Orientation for New Advisory Council Members

A MESSAGE FROM THE DIRECTOR, NIDDK

The National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) is one of 27 Institutes and Centers that make up the National Institutes of Health (NIH), part of the Public Health Service in the U.S. Department of Health and Human Services. The Institute conducts and supports basic and clinical research in some of the most serious, common, disabling, and costly conditions affecting the public's health. The diseases in NIDDK's research mission cut across the full spectrum of medicine and include:

- Diabetes and other endocrine diseases;
- Cystic fibrosis and other inherited diseases;
- Digestive diseases;
- Obesity;
- Nutrition;
- Diseases of the kidney, genitourinary tract, and blood.

Most arise from the complex interaction of genetic, autoimmune, neuroendocrine, metabolic, nutritional, and environmental factors. Some diseases such as diabetes, obesity, hepatitis, and kidney failure disproportionately affect minority populations. NIDDK funds research projects that relate directly to these diseases, but it also places a high priority on fundamental, untargeted research.

Training is critically important to continued progress in medical research. NIDDK supports research training and career development, with special emphasis on increasing the ranks of physician scientists and recruiting underrepresented minorities and women into biomedical research careers.

The National Diabetes and Digestive and Kidney Diseases Advisory Council's most important purpose is to make recommendations regarding the funding of grant applications, focusing primarily on the relevance to the programmatic missions and priorities of the Institute. The Council also has the responsibility to ensure the adequacy of the scientific review by the initial review groups. In addition, the Council offers advice on a wide variety of policies and programs within the Institute.

As you begin service on the National Diabetes and Digestive and Kidney Diseases Advisory Council, we hope this orientation material will help answer some of your questions and provide the information you will need in your role as a Council member. In addition, your comments on the usefulness of this material and suggestions for improvement will be appreciated.

Griffin P. Rodgers, M.D., M.A.C.P.,

Director, National Institute of Diabetes and Digestive

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and Kidney Diseases National Institutes of Health

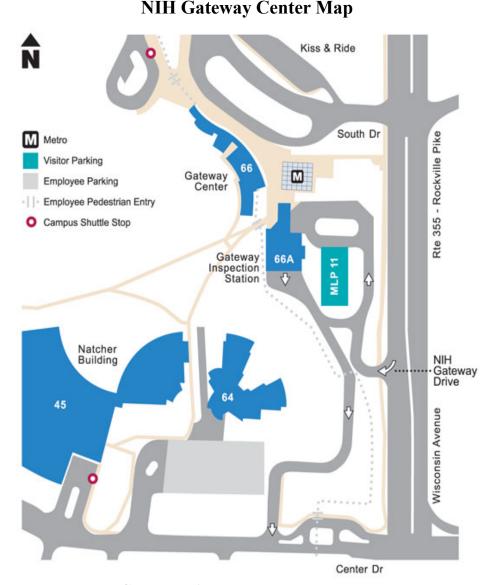
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Main Visitor Entrance: NIH Gateway Drive

Gateway Center - Building 66 (for pedestrians entering campus)

- Open Monday Friday, 6am 10pm
- Closed on Weekends and Observed Holidays
- After 10pm weekdays, all day weekends and holidays, pedestrian visitors enter via the Commercial Vehicle Inspection Facility (CVIF) – Building 67 (on Rockville Pike between North Drive and Wilson Drive)

Gateway Inspection Station - Building 66A (for vehicles entering campus)

- Monday-Friday: 5am 10pm
 - Weekends and After Hours: Closed
 - After 10pm on weekdays, all day weekends and holidays, visitors in vehicles should enter campus via the <u>CVIF</u> Building 67 (on Rockville Pike between North Drive and Wilson Drive)
- All vehicles and their contents will be inspected upon entering the campus.
- After inspection, vehicles enter campus at Center Drive
- Roadway at Center Drive is for entering campus only; visitors exiting campus may exit from other open locations.

Multi-Level Parking Garage 11 – MLP-11 (car inspection not required; visitor badges obtained at Gateway Visitor Center – Bldg 66) Hours: Monday - Friday: 6am – 9pm (entrance) 6am – 11pm (exit) Cost: \$2 per hour for the first three hours, \$12 maximum for entire day. Closed weekends.

Security Procedures for Entering the NIH Campus:

All visitors and patients – **please be aware**: Federal law prohibits the following items on Federal property: firearms, explosives, archery equipment, dangerous weapons, knives with blades over 2 ½ inches, alcoholic beverages and open containers of alcohol.

The NIH has implemented security measures to help ensure the safety of our patients, employees, guests and facilities. All visitors must enter through the NIH Gateway Center at Metro or the West Gate Center. You will be asked to submit to a vehicle or personal inspection.

Whether arriving by Metro, hotel shuttle, or private or commercial vehicle, visitors over 15 years of age must show one (1) form of a government-issued photo ID—driver's license, passport, green card, etc. Visitors under 16 years of age must be accompanied by an adult.

Tobacco-Free Campus – Effective October 1, 2008, the use of all tobacco products (including cigarettes, cigars, pipes, smokeless tobacco, or other tobacco products) is prohibited at all times in all buildings; on all outside property or grounds, including parking areas; and in government vehicles.

Vehicle Inspections – Except for those parked in MLP-11, all vehicles and their contents will be inspected upon entering the campus. Additionally, all vehicles entering certain parking areas will be inspected, regardless of any prior inspection. Drivers will be required to present their driver's license and may be asked to open the trunk and hood. If you are physically unable to perform this function, please inform the inspector and they will assist you. Vehicle inspection may consist of any combination of the following: Detection Dogs Teams (K-9), Electronic Detection Devices and Manual Inspection.

After inspection, you will be issued a vehicle inspection pass. It must be displayed on your vehicle's dashboard while you are on campus. The inspection pass is not a "parking permit." It only grants your vehicle access to enter the campus. You can only park in designated parking areas.

Personal Inspections – All visitors should be prepared to submit to a personal inspection prior to entering the campus. These inspections may be conducted with a handheld monitoring device, a metal detector and by visible inspection. Additionally, your personal belongings may be inspected and passed through an x-ray machine.

If driving onto campus, the personal inspection and issuance of a visitor badge will take place where your private or commercial vehicle (including a taxi) is inspected.

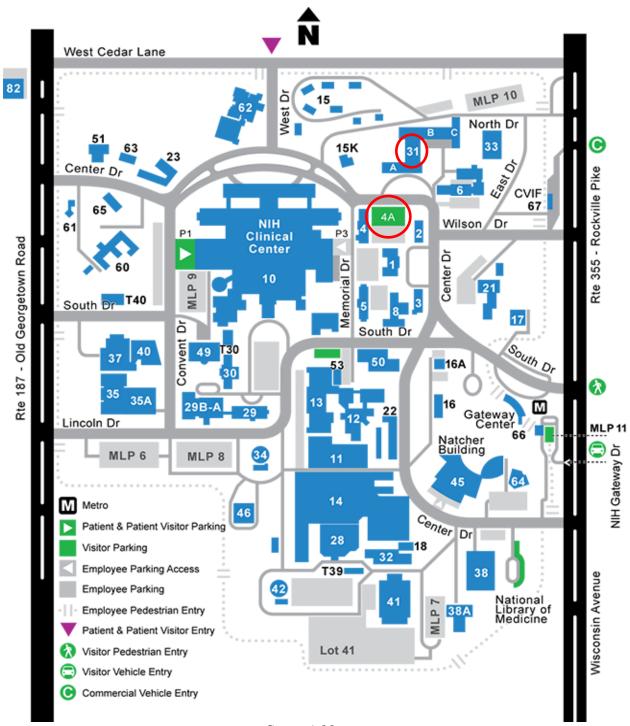
If you parked in the NIH Gateway Center multi-level garage (MPL-11), the personal inspection and issuance of a visitor badge will take place in the Visitor's Center. Outside the Visitor Center, campus shuttles will take you to Building 31 on campus. Any shuttle, except the Campus Perimeter Route, will stop at Building 31. To access the NIH campus shuttle schedules, see http://www.ors.od.nih.gov/pes/dats/nihshuttleservices/Pages/shuttle.aspx. Directional signs within Building 31 will guide you to the meeting room.

Visitor passes must be prominently displayed at all times while on the NIH campus.

To learn more about visitor and security issues at the NIH, visit: http://www.nih.gov/about/visitor/index.htm.

For questions about campus access, please contact the ORS Information Line at or 301-594-6677, TTY - 301-435-1908.

NIH Visitors Map of Campus



Street Address:

National Institutes of Health 9000 Rockville Pike Bethesda, MD 20892

See Parking on Following Page

General Visitor Parking Information

Parking:

Visitors may park at the **Gateway Parking Garage (MLP-11)** (see Gateway Center Map) or in designated visitor parking lots (see Campus Map):

Monday – Friday, 6am – 9pm (entrance); 6am – 11pm (exit):

\$2.00 per hour for the first three hours

\$12.00 for the entire day

Lot 4A (between Buildings 2 and 4, across from Building 31): Monday – Friday, 7am – 9pm (entrance and exit)

Metered parking lots: Monday – Friday, enforced 7am – 7pm Available in up to 2-hour increments; \$2 per hour (\$1.50 per hour in front of Building 31A)

Arriving at NIH:

When traveling to the main NIH campus, use of the Metro is strongly encouraged. Visitor parking lots on the NIH campus fill up quickly.

The NIH Has implemented security measures to help ensure the safety of our patients, employees, guests, and facilities. All visitors must enter through the NIH Gateway Center at Metro or the West Gateway Visitor Center. You will be asked to submit to a vehicle and personal inspection.

Visitors over 15 years of age must provide a form of government-issued ID such as a driver's license or passport. Visitors under 16 years of age must be accompanied by an adult.

<u>If traveling via Metro or hotel shuttle to Medical Center Metro stop</u>: The Washington D.C. Metro-Rail system Red Line has a station right on the NIH campus, called "Medical Center." Once you're out of the station, it's a short walk to the NIH Visitor Center where you will go through the NIH security procedures and receive a visitor's badge. Outside the Visitor Center, campus shuttles will take you to Building 31 on campus. Any shuttle, except the Campus Perimeter Route, will stop at Building 31. To access the NIH campus shuttle schedules, see http://www.ors.od.nih.gov/pes/dats/nihshuttleservices/Pages/shuttle.aspx. Directional signs within Building 31 will guide you to the meeting room

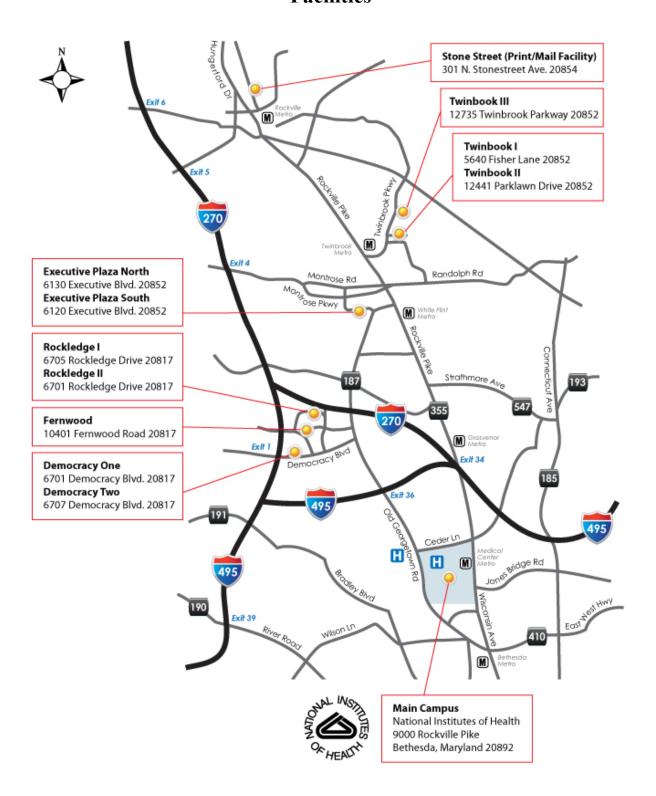
If taking a taxi directly to the meeting site: Upon entering the campus, please let the driver know that you wish to be dropped off in front of Building 31. The taxi must first go through an NIH security inspection of the car, and you and the driver must go through the security procedures and receive visitor badges. Directional signs within Building 31 will guide you to the meeting room.

If driving private vehicle to the meeting site: Unless you choose to park in the NIH Gateway Center parking garage, receive your security processing at the Visitor Center, and take a shuttle to Building 31, you and your car must first go through security procedures. Visitor parking is located directly across from Building 31 (see circles on map). Parking fees are \$12 per day and are fully reimbursable. Directional signs within Building 31 will guide you to the meeting room.

Vehicle and Visitor passes must be prominently displayed at all times while on the NIH campus.



Bethesda Area Map Showing NIH Campus and Off-Campus Facilities



Glossary of Terms

For extensive list of grant terms see http://grants.nih.gov/grants/glossary.htm

A

Accession Number – Related to electronic submission of applications, the Accession number is the Agency tracking number provided for the application after Agency validations.

Acquisition – Obtaining supplies or services by the Federal Government with appropriated funds through purchase or lease.

Active Grant – A grant meeting the following criteria: (1) Today's date is between the budget start and end dates; (2) The grant has an eRA System (IMPAC II) application status code of "Awarded. Non-fellowships only." or "Awarded. Fellowships only."

Activity Code – A three-digit code assigned by the National Institutes of Health (NIH) to identify funding mechanisms (e.g. F32, K12, P01, R01, T32, etc.). *See* Funding Mechanisms in NIDDK section of Background Information.

Administrative Expenses – Expenses incurred for the support of activities relevant to the award of grants, contracts, and cooperative agreements and expenses incurred for general administration of the scientific programs and activities of the National Institutes of Health.

Administrative I/C – The NIH Institute or Center to which the Center for Scientific Review (CSR) routes NIH grant applications for a funding decision. An I/C may request to change this assignment if the application is more suited to another I/C. Also referred to as primary assignment.

Administrative Supplement – Monies added to a grant without peer review to pay for items within the scope of an award but unforeseen when a grant application was submitted.

Amendment (amended or revised applications) – Resubmission of an unfunded application revised in response to a prior review.

Appeal - A procedure for contesting the peer review of a grant application. Synonymous with rebuttal.

Application – A request for financial support of a project or activity submitted to NIH on specified forms and in accordance with NIH instructions.

Application Identification Numbers – The application number identifies: type of application (1); activity code (R01); organization to which it is assigned (DK); serial number assigned by the Center for Scientific Review (CSR) (183723); suffix showing the support year for the grant (-01); other information identifying a supplement (S1), amendment (A1), or a fellowship's institutional allowance. For contracts, the suffix is replaced by a modification number. *See* Sample Application Number Graphical Overview of Grants Process.

Application Types – Type 1, New; Type 2, Competing continuation (a.k.a. renewal, re-competing); Type 3, Application for additional (supplemental) support; Type 4, Competing extension for an R37 award or first non-competing year of a Fast Track SBIR/STTR award; Type 5, Non-competing continuation; Type 7. Change of grantee institution; Type 9, Change of NIH awarding Institute or Division (competing continuation.

Appropriation – Law authorizing Federal Agencies to obligate funds and make payments from the U.S. Treasury for specified purposes. Appropriations are in annual acts and permanent law.

Approved Budget – The financial expenditure plan for the grant-supported project or activity, including revisions approved by NIH as well as permissible revisions made by the grantee. The approved budget consists of Federal (grant) funds and, if required by the terms and conditions of the award, non-Federal participation in the form of matching or cost sharing. The approved budget specified in the Notice of Grant Award may be shown in detailed budget categories or as total costs without a categorical breakout. Expenditures charged to an approved budget that consists of both Federal and non-Federal shares are deemed to be borne by the grantee in the same proportion as the percentage of Federal/non-Federal participation in the overall budget.

Award – The provision of funds by NIH, based on an approved application and budget or progress report, to an organizational entity or an individual to carry out a project or activity.

Awarding Office – The NIH I/C responsible for the award, administration, and monitoring of particular grants.

В

Bilateral Agreement – A general science agreement between the U.S. and a foreign country. Grant applications from institutions in these countries that have been recommended for approval by the scientific review group are given special funding consideration by Council.

Bridge Awards (R56) – Provides limited interim research support based on the merit of a pending R01 application while current researcher or new applicant gathers additional data to revise a new or competing renewal application. This grant will underwrite highly meritorious applications that if given the opportunity to revise their application could meet IC recommended standards and would be missed opportunities if not funded. Investigators do not apply for Bridge Awards but are selected from R01 grants at the pay-line margin. A Bridge Award is made as an R56 with 1 year of funding, which the PI can choose to spend over a 2-year period. This enables the PI to submit an amended R01 application for the next receipt date while receiving interim (bridge) funding under the R56 mechanism. Interim funding ends when the applicant succeeds in obtaining an R01 or other competing award built on the R56 grant. These awards are not renewable.

Budget Appropriation – The yearly amount given to a Government Agency by Congress.

Budget Period – The intervals of time (usually 12 months each) into which a project period is divided for budgetary and funding purposes.

 \mathbf{C}

Career Development Awards (CDA K Series) – Award supporting Ph.D.'s and clinicians who wish to develop a career in biomedical research.

Capital Expenditure – The cost of an asset (land, building, equipment), including the cost to put it in place. A capital expenditure for equipment includes the net invoice price and the cost of any modifications, attachments, accessories, or auxiliary apparatus to make it usable for the purpose for which it was acquired. Other charges, such as taxes, in-transit insurance, freight, and installation, may be included in capital expenditure costs in accordance with the recipient's regular accounting practices consistently applied regardless of the source of funds.

Clinical Research – Patient-oriented research, including epidemiologic and behavioral studies, outcomes research, and health services research. Patient-oriented research is research conducted with human subjects (or on material of human origin such as tissues, specimens, and cognitive phenomena) in which a researcher directly interacts with human subjects. It includes research on mechanisms of human disease, therapeutic interventions, clinical trials, and development of new technologies, but does not include in vitro studies using human tissues not linked to a living individual.

Clinical Trial – A biomedical or behavioral research study of human subjects designed to answer specific questions about biomedical or behavioral interventions (drugs, treatments, devices, or new ways of using known drugs, treatments, or devices). Clinical trials are used to determine whether new biomedical or behavioral interventions are safe, efficacious, and effective. Clinical trials of an experimental drug, treatment, device, or intervention may proceed through four phases: Phase I. Testing in a small group of people (e.g. 20-80) to determine efficacy and evaluate safety (e.g., determine a safe dosage range and identify side effects); Phase II. Study in a larger group of people (several hundred) to determine efficacy and further evaluate safety; Phase III. Study to determine efficacy in large groups of people (from several hundred to several thousand) by comparing the intervention to other standard or experimental interventions, to monitor adverse effects, and to collect information to allow safe use; Phase IV. Studies done after the intervention has been marketed. These studies are designed to monitor the effectiveness of the approved intervention in the general population and to collect information about any adverse effects associated with widespread use.

Close Out – Procedure to officially conclude a grant. Institute staff must ensure necessary scientific, administrative, and financial reports have been received, implemented and documented in compliance with Federal records management policy; includes the Final Financial Status Report (FSR), Final Invention Report, and Final Progress Report.

Co-Funding – Funding arrangement through which two or more Institutes or Centers pay for a grant.

Co-Investigator – An individual involved with the PI in the scientific development or execution of a project. The co-investigator (collaborator) may be employed by, or be affiliated with, the applicant/grantee organization or another organization participating in the project under a consortium agreement. A co-investigator typically devotes a specified percentage of time to the project and is considered "key personnel." The designation of a co-investigator, if applicable, does not affect the PI's roles and responsibilities as specified in the NIH Grants Policy Statement (NIH GPS). Note: NIH does not recognize the term "co-PI."

Commitment Base – Funds used for non-competing (type 5 or ongoing awards), typically 70-80 percent of the dollars spent for research project grants.

Competing Applications – Either new or re-competing applications that must undergo initial peer review.

Competing Continuation – Application requiring competitive peer review and Institute/Center action to continue beyond the current competitive segment. (Also known as a Renewal or Type 2.)

Competitive Range – Contracting term denoting a group of proposals considered acceptable by the initial peer review group which are potential candidates for an award.

Concept – The earliest planning stage of an initiative [request for applications (RFA), request for proposals (RFP), or program announcement (PA)]. Concepts may be brought before the Advisory Council

for concept clearance. Not all concepts cleared by Council are published as initiatives depending on the availability of funds.

Conflict of Interest – Regulations to ensure Government employees, scientific review group members, Council members, or others having the ability to influence funding decisions have no personal interest in the outcome.

Consortium Agreement – Formalized agreement whereby a research project is carried out by the grantee and one or more other organizations that are separate legal entities. Under the agreement, the grantee must perform a substantive role in the conduct of the planned research and not merely serve as a conduit of funds to another party or parties.

Constant Dollars – Dollar amounts adjusted for inflation, based on buying power in a selected base year. The BRDPI is used to determine constant dollars from current dollars.

Contract (**R&D**) – Award instrument establishing a binding legal procurement relationship between NIH and a recipient obligating the latter to furnish a product or service defined in detail by NIH and binding the Institute to pay for it.

Contracting Officer – Government employee authorized to execute contractual agreements on behalf of the Government.

Cooperative Agreement (U Series) – Support mechanism used when there will be substantial Federal scientific or programmatic involvement. Substantial involvement means that, after award, scientific or program staff will assist, guide, coordinate, or participate in project activities.

Council/Board, Advisory – National Advisory Council or Board, mandated by statute, providing the second level of review for grant applications for each Institute/Center awarding grants. The Councils/Boards are comprised of both scientific and lay representatives. Council/Board recommendations are based on scientific merit (as judged by the initial review groups) and the relevance of the proposed study to an institute's programs and priorities. With some exceptions, grants cannot be awarded without recommendations for approval by a Council/Board.

Council Round – At NIH, there are typically three council rounds each fiscal year: September. January/February, and May/June. Application receipt dates, initial review dates, and council review dates all fall within one of these council rounds. Incoming grant applications all are assigned to a council round.

CR (Continuing Resolution) – An Act of Congress to fund or partially fund government operations for a limited period of time, in the absence of an appropriations.

Critique – An overall evaluation of a grant application prepared by a reviewer before an initial peer review meeting and presented to a Scientific Review Group at a meeting.

Current Dollars – Actual dollars awarded, without adjustment for inflation.

D

Direct Costs – Costs that can be specifically identified with a particular project or activity.

Direct Operations – Funds for salary and other administrative costs.

Dual Assignments – Applications simultaneously assigned to two Institutes, Centers, or Divisions. The primary Institute has complete responsibility for administering and funding the application; the secondary assumes this responsibility only if the primary is unable or unwilling to support it.

Dual Review System – Peer review process used by NIH. The first level of review provides a judgment of scientific merit. The second level of review (usually conducted by an ICD's advisory Council) assesses the quality of the first review, sets program priorities, and makes funding recommendations.

DUNS Number – The Data Universal Numbering System (DUNS) number is a unique nine-digit number assigned by Dun and Bradstreet Information Services. It is recognized as the universal standard for identifying and keeping track of more than 92 million businesses worldwide. Grants.gov requires a DUNS number for registration. For applicants, the DUNS number in the application must match the DUNS number in the Institutional Profile in Commons.

 \mathbf{E}

Early Stage Investigator (ESI) – A New Investigator (*see* definition under N) who is within 10 years of completing a terminal research degree or within 10 years of completing medical residency. Between 1980 and 2001, the duration of postdoctoral training increased and the average age at which an investigator first obtained R01 funding increased by more than 5 years. Under the ESI program (NOT-OD-08-121 released September 26, 2008), New Investigators identified as ESIs will have their career stage considered at the time of review and award of R01 applications. By providing this advantage to ESIs, NIH can directly encourage earlier application for NIH research grant support. In some cases there may have been one or more lapses in the period of research or research training after the terminal degree or completion of medical residency. A new NIH Guide Notice (NOT-OD-09-034, released December 31, 2008, by the Office of Intramural Research) describes the procedures for requesting an extension of the ESI period and the conditions under which such extensions can be considered.

Electronic Research Administration (eRA) – NIH's infrastructure for conducting interactive electronic transactions for the receipt, review, monitoring, and administration of NIH grant awards to biomedical and behavioral investigators worldwide. Registration is required.

Enrollment Data – Provides race and ethnicity data for the cumulative number of human subjects enrolled in an NIH-funded clinical research study since the protocol began. This data is provided in competing continuation applications and annual progress reports.

Equipment – An article of tangible nonexpendable personal property that has a useful life of more than 1 year and an acquisition cost per unit that equals or exceeds \$5,000 or the capitalization threshold established by the organization, whichever is less.

eRA Commons – A secure meeting place on the Web where research organizations and grantees electronically receive and transmit information about the administration of biomedical and behavioral research grants. Registration is required. At this site applicants access the status of their applications and grantees access the status of their awards, submit reports, and make requests electronically

Expiration Date – The date signifying the end of the current budget period, after which the grantee is not authorized to obligate grant funds regardless of the ending date of the project period or "completion date."

Extramural Research – Research supported by NIH to researchers and organizations outside the NIH through a grant, contract, or cooperative agreement.

F

Facilities and Administrative Costs (F&A) – Costs that are incurred by a grantee for common or joint objectives and cannot be identified specifically with a particular project or program. These costs are also known as "indirect costs."

Federal Acquisition Regulations (FAR) – Laws regulating government contracting.

Federal Advisory Committee Act (FACA) – A law regulating Federal advisory committees to ensure an appropriate balance of scientists and lay persons and minority, geographical, and racial representation.

Federal Register – An official, daily publication communicating proposed and final regulations and legal notices issued by Federal agencies, including announcements of the availability of funds for financial assistance.

Federal-Wide Assurance (FWA) – Online form every institution and collaborating institution conducting human subjects research must file with the Office for Human Research Protections—HHS to establish policies and procedures to protect human subjects as required by 45 CFR 46.

Fee – An amount (in addition to actual, allowable costs) paid to an organization providing goods or services consistent with normal commercial practice. This payment also is referred to as "profit."

Fellowship - An NIH training program award where the NIH specifies the individual receiving the award. Fellowships comprise the F activity codes.

Fiscal Year (FY) – The annual period established for Government accounting purposes. A Fiscal Year begins on October 1 and ends September 30 of the following year. Example: FY2009 – Started October 1, 2008 and ends September 30, 2009.

Full-Time Appointment – Number of days per week and/or months per year representing full-time effort at the applicant/grantee organization, as specified in organizational policy. The organization's policy must be applied consistently regardless of the source of support.

Funding Opportunity Announcement (FOA) – *See* Initiative.

G

Gender – Human subject term indicating a classification of research subjects into women and men.

Grant – Financial assistance mechanism providing money, property, or both to an eligible entity to carry out an approved project or activity. A grant is used whenever the NIH IC anticipates no substantial programmatic involvement with the recipient during performance of the financially assisted activities.

Grant Appeals – A DHHS policy providing for an appeal by the grantee institution of post award administrative decisions made by awarding offices. The two levels of appeal are an informal NIH procedure and a formal DHHS procedure. The grantee must first exhaust the informal procedures before appealing to the DHHS Appeals Board.

Grant Project Period – Total period a project has been recommended for support, which may include more than one competitive segment. For example, a project period for a grant begun in 2008 can be divided into competitive segments 2008 to 2012, 2012 to 2016, etc.

Grant Start Date – Official date a grant award begins; same as the first day of the first budget period.

Grantee – Organization or individual awarded a grant or cooperative agreement by NIH that is responsible and accountable for the use of the funds provided and for the performance of the grant-supported project or activities. The grantee is the entire legal entity even if a particular component is designated in the award document. The grantee is legally responsible and accountable to NIH for the performance and financial aspects of the grant-supported project or activity.

Grants Management Officer (GMO) – An NIH official responsible for the business management aspects of grants and cooperative agreements, including review, negotiation, award, and administration, and for the interpretation of grants administration policies and provisions. Only GMOs are authorized to obligate NIH to the expenditure of funds and permit changes to approved projects on behalf of NIH. Each NIH Institute and Center awarding grants has one or more GMOs with responsibility for particular programs or awards.

Grants Management Specialist (GMS) – An NIH staff member who oversees the business and other non-programmatic aspects of one or more grants and/or cooperative agreements. These activities include, but are not limited to, evaluating grant applications for administrative content and compliance with statutes, regulations, and guidelines; negotiating grants; providing consultation and technical assistance to grantees; and administering grants after award.

Grants.gov – An access point through which any person, business, or State, local, or Tribal government may electronically find and apply for more than 1,000 competitive grant opportunities from the 26 Federal grant-making Agencies. The Department of Health and Human Services (DHHS) is the managing partner for the Federal Grants.gov initiative, one of 24 initiatives of the overall E-Government program for improving access to Government services via the Internet. Registration is required to apply. Go to http://www.grants.gov/.

Η

High Risk/High Impact (HR/HI) – A category of applications identified by a scientific review group as having a high degree of uncertainty in approach but also a high potential for impact. NIH tracks how many of these applications are identified and funded.

Human Subject – A living individual about whom an investigator (whether professional or student) conducting research obtains data through intervention or interaction with the individual or obtains identifiable private information. Regulations governing the use of human subjects in research extend to use of human organs, tissues, and body fluids from identifiable individuals as human subjects and to graphic, written, or recorded information derived from such individuals.

Human Subjects Assurance – A document filed by an institution conducting research on human subjects with the Office for Human Research Protections—HHS that formalizes its commitment to protect the human subjects prior to receiving any HHS grant funding.

I

Identifier – Information linking specimens or data to individually identifiable living people or their medical information. Examples include names, social security numbers, medical record numbers, and pathology accession numbers.

Indirect Costs – Costs that are incurred by a grantee for common or joint objectives and cannot be identified specifically with a particular project or program. These costs are also known as "Facility and Administrative Costs."

Information for Management, Planning, Analysis, and Coordination (IMPAC) – A computer database system developed and maintained by the Office of Extramural Research for information concerning PHS extramural programs.

Informed Consent – Person's voluntary agreement, based upon adequate knowledge and understanding, to participate in human subjects research or undergo a medical procedure. In giving informed consent, people may not waive legal rights or release or appear to release an investigator or sponsor from liability for negligence.

Initial Peer Review Criteria – *Significance:* Is the topic important? Will it advance Scientific Knowledge? *Approach:* Are the hypothesis, design, and methods well developed and appropriate? Are potential problems addressed? *Innovation:* Does the proposal involve new ideas or methods; does it challenge existing paradigms? *Investigator:* Does the investigator and collaborators have the training and experience to do the work? *Environment:* Will the scientific environment contribute to success? Is there institutional support for the project? Does the work take advantage of existing opportunities including collaborations? Note: criteria-based scoring commences in 2009.

Initiative – A request for applications (RFA), request for proposals (RFP), or program announcement (PA) stating the Institute or Center's interest in receiving research applications in a given area because of a programmatic need or scientific opportunity. RFAs and RFPs generally have monies set aside to fund the applications responding to them; program announcements generally do not. *See* Funding Opportunity Announcement (FOA)

Institutional Base Salary – The annual compensation paid by an applicant/grantee organization for an employee's appointment whether that individual's time is spent on research, teaching, patient care, or other activities. The base salary excludes any income that an individual is permitted to earn outside of duties for the applicant/grantee organization. Base salary may not be increased as a result of replacing organizational salary funds with NIH grant funds.

Institutional Review Board (IRB) – IRBs are set up by research institutions to ensure the protection of rights and welfare of human research subjects participating in research conducted under their auspices. IRBs make an independent determination to approve, require modifications in, or disapprove research protocols based on whether human subjects are adequately protected, as required by federal regulations and local institutional policy.

Interactive Research Project Grant (IRPG) – An award made to two or more investigators funded independently as R01 grantees but brought together as a collaborative group receiving additional support for collaborative work, shared resources, or the exchange of ideas.

Interagency Agreement – Formal agreement among Government agencies to collaborate on and fund research; Y series activity code.

Integrated Review Group (IRG) – A cluster of study sections responsible for the review of grant applications in scientifically related areas. These study sections share common intellectual and human resources.

Internet Assisted Review (IAR) - Allows reviewer to submit critiques and preliminary scores for applications they are reviewing. Allows Reviewers, SROs, and GTAs to view all critiques in preparation for a meeting. IAR creates a preliminary summary statement body containing submitted critiques for the SRO or GTA.

Intramural Research - Research conducted by, or in support of, employees of the NIH.

Investigational New Drug (IND) – Status given by the FDA to a new drug or biological product to be used in a clinical investigation.

Investigator-Initiated Research – Research funded as a result of an investigator, on his or her own, submitting a research application. Also known as unsolicited research. Unsolicited applications are reviewed by chartered CSR review committees. Its opposite is targeted research.

J

Just-In-Time – Within the Status module of the eRA Commons, users will find a feature to submit Just-In-Time information when requested by the NIH. NIH policy allows the submission of certain elements of a competing application to be deferred. Through this module, institutions can electronically submit the information that is requested after the review, but before award.

K

Key Personnel – The PI and other individuals who contribute to the scientific development or execution of a project in a substantive, measurable way, whether or not they receive salaries or compensation under the grant. Typically these individuals have doctoral or other professional degrees, although individuals at the masters or baccalaureate level may be considered key personnel if their involvement meets this definition. Consultants also may be considered key personnel if they meet this definition. "Zero percent" effort or "as needed" is not an acceptable level of involvement for key personnel.

M

Matching or Cost Sharing – The value of third party in-kind contributions and the portion of the costs of a federally assisted project of program not borne by the Federal Government. Matching or cost sharing may be required by law, regulation, or administrative decision of an NIH Institute or Center. Costs used to satisfy matching or cost sharing requirements are subject to the same policies governing allowability as other costs under the approved budget.

Mechanism – Another term for Activity Code.

MEDLINE - National Library of Medicine's database for scientific publications.

Minority Group – Human subject term indicating a subset of the U.S. population distinguished by racial, ethnic, or cultural heritage. Categories are: American Indian or Alaskan Native, Asian, black or African American, Hispanic or Latino, and Native Hawaiian and other Pacific Islander. Inclusion of a group should be determined by the scientific questions under examination and their relevance. Not every study will include all minority groups or subpopulations.

Model Organism – Animal, plant, or other organism used to study basic biologic processes to provide insight into other organisms.

Modular Application – A type of grant application in which support is requested in specified increments without the need for detailed supporting information related to separate budget categories. When modular procedures apply, they affect not only application preparation but also review, award, and administration of the application/award.

Monitoring – A process whereby the programmatic and business management performance aspects of a grant are reviewed by assessing information gathered from various required reports, audits, site visits, and other sources.

Multiple Principle Investigator – Individual research awards in which more than one Principal Investigator (PI) is identified by the applicant or institution.

N

New Application (award, grant) – Refers to an application not previously proposed, or one that has not received prior funding. Also known as a Type 1.

New Investigator – New investigator is an individual who has not previously competed successfully for an NIH-supported research project other than the following small or early stage research awards: Pathway to Independence Award-Research Phase (R00); Small Grant (R03); Academic Research Enhancement Award (R15); Exploratory/Developmental Grant (R21); Clinical Trial Planning Grant (R34); Dissertation Award (R36); Small Business Technology Transfer Grant-Phase I (R41); Small Business Innovation Research Grant-Phase I (R43); Shannon Award (R55); NIH High Priority, Short-Term Project Award (R56). Additionally, an individual is not excluded from consideration as a "New Investigator" if he/she has received an award from the following classes of awards: Training-Related and Mentored Career Awards; Fellowships (F05, F30, F31, F32, F34, F37, F38); Mentored-career awards (K01, K08, K22, K23, K25, K99-R00; Other mentored career awards (developmental K02 as used by NINDS and the developmental K07); Loan repayment contracts (L30, L32, L40, L50, L60). Note: Current or past recipients of non-mentored career awards that normally require independent research support (K02, K05, K24, and K26) are not considered new investigators. *See* Early Stage Investigator.

Non-Competing Continuation – A year of continued support for a funded grant. Progress reports for continued support do not undergo peer review but are administratively reviewed by the Institute/Center and receive an award based on prior award commitments. Also known as a Type 5.

Non-Competing Grant – An ongoing grant whose award is contingent on the completion of a progress report as the condition for the release of money for the following year.

Notice of Award (NoA) – The legally binding document notifying the grantee and others that an award has been made. The NoA contains or references all terms and conditions of the award documenting the obligation of Federal funds and may be in letter format and may be issued electronically. Previously known as Notice of Grant Award (NGA).

Not Recommended for Further Consideration (NRFC) – A judgment made by a scientific review group for applications when the merit of the proposed research is not significant and substantial enough to warrant a further review. The study section does not recommend funding; the application cannot be funded by an Institute.

0

Obligation – Data based on NIH funds that have been awarded by an NIH Institute/Center.

Office of Extramural Research (OER) – NIH office overseeing policies and guidelines for extramural research grants.

Office for Human Research Protections (OHRP) – HHS office overseeing human subject protection for HHS-supported research.

Office of Laboratory Animal Welfare (OLAW) – NIH office overseeing compliance with the PHS Policy on Humane Care and Use of Laboratory Animals.

Office of Management and Budget (OMB) – Executive Branch office assisting the U.S. president in preparing the Federal budget, evaluating agency programs and policies, and setting funding priorities. In setting policy, OMB issues Government-wide policy directives, called circulars that apply to grants.

OnPAR – A Leidos Health Life science partnership with NIH to seek private funding for promising research. See: https://onpar.leidosweb.com/

On Time – Paper applications using "standard" submission dates are on time if postmarked on or before the submission date. Electronic applications are on time if successfully submitted to Grants.gov by 5 p.m. local time on the date indicated. Note: For both paper and electronic submissions, when these dates fall on a weekend or holiday, they are extended to the next business day.

Organization – A generic term used to refer to an educational institution or other entity, including an individual, which applies for or receives an NIH grant or cooperative agreement.

Organizational Code – A two-letter code in the grant number identifying the first major-level subdivision of the funding organization. NIDDK's organizational code is DK.

Other Research Grants – Research grants not classified as research projects or research centers.

Other Support – Includes all financial resources, whether Federal, non-Federal, commercial or organizational, available in direct support of an individual's research endeavors, including, but not limited to, research grants, cooperative agreements, contracts, or organizational awards. Other support does not include training awards, prizes, or gifts.

Overlap of Support – Other support duplicating research or budgetary items already funded by an NIH grant. Overlap also occurs when any project-supported personnel has time commitments exceeding 12 person months.

P

Program Announcement Reviewed in an Institute (PAR) – Program Announcement with special receipt, referral and/or review considerations.

Parent Announcement – NIH-wide funding opportunity announcement enabling applicants to submit an electronic investigator-initiated grant application for a single grant mechanism [e.g., Research Project Grant (Parent R01)].

Payback – Time and effort fellows and T32 trainees must repay the Government. During the first year, trainees owe one month of payback for every month of support; then they start paying back one month for every month worked.

Payline – A percentile-based funding cutoff point determined at the beginning of the fiscal year by balancing the projected number of applications coming to an NIH Institute with the amount of funds available.

Peer Review – A system for evaluating research applications using reviewers who are the professional equals of the applicant.

Percentile – Represents the relative position or rank of each priority score (along a 100.0 percentile band) among the scores assigned by a particular study section.

Person Months – Measurement of a person's effort in academic, summer, or calendar months a year. Used on NIH applications and other forms instead of percent effort.

Pre-application – A statement in summary form of the intent of the applicant to request funds. It is used to determine the applicant's eligibility and how well the project can compete with other applications and eliminate proposals for which there is little or no chance for funding.

President's Budget – The annual budget request submitted to Congress by the U.S. President. The process begins with a budget request from the IC, which, as part of the entire NIH budget request, is modified by the Office of Management and Budget.

Principal Investigator – An individual designated by the grantee to direct the project or activity being supported by the grant. He or she is responsible and accountable to the grantee and NIH for the proper conduct of the project or activity. Also known as Program Director or Project Director.

Prior Approval – Written approval from the designated Grants Management Officer (GMO) required for specified post award changes in the approved project or budget. Such approval must be obtained before undertaking the proposed activity or spending NIH funds.

Priority score – A numerical rating that reflects the scientific merit of the proposed research relative to stated evaluation criteria.

Privacy Act – A law protecting against needless collection or release of personal data. Records maintained by NIH with respect to grant applications, grant awards, and the administration of grants are subject to the provisions of the Privacy Act.

Program - A coherent assembly of plans, project activities, and supporting resources contained within an administrative framework, the purpose of which is to implement an organization's mission or some specific program-related aspect of that mission. For the NIHGPS, "program" refers to those NIH programs carrying out their missions through the award of grants or cooperative agreements to other organizations.

Program Announcement (PA) – An announcement by an NIH Institute or Center requesting applications in the stated scientific areas. Program Announcements (PA) are published in the NIH Guide for Grants and Contracts.

Program Balance – The need to balance an Institute's support of research in all its programmatic areas with its high-quality applications eligible for funding.

Program Classification Code (PCC) – An internal code unique for each I/C indicating the I/C's scientific interest and used to identify internal programs, branch classifications, the science or disease area, and sometimes program officials.

Program Official (PO) – The NIH official responsible for the programmatic, scientific, and/or technical aspects of a grant.

Programmatic Reduction – The dollar amount a grant award is reduced from the amount recommended by the study section (scientific review group). This is done so Institutes can maintain a sufficient number of grants in their portfolio and to combat inflation of grant costs.

Progress Number – Commonly referred to as the application number or grant number, depending upon its processing status. This unique identification number for the grant is composed of the type code, activity code, Institute code, serial number, support year, and/or suffix code.

Project Period – The total time for which support of a project has been programmatically approved. The total project period comprises the initial competitive segment, any subsequent competitive segment(s) resulting from a competing continuation award(s), and non-competing extensions.

Protocol – Formal description and design for a specific research project. A protocol involving human subject research must be reviewed and approved by an Institutional Review Board (IRB) if the research is not exempt, and by an IRB or other designated institutional process for exempt research.

Public Access Policy – The NIH Public Access Policy implements Division G, Title II, Section 218 of PL 110-161 (Consolidated Appropriations Act, 2008). The law states: *The Director of the National Institutes of Health shall require that all investigators funded by the NIH submit or have submitted for them to the National Library of Medicine's PubMed Central an electronic version of their final, peer-reviewed manuscripts upon acceptance for publication, to be made publicly available no later than 12 months after the official date of publication: Provided, That the NIH shall implement the public access policy in a manner consistent with copyright law.*

PubMed – Provides access to citations from biomedical literature. It includes over 17 million citations from MEDLINE and other life science journals for biomedical articles back to the 1950s, along with links to full text articles and other scientific resources. These citations are indexed with a PMID, a series of numbers.

R

Rating Criteria – See Initial Peer Review Criteria.

Real Property – Land, including land improvements, structures, and appurtenances, but not movable machinery and equipment.

Rebuttal – Procedure for contesting the peer review of a grant application. Synonymous with appeal.

Receipt, Referral, and Assignment of Applications – Routing of applications arriving at NIH. The referral section of CSR is the central receipt point for competing applications. CSR referral officers assign each application to an Institute and refer it to a scientific review group, notifying applicants of these assignments by mail. Alternatively, NIH encourages applicants to self assign.

Recipient – Organizational entity or individual receiving a grant or cooperative agreement. *See* Grantee.

Recommended – Designation given by a study section advising funding of an application. The application gets a priority score and summary statement. Roughly the top half of applications being reviewed are recommended for funding.

Recommended Levels of Future Support – Funding level recommended for each future year approved by the scientific review group, subject to availability of funds and scientific progress.

Re-Competing – Grant whose term (e.g., 4 years) is over and for which the applicant is again seeking NIH support. Also known as type 2, competing continuation application, and renewal.

Request for Application (RFA) – The official statement inviting grant or cooperative agreement applications to accomplish a specific program purpose. RFAs indicate the amount of funds set aside for the competition and generally identify a single application receipt date.

Request for Proposals (RFP) – Announces that NIH would like to award a contract to meet a specific need, such as the development of an animal model. RFPs have a single application receipt date and are published in the NIH Guide for Grants and Contracts.

Research – A systematic, intensive study intended to increase knowledge or understanding of the subject studied, a systematic study specifically directed toward applying new knowledge to meet a recognized need, or a systematic application of knowledge to the production of useful materials, devices, and systems or methods, including design, development, and improvement of prototypes and new processes to meet specific requirements. Also termed "research and development."

Research Grants – Extramural awards made for Other Research Grants, Research Centers, Research Projects, and SBIR/STTRs. Includes the following: R,P,M,S,K,U series (excluding UC6) DP1, DP2, D42, G12.

Research Misconduct – Fabrication, falsification, or plagiarism in proposing, performing, or reporting research, or in reporting research results. Fabrication is making up data or results and recording or reporting them. Falsification is manipulating research materials, equipment, or processes, or changing or omitting data or results such that research is not accurately represented in the research record. Plagiarism is the appropriation of another person's ideas, processes, results, or words without giving appropriate credit. The term does not include honest error or honest differences of opinion.

Research Portfolio – The cohort of grants supported by a given NIH organization.

Research Projects – Includes the following selected Research Grant and Cooperative Agreement activities: R01, R03, R15, R21, R22, R23, R29, R33, R34, R35, R36, R37, R55, R56, RC1, P01, P42, PN1, U01, U19, UC1, NIGMS P41.

Research Project Grant (RPG) – Supports discrete, specified, circumscribed projects to be performed by named investigators in areas representing their specific interest and competencies. *See* Research Projects.

Research Supplement – Monies adding funds to an existing grant to support and promote diversity, people with disabilities, and people returning to work from family responsibilities.

Restriction – Special term and condition in a Notice of Award or article in a contract that limits activities and expenditures for human subjects or animal research. It may be lifted or adjusted after the award if the requirements are met.

Resubmission – Grants.gov term for a grant application resubmitted to NIH after a PD/PI applicant who did not succeed in getting funded revises it based on feedback from the initial peer review. Previous NIH term was "revision." A resubmission has an entry in its application identification number (e.g., A1).

Review Cycle – Refers to the Center for Scientific Review's thrice yearly initial peer review cycle, from the receipt of applications to the date of the review.

Revision – Grants.gov term for money added to a grant to expand its scope or meet needs of a research protocol. Applicants must apply and undergo peer review. The NIH term has been "competing supplemental." NOTE: The former NIH term, "revision," is now "resubmission" in Grants.gov.

S

Salary Cap/Limitation – A legislatively mandated provision limiting the direct salary (also known as salary or institutional base salary, but excluding any fringe benefits and F&A costs) for individuals working on NIH grants, cooperative agreement awards, and extramural research and development contracts.

Scientific Overlap – Overlap of support occurs when substantially similar research is proposed in more than one concurrent PHS grant application.

Scientific Review Officer (SRO) – Federal scientist who presides over a scientific review group and is responsible for coordinating and reporting the review of each application assigned to it. The SRO serves as an intermediary between the applicant and reviewers and prepares summary statements for all applications reviewed.

Scientific Review Group (SRG) – The first level of a two-stage peer review system. These legislatively mandated panels of subject matter experts are established according to scientific discipline or medical specialty. Their primary function is the review and rating of research grant applications for scientific and technical merit. They make recommendations for the appropriate level of support and duration of award. Also known as Study Section.

Scored – In the peer review process, applications judged by a study section to be competitive (i.e., generally in the upper half of the applications reviewed). These applications are assigned a priority score and forwarded to the appropriate Institute/Center for the second level of review.

Selective Pay – The funding of a small number of programmatically important applications at the margin of the payline as recommended by Council.

Set-Aside – Money taken out of the budget for a specific purpose, for example, to fund a congressionally mandated program.

Sex as a Biological Variable (SABV) – NIH expects that sex as a biological variable will be factored into research designs, analyses and reporting in vertebrae animals and human studies. See: Consideration of Sex as a Biological Variable in NIH-funded Research: https://grants.nih.gov/grants/guide/notice-files/NOT-OD-15-102.html

Signing Official (SO) – Person with has institutional authority to legally bind the institution in grants administration matters. The individual fulfilling this role may have any number of titles in the grantee organization. The SO can register the institution, and create and modify the institutional profile and user accounts. The SO also can view all grants within the institution, including status and award information.

An SO can create additional SO accounts as well as accounts with any other role or combination of roles. For most institutions, the Signing Official (SO) is located in its Office of Sponsored Research or equivalent.

Small Business Concern – A business independently owned and operated and not dominant in its field of operation; has its principal place of business in the United States and is organized for profit; is at least 51 percent owned, or in the case of a publicly owned business, at least 51 percent of its voting stock is owned by U.S. citizens or lawfully admitted permanent resident aliens; has, including its affiliates, not more than 500 employees; and meets other regulatory requirements established by the Small Business Administration at 13 Code of Federal Regulations (CFR) Part 121.

Small Business Innovation Research (SBIR) – A program designed to support small business concerns conducting innovative research/research & development with potential for commercialization. For the computation of success rates, SBIR awards are not included in the count of RPGs.

Small Business Technology Transfer (STTR) – A program designed to support cooperative research/research & development with potential for commercialization, through a formal cooperative effort between a small business and a U.S. research institution. For the computation of success rates, STTR awards are not included in the count of RPGs.

Special Council Review (SCR) – Advisory Council members provide additional consideration of new and renewal applications from well-supported investigators who currently receive \$1 million or more in direct costs of NIH funding for RPGs. See: Notice of NIH Special Council Review of Research Applications from PDs/PIs with More than \$1.0 Million Direct Costs in Annual NIH Support: https://grants.nih.gov/grants/guide/notice-files/NOT-OD-12-140.html

Special Emphasis – The NIDDK's policy to set aside funds that are used by the respective program divisions to fund meritorious grants whose competitive position places them beyond the established regular payline. It is the responsibility of the respective program divisions to identify such grants and through its established review procedures to determine which grants meet the Special Emphasis (SE) criteria and receive Subcouncil endorsement for funding. Each such application is then nominated for the Division Director's concurrence and approval by the Institute Director.

Special Government Employee (SGE) – A Special Government Employee is an officer or employee who is retained, designated, appointed, or employed to perform temporary duties, with or without compensation, for not more than 130 days during any period of 365 consecutive days. This category should be distinguished from other categories of individuals who serve executive branch agencies but who are not employees, such as independent contractors.

Specific Aims – A component of an application's Research Plan which describes concisely and realistically what the proposed research or activity intends to accomplish by the end of the grant. Includes broad, long-term goals; hypothesis or hypotheses to be tested; and specific time-phased research objectives (e.g., to test a stated hypothesis, create a novel design, solve a specific problem, challenge an existing paradigm or clinical practice, address a critical barrier to progress in the field, or develop a product or new technology).

Statement of Work (SOW) – In a contract proposal, the detailed description of the work to be performed under the contract.

Streamlined Non-Competing Award Process (SNAP) – Simplified process for the submission of information prior to the issuance of a non-competing award. Funds are automatically carried over and are

available for expenditure during the entire project period. All NIH award notices identify whether the grant is subject to or excluded from SNAP.

Streamlined Review (formerly Triage) – In the CSR peer review process, applications judged by a study section to be in the lower half of the applications evaluated in a given review round. These applications are generally not discussed during the study section meeting, but returned to the applicant with the assigned reviewers' written comments with no priority score. *See* Unscored.

Study Section – Panel of experts established according to scientific disciplines or current research areas for the primary purpose of evaluating the scientific and technical merit of grant applications. Also called scientific review group (SRG) or initial review group (IRG).

Subaward – Collaborative arrangement in support of a research project in which part of an activity is carried out through a formal agreement between a grantee and one or more other organizations. Also known as consortium agreement.

Success Rate – Indicates the percentage of reviewed RPG applications receiving funding computed on a fiscal year basis. It is determined by dividing the number of competing applications funded by the sum of the total number of competing applications reviewed and the number of funded carryovers. NOTE: Applications having one or more amendments in the same fiscal year are only counted once. Success rate computations exclude SBIR/STTRs.

Success Rate Base – The basis for computing the Research Project Grant (RPG) success rate. It includes the total number of competing applications reviewed (the number of applications subjected to a streamlined review process). Also known as Rate Base.

Summary Statement – A combination of the reviewers' written comments and the Scientific Review Administrator's (SRA's) summary of the members' discussion during the study section meeting. It includes the recommendations of the study section, a recommended budget, and administrative notes of special considerations.

Supplement – A request for additional funds either for the current operating year or for any future year recommended previously. Also known as a Type 3 application or award, a supplement can be either noncompeting (administrative) or competing (subject to peer review).

T

Targeted Research – Research funded as a result of an Institute set-aside of dollars for a specific scientific area. Institutes solicit applications using research initiatives (RFAs for grants, RFPs for contracts). Targeted research applications are reviewed by chartered peer review committees within Institutes. The opposite is Investigator-Initiated Research.

Technology Transfer – Sharing of knowledge and facilities among Federal laboratories, industry, universities, Government, and others to make federally generated scientific and technological advances accessible to private industry and State and local governments.

Terms and Conditions of Award – All legal requirements imposed on a grant by NIH, whether based on statue, regulation, policy, or other document referenced in the grant award, or specified by the grant award document itself. The Notice of Award may include both standard and special conditions that are

considered necessary to attain the grant's objectives, facilitate post award administration of the grant, conserve grant funds, or otherwise protect the Federal Government's interests.

Tethered Application/Grant – When applications are submitted for multiple PI's from multiple organizations, the application from the partnering Institutions are associated and reviewed as a single project. If an award is made, each of the involved institutions will receive a separate grant to fund the collaborative project. All applications are linked by a common project title and by cross-references within each application.

Total Project Costs – The total allowable costs (both direct costs and facilities and administrative costs) incurred by the grantee to carry out a grant-supported project or activity. Total project costs include costs charged to the NIH grant and costs borne by the grantee to satisfy a matching or cost-sharing requirement.

Training Awards – Awards designed to support the research training of scientists for careers in the biomedical and behavioral sciences, as well as help professional schools to establish, expand, or improve programs of continuing professional education. Training awards consist of institutional training grants (T) and individual fellowships (F).

Translational Research – Translational research includes two areas of translation. One is the process of applying discoveries generated during research in the laboratory, and in preclinical studies, to the development of trials and studies in humans. The second area of translation concerns research aimed at enhancing the adoption of best practices in the community. Cost-effectiveness of prevention and treatment strategies is also an important part of translational science.

Triage – See Streamlined Review

Type – *See* Application Types.

U

Underrepresented Group – Group underrepresented in biomedical research, such as people with disabilities, people from disadvantaged backgrounds, and racial and ethnic groups such as blacks or African Americans, Hispanics or Latinos, American Indians or Alaskan Natives, and Native Hawaiians and other Pacific Islanders. Used as an eligibility requirement for diversity supplements, fellowships (F31), and other NIH programs.

Unscored – In the Center for Scientific Review peer review process, applications judged by a study section to be noncompetitive are generally in the lower half of the applications to be reviewed. These applications are not given a priority score, although they are reviewed and applicants receive a summary statement. Between FY 1992 and FY 1995 the term "Not Recommended for Further Consideration" (NRFC) referred to noncompetitive applications.

 \mathbf{V}

Validation – The systematic check of applications against the NIH application guide and Funding Opportunity Announcement instructions. The process can generate errors or warnings.

W

Withholding of Support – A decision by NIH not to make a non-competing continuation award within the current competitive segment.

Book of NIH Abbreviations and Acronyms

Letter Codes Designating Funding for NIH Institutes, Centers in Grant Applications

Abbreviation	NIH Institutes, Centers	Letter Code Designating Funding Institute In Grant Applications
СС	Clinical Center*	
CIT	Center for Information Technology*	
CSR	Center for Scientific Review*	
FIC	John E. Fogarty International Center	TW
NCATS	National Center for Advancing Translational Sciences	TR
NCCIH	National Center for Complementary and Integrative Health	AT
NCI	National Cancer Institute	CA
NEI	National Eye Institute	EY
NHGRI	National Human Genome Research Institute	HG
NHLBI	National Heart, Lung, and Blood Institute	HL
NIA	National Institute on Aging	AG
NIAAA	National Institute on Alcohol Abuse and Alcoholism	AA
NIAID	National Institute of Allergy and Infectious Diseases	Al
NIAMS	National Institute of Arthritis and Musculoskeletal and Skin Diseases	AR
NIBIB	National Institute of Biomedical Imaging and Bioengineering	ЕВ

^{*} Does Not Make Extramural Awards

Abb reviation	NIH Institutes, Centers, Offices	Letter Code Designating Funding Institute In Grant Applications
NICHD	Eunice Kennedy Shriver National Institute of Child Health and Human Development	HD
NIDA	National Institute on Drug Abuse	DA
NIDCD	National Institute on Deafness and Other Communication Disorders	DC
NIDCR	National Institute of Dental and Craniofacial Research	DE
NIDDK	National Institute of Diabetes and Digestive and Kidney Diseases	DK
NIEHS	National Institute of Environmental Health Sciences	ES
NIGMS	National Institute of General Medical Sciences	GM
NIH	National Institutes of Health	
NIMH	National Institute of Mental Health	МН
NIMHD	National Institute on Minority Health and Health Disparities (formerly National Center on Minority Health and Health Disparities)	MD
NINDS	National Institute of Neurological Disorders and Stroke	NS
NINR	National Institute of Nursing Research	NR
NLM	National Library of Medicine	LM
OD	Office of the Director	OD

Acronym Definition

Α

AAALAC Association for Assessment and Accreditation of Laboratory Animal Care

AALAS American Association for Laboratory Animal Science

AAMC Association of American Medical Colleges

AAP American Academy of Pediatrics

AAPHP American Academy of Pediatrics

ABL Applied BioScience Laboratories for Acquired Immunodeficiency Syndrome

ABRCMS Annual Biomedical Research Conference for Minority Students

ABSL American Bio-Safety Level

ACD Advisory Committee to the Director

ACEP American College of Emergency Physicians

ACF Administration for Children and Families (DHHS)

ACGME Accreditation Council for Graduate Medical Education

ACPM American College of Preventive Medicine

ACR American College of Radiology

ACS American Cancer Society

ACS American College of Surgeons

ACSI American Customer Satisfaction Index

ACSR AIDS and Cancer Specimen Resource, NCI

ACTG AIDS Clinical Trials Group

ACTIS AIDS Clinical Trials Information Service

ACTU AIDS Clinical Trials Unit

ACUC Animal Care and Use Committee

ADAMHA Alcohol Drug Abuse and Mental Health Administration (now SAMSHA)

ADB Automated Data Base System

ADB Administrative Database System (NIH)

ADC AIDS Dementia Complex

ADCR Associate Director for Clinical Research

ADD Attention Deficit Disorder

AdEERS Adverse Event Expedited Reporting System

ADP Automated Data Processing

ADR Adverse Drug Reactions

ADR Alternative Dispute Resolution

AE Adverse Event

AER Adverse Event Reporting

AFGE American Federation of Government Employees

AFIP Armed Forces Institute of Pathology

AFIP Animal Facilities Improvement Program

AFL/CIO American Federation of Labor/Congress of Industrial Organizations

AGEMAP Atlas of Gene Expressions in Mouse Aging Project

AGRICOLA AGRICultural OnLine Access

AHCPR Agency for Health Care Policy and Research

AHRQ Agency for Healthcare Research and Quality

Al Amelogenesis Imperfecta

Al/ANO American Indian/Alaskan Native Organization

AID U.S. Agency for International Development

AIDS Acquired Immunodeficiency Syndrome

AIDSinfo HHS AIDS information Web site

AIEDRP Acute Infection and Early Disease Research Program

AIRO Agency Intramural Research Integrity Officer

AIRO American Indian Research Opportunities

AITRC Allergy, Immunology, and Transplantation Research Committee

AITRP AIDS International Training and Research Program, FIC

AJCC American Joint Committee on Cancer

AL Annual Leave

ALAT Assistant Laboratory Animal Technician (Certified by AALAS)

ALERT system for disseminating information to Public Health Service officials about organizations or people charged with or found to have engaged in

scientific misconduct (PHS)

AMA American Medical Association

AMB AIDS Malignancy Bank

AMC AIDS Malignancy Consortium

AMC Acquisition Management Committee

AMD Age-related Macular Degeneration

AMHPS Association of Minority Health Professionals Schools

AMIA American Medical Informatics Association

AMLCD Active matrix liquid crystal display

AMSSC Administrative Management Systems Steering Committee

AMWG AIDS Malignancies Work Group

ANL Argonne National Laboratory, Argonne, IL

ANPR Advance Notice of Proposed Rulemaking

ANSI American National Standards Institute

AO Administrative Official/ Administrative Office/ Administrative Officer

AOA Administration on Aging

AP Acquisition Plan

APA Administrative Program Assistant

APAC Annual Payback Activities Certification

APAO Asian and Pacific Islander American Organization

APC NIH Purchase Card Program Agency Program Coordinator

APD Animal Program Director

APHA American Public Health Association

APHIS USDA - Animal and Plant Health Inspection Service

API Application Programming Interfaces

APN Advanced Practice Nursing

ARA Awaiting Receipt of Application

ARAC Administrative Restructuring Advisory Committee/Work Group on

Acquisition

ARAC AIDS Research Advisory Committee (NIAID)

ARB Architecture Review Board

ARC Administrative Resource Center

AREA NIH Academic Research Enhancement Award (R15)

ARL U.S. Army Research Laboratory

ARND Alcohol-related Neurodevelopmental Disorder

ARRA American Recovery and Reinvestment Act of 2009

ARRR AIDS-Related Research Review

ARS Agriculture Research Service

ART Antiretroviral Therapy

ARV Antiretroviral

ASAP As Soon As Possible

ASB Administrative Services Branch

ASBTF Assistant Secretary for Budget, Technology and Finance

ASDC Administrative Skills Development Curriculum

ASH Assistant Secretary for Health, PHS

ASI Addiction Severity Index

ASP Animal Study Proposal

ASPE Office of the Assistant Secretary for Planning and Evaluation

ASPER Assistant Secretary for Personnel Administration, DHHS

ASPH Association of Schools of Public Health

ASTHO Association of State and Territorial Health Officials

AT Administrative Technician

ATCC American Type Culture Collection, Manassas, VA

ATI Analytic Treatment Interruption

ATIS AIDS Treatment Information Service

ATPM Association of Teachers and Preventive Medicine

ATSDR Agency for Toxic Substances and Disease Registry

AVEG AIDS Vaccine Evaluation Group

AVEU AIDS Vaccine Evaluation Unit

AVRC AIDS Vaccine Research Committee

AWA Animal Welfare Act

AWOL Absence Without Official Leave

AWS AIDS-associated Wasting Syndrome

AZT Zidovudine (generic name) or Azidothymidine

В

B&F Buildings and Facilities

B&P Bid and Proposal

B/Start Behavioral Science Track Award for Rapid Transition

BAA Broad Agency Announcement

BAFO Best and Final Offer

BARC Beltsville Agricultural Research Center

BBBP Biobehavioral and Behavioral Processes

BC Biomarker Consortium

BC/BS Blue Cross/Blue Shield

BCP Best Community Practice and Biophysical and Chemical Sciences

BCS Biochemical Sciences

BDCN Brain Disorders and Clinical Neuroscience

BDP Biopharmaceutical Development Program

BDR Budget Data Request

BEA Bureau of Economic Analysis

BECON Bioengineering Consortium (NIH OD)

BEMIS Biomaterials and Medical Implant Science

BEP Bureau of Engraving and Printing

BESA Border Epidemiologic Study of Aging

BEST Biomonitoring of Environmental Status and Trends

BFRL Building and Fire Research Laboratory

BGCRG Breast and Gynecologic Cancer Research Group

BHPr Bureau of Health Professions

BIA Bureau of Indian Affairs

BIC Business Information Center

BIG Blacks in government

BIGR Biomaterials and Information for Genomic Research™ (Ardais Corporation)

BIMAS Bioinformatics Molecular Analysis Section

BIO Biotechnology Industry Organization

BIRADS Breast Imaging Reporting and Data System

BIRN Biomedical Informatics Research Network

BIS Bureau of Industry and Security

BISM Blind Industries and Services of Maryland

BISTI Biomedical Information Science and Technology Initiative

BISTIC Bioinformatics Consortium (NIH OD)

BITS Business Information Technology System

BJA Bureau of Justice Assistance

BJS Bureau of Justice Statistics

BL-3 Biosafety Level 3

BLA Biologics License Application

BLIRC Biomedical Library and Informatics Review Committee

BLM Bureau of Land Management

BLS Board on Life Sciences

BLS Bureau of Labor Statistics

BMBL Biosafety in Microbiological and Biomedical Laboratories

BMDO Ballistic Missile Defense Organization

BML Biological Material License

BMMR Biological Models and Materials Research

BMO Business Management Office

BNA Bureau of National Affairs

Brookhaven National Laboratory, Upton, NY (Department of Energy

Organization)

BOA Basic Ordering Agreement

BOG Board of Governors, NIH

BOP Federal Bureau of Prisons

BOR Board of Regents

BOR Bureau of Reclamation

BoS **Board of Survey**

BPA Blanket Purchase Agreement

BPD Bureau of Public Debt

Benign Prostatic Hyperplasia **BPH**

BPHC Bureau of Primary Health Care

BPSRG Basic Prevention Science Research Group

BRB Benefits Review Board

BRCA Breast Cancer

BRD Biological Resource Division,

Biomedical Research and Development Price Index, measures real annual **BRDPI**

changes in the prices of items and services required for research and

development (R&D) activities

BRFSS Behavioral Risk Factor Surveillance System

BRG Biometry Research Group

BRIN Biomedical Research Infrastructure Network

BRMP Biological Response Modifiers Program

BSA Board of Scientific Advisors

BSC Board of Scientific Counselors

BSC Business Service Centers

BSI Brief Symptom Inventory

BSL Bio-Safety Level

BSSC Behavioral and Social Sciences Coordinating Committee

BTP Biotechnology Training Program

BTR Biomedical Technology Resource BTS Bureau of Transportation Statistics

BVA Board of Veterans Appeals

C

CAM Complementary and Alternative Medicine

CBER Center for Biologics Evaluation and Research

CBIAC Chemical and Biological Defense Information Analysis Center

CBO Congressional Budget Office

CBT Computer-Based Training

CC Warren Grant Magnuson Clinical Center, NIH

CCB Configuration Control Board

CCB Child Care Bureau

CCC Commodity Credit Corporation

CCO Chief Contracting Officer

CCR Center for Career Resources (OD)

CCR Center for Cooperative Resolution

CCR Commission on Civil Rights

CCSS Childhood Cancer Survivor Study

CCTAT Cooperative Clinical Trials in Adult Kidney Transplantation

CCTPT Cooperative Clinical Trials in Pediatric Kidney Transplantation

CDA Confidential Disclosure Agreement

CDBG Community Development Block Grants

CDC Centers for Disease Control and Prevention, PHS (Public Health Service)

CDE Common Data Element

CDER Center for Drug Evaluation and Research

CDFI Community Development Financial Institutions

CDHR Center for Devices and Radiological Health

CDMC Central Data Management Center

CDMRP Congressionally Directed Medical Research Program

cDNA Complementary DNA

CDs Communication Directors

CES Central E-mail Service

CDP Career Development Plan

CDR Clinical Drug Request

CDUS Clinical Data Update System

CDW Consultant Days Worked

CEA Council of Economic Advisers

CEC Contractor Establishment Code

CEDR Comprehensive Epidemiologic Data Resource

CEGS Centers of Excellence in Genomic Science

CEL Commercial Evaluation License

CEN Bureau of the Census

CEPPO Chemical Emergency Preparedness and Prevention Office

CEPS Center for Earth and Planetary Studies

CEQ Council on Environmental Quality

CERCLIS Comprehensive Environmental Response, Compensation, & Liability

Information System

CETEC Topographic Engineering Center

CF Consent Form

CFAR Centers for AIDS Research

CFC Combined Federal Campaign

CFDA

Catalog of Federal Domestic Assistance, a database that helps the Federal

Government track all programs it has domestically funded. Federal programs are assigned a number in the database called the "CFDA"

number."

CFO Chief Financial Office

CFOC Chief Financial Officers Council

CFR Code of Federal Regulations

CFS CRC Chronic Fatigue Syndrome Cooperative Research Centers

National Center for Food Safety and Applied Nutrition **CFSAN**

CGAP Competitive Grant Application Process

CGH Comparative genomic hybridization

CHAMPVA Civilian Health and Medical Program of the Department of Veterans Affairs

CHB Community Health Branch (DOHS)

CHID Combined Health Information Database

ChiMP NIH Chimpanzee Management Program

CHIMP Chimpanzee Health, Improvement, Maintenance and Protection Act

Cooperative Human Tissue Network CHTN

CIAO Critical Infrastructure Assurance Office

CIC **Consumer Information Center**

CID Center of Infectious Diseases (CDC)

CIDI Composite International Diagnostic Interview (Clinical Trials Standard)

CIO Chief Information Officer

CIPRA Comprehensive International Program for Research on AIDS

CIS Cancer Information Service

CISET Committee on International Sciences, Engineering, and Technology

CIT Center for Information Technology

CJD Creutzfeldt-Jakob Disease **CLC** Community Liaison Council

CLIA Clinical Laboratories Improvement Act

CLM Council of Logistics Management

CMAB Complaints Management and Adjudication Branch (OEO)

CMAP Cancer Molecular Analysis Project

CMB Comparative Medicine Branch

CMBD Collection Management & Delivery Branch (DLS)

CME Continuing Medical Education

CMHS Center for Mental Health Services

CML Chronic Myeloid Leukemia

СМО

Committee Management Officer, IC person responsible for the oversight of all NIH Federal advisory committees under the auspices of the Federal Advisory Committee Act; responsible for developing committee charter, preparing nomination and appointment documents for membership to

committees, providing technical assistance to committee members,

providing initial review of conflict of interest disclosures, etc.

CMP Contract Management Program

CMP/HMO Comprehensive Medical Plans/Health Maintenance Organizations

CMPP Center for Nutrition Policy and Promotion

CMS Centers for Medicare and Medicaid Services

CMSP Cooperative Medical Sciences Program

CMV Center for Minority Veterans

CNCRIT Collaborative Network for Clinical Research on Immune Tolerance

CNS Central Nervous System

CO Contracting Officer

COB Close of Business

COBRE Centers of Biomedical Research Excellence

CoC Commission on Cancer

CoC Council of Councils

COC Certificate of Confidentiality

COG Children's Oncology Group

COGA Collaborative Study on the Genetics of Alcoholism

COI Conflict of Interest

COLA Cost of Living Allowance

CONSER Cooperative Online Serials

COOG Continuity of Operations Group

COOP Continuity of Operations Plan

COP Continuation of Pay

COP Costal Ocean Program

COPR Council of Public Representatives (serves NIH Director)

COPS Office of Community Oriented Policing Services

COPTRG Community Oncology and Prevention Trials

COR Career Opportunities in Research Education and Training

COSEPUP Committee on Science Engineering and Public Policy

COTA Career Opportunities Training Agreement (HHS)

COTS Commercial Off-The-Shelf Software Products

CPA Cooperative Project Assurance

CPAF Cost Plus Award Fee

CPDF Central Personnel Data File

CPE Continuing Professional Education

CPFP Cancer Prevention Fellowship Program

CPI Consumer Price Index

CPIF Cost Plus Incentive Fee

CPMS Defense Civilian Personnel Management Service

CPO Corrections Program Office

CPS Contractor Performance System

CPS Center for Prevention Services (CDC)

CPSC Consumer Product Safety Commission

CR Continuing Resolution

CRA Clinical Research Associate

CRADA Cooperative Research and Development Agreement

CRC Cooperative Research Center

CRC Civil Rights Center

CRC New Clinical Research Center

CRF Case Report Form (Source Document for Clinical Studies)

CRIB Central Institutional review Board

CRIC Chronic Renal Insufficiency Cohort

CRIS Clinical Research Information System

Computer Retrieval of Information on Scientific Programs, A searchable biomedical database of federally supported proposed research conducted at

universities, hospitals, institutions, etc.

CRL Charles River Laboratories

CRM Customer Relations Manager

CRO Contract Research Organization

CRP Conference Room Pilot

CRP Conservation Reserve Program

CRS Congressional Research Service

CRS Clinical Research Scholar

CRS Community Relations Service

CRTA Cancer Research Training Award

CRTP Clinical Research Training Program

CRVP Clinical Research Volunteer Program

CS Contract Specialist

CSAC Central Services Advisory Committee

CSAP Center for Substance Abuse Prevention

CSAT Center for Substance Abuse Treatment

CSB Customer Service Branch (DMAPS)

CSB Chemical Safety and Hazard Investigation Board

CSD Client Services Division

CSE Office of Child Support Enforcement

CSI Center for the Study of Intelligence

CSR Center for Scientific Review

CSREES Cooperative State Research, Education, and Extension Service

CT Computed Tomography

CTA Clinical Trial Agreement

CTAG Clinical Translation Advisory Group

CTC Common Toxicity Criteria

CTEP Clinical Therapeutic Evaluation Program

CTEP Cancer Therapy Evaluation Program

CTN National Drug Abuse Treatment Clinical Trials Network

CTP Community Treatment Program

CTSA Clinical and Translational Science Awards

CTSU Clinical Trials Support Unit

CU Coordinating Unit

CUAP College and University Affiliations Program

Cumulus Slide/Presentation Management System

CVS Cardiovascular Sciences

CVS Chorionic Villus Sampling

CWC Chemical Weapons Convention

CWD Chronic Wasting Disease

CY Calendar Year

D

D&A Design and Analysis Workgroup

D&B Dun & Bradstreet Number

DAP Division of Acquisition Programs, OLAO

DARPA Defense Advanced Research Projects Agency

DASAM Deputy Secretary for Administration and Management

DASPA Division of Advanced Studies and Policy Analysis

DB Design Branch (DMAPS)

DBASSE Division of Behavioral and Social Sciences and Education

DBBD Division of Biological Basis of Disease

DBDR Division of Blood Diseases and Resources

DBPS Division of Bioengineering and Physical Science

DBT Division of Biomedical Technology

DCA Division of Cost Allocation

DCAA Defense Contract Audit Agency

DCCT Diabetes Control and Complications Trial

DCIS Department Contract Information System

DCLG Director's Consumer Liaison Group

DCM Division of Comparative Medicine

DCMC Defense Contract Management Command

DCMS Division of Mail and Courier Services (ORS)

DCPS Division of Clinical and Population Based Studies

DCR Division of Career Resources, OHRM, NIH

DCR Division of Clinical Research

DCRT Division of Computer Research and Technology (now CIT)

DDC Defense Distribution Center

DDER Deputy Director of Extramural Research, NIH

DDIR Deputy Director for Intramural Research

DDKR Drug Delivery & Kinetics Resource (DBPS)

DDM Deputy Director for Management

DDN Division of Digestive Diseases and Nutrition, NIDDK

DDP Diamminedichloroplatinum

DEA Division of Extramural Activities, NIDDK

DEC Deputy Ethics Counselor

DeCA Defense Commissary Agency

DEIS Division of Extramural Information Systems

DELPRO Delegated Procurement System

DEM Division of Diabetes, Endocrinology, and Metabolic Diseases, NIDDK

DEMS Division of Events Management Services (PES or P&ES)

DEPC Division of Emergency Preparedness & Coordination

DEPS Division of Epidemiology and Population Studies

DERT Division of Extramural Research and Training

DES Division of Engineering Services

DEFAS Defense Finance and Accounting Service (sends out DHHS/NIH W2s for

honorariums, etc.)

DFM Division of Financial Management

DHHS Department of Health and Human Services

DHRS Division of Human Resource Systems, OHRM, NIH

DHVD Division of Heart and Vascular Diseases

DICOM Digital Imaging and Communications in Medicine

DINFOS Defense Information School

DIR Division of Intramural Research, NIDDK

DITA Division of Information Technology Acquisition, OLAO (also known as

NITAAC)

DITR Division of International Training and Research

DLD Division of Lung Diseases

DLS Division of Library Services

DLS Division of Logistics Services, OLAO

DLT Digital linear tape

DM Data management

DMAPS Division of Medical Arts and Printing Services

DMAS Data Management and Analysis Subcommittee

DMCM Division of Molecular and Cellular Mechanisms

DMCS Division of Mail and Courier Services

DMDC Defense Manpower Data Center

DMID Division of Microbiology and Infectious Diseases

DMS Division of Management Services

DNA Deoxyribonucleic Acid

DOHS Division of Occupational Health and Safety

DORRA DLA Office of Operations Research and Resource Analysis

DPCPSI Division of Program Coordination, Planning, and Strategic Initiatives

DPPS Division of Personal Property Services, OLAO

DPS Division of Physiological Systems

DPSM Division of Physical Security Management

DRA Division of Research Acquisition, OLAO

DRI Division of Research Infrastructure

DRR Division of Receipt and Referral

DRS Division of Radiation Safety

DRSB Diagnostic & Research Services Branch

DS Division of Safety, Office of Research Services

DSEIS Division of Scientific Equipment and Instrumentation Services (ORS)

DSFM Division of Space and Facility Management

DSMB Data and Safety Monitoring Board

DSM-IV Diagnostic & Statistical Manual of Mental Disorders – 4th Edition

DSO Division of Security Operations

DSS Division of Support Services

DSSA Division of Station Support Acquisition, OLAO

DTIC Defense Technical Information Center

DTM Department of Transfusion Medicine (ORS)

DTP Developmental Therapeutics Program

DTTS Division of Travel and Transportation Services

DUNS Data Universal Numbering System

DVR Division of Veterinary Resources

DW Data Warehouse

DWD Division of Workforce Development

Ε

EA Expanded Authorities

EA Enterprise Architecture

EAC External Advisory Committee

EACC External Affairs Coordinating committee

EAP Employee Assistance Program

EBSA Employee Benefits Security Administration

EC Executive Committee

EC European Commission

ECA Executive Committee for Acquisition

ECA Bureau of Educational and Cultural Affairs

ECAB Employees' Compensation Appeals Board

ECB Electronic Council Book

ECFMG Educational Commission for Foreign Medical School Graduates

ECIE Executive council on Integrity and Efficiency

ECL Executive Committee on Logistics

ECOSOC Economic and Social Council

ECP Emergency Conservation Program

ECR-LRP Extramural Clinical Research Loan Repayment Program for Individuals from

Disadvantaged Backgrounds

EDGAR Electronic Data Gathering, Analysis, and Retrieval

EDI Electronic Data Interchange

EDIC Epidemiologic Cohort Study

Edison Extramural Invention Information Management System

EDRG Early Detection Research Group

EDRN Early Detection Research Network

EEO Equal Employment Opportunity

EEOC Equal Employment Opportunity Commission

EES Enterprise E-Mail System

EHP Environmental Health Perspectives

EHRP Enterprise Human resources and Payroll System

EIA Energy Information Administration

EIN Entity Identification Number

EIR Employee Invention Report

EIS Epidemic Intelligence Service

ELS Earnings and Leave Statement

ELSI Ethical, Legal and Societal Implications

EL-TRAINS Electronic Logistics Training & Support Network

EM Office of Environmental Management

EML Environmental Measurement Laboratory

EMPSB Events Management Program Support Branch (DEMS)

ENC Eisenhower National Clearinghouse

ENR Endocrinology and Reproductive Sciences

ENS Early Notification System

EO Executive Order

EOB Editorial Operations Branch

EOC Ethics Oversight Committee

EOD Entrance on Duty

EOIR Executive Office for Immigration Review

EOP Executive Office of the President

EOUSA Executive Office for United States Attorneys

EP Extramural Programs

EPMC Extramural Program Management Committee

EPN Executive Plaza North (6130 Executive Blvd.; Rockville, MD 20852)

EPRU Enteric Pathogens research Unit

EPS Executive Plaza South (6120 Executive Blvd.; Rockville, MD, 20852)

EPSCoR Experimental Program to Stimulate Competitive Research

EPSS Electronic Performance Support Systems

eRA Electronic Research Administration; responsible for IMPAC II

ERDA Energy Research and Development Administration

EREN Energy Efficiency and Renewable Energy Network

ERIC Educational Resources Information Center

EROD Educational Resource Organizations Directory

ERP Extramural Research Program

ERS Economic Research Service

ERSB Equipment Rental & Sakes Branch (DSEIS)

ES Executive Secretariat (NIH)

ESA Extramural Scientist Administrator

ESA Employment Standards Administration

ESA Economics and Statistics Administration

ESDIM Environmental Services Data and Information Management

ESG Executive Staffing Group (REPS, PMB, NCI)

ESI Early Stage Investigator

eSNAP Electronic Streamlined Non-competing Award Process

ETA Employment and Training Administration

ETSO Employee Transportation Services Office

F

F & A Facilities and Administrative Cost

F Awards Fellowship Awards

FACA Federal Advisory Committee Act

FAES Foundation for Advanced Education in the Sciences

FAI Fair Act Inventory

FAIR Act Federal Activities Inventory Reform Act

FAQ Frequently Asked Questions

FAR Federal Acquisition Regulation

FARB Funding Advisory Review Board

FASAB Federal Accounting Standards Advisory Board

FASEB Federation of American Societies for Experimental Biology

FCC Federal Communications Commission

FCOI Financial Conflict of Interest

FCRDC Frederick Cancer Research and Development Center

FDA Food and Drug Administration (PHS)

FDP Federal Demonstration Partnership

FECA Federal Employees' Compensation Act

FEGLI Federal Employees' Group Life Insurance

FEHBP Federal Employees' Health Benefit Program

FEMA Federal Emergency Management Agency

FERC Federal Energy Regulatory Commission

FERS Federal Employees' Retirement System

FFLA Family Friendly Leave Act

FIC John E. Fogarty International Center

FICA Federal Insurance Contributions Act (Social Security)

FIRST First Independent Research Support and Transition Award

fMRI Functional Magnetic Resonance Imaging

FMS Financial Management Service

FNIH Foundation for the National Institutes of Health

FOIA Freedom of Information Act of 1966, amended 1986

FRB Federal Reserve Board

FRS Federal Reserve System

FTC Federal Trade Commission

FTE Full Time Equivalent

FTTP Full-Time Training Position

FWA Federal Wide Assurance

FY Fiscal Year (October 1 – September 30)

FYI For Your Information

G

GAO General Accounting Office, Congress

GBV-C Hepatitis G (GB Virus-C)

GCRC General Clinical Research Center

GDB Human Genome Database

GH Growth Hormone

GM Grants Management

GMB Grants Management Branch Office

GME Graduate Medical Education

GMO Grants Management Officer

GMS Grants Management Specialist

GPA Grade Point Average

GPEA Government Paperwork Elimination Act of 1998

GPO Government Printing Office

GPRA Government Performance Results Act of 1993

GPS Global Positioning Satellite System

GRE Graduate Record Examinations

GS General Schedule

GSA General Services Administration

GTA Grants Technical Assistant

GWAC Government-Wide Acquisition Contract

Н

HAART Highly Active Antiretroviral Therapy

HBCU Historically Black Colleges and Universities

HBV Hepatitis B Virus

HCV Hepatitis C virus

HDR-LRP Loan Repayment Program for Health Disparities Research

HEM Hematology Study Section

hESC Human Embryonic Stem Cells

HHMI Howard Hughes Medical Institute

HHS Health and Human Services (Department of)

HIPAA Health Insurance Portability and Accountability Act of 1996

HIV Human Immunodeficiency Virus

HMO Health Maintenance Organization

HPV Human Papillomavirus

HQ Headquarters

HRSA Health Resources and Services Administration, PHS

HRT Hormone Replacement Therapy

HSA Health Scientist Administrator

HSRAC Human Subjects Research Advisory Committee

HSRB Human Subjects Review Board

HSV Herpes Simplex Virus

HTML Hypertext Markup Language

IACUC Institutional Animal Care and Use Committee

IAG Interagency Agreement

IAR Internet Assisted Review

IBC Institutional Biosafety Committee

IC Institute and Center (NIH)

ICC Interstate Commerce Commission

ICD Institutes/Centers/Divisions

ICF Informed Consent Form

ID Identification

IDE Investigational Device Exemption (FDA)

IDeA Institutional Development Award Program (NCRR)

IDIQ Indefinite Delivery Indefinite Quality Contract

IDM Infectious Diseases and Microbiology

iEdison NIH's Extramural Electronic Invention Reporting system

IFCN Integrative, Functional and Cognitive Neuroscience

IG Inspector General

IHS Indian Health Service, PHS

IMA Internal Monitoring Board

IMAGE Integrated Molecular Analysis of Genomes and their Expression

IMF International Monetary Fund

IMPAC Integrated Management, Planning, Analysis and Coordination

(Data System)

IMPAC II Information for Management, Planning, Analysis, and Coordination (grants

data system)

IMS/ADB Information Management System/Administrative Data Base System

(DELPRO)

IND Investigational New Drug Application (FDA)

Immigration and Naturalization Service (now the United States Citizenship

and Immigration Services)

IO Information Officer

IOM Institute of Medicine, NAS

IP Intellectual Property

IPC Incidental Patient Contact

IPF Institutional Profile File Number

IRA Individual Retirement Account

IRACDA Institutional Research and Academic Career Development Award

IRB Institutional Review Board

Integrated Review Group, a cluster of study sections responsible for review

IRG of grant applications in scientifically related areas; sections share common

intellectual and human resources.

IRM Information Resources Management

IRP NIH Intramural Research Program

IRPG Interactive Research Project Grant

IRTA Intramural Research Training Award or Agreement

ISO International Organization for Standardization

ISSO Information Systems Security Office

IT Information Technology

ITAS Integrated Time and Attendance System

ITB Information Technology Branch

ITC United States International Trade Commission

J

JAX The Jackson Laboratory

JHU Johns Hopkins University

JOFOC Justification for Other than Full and Open Competition

Grant application timeframe that requires applicants to send some

information to NIH only if an award is likely. Also used for other support information, and other items, including: certification of IRB approval,

Federal wide assurance, IACU certification, and letter stating key personnel

have been trained in protecting human subjects

K

Just-in-time

K Awards Mentored and Career Development Awards

KSA Knowledge, Skills and Ability Form

KSASF Knowledges, Skills, Abilities Supplemental Form (NIH-2252-3)

KUH Division of Kidney, Urologic, and Hematologic Diseases, NIDDK

L

LABS Laboratory Automated Bibliographic System

LAN Local Area Network

LAO Leave Approving Official

LAS Laboratory Animal Sciences

LAT Laboratory Animal Technician (AALAS Certified)

LATG Laboratory Animal Technologist (AAALAS Certified)

LCM Laser Capture Microdissection

LI Lead Investigator

LOC Library of Congress

LOCIS Library of Congress Information System

LOE Level of Effort

LOI Letter of Intent

LRP Loan Repayment Program (NIH)

LWOP Leave Without Pay

M

MA Master Agreement

MAC Multiple Award Contract

MACs Multiple Agency Contracts

MARC Minority Access to Research Career Program

MBRS Minority Biomedical Research Support

MC Manual Chapter

MCDN Molecular, Cellular and Developmental Neuroscience

MCP NIH Management Cadre Program

MCR Management Control Review

MCSB Mail Customer Service Branch (DMCS)

MCRU Metabolic Clinical Research Unit (in NIH Clinical Center)

MEDLINE/
PUBMED

National Library of Medicine's Database for Scientific Publications

MEO Most Efficient Organization

MERIT Method to Extend Research in Time Award

MeSH Medical Subject Headings

MF NIH Management Fund

MHC Major Histocompatibility Complex

MHPF Minority Health Professionals Foundation

MI Minority Institutions

MIGA Multilateral Investment Guarantee Agency

MIS Medical Information System

ML Military Leave

MM Medical Monitor

MODY Maturity Onset Diabetes of the Young

MORE Minority Opportunities in Research

MOU Memorandum of Understanding

MOU/MOA Memorandum of Understanding/Memorandum of Agreement

MPA Multiple Project Assurance

MPP Merit Program Plan (NIH)

MPW Medical Pathological Waste

MRA Minimum Retirement Age

MRC Medical Research Council (UK)

MRI Magnetic Resonance Imaging

M-RISP Minority-Research Infrastructure Support Program

mRNA Messenger RNA

MRS Magnetic Resonance Spectroscopy

MSDS Material Safety Data Sheet

MSPB Merit Systems Protection Board

MTA Material Transfer Agreement

MTCT Mother-to-Child Transmission

N

N/A Not Applicable/Not Available

NAFTA North American Free Trade Agreement

NAHFE National Association of Hispanic Federal Executives

NARA National Archives and Records Administration

NARCH Native American Research Centers for Health

NARFE National Association of Retired Federal employees

NAS National Academy of Sciences (U.S.)

NBAC National Bioethics Advisory Commission

NBII National Biological Information Infrastructure

NBN National Biospecimen Network

NBRSS NIH Business and Research Support System

NBS New Business Systems/NIH Business System

NCATS National Center for Advancing Translational Sciences

NCBI National Center for Biotechnology Information

NCC National Coordinating Center for Telecommunications

NCCIH National Center for Complementary and Integrative Health (NIH)

NCCDPHP National Center for Chronic Disease and Prevention Health Promotion

(CDC)

NCCIC National Child Care Information Center

NCCLS National Committee for Clinical Laboratory Standards

NCD National Council on Disability

NCEH National Center for Environmental Health (CDC)

NCES National Center for Education Statistics

NCHS National Center for Health Statistics

NCI National Cancer Institute (NIH)

NCICAS National Cooperative Inner-City Asthma Study

NCIPC National Center for Injury Prevention and Control (CDC)

NCRR National Center for Research Resources (dissolved as of December 23,

2011)

NCSDR National Center on Sleep Disorders Research

NCTR National Center for Toxicological Research

NCUA National Credit Union Administration

NCVHS National Committee on Vital and Health Statistics

NDA New Drug Application

NDDKDAC National Diabetes and Digestive and Kidney Diseases Advisory Council

NDIC National Drug Intelligence Center

NDRI National Disease Research Interchange

NED NIH Enterprise Directory

NEI National Eye Institute (NIH)

NFT Notification of Foreign Travel

NGA Notice of Grant Award (also NoGA) [see NOGA p 36/59]

NGO Non-Government Organization

NGRI Next Generation of Researchers Initiative

NHGRI National Human Genome Research Institute (NIH)

NHIC National Health Information Center

NHLBI National Heart, Lung, and Blood Institute (NIH)

NHP Nonhuman Primate

NHRPAC National Human Research Protection Advisory Committee

NHSC National Health Sciences Scholarship

NIA National Institute on Aging (NIH)

NIAAA National Institute on Alcohol Abuse and Alcoholism (NIH)

NIAID National Institute of Allergy and Infectious Disease (NIH)

NIAMS National Institute of Arthritis and Musculoskeletal and Skin Disease (NIH)

NIBIB National Institute of Biomedical Imaging and Bioengineering (NIH)

NICHD Eunice Kennedy Shriver National Institute of Child Health and Human

Development (NIH)

NIDA National Institute on Drug Abuse (NIH)

NIDCD National Institute on Deafness and Other Communication Disorders (NIH)

NIDCR National Institute of Dental and Craniofacial Research (NIH)

NIDDK National Institute of Diabetes and Digestive and Kidney Diseases (NIH)

NIDRR National Institute on Disability and Rehabilitation Research

NIEHS National Institute of Environmental Health Sciences (NIH)

NIGMS National Institute of General Medical Sciences (NIH)

NIH National Institutes of Health

NIH DW NIH Data Warehouse

NIHAC The National Institutes of Health Animal Center (Poolesville, MD)

NIH Integrated Training System

NIHTC National Institutes of Health Training Center

NIMH National Institute of Mental Health (NIH)

NIMHD National Institute on Minority Health and Health Disparities (formerly

National Center on Minority Health and Health Disparities)

NINDS National Institute of Neurological Disorders and Stroke (NIH)

NINR National Institute of Nursing Research (NIH)

NIOSH National Institute for Occupational Safety and Health (CDC)

NIST National Institute of Standards and Technology

NLAES National Longitudinal Alcohol Epidemiologic Survey

NLM National Library of Medicine (NIH)

NLT Not Later Than

NMA National Medical Association

NMR Nuclear Magnetic Resonance

NMS Nutritional and Metabolic Sciences

NOA Nature of Action

NOGA Notice of Grant Award [see NoGA prior page at NGA]

Non-FTE Non Full-time Equivalent

NOTA National Organ Transplant Act

NPEBC National Programs of Excellence in Biomedical Computing

NPRC National Primate Research Center

NREN National Research and Education Network

NREVSS National Respiratory and Enteric Virus Surveillance System

NRFC Not Recommended for Further Consideration

NRL Naval Research Laboratory

NRSA National Research Service Award (e.g., T32, F32)

NS No Score (lower 50% of grants in study section)

NSF National Science Foundation

NSRG Nutritional Science Research Group

NSTC National Science and Technology Center

NSTL National Space Technology Laboratories

NTE Not To Exceed

NTIA National Telecommunications and Information Administration

NTIS National Technical Information Service

NTP National Toxicology Program

0

OA Office of Administration

OACU Office of Animal Care and Use

OAM Office of Administrative Management (OD)

OAMP Office of Acquisition Management and Policy, OA

OAPP Office of Adolescent Pregnancy Programs (OASH)

OAR Office of AIDS Research

OASDI Old Age Survivor Disability Insurance

OASH Office of the Assistant Secretary for Health, PHS

OASPA Office of the Assistant Secretary for Public Affairs

OB Office of Budget (NIH OD)

OBA Office of Biotechnology Activities (NIH OD)

OBL Office of Business Liaison

OBSF Office of Business Systems & Finance (OD)

OBSSR Office of Behavioral and Social Sciences Research (NIH OD)

OC Office of Communications

OCAB Office of the Assistant Secretary for Health, PHS

OCC Operations Coordinating Committee

OCCC Office of Clinical Center Communications

OCL Office of Community Liaison (NIH OD)

OCPL Office of Communications & Public Liaison

OD Office of the Director, NIH

ODA Official Duty Activities

ODEO Office of the Director Executive Office (NIH OD)

ODEP Office of Disability Employment Policy

ODP Office of Disease Prevention (NIH OD)

ODS Office of Dietary Supplements (NIH OD)

OE Office of Education (NIH OD)

OEEO Office of Equal Employment Opportunity (NIH OD)

OEO Office of Equal Opportunity

OEODM Office of Equality, Opportunity & Diversity Management

OEP Office of Extramural Programs, OER, OD, NIH

OER Office of Extramural Research, OD, NIH

OFACP Office of Federal Advisory Committee Policy (NIH OD)

OFCCP Office of Federal Contract Compliance Programs

OFM Office of Financial Management

OFRM Office of Financial Resources Management

OGC Office of the General Counsel (NIH OD)

OGE Office of Government Ethics

OHASIS Office of Health and Safety Information System

OHER Office of Health and Environmental Research

OHR Office of Human Resources (NIH OD)

OHRM Office of Human Resource Management (NIH OD)

OHRP Office for Human Research Protections

OHS Office of Healthy Start (HRSA)

OHSR Office of Human Subjects Research

OIB Office of Information Branch

OIG Office of the Inspector General (USDA)

OliA Office of Intergovernmental and Interagency Affairs

OIR Office of Intramural Research (NIH OD)

Office of Information Technology

OLAO Office of Logistics and Acquisition Operations

OLAW Office of Laboratory Animal Welfare, OER, OD, NIH

OLM Office of Logistics Management

OLPA Office of Legislative Policy and Analysis (NIH OD)

OLRS Office of Loan Repayment and Scholarship (NIH OD)

OM Office of Management (NIH OD)

OMA Office of Management Assessment (NIH OD)

OMAR Office of Medical Applications of Research (NIH OD)

OMB Office of Management and Budget (White House)

OMBS Office of Medical Board Services

OMH Office of Minority Health (OASH)

OMS Occupational Medical Services (DOHS)

ONC Oncological Sciences

OPASI Office of Portfolio Analysis and Strategic Initiatives (dissolved October 2008)

OPDIV Operating Division (HHS)

OPEC Office of Prevention, Education, and Control

OPERA Office of Policy for Extramural Research Administration

OPF Official Personnel File

OPHS Office of Public Health and Science

OPL Offices of Public Liaison (NIH OD)

OPM Office of Personnel Management

OPRR Office of Protection from Research Risks

ORA Office of Reports and Analysis, OER, OD, NIH

ORD Office of Rare Diseases (NIH OD)

ORI Office of Research Integrity, HHS

ORIM Office of Information Resources Management

ORS Office of Research Services (NIH OD OM)

ORWH Office of Research on Women's Health, OD, NIH

OS Office of the Secretary

OSA Office of Scientific Affairs, OER, OD, NIH

OSC Office of Strategic Coordination, DPCPSI, OD, NIH

OSD Office of the Scientific Director

OSE Office of Science Education (NIH OD)

OSHA Occupational Safety and Health Administration

OSHRC Occupational Safety and Health Review Commission

OSMP Office of Strategic Management and Planning (NIH OD)

OSP Office of Science Policy (NIH OD)

OSPA Office of Science Policy Analysis

OSPP Office of Science Policy and Planning

OST Office of Science and Technology

OSTI Office of Scientific and Technical Information

OSTP Office of Science and Technology Policy (White House)

OT Overtime

OTA Office of Technology Assessment

OTD Office of Technology Development

OTS Omega Travel Service (NIH Travel Agent)

OTT Office of Technology Transfer

OUTPT Outpatient

OWH Office on Women's Health

P

P/TRP Promotion/Tenure Review Panel

PA Program Announcement

PA Purchasing Agent

PAM Office of Acquisition and Property Management

PAR Program Announcement with special receipt or review

PART Program Assessment Rating Tool (OMB)

PAS Program Announcement with Set-aside funds

PCA Physicians Comparability Allowance

PCBE President's Council on Bioethics

PD Position Description

PDF Portable Document Format

PET Positron Emission Tomography

PETA People for the Ethical Treatment of Animals

PhRMA Pharmaceutical Research and Manufacturers of America

PHS Public Health Service (U.S.)

PHS OWH U.S. Public Health Service's Office on Women's Health

PHTN Public Health Training Network

PI Principal Investigator

PIA Procurement Integrity Act

PIN Personal Identification Number

PKU Phenylketonuria

PLC Program Leadership Committee

PMCID PubMed Central Identification

PMI Presidential Management Intern

PMIS Property Management Information System

PMO Property Management Officer

PO Program Official

PO Project Officer (For a Grant or Contract)

PO Purchase Order

Post-Doc Post-Doctoral Fellow

PP Pay Period

PPE Pay Period Ending

PPP Public Private Partnerships

PPS Pathophysiological Sciences

PR Public Relations

PRB Protocol Review Board

PRC Processing Resource Centers

Pre-Doc Pre-Doctoral Fellow

PRG Progress Review Groups

PRIMR Public Responsibility in Medicine and Research

PRMC Protocol Review and Monitoring Committee

Project Centers of Excellence in Partnerships for Community Outreach, Research

EXPORT on Health Disparities and Training

PROTRACK Clinical Center Protocol Tracking Database

PrP Prion Protein

PRPL Patient Recruitment and Public Liaison Office

PRRR Program Review Report Record

PRS Protocol Review Subcommittee

PSC Program Support Center

PSC Publications Subcommittee

PSO Professional Service Order

PSP Physician Special Pay (Title 38)

PTSD Post-Traumatic Stress Disorder

PWS Performance Work Statement

Q

Q&A Questions and Answers

QA Quality Assurance

QALY Quality-Adjusted Life Years

QAP Quality Assurance Program

QAS Quality Assurance Subcommittee

QC Quality Control

QRB Quality Review Board

QSI Quality Step Increase

R

R&D Research & Development

R&W Recreation and Welfare

R01 Standard NIH Research Project Grant

R34 Investigator-Initiated Clinical Trial Planning and Implementation Grants

Grant allowing an interim award so principal investigator can continue while

reapplying for an R01 grant. Also enables new investigators to gather

preliminary data to improve their grant applications. (Bridge Award)

RA Research Assistant

RAC Recombinant-DNA Advisory Committee

RAID Rapid Access to Intervention Development

RAL Restored Annual Leave

RALAT Registered Assistant Laboratory Animal Technician

RAO Regulatory Affairs Officer

RCC Research Coordination Council (Department-wide)

RCDA Research Career Development Award (K-series awards)

RCDC Research, Condition, and Disease Categorization

RCR Responsible Conduct of Research

RCRII RCMI Clinical Research Infrastructure Initiative

RCT Randomized Controlled Trial

rDNA Recombinant DNA

RePORT NIH Research Portfolio Online Reporting Tools

RePORTER RePort Expenditures and Results

RFA Request for Application (request for grant applications for a research area)

RFC Request For Contract

RFI Request for Information

RFIP Research Facilities Improvement Program

RFP Request For Proposal (request for contract proposal for a project)

RFQ Request for Quotation

RIF Reduction In Force

RIMS Robocom Inventory Management System

RISE Research Initiative for Scientific Enhancement

RM Roadmap

RMA Risk Management Agency

RMS Research Management Support

RNA Ribonucleic Acid

RNAi RNA interference

RPC Review Policy Committee

RPG Research Project Grant

RPHB Risk, Prevention, and Health Behaviors

RPPR Research Program Performance Report

RRTC Regional Research and Training Center

RSA Rehabilitation Services Administration

RSC Radiation Safety Committee

RSO Radiation Safety Officer

RSOB Radiation Safety Operations Branch (DRS)

RSUM Research Supplements for Underrepresented Minorities

S

SAC Simplified Acquisition Committee

SAE Serious Adverse Event

SAMHSA Substance Abuse and Mental Health Services Administration, HHS

SB Small Business

SBA U.S. Small Business Administration

SBIR Small Business Innovation Research

SBO Small Business Office

SBRS Senior Biomedical Research Service

SBS Small Business Specialist

SBSA Small Business Set-Aside

SC Steering Committee

SCD Service Computation Date

SCORE Support of Continuous Research Excellence

SCR Special Council Review

SD Scientific Director

SDB Small Disadvantaged Business

SEER Surveillance, Epidemiology, and End Results

SE Special Emphasis

SEP Special Emphasis Panel (an SRG convened for a single meeting)

SES Senior Executive Service

SF Standard Form

SF Staff Fellow

SIG Shared Instrumentation Grant

SIMS Scientific Initiative Management System

SIP Summer Internship Program in Biomedical Research

SLA Simple Letter of Agreement

SMSA Small Business & Minority Business Set Aside

SNAP Streamlined Noncompeting Award Process

SNEM Social Science, Nursing, Epidemiology, and Methods

SNMA Student National Medical Association

SNOMED Systemized Nomenclature of Medicine

SNOMED CT Systemized Nomenclature of Medicine – Clinical Terms

SNPs Single Nucleotide Polymorphisms

SO Signing Official

SOP Standard Operating Procedure

SOW Statement Of Work

SPA Single Project Assurance

SPF Specific-pathogen free

SPIN Shared Pathology Informatics Network

SPORE Specialized Program of Research Excellence

Scientific Review Administrator (an NIH scientist administrator in charge of **SRAs**

review and advisory groups; now called SROs)

SRB Surgery, Radiology, and Bioengineering

SRB Scientific Review Board

SREA Scientific Review Evaluation Awards

SRFP Summer Research Fellowship Program

Scientific Review Group (performs initial scientific merit review of grant **SRG**

application & contract proposals; also called Initial Review Group (IRG)

when pertaining to grant applications)

Scientific Review Officer (manages the peer review process for grant **SROs**

applications and contract proposals; designated Federal official

responsible for the peer review meeting; major focus is on scientific

rather than administrative activities; former title was SRA)

SSB Support Services Branch (DP)

SSEB Source Selection Evaluation Board

SSF Senior Staff Fellow

SSF Service and Supply Fund

SSN Social Security Number

SSS Special Study Section

STD Sexually Transmitted Disease

STDCRC Sexually transmitted Disease Cooperative Research Centers

STDCTU Sexually Transmitted Disease Clinical Trials Unit **STEP** Staff Training in Extramural Programs

STI Scientific and Technical Information

STTR Small Business Technology Transfer

SV Student, or Special Volunteer

T

T&A Time and Attendance

TAIMS Time and Attendance Information Management System

TEHIP Toxicology and Environmental Health Program

TIA Time Off Incentive Award

TIG Time In Grade

TIN Payer Identification Number Tax

TK Timekeeper

TMA Tissue Microarray

TMJ Temporomandibular joint

TO Task Order

TOD Tour of Duty

TOXNET Toxicology Data Network

TQM Total Quality Management

TSC Training Subcommittee

TSP Thrift Savings Plan

TTB Technology Transfer Branch

TX Treatment

U

U.S.C. United States Code

UMLS Unified Medical Language System

URC User Resource Center

USAID United States Agency for International Development

USAMRIID United States Army Medical Research Institute of Infectious Diseases

USDA United States Department of Agriculture

USIA United States Information Agency

USOPM United States Office of Personnel Management

USUHS Uniformed Services University of Health Sciences

V

VA Veterans Administration

VA Department of Veterans Affairs

VF Visiting Fellow

VLTP Voluntary Leave Transfer Program

VRC Vaccine Research Center

VRP Veterinary Resources Program

VS Visiting Scientist

VSOF Visual Status of Funds

W

WAG Widely Attended Gathering

WFCL Work and Family Life Center

WG Wage Grade

WGI Within-Grade Increase

WHI Women's Health Initiative

WHO World Health Organization, United Nations

WTO World Trade Organization

WWW World Wide Web

WYLBUR Interactive system providing simultaneous service to more than 825

terminals or microcomputers.

X

X-Train Trainee Activities System

Υ

YTD Year To Date

Ζ

ZIP (Code) Zone Improvement Plan

National Institute of Diabetes and Digestive and Kidney Diseases Mission, Overview, and History

Until May 19, 1972, the National Institute of Arthritis and Metabolic Diseases; until June 23, 1981, the National Institute of Arthritis, Metabolism, and Digestive Diseases; and until April 8, 1986, the National Institute of Arthritis, Diabetes, and Digestive and Kidney Diseases.

Mission

The mission of the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) is to conduct and support medical research and research training and to disseminate science-based information on diabetes and other endocrine and metabolic diseases; digestive diseases, nutritional disorders, and obesity; and kidney, urologic, and hematologic diseases, to improve people's health and quality of life.

Overview

The NIDDK supports a wide range of medical research through grants to universities and other medical research institutions across the country. The Institute also supports government scientists who conduct basic, translational, and clinical research across a broad spectrum of research topics and serious, chronic diseases and conditions related to the Institute's mission. In addition, the NIDDK supports research training for students and scientists at various stages of their careers and a range of education and outreach programs to bring science-based information to patients and their families, health care professionals, and the public.

External research funded by the NIDDK is organized into three scientific program divisions:

- Diabetes, Endocrinology, and Metabolic Diseases
- Digestive Diseases and Nutrition
- Kidney, Urologic, and Hematologic Diseases

The NIDDK's overarching principles in moving research forward include:

- maintaining a vigorous, investigator-initiated research portfolio that supports crosscutting science that can be broadly applied to many disease-specific research areas
- supporting pivotal clinical studies and trials, with a focus on substantial participation of groups at highest risk.
- preserving a stable pool of talented new investigators
- fostering exceptional research training and mentoring opportunities
- ensuring that science-based health information reaches patients, their families, health care providers and the public through communications and outreach activities

Important Events in NIDDK History

August 15, 1950—President Harry S. Truman signed the Omnibus Medical Research Act into law, establishing the National Institute of Arthritis and Metabolic Diseases (NIAMD) in the U.S. Public Health Service. The new Institute incorporated the laboratories of the Experimental Biology and Medicine Institute, and expanded to include clinical investigation in rheumatic diseases, diabetes, and a number of metabolic, endocrine, and gastrointestinal diseases.

November 15, 1950—The National Advisory Arthritis and Metabolic Diseases Council held its first meeting and recommended approval of NIAMD's first grants.

1959—Dr. Arthur Kornberg, former chief of the Institute's enzyme and metabolism section, won the Nobel Prize for synthesizing nucleic acid.

1961—Laboratory-equipped mobile trailer units began an epidemiological study of arthritis among the Blackfeet and Pima Indians in Montana and Arizona, respectively.

October 16, 1968—The Nobel Prize was awarded to Dr. Marshall W. Nirenberg of the National Heart Institute, who reported his celebrated partial cracking of the genetic code while an NIAMD scientist.

November 1970—The Institute celebrated its 20th anniversary. U.S. Secretary of Defense Melvin R. Laird addressed leaders in the department, representatives from voluntary health agencies and professional biomedical associations, and past and present Institute National Advisory Council members.

May 19, 1972—The Institute's name was changed to the National Institute of Arthritis, Metabolism, and Digestive Diseases (NIAMDD).

October 1972— Dr. Christian B. Anfinsen, chief of the Institute's Laboratory of Chemical Biology, shared a Nobel Prize with two other American scientists for demonstrating one of the most important simplifying concepts of molecular biology: that the three-dimensional conformation of a native protein is determined by the chemistry of its amino acid sequence. A significant part of the research cited by the award was performed while Anfinsen was with the NIH.

September 1973—The creation of the first Diabetes-Endocrinology Research Centers marked the beginning of the Institute's Diabetes Centers Program.

November 1975—After nine months of investigation into the epidemiology and nature of diabetes mellitus and public hearings throughout the United States, the National Commission on Diabetes delivered its report, the *Long-Range Plan to Combat Diabetes*, to Congress. Recommendations included expanding and coordinating diabetes and related research programs; creating a diabetes research and training centers program; accelerating diabetes health care, education, and control programs; and establishing a National Diabetes Advisory Board.

April 1976—The National Commission on Arthritis and Related Musculoskeletal Diseases issued *The Arthritis Plan*. This report to Congress called for increased arthritis research and training programs, multipurpose arthritis centers, epidemiologic studies and data systems in arthritis, a National Arthritis Information Service, and a National Arthritis Advisory Board.

October 1976—Dr. Baruch Blumberg was awarded the Nobel Prize in Physiology or Medicine for research on the hepatitis B virus protein, the "Australia antigen," which he discovered in 1963 while at the Institute. This advance has proven to be a scientific and clinical landmark in detecting and controlling viral hepatitis and led to the development of preventive measures against hepatitis and liver cancer.

April 19, 1977—The NIH director established a trans-NIH program for diabetes, with the NIAMDD taking lead responsibility.

September 1977—More than \$5 million in grants was awarded to 5 institutions to establish Diabetes Research and Training Centers.

October 1977—In response to the recommendation of the National Commission on Diabetes, the National Diabetes Data Group was established within the Institute to collect, analyze, and disseminate diabetes data to scientific and public health policy and planning associations.

December 1977—Institute grantees Drs. Roger C.L. Guillemin and Andrew V. Shally shared the Nobel Prize in Physiology or Medicine with a third scientist. Guillemin's and Shally's prizes were for discoveries related to the brain's production of peptide hormones.

1978—In response to congressional language, the NIDDK created the National Diabetes Information Clearinghouse to increase knowledge and understanding about diabetes among people with these conditions and their families, health professionals, and the public.

January 1979—The National Commission on Digestive Diseases issued the report, The *National Long-Range Plan to Combat Digestive Diseases*. Recommendations to Congress included establishing a National Digestive Diseases advisory board and information clearinghouse, and emphasizing digestive diseases educational programs more in medical schools

June 1980—In response to congressional language, the NIDDK created the National Digestive Diseases Information Clearinghouse to increase knowledge and understanding about digestive diseases among people with these conditions and their families, health professionals, and the public.

September 1980—Dr. Joseph E. Rall, director of NIAMDD intramural research, became the first person at the NIH to be named to the distinguished executive rank in the Senior Executive Service. President Jimmy Carter presented the award in ceremonies at the White House on September 9.

October 15, 1980—NIAMDD celebrated its 30th anniversary with a symposium, "DNA, the Cell Nucleus, and Genetic Disease." Dr. Donald W. Seldin, chairman of the department of internal medicine, University of Texas Southwestern Medical School, Dallas, was guest speaker.

1981—A report entitled *An Evaluation of Research Needs in Endocrinology and Metabolic Diseases* was prepared by an external group of scientific experts, and was submitted to the NIH and the Senate Committee on Appropriations.

June 23, 1981—The Institute was renamed the National Institute of Arthritis, Diabetes, and Digestive and Kidney Diseases (NIADDK).

April 1982—U.S. Department of Health and Human Services (HHS) Secretary Richard S. Schweiker elevated the NIADDK's programs to division status, creating five extramural divisions and the Division of Intramural Research.

November 1982—Dr. Elizabeth Neufeld, chief of the NIADDK's genetics and biochemistry branch, received a Lasker Foundation Award. She was cited, along with Dr. Roscoe E. Brady of the then-named National Institute of Neurological and Communicative Disorders and Stroke (NINCDS), for "significant and unique contributions to the fundamental understanding and diagnosis of a group of inherited diseases called mucopolysaccharide storage disorders (MPS)."

November 1984—Grants totaling more than \$4 million were awarded to six institutions to establish the Silvio O. Conte Digestive Diseases Research Centers. The research centers investigate the underlying causes, diagnoses, treatments, and prevention of digestive diseases.

April 8, 1986—The Institute's Division of Arthritis, Musculoskeletal and Skin Diseases became the core of the new National Institute of Arthritis and Musculoskeletal and Skin Diseases. The NIADDK was renamed the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK).

June 3, 1986—The National Kidney and Urologic Diseases Advisory Board was established to formulate the long-range plan to combat kidney and urologic diseases.

1987—The NIDDK created the National Kidney and Urologic Diseases Information Clearinghouse to increase knowledge and understanding about diseases of the kidneys and urologic system among people with these conditions and their families, health care professionals, and the general public.

August 1, 1987—Six institutions were funded to establish the George M. O'Brien Kidney and Urological Research Centers.

December, 1987—In response to congressional language on the fiscal year (FY) 1988 appropriation for the NIDDK, the Institute established a program of cystic fibrosis research centers.

March, 1990—The National Kidney and Urologic Diseases Advisory Board issued its "Long-Range Plan: Window on the 21st Century," which recommended uniting the public and private sectors in the quest to prevent these diseases; improve methods for early detection, treatment, and rehabilitation; and ultimately find cures.

September 16, 1990—The NIDDK celebrated its 40th anniversary. Dr. Daniel E. Koshland, Jr., editor of *Science*, was guest speaker.

June, 1991—The NIDDK Advisory Council established the National Task Force on the Prevention and Treatment of Obesity to synthesize current science on preventing and treating obesity and to develop statements about topics of clinical importance based on critical analyses of the scientific literature.

September 30, 1992—Three Obesity/Nutrition Research Centers were established, along with an extramural animal models core to breed genetically obese rats for obesity and diabetes research.

October 12, 1992—Drs. Edwin G. Krebs and Edmond H. Fischer were awarded the Nobel Prize in Physiology or Medicine for their work on "reversible protein phosphorylation." At the time of the award, the scientists had been receiving continuous NIDDK grant support since 1951 and 1956, respectively.

October 30, 1992—In response to congressional language on the Institute's FY 1993 appropriation, the NIDDK initiated a program to establish gene therapy research centers with emphasis on cystic fibrosis.

November 1, 1993—The functions of the NIH Division of Nutrition Research Coordination, including those of the NIH Nutrition Coordinating Committee, were transferred to the NIDDK.

October 10, 1994—Drs. Martin Rodbell and Alfred G. Gilman received the Nobel Prize in Physiology or Medicine for discovering G-proteins, a key component in the signaling system that regulates cellular activity. Dr. Rodbell discovered the signal transmission function of GTP while a researcher at the then-named NIAMD.

June 22, 1997—Led by the NIDDK, the NIH and the U.S. Centers for Disease Control and Prevention (CDC) announced the creation of the National Diabetes Education Program (NDEP). The NDEP's goals are to reduce the rising prevalence of diabetes, the morbidity and mortality of the disease, and its complications.

July 18, 2000—The NIDDK created the National Kidney Disease Education Program to raise awareness among the public of kidney disease and its risk factors, and make resources available to consumers and health care providers.

June 2000—To reduce the disproportionate burden of many diseases in minority populations, the NIDDK initiated an Office of Minority Health Research Coordination.

November 16, 2000—The NIDDK celebrated its 50th anniversary. Professional societies in eight U.S. locations and Canada sponsored scientific symposia and hosted an NIDDK exhibit. NIDDK published *A New Century of Science: A New Era of Hope* was published to highlight NIDDK-supported research and jointly hosted a scientific symposium at the Society for Cell Biology's 40th anniversary meeting.

November 2002—NIDDK created the Network of Minority Health Research Investigators to help increase the number of minority health researchers who compete for NIH research support in the fields of interest to NIDDK.

October 8, 2003—NIDDK grantee Dr. Peter Agre shared the Nobel Prize in Chemistry with another scientist for studies of channels in cell membranes. Agre discovered aquaporins, proteins that move water molecules through the cell membrane.

October 4, 2004—Dr. Richard Axel, once an intramural research fellow under Dr. Gary Felsenfeld at the NIDDK, shared the Nobel Prize in Physiology or Medicine with another scientist for discovering a large family of receptors selectively expressed in cells that detect specific odors.

October 6, 2004—Long-time grantees Drs. Irwin A. Rose and Avram Hershko shared the Nobel Prize in Chemistry with another scientist for discovering ubiquitin-mediated protein degradation inside the cell.

October 2007—Institute grantee Dr. Oliver Smithies shared the Nobel Prize in Physiology or Medicine with two other scientists for discovering principles for introducing specific gene modifications in mice by using embryonic stem cells.

2010—The NIDDK celebrated its 60th anniversary. Special events included the September 21 scientific symposium "Unlocking the Secrets of Science: Building the Foundation for Future Advances" and the publication of the commemorative report *NIDDK: 60 Years of Advancing Research to Improve Health.*

September 2010—NIDDK grantee Dr. Jeffrey Friedman and former grantee Dr. Douglas Coleman won the 2010 Albert Lasker Basic Medical Research Award for discovering the hormone leptin, which plays a key role in regulating energy intake and energy expenditure.

October 3, 2011—NIDDK grantee Dr. Bruce Beutler shared the 2011 Nobel Prize in Physiology or Medicine with NIH grantee Dr. Jules Hoffman for their discoveries concerning the activation of innate immunity. NIH grantee Dr. Ralph Steinman also shared the award posthumously for his discovery of the dendritic cell and its role in adaptive immunity.

December 2011—The journal *Science* named an HIV-prevention research study led by NIDDK grantee Dr. Myron Cohen the 2011 Breakthrough of the Year. The study found that people infected with HIV reduced the risk of transmitting the virus to their sexual partners by taking oral antiretroviral medicines when their immune systems were relatively healthy.

April 29, 2012—The Treatment Options for type 2 Diabetes in Adolescents and Youth (TODAY) study results appeared in the New England Journal of Medicine, marking the first major comparative effectiveness trial for the treatment of type 2 diabetes in young people. The NIDDK-funded study found that combined therapy with metformin and rosiglitazone was superior to metformin alone. The rate of treatment failure with metformin alone suggested that most youth with type 2 diabetes will require combination treatment or insulin within a few years after diagnosis.

September 21, 2012—Dr. Thomas E. Starzl, a longtime NIDDK grantee, received the 2012 Lasker-DeBakey Clinical Medical Research Award – shared with Dr. Roy Calne — for his work developing liver transplantation, an intervention that has restored normal life to thousands of people with end-stage liver disease.

October 2012—Dr. Robert J. Lefkowitz, who trained at NIDDK from 1968-1970 as a clinical associate in the Clinical Endocrinology Branch, won the 2012 Nobel in chemistry for studies of protein receptors that let body cells sense and respond to outside signals.

October 2013—Dr. James Rothman, an NIDDK grantee, received the 2013 Nobel Prize in physiology or medicine, shared with fellow NIH grantees Drs. Randy W. Schekman and Thomas C. Südhof "for their discoveries of machinery regulating vesicle traffic, a major transport system in our cells," according to the Nobel organization. The researchers' work revealed how cells use small sacs, called vesicles, to import and export materials to and from cells. This transport system is a fundamental process in how cells work.

August 1, 2015—NIDDK established the Office of Nutrition Research, replacing the NIH Division of Nutrition Research Coordination. The Office is within the NIDDK Office of the Director and will assist in leading a trans-NIH group to strategically plan new initiatives for NIH nutrition research.

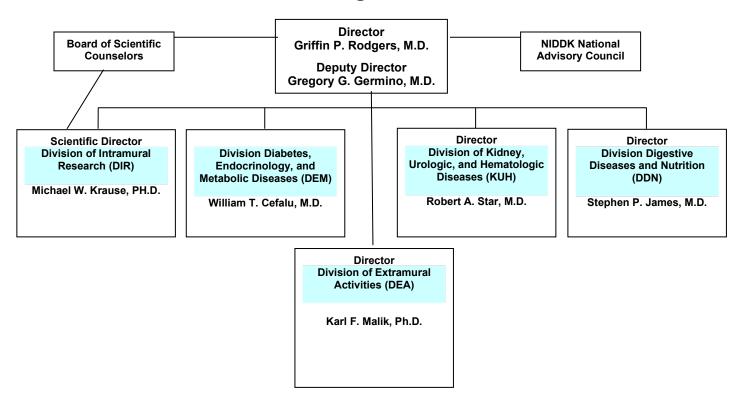
September 2016—NIDDK grantee, Dr. Gregg L. Semenza was awarded the 2016 Albert Lasker Basic Medical Research Award, shared with Dr. William G. Kaelin Jr. and Dr. Peter J. Ratcliffe for their "discovery of the pathway by which cells from humans and most animals sense and adapt to changes in oxygen availability- a process essential for survival," according to the organization.

NIDDK Directors

Name	In Office from	To
William Henry Sebrell, Jr.	August 15, 1950	October 1, 1950
Russell M. Wilder	March 6, 1951	June 30, 1953
Floyd S. Daft	October 1, 1953	May 3, 1962
G. Donald Whedon	November 23, 1962	September 30, 1981
Lester B. Salans	June 17, 1982	June 30, 1984
Mortimer B. Lipsett	January 7, 1985	September 4, 1986
Phillip Gorden	September 5, 1986	November 14, 1999
Allen M. Spiegel	November 15, 1999	March 3, 2006
Griffin P. Rodgers	April 1, 2007	present

Background Information: NIDDK Organizational Chart

NIDDK Organizational Chart



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Overview of the Office of the Director

The Office of the Director includes the following offices:

- Biostatistics Program
- Executive Office, including administrative components:
 - Administrative Management Branches
 - Computer Technology Branch
 - Ethics Office
 - Office of Financial Management and Analysis
 - Office of Workforce and Strategic Planning
 - Purchasing Office
- NIDDK Central Repository
- Office of Clinical Research Support
- Office of Communications and Public Liaison
- Office of Scientific Program and Policy Analysis
- Regulatory Support Program
- Technology Advancement Office

Also, within the Office of the Director are the following research coordination offices.

The *Office of Minority Health Research Coordination (OMHRC)* addresses the burden of diseases and disorders that disproportionately impact the health of minority populations. The OMHRC helps to implement the Institute's strategic plan for health disparities and build on the strong partnership with the National Institute of Minority Health and Health Disparities at the NIH. Dr. Lawrence Agodoa is the director of the OMHRC.

The NIDDK *Office of Obesity Research* (OBR) is responsible for coordination of obesity-related research within NIDDK and carries out its functions through the NIDDK Obesity Research Working Group. Drs. Philip Smith (DEM) and Susan Yanovski (DDN) are the co-directors of OBR. The Office is located organizationally under the auspices of the Office of the Director, NIDDK, and its co-directors represent the two divisions with primary responsibility for obesity-related extramural research, the Division of Digestive Diseases and Nutrition (DDN) and the Division of Diabetes, Endocrinology, and Metabolic Diseases (DEM). The Obesity Research Working Group consists of representatives of DDN, DEM, the Division of Kidney, Urologic, and Hematologic Diseases (KUH), the NIDDK Review Branch, the Office of Scientific Program and Policy Analysis (OSPPA), and the Division of Nutrition Research Coordination (DNRC). The responsibilities of the NIDDK Obesity Research Working Group are: (1) to provide a forum for sharing and coordination of trans-NIDDK and trans-NIH obesity research activities; (2) to assist the Director, NIDDK in identifying research opportunities, initiatives, and advances; (3) to identify and plan appropriate workshops and conferences; and (4) to assist in the preparation of obesity-related reports and inquiries.

The *Office of Nutrition Research* (ONR) is responsible for leadership of nutrition research in NIDDK and collaboratively, across NIH institutes. The office participates in strategic planning, portfolio analysis, budget and resource allocation, and assessment of research needs and opportunities that fall within the mission of NIDDK and the NIH. Strategic planning includes developing new NIH research initiatives in nutrition research. The office replaces the NIH Division of Nutrition Research Coordination (DNRC). Dr. Christopher Lynch is the director of the ONR.

Overview of the Division of Intramural Research

The <u>Division of Intramural Research</u> conducts biomedical research and training related to diabetes mellitus; endocrine, bone, and metabolic diseases; digestive diseases, including liver diseases and nutritional disorders; and kidney, urologic, and hematologic diseases. The research conducted in the Intramural Research Program (IRP) spans the breadth of modern biomedical investigation, from basic science to clinical studies.

A sampling of areas under study includes:

- **biophysics** studies of protein folding, development of optical and vibrational imaging, and theory of protein dynamics
- **cell biology** studies of nuclear import/export, intracellular protein and lipid trafficking, cellular migration and prions
- **chemical biology and medicinal chemistry** synthesis and characterization of novel compounds and discovery of biologically active natural products
- **developmental biology** studies using model systems ranging from single-cell organisms to vertebrates to human cells
- **genetics, pathogenesis and novel therapies of disease** studies of diabetes types 1 and 2, hepatitis, endocrine disorders, nephritis/nephropathy, obesity, sickle cell anemia, and gastrointestinal disorders
- molecular biology studies of chromatin structure and function, transcriptional regulation and DNA recombination
- **signal transduction** basic and human disease-oriented studies of GTP-binding proteins and GTP-binding protein-coupled receptors, tyrosine kinase receptors and nuclear hormone receptors
- **structural biology** studies using x-ray crystallography and NMR spectroscopy

The hallmarks of the NIDDK IRP are excellence and diversity. Many of the scientists within the IRP have achieved international recognition as highly productive and innovative researchers. The program continues a tradition of excellence reflected in the several Nobel prizes and other prestigious awards that have resulted from its work. Many scientists trained in the IRP are now prominent faculty members at leading universities throughout the world.

Website: https://www.niddk.nih.gov/about-niddk/offices-divisions/division-intramural-research

Overview of the Division of Extramural Activities

The Division of Extramural Activities (DEA) is responsible for:

- 1. Coordinating the receipt, referral, and scientific review of extramural research before funding
- 2. The publication of Funding Opportunity Announcements in the NIH Guide for Grants and Contracts
- 3. The processing of awards for grants, cooperative agreements, and contracts
- 4. Performing quantitative and qualitative data analyses and evaluations on behalf of NIDDK's scientific program divisions and the NIDDK Office of the Director
- 5. Providing leadership and advice in developing, implementing, and coordinating extramural programs and policies within the NIDDK
- 6. Coordinating the Institute's committee management activities and meetings of the National Diabetes and Digestive and Kidney Diseases Advisory Council

Components of the DEA

- Receipt and Referral logs, assigns, and internally distributes all applications received by the NIDDK
- Grant Review Branch conducts scientific and technical peer review of applications
- **Grants Management Branch** manages awards for research project grants, program project and center grants, research training and development grants, cooperative agreements, and research contracts
- Committee Management Office coordinates the administrative details of all of NIDDK's meetings that operate under the Federal Advisory Committee Act. These meetings include peer review meetings to review grant applications, meetings of the NIDDK Advisory Council, and meetings of the NIDDK Board of Scientific Counselors to review components of the Intramural Research Program.
- Office of Research Evaluation and Operations oversees and coordinates disease coding and reporting for the NIDDK extramural program, manages the Early Notification System and NIH Guide publication process associated with publishing Funding Opportunity Announcements, and supports NIDDK Advisory Council activities. The office also facilitates harmonization of activities among NIDDK's four extramural divisions, and coordinates and performs special projects at the request of the NIDDK leadership.

Website: https://www.niddk.nih.gov/about-niddk/offices-divisions/division-extramural-activities

Overview of the Division of Diabetes, Endocrinology and Metabolic Diseases (DEM)

The Division of Diabetes, Endocrinology, and Metabolic Diseases (DEM) provides research funding and support for basic and clinical research in the areas of type 1 and type 2 diabetes and other metabolic disorders, including cystic fibrosis; endocrinology and endocrine disorders; obesity, neuroendocrinology, and energy balance; and development, metabolism, and basic biology of liver, fat, and endocrine tissues. DEM also provides funding for the training and career development of individuals committed to academic and clinical research careers in these areas.

The Division of Diabetes, Endocrinology, and Metabolic Diseases supports research in:

Diabetes Research Programs

- Bioengineering, Biotechnology, and Imaging
- Clinical Research in Type 1 Diabetes
- Clinical Research in Type 2 Diabetes
- Clinical, Behavioral, and Epidemiological Obesity Research
- Diabetes and Metabolism HIV/AIDS
- Diabetes Centers
- Diabetes Genetics and Genomics
- Diabetes, Endocrine, and Metabolic Disease Translational Research
- Diabetes: Treatment, Prevention, and Complications
- Diabetic Kidney Disease
- Diabetic Urologic Disease
- Endocrine Pancreas
- Endocrinology and Hormone Signaling
- Genetic Metabolic Disease
- Kidney Genetics and Genomics
- Metabolic Pathways
- Obesity, Pregnancy, and the Intrauterine Environment
- Pathophysiology of Diabetes and Metabolic Disease

Endocrine and Metabolic Diseases Research Programs

- <u>Bioengineering</u>, <u>Biotechnology</u>, and <u>Imaging as applied to Diabetes</u>, <u>Metabolic and Endocrine Diseases</u>
- Chronic Kidney Disease
- Clinical, Behavioral, and Epidemiological Obesity Research
- Cystic Fibrosis
- Cystic Fibrosis Research and Translational Centers
- Diabetes and Metabolism HIV/AIDS
- Diabetes, Endocrine, and Metabolic Disease Translational Research
- Endocrine Pancreas
- Endocrine Tumors of the Pancreas
- Endocrinology and Hormone Signaling
- Genetic Metabolic Disease
- Metabolic Pathways
- Metabolism, Energy Balance, and Obesity

- Nutrient Metabolism, Status, and Assessment
- Obesity, Pregnancy, and the Intrauterine Environment
- Pathophysiology of Diabetes and Metabolic Disease

Research Training and Career Development

Small Business Programs

Website: https://www.niddk.nih.gov/about-niddk/offices-divisions/division-diabetes-endocrinology-metabolic-diseases

Overview of the Division of Digestive Diseases and Nutrition (DDN)

The Division of Digestive Diseases and Nutrition (DDN) supports research related to digestive diseases, including the alimentary tract, liver and pancreas, nutrition and obesity. The programs include basic, translational and clinical research, research training, and career development. DDN also promotes public awareness and education about digestive diseases and related conditions, and oversees several national public awareness campaigns.

The Division of Digestive Diseases and Nutrition supports basic, translational and clinical research in:

Digestive Diseases Research Programs

- Digestive Diseases Clinical Research and Epidemiology
- <u>Digestive Diseases Genetics and Genomics</u>
- Digestive Diseases Research Core Centers
- Gastrointestinal Immunology, Inflammation, and Inflammatory Diseases
- Gastrointestinal Microbiology and Infectious Diseases
- Gastrointestinal Neuroendocrinology
- Gastrointestinal Physiology, Development, and Epithelial Biology
- Gastrointestinal, Nutrition, and Liver Research in HIV/AIDS
- Motility and Functional Gastrointestinal Disorders
- Nutrient Metabolism, Status, and Assessment

Liver Disease Research Programs

- Digestive Diseases Research Core Centers
- Gastrointestinal, Nutrition, and Liver Research in HIV/AIDS
- Iron and Heme Metabolism, Iron Chelation
- Liver Clinical Research and Epidemiology
- Liver Diseases Genetics and Genomics
- Translational and Basic Liver Disease Research

Nutrition Research Programs

- Clinical and Epidemiological Nutrition Research
- Clinical, Behavioral, and Epidemiological Obesity Research
- Endocrinology and Hormone Signaling
- Gastrointestinal, Nutrition, and Liver Research in HIV/AIDS
- Metabolic Pathways
- Metabolism, Energy Balance, and Obesity
- Nutrient Metabolism, Status, and Assessment
- Nutrition and Obesity Genetics and Genomics
- Nutrition Obesity Research Centers
- Obesity Treatment and Prevention
- Obesity, Pregnancy, and the Intrauterine Environment

Obesity Research Programs

- Chronic Kidney Disease
- Clinical, Behavioral, and Epidemiological Obesity Research
- Endocrinology and Hormone Signaling

- Metabolic Pathways
- Metabolism, Energy Balance, and Obesity
- Neurobiology of Obesity
- Nutrient Metabolism, Status, and Assessment
- Nutrition and Obesity Genetics and Genomics
- Nutrition Obesity Research Centers
- Obesity Treatment and Prevention
- Obesity, Pregnancy, and the Intrauterine Environment

Pancreatic Disease Research Programs

- Acute and Chronic Pancreatitis
- Endocrine Pancreas
- Endocrine Tumors of the Pancreas
- Hereditary and Pediatric Disorders of the Pancreas
- Pancreas Basic Research and Development
- Pancreas Clinical Research and Epidemiology

Research Training and Career Development

Small Business Programs

Website: https://www.niddk.nih.gov/about-niddk/offices-divisions/division-digestive-diseases-nutrition

Overview of the Division of Kidney, Urologic, and Hematologic Diseases (KUH)

The Division of Kidney, Urologic, and Hematologic (KUH) Diseases provides research funding and support for basic, translational, and clinical research studies of the kidney, urinary tract, and disorders of the blood and blood-forming organs. Areas of research include:

Kidney

Chronic kidney disease, end-stage renal disease, diabetic nephrology, polycystic kidney disease, hypertensive nephrosclerosis, acute kidney injury, kidney donation, congenital kidney disorders, IgA nephrology, hemolytic uremic syndrome, fluid and electrolyte disorders, kidney repair and regeneration, and normal and abnormal kidney development and physiology.

Urology

Benign prostatic hyperplasia, urinary incontinence, urinary tract infections, stones, erectile dysfunction, urologic chronic pelvic pain syndromes (including interstitial cystitis and chronic prostatitis), congenital urologic disorders, repair and regeneration of lower urinary tract organs, and normal and abnormal lower urinary tract development and physiology.

Hematology

Blood and blood-forming organs, hematopoiesis, hemoglobin disorders, iron metabolism, sickle cell disease, bone marrow failure, iron deficiency, Cooley's anemia (thalassemia), and hemochromatosis.

The KUH also provides funding for training and career development of persons committed to academic and clinical research in these areas.

Kidney Disease Research Programs

- Acute Kidney Injury
- Chronic Kidney Disease
- <u>Diabetic Kidney Disease</u>
- End-Stage Renal Disease
- Genetic Metabolic Disease
- Kidney Basic Research
- Kidney Bioengineering, Biotechnology, and Imaging
- Kidney Clinical Research and Epidemiology
- Kidney Developmental Biology and Aging
- Kidney Disease Centers
- Kidney Genetic and Genomics
- Kidney HIV/AIDS
- Kidney Inflammation and Inflammatory Diseases
- Kidney Precision Medicine Project
- Pediatric Kidney Disease
- Polycystic Kidney Disease

Urologic Disease Research Programs

- Diabetic Urologic Disease
- Genetic Metabolic Disease
- Pediatric Urology
- Urologic Disease Centers
- <u>Urology Basic Research</u>
- Urology Bioengineering, Biotechnology, and Imaging
- Urology Clinical Research and Epidemiology
- <u>Urology Developmental Biology and Aging</u>
- Urology Genetics and Genomics
- Urology HIV/AIDS
- Women's Urology

Hematologic Disease Research Programs

- Erythropoiesis and Hemoglobin
- Genetic Metabolic Disease
- Hematology HIV/AIDS
- Hematopoiesis and Hematopoietic Stem Cell Biology
- Iron and Heme Metabolism, Iron Chelation
- Molecular Hematology Centers

Website: https://www.niddk.nih.gov/about-niddk/offices-divisions/division-kidney-urologic-hematologic-diseases

Funding Mechanisms (Activity Codes) Supported by NIDDK

Brief Overview

An Activity Code is a three-digit code assigned by the National Institutes of Health (NIH) to identify funding mechanisms (e.g. F32, K12, P01, R01, T32, etc.). General categories include:

- F <u>fellowships</u>
- K career development awards
- N research contracts
- P program project and research center grants
- R research project grants
- S <u>research-related programs</u>
- T <u>training grants</u>
- U <u>cooperative agreements</u>
- Y interagency agreements

Extramural research activities are divided into three main mechanisms: grants, cooperative agreements, and contracts. A mechanism is the type of funding instrument used at the NIH. In general, with grants (all activity codes other than "N" or "U"), investigators are responsible for developing the concepts, methods, and approach for a research project. With contracts ("N" series), the DHHS awarding unit is responsible for establishing the detailed requirements. With cooperative agreements ("U" series), both the awarding unit and the recipient have substantial responsibility. Programs are areas within the funding mechanisms (for example, research, training, fellowships, and cooperative agreements). Activity codes identify categories applied to various mechanisms.

For NIH-wide activity codes and definitions beyond the NIDDK codes listed below, go to <u>Types of Grant Programs</u> page (http://grants.nih.gov/grants/funding_funding_program.htm) to search activity codes or to the <u>comprehensive list of extramural grant and cooperative agreement activity codes</u> for more information on selected grant programs.

Special NIH-Wide Programs

DP1 **NIH Director's Pioneer Award** (NDPA) (Roadmap program)

To support individual scientists of exceptional creativity, who propose pioneering – and possibly transforming approaches – to major challenges in biomedical and behavioral research.

DP2 NIH Director's New Innovator Awards (Roadmap program)

To support highly innovative research projects by new investigators in all areas of biomedical and behavioral research.

DP3 Type 1 Diabetes Targeted Research Award

To support research tackling major challenges in type 1 diabetes and promoting new approaches to these challenges by scientific teams.

DP5 Early Independence Award

To support the independent research project of a recent doctoral degree recipient.

Fellowship Programs

F30 Individual Predoctoral National Research Service Award (NRSA) for M.D./Ph.D Fellowship

To support students enrolled in MD/PhD, or equivalent combined degree programs, once they have identified a dissertation project.

F31 Individual Predoctoral National Research Service Award (NRSA)

To support students enrolled in a doctoral degree program (usually PhD) once they have identified a mentor and have chosen a dissertation research project.

F32 Individual Postdoctoral National Research Service Award (NRSA)

To support postdoctoral fellows to pursue mentored research training prior to applying for a faculty position.

Research Career Programs

K01 Research Scientist Development Award - Research & Training

To support basic scientists (non-clinicians) as they transition to independence and develop their careers with the support of a mentor.

K05 Research Scientist Award

To support a research scientist qualified to pursue independent research which would extend the research program of the sponsoring institution, or to direct an essential part of this research program.

K08 Clinical Investigator Award (CIA)

To support early clinician scientists who are transitioning to independence in a junior faculty position while pursuing a basic or clinical research project and developing their career.

K12 Physician Scientist Award (Program) (PSA)

Award to an institution to support several individuals as they transition from fellowship to faculty while pursuing a research project with the help of a mentor(s).

K23 Mentored Patient-Oriented Research Career Development Award

To provide support for the career development of investigators who have made a commitment to focus their research endeavors on patient-oriented research. Supports early clinician scientists who are transitioning to independence in a junior faculty position and developing their career while pursuing a clinical research project that involves direct patient contact and the support of a mentor(s).

K24 Midcareer Investigator Award in Patient-Oriented Research

Supports established clinician scientists to enable them to pursue their patient-oriented research while mentoring the next generation of patient-oriented researchers.

K25 Mentored Quantitative Research Career Development Award

To support highly productive postdoctoral fellows pursuing mentored research projects while looking for faculty appointments.

K99 NIH Pathway to Independence Award (PI)

R00 Supports the initial phase of a Career/Research Transition award program that provides 1-2 years of mentored support for highly motivated, advanced postdoctoral research scientists.

Extramural Loan Repayment Program

L30 Loan Repayment Program for Clinical Researchers

NIH may repay up to \$35,000 of your qualified student loan debt per year, including most undergraduate, graduate, and medical school loans if you are actively engaged in clinical research.

L40 Loan Repayment Program for Pediatric Research

NIH may repay up to \$35,000 of your qualified student loan debt per year, including most undergraduate, graduate, and medical school loans if you are actively engaged in research related to pediatric disease or disease model.

Research and Development-Related Contracts

N01 Research and Development Contracts

To develop and/or apply new knowledge or to test, screen, or evaluate a product, material, device, or component for use by the scientific community.

N02 Resource and Support Contracts - Awarded in the ICD

To support intramural and extramural station support needs. This activity also includes the provision of resources to intramural research programs.

N41 Small Business Technology Transfer (STTR) Contracts - Phase I

To support cooperative R&D projects between small business concerns and research institutions, limited in time and amount, to establish the technical merit and feasibility of ideas that have potential for commercialization. Awards are made to small business concerns only.

N42 Small Business Technology Transfer (STTR) Contracts - Phase II

To support in-depth development of cooperative R&D projects between small business concerns and research institutions, limited in time and amount, whose feasibility has been established in Phase I and that have potential for commercialization. Awards are made to small business concerns only.

N43 Small Business Innovation Research (SBIR) Contracts- Phase I

To support project, limited in time and amount, to establish the technical merit and feasibility of R&D ideas which may ultimately lead to a commercial product(s) or service(s). These contracts may be made only with small businesses.

N44 Small Business Innovation Research (SBIR) Contracts - Phase II

To support in-depth development of R&D ideas whose feasibility has been established in Phase I and which are likely to result in commercial products or services. These contracts may be made only to small businesses.

Research Program Projects and Centers

P01 Research Program Projects

For the support of a broadly based, multidisciplinary, often long-term research program which has a specific major objective or a basic theme. A program project generally involves the organized efforts of relatively large groups, members of which are conducting research projects designed to elucidate the various aspects or components of this objective. Each research project

is usually under the leadership of an established investigator. The grant can provide support for certain basic resources used by these groups in the program, including clinical components, the sharing of which facilitates the total research effort. A program project is directed toward a range of problems having a central research focus, in contrast to the usually narrower thrust of the traditional research project. Each project supported through this mechanism should contribute or be directly related to the common theme of the total research effort. These scientifically meritorious projects should demonstrate an essential element of unity and interdependence, i.e., a system of research activities and projects directed toward a well-defined research program goal.

P20 Center Exploratory Grants

To support planning for new programs, expansion or modification of existing resources, and feasibility studies to explore various approaches to the development of interdisciplinary programs that offer potential solutions to problems of special significance to the mission of the NIH. These exploratory studies may lead to specialized or comprehensive centers.

P30 Center Core Grants

To support shared resources and facilities for categorical research by a number of investigators from different disciplines who provide a multidisciplinary approach to a joint research effort or from the same discipline who focus on a common research problem. The core grant is integrated with the center's component projects or program projects, though funded independently from them. This support, by providing more accessible resources, is expected to assure a greater productivity than from the separate projects and program projects.

P50 Specialized Center

To support any part of the full range of research and development from very basic to clinical; may involve ancillary supportive activities such as protracted patient care necessary to the primary research or R&D effort. The spectrum of activities comprises a multidisciplinary attack on a specific disease entity or biomedical problem area. These grants differ from program project grants in that they are usually developed in response to an announcement of the programmatic needs of an Institute or Division and subsequently receive continuous attention from its staff. Centers may also serve as regional or national resources for special research purposes.

Research Projects

R01 Research Project Grant

To support a discrete, specified, circumscribed project to be performed by the named investigator(s) in an area representing his specific interest and competencies.

R03 Small Research Grants

Supports research projects that can be completed in a 2-yr time frame. NIDDK does not participate in the parent FOA for R03s, but issues FOAs for specific audiences, e.g. NIDDK-supported K01, K08, and K23 awardees.

R13 Research Conference Grant

To support recipient sponsored and directed international, national or regional meetings, conferences and workshops.

R15 Academic Research Enhancement Awards (AREA)

To support small-scale research projects conducted by faculty in primarily baccalaureate degree-granting domestic institutions. Awards are for up to \$75,000 for direct costs (plus applicable indirect costs) for periods not to exceed 36 months.

R18 Research Demonstration and Dissemination Projects

To provide support designed to develop, test, and evaluate health service activities, and to foster the application of existing knowledge for the control of categorical diseases.

R21 Exploratory/Developmental Grants

Supports a discrete, specified, circumscribed project to be performed by the named investigator(s) in an area representing his specific interest and competencies.

R24 Resource-Related Research Projects

To support research projects that will enhance the capability of resources to serve biomedical research.

R25 Education Projects

For support to develop and/or implement a program as it relates to a category in one or more of the areas of education, information, training, technical assistance, coordination, or evaluation.

R34 Clinical Trial Planning Grant

To provide support for the initial development of a clinical trial, including the establishment of the research team; the development of tools for data management and oversight of the research; the development of a trial design and other essential elements of the study, such as the protocol, recruitment strategies, and procedure manuals; and to collect feasibility data.

R41 Small Business Technology Transfer (STTR) Grants - Phase I

R42 To support cooperative R&D projects between small business concerns and research institutions, limited in time and amount, to establish the technical merit and feasibility of ideas that have potential for commercialization. Awards are made to small business concerns only.

R43 Small Business Innovation Research (SBIR) Grants - Phase I

R44 To support projects, limited in time and amount, to establish the technical merit and feasibility of R&D ideas which may ultimately lead to a commercial product(s) or service(s).

RC2 High Impact, Interdisciplinary Science in NIDDK Research Areas

To support high impact ideas that may lay the foundation for new fields of investigation; accelerate breakthroughs; stimulate early and applied research on cutting-edge technologies; foster new approaches to improve the interactions among multi- and interdisciplinary research teams; or, advance the research enterprise in a way that could stimulate future growth and investments and advance public health and health care delivery. This activity code could support either a specific research question or propose the creation of a unique infrastructure/ resource designed to accelerate scientific progress in the future.

Research-Related Programs

S06 Native American Research Centers for Health (NARCH)

Supports partnerships between American Indian/Alaska Native (AI/AN) tribes or tribally-based organizations and institutions that conduct intensive academic-level biomedical, behavioral and health services research.

SC1 Research Enhancement Award

Individual investigator-imitated research projects aimed at developing researchers at minority-serving institutions (MSIs) to a stage where they can transition successfully to other extramural support (R01 or equivalent).

SC2 Pilot Research Project

Individual investigator-initiated pilot research projects for faculty at MSIs to generate preliminary data for a more ambitious research project.

Training Programs

T32 Institutional National Research Service Award (NRSA)

To enable institutions to make National Research Service Awards to individuals selected by the institution, in either short-term, predoctoral, and/or postdoctoral research training in specified shortage areas.

T32 Diversity NRSA Diversity Supplement Award

Additional slot awarded to an existing training grant for either a specific medical student wishing to take a year off from school to pursue research training or for a pre- or post-doctoral trainee from a group underrepresented in biomedical research, when no slot is available on the training grant.

T32 MSRT Medical Student Research Training Supplement

Additional slot awarded to an existing training grant for either a specific medical students wishing to take a year off from school to pursue research training of for a pre- or post-doctoral trainee from a group underrepresented in biomedical research, when no slot is available on the training grant.

T35 NRSA Short-Term Research Training

Provides 2-3 months of support for medical students, selected by the institution, to pursue research training during off-quarters or summer periods.

Cooperative Agreements

Note: For all funding mechanisms within this section, substantial Federal programmatic staff involvement is intended to assist investigators during performance of the research activities, as defined in the terms and conditions of award.

U01 Research Project Cooperative Agreement

To support a discrete, specified, circumscribed project to be performed by the named investigator(s) in an area representing his specific interest and competencies.

U13 Research Conference Cooperative Agreement

To support international, national, or regional meetings, conferences and workshops where substantial programmatic involvement is planned to assist the recipient.

U24 Resource – Related Research Projects – Cooperative Agreement

Supports research projects contributing to improvement of the capability of resources to serve biomedical research.

U34 Multi-Center Clinical Study Implementation Planning Grants

Supports a discrete, specified, circumscribed project to be performed by the named investigator(s) in an area representing his specific interest and competencies.

U54 Specialized Center – Cooperative Agreement

To support any part of the full range of research and development from very basic to clinical; may involve ancillary, supportive activities such as protracted patient care necessary to the primary research or R&D effort. The spectrum of activities comprises a multidisciplinary attack on a specific disease entity or biomedical problem area. These differ from program project in that they are usually developed in response to an announcement of the programmatic needs of an Institute or Division and subsequently receive continuous attention from its staff. Centers may also serve as regional or national resources for special research purposes, with funding component staff helping to identify appropriate priority needs.

UC4 High-Impact Research and Research Infrastructure Cooperative Agreements

To support multi-year funded cooperataive agreement research with high impact ideas that may lay the foundation for new fields of investigation; accelerate breakthroughs; stimulate early and applied research on cutting-edge technologies; foster new approaches to improve the interactions among multi- and interdisciplinary research teams; or, advance the research enterprise in a way that could stimulate future growth and investments and advance public health and health care delivery. This activity code could support either a specific research question or propose the creation of a unique infrastructure/resource designed to accelerate scientific progress in the future. It is the cooperative agreement companion to the RCA. It is also the multi-year funded companion to the existing UC2; thus ICs need OER prior approval to use the UC 4.

UG3 Phase 1 Exploratory/Developmental Cooperative Agreement

As part of a bi-phasic approach to funding exploratory and/or developmental research, the UG3 provides support for the first phase of the award. This activity code is used in lieu of the UH2 activity code when larger budgets and/or project periods are required to establish feasibility for the project.

UH2 Exploratory/Developmental Cooperative Agreement Phase II

UH3 To provide a second phase for the support for innovative exploratory and development research activities initiated under the UH2 mechanism. Although only UH2 awardees are generally eligible to apply for UH3 support, specific program initiatives may establish eligibility criteria under which applications could be accepted from applicants demonstrating progress equivalent to that expected under UH2.

X01 Resource Access Program

To invite eligible institutions to seek access to NIH research resources. This includes programs where institutions will request access to submit to the resource, e.g., high throughput screening assays. It also includes programs where access to a specific NIH research resource is needed to conduct certain research.

X02 Preapplication

A program to invite eligible institutions to submit a pre-application (also known as a "white paper" to "precis") to facilitate certain approaches or economies, such as reducing burden on the applicant community, for a funding opportunity.

NIH Operates Under a Continuing Resolution

Notice Number: NOT-OD-20-003

Key Dates

Release Date: October 4, 2019

Related Announcements

NOT-OD-19-030 NOT-OD-19-031 NOT-OD-19-036 NOT-OD-19-099

Issued by

Office of The Director, National Institutes of Health (OD)

Purpose

The Department of Health and Human Services (HHS), including NIH, operates under the "Continuing Appropriations Act, 2020 and Health Extenders Act of 2019" (Public Law 116-59) signed by President Trump on September 27, 2019. This Act (CR) continues government operations through November 21, 2019, at 99.3209 percent of the FY 2019 enacted level.

Continuing the procedures identified under NOT-OD-19-031 and consistent with NIH practices during the CRs of FY 2006-2019, the NIH will issue non-competing research grant awards at a level below that indicated on the most recent Notice of Award (generally up to 90% of the previously committed level). Upward adjustments to awarded levels will be considered after FY 2020 appropriations are enacted, but NIH expects institutions to monitor their expenditures carefully during this period. All legislative mandates that were in effect in FY 2019 (see NOT-OD-19-030) remain in effect under this CR, as well as the salary limitation set at Executive Level II of the Federal Pay Scale (see NOT-OD-19-099). The Ruth L. Kirschstein National Research Service Award predoctoral and postdoctoral stipend levels and tuition/fees are described in NOT-OD-19-036.

Inquiries

Questions regarding adjustments applied to individual grant awards may be directed to the Grants Management Specialist identified on the Notice of Award.

Notice of Fiscal Policies in Effect for FY 2019

Notice Number: NOT-OD-19-031

Key Dates

Release Date: November 27, 2018

Related Announcements

NOT-OD-18-180 NOT-OD-20-003

Issued by

National Institutes of Health (NIH)

Purpose

This Notice provides guidance about the NIH Fiscal Operations for FY 2019 and implements The Department of Defense and Labor, Health and Human Services, and Education Appropriations Act, 2019 (Public Law 115-245), signed into law on September 28, 2018. With the passage of the Act, NIH received a 5.6 percent increase over the FY 2018 final funding level, for a total of \$39.3 billion in program level funding, including \$711,000,000 authorized under the 21st Century Cures Act and specific increases for Alzheimer's disease, the All of Us Research Program, and the BRAIN Initiative.

The following NIH fiscal policies are instituted in FY 2019:

FY 2019 Funding Levels: Non-competing continuation awards made in FY 2019 will generally be issued at the commitment level indicated on the Notice of Award. Any exceptions will be posted at the site listed under "Additional Information" below. Out-year commitments for continuation awards in FY 2020 and beyond will remain unchanged. The NIH awarding Institutes/Centers (IC) will develop and post their fiscal policies consistent with overall NIH goals and available FY 2019 funds.

Ruth L. Kirschstein National Research Service Awards (NRSA): Consistent with the recommendations of the <u>Advisory Committee to the Director</u> regarding the <u>Biomedical Research Workforce</u>, the NIH will increase NRSA stipends by approximately 2 percent on average. The full range of stipend adjustments for FY 2019 is described at NOT-OD-19-036.

Next Generation Researchers Initiative Policy: NIH will prioritize meritorious R01- equivalent applications from ESI PD/PIs. By providing funding priority for ESIs, NIH intends to encourage funding applications that involve researchers earlier in their career in accordance with the policy established in FY 2017 and described at https://grants.nih.gov/grants/guide/notice-files/NOT-OD-17-101.html.

Salary Limits: Section 202 of the Department of Defense and Labor, Health and Human Services, and Education Appropriations Act, 2019 prohibits payments for salaries under grants and other extramural mechanisms in excess of <u>Executive Level II</u> previously set at \$189,600.

Other Legislative Mandates: Other statutory requirements are described in NOT-OD-19-030.

Additional Information: Additional details on Fiscal Operations, including specific funding strategies for ICs will be posted at https://grants.nih.gov/grants/financial/index.htm.

Inquiries

Please direct all inquiries to: Division of Grants Policy National Institutes of Health Telephone: 301-435-0949 Email: GrantsPolicy@od.nih.gov

2020 Interim Award Funding Policy

The Department of Health and Human Services (HHS), including NIH, operates under the "Continuing Appropriations Act, 2020 and Health Extenders Act of 2019" (Public Law 116-59) signed by President Trump on September 27, 2019. This Act (CR) continues government operations through November 21, 2019 at 99.3209 percent of the FY 2019 enacted level.

- Until FY 2020 appropriations are enacted, NIH will issue non-competing research grant awards at a level below that indicated on the most recent Notice of Award (generally up to 90% of the previously committed level). See NOT-OD-20-003: NIH Operates Under a Continuing Resolution for details.
- NIDDK will announce additional details regarding its interim FY 2020 funding policy, including details regarding funding of competing grant applications as information becomes available.

2019 Award Funding Policy

The National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) conducts and supports basic and clinical research on many of the most serious diseases affecting public health.

NIDDK extramural research is organized into 3 programmatic divisions:

- 1. Diabetes, Endocrinology, and Metabolic Diseases;
- 2. Digestive Diseases and Nutrition; and
- 3. Kidney, Urologic, and Hematologic Diseases.

The Institute supports basic and clinical research through investigator-initiated grants, program project and center grants, cooperative agreements, career development and training awards, and contracts.

Budget Data

Current Appropriation

NIH is operating at a program level of \$39.084 billion in FY 2019, an increase of approximately \$2 billion over the FY 2018 final budget allocations.

NIDDK's discretionary appropriation for FY 2019 is \$2.030 billion. This is an increase of about 3% from NIDDK's appropriation in FY 2018. This figure does not include the Special Type 1 Diabetes appropriation of \$150M that NIDDK oversees on behalf of the Department of Health and Human Services.

Funding Strategy

NIDDK is committed to supporting as many meritorious competing research grant applications as possible. Consistent with NIH policy (see NIH Guide Notice NOT-OD-19-031), NIDDK will manage its portfolio in biomedical research investments in a manner that includes recognizing applications from and providing special consideration for early career investigators.

To maximize our available resources, all grant awards will continue to be subject to programmatic adjustments from the National Diabetes and Digestive and Kidney Diseases (NDDK) Advisory Council approved levels. These adjustments take into consideration the overall scientific and technical merit of the grant application, the cost of the proposed research, and other resources available for related research projects.

Funding Guidelines

Competing Awards

For FY 2019 NIDDK is establishing a nominal "payline" for new (Type 1) and renewal or competing continuation (Type 2) R01 applications of 13th percentile. Most R01 applications submitted to Funding Opportunity Announcements that 1) do not have a set-aside funds, 2) have a primary assignment to NIDDK, 3) request less than \$500,000 direct costs per year, and 4) score at or better than the 13th percentile will receive an award. Applications that have NIDDK as a secondary assignment do not benefit from this payline.

R01 applications that do not include therapeutic clinical trials as the primary focus of the research plan requesting \$500,000 or more in direct costs for any year will be held to a more stringent pay line – the 8th percentile for both Type 1 and 2 applications.

Therapeutic Clinical Trial R01 Applications

Per NOT-DK-18-012, NIDDK will not apply the more stringent pay line to R01 applications that include therapeutic clinical trials if that total direct costs (exclusive of F&A on subcontracts) for five years do not exceed \$2.5 million (or \$2 million for four years), even if that directs costs equal or exceed \$500,000 in some years. As indicated above, the more stringent pay line will continue to be applied for all other R01 applications (i.e., all applications that do not have a therapeutic clinical trial as the primary focus of the research plan).

Consistent with NIDDK policy first established in FY2016, R01 applications received in response to Funding Opportunity Announcements (FOAs) that are PARs will not automatically be considered for funding based on payline/percentile ranking. Scores and additional programmatic factors will be weighed when considering applications received under R01 PAR FOAs for funding.

Please note the following regarding competing awards:

- NIDDK will exercise discretion and consider portfolio balance, programmatic importance and a number of other factors in determining precisely which applications are awarded.
- All grant awards will continue to be subject to programmatic adjustments from the NDDK Advisory Council approved levels.
- These funding levels are applicable for applications to be paid in FY 2019. Many applications submitted in FY 2019 (e.g., those submitted in January/February/March for September/October Advisory Council consideration) will not be eligible for funding consideration until FY 2020. The funding levels for FY 2020 cannot now be reliably predicted.

Early Stage Investigators (ESIs)

Fostering the success of investigators establishing careers in biomedical research is a high priority of the NIDDK and NIH. In FY 2019 NIDDK will place special emphasis on supporting ESIs (new investigators within 10-years of their terminal research degree or medical residency who have not yet been awarded a substantial, competing NIH research grant; see ESI FAQs and NIDDK's New and Early Stage Investigators page) by establishing a nominal payline for R01 applications submitted by ESIs at the18th percentile. In addition, when possible and appropriate the full period of support recommended will be awarded.

R01s applications submitted by New Investigators who are not also ESIs will be paid up to the 13th percentile (same as the general pay line).

First Competitive Renewal Applications of R01 Grants Awarded to NIDDK ESIs

Consistent with the NIH Next Generation Researchers Initiative, NIDDK seeks to encourage the stable integration of early career researchers into the scientific research workforce. In support of this, the nominal payline for first competitive renewal applications for R01 awards to researchers who were ESIs when they competed for the initial NIDDK Type 1 R01 award will be 16th percentile in FY 2019. Only one award per eligible investigator may be considered for this special payline. If a special payline award is made to an eligible investigator any other eligible applications from that investigator will be considered for funding based on the standard nominal payline.

Bridge Support

In cases where a competing renewal application falls near but beyond the nominal payline, NIDDK will continue to consider interim support on a case-by-case basis and provide limited support in selected cases. The goal is to preserve essential research resources pending the re-review of a revised application. NIDDK can choose to award a one- or two-year R56 grant to an R01 application scored outside the payline. These awards provide support for investigators to collect preliminary data and use these data to revise and improve their R01 applications.

Administrative Supplements

NIDDK has prioritized its budget to maintain funding of investigator-initiated grants at the highest possible level. Therefore, the institute has little flexibility to support administrative supplements. Given this prioritization, the number of successful administrative supplement applications will be extremely low and generally limited to rare, unforeseen circumstances (e.g., requests to replace key pieces of equipment following a natural disaster). In FY 2019, NIDDK does not have any special FOAs or

Notices soliciting administrative supplements to replace old equipment or to expand the scope of a project by adding funds or restoring an administratively cut year.

Duration of Grant Support

Competing awards are adjusted to achieve a 4-year average duration for research project grants. Nevertheless, applications from ESIs, MERIT extensions, program project grants, and clinical trial grants are generally awarded for the full length of their recommended project period.

Salaries

Section 202 of the Department of Defense and Labor, Health and Human Services, and Education Appropriations Act, 2019 prohibits payments for salaries under grants and other extramural mechanisms in excess of <u>Executive Level II</u> currently set at \$189,600.

Non-competing (Continuation) Awards

Consistent with the Notice of Fiscal Policies in Effect for FY 2019 (see NOT-OD-19-031) non-competing (Type 5) continuation grants (research and non-research) issued in FY 2019 will generally be issued at the commitment level indicated on the Notice of Award. Out-year commitments for continuation awards in FY 2020 and beyond remain unchanged.

Program Project (P01), High Impact, Interdisciplinary Science in NIDDK Research Areas (RC2), and Other Applications with Budgets Greater than \$500K

NIDDK has adopted a more stringent funding practice for awarding program project (P01) grants, High Impact, Interdisciplinary Science in NIDDK Research Areas (RC2), and other investigator-initiated grant applications with budgets of \$500,000 or more requested direct costs in any one year. Prior approval is required before submitting an application for review that requests \$500,000 or more in direct costs in any one year. The request to submit such applications should be received at least three months prior to the proposed submission date. Prior approval is required for renewal and revised applications as well as new applications. Please consult with the appropriate NIDDK program staff and visit the following site for information on research areas supported by NIDDK: http://www.niddk.nih.gov/research-funding/research-programs/.

New (Type 1) and Renewal (competing continuation [Type 2]) program project (P01) applications may request a maximum of \$6.25 million in direct costs over five years, excluding the Facilities & Administrative (F&A) costs for subcontracts. In addition to the caps on the amount requested, P01 awards are subject to administrative adjustment from the NIDDK Advisory Council approved levels.

Also, please note that any P01 grant receiving a competing award in FY 2011 or later will be limited to one subsequent renewal.

HIV/AIDS Research

HIV/AIDS related applications will receive additional consideration in the context of NIH's HIV/AIDS research priorities (see NOT-OD-15-137) as well as programmatic relevance to the NIDDK mission.

Resources for New and Early Stage Investigators

A New Investigator (NI) is an NIH research grant applicant who has not yet competed successfully for a substantial, competing NIH research grant. For a complete list of NIH grants that do not disqualify a PD/PI from being considered a New Investigator, see the NIH Definition of New Investigator.

An Early Stage Investigator (ESI) is a new investigator who has completed his or her terminal research degree or medical residency – whichever date is later – within the past 10 years and has not yet competed successfully for a substantial, competing NIH research grant.

How Are New Investigators (NIs) and Early Stage Investigators (ESIs) Identified?

Software within the eRA Commons will check first for New Investigator (NI) status based on the individual's previous award history. For individuals identified as NIs, the software will calculate the ten year window of Early Stage Investigator (ESI) status based on the date of the terminal research degree or the residency end date entered in the investigator's Profile. To ensure that NIH recognizes your ESI status, you must update your eRA Commons profile to reflect the date of completion of your terminal research degree of the end of your residency.

Note: NIH will consider a request to extend the period of your ESI status if there has been a lapse in your post-degree training (see <u>Form for Requesting an Extension in the Early Stage Investigator (ESI) Period</u>).

What Benefits Are Conveyed With New Investigator (NI) or Early Stage Investigator (ESI) Status?

Peer Review – For both New Investigator (NI) and Early Stage Investigator (ESI) applications, peer reviewers are instructed to focus more on the proposed approach than on the track record, and to expect less preliminary data than would be provided by established investigators. Institute staff members pay special attention to applications from NI and ESI investigators as well.

In addition, NIH has a <u>program for raid turnaround</u> for NI and ESI applications, this gives NIs and ESIs the opportunity to revise and resubmit their applications more quickly. While this rapid turnaround may be appropriate for those applications that need only improved writing, inclusion of missing detail, or other minor changes, it may not be the most efficient path to success for those applications that may benefit from a more thoughtful and thorough revision to address the reviewers' concerns. NIs and ESIs are strongly encouraged to contact their program director to discuss the decision of when to resubmit a revised application.

Differential payline (for ESIs) – Each year, the NIDDK sets a percentile "payline" for R01 applications based on available funds and the volume of applications. The payline for ESI applications is typically more generous than the regular payline for established investigators (see NIDDK Funding Policy). While NIDDK often makes administrative reductions in grant duration, applications from ESIs that fall within the payline are usually awarded the full requested duration.

Consideration for NIH High Priority, Short-Term Project Award (R56) — Although you cannot apply for this grant activity, NIDDK can choose to award a one- or two-year R56 grant to an R01 application scored outside the payline. These provide support for an investigator to collect key preliminary data in order to submit an improved revised R01 application, but you should understand that NIDDK has only enough funds to make very few of these awards.

Background Information: NIDDK

Mentoring Workshops – NIDDK regularly holds workshops for recently funded new investigators. In addition, when NIs or ESIs receive their first grant they are encouraged to maintain contact with their Program Official who can be an excellent resource during this critical stage of your research career.

First Competitive Renewal of R01 Applications From Former NIDDK ESIs – NIDDK seeks to encourage the stable integration of early career researchers into the scientific research workforce. In support of this, the nominal payline for first competitive renewal applications for R01 awards to researchers who were ESIs when they competed for the initial NIDDK Type 1 R01 award is typically more generous than the regular payline for established investigators (see NIDDK Funding Policy). Only one award per eligible investigator may be considered for this special payline. If a special payline award is made to an eligible investigator any other eligible applications from that investigator will be considered for funding based on the standard nominal payline.

For Information

Visit the <u>NIH New and Early Stage Investigator Policies</u> page, or view NIDDK <u>Research Programs and Contacts</u> for your scientific area of interest.

Role of NIDDK Advisory Council

Established by law and charter, the National Diabetes and Digestive and Kidney Diseases Advisory Council (NDDKAC) meets three times annually to advise the NIDDK about its research portfolio. The Council typically undertakes broad issues of science policy. An important role of the Council is to provide second-level peer review of grant applications that have been scored by scientific review groups. The Council members are an important liaison between the research communities they represent and NIDDK, which supports each community's research efforts.

Who are the Council members?

Members of the Advisory Council are drawn from the scientific and lay communities, are appointed for 4-year terms, and represent all areas within the Institute's research mission. The Council membership consists of 18 voting members, including 12 health or science experts and 6 public members.

Six nonvoting, *ex officio* members provide liaison with higher level agencies or organizations having missions consistent with that of NIDDK, including the Secretary, Department of Health and Human Services (DHHS), and representatives from the Department of Defense, Department of Agriculture, and Department of Veterans' Affairs.

Council's health or science experts contribute technical expertise and an understanding of the needs of the research communities of academia and industry. Council's public representatives impart a perspective of people affected by diseases in NIDDK's research mission.

Each Council member also belongs to one of the three Council subcommittees – Digestive Diseases and Nutrition; Diabetes, Endocrinology, and Metabolic Diseases; and, Kidney, Urologic and Hematologic Diseases, corresponding to NIDDK's extramural programmatic divisions.

A copy of the current Council roster is included in the next section on Advisory Council Logistical documents and online at http://www.niddk.nih.gov/about-niddk/advisory-coordinating-committees/national-diabetes-digestive-kidney-disease-advisory-council/members/Pages/advisory-council-members.aspx

What does the Council do? (For an abbreviated version see: "RESPONSIBILITIES OF NIDDK ADVISORY COUNCIL MEMBER" at the end of this book.)

As required by law, chartered advisory committees, including the councils, are part of every NIH institute. NIDDK's Council performs the following four key roles:

- Conducts second-level peer review of grant applications scored by scientific review groups
- Advises NIDDK on broad issues of science policy
- Reviews NIDDK programs
- Clears concepts for Program Announcements (PAs), Requests for Applications (RFAs), and Requests for Proposals (RFPs).

The subcommittees conduct most of the NIDDK Division-specific business, including the closed-session discussion of grant applications. Note that other public venues may clear concepts.

What is second-level review?

Second-level review is the assessment of the quality of the initial review of grant applications. The Council has three options for recommendations: (1) concurrence with initial review; (2) modify the initial review action (e.g., an adjustment of the budget level and/or project period); or (3) defer an application for re-review. Applications that are brought to the Council subcommittees for closed-session discussion are then reported to the full Council in closed session. The remainder of the applications are considered through an en bloc vote.

Expedited Concurrence of En Bloc Actions. For grant and cooperative agreement applications that have no concerns noted that would represent an administrative bar to award (e.g., for human subjects, animal welfare, biohazards or inclusion of women, children and appropriate minority distribution), excluding those from foreign organizations, a process of expedited concurrence is available. The purpose is to provide NIDDK staff with the opportunity to make awards meeting specific circumstances in a more timely, responsive, and responsible manner. In this process, the power to review applications is delegated by the Chairman of the Advisory Council to specifically designated Council members acting on behalf of the Advisory Council as a whole. The concurrence committee consists of the Council Executive Secretary and six members of the NDDKAC. Two members are selected from each subcommittee of the NDDKAC. Electronic or written concurrence by a minimum of two members with no votes for nonconcurrence within 7 days of notification of posting is required for expedited concurrence approval.

For the first two Councils – January or February and May or June – expedited review enables NIDDK to fund grants a few weeks after the initial peer review meeting. Because September Council reviews applications for funding in the next fiscal year, applicants approved for funding through expedited review will get their awards after the Institute receives its next year's appropriation.

The NIDDK Director makes final funding decisions based on staff and Advisory Council/Board advice.

What happens at Council meetings?

Council meets in September, January or February, and May or June. Its activities are driven partly by the budget and appropriation cycle. For example, discussions in September reflect the beginning of the fiscal year.

In the morning, the full Council meets in open session to hear updates from the Director, NIDDK, and to discuss items that cut across NIDDK Divisional lines. This may include scientific and administrative topics for discussion, often presented by staff or outside speakers. *Note: Open sessions are open to the public and members of the press may be present.*

In the early afternoon, the three subcommittees meet individually to review applications needing special consideration, discuss selective pay nominations, and recommend MERIT awards. Then, the Director, NIDDK, convenes the full Council for a short, closed meeting to discuss and formally approve subcommittee recommendations for funding grants.

Note: A sample agenda is included in the on Advisory Council Logistical documents. The next meeting's agenda is posted several weeks before each meeting and is available from the Council's home page (http://www.niddk.nih.gov/about-niddk/advisory-coordinating-committees/national-diabetes-digestive-kidney-disease-advisory-council/Pages/advisory-council.aspx). Minutes are also posted and available from the home page.

What is Council's role in concept clearance?

NIDDK seeks Council's advice for long-term planning at an early stage. However, the decision to go forward with an initiative is made by NIDDK, based on scientific and programmatic priorities and on the availability of funds.

Definitions of Special Issues Presented to Council

The following types of special issues are typically presented to Council.

- 1. **Reinstatement of Research Aims**. Applications for which the division is requesting to reinstate specific aims or research not recommended for support by the study section.
- 2. **Non-Peer-Reviewed Applications**. Used in some circumstances. Council performs both <u>initial</u> peer review and second-level review functions. Renewal MERIT awards are the most common example.
- 3. **Deferred Applications**. All Council-deferred applications independent of review results.
- 4. **Unresolved Appeals.** Formerly called rebuttals. When program staff working with a <u>scientific</u> review officer have been unable to resolve the applicant's concerns, the DEA director reviews the appeal, and staff present it to Council.
- 5. **Foreign Applications**. Foreign applications a division proposes to award. (Foreign applicants may NOT receive R56-Bridge awards.)
- 6. **Human Subjects**. Applications proposed for award with unresolved concerns about a lack of assurance of protection of human subjects.
- 7. **Biohazards**. Applications proposed for award with unresolved concerns about biohazards.
- 8. **Use of Animals in Research**. Applications proposed for award with unresolved concerns about a lack of assurance of protection of animals in research.
- 9. **Minority Recruitment Plans in Institutional Training Grant Applications**. Fundable, meritorious National Research Service Award applications with inadequate plans for minority recruitment. When the study section deems a plan inadequate, options are (1) no special action, pay by priority score; (2) defer payment pending submission and staff approval of a recruitment plan; or (3) defer for study section re-review pending receipt of an acceptable plan.
- 10. **Inclusion of Women and Minorities as Subjects in Clinical Research**. Applications a division plans to award with an unresolved inclusion issue ("U" code).
- 11. **Inclusion of Children as Subjects in Clinical Research**. Applications a division plans to award with an unresolved inclusion issue ("U" code).
- 12. **Special Council Review**. Review of research applications from Program Investigator with more than \$1,000,000 in direct costs in annual NIH support.

NATIONAL DIABETES AND DIGESTIVE AND KIDNEY DISEASES ADVISORY COUNCIL

AUTHORITY

Required by 42 U.S.C. 284a, sections 406 of the Public Health Service (PHS) Act, as amended, The National Diabetes and Digestive and Kidney Diseases Advisory Council (Council) is governed by the provisions of the Federal Advisory Committee Act, as amended (5 U.S.C. app.), which sets forth standards for the formation and use of advisory committees.

OBJECTIVES AND SCOPE OF ACTIVITIES

The Council will advise, assist, consult with, and make recommendations to the Secretary of Health and Human Services (Secretary) and the Director, National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK, also referred to as Institute) on matters related to the activities carried out by and through the Institute and the policies respecting these activities.

DESCRIPTION OF DUTIES

The Council may recommend to the Secretary, in accordance with section 231 of the PHS Act, as amended, acceptance of conditional gifts for study, investigation, or research on basic and clinical diabetes mellitus and endocrine and metabolic diseases, digestive diseases and nutrition, and kidney, urologic, and hematologic diseases, for the acquisition of grounds, or for the construction, equipping, or maintenance of facilities for the Institute.

The Council may review applications for grants and cooperative agreements for research and training and recommend approval of applications for projects which show promise of making valuable contributions to human knowledge; may review any grant, contract, or cooperative agreement proposed to be made or entered into by the Institute; may collect, by correspondence or by personal investigation, information as to studies which are being carried on in the United States or any other country and, with the approval of the Director of NIDDK, make available such information through appropriate publications for the benefit of public and private health entities, health professions personnel and scientists, and for the information of the general public.

The Council may prepare, for inclusion in the Biennial Report prepared by the Director, National Institutes of Health (NIH), under section 403 of the PHS Act, as amended (1) comments reflecting the activities of the Council in the fiscal years in which the report is prepared; (2) comments on the progress of the Institute in meeting its objectives; and (3) recommendations respecting the future directions and program and policy emphasis of the Institute.

AGENCY OR OFFICIAL TO WHOM THE COMMITTEE REPORTS

The Council will advise the Secretary; the Assistant Secretary for Health; the Director, NIH; and the Director, NIDDK.

SUPPORT

Management and support services will be provided by the Division of Extramural Activities, NIDDK.

ESTIMATED ANNUAL OPERATING COSTS AND STAFF YEARS

The estimated annual cost for operating the Council, including compensation and travel expenses for members, but excluding staff support, is \$49,407. The estimated annual person-years of staff support required is 0.7, at an estimated annual cost of \$84,848.

DESIGNATED FEDERAL OFFICER

The Director, NIDDK, will assign a full-time or permanent part-time NIDDK employee to serve as the Designated Federal Officer (DFO) of the Council. In the event that the DFO cannot fulfill the assigned duties of the Council, one or more full-time or permanent part-time NIDDK employees will be assigned these duties on a temporary basis.

The DFO will approve or call all of the Council's and subcommittees' meetings, prepare and approve all meeting agendas, attend all Council and subcommittee meetings, adjourn any meeting when it is determined to be in the public interest, and chair meetings when directed to do so by the Director, NIH, or Director, NIDDK.

ESTIMATED NUMBER AND FREQUENCY OF MEETINGS

Meetings of the full Council will be held at the call of the Chair (with the DFO's approval) or upon request of the Director, NIDDK, not less than three times within a fiscal year. Meetings will be open to the public except as determined otherwise by the Secretary in accordance with subsection (c) of section 552b to Title 5 U.S.C. Notice of all the meetings will be given to the public. In the event a portion of a meeting is closed to the public, as determined by the Secretary, in accordance with the Government in the Sunshine Act (5 U.S.C. 552b(c) and the Federal Advisory Committee Act, a report will be prepared which will contain, as a minimum, a list of members and their business addresses, the Council's functions, dates and places of meetings, and a summary of the Council's activities and recommendations made during the fiscal year. A copy of the report will be provided to the Department Committee Management Officer.

DURATION

Continuing.

TERMINATION

Unless renewed by appropriate action, prior to its expiration, the Charter for the National Diabetes and Digestive and Kidney Diseases Advisory Council will expire two years from the date the charter is filed.

MEMBERSHIP AND DESIGNATION

The Council will consist of 18 members appointed by the Secretary and 6 nonvoting ex officio members: the Secretary; the Director, NIH; the Director, NIDDK; the Chief Medical Director of the Department of Veterans Affairs; the Assistant Secretary of Defense for Health Affairs; and the Assistant Secretary for Science and Education, United States Department of Agriculture (or their designees); and any additional officers or employees of the United States as the Secretary determines necessary for the Council to effectively carry out its functions. Of the 18 appointed members, 12 will be selected from among the leading representatives of the health and scientific disciplines (including not less than 2 individuals who are leaders in the fields of public health and the behavioral or social sciences) relevant to the activities of the NIDDK, particularly representatives of the health and scientific disciplines in the areas of diabetes mellitus, endocrinology, metabolism, digestive diseases, nutrition, nephrology, urology, hematology and public health. Six of the members will be appointed by the Secretary from the general public and will include leaders in the fields of public policy, law, health policy, economics, and management. All non-Federal members will serve as Special Government Employees. A member who has been appointed for a term of four years may not be reappointed to this Council before two years from the date of expiration of that member's term of office. A quorum for the conduct of business by the full Council will consist of a majority of currently appointed members.

Members will be invited to serve for overlapping four-year terms, except that any member appointed to fill a vacancy for an unexpired term will be appointed for the remainder of that term. A member may serve 180 days after the expiration of that member's term if a successor has not taken office.

The Chair of the Council will be selected by the Secretary from among the appointed members, except that the Secretary may select the Director, NIDDK, to be the Chair. The term of office of the Chair will be two years.

SUBCOMMITTEES

As necessary, subcommittees and ad hoc working groups may be established by the DFO within the Council's jurisdiction. The advice/recommendations of a subcommittee /working group must be deliberated by the parent advisory committee. A subcommittee may not report directly to a Federal official unless there is statutory authority to do so.

Subcommittee membership may be drawn in whole or in part from the parent advisory committee. All subcommittee members may vote on subcommittee actions and all subcommittee members count towards the quorum for a subcommittee meeting. A quorum for a subcommittee will be three members. Ad hoc consultants do not count towards the quorum and may not vote. The Department Committee Management Officer will be notified upon establishment of each standing subcommittee and will be provided information on its name, membership, function, and estimated frequency of meetings.

RECORDKEEPING

Meetings of the Council and its subcommittees will be conducted according to the Federal Advisory Committee Act, other applicable laws and Departmental policies. Council and subcommittee records will be handled in accordance with General Records Schedule 6.2, Federal Advisory Committee Records, or other approved agency records disposition schedule. These records will be available for public inspection and copying, subject to the Freedom of Information Act, 5 U.S.C. 552.

FILING DATE

October 31, 2018

APPROVED

Date Director, NIH

Reviewing Applications Prior to the Meeting: Using the NIH Electronic Council Book (ECB)

(For NIDDK Advisory Council Members Only)

What is the NIH Electronic Council Book

The NIH Electronic Council Book (ECB) provides access to NIH summary statements. Using World Wide Web and Internet capabilities for database search and retrieval, as an NIDDK Advisory Council member you may read, search, sort, and print any or all of the summary statements for a Council round that has either a DK primary or secondary assignment. NIH staff load data and summary statements into the ECB each night, so the ECB is always current.

The data in the ECB, and the codes you use for access to those data, are confidential and must be protected. Since the ECB contains confidential data, you should not leave it unattended. Use it and then disconnect. If for some reason you are inactive for approximately one hour, the system will automatically disconnect, and you will have to login again.

How do I get started?

You or your institution will supply your computer access to the NIH computer, via an Internet connection and a WEB browser (such as Firefox, Netscape Navigator, or Internet Explorer). An NIDDK staff member will give you the information necessary to identify yourself to the NIH computer where the ECB is located. That information includes two codes. The first is called your "USER NAME," the second is your "PASSWORD." Once you have this information, you are ready to start.

Assuming you are already connected to the internet, use your web browser to access the following page: https://ecb.nih.gov/council/login.cfm

You will see a screen entitled "NIH Electronic Council Book" with two blank boxes for your USER NAME and your PASSWORD. Neither the USER NAME nor the PASSWORD are case sensitive. To log in to the ECB:

- Enter your USER NAME, for example, ECB JOHNST
- Press Tab or move the mouse cursor to the PASSWORD block
- Enter your PASSWORD
- Click on LOGON

Please note that the password issued to you by NIDDK staff is a temporary password and you must change it before you can login to the ECB. To change your password, go to the ECB login page (see below) and click on the link to the "Council Member Change Password Page." Use the NIDDK-issued password as the "Old Password," and follow the instructions on this page to change your password to a password of your choosing. If you have problems changing your password, please contact Theresa Smith (smiththe@mail.nih.gov, 301-443-9908).

If you have entered an incorrect USER NAME, you can click on CLEAR, and enter the information again.

How Do I Use the System?

When you log on to the ECB, you will go directly to the Search For Projects tab. The Search Criteria appear in a list on the left of the screen; you can use this menu to move quickly through the sections of the search screen. Clicking on the name of any search item will provide you with help for that item.

PLEASE NOTE that when moving through the screens in the ECB it is best to use the small red arrows in the upper left hand corner of your screen rather than the "Back" button on your browser.

Note that in the Basic Search Options portion of the Search screen, there is an item entitled: **Output Option.** There are two choices: Standard Project List and Resumé Project List. A search using the Standard Project List format will return a list containing the following information:

- Project (or grant) number
- Principal Investigator (PI) name
- Project Title
- Request for Application (RFA) or Program Announcement (PA) number
- Percentile
- Priority score
- Study section name
- Institute or Center (IC) Program Class Code
- PI's institution.

The Resume Project List retrieves the "Summary of Review and Discussion" section of the summary statement in addition to the items in the Standard Project List. This version of the Project List provides a useful overview of the review of a single application or group of applications.

How do I initiate a search?

Commonly searched items are located near the top of the Search screen. Searching is very flexible. Please note that all searches default to applications on which NIDDK is the primary Institute. If you are looking for an application assigned to another NIH Institute or Center you will need to select either "Primary and Dual Projects" or "Dual Projects only" in the Review/Program Section of the Search screen.

Conduct a search by inserting the particular criteria (Principal Investigator's name; Application number; Study Section, etc.) (Examples are provided below.)

- To search for a specific summary statement, enter either the application number or the Principal Investigator's last name in the appropriate box. You do not need to enter the entire grant number or full PI name; the system will find all applications that meet your criteria.
- To search for a group of summary statements that meet certain search criteria (such as all the applications reviewed by a particular Scientific Review Group (SRG), projects in a range of priority scores or percentiles, or all applications reviewed in response to a particular RFA or any other combination of information), simply enter that information in the appropriate boxes.
- To search for all applications on a specific scientific topic, simply enter the appropriate term in the boxes labeled "Summary Text Contains." This search criterion has two boxes and a drop-down menu between them that allows use of a Boolean logical operator (*AND*, *OR*, and *NOT*) to connect two character strings. Note: If one is searching for a topic such as "endocrine disruptors" consider the two words as a single character string and enter both words in the left box separated by a space rather than one in each box. You may use these fields to search the summary statement, the Project Title, or both of these items.

To initiate a new search, click on the **Clear Criteria** button. This will remove all prior search criteria except for the defaults in percentile and priority score. Clicking on the **Default Criteria** will reset all criteria to their default values.

SEARCH CRITERIA EXAMPLES

Principal Investigator (PI): In the PI/Institution section, enter the first several letters of the PI's last name in the box labeled "Principle Investigator Starts With:" For example, searching for "**Ham**" will return matches for Hamilton, Hammerman, Hammes, Hampe, etc. The more complete the name, the more exact will be the search results.

Scientific Review Group (SRG): In the Review/Program section of the search screen, type the three- or four-character abbreviation of the SRG (e.g., MET, NTN, CVB) in the field labeled "Scientific Review Group Contains". If you are looking for an application that was reviewed in a Special Emphasis Panel, please enter information in the boxes labeled "Special Emphasis Panel." For example, if you enter "DK" in the first box for this search item, the search will return all applications reviewed in NIDDK Special Emphasis Panels (ZDK).

Program Code (PCC): It is important to enter the Program Class Codes correctly. All NIDDK Program Class Codes consist of 8 characters: three characters, a blank space, and then four characters. For example, to search for Obesity Special Projects (Program Class Code = **NBH OBSP**), place **NBH** in the first three boxes. Leave the next box blank and enter OBSP in the remaining 4 boxes.

Application/Grant Number: The identification number is commonly referred to as the application number or grant number, depending on its processing status. The identification number consists of several parts, each having a distinct meaning. The following example shows the parts of an ID number assigned to an amendment (A1) to a supplemental (Type 3) application for a traditional research project (R01) referred to the National Cancer Institute (CA). The number further identifies the application serially as the 65412st new proposal submitted to the National Cancer Institute and indicates that this is the first supplemental application (S1) to the fourth year (-04) of support to this project.

Explanation of Grant application/award identification NUMBERING system:

Application Type	Activity Code	Administering Organization	Serial Number	Suffixes	
				Grant Year	Other
3	R01	CA	65412	08	S1A1

- **Application Type Code:** A single-digit code identifying the type of application received and processed. The codes are as follows:
- 1 New
- 2 Competing Continuation
- 3 Supplement
- 4 Extension

- 5 Noncompeting Continuation
- 6 Change of Institute or Division
- 7 Change of Grantee or Training Institution
- 8 Change of Institute or Division (noncompeting continuation)
- 9 Change of Institute or Division (competing continuation)
- **Activity Code:** A three-digit code identifying a specific category of extramural activity (e.g., R01, R03, R33, T32, F33, R44, U01).
- Administering Organization Code (Also referred to as an IC Code or Admin PHS Org Code): A two-letter code identifying the primary NIH Institute or Center to which the application is assigned. In the above example, "CA" refers to the National Cancer Institute.
- **Serial Number:** A six-digit number generally assigned sequentially to a series within an NIH Institute or Center.
- **Suffixes:** A field composed of the following components:

Grant year. A two-digit number indicates the actual segment or budget period of a project. The grant year number (01, 02, etc.) is preceded by a dash to separate it from the serial number; (e.g., AI 12345-02 or CA 00900-04). The grant year number is increased by one for each succeeding renewal year. Thus, the 04 year suffix in the example above identifies a grant in its fourth year.

Supplement. The letter "S" and related number identify a particular supplemental record (e.g., S1, S2). Supplement designations follow the grant year or the amendment designation, as the case may be (e.g., AI 12345-01S1 and CA 00900-04A1S2).

Amendment. The letter "A" and related number identify each amended application (e.g., A1, A2, etc.). Amendment designations follow the grant year or the supplement designation, as the case may be (e.g., DE 34567-02A1 and HL 45678-01S1A2).

Text Search: A text word search retrieves applications containing one or two search terms. The search is performed against the summary statement narrative and the Project Title and may take slightly longer to return the results. Submitting a search with an entry in the first box will find all summary statements and/or Project Titles containing that single word anywhere in the text. To enter two text words, select the correct Boolean logical operator (*AND*, *OR*, *NOT*) from the drop-down menu between the two text boxes.

Priority Score/Percentile: The system sets a default priority score and percentile to focus on the applications being reviewed by the Advisory Councils. The default for the percentile is between 00 and 30 and for the priority score, between 100 and 300. These defaults can be deleted or changed. Score ranges can be cleared by clicking the "Clear Scores" button below the data entry boxes. If you wish to enter different ranges, highlight the contents of these boxes and enter different numbers.

ADVANCED SEARCH CRITERIA EXAMPLES

Summary Statements Released Since: A frequent user of the system will be able to retrieve summary statements released into the database since the last time the user logged into the system. For example, to retrieve all summary statements since January 15, 2008, the entry would be 01/15/2008 (mm/dd/yyyy). You can also select applications based on whether or not the summary statement has been released by selecting the appropriate option in the drop-down box.

RFA/PA Number: NIDDK will provide its Council members with valid RFA/PA numbers. **Please** use the format as provided on the search screen in the Application ID section. **Please note** that if you are interested in Roadmap applications, there is a radio button in the Basic Search Options section that allows you to include only Roadmap applications in your search.

Direct Cost Recommended: In the Review/Program Section, you can search for applications based on specified budget amounts. For example, entering **1000000** and selecting "Greater Than or Equal To" from the drop-down menu will retrieve a list of applications with budgets of one million dollars or more.

Special Selects: The Special Selects Section provides options for searching on several different criteria. You may search on one criterion or a combination of criteria. **Foreign applications** are those applications from organizations outside the boundaries and territories of the United States. In the Special Selects Section, check the box 'Foreign Grants' to retrieve a list of summary statements of all foreign applications. **Phase 3 Clinical Trials** are identified by the Initial Review Group. **AIDS** identifies applications involving AIDS-related research. You may also search for applications with various human or animals subjects concerns.

COMPLETING YOUR SEARCH

Once you are satisfied with the search criteria, click the Search button at the top of the page. **Please note** that there is a default score range of 0 to 30 PERCENTILE and 100 to 300 PRIORITY SCORE. If you need to search ALL applications, please **clear** these values prior to running your search.

SEARCH RESULTS

When a search is completed a hit list will be displayed with the search criteria listed at the top. The hit list will include all data on all applications that meet the search criteria you have selected. The search criteria will be listed at the top of the list of applications for easy reference.

The hit list is compiled as a table with one application per line. You may increase or decrease the number of applications displayed on the page by using the Set Records per page display in the upper left corner. The list contains the following information for each application:

Count Sequence number of applications as retrieved Email A link to the Program Officer's email address

Project Number Type, activity, and serial number

RFA/PA The RFA or PA announcement number, if any, with a link to the

Program Announcement in the NIH Guide for Grants and Contracts

PI Name Name of Principal Investigator

Percentile Percentile rank
Priority Priority score

Project Title Title of research application

Study Section Scientific Review Group, with a link to the Study Section roster

IC-Prog Code Program Class Code for the primary IC

Institution Applicant organization

VIEWING SUMMARY STATEMENTS

To view a particular summary statement click on the project number. The next screen will be the complete summary statement. **Note**: Each hit list will list all applications that satisfy the search criteria whether or not the summary statement is currently available. For Netscape users, the grant number will be a different color (usually blue) and underlined if the summary statement is available.

Also, there will be a check box on the left margin (see instructions below on downloading one or more summary statements for offline reading).

The Electronic Council Book allows you to retrieve and download groups of summary statements. In addition, the user now has the ability to selectively "tag" and "untag" items in the hit list by checking the boxes on the left margin. This allows the user to create highly customized hit lists for the purpose of downloading summary statements.

Summary statements may be retrieved in several ways:

- Download one or more summary statements as a single PDF file that can be printed locally (you will need Adobe Acrobat Reader on your computer to use this feature). To download a group of summary statements as a single PDF, check the boxes on the left margin for all applications you wish to include
- Download a collection of summary statements as a "Zip" file from which individual summary statements can be viewed or printed. You will need a program that extracts Zip files in order to view the summary statements. To download a group of summary statements as a single Zip file, check the boxes on the left margin for all applications you wish to include.
- View individual summary statements in the browser without distracting page headers embedded in the text. To view a single summary statement in your browser window, click on the project number.

VIEWING IRG/SRG ROSTERS

To view the roster of members for a particular Study Section, simply click on the SRG identifier on the hit list. The IRG identifier is adjacent to the application of interest.

For assistance please contact:

Theresa Smith, smiththe@niddk.nih.gov or 301-443-9908.

National Diabetes and Digestive and Kidney Diseases Advisory Council: Advisory Council Operating Procedures

A. Purpose

This documents operating procedures established annually by the National Diabetes and Digestive and Kidney Diseases Advisory Council (NDDKAC) for use of council-delegated authorities. These authorities establish program management and council review procedures for the Institute's extramural programs and establish authorities for management actions undertaken by staff.

In general, the Council makes three types of recommendations relating to second level review of scientific review group (SRG) actions: (1) the Council can concur with the SRG critique; (2) it can suggest a different budget and/or a different length of the grant period; and (3) it can advise deferral of an application for re-review. Specific procedures are given below for each of these types of actions. These procedures are meant to ensure a level of uniformity and comparability across the Council's three subcommittees, which are aligned with the Institute's programmatic divisions. Those subcommittees of Council are free to develop and utilize their own procedures with the understanding that they be consistent with the operating procedures.

B. Background

The National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) and other National Institutes of Health (NIH) awarding Institutes are required by policy to establish procedures for interactions between Advisory Councils and the staff responsible for the day-to-day management of extramural portfolios. These procedures, referred to as Council-delegated authorities, govern staff and NDDKAC responsibilities with regard to grant portfolio management.

C. Definitions

- 1) **Council Delegated Authorities**: Those actions negotiated between the NDDKAC and the Director, NIDDK that govern management of the Institute's extramural program portfolio.
- 2) *En Bloc* Action: An action taken by Council on a group of applications under review rather than on specific individual applications being presented to NDDKAC for review.
- 3) **Staff Actions**: Actions that, based on policy and procedures, do not require a specific action on the part of the NDDKAC. These actions include, but may not necessarily be limited to: (a) change of grantee institution, (b) change of principal investigator, (c) administrative supplements, (d) no-cost extensions, and (e) phase-out or interim support.
- 4) **Communication Letter**: A communication between an applicant and Institute staff that is included for NDDKAC information purposes. Communication letters may or may not be acted upon by Council and need not be brought up for special discussion.

D. Policy and Implementation Procedures

The NDDKAC by approval has delegated authority to the NIDDK Director for staff to negotiate adjustments in dollars and/or the terms and conditions of grant and cooperative agreement awards

recommended by the Council. In general, these operational guidelines for administrative actions are developed to provide a day-to-day framework for the smooth and effective operations necessary after review of grant applications by the Council. They are principally intended to enhance the administration of the federal assistance portfolio by the NIDDK.

NIDDK program and grants management staff analyze and review applications, i.e., noncompeting continuation applications and competing applications (new, resubmission (amended) renewal, or revision (supplemental)) before issuing a grant award. NIDDK staff negotiates appropriate adjustments, when applicable, for such changes as the base used for recovery of facilities and administrative costs and/or legislatively imposed salary or other limits. Also, staff can make adjustments to reconcile inconsistencies between SRG recommended budgets and approved activities.

Expedited En Bloc Concurrence

NIH, to improve the efficiency of making awards, authorized the use of an expedited *en bloc* concurrence Council review process. NIDDK makes use of an expedited concurrence of *en bloc* actions to provide NIDDK staff with the opportunity to make awards meeting specific circumstances in a more timely, responsive and responsible manner.

All grant and cooperative agreement applications, excluding those from foreign organizations, which have no concerns noted that would represent an administrative bar to award (e.g., for human subjects, animal welfare, biohazards or inclusion of women, children and appropriate minority distribution) or need SCR, will follow a process of expedited concurrence whereby the review of applications is delegated by the Chairman of the Advisory Council to designated Council members acting on behalf of the Advisory Council as a whole. The concurrence committee shall consist of the Council Executive Secretary (nonvoting) and six members of the NDDK Advisory Council. Two members will be selected from each subcommittee of the NDDKAC.

The Executive Secretary will alert the concurrence committee members with responsibility for expedited concurrence when review outcomes for eligible applications are available in the Electronic Council Book. The Electronic Council Book enables members to access: Application Number, Principal Investigator, Project Title and Percentile/Priority Score. Typically this will occur once each Council round, several weeks before the scheduled NDDKAC meeting, however circumstances may arise that will require an additional, earlier expedited concurrence review to allow a set of applications to be funded in a timely manner to optimize the initiation or continuation of the proposed research. In the event of an earlier expedited concurrence review the same procedures described below will be followed including the involvement of the full NDDKAC.

Electronic or written concurrence by a minimum of two members with no votes for non-concurrence within seven days of notification of posting is required for expedited concurrence approval. Any member may bring an application to full NDDKAC consideration without the need for justification. Any single vote for non-concurrence within the allotted time period will result in that application going for regular consideration to the NDDKAC under its normal procedures for concurrence. Members not acting upon an application within the allotted time period after posting will be considered to have abstained from a vote on that application. Expedited listings lacking enough votes for final action will be presented to the regular NDDKAC meeting for review.

The full NDDKAC will be provided with a list of all applications eligible for expedited concurrence, as well as the outcome of the vote by the concurrence committee members on those applications.

Special Council Review

Each Council round the NDDKAC will be provided a list of competing applications that meet the criteria for Special Council Review (SCR) under NIH policy. For each application on the list that may be funded, NIDDK staff will provide information about that other funding for the PI that brings his/her direct cost total to the \$1 million threshold and a justification for considering funding. Council members will review these cases and indicate whether or not they have concerns.

Specification of Council Action Requirements

Actions requiring NDDKAC review or advice and <u>not</u> eligible for expedited *en bloc* concurrence are: SCR, applications from foreign institutions, nominations for Method to Extend Research in Time (MERIT) awards and extensions, and unresolved appeals of initial peer review.

Actions not requiring NDDKAC review or advice are: (1) change of grantee institution, (2) change of principal investigator, (3) administrative supplements to provide additional support either to meet the increased cost of maintaining the level of research previously recommended, to otherwise accommodate research activities or to meet needs judged by staff to be within the scope of the previously peer reviewed project, or (4) phase-out or interim support.

The Council will be provided with notice of general solicitations for administrative supplements if they apply to an entire class of applications. Administrative requests for increases in direct costs, which are the result of marked expansion or significant change in scientific content after formal peer review, will be referred to the Council for advice and recommendation. The NIDDK Director will determine whether the urgency is sufficient to warrant interim consultation with the Council by mail, e-mail, facsimile or telephone, instead of delaying action until the next Council meeting, or by mutual agreement, in rare instances the NIDDK Director may act on behalf of the Council as a whole.

NIDDK staff may restore requested time and support which were deleted by the initial review group when the principal investigator has provided written justification, and the restoration is in the best interest of the Institute and the project is of high programmatic relevance. Staff will record the action taken and its justification in a memo to the file. In addition, restorations will be summarized for Council information at the next regular scheduled meeting.

The NDDKAC may also advise the Institute on: The adequacy of the initial review process; and, funding of applications out of order (i.e., "Reaches") and/or with Special Emphasis dollars.

Finally, the NDDKAC will receive a report annually on the activities of the NIDDK Board of Scientific Counselors.

E. Exceptional Situations

As circumstances require, based on programmatic considerations, the Director, NIDDK, generally after consultation with Council, may make exceptions to these guidelines.

Exceptions to these procedures should be extremely rare because there needs to be consistent application of these procedures across extramural divisions. Nonetheless, circumstances may require the deviation from the prescribed procedure in order to achieve the mission of the NIDDK. By NDDKAC delegated procedures, the Director, NIDDK has authority to act upon unusual or extenuating circumstances. These actions are usually discussed by a subset of Council members selected by the Director and Executive

Secretary of NDDKAC. Any actions of this exceptional nature must be appropriately documented as necessary for the official record, and should be reported to Council at its next scheduled meeting.

F. References

- 1) Public Health Service Act as amended, 42 USC 52h, 42 USC 241, 42 USC 284a
- 2) NIH Manual Chapter 1805, Use of Advisors in Program and Project Review and Management (https://oma1.od.nih.gov/manualchapters/management/1805/)
- 3) NIH Manual Chapter 1810-1, Procedures for Avoiding Conflict of Interest for NIH Special Government Employee SGE Advisory Committee Members (http://oma1.od.nih.gov/manualchapters/management/1810-1/)
- 4) NIH Manual Chapter 3005, Review and Evaluation of Intramural Programs (https://oma1.od.nih.gov/manualchapters/intramural/3005/)
- 5) NIH Manual Chapter 4204-204B, Peer Review Process (https://oma1.od.nih.gov/manualchapters/grants/4204-204B/)
- 6) NIH Manual Chapter 54104, NIH Research Grants Involving Foreign Institutions and International Organizations (https://oma1.od.nih.gov/manualchapters/grants/54104)
- 7) PHS Policy on Humane Care and Use of Laboratory Animals (http://grants.nih.gov/grants/olaw/references/PHSPolicyLabAnimals.pdf)
- 8) NIH Manual Chapter 54513, Management and Procedures of National Advisory Councils and Boards in Their Review of Extramural Activities (https://omal.od.nih.gov/manualchapters/grants/54513/)
- 9) NIH Manual Chapter 7410, Review and Documentation of Protections for Human Subjects in Grant Applications and Contract Proposals (https://omal.od.nih.gov/manualchapters/comgc/7410/)
- 10) OER Policy & Guidance: Inclusion of Women and Minorities as Participants in Research Involving Human Subjects Policy Implementation Page (http://grants.nih.gov/grants/funding/women_min/women_min.htm)
- 11) OER Policy & Guidance: Inclusion of Children Policy Implementation (http://grants.nih.gov/grants/funding/children/children.htm)
- 12) NOT-OD-12-140: Notice of Special Council Review of Research Applications from PDs/PIs with More than \$1.0 Million Direct Costs in Annual NIH Support (http://grants.nih.gov/grants/guide/notice-files/NOT-OD-12-140.html)

09/10/2019

NATIONAL DIABETES AND DIGESTIVE AND KIDNEY DISEASES ADVISORY COUNCIL

(All terms end October 31)

Note: Beginning slate submitted in 2018, all terms will begin 1/1 and end 12/31

National Institute of Diabetes and Digestive and Kidney Diseases
National Institutes of Health
Department of Health and Human Services

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NIDDK Advisory Council Meetings Dates: 2020 - 2021

2020

January 30 (Thursday)

Natcher Conference Center (Building 45) Conference Rooms E1/E2, D, and F1/F2

May 20-21 (Wednesday and Thursday)

Building 31, C-Wing 6th Floor Conference Center, Conference Rooms 10, 6, and 7

September 9-10 (Wednesday and Thursday)

Building 31, C-Wing 6th Floor Conference Center, Conference Rooms 10, 6, and 7

2021

January 20-21 (Wednesday and Thursday)

Building 31, C-Wing 6th Floor Conference Center, Conference Rooms 10, 6, and 7

May 12-13 (Wednesday and Thursday)

Natcher Conference Center (Building 45) Conference Rooms E1/E2, D, and F1/F2

September 1-2 (Wednesday and Thursday)

Natcher Conference Center (Building 45) Conference Rooms E1/E2, D, and F1/F2





211th Meeting of the NATIONAL DIABETES AND DIGESTIVE AND KIDNEY DISEASES ADVISORY COUNCIL

Natcher Conference Center (Building 45)

Conference Room E1/E2

September 11, 2019

OPEN SESSION 8:30 a.m. to 10:45 a.m.

I. CALL TO ORDER

Dr. Rodgers

II. CONSIDERATION OF SUMMARY
MINUTES OF THE 210th COUNCIL MEETING

Dr. Rodgers

III. FUTURE COUNCIL DATES

Dr. Rodgers

<u>2020</u>

January 29-30 (Wednesday and Thursday)

Building 31, C-Wing 6th Floor Conference Center Conference Rooms 10, 6 and 7

May 20-21 (Wednesday and Thursday)

Building 31, C-Wing 6th Floor Conference Center Conference Rooms 10, 6 and 7

September 9-10 (Wednesday and Thursday)

Building 31, C-Wing 6th Floor Conference Center Conference Rooms 10, 6 and 7

2021

January 20-21 (Wednesday and Thursday)

Building 31, C-Wing 6th Floor Conference Center Conference Rooms 10, 6 and 7

May 12-13 (Wednesday and Thursday)

Natcher Conference Center, Building 45 Rooms E1/E2, D, and F1/F2

September 1-2 (Wednesday and Thursday)

Natcher Conference Center, Building 45 Rooms E1/E2, D, and F1/F2

IV. ANNOUNCEMENTS

Confidentiality/Conflict of Interest

Dr. Malik

V. REPORT FROM THE NIDDK DIRECTOR

Dr. Rodgers

VI. PATIENT ENGAGEMENT in NIDDK RESEARCH

Dr. Kimmel Ms. Brown Dr. Heller Mr. Knight

COFFEE BREAK 10:15 a.m.

VII. SUBCOMMITTEE MEETINGS

Natcher Conference Center (Building 45) Rooms D, E1/E2, and F1/F2

Open Sessions – 10:30 a.m. to Noon

Diabetes, Endocrinology, and Metabolic Diseases

Natcher Conference Center (Building 45) Room E1/E2

Digestive Diseases and Nutrition

Natcher Conference Center (Building 45) Room D

Kidney, Urologic, and Hematologic Diseases

Natcher Conference Center (Building 45) Room F1/F2

LUNCH BREAK – Noon – 1:00 p.m.

Closed Sessions – 1:00p.m. to 2:15 p.m.

Diabetes, Endocrinology, and Metabolic Diseases

Natcher Conference Center (Building 45) Room E1/E2

Digestive Diseases and Nutrition

Natcher Conference Center (Building 45) Room D

Kidney, Urologic, and Hematologic Diseases

Natcher Conference Center (Building 45) Room F1/F2

OPEN SESSION of the FULL COUNCIL – 2:30 p.m. to 4:00 p.m.

Natcher Conference Center (Building 45) Room E1/E2

VIII. CONCEPT CLEARANCE

Presentation of Concepts

• Discussion of Trans-NIDDK Concepts

- GI Sampling and Monitoring Tools/Devices for Diet-Host-Microbiome Interactions
- Advanced Tools for Continuous Monitoring of Nutrients and Metabolites
- Summer Research Experiences Utilizing SPARC-Generated Resources

- Research Supplements to Train and Retain Study Coordinators to Support Clinical Trials in NIDDK Disease areas
- Adding a Step to STEP-UP Research Supplements
- Discussion of Special Diabetes Program (SDP) concepts
- Presentation of Concepts Receiving Full Discussion in Subcommittee Meetings
 - See Subcommittee Agendas for List of Concepts
- Questions/Discussion

COFFEE BREAK - 4:00 p.m.

CLOSED SESSION 4:15 p.m. to 4:30 p.m.

Natcher Conference Center Building 45, Room E1/E2

IX. REPORTS OF SUBCOMMITTEES: CONSIDERATION OF APPLICATIONS

Dr. Malik

- Digestive Diseases and Nutrition
- o Diabetes, Endocrinology, and Metabolic Diseases
- o Kidney, Urologic, and Hematologic Diseases

X. ADJOURNMENT

Dr. Rodgers

National Diabetes and Digestive and Kidney Diseases Advisory Council

National Institute of Diabetes and Digestive and Kidney Diseases
National Institutes of Health
Department of Health and Human Services

I. CALL TO ORDER

Dr. Rodgers

Dr. Griffin Rodgers, Director, NIDDK, called to order the 210th meeting of the National Diabetes and Digestive and Kidney Diseases Advisory Council at 8:30 a.m. on May 8, 2019, in the Porter Neuroscience Research Center (Building 35), Conference Rooms 610-640, the NIH Campus, Bethesda, Maryland.

A. ATTENDANCE – COUNCIL MEMBERS PRESENT

Ms. Tracey Brown+ Dr. Jill Macoska+ Dr. David D'Alessio* Mr. Thomas Nealon Dr. Iain Drummond+ Dr. Richard Peek Dr. Joel Elmquist Dr. Jeffrey Pessin Dr. Penny Gordon-Larsen+ Dr. Michael Snyder+ Dr. Lisa Guay-Woodford Dr. Ronald Sokol Dr. Caren Heller Dr. Ian Stewart* Dr. Barbara Kahn Ms. Lorraine Stiehl Mr. Richard Knight Dr. Beverly Torok-Storb

Dr. Paul Lange Dr. Gary Wu+

Also Present:

Dr. Griffin P. Rodgers, Director, NIDDK, and Chair of the NIDDK Advisory Council Dr. Karl F. Malik, Executive Secretary, NIDDK Advisory Council

Dr. Stephen P. James, Director, Division of Digestive Diseases and Nutrition, NIDDK Dr. Robert A. Star, Director, Division of Kidney, Urologic, and Hematologic Diseases, NIDDK

Dr. Philip Smith, Acting Director, Division of Diabetes, Endocrinology, and Metabolic Diseases, NIDDK

Dr. Richard Hodes, Director, National Institute on Aging

B. NIDDK STAFF AND GUESTS

Abbott, Kevin – NIDDK
Abraham, Kristin – NIDDK
Agodoa, Lawrence – NIDDK
Agreaza, Guillermo – NIDDK
Begum, Najma – NIDDK
Bishop, Terry – NIDDK
Blondel, Olivier – NIDDK
Burch, Henry – NIDDK

Barthold, Julia – CSR Burgess-Beusse, Bonnie – NIDDK

Bateman, Jessica – Amer. Urological Assoc.

Camp, Dianne – NIDDK

Berti-Mattera, Liliana – CSR

Castle, Arthur – NIDDK

Cerio, Rebecca – NIDDK

^{*} Ex Officio member

⁺ Served as an ad hoc member for this meeting

Chan, Kevin – NIDDK Chowdhury, Bratati – NIDDK Connaughton, John – NIDDK Curling, Mitchell – NIDDK Curtis. Leslie – NIDDK Dayal, Sandeep – NIDDK Denny, Alexis – PKD Foundation

Doherty, Dee – NIDDK Doo, Edward – NIDDK Drew, Devon – NIDDK Eggerman, Thomas – NIDDK

Evans, Mary – NIDDK Fisher, Rachel - NIDDK Fonville, Olaf – NIDDK Gansheroff, Lisa – NIDDK Gossett, Danny – NIDDK Greenwel, Patricia – NIDDK Haft, Carol – NIDDK

Hamilton, Frank – NIDDK

Hanlon-Tilghman, Mary – NIDDK Herzog, Peter - Digestive Diseases Nat'l

Coalition

Hoofnagle, Jay - NIDDK Hoshizaki, Deborah - NIDDK Hvde, James – NIDDK James, Stephen - NIDDK Jerkins, Ann – NIDDK Karp, Robert – NIDDK Ketchum, Christian – NIDDK Kimmel, Paul – NIDDK Kirkali, Ziya – NIDDK Kozel, Peter – CSR

Kuczmarski, Robert- NIDDK Laakso, Joe – Endocrine society

Larkin, Jennie – NIDDK Laughlin, Maren – NIDDK Lee, Christine – NIDDK Leschek, Ellen – NIDDK Li, Yan – NIDDK

Linder, Barbara – NIDDK Lynch, Christopher – NIDDK Malozowski, Saul – NIDDK Martey, Louis – NIDDK Martinez, Winnie – NIDDK Maruvada, Padma – NIDDK

Mendley, Susan - NIDDK Mullins, Christopher – NIDDK

Murray, Ryan – Am. Society of Nephrology

Osganian, Voula – NIDDK Otradovec, Heidi - NIDDK Parsa, Afshin - NIDDK Pawlyk, Aaron – NIDDK Perrin, Peter – NIDDK Perry Jones, Aretina – NIDDK Rankin, Tracy – NIDDK Roberts, Tibor – NIDDK Rooker, Ceciel-NIDDK Rosenberg, Mary Kay – NIDDK

Roias, Raul - CSR Roy, Cindy - NIDDK Sanovich, Elena - NIDDK Saslowsky, David – NIDDK Sato, Sheryl - NIDDK Sechi, Salvatore – NIDDK Serrano, Jose – NIDDK Shea-Donohue, Terez - NIDDK

Shepherd, Aliecia – NIDDK Sherker, Averell – NIDDK Sierra-Rivera, Elaine – CSR Silva, Corinne – NIDDK Singh, Megan – NIDDK Smith, Jaime – NIDDK Smith, Philip – NIDDK Smith, Thomas – NIDDK Spain, Lisa – NIDDK Star, Robert - NIDDK Stoeckel, Luke - NIDDK Tatham, Thomas – NIDDK Teff, Karen – NIDDK Thornton, Pamela – NIDDK Tilghman, Robert – NIDDK Unalp-Arida, Aynur – NIDDK

Van Raaphorst, Rebekah – NIDDK Vij, Vibha - Westat Wang, Xujing – NIDDK White, Vanessa - NIDDK Wilkins, Kenneth - NIDDK Wright, Elizabeth - NIDDK Yang, Jian – NIDDK Yanovski, Susan – NIDDK

C. **ANNOUNCEMENTS** Dr. Rodgers

Council Member News

Dr. Rodgers opened the meeting by welcoming **Dr. Jill Macoska**, the Alton J. Brann Endowed Distinguished Professor in Science, Mathematics and Cancer Biology at the University of Massachusetts, Boston. She is also the director of the Center for

Personalized Cancer Therapy, a joint program between the University of Massachusetts, Boston, and the Dana-Farber Cancer Institute. Her research career focuses on exploring the molecular genetic alterations in dysfunctional inter- and intracellular signaling mechanisms that promote prostate pathobiology. Dr. Macoska attended the meeting as an *ad hoc* member and served on the Subcommittee on Kidney, Urologic, and Hematologic Diseases.

Dr. Rodgers also noted a change in the usual order for the Council meeting. A working group from the NIH Advisory Committee to the Director has recommended measures to ensure that NIH institutes and centers follow a uniform process for vetting concepts for possible Funding Opportunity Announcements (FOAs). Henceforth, new concepts must receive clearance from an advisory committee constituted under the Federal Advisory Committee Act (FACA). At this meeting, NIDDK is piloting a "concept clearance" process that will include an in-depth discussion of new and renewed concepts in subcommittee, followed by a brief summary of each concept in an open session of the full Council.

Dr. Rodgers also noted the absence of **Dr. Greg Germino, NIDDK Deputy Director**, who was in Boston attending the 2019 spring clinical meeting of the National Kidney Foundation (NKF). At this meeting, Dr. Germino received the Dr. Shaul Massry Distinguished Lecturer Award, established in honor of Dr. Massry, for his scientific achievements and contribution to the kidney health care community and NKF. In announcing the award, Holly Kramer, NKF president, noted that "Dr. Germino's research has significantly improved our understanding of polycystic kidney disease and molecular basis of how kidneys develop tubules." Dr. Germino's lecture will focus on the state of research on polycystic kidney disease.

Ex officio member **Dr. David Klurfeld**, who represents the Department of Agriculture on the Council, was awarded the Ralph Holman Lifetime Achievement Award from the American Oil Chemist Society, which focuses on research into edible fats and oils.

Dr. Jeffrey Friedman, a long-time NIDDK grantee, of Rockefeller University was awarded the prestigious Wolf Prize in Medicine by the Wolf Foundation in Israel for his seminal work that identified leptin as a key hormone in regulating body weight and metabolism. This discovery revolutionized the field of obesity research by opening new avenues of investigations into the role of leptin, its receptors, and the related neural and hormonal factors that affect energy balance. A Howard Hughes Investigator, Dr. Friedman has received numerous awards and honors, including the Lasker Prize and the Shaw Prize. Dr. Friedman's current research includes a delineation of the neuronal effects of leptin and the mechanisms by which it reduces food intake, as well as the mechanisms responsible for leptin's antidiabetic effects.

Dr. Ronald Kahn, a former NIDDK Council member, of the Harvard Medical School and the Joslin Diabetes Center received the George Kober Medal from the Association of American Physicians (AAP). The award is given to an AAP member whose lifetime efforts have had an enormous impact on the field of internal medicine through their

scientific contributions. Dr.Kahn, best known for his work on the mechanism of insulin action and insulin resistance in type 2 diabetes and obesity, has received NIDDK support for over 30 years.

NIDDK Staff News

Dr. Rodgers reported several staffing changes within NIDDK:

Dr. Terry Bishop, who has administered the hematology program within the Division of Kidney, Urologic, and Hematologic Diseases for nearly 20 years, is retiring. She has overseen a portfolio that includes developmental hematopoiesis, erythropoiesis, globin gene regulation, heme biosynthesis and cell differentiation. She has also led the Cooperative Centers of Excellence in Molecular Hematology program and the Stimulating Hematologic Investigations: New Endeavors (SHINE) program. Dr. Bishop started her career at the National Heart, Lung, and Blood Institute as a scientific review officer. Previously, she was on the faculty at The Johns Hopkins University where she was a principal investigator focused on erythropoiesis research. Dr. Rodgers praised her energy and enthusiasm for hematology and her dedication to the hematology program, as well as her devotion to recruiting and training the next generation of young researchers in hematology.

Dr. Anna Sadusky has joined the Division of Kidney, Urologic, and Hematologic Diseases as a program director. Prior to joining KUH, she worked for the American Association for Cancer Research as a director of regulatory science and policy within the Office of Science Policy and Government Affairs. She was a senior scientist at Omeros Corporation, a Seattle-based commercial-stage biopharmaceutical company. Dr. Sadusky earned her Ph.D. in interdisciplinary biological sciences from Northwestern University in 2005. She then completed post-doctoral work with Dr. Jurrien Dean in NIDDK's Division of Intramural Research.

NIDDK Strategic Planning Process

Dr. Rodgers informed the Council that the 21st Century Cure Act requires all NIH Institutes and centers (ICs) to prepare a strategic plan. NIDDK has historically focused on disease- and organ- specific strategic plans. NIDDK will now take this opportunity to develop an overarching plan for the entire Institute. Planning will begin in 2019 and continue through 2020, which also happens to be NIDDK's 70th anniversary.

NIDDK will soon solicit advice on research planning from the Council. Additionally, the Institute also will reach out to the broader research and patient communities and others during this planning process. Dr. Rodgers hopes to use the results of the strategic planning process to augment and complement other planning efforts, as well as to inform Congress and other stakeholders of the critical research NIDDK supports and opportunities for the future.

II. CONSIDERATION OF SUMMARY MINUTES OF THE 209th COUNCIL MEETING

Dr. Rodgers

The Council approved, by voice vote, the Summary Minutes of the 209th Council meeting, which had been sent to them in advance for review.

III. FUTURE COUNCIL DATES

2019

September 11 (Wednesday)
Natcher Conference Center, Building 45

2020

January 29-30 (Wednesday and Thursday)

Location to Be Announced

May 20-21 (Wednesday and Thursday) Location to Be Announced

September 9-10 (Wednesday and Thursday) *Location to Be Announced*

Most meetings are expected to be a single day. However, the NIDDK asks Council members to reserve two days for each meeting should a situation arise where a longer meeting is required.

Dr. Rodgers announced that the location planned for the 2020 meetings, Building 31 on the NIH campus, may be unavailable due to construction delays for asbestos abatement. Updated location information will be shared as it becomes available.

IV. ANNOUNCEMENTS Dr. Karl Malik

Confidentiality

Dr. Malik reminded the Council Members that material furnished for review purposes and discussion during the closed portion of the meeting is considered confidential. The content of discussions taking place during the closed session may be disclosed only by the staff and only under appropriate circumstances. Any communication from investigators to Council Members regarding actions on an application must be referred to the Institute. Any attempts by Council Members to handle questions from applicants

could create difficult or embarrassing situations for the Members, the Institute, and/or the investigators.

Conflict of Interest

Dr. Malik reminded the Council Members that advisors and consultants serving as Members of public advisory committees, such as the NIDDK Advisory Council, may not participate in situations in which any violation of conflict of interest laws and regulations may occur. Responsible NIDDK staff shall assist Council Members to help ensure that a Member does not participate in, and is not present during, the review of applications or projects in which, to the Member's knowledge, any of the following has a financial interest: the Member, or his or her spouse, minor child, or partner (including close professional associates), or an organization with which the Member is connected. To ensure that a Member does not participate in the discussion of, nor vote on, an application in which he/she is in conflict, a written certification is required. A statement is provided for the signature of the Member, and this statement becomes a part of the meeting record. Dr. Malik directed each Council Member to a statement in his/her meeting folder regarding the conflict of interest in review of applications. He asked each Council Member to read it carefully, sign it, and return it to NIDDK before leaving the meeting.

Dr. Malik noted that when the Council reviews applications in groups without discussion--also called "en bloc" actions--all Members may be present and may participate. The vote of an individual Member in such instances does not apply to applications for which the Member might be in conflict.

Regarding multi-campus institutions of higher education, Dr. Malik said that an employee at one campus may participate in any particular matter affecting another campus, if the employee's financial interest is solely at one campus and the employee has no multi-campus responsibilities.

V. REPORT FROM THE NIDDK DIRECTOR Dr. Rodgers

Budget Update

Dr. Rodgers updated the Council on the status of NIH's appropriation for Fiscal Year (FY) 2020. The President's Budget Request for 2020 was released in March. The Request for NIH is just under \$34 billion, which represents an overall 13.3 percent drop from the FY 2019 level, and approximates the FY 2017 level.

Funding for the 21st Century Cures Act initiatives will be provided at authorized levels, and funding for some programs, like the HEAL Initiative, will remain flat. But across NIH, the proposed decrease in funding would result in the number of research grants falling from approximately 11,600 to about 7,900. For NIDDK specifically, the Request would represent a 14 percent decline of approximately \$283 million less than the FY 2019 level, excluding the separate mandatory funding for the Special Diabetes Program.

As was the case in both FY 2018 and FY 2019, the President proposes moving the free-standing Agency for Healthcare Research and Quality (AHRQ) to a new institute within NIH. The proposed National Institute for Research on Safety and Quality would receive \$256 million, a 24 percent cut from AHRQ's 2019 funding level.

As part of the appropriations process, the House Appropriations Subcommittee for Labor-HHS- Education held a hearing on NIH in April. NIH Director Dr. Francis Collins and several IC

directors testified. When asked what the NIH would prioritize if it could exceed the proposed budget constraints, Dr. Collins replied that the NIH would fund more grants. Instead of the current funding rate of one in five grant applications, he would like to fund one in three.

Dr. Collins also testified that since 2013, NIH has more than doubled the number of early career investigators receiving grants from about 600 to nearly 1,300. Chairwoman Rosa DeLauro said that the lawmakers are united in boosting NIH funds and are focusing their attention on putting funds into research areas that haven't seen big increases in recent years. Representative DeLauro said she intends to hold additional hearings with other NIH institute directors who have not appeared before the Subcommittee in the recent past.

The Senate Appropriations Subcommittee for Labor-HHS-Education also held its hearing for NIH in April. Dr. Rodgers joined Dr. Collins and other IC directors at the hearing. Asked to describe some of the latest progress in diabetes research, Dr. Rodgers spoke of the development of the first hybrid artificial pancreas and the next generation of continuous glucose monitors, noting that much of the progress in this area was made possible by NIDDK's Special Diabetes Program.

Moving forward, the appropriations subcommittees and the full appropriations committees in each chamber review and revise their draft bills, a process known as markup. The House subcommittee started by marking up its bill, which provides NIH with an increase of \$2 billion, or 5.1 percent over 2019. Of this amount, NIDDK would receive about \$100 million, a 4.9 percent increase over 2019. As in recent years, the difference between the percent increase in NIH overall and an IC average increase of 4.9 percent reflects additional funding targeted to specific programs. The Senate Subcommittee markup is scheduled to be completed by the end of June.

Dr. Rodgers noted that while the appropriations committees are writing and marking up their bills for 2020, the overall spending caps for defense and non-defense discretionary programs for 2020 have not yet been finalized. He said that the caps for 2020, currently defined by the Budget Control Act of 2011, are substantially lower than the actual 2019 funding levels provided by a previous amendment to the law. These caps are important even though they don't actually appropriate money, and bipartisan legislation is required to change the caps. In April, the House Budget Committee approved H.R. 2021, the

Investing for People Act legislation, to raise both the defense and non-defense discretionary spending caps for 2020 and 2021. The proposed new caps potentially would increase NIH funding. In fact, the House appropriations subcommittee for NIH based its recommended FY 2020 funding level on a presumptive increase in the non-defense discretionary spending cap.

Apart from the regular appropriations process, Dr. Rodgers mentioned that the Special Diabetes Program's current authority will expire September 30, but that he believes it is prudent to plan as if the program will be renewed, as it has been since its inception in 1998. Therefore, NIDDK will hold meetings with diabetes experts to provide input about pressing needs and opportunities in diabetes research. This information will be used to plan for new and expanded initiatives that could be pursued with renewed funding.

Dr. Rodgers ended his report by noting that Congress is on a faster track than usual in dealing with the appropriations bill this year, leaving him hopeful that the 2020 budget will be approved by the end of September, as was the case last year.

VI. UPDATE: NATIONAL CENTER FOR COMPLEMENTARY AND INTEGRATIVE HEALTH

Dr. Helene Langevin

Dr. Rodgers introduced Dr. Helene Langevin, Director of the National Center for Complementary and Integrative Health (NCCIH). Dr. Langevin was sworn in as Director of NCCIH on November 26, 2018. Prior to leading NCCIH, Dr. Langevin worked at the Osher Center for Integrative Medicine, jointly based at the Brigham and Women's Hospital and Harvard Medical School. She served as a director of Osher Center and professor in residence of medicine at Harvard Medical School. As a principal investigator of several NIH-funded studies, Dr. Langevin's research has centered on the role of connective tissue in chronic musculoskeletal pain and the mechanisms of acupuncture, and manual- and movement-based therapies. She has authored more than 70 scientific papers and is a fellow of the American College of Physicians.

Dr. Langevin began by explaining that the term "integrative health" includes concepts like treating the whole person, applying conventional and complementary approaches together in a coordinated way, and emphasizing practices that improve or even restore health in addition to preventing disease. She contrasted this integrative approach with the predominant disease model in modern medicine which is, of course, organized around and focused on the etiology and dysfunction of individual organ systems.

Dr. Langevin introduced the concept of "unhealth," noting that it is an actual word although rarely used, unlike the more familiar term "unhealthy." Even though the state of unhealth is rarely considered in medicine, she finds it to be a useful concept in bridging the gap between health and disease because it implies that the transition between health and unhealth is dynamic and reversible, whereas actual disease may be harder to reverse. Disease prevention and health promotion inhabit a broader spectrum that includes a full

range of transitions between health, unhealth, and disease, so she prefers to broaden the concept to include primary, secondary, and tertiary prevention.

Dr. Langevin defined primary prevention as what happens when people make improvements to their environment, nutrition, and lifestyle in an attempt to preserve health (and prevent disease). At the other end of the prevention spectrum is tertiary prevention, which occurs when people make efforts to either limit disability or preserve function in the presence of established disease. Between the two is secondary prevention, which focuses on arresting disease progression by means of early detection but also includes interventions to restore health. The latter—restoration of health—needs more research attention, she said.

In examining disease states, Dr. Langevin believes in what she calls a behavioral dysfunction phase, in which healthy behavior is deteriorating and corresponding physical abnormalities are beginning to develop. One example of this phenomenon is how prediabetes precedes the full- blown disease state of diabetes. In this instance, defining the difference between pre-disease and disease is important because it determines when behavioral interventions alone are sufficient or when medical interventions should be added

Going forward, NCCIH will increasingly prioritize investigations into ways complementary and integrative healthcare can address the full spectrum of disease prevention and health restoration, Dr. Langevin said. This includes natural food or low-dose nutritional supplements for prevention. On the disease-control end of the spectrum, isolation of specific molecules from natural products can lead to the development of conventional pharmaceuticals. In the middle of the spectrum are different approaches to restoring health after disease—such as probiotics to restore a healthy gut environment.

Additionally, she sees untapped potential in investigating how to use behavioral interventions to restore health. Research shows cognitive behavior therapy, meditation, yoga, and tai chi can improve subjective sensations of emotional well-being and feelings of health. Dr. Langevin encourages researchers to explore how these interventions affect physiological processes such as repair, regeneration, restoration, regrowth, and resolution of disease.

While conventional medicine (and even NIH) is organized around different physiological systems, patients aren't just a collection of individual body parts—the systems interact and are connected by tissue, called fascia, the importance of which is only beginning to be understood. Dr. Langevin noted the need for investigations into these connections. For example, the nervous system and the cardiovascular system are connected via the autonomic nervous system, and we are gaining understanding of the connections among the nervous, immune, and endocrine systems. But, for example, we know much less about the connections between the respiratory system and the digestive system. She pointed out that the mechanical forces produced by the diaphragm during breathing can compress the abdominal organs, which may explain the connection some see between yoga and digestion, but a literature search on the terms "respiratory" combined with

"gastrointestinal" yields few results. One area to investigate might be how the forces produced by breathing could have an effect on gastroesophageal reflux disorders, she said.

Dr. Langevin pointed out the need for more research into the fascia and how connective tissues affect nearby organs and structures. Although certain conditions that frequently occur together, such as chronic back pain and irritable bowel syndrome or chronic pelvic pain and interstitial cystitis, are usually thought of as being driven by central nervous system phenomena, Dr.Langevin suggested that direct physical and/or mechanical connections between the musculoskeletal system and the genitourinary or digestive systems also should be considered.

Emphasizing that mechanical forces influence biological processes at all levels of function from intracellular biochemistry to whole-organ physiology, Dr. Langevin described connective tissue as a scaffold that determines the shape of the entire body and remodels itself in response to mechanical forces such as gravity, posture, muscle contractions, and other events, such as surgery or injury. Gravity, inactivity, posture, scarring, and adhesions remodel and shorten connective tissue and muscle, which can lead to increasing atrophy, weakness, and inflammation. This in turn creates a predisposition to additional injuries, mostly commonly joint sprains.

Fortunately, connective tissue remodeling can also work in a positive way, Dr. Langevin said, noting that behavioral interventions can prevent injuries and restore function. In particular, yoga and tai chi provide gentle stretching and positive physical awareness of correct movement, which can assist in the remodeling of connective tissue and correcting postural abnormalities and poor alignment.

At times, the muscles' mechanical forces may not be intense enough to remodel the connective tissue to regain healthy function. Hands-on, direct application of mechanical forces can then help break down adhesions, stretch the connective tissue to a proper length, and allow the muscles to be retrained at a more favorable length and may help modulate processes like inflammation.

Dr. Langevin then described several projects, including some from her own lab. In one, rats were trained to stretch their bodies as part of a model of inflammation of the thoracolumbar fascia in the back. Over the course of two weeks, the animals became less sensitive to pain and had a marked reduction in macrophage infiltration of the thoracolumbar fascia, a sign of reduced inflammation. In another, she collaborated with Dr. Charlie Sarhan of Brigham and Women's Hospital to describe the phenomenon of inflammation resolution in which the body produces molecules derived from dietary omega-3 fatty acids that are converted to specialized pro- resolving mediators. These molecules are up to 1,000 times more potent than the omega-3 fatty acids themselves in reducing and resolving—though not suppressing—inflammation.

Dr. Langevin also discussed a recently published study from Dr. Geoffrey Bove of the University of New England in which he and his colleagues developed a repetitive motion

model in which rats were trained to pull a lever with increasing amounts of force to earn a reward. As the force increased over time, the rats developed repetitive motion injuries. However, rats that received gentle massage during training improved function and did not develop injuries. Function deteriorated in the rats that were not massaged. What's more, fibrous collagen in the connective tissues increased in the rats that did not receive massage, while levels remained close to normal in the massaged rats, preventing the development of fibrosis. Another small study from the same group indicated that abdominal massage following surgery may prevent adhesions.

Dr. Langevin also wants to see more research exploring systemic inflammation and its consequences. She believes that many of the same behavioral interventions that can help with musculoskeletal inflammation, pain, and connective tissue fibrosis can also help with chronic inflammatory disease processes. In general, she sees a need to better understand how behavior modifications can have profound physiological effects.

She sees some application of this research to investigations of the effects of sedentary lifestyle and poor diet on weight gain and the development of pre-diabetes and diabetes. In the debate over whether to treat pre-diabetes, she pointed out that many of the same behavioral interventions that can help with musculoskeletal inflammation, pain, and connective tissue fibrosis may also help with sleep, stress, and diet and help restore health and prevent chronic disease. The key is early intervention.

Dr. Langevin closed by summarizing NCCIH's role in exploring and promoting wholeperson health and non-pharmacological approaches to restorative health practices. Since NCCIH is a small center, inter-center and inter-institute collaborations, including with NIDDK, are vital and very much welcomed. She then took questions from the audience.

Council Questions and Discussion

Do we need to reinterpret findings from clinical trials based on these new designations you described? For example, in microbiome research, studies include healthy controls, but maybe we're not controlling adequately for behavioral factors like insufficient sleep. In the future, perhaps we should incorporate some of the parameters you mentioned today.

Dr. Langevin agreed there is much to consider, especially because the concept of a healthy population has never been truly defined. She believes that the NIH Office of Behavioral Health and Disease Prevention would be an important partner in reaching a consensus.

Dr. Rodgers noted that this comment from Council hinges upon redefining what potential placebo effects are or could be. Dr. Langevin agreed that research into the placebo effect is important and needed, given that we already know that placebo effects are not just subjective but physiology-changing.

It seems the principles laid out would have equal application to the growing crisis of nonalcoholic fatty liver disease and NASH and the need for behavioral modifications in the absence of effective medical treatment.

Dr. Langevin agreed.

NCCIH's focus area may be well-suited to the techniques of "citizen science" and for bringing rigor and reproducibility to examinations of things like dietary supplements. Do you have plans to create and implement such initiatives, alone or in conjunction with other institutes?

Dr. Langevin mentioned the importance of NIH's All of Us program to NCCIH, noting that the scale and longitudinal nature of All of Us may yield insights into how people can grow old and remain healthy. Specifically relating to the issue of dietary supplements, she noted that this is a priority area for NCCIH, particularly with the emergence of cannabidiol and related products.

The NIDDK portfolio includes a number of diseases, such as polycystic kidney disease and sickle cell disease, that include chronic pain and major quality-of-life issues. We also know that these patients are not immune to getting caught up in the opioid crisis. What is NCCIH doing to learn about pain?

Dr. Langevin responded that pain is one of NCCIH's major focus areas, particularly in looking at pain in an integrative way. One center priority is to study how to measure pain sensitivity at baseline to learn to predict who will respond to specific types of treatment. The same principles of health restoration and whole-body and nonpharmacological treatments apply to pain as well as NCCIH's other research interests.

In looking at chronic kidney disease, when flow is arrested, the organ degenerates in a self- amplifying process. This raises the issue of whether imposing flow by peristaltic application of force to the ureter would actually preserve kidney function. What would be the equivalent of rat massage for the kidney?

Dr. Langevin found this to be an intriguing question. She focused on the relationship between the kidney and psoas muscle, noting that the psoas, while poorly understood, appears to play an important role in back pain. So a massage of this area would both impart mechanical force onto the kidney and possibly relax the psoas, potentially relieving back pain as well. She also noted that some people are trying to develop manual techniques to promote lymphatic flow. Something comparable may be possible for urine flow, even within the kidney.

VII. SCIENTIFIC PRESENTATION: Autosomal Recessive Polycystic Kidney Disease: New Insights Reveal Provocative Complexities Dr. Lisa Guay-Woodford

Dr. Rodgers introduced Dr. Lisa Guay-Woodford, Council member, internationally recognized pediatric nephrologist, and Richard L. Hudson professor of pediatrics at Children's National Health System at George Washington University School of Medicine and Health Sciences. Dr. Guay-Woodford's research interests include inherited renal disorders, especially autosomal recessive polycystic kidney disease.

References:

- (1) The ciliary protein cystin forms a regulatory complex with necdin to modulate Myc expression. Wu M1, Yang C, Tao B, Bu S, Guay-Woodford LM. <u>PLoS One</u>. 2013 Dec 11;8(12):e83062.
- (2) Autosomal recessive polycystic kidney disease: the prototype of the hepato-renal fibrocystic diseases. Guay-Woodford LM. J Pediatr Genet. 2014;3(2):89-101
- (3) Clinical and genetic characterization of a founder PKHD1 mutation in Afrikaners with ARPKD. Lambie L, Amin R, Essop F, Cnaan A, Krause A, Guay-Woodford LM. <u>Pediatr Nephrol</u>. 2015 Feb;30(2):273-9
- (4) Cystic kidney disease: a primer. Cramer MT, Guay-Woodford LM. <u>Adv Chronic Kidney Dis</u>. 2015 Jul;22(4):297-305.

VIII. UPDATE: NATIONAL INSTITUTE ON AGING Dr. Richard Hodes

Dr. Rodgers introduced Dr. Richard Hodes, Director of the National Institute on Aging (NIA), which leads the federal effort to support and conduct research on the biological, clinical, and behavioral and social aspects of aging. A leading researcher in the field of immunology, Dr. Hodes has served as Director since 1993, overseeing a strong, diverse, and balanced research program. NIA is the lead NIH institute for research into effective ways to treat and prevent Alzheimer's disease (AD), and cutting-edge research conducted and supported by NIA has helped revolutionize the way we think about Alzheimer's disease and related dementias (ADRD).

Dr. Hodes started by summarizing recent changes in NIA's budget, which has tripled from \$1.045 billion in 2013 to \$3.083 billion in 2019. Most of the additional funds stem from the Congressional appropriation targeted at Alzheimer's disease and related dementias, reflecting a strong national and global emphasis on this disease and these conditions. He pointed out that although the funds have come to NIA as the lead institute, success in this mission depends on bringing together talents across the biological and behavioral science disciplines supported by many other institutes within NIH.

NIA accomplishes this by awarding administrative supplements to grantees whose work is relevant to ADRD. Some 300 of these supplements were funded, 21 of which went to NIDDK grantees. Some examples of research supported at NIDDK include efforts to identify specific associations between central nervous system impairments and complications of diabetes, the role of nitric oxide signaling in the development of dementia, an examination of cell biology and the role of peptide hormones in type 2 diabetes and AD, and a gene therapy method to investigate whether there is a connection between AD-related pathologies and inflammation in the gut. In all, about \$200 million of research was funded at other NIH institutions in 2018, including \$7 million to NIDDK.

Dr. Hodes pointed out that NIA is looking for ways to recruit leading and innovative researchers to the field. From 2015 to 2018, one-quarter of awards went to new or early-stage investigators and one-third were new to the field of AD and ADRD research.

Thus far, large clinical trials targeting AD have been disappointing. Many have aimed at addressing amyloid, a protein that builds up in the brain and has been implicated in the development of AD, especially the rare but tragic form of autosomal dominant AD, caused by gene mutation that runs in families. This mutation may also be relevant to other conditions, Dr. Hodes said. Despite the evidence of amyloid's involvement with AD, industry-supported trials targeting amyloid with antibodies have yielded negative results, especially in addressing AD once symptoms start. Brain scans show that by the time even early symptoms appear, amyloid accumulation has reached maximum levels. Continuing efforts are looking at very early stages of the disease, looking at individuals who inherit the autosomal dominant gene and who will, tragically, develop the disease, often in their 40s. The idea is to treat people decades before symptoms begin to prevent the appearance of amyloid lesions in the brain and prevent rather than reverse damage.

Additional funding for AD research has also enabled basic science discoveries that target multiple pathways and networks. Currently, NIA has 140 broadly defined interventions and treatment trials underway, including several that target caregivers and caregiver interventions. Of the 35 pharmaceutical trials currently underway, 12 target amyloid. The majority target other pathways, including neurotransmitters, growth factors, diseases that affect proteins, and inflammation. NIDDK and NIA are both active in a consortium looking at vascular aspects of hypertension and diabetes to see if there's any application to the development of ADRD. Until a cure is found, there is an enormous burden on those caring for loved ones with AD. Some of the most successful trials have looked at lifestyle interventions to improve quality-of-life, delay the need for institutionalization, and address the stress on caregivers and providers.

Dr. Hodes presented a list of genes that have been linked to AD either as risk factors or protective factors. The discoveries, which started in the 1990s, have accelerated in recent years. In 2018 there were more new genetic factors identified than all previous years.

He pointed out that both AD and type 2 diabetes are important topics for the Accelerating Medicines Partnership (AMP), a public-private partnership among the NIH, FDA, the pharmaceutical and life sciences industry, and nonprofit organizations. Launched in 2014, the partnership is working to develop new diagnostics and treatments by identifying and validating promising targets, with the goal of reducing the time and cost of developing new therapies. The consortium has released a list of more than 100 promising targets to accelerate the pace of this information into clinical trials.

Another important area of investigation is to gather and assess evidence to make health recommendations for prevention of ADRD. In a two-phase process in cooperation with the Agency on Healthcare Research and Quality (AHRQ) and the National Academy of Medicine (formerly known as the Institute of Medicine), NIA found encouraging but inconclusive evidence for cognitive training, blood pressure management, and increased

physical activity to prevent ADRD. Dr. Hodes pointed out that along with other reasons to increase physical activity and manage blood pressure, we don't have to wait for conclusive evidence for AD prevention to encourage these activities. He pointed to findings from the Systolic Blood Pressure Intervention Trial (SPRINT) study that looked at standard versus intensive treatment of hypertension in severe vascular disease. Although the trial was stopped prematurely because the intensively managed group was doing substantially better, the researchers continued to follow participants with brain imaging and cognitive testing to monitor different in cognitive function. Results published in January from the SPRINT-MIND (Memory and Cognition in Decreased Hypertension) trial found a 19 percent reduction in the rate of mild cognitive impairment (MCI), which is frequently a precursor to dementia, and a 15 percent reduction in the rate of MCI and dementia combined. He said this is probably the strongest evidence to date of the impact of a preventive intervention on age-related cognitive decline and risk of dementia.

Dr. Hodes pointed to other shared interests with NIDDK, including strategic planning for nutritional research. NIA is a co-sponsor of the Look AHEAD study, which collects data on the long-term effects of intentional weight loss on body composition and physical function. Look AHEAD Mind is a 4-year, \$5.7 million ancillary study that will repeat cognitive assessments in the cohort to confirm findings and identify potential mechanisms for both benefits and harms from intentional weight loss. Another study, the CALERIE Biobank Analysis, found that participants in the caloric restriction arm had slower increase in biological aging compared to controls.

Dr. Hodes also briefed the group on the activities of the trans-NIH GeroScience Interest Group initiated by NIA and involving 21 institutes, including NIDDK. The purpose is to explore the role of age as a risk factor for disease and chronic disease. He discussed the components—or pillars—of GeroScience, focusing particularly on senolytics, or the breakdown of senescent cells, which do not have the ability to proliferate or divide. Senescent cells accumulate in all tissue as we age and secrete a number of factors that affect the function of non-senescent cells, including breaking down telomeres (associated with life span), damaging DNA, and reducing tumor suppression. These cells also increase oxidative stress, which reduces the body's ability to repair itself.

To explore the role of senescent cells in the development of disease, researchers are looking at ways to reduce or eliminate them. In recent studies, mice who were treated with a combination of two drugs that eliminate senescent cells lived longer than control mice and experienced less cognitive decline. Eliminating senescent cells has also improved obesity-induced metabolic function, including renal function, heart function, and hemoglobin A1c in animal models.

In a pilot study in humans, individuals with idiopathic pulmonary fibrosis treated with the same drug combination saw increases in function, including distance walked in six minutes, walking speed, and standing up from a chair. Dr. Hodes says more studies are underway into the association between senescent cells, aging, and development of disease

He closed with the hope that NIA and NIDDK will continue to collaborate on joint interests. He then opened the floor to questions.

Have you looked at the senolytics approach to diabetes? Is there data on blood sugar regulation?

Dr. Hodes said investigations of senolytics and senescent cells in diabetes are underway and such research presents an opportunity for collaboration between NIDDK and NIA, looking at hemoglobin A1c in people with diabetes or at risk for diabetes. Diabetes is a known risk factor for dementia, so remains an important target.

Is the lack of an animal model for AD a limiting factor in this line of research? Are investigators using CRISPR to develop better models?

Dr. Hodes agreed that there has been a lot of concern about the quality of animal models in AD. He explained that, to date, animal models for AD have involved mice with one or a combination of gene mutations associated with the risk of AD. But interventions that appeared to work in the mouse model have failed in human trials to reduce amyloid in the brain and improve cognitive performance. He said that NIA has established two new research centers committed to developing new animal models that will be more reflective of the disease in humans.

He said that CRISPR is being used on mouse models. He said there is also interest in non-transgenic natural models of AD, looking beyond mouse and rodent models to primates and marmosets.

You mentioned that the effect of senescent cells is evident even when few cells are detected. How do we know they are limited in number or if our detection methods are not adequate?

Dr. Hodes explained that detection has relied on reporter genes like p16 and admitted that not all senescent cells may be in that pathway. He said that methodologies for single cell exploration of gene expression may help here. The initial focus has been peripheral blood because that is easiest, but further explorations will look at other tissues.

Is there interest at NIA in nutritional research into alternative food utilization and the brain, specifically ketogenesis and some of the intriguing initial observations on cognitive function in elderly people?

Dr. Holes explained that both animal models and human studies are investigating the impact of administering ketones or ketogenic treatments on many aspects of aging, including cognition. A current clinical trial is looking at intranasal insulin delivery, which has been shown to achieve selective insulin increases in the brain without increasing systemic insulin levels, as a means of preventing AD. The idea is that relative insulin resistance in the brain may contribute to metabolic abnormalities in the dementia process.

Have there been many studies on families or individuals who live long and never get dementia?

In addition to looking at risk factors, studies have looked at protective factors and identifying genes that may protect. The numbers of super-centenarians—people who have escaped cognitive deterioration—are small but investigators might be able to find protective factors against ADRD. There might be opportunities for collaboration with researchers who are already looking at individuals in these populations.

Is the senescent cell a particular type of cell?

Dr. Hodes explained that most, if not all, cell types progress to senescence, although the signs of senescence appear to differ under different circumstances and by cell type. In some, such as lymphocytes, the process is less obvious than others. In addition to senescence, there's also exhaustion and other states in which cells don't proliferate any more (quiescence). Macrophages are among those cells in which, under certain conditions, senescence can be induced by DNA damage, radiation, and normal aging.

Can you comment on the idea that AD plaques are formed as a defensive response to infection? Would blood pressure data reflect a blood-brain barrier leakiness that might expose the brain?

A number of researchers are looking at the interrelationship between AD, amyloid, and infectious disease. Over the years, there have been several proposals for how infectious agents can contribute to AD. Rudolph Tanzi's group at Harvard has suggested that amyloid may protect against certain infections. Analysis of brains with AD and unaffected brains resulted in sequences that suggest human viruses and responses to those viruses. An ongoing trial is looking at the impact on cognition of antivirals on individuals with herpes infection. The question is whether the amyloid is a protective response to inflammation or infection or if infection is driving neurodegeneration through inflammatory intermediaries.

The CDC publishes "heat maps" that show the incidence of obesity and diabetes on a state-by- state basis. Does AD parallel that trend? Has the incidence of AD gone up as populations age and obesity becomes more common? Do you see similar generational trends in AD as we do in children or even grandchildren of obese and diabetic mothers are more likely to be obese and diabetic?

Dr. Hodes explained that reports from a number of countries, including the U.S., showed that the age-specific rate of AD was decreasing a few years ago. Associated variables were education level and cardiovascular risk factors. Although clinical trials on this are difficult to design and perform, natural experiments suggest that education can be protective, whether as an actual effect due to neural development or whether individuals simply have more cognitive reserve as a result of education and therefore don't show clinical signs of dementia as early. In recent years, the decline in dementia rates has

leveled off and may be increasing again, along with the rate of obesity and cardiovascular disease.

Generational patterns have been of interest going back to the Barker hypothesis that correlated low birthweight and premature birth with the development of hypertension, heart disease, and type 2 diabetes. However, the link with cognitive decline has not been studied.

Can you comment on what the NIA is doing to explore the connection of diet and exercise with cognitive impairment?

In addition to looking at drugs and molecular targets, AD research is also looking at lifestyle factors. Currently, 13 clinical trials of exercise or diet and exercise are underway, mostly looking at preclinical or early stage disease. Investigations into cognitive training have shown that short- term, intensive cognitive training improves processing speed, memory, and executive function, with individuals maintaining those advantages for many years. There's a suggestion from these studies—although they were not designed to determine this—that the early training was associated with decreased risk of cognitive decline. NIA is planning studies with more power to look at that connection. Other studies are looking at blood pressure and blood pressure control and its connection to cognition.

IX. CONCEPT CLEARANCE

Dr. Rodgers explained again that, to comply with new recommendations from the NIH Advisory Committee to the Director, NIDDK is piloting a new process for clearing concept for Funding Opportunity Awards (FOA) prior to publication. After in-depth discussion in the subcommittees, NIDDK staff presented brief concept summaries to the full Council.

Diabetes, Endocrinology, and Metabolic Diseases Subcommittee

- Accelerating Medicines Partnership for Type 2 Diabetes (AMP T2D) focuses on disease-modifying therapies for type 2 diabetes. Five pharmaceutical companies and NIH form the partnership. The purpose of this pre-competitive collaboration is to aggregate and harmonize human genetic data to identify and validate therapeutic targets and biomarker candidates for clinical trials. The database includes more than 400 genomic risk variants and has identified 70 probable-causal therapeutic target/biomarker effector transcripts. It hosts automatic analytic methods so that non-geneticists can mine the data across a wide range of phenotypes. The concept proposes to continue this work to foster fundamental, translational and clinical research through the open dissemination of genetic and network analysis of T2D and its complications.
- Catalyst Award in Diabetes, Endocrinology and Metabolic Diseases, piloted a year ago, is patterned on the NIH Common Fund Pioneer Award Program to fund high-risk/high-reward projects proposed by creative investigators with a proven track record of innovation. The pilot elicited a robust response from many people outside the diabetes community, and the project funded a number of innovative proposals.

- Support of Emerging Physician Scientists to Develop Research Careers in Diabetes, Endocrinology & Metabolic Diseases helps overcome roadblocks for physicians to pursue research careers in NIDDK's submission areas. Physicians emerging from training programs don't have publications or research experience to compete effectively for K awards compared to Ph.Ds. This program links medical doctors with productive, funded researchers in the diabetes mission areas and provides significant support beyond the fellowship level to help them gain experience and productivity so that they can compete effectively for K awards.
- Bioinformatics Training in DEM Research Areas grows out of an increasing need to apply computational methods to compelling research problems in diabetes, endocrinology, and metabolic diseases. To increase the number of trained bioinformatics scientists in this area of research, the DEM division plans to support interdisciplinary training in both bioinformatics and DEM disease with training awards for predoctoral students and postdoctoral fellows.

Digestive Diseases and Nutrition Subcommittee

- Molecular Mechanism of Metabolic Adaptation to Weight Change addresses the problem of regaining weight after weight loss. After weight loss, people have a new metabolic set point that requires fewer calories to maintain that weight loss. The goal of this program will be to take a deep look into the biology behind this process.
- Chronic Pancreatitis, Diabetes, and Pancreatic Cancer aims to support collaborative multidisciplinary research into pancreatic diseases, including acute, recurrent, and chronic pancreatitis as well as the development of pancreatic cancer.
- Food Insecurity and HIV addresses the issues of inadequate nutrition among people with HIV/AIDS, particularly those who remain untreated and continue to contribute to the epidemic.
- Obesity and HIV addresses the rise in obesity among people with HIV and the increasing evidence that indicates effects on adipose tissue physiology and other unique mechanisms associated with HIV may be at play. The purpose of the program is to determine the underlying mechanism and understand the relative contribution of HIV and/or anti-retroviral therapy to weight gain.

Kidney, Urologic, and Hematologic Diseases Subcommittee

- Centers of Excellence in Hematology program seeks renewal funding to continue support of multidisciplinary research, collaboration, and resources to support hematology research through a national consortium aimed at combatting nonmalignant hematologic disease. It includes a national pilot and feasibility program for enrichment of emerging scientists in this field and development of shared resources and data.
- Prevention of Lower Urinary Tract Research Consortium seeks renewal to continue work to establish the scientific basis for intervention studies to promote bladder health and prevent bladder conditions in adolescent and adult women. The program aims to expand understanding of risk and protective factors associated with urinary tract diseases and identify targets for future study. A collaborative and transdisciplinary group of investigators will look at risk factors across the lifespan.
- United States Renal Data System (USRDS) is a critical data resource on the incidence, prevalence, mortality, and cost of kidney disease in the United States that is

mandated by Congress. Its annual data report is shared and used widely by other government agencies, and investigators also rely on the data and analysis files. The renewal will establish a special study section to look transitions of care in chronic kidney disease.

- Supporting Descriptive Epidemiology of Non-Malignant Urological Disease (UDA) tracks data on the incidence, prevalence, and costs of urological disease.
- National Survey of Prevalence of Kidney Disease is a population-based survey that has continued for more than 20 years to measure the prevalence of chronic kidney disease in the U.S. Information from this survey is used by other divisions of NIDDK as well as by the USRDS and UDA mentioned above.
- **Polycystic Kidney Disease Centers Program** funds four PDK research centers as well as a coordinating site. The research centers develop and validate resources and the coordinating center administers a common pilot and feasibility program.
- **(Re)Building a Kidney**, a project described at the January Council meeting, conducts a variety of research projects aimed at stimulating regeneration, enhancing productive repair, or generating functioning kidney tissue that can then be integrated into structures that replicate human kidney function.

Trans-NIDDK

- NIDDK's Therapeutics Discovery Translational Pipeline promotes the translation of basic science discoveries into knowledge and development of tools to support laterphase drug discovery and development. It has resulted in 36 awards and brought in more than a dozen medicinal chemistry groups to NIDDK mission areas.
- Pathways for Review and Release of Available NIDDK Repository Samples maximizes benefit from data and samples collected from multicenter and large single-center trials, then makes them available to interested scientists by application and administrative review.
- Optimization of NIDDK Investment in Large Research Programs is a replacement for the Program Project Grants, which will be phased out to allow resources to be shifted to more flexible awards to support collaborative research.
- Supporting Transition to Independence for NIDDK Career Training Awardees provides support to currently funded K awardees to undertake short-term, limited-scope projects. These \$75,000/year supplemental grants are designed to allow them to conduct small, independent feasibility or pilot studies. Usually, researchers apply in the latter years of their K experience to encourage them to accrue publications from their K work, particularly for clinically oriented projects.

All concepts presented to the council are available on the NIDDK website and are associated with the NIDDK Advisory Council section of the website. (See https://www.niddk.nih.gov/about-niddk/advisory-coordinating-committees/national-diabetes-digestive-kidney-diseases-advisory-council/concept-clearances.)

IX. CONSIDERATION OF REVIEW OF GRANT APPLICATIONS.

A total of 1,158 grant applications (369 primary and 789 dual), requesting support of \$434,087,880 were reviewed for consideration at the meeting. An additional 1,292 Common Fund applications requesting \$1,905,758,566 were presented to Council. Funding for these applications was recommended at the Scientific Review Group recommended level. Prior to the Council meeting, 1,139 applications requesting \$376,875,076 received second-level review through expedited concurrence. All of the expedited concurrence applications were recommended for funding at the Scientific Review Group recommended level. The expedited concurrence actions were reported to the full Council at the meeting.

XI. ADJOURNMENT

Dr. Rodgers

Dr. Rodgers expressed appreciation on behalf of the NIDDK to the Council members, presenters, and other participants. He thanked the Council members for their valuable input. There being no other business, the 210th meeting of the NIDDK Advisory Council was adjourned at 4:30 p.m.

I hereby certify that, to the best of my knowledge, the foregoing summary minutes are accurate and complete.

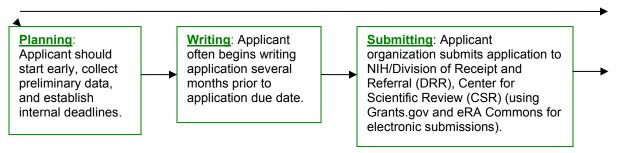
Griffin P. Rodgers, M.D., M.A.C.P.

Director, National Institute of Diabetes and Digestive and Kidney Diseases Chairman, National Diabetes and Digestive and Kidney Diseases Advisory Council

Grants Process At-A-Glance

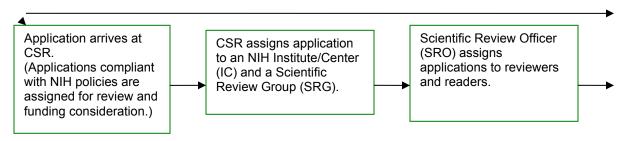
The following NIH "Grants Process At-A-Glance" chart is provided as a sample of the general time element necessary for a competing application to proceed from Receipt and Referral through the Peer Review process to negotiation and award.

Planning, Writing, Submitting



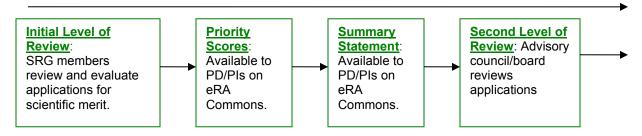
Receipt and Referral

Months 1 to 3



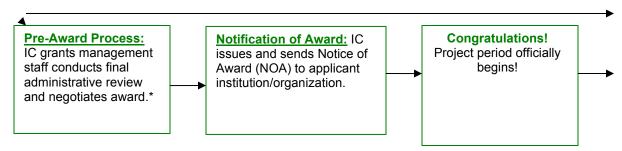
Peer Review

Months 4 to 8



Award (*Requests additional information needed <u>just-in-time</u> for award.)

Months 9 to 10

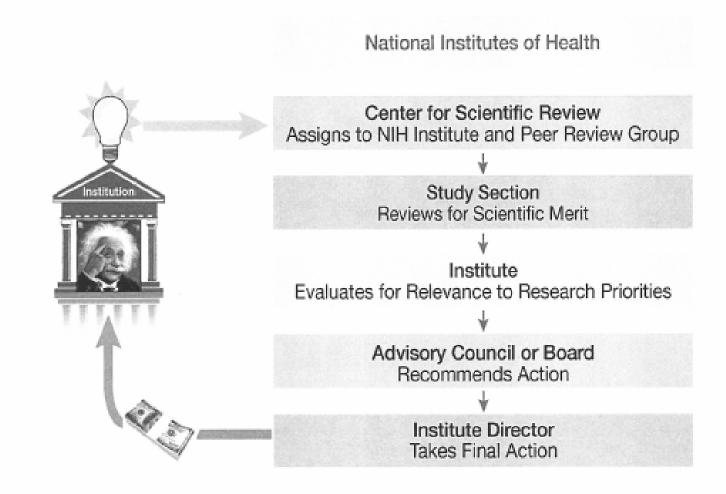


Post-Award Management

Administrative and fiscal monitoring, reporting, and compliance.

Note: Timeline is based on the standard grants process. It does not reflect a shorter timeframe for grants undergoing expedited review.

Peer Review and Funding of NIH Grant Applications



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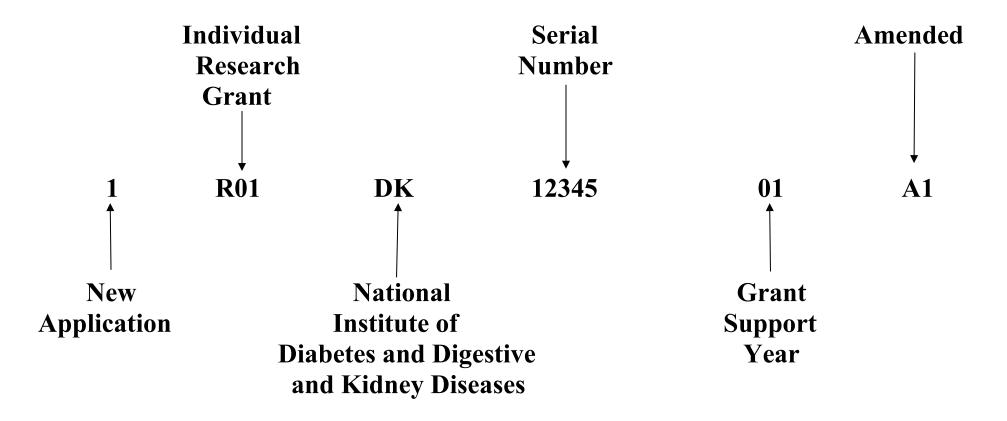
NIH Grant Receipt, Review, and Award Schedule

Jan-May	
May-Sept	Receipt Dates
Sept-Jan	
June-July	
Oct-Nov	Review Dates
Feb-Mar	
Sept-Oct	
Jan-Feb	National Advisory Council/Board Dates
May-June	
Dec1	
Apr 1	Earliest Possible Beginning Date
July 1	

NIH Funding Instruments

Grant	Cooperative Agreement	Contract
(NIH as Patron)	(NIH as Partner)	(NIH as Purchaser)
Project Conceived by	Project Conceived by	Project Conceived by NIH
Investigator	Investigator or NIH	
NIH Supports or Assists	NIH Supports or Assists	NIH Acquires Services or Product
Performer Discusses Details and Retains Scientific Control	NIH Participates in Direction	NIH Exercises Direction and Control
NIH Maintains Cognizance	NIH Monitors	NIH Closely Monitors
Accomplishes a Public	Accomplishes a Public	For the Direct Benefit of the
Purpose	Purpose	Government

Sample Application Number

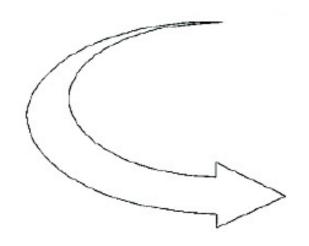


Dual Review System for Grant Applications

First Level of Review

Scientific Review Group (SRG)

- Provides Initial Scientific Merit Review of Grant Applications
- Rates Applications and Makes
 Recommendations for Appropriate Level
 of Support and Duration of Award



Second Level of Review

Council

- Assesses quality of SRG Review of Grant Applications (See Advisory Council Voting Options)
- Makes Recommendations to Institute Staff on Funding
- Evaluates Program Priorities and Relevance
- Advises on Policy

Second Level of Review: Advisory Council Voting Options

- Concurrence with study section action
- Modification of study section action
- Deferral for re-review

NIDDK Makes Funding Decisions Based on:

- Scientific merit
- Program considerations
- Availability of funds

Initial Review Process

Overview

NIH policy is intended to ensure that grant applications submitted to the NIH are evaluated on the basis of a process that is fair, equitable, timely, and free of bias. The NIH dual peer review system is mandated by statute in accordance with section 492 of the Public Health Service Act and federal regulations governing "Scientific Peer Review of Research Grant Applications and Research and Development Contract Projects."

The first level of review is carried out by a Scientific Review Group (SRG) composed primarily of non-federal scientists who have expertise in relevant scientific disciplines and current research areas. The second level of review is performed by Institute and Center (IC) National Advisory Councils or Boards. Councils are composed of both scientific and lay members chosen for their expertise, interest, or activity in matters related to health and disease. Only applications that are favorably recommended by both the SRG and the Advisory Council may be recommended for funding.

First Level of Review

Initial peer review meetings are administered by either the <u>Center for Scientific Review (CSR)</u> or another <u>NIH IC</u>. The focus of review is specified in the Funding Opportunity Announcement. Peer review meetings are announced in the <u>Federal Register</u>. The meetings are closed to the public, although some meetings may have an open session; the Federal Register provides the details of each meeting.

A. Peer Review Roles and Meeting Overview

Scientific Review Officer:

Each SRG is led by a Scientific Review Officer (SRO), formerly Scientific Review Administrator (SRA)]. The SRO is an extramural staff scientist and the Designated Federal Official responsible for ensuring that each application receives an objective and fair initial peer review, and that all applicable laws, regulations, and policies are followed.

SROs:

- Analyze the content of each application, and check for completeness.
- Document and manage conflicts of interest. See <u>NOT-OD-11-120</u> issued on September 26, 2011, and briefly described at end of this chapter.
- Recruit qualified reviewers based on scientific and technical qualifications and other considerations, including:
 - Authority in their scientific field (42 CFR 52h.4)
 - o Dedication to high quality, fair, and objective reviews
 - Ability to work collegially in a group setting
 - Experience in research grant review
 - Balanced representation
- Assign applications to reviewers for critique preparation and assignment of individual criterion scores.
- Attend and oversee administrative and regulatory aspects of peer review meetings.
- Prepare summary statements for all applications reviewed.

SRG Members

Chair:

- Serves as moderator of the discussion of scientific and technical merit of the applications under review.
- Is also a peer reviewer for the meeting.

Reviewers:

- Declare Conflicts of Interest (COI) with specific applications following NIH guidance. (See COI section below.)
- Receive access to the grant applications approximately six weeks prior to the peer review meeting.
- Prepare a written critique (using <u>Review Critique Fill-able Templates</u>) for each application assigned per the SRO, based on <u>review criteria</u> and judgment of merit.
- Assign a numerical score to each review criterion
- Make recommendations concerning the scientific and technical merit of applications under review, in the form of final written comments and numerical scores.
- Make recommendations concerning protections for human subjects; inclusion of women, minorities, and children in clinical research; welfare of vertebrate animals; and other areas as applicable for the application (see <u>guidance for reviewers on Human Subjects</u> <u>Protection and Inclusion, Human Embryonic Stem Cells, and Vertebrate Animals</u>).
- Make recommendations concerning appropriateness of budget requests (see <u>Budget Information for Reviewers</u>).

Other NIH Staff:

- Federal officials who have need-to-know or pertinent related responsibilities are permitted to attend closed review meetings.
- NIH IC or other federal staff members wishing to attend an SRG meeting must have advance approval from the responsible SRO. These individuals may provide programmatic or grants management input at the SRO's discretion.

Peer Review Meeting Procedures

- Applications are reviewed based on established review criteria (see below).
- Assigned reviewers summarize their prepared critiques for the group.
- An open discussion follows.
- Final scoring of overall impact/priority scores is conducted by private ballot.

B. Peer Review Criteria and Considerations

The mission of the NIH is to support science in pursuit of knowledge about the biology and behavior of living systems and to apply that knowledge to extend healthy life and reduce the burdens of illness and disability. As part of this mission, applications submitted to the NIH for grants or cooperative agreements to support biomedical and behavioral research are evaluated for scientific and technical merit through the NIH peer review system.

Review Criteria for Research Grants and Cooperative Agreements

Overall Impact. Reviewers will provide an overall impact/priority score to reflect their assessment of the likelihood for the project to exert a sustained, powerful influence on the research field(s) involved, in consideration of the following review criteria, and additional review criteria (as applicable for the project proposed).

Scored Review Criteria. Reviewers will consider each of the review criteria below in the determination of scientific and technical merit, and give a separate score for each. An application does not need to be strong in all categories to be judged likely to have major scientific impact. For example, a project that by its nature is not innovative may be essential to advance a field.

Significance. Does the project address an important problem or a critical barrier to progress in the field? If the aims of the project are achieved, how will scientific knowledge, technical capability, and/or clinical practice be improved? How will successful completion of the aims change the concepts, methods, technologies, treatments, services, or preventative interventions that drive this field?

Investigator(s). Are the PD/PIs, collaborators, and other researchers well suited to the project? If Early Stage Investigators or New Investigators, or in the early stages of independent careers, do they have appropriate experience and training? If established, have they demonstrated an ongoing record of accomplishments that have advanced their field(s)? If the project is collaborative or multi-PD/PI, do the investigators have complementary and integrated expertise; are their leadership approach, governance and organizational structure appropriate for the project?

Innovation. Does the application challenge and seek to shift current research or clinical practice paradigms by utilizing novel theoretical concepts, approaches or methodologies, instrumentation, or interventions? Are the concepts, approaches or methodologies, instrumentation, or interventions novel to one field of research or novel in a broad sense? Is a refinement, improvement, or new application of theoretical concepts, approaches or methodologies, instrumentation, or interventions proposed?

Approach. Are the overall strategy, methodology, and analyses well-reasoned and appropriate to accomplish the specific aims of the project? Are potential problems, alternative strategies, and benchmarks for success presented? If the project is in the early stages of development, will the strategy establish feasibility and will particularly risky aspects be managed? Have the investigators presented adequate plans to address relevant biological variables, such as sex, for studies in vertebrate animals or human subject? If the project involves human subjects and/or NIH-defined clinical research, are the plans for 1) protection of human subjects from research risks, and 2) inclusion (or exclusion) of individuals on the basis of sexes/gender, race, and ethnicity, as well as the inclusion of children, justified in terms of the scientific goals and research strategy proposed?

Environment. Will the scientific environment in which the work will be done contribute to the probability of success? Are the institutional support, equipment and other physical resources available to the investigators adequate for the project proposed? Will the project benefit from unique features of the scientific environment, subject populations, or collaborative arrangements?

Additional Review Criteria. As applicable for the project proposed, reviewers will evaluate the following additional items while determining scientific and technical merit and in providing an overall impact/priority score, but will not give separate scores for these items.

Protections for Human Subjects
Inclusion of Women, Minorities, and Children
Vertebrate Animals
Biohazards
Resubmission
Renewal
Revision

Additional Review Considerations. As applicable for the project proposed, reviewers will consider each of the following items, but will not give scores for these items and should not consider them in providing an overall impact/priority score.

Applications from Foreign Organizations
Select Agent Research
Resource Sharing Plans
Authentication of Key Biological and/or Chemical Resources
Budget and Period of Support

C. Scoring

The scoring system described below was implemented for applications submitted for funding consideration for FY2010 and thereafter (NOT-OD-09-024)

Before the SRG meeting, each reviewer and discussant assigned to an application will give a separate score for each of five review criteria (i.e., Significance, Investigator(s), Innovation, Approach, and Environment for research grants and cooperative agreements; see above). For all applications, even those not discussed by the full committee, the individual scores of the assigned reviewers and discussant(s) for these criteria are reported to the applicant.

In addition, each reviewer and discussant assigned to an application gives a preliminary overall impact/priority score for that application. The preliminary scores are used to determine which applications will be discussed in full. For each application that is discussed at the meeting, a final impact/priority score is given by each eligible committee member (without conflicts of interest) including the assigned reviewers. Each member's score reflects his/her evaluation of the overall impact that the project is likely to have on the research field(s) involved, rather than being a calculation of the reviewer's scores for each criterion.

The scoring system utilizes a 9-point rating scale (1 = exceptional; 9 = poor). The final overall impact/priority score for each discussed application is determined by calculating the mean score from all the eligible members' impact/priority scores, and multiplying the average by 10; the final overall impact/priority score is reported on the summary statement. Thus, the final overall impact/priority scores range from 10 (high impact) through 90 (low impact). Numerical impact/priority scores are not reported for applications that are not discussed (ND), which may be reported as *.* on the face page of the summary statement and typically rank in the bottom half of the applications.

Applicants should contact the Program Officer for the application to seek additional feedback on the score and summary statement.

An application may be designated Not Recommended for Further Consideration (NRFC) by the Scientific Review Group if it lacks significant and substantial merit; presents serious ethical problems in the protection of human subjects from research risks; or presents serious ethical problems in the use of vertebrate animals, biohazards, and/or select agents. Applications designated as NRFC do not proceed to the second level of peer review (National Advisory Council/Board) because they cannot be funded.

The following guidance has been given to reviewers to determine individual review criterion and overall impact/priority scores:

High Impact Table		
Score	Descriptor	Additional Guidance on Strengths/Weaknesses
1	Exceptional	Exceptionally strong with essentially no weaknesses
2	Outstanding	Extremely strong with negligible weaknesses
3	Excellent	Very strong with only some minor weaknesses
Medium Impact Table		
Score	Descriptor	Additional Guidance on Strengths/Weaknesses
4	Very Good	Strong but with numerous minor weaknesses
5	Good	Strong but with at least one moderate weakness
6	Satisfactory	Some strengths but also some moderate weaknesses
Low Impact Table		
Score	Descriptor	Additional Guidance on Strengths/Weaknesses
7	Fair	Some strengths but with at least one major weakness
8	Marginal	A few strengths and a few major weaknesses
9	Poor	Very few strengths and numerous major weaknesses

Non-numeric score options: NR = Not Recommended for Further Consideration, DF = Deferred, AB = Abstention, CF = Conflict, NP = Not Present, ND = Not Discussed

Minor Weakness: An easily addressable weakness that does not substantially lessen impact Moderate Weakness: A weakness that lessens impact Major Weakness: A weakness that severely limits impact

D. <u>Summary Statement</u>

Applications that are not discussed at the meeting will be given the designation "ND" as an overall impact/priority score, but the applicant, as well as NIH staff, will see the scores from the assigned reviewers and discussants for each of the review criteria as additional feedback on their summary statement.

Understanding the Percentile

- A percentile is the approximate percentage of applications that received a better overall impact/priority score from the study section during the past year.
- All percentiles are reported as whole numbers
- Only a subset of all applications receive percentiles. Which types of applications are percentiled varies across different NIH Institutes and Centers.
- The summary statement will identify the base that was used to determine the percentile.

E. Appeals

To preserve and underscore the fairness of the NIH peer review process, NIH established a peer review appeal system (see NIH Guide Notice NOT-OD-11-064) to provide investigators and applicant organizations the opportunity to seek reconsideration of the initial review results if, after consideration of the summary statement, they believe the review process was flawed as outlined below. The appeals policy applies to appeal letters received with respect to the initial peer review of all competing applications submitted to the NIH for support for the January 25, 2011 due date and thereafter, including: 1) reviews conducted by the NIH Center for Scientific Review (CSR) and reviews conducted by the NIH Institutes and other NIH Centers; and 2) applications such as fellowship application that typically do not require Council review. This policy does not apply to appeals of the technical evaluation of R&D contract projects through the NIH peer review process, appeals of NIH funding decisions, or appeals of decisions concerning extensions of MERIT award.

An appeal is a written communication from a Project Director/Principal Investigator (PD/PI) and/or official of the applicant institution [not necessarily the Authorized Organization Representative (AOR)] that meets the following four criteria: 1) is received after issuance of the summary statement and up to 30 calendar days after the second level of peer review, 2) describes a flaw in the review process for a particular application, 3) is based on one or more of four allowable issues (described below), and 4) displays concurrence of the AOR. An appeal letter will be accepted only if the letter 1) describes a flaw(s) or perceived flaw(s) in the review process for the application in question, 2) explains the reasons for the appeal, and 3) is based on one or more of the following issues related to the process of the initial peer review:

- Evidence of bias on the part of one or more peer reviewers
- Conflict of interest, as specified in regulation at <u>42 CFR 52h</u> "Scientific Peer Review of Research Grant Applications and Research and Development Contract Projects", on the part of one or more non-federal peer reviewers
- Lack of appropriate expertise within the SRG
- Factual error(s) made by one or more reviewers that could have altered the outcome of review substantially.

Appeal letters based solely on differences of scientific opinion will not be accepted. A letter that does not meet these criteria and/or does not include the concurrence of the AOR will not be considered an appeal, but rather a grievance. The IC will handle grievances according to IC-specific procedures.

The IC cannot deny the PD/PI and/or the applicant institution the opportunity to have an appeal letter made available to Council, but the IC may determine which appeal letters warrant discussion by the Council members, and Council members may raise certain ones for discussion if they so choose. The Council may concur:

- with the appeal, and recommend that the application be re-reviewed.
- with the SRG's recommendation and deny the appeal.

The recommendation of Council concerning resolution of an appeal is final and will not be considered again by the NIH through this or another process.

Information from http://grants.nih.gov/grants/peer review process.htm.

F. Revised Conflict of Interest Policy for Initial Review

The NIH initial peer review process involves the consistent application of standards and procedures that produce fair, equitable, informed, and unbiased examinations of grant and cooperative agreement applications to the National Institutes of Health (NIH). The process, defined in regulation at <u>42 CFR Part 52h</u>, is extended by policy to other types of applications submitted to the agency.

On September 26, 2011, the NIH issued a revised policy on managing conflict of interest (COI) in the initial peer review of NIH grant and cooperative agreement applications: see NOT-OD-11-120. This announcement provides revised policy for managing COI, the appearance of COI, prejudice, bias, or predisposition in the NIH initial peer review process.

The announcement addresses multi-disciplinary and collaborative research and clarifies the role of non-Federal and Federal employees serving as reviewers. Unlike members of NIH Advisory Councils or Boards, reviewers in the initial level of NIH peer review are not appointed as Special Government Employees and do not submit financial disclosure forms. Therefore, SROs are not in a position to collect financial information from reviewers, but can ask about professional relationships and roles as defined in the revised NIH policy and make determinations about potential bias in the initial peer review process.

The overall goal of the revised policy is to increase transparency and to inform the scientific community. With the dramatic increase in internet capability, reviewers may be looking up financial information about investigators on the websites of the investigators' institutions. Although this COI information is available publicly, SROs should instruct reviewers not to consider COI information about applicants in their reviews, discussions, or evaluations.

Similarly, applicants may be looking up financial information about reviewers on their institutions' websites and submitting appeals of initial peer review on the basis of that information. Therefore, it is important that SROs clearly explain the conflict rules for initial peer review to their reviewers.

Modified Application Submission, Referral and Review for Appointed NIH Advisory Group Members

To recognize their outstanding commitment to service to the NIH, regular members of NIH Boards of Scientific Counselors, NIH Advisory Boards or Councils, and the NIH Peer Review Advisory Committee are extended the option of modified application submission, referral and CSR review.

This alternate process is limited to R01, R21, and R34 applications that would normally be received on standard submission dates (but not special receipt dates) and will be reviewed at CSR. Depending on the timing of the submission and the number of other similar applications received during the premeeting time window, NIH staff will decide if the application will be reviewed in a standing Study Section or in a Special Emphasis Panel (SEP). These applications will be processed and assigned to NIH Institute Review Offices or CSR Integrated Review Groups (IRGs) using the standard referral guidelines (http://cms.csr.nih.gov/PeerReviewMeetings/CSRIRGDescription/).

This continuous submission process will enable appointed members of chartered NIH advisory groups to submit their applications as soon as they are fully developed. The applications will be reviewed no later than 120 days after receipt. Because of the need to assign an Advisory Council date, the following schedule will be followed. However, applications may be moved to earlier councils following review as timing permits

Schedule for Assignment to Advisory Council Rounds

Non-AIDS applications		AIDS applications
Council Round		
May	August 17 - December 16	October 8 - February 7
October	December 17 - April 16	February 8 - June 7
January	April 17 - August 16	June 8 - October 7

Further information and Inquiries

For more information see: http://grants.nih.gov/grants/guide/notice-files/NOT-OD-09-114.html.

A series of Frequently Asked Questions has been prepared (see http://cms.csr.nih.gov/ResourcesforApplicants/ContinuousSubmissionFAO.htm).

Inquiries may also be addressed to: Division of Receipt and Referral Center for Scientific Review 6701 Rockledge Drive MSC 7720 Bethesda, MD 20892-7720 Voice: (301) 435-0715

Fax: (301) 480-1987

Second-Level Review Procedures

The Advisory Council/Board of the potential awarding Institute or Center (IC) performs the second level of review. Advisory Councils/Boards are composed of scientists from the extramural research community and public representatives (NIH Federal Advisory Committee Information). Members are chosen by the respective IC and are approved by the Department of Health and Human Services. For certain committees, members are appointed by the President of the United States.

On June 18, 2010, President Obama issued "Lobbyists on Agency Boards and Commissions," a memorandum directing agencies and departments in the Executive Branch not to appoint or reappoint federally registered lobbyists to advisory committees and other boards and commissions. On October 5, 2011, the Office of Management and Budget (OMB) issued final guidance to Executive Departments and agencies concerning the appointment of federally registered lobbyists to boards and commissions. This guidance applies not only to advisory committees subject to FACA, but to all other groups as well-even to members of working groups not appointed as SGEs. See *Federal Register |* Vol. 76, No. 193 / Wednesday, October 5, 2011/Notices under OFFICE OF MANAGEMENT AND BUDGET, Final Guidance on Appointment of Lobbyists to Federal Boards and Commissions, AGENCY: Office of Management and Budget. ACTION: Notice of Final Guidance.

Second-level review is the assessment of the quality of the initial review of grant applications. By law, NIDDK's Advisory Council must recommend an application before the Institute can fund it. Second-level review is **not a second scientific review**. Rather, the Council looks at applications with potential barriers to funding such as human subjects and animal concerns or special circumstances such as foreign applications and renewal applications requesting more money than the limit.

The Council has three options for recommendations: (1) concurrence with initial review; (2) modify the initial review action (e.g., an adjustment of the budget level and/or project period); or (3) defer an application for re-review. Applications that are brought to the Council subcommittees for closed-session discussion are then reported to the full Council in closed session. The remainder of the applications are considered through an en bloc vote. When Council recommends an application for funding, that doesn't necessarily mean it will receive an award. NIDDK makes the final decision.

Applications Requiring Individual Consideration

Applications from Foreign Institutions

In reviewing and making recommendations on foreign grant applications, the Council members should be aware that ALL of the following criteria must be met in order to be supported by the NIH:

- a. The project presents special opportunities for furthering research programs through the use of unusual talents, resources, populations, or environmental conditions in other countries that are not readily available in the United States or that augment existing United States resources.
- b. The project has specific relevance to the mission and objectives of NIDDK and has the potential for significantly advancing the health sciences in the United States.
- c. The application must be approved for funding by the Council.
- d. The application may be awarded only after assurance that the foreign institution is in compliance with human subject, animal welfare, and gender and minority requirements.
- Applications With Concerns about Human or Animal Subjects and/or Gender and Minority Representation

The Council will be asked to comment on any application(s) recommended for possible funding with unresolved concerns regarding the involvement of human subjects, the use of animals, and/or gender and minority representation. The Council will be asked specifically for concurrence with the Scientific Review Group's (SRG) concern(s).

 Applications That May Not Provide for Appropriate Biosafety, Biocontainment, and Security of Select Agents

The Council will be asked to comment on any applications recommended for possible funding with unresolved concerns regarding biosafety, biocontainment, and security of select agents. The Council will be asked specifically for concurrence with the Scientific Review Group's (SRG) concern

Letters of Appeal

The Council reviews appeal letters that were submitted by investigators subsequent to the peer review of their application and were not resolved by program and review staff. It is the responsibility of NIDDK staff to determine whether a letter is an appeal.

An investigator may have concerns about and may wish to appeal a procedural aspect of the peer review process. Only letters concerning procedural aspects of a review are considered an appeal. Procedural issues fall under four categories and the applicant must claim one or more of the following:

- a. The initial review was biased.
- b. A conflict of interest existed.
- c. The review group lacked appropriate scientific expertise.
- d. Factual errors entered into the review.

Differences in scientific opinion that often occur between investigators and reviewers may not be contested through these procedures. In addition, communications from investigators consisting of additional information that was not available to the reviewers are not considered to be appeals.

The Council has two options when reviewing an appeal letter:

- a. To concur with the outcome of the initial peer review as reflected in the summary statement.
- b. To concur with the claims discussed in the applicant's appeal letter and recommend deferral for re-review either by the same or a different review group.

Other letters, termed Council communications, are also made available to the Council at the discretion of NIDDK staff.

Special Council Review of Research Applications from Program Directors/Principal Investigators (PDsPIs) with more than \$1.0 Million Direct Costs in NIH Support

In an effort to continue responsible stewardship of public funds and to support meritorious and innovative research, NIH has instituted a policy of Special Council Review (SCR) of applications from well-funded investigators: http://grants.nih.gov/grants/guide/notice-files/NOT-OD-12-140.html. Pending grants going to Council from PDs/PIs who have more than \$1 million in direct costs from active NIH Research Project Grants (RPGs) grants will be subjected to additional consideration. It is important to recognize that this is a threshold only; investigators who have more research support

may still receive additional awards as warranted. When making funding recommendations, staff will take into account factors such as: how innovative and distinct the pending project is from the PD/PI's other grants; the type of research (since costs requirements differ substantially by field); the public health priority of the research; and how the absence of an award impacts other collaborative or translational research efforts.

The following SCR policy guidance is designed to achieve these goals.

- Criteria Considered by NIDDK Staff for Determining Applications Subject to SCR
 - a. P01s and other Multi-Component RPGs: Only funds acquired through RPGs should be included when calculating a given PD/PI's support.
 - b. Only competing RPGs (New and Renewals) to be considered for award to investigators with \$1.0M or more of direct cost NIH support are subject to SCR via this policy.
 - c. P01s and other Multi-Component RPGs:
 - i. Competing Multi-Component RPGs are not subject to SCR unless all of the component leaders have \$1.0M or more of NIH support. The rationale for this is that failure to support one or more of the leaders who exceed the limit could significantly detract from the project as a whole.
 - ii. Funded P01s and any other multi-component RPGs, including consortium/sub-award costs, contribute to the \$1.0M threshold of the Program Director and sub-project leaders. Each sub-project leader's total should include the funds provided directly to him/her only through the P01; core costs should not be included.

• Multiple PD/PI Projects:

- a. Competing Multi-PI applications are only subject to SCR if all the PD/PIs exceed the \$1.0M threshold
- b. In calculating the research support available to a PD/PI who participates in a multi-PI award, the direct cost award amount to the institution should be divided evenly among PIs at that institution. Budgets of multi-PIs at other institutions may be determined using the funds allocated to their subcontract costs.

• Requests for Applications (RFAs):

- a. Pending applications submitted in response to RFAs will not be subjected to SCR. The rationale is that these applications have been solicited by the IC to accomplish a specific purpose. The intent is to award the best proposal(s) designed to achieve the IC's specified goal(s).
- b. Funds provided through these grants will contribute to the \$1.0M threshold for the investigators' future applications.

• Competing revisions and administrative supplements:

a. These types of grants are not expected to be a significant contributing factor in reaching the threshold, since many will not incur future year commitments. However, multi-year supplements are included in grant's out-year commitments and do contribute to the \$1.0M threshold. In order to prevent Re-entry and Diversity Supplements from being an impediment

¹ Funds acquired include active RPG awards for the PD/PI (exclusive of projects in no cost extension) when the application subjected to SCR is pending Council review and funds for multi-year projects allocable to the current Fiscal Year (Multi-Yr: R15, DP2, DP3, DP4, RC3, RC4, R55, RC1)

² Defined as R00, R01, R03, R15, R21, R22, R23, R29, R33, R34, R35, R36, R37, R55, R56, RC1, RC2, RC3, RC4, RL1, RL2, RL5, RL9, P01, P42, PN1, UA5, UC1, UC2, UC4, UC7, UH2, UH3, UH5, UM1, U01, U19, U34, DP1, DP2, DP3, DP4, and DP5.

to an investigator, to the extent possible, these supplements should be excluded from the threshold count.

- Guidelines for Council Consideration (Council role):
 - a. When applied to new projects, SCR will focus on the unique opportunities afforded to the investigator to advance his/her research in directions that are highly promising and distinct from his/her other funded projects.
 - b. SCR of renewal applications may also consider the value of continuing a productive project and the contribution this project makes to the investigator's research program and ongoing collaborations.
 - c. Consideration may also be given to the PD/PI's field of research when evaluating the appropriateness of awarding new grants above the \$1.0M direct cost threshold. The rationales for this consideration are that 1) different types of research (e.g., clinical trials, population sciences) may require larger awards than other fields and 2) non-RPG mechanisms often used for an IC's specialized purposes/goals typically receive separate Council consideration. Since some RPGs, such as U01s, are also used for projects with specialized purposes/goals, each IC, working with its Council, may create defaults for these and other RPG mechanisms or programs to simplify SCR.

NIDDK Implementation of the Second Council Review Policy

Each Council round, the NIDDK Council members will be provided a list of competing applications that meet the criteria for Special Council Review (SCR) under the NIH policy as outlined above. During the closed session, for each application on the list that might actually be funded, NIDDK staff will provide information about the other NIH funding for the PI that brings his/her direct cost total to the \$1 million threshold and a justification for possibly funding the application under consideration. Council members will review these cases and decide whether or not they have concerns.

Recommendation Process

- NIDDK program staff members examine applications, their overall impact/priority scores, percentile rankings, and their summary statements and consider these against NIDDK's needs.
- Program staff provide a grant-funding plan to the Advisory Council.
- The Advisory Council also considers NIDDK's goals and needs and advises the NIDDK Director.
- The NIDDK director makes the final funding decisions based on staff and Advisory Council advice

Post-Review

Not Funded – What Next?

The NIH receives thousands of applications for each application receipt round. Funding on the first attempt is difficult, but not impossible. If an application does not result in funding, NIH has resources available to help applicants prepare a possible resubmission. Applications in response to a specific initiative with set-aside money typically cannot be resubmitted, but the Program Official should be consulted about next steps.

• Fundable Score – What Next?

If an application results in an award, the applicant will be working closely with the NIDDK Program Official on scientific and programmatic matters and a Grants Management Officer on budgetary or administrative issues.

Reviewing Applications Prior to the Meeting: Using the NIH Electronic Council Book (ECB)

(For NIDDK Advisory Council Members Only)

What is the NIH Electronic Council Book

The NIH Electronic Council Book (ECB) provides access to NIH summary statements. Using World Wide Web and Internet capabilities for database search and retrieval, as an NIDDK Advisory Council member you may read, search, sort, and print any or all of the summary statements for a Council round that has either a DK primary or secondary assignment. NIH staff load data and summary statements into the ECB each night, so the ECB is always current.

The data in the ECB, and the codes you use for access to those data, are confidential and must be protected. Since the ECB contains confidential data, you should not leave it unattended. Use it and then disconnect. If for some reason you are inactive for approximately one hour, the system will automatically disconnect, and you will have to login again.

How do I get started?

You or your institution will supply your computer access to the NIH computer, via an Internet connection and a WEB browser (such as Firefox, Netscape Navigator, or Internet Explorer). An NIDDK staff member will give you the information necessary to identify yourself to the NIH computer where the ECB is located. That information includes two codes. The first is called your "USER NAME," the second is your "PASSWORD." Once you have this information, you are ready to start.

Assuming you are already connected to the internet, use your web browser to access the following page: https://ecb.nih.gov/council/login.cfm

You will see a screen entitled "NIH Electronic Council Book" with two blank boxes for your USER NAME and your PASSWORD. Neither the USER NAME nor the PASSWORD are case sensitive. To log in to the ECB:

- Enter your USER NAME, for example, ECB JOHNST
- Press Tab or move the mouse cursor to the PASSWORD block
- Enter your PASSWORD
- Click on LOGON

Please note that the password issued to you by NIDDK staff is a temporary password and you must change it before you can login to the ECB. To change your password, go to the ECB login page (see below) and click on the link to the "Council Member Change Password Page." Use the NIDDK-issued password as the "Old Password," and follow the instructions on this page to change your password to a password of your choosing. If you have problems changing your password, please contact Theresa Smith (theresa.smith@nih.gov 301-443-9908).

If you have entered an incorrect USER NAME, you can click on CLEAR, and enter the information again.

How Do I Use the System?

When you log on to the ECB, you will go directly to the Search For Projects tab. The Search Criteria appear in a list on the left of the screen; you can use this menu to move quickly through the sections of the search screen. Clicking on the name of any search item will provide you with help for that item.

PLEASE NOTE that when moving through the screens in the ECB it is best to use the small red arrows in the upper left hand corner of your screen rather than the "Back" button on your browser.

Note that in the Basic Search Options portion of the Search screen, there is an item entitled: **Output Option.** There are two choices: Standard Project List and Resumé Project List. A search using the Standard Project List format will return a list containing the following information:

- Project (or grant) number
- Principal Investigator (PI) name
- Project Title
- Request for Application (RFA) or Program Announcement (PA) number
- Percentile
- Priority score
- Study section name
- Institute or Center (IC) Program Class Code
- PI's institution

The Resume Project List retrieves the "Summary of Review and Discussion" section of the summary statement in addition to the items in the Standard Project List. This version of the Project List provides a useful overview of the review of a single application or group of applications.

How do I initiate a search?

Commonly searched items are located near the top of the Search screen. Searching is very flexible. Please note that all searches default to applications on which NIDDK is the primary Institute. If you are looking for an application assigned to another NIH Institute or Center you will need to select either "Primary and Dual Projects" or "Dual Projects only" in the Review/Program Section of the Search screen.

Conduct a search by inserting the particular criteria (Principal Investigator's name; Application number; Study Section, etc.) (Examples are provided below.)

- To search for a specific summary statement, enter either the application number or the Principal Investigator's last name in the appropriate box. You do not need to enter the entire grant number or full PI name; the system will find all applications that meet your criteria.
- To search for a group of summary statements that meet certain search criteria (such as all the applications reviewed by a particular Scientific Review Group (SRG), projects in a range of priority scores or percentiles, or all applications reviewed in response to a particular RFA or any other combination of information), simply enter that information in the appropriate boxes.
- To search for all applications on a specific scientific topic, simply enter the appropriate term in the boxes labeled "Summary Text Contains." This search criterion has two boxes and a dropdown menu between them that allows use of a Boolean logical operator (*AND*, *OR*, and *NOT*) to connect two character strings. Note: If one is searching for a topic such as "endocrine disruptors" consider the two words as a single character string and enter both words in the left box separated by a space rather than one in each box. You may use these fields to search the summary statement, the Project Title, or both of these items.

To initiate a new search, click on the **Clear Criteria** button. This will remove all prior search criteria except for the defaults in percentile and priority score. Clicking on the **Default Criteria** will reset all criteria to their default values.

SEARCH CRITERIA EXAMPLES

Principal Investigator (PI): In the PI/Institution section, enter the first several letters of the PI's last name in the box labeled "Principle Investigator Starts With:" For example, searching for "**Ham**" will return matches for Hamilton, Hammerman, Hammes, Hampe, etc. The more complete the name, the more exact will be the search results.

Scientific Review Group (SRG): In the Review/Program section of the search screen, type the three-or four-character abbreviation of the SRG (e.g., MET, NTN, CVB) in the field labeled "Scientific Review Group Contains". If you are looking for an application that was reviewed in a Special Emphasis Panel, please enter information in the boxes labeled "Special Emphasis Panel." For example, if you enter "DK" in the first box for this search item, the search will return all applications reviewed in NIDDK Special Emphasis Panels (ZDK).

Program Code (PCC): It is important to enter the Program Class Codes correctly. All NIDDK Program Class Codes consist of 8 characters: three characters, a blank space, and then four characters. For example, to search for Obesity Special Projects (Program Class Code = **NBH OBSP**), place **NBH** in the first three boxes. Leave the next box blank and enter OBSP in the remaining 4 boxes.

Application/Grant Number: The identification number is commonly referred to as the application number or grant number, depending on its processing status. The identification number consists of several parts, each having a distinct meaning. The following example shows the parts of an ID number assigned to an amendment (A1) to a supplemental (Type 3) application for a traditional research project (R01) referred to the National Cancer Institute (CA). The number further identifies the application serially as the 65412st new proposal submitted to the National Cancer Institute and indicates that this is the first supplemental application (S1) to the fourth year (-04) of support to this project.

Explanation of Grant application/award identification NUMBERING system:

Application	Activity Code	Administering Organization	Serial Number	Suffixes	
Туре				Grant Year	Other
3	R01	CA	65412	08	S1A1

- **Application Type Code:** A single-digit code identifying the type of application received and processed. The codes are as follows:
- 1 New
- 2 Competing Continuation
- 3 Supplement
- 4 Extension
- 5 Noncompeting Continuation
- 6 Change of Institute or Division
- 7 Change of Grantee or Training Institution

- 8 Change of Institute or Division (noncompeting continuation)
- 9 Change of Institute or Division (competing continuation)
- **Activity Code:** A three-digit code identifying a specific category of extramural activity (e.g., R01, R03, R33, T32, F33, R44, U01).
- Administering Organization Code (Also referred to as an IC Code or Admin PHS Org Code): A two-letter code identifying the primary NIH Institute or Center to which the application is assigned. In the above example, "CA" refers to the National Cancer Institute.
- Serial Number: A six-digit number generally assigned sequentially to a series within an NIH Institute or Center
- **Suffixes:** A field composed of the following components:

Grant year. A two-digit number indicates the actual segment or budget period of a project. The grant year number (01, 02, etc.) is preceded by a dash to separate it from the serial number; (e.g., AI 12345-02 or CA 00900-04). The grant year number is increased by one for each succeeding renewal year. Thus, the 04 year suffix in the example above identifies a grant in its fourth year.

Supplement. The letter "S" and related number identify a particular supplemental record (e.g., S1, S2). Supplement designations follow the grant year or the amendment designation, as the case may be (e.g., AI 12345-01S1 and CA 00900-04A1S2).

Amendment. The letter "A" and related number identify each amended application (e.g., A1, A2, etc.). Amendment designations follow the grant year or the supplement designation, as the case may be (e.g., DE 34567-02A1 and HL 45678-01S1A2).

Text Search: A text word search retrieves applications containing one or two search terms. The search is performed against the summary statement narrative and the Project Title and may take slightly longer to return the results. Submitting a search with an entry in the first box will find all summary statements and/or Project Titles containing that single word anywhere in the text. To enter two text words, select the correct Boolean logical operator (*AND*, *OR*, *NOT*) from the drop-down menu between the two text boxes.

Priority Score/Percentile: The system sets a default priority score and percentile to focus on the applications being reviewed by the Advisory Councils. The default for the percentile is between 00 and 30 and for the priority score, between 100 and 300. These defaults can be deleted or changed. Score ranges can be cleared by clicking the "Clear Scores" button below the data entry boxes. If you wish to enter different ranges, highlight the contents of these boxes and enter different numbers.

ADVANCED SEARCH CRITERIA EXAMPLES

Summary Statements Released Since: A frequent user of the system will be able to retrieve summary statements released into the database since the last time the user logged into the system. For example, to retrieve all summary statements since January 15, 2008, the entry would be 01/15/2008 (mm/dd/yyyy). You can also select applications based on whether or not the summary statement has been released by selecting the appropriate option in the drop-down box.

RFA/PA Number: NIDDK will provide its Council members with valid RFA/PA numbers. **Please** use the format as provided on the search screen in the Application ID section. **Please note** that if you

are interested in Roadmap applications, there is a radio button in the Basic Search Options section that allows you to include only Roadmap applications in your search.

Direct Cost Recommended: In the Review/Program Section, you can search for applications based on specified budget amounts. For example, entering **1000000** and selecting "Greater Than or Equal To" from the drop-down menu will retrieve a list of applications with budgets of one million dollars or more.

Special Selects: The Special Selects Section provides options for searching on several different criteria. You may search on one criterion or a combination of criteria. **Foreign applications** are those applications from organizations outside the boundaries and territories of the United States. In the Special Selects Section, check the box 'Foreign Grants' to retrieve a list of summary statements of all foreign applications. **Phase 3 Clinical Trials** are identified by the Initial Review Group. **AIDS** identifies applications involving AIDS-related research. You may also search for applications with various human or animals subjects concerns.

COMPLETING YOUR SEARCH

Once you are satisfied with the search criteria, click the Search button at the top of the page. **Please note** that there is a default score range of 0 to 30 PERCENTILE and 100 to 300 PRIORITY SCORE. If you need to search ALL applications, please **clear** these values prior to running your search.

SEARCH RESULTS

When a search is completed a hit list will be displayed with the search criteria listed at the top. The hit list will include all data on all applications that meet the search criteria you have selected. The search criteria will be listed at the top of the list of applications for easy reference.

The hit list is compiled as a table with one application per line. You may increase or decrease the number of applications displayed on the page by using the Set Records per page display in the upper left corner. The list contains the following information for each application:

Count Sequence number of applications as retrieved Email A link to the Program Officer's email address

Project Number Type, activity, and serial number

RFA/PA The RFA or PA announcement number, if any, with a link to the

Program Announcement in the NIH Guide for Grants and Contracts

PI Name Name of Principal Investigator

Percentile Percentile rank
Priority Priority score

Project Title Title of research application

Study Section Scientific Review Group, with a link to the Study Section roster

IC-Prog Code Program Class Code for the primary IC

Institution Applicant organization

VIEWING SUMMARY STATEMENTS

To view a particular summary statement click on the project number. The next screen will be the complete summary statement. **Note**: Each hit list will list all applications that satisfy the search criteria whether or not the summary statement is currently available. For Netscape users, the grant number will be a different color (usually blue) and underlined if the summary statement is available.

Also, there will be a check box on the left margin (see instructions below on downloading one or more summary statements for offline reading).

The Electronic Council Book allows you to retrieve and download groups of summary statements. In addition, the user now has the ability to selectively "tag" and "untag" items in the hit list by checking the boxes on the left margin. This allows the user to create highly customized hit lists for the purpose of downloading summary statements.

Summary statements may be retrieved in several ways:

- Download one or more summary statements as a single PDF file that can be printed locally (you
 will need Adobe Acrobat Reader on your computer to use this feature). To download a group of
 summary statements as a single PDF, check the boxes on the left margin for all applications you
 wish to include.
- Download a collection of summary statements as a "Zip" file from which individual summary statements can be viewed or printed. You will need a program that extracts Zip files in order to view the summary statements. To download a group of summary statements as a single Zip file, check the boxes on the left margin for all applications you wish to include.
- View individual summary statements in the browser without distracting page headers embedded
 in the text. To view a single summary statement in your browser window, click on the project
 number.

VIEWING IRG/SRG ROSTERS

To view the roster of members for a particular Study Section, simply click on the SRG identifier on the hit list. The IRG identifier is adjacent to the application of interest.

For assistance please contact:

Theresa Smith, theresa.smith@nih.gov or 301-443-9908.

Grant Review-Related Policies

Foreign Organizations

In addition to the regular review criteria, foreign applications are evaluated in terms of special opportunities for furthering research programs through the use of special talents, resources (human subjects, animals, diseases, equipment or technologies), populations or environmental conditions in the applicant country which are not readily available in the United States or which provide augmentation of existing United States resources. In addition, it should be noted whether similar research is being done in the United States and whether there is a need for additional research in the area of the proposal. These special review criteria are not applied to applications from domestic institutions that include a significant foreign component.

Research Involving Human Subjects

The rights of all human subjects involved in NIH-supported research are of paramount importance to the Federal Government. Safe-guarding these rights is primarily the responsibility of the institution that receives or is accountable for the funds awarded for support of the research. However, NIH also relies on its scientific review groups (SRGs) and National Advisory Councils or Boards to evaluate all applications and proposals involving human subjects for compliance with the Department of Health and Human Services human subject regulations (Code of Federal Regulations, Title 45 Part 46).

There are several considerations for review of applications involving human subjects. These can be clustered into two broad areas: Protection of subjects from research risks; and the inclusiveness of the study population. Protection issues include questions regarding safety and welfare of the subjects, including data and safety monitoring where applicable. Inclusion issues reflect the appropriate involvement of women, minorities and children.

SROs now assign inclusion codes informed by the reviewer critiques and discussion at the review meeting to applications to indicate their judgment as to compliance with these concerns (*see* Inclusion Codes below). The evaluation by Council will take into consideration the risks to the subjects, the adequacy of protection against these risks, the potential benefits of the proposed research to the subjects and others, and the importance of the knowledge to be gained.

NIH will fund research covered by the regulations only if the institution has filed an assurance with the Office for Human Research Protections (OHRP) and has certified that the research has been approved by an institutional review board (IRB), a board at the requesting institution formed solely for this purpose.

More detailed instructions for reviewing grant applications involving human subjects, and exemptions, are available at the following URL:

https://grants.nih.gov/grants/peer/guidelines_general/Guidelines_for_the_Review_of_the_Human_Su bjects.pdf.

Definitions:

Human subjects: Federal regulations define "human subject" as a "living individual about whom an investigator obtains (1) data through intervention or interaction with the individual, or (2) identifiable private information." The regulations extend to the use of human organs, tissue and body fluids from individually identifiable human subjects as well as to graphic, written, or recorded information derived from individually identifiable human subjects. A subset of research involving human subjects may qualify for exemption, but justification must be provided under the heading "Protection of Human Subjects from Research Risk". The use of autopsy materials is governed by applicable state and local law and is not directly regulated by the Federal human subject regulations.

Clinical research is defined as: (1) Patient-oriented research, i.e., research conducted with human subjects (or on material of human origin such as tissues, specimens and cognitive phenomena) for which an investigator (or colleague) directly interacts with human subjects. (Excluded from the definition of patient-oriented research are in vitro studies that utilize human tissues that cannot be linked to a living individual.) Patient-oriented research includes: (a) mechanisms of human disease, (b) therapeutic interventions, (c) clinical trials, and (d) development of new technologies; (2) Epidemiologic and behavioral studies; or (3) Outcomes research and health services research.

A Clinical Trial is operationally defined as a research study in which one or more human subjects are prospectively assigned to one or more interventions (which may include placebo or other control) to evaluate the effects of those interventions on health-related biomedical or behavioral outcomes.

An NIH-defined Phase III clinical trial is a broadly based prospective clinical investigation for the purpose of investigating the efficacy of the biomedical or behavioral intervention in large groups of human subjects (from several hundred to several thousand) by comparing the intervention to other standard or experimental interventions as well as to monitor adverse effects, and to collect information that will allow the intervention to be used safely.

A *valid analysis* is required in phase III clinical trials. This means an unbiased assessment. Such an assessment will, on average, yield the correct estimate of the difference in outcomes between two groups of subjects. Valid analysis can and should be conducted for both small and large studies. A valid analysis does not need to have a high statistical power for detecting a stated effect. The principal requirements for ensuring a valid analysis are:

- Allocation of study participants of both sexes/genders and different racial/ethnic groups to the intervention and control groups by an unbiased process such as randomization,
- Unbiased evaluation of the outcome(s) of study participants, and
- Use of unbiased statistical analyses and proper methods of inference to estimate and compare the intervention effects among the sex/gender and racial/ethnic groups.

Research Conducted in a Foreign Country: For foreign awards, and domestic awards with a foreign component, the NIH policy on inclusion of women and minority groups in research is the same as that for research conducted in the U.S. If there is scientific rationale for examining subpopulation group differences within the foreign population, investigators should consider designing their studies to accommodate these differences

Children: For purposes of this policy, a child is an individual under the age of 18 years. This definition does not affect the human subject protection regulations for research on children (45 CFR 46) and their provisions for assent, permission, and consent, which remain unchanged. State laws

define what constitutes a "child," for the purpose of determining whether or not a person can legally consent to participate in a research study.

Exemption from Human Subjects Regulations

If the applicant designates an exemption from the human subjects regulations, reviewers should evaluate the information provided to determine if the designated exemption is appropriate. With regard to exemption 4, although reviewers need not evaluate questions related to research risks or the inclusion of women and minorities, the appropriate inclusion of children *DOES* need to be addressed for these applications.

Protection of Human Subjects

If the proposed research involves human subjects, and does not qualify as being exempt, it is considered clinical research (see definition above) and reviewers must evaluate the plan to protect human subjects. The applicant's research plan should include four elements under the heading "Protection of Human Subjects from Research Risk". Reviewers are asked to evaluate each of the four elements:

- Risks to the subjects
- Adequacy of protection against risks
- Potential benefit of the proposed research to the subjects and others
- Importance of the Knowledge to be gained
- Data and Safety Monitoring Plan/Board

Additional information concerning the NIH Policy on Inclusion of Women and Minorities as Participants in Research Involving Human Subjects is available at http://grants.nih.gov/grants/funding/women_min/women_min.htm.

Women and Minorities in Study Populations

There are clear scientific and public health reasons for including women and minorities in study populations. Accordingly, the NIH requires that applications for clinical research give appropriate attention to including members of these groups in studies. If this is impossible (for example, because the disease occurs only in men or is prevalent only in one racial or ethnic group), or is inappropriate with respect to the health of the subjects, a strong scientific rationale or other well-supported justification is necessary. Unless the rationale/justification is compelling, NIH will not fund such applications. This policy covers research grants, cooperative agreements, and research contracts.

SRGs assign codes to applications to indicate their judgment as to compliance with these concerns. These inclusion codes, described below, appear on the summary statement.

Council will consider the degree to which the applicants have addressed this policy when it evaluates applications. Applications with inadequate representation of women and minorities and/or inadequate justification may be deferred, approved based on portfolio considerations, or approved with the condition that staff will ensure compliance with the policy before award. Council will be subsequently notified of awards for these types of approvals.

The NIH will not award research grants, cooperative agreements, or contracts to applicants who do not follow this policy.

Inclusion of Children as Participants in Research

To ensure that adequate data is developed to support the treatment of modalities for disorders and conditions that affect children, as well as adults, it is the policy of NIH that children (i.e., individuals 18 years of age and under) must be included in all human subjects research conducted or supported by the NIH. Children will not be excluded from this policy unless there are scientific and ethical reasons not to include them in the research being conducted; well-supported justification for the exclusion will be necessary. This policy applies to all research involving human subjects, **including** research that is otherwise "exempt". Proposals for research involving human subjects **must** include a description of plans for including children. If children will be excluded from the research, the application must present an acceptable justification for the exclusion.

The section in the application titled "Inclusion of Children" should provide either a description of the plans to include children and a rationale for selecting or excluding a specific age range of child, or an explanation of the reason(s) for excluding children as participants in the research. When children are included, the plan **must** also include a description of the expertise of the investigative team for dealing with children at the ages included, of the appropriateness of the available facilities to accommodate the children, and the inclusion of a sufficient number of children to contribute to a meaningful analysis relative to the purpose of the study.

Specific exclusionary circumstances and other pertinent information on the inclusion of children in NIH-supported research may be found at: http://grants.nih.gov/grants/guide/notice-files/not98-024.html.

Use of Human Embryonic Stem Cells In NIH-Supported Research

The National Institutes of Health (NIH) has published final "National Institutes of Health Guidelines for Human Stem Cell Research" (Guidelines).

On March 9, 2009, President Barack H. Obama issued Executive Order 13505: *Removing Barriers to Responsible Scientific Research Involving Human Stem Cells*. The Executive Order states that the Secretary of Health and Human Services, through the Director of NIH, may support and conduct responsible, scientifically worthy human stem cell research, including human embryonic stem cell (hESC) research, to the extent permitted by law.

These Guidelines implement Executive Order 13505, as it pertains to extramural NIH-funded stem cell research, establish policy and procedures under which the NIH will fund such research, and helps ensure that NIH-funded research in this area is ethically responsible, scientifically worthy, and conducted in accordance with applicable law. Internal NIH policies and procedures, consistent with Executive Order 13505 and these Guidelines, will govern the conduct of intramural NIH stem cell research.

EFFECTIVE DATE: These Guidelines are effective on July 7, 2009.

SUMMARY OF PUBLIC COMMENTS ON DRAFT GUIDELINES: On April 23, 2009 the NIH published draft Guidelines for research involving hESCs in the Federal Register for public comment, 74 Fed. Reg. 18578 (April 23, 2009). The comment period ended on May 26, 2009.

The NIH received approximately 49,000 comments from patient advocacy groups, scientists and scientific societies, academic institutions, medical organizations, religious organizations, and private

citizens. The NIH also received comments from members of Congress. Read the NIH response to the public comments that addressed provisions of the Guidelines at http://stemcells.nih.gov/policy/Pages/2009guidelines.aspx.

NATIONAL INSTITUTES OF HEALTH GUIDELINES FOR RESEARCH USING HUMAN STEM CELLS

I. Scope of Guidelines

These Guidelines apply to the expenditure of National Institutes of Health (NIH) funds for research using human embryonic stem cells (hESCs) and certain uses of induced pluripotent stem cells (See Section IV). The Guidelines implement Executive Order 13505.

Long-standing HHS regulations for Protection of Human Subjects, 45 C.F.R. 46, Subpart A establish safeguards for individuals who are the sources of many human tissues used in research, including non-embryonic human adult stem cells and human induced pluripotent stem cells. *When research* involving human adult stem cells or induced pluripotent stem cells constitutes human subject research, Institutional Review Board review may be required and informed consent may need to be obtained per the requirements detailed in 45 C.F.R. 46, Subpart A. Applicants should consult http://answers.hhs.gov/ohrp/categories/1562.

It is also important to note that the HHS regulation, *Protection of Human Subjects*, 45 C.F.R. Part 46, Subpart A, may apply to certain research using hESCs. This regulation applies, among other things, to research involving individually identifiable private information about a living individual, 45 C.F.R. § 46.102(f). The HHS Office for Human Research Protections (OHRP) considers biological material, such as cells derived from human embryos, to be individually identifiable when they can be linked to specific living individuals by the investigators either directly or indirectly through coding systems. Thus, in certain circumstances, IRB review may be required, in addition to compliance with these Guidelines. Applicant institutions are urged to consult OHRP guidances at http://www.hhs.gov/ohrp/policy/index.html#topics

To ensure that the greatest number of responsibly derived hESCs are eligible for research using NIH funding, these Guidelines are divided into several sections, which apply specifically to embryos donated in the U.S. and foreign countries, both before and on or after the effective date of these Guidelines. Section II (A) and (B) describe the conditions and review processes for determining hESC eligibility for NIH funds. Further information on these review processes may be found at www.NIH.gov. Sections IV and V describe research that is not eligible for NIH funding.

These guidelines are based on the following principles:

- 1. Responsible research with hESCs has the potential to improve our understanding of human health and illness and discover new ways to prevent and/or treat illness.
- 2. Individuals donating embryos for research purposes should do so freely, with voluntary and informed consent.

As directed by Executive Order 13505, the NIH shall review and update these Guidelines periodically, as appropriate.

II. Eligibility of Human Embryonic Stem Cells for Research with NIH Funding

For the purpose of these Guidelines, "human embryonic stem cells (hESCs)" are cells that are derived from the inner cell mass of blastocyst stage human embryos, are capable of dividing without differentiating for a prolonged period in culture, and are known to develop into cells and tissues of the three primary germ layers. Although hESCs are derived from embryos, such stem cells are not themselves human embryos. All of the processes and procedures for review of the eligibility of hESCs will be centralized at the NIH according to the guidelines available at http://stemcells.nih.gov/policy/Pages/2009guidelines.aspx.

III. Use of NIH Funds

Prior to the use of NIH funds, funding recipients should provide assurances, when endorsing applications and progress reports submitted to NIH for projects using hESCs, that the hESCs are listed on the NIH registry.

IV. Research Using hESCs and/or Human Induced Pluripotent Stem Cells That, Although the Cells May Come from Eligible Sources, is Nevertheless Ineligible for NIH Funding

This section governs research using hESCs and human induced pluripotent stem cells, i.e., human cells that are capable of dividing without differentiating for a prolonged period in culture, and are known to develop into cells and tissues of the three primary germ layers. Although the cells may come from eligible sources, the following uses of these cells are nevertheless ineligible for NIH funding, as follows:

- A. Research in which hESCs (even if derived from embryos donated in accordance with these Guidelines) or human induced pluripotent stem cells are introduced into non-human primate blastocysts.
- B. Research involving the breeding of animals where the introduction of hESCs (even if derived from embryos donated in accordance with these Guidelines) or human induced pluripotent stem cells may contribute to the germ line.

V. Other Research Not Eligible for NIH Funding

- A. NIH funding of the derivation of stem cells from human embryos is prohibited by the annual appropriations ban on funding of human embryo research (Section 509, Omnibus Appropriations Act, 2009, Pub. L. 111-8, 3/11/09), otherwise known as the Dickey Amendment.
- B. Research using hESCs derived from other sources, including somatic cell nuclear transfer, parthenogenesis, and/or IVF embryos created for research purposes, is not eligible for NIH funding.

See also: NIH research Involving Introduction of Human Pluripotent Cells in to Non-Human Vertebrate Animal Pre-Gastrulation Embryos: http://grants.nih.gov/grants/guide/notice-files/NOT-OD-15-158.html

Research Involving Vertebrate Animals

Although the recipient institution and investigator bear the major responsibility for the proper care and use of animals, NIH relies on its staff, scientific review groups, and Advisory Councils to share this responsibility and review research activities for compliance with the Public Health Service policy

for the care and use of vertebrate animals. The general intent of the law and policy can be summarized as two broad rules:

- The project should be worthwhile and justified on the basis of anticipated results for the good of
 society and the contribution to knowledge, and the work should be planned and performed by
 qualified scientists;
- Animals should be confined, restrained, transported, cared for, and used in experimental
 procedures in a manner to avoid any unnecessary discomfort, pain, or injury. Special attention
 must be provided when the proposed research involves dogs, cats, nonhuman primates, large
 numbers of animals, or animals that are in short supply or are costly.

Any comments or concerns that scientific review group members may wish to express regarding the appropriateness of the choice of species and numbers involved, the justification for their use, and the care and maintenance of vertebrate animals used in the project will be discussed in a special note in the summary statement. A "concern" is a scientific review group finding regarding animal care or use that requires resolution by program staff prior to award; a "comment" is a scientific review group observation that will be communicated in the summary statement as a suggestion to the principal investigator. For projects involving animals, the species used is separately identified at the end of the "Description" in the summary statement. Any comments or concerns that members have regarding treatment and welfare of research animals used in the project are explained in a separate paragraph in the summary statement. Any questions Council members may have should be directed to National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) staff.

SRGs assign codes to applications to indicate their judgment as to compliance with these concerns (*see* Inclusion Codes below).

No research involving animals may be conducted or supported by NIH until the institution proposing the research has provided a written assurance acceptable to NIH.

Inclusion Codes

Gender, Minority, and Children Codes

An NIH-Defined CLINICAL TRIAL? Y Or N

GENDER CODE	MINORITY CODE	CHILDREN CODE:
First character = G	First character = M	First character = C
Second character: 1 = Both Genders	Second character: 1 = Minority & Non-minority	Second character: 1 = Both children & adults
2 = Only Women 3 = Only Men	2 = Only Minority 3 = Only Non-minority	2 = Only children 3 = No children included
4 = Gender Unknown	4 = Minority Representation Unknown	4 = Representation of children unknown
Third character: A = Scientifically Acceptable	Third character: A = Scientifically Acceptable	Third character: A = Scientifically Acceptable

U = Scientifically	U = Scientifically	U = Scientifically
Unacceptable	Unacceptable	Unacceptable

Vertebrate Animal Codes

Code 10	No Live Vertebrate Animals Involved
Code 30	Live Vertebrate Animals Involved, no SRG Comments or Concerns
Code 44	Animals Involved - Certified - SRG Concerns
Code 45	Animals Involved - No Assurance - No SRG Comments or Concerns
Code 47	Animals Involved - No Assurance, SRG Comments
Code 49	Animals Involved - No Assurance, SRG Concerns

Biomedical Safety

The investigator and the sponsoring institution are responsible for protecting the environment and research personnel from hazardous conditions. As with research involving human subjects, reviewers are expected to apply the collective standards of the professions represented within the scientific review group in identifying potential hazards, such as inappropriate handling of oncogenic viruses, chemical carcinogens, infectious agents, radioactive or explosive materials, or recombinant DNA.

If applications pose special hazards, these hazards will be identified and any concerns about the adequacy of safety procedures highlighted as a special note (**BIOHAZARD**) on the summary statement.

In the case of research involving human immunodeficiency virus, researchers are expected to follow the latest Centers for Disease Control and Prevention recommendations and guidelines for health care workers and laboratory personnel. In research involving recombinant DNA, assessment of an applicant's compliance with Public Health Service guidelines is the responsibility of the NIH Office of Recombinant DNA Activities.

No award will be made until all concerns about hazardous procedures or conditions have been resolved to the satisfaction of the NIH.

Advisory Council Policy/Logistical Documents

Confidentiality

Review materials and proceedings of review meetings are privileged communications prepared for use only by consultants and staff. Members of Council must return the material given to them to the Executive Secretary at the conclusion of the meeting. All materials members have received at home or at their institutions also must be returned for disposition.

There should be no direct communication between members of Council and applicants. In addition to legal considerations, pre-mature notification of recommendations to applicants often leads to misinterpretation and distortion of discussions and recommendations.

As soon after the Council meeting as possible, applicants will be notified by NIDDK staff about the status of their applications.

Conflict of Interest

NIH takes extreme precautions to avoid placing Council members in situations where there might be an actual or apparent conflict of interest. Thus, at each Council meeting, procedures are delineated to avoid such conflicts.

A member must be absent from the meeting room during review of an application submitted by an institution, or a component of a system of institutions, in which the member or member's spouse, parent, child, partner, or close professional associate is an employee, or in which there is a directive or consultative relationship or financial interest. This includes ownership of stock in, or being a consultant for a for-profit organization. A reviewer should also leave the room during discussion of an application if being present would give the **appearance** of a conflict of interest. Examples would be an application from a for-profit organization that provides substantial financial funding to the reviewer's organization or laboratory.

The NIH has been granted a regulatory waiver by the Office of Government Ethics so that faculty of multi-campus institutions of higher education who serve as experts or consultants to DHHS may participate in matters affecting one campus of a state multi-campus institution if the expert's disqualifying financial interest is employment with no multi-campus responsibilities at a separate campus.

Additionally, a Council member should not participate in the deliberations and actions on any application from a recent student, a recent teacher, a recent collaborator, or a close personal friend. Further, a member should not take part in the discussion of an application from a scientist with whom the member has had long-standing differences which reasonably could be viewed as affecting the member's objectivity.

Council members present at each Council meeting sign a statement certifying that they did not participate in the discussion of, or vote on, any application from their own institution or an institution in which they have a financial interest.

Though the staff attempts to identify possible conflicts of interest and bring them to the attention of the Chairperson, the National Diabetes and Digestive and Kidney Diseases Advisory Council needs the assistance of members to ensure that such conflicts do not arise.

Lobbying

Technically, Council members are Government employees and governed by DHHS standards of conduct during the days they are being paid for duty. Thus, during the full midnight-to-midnight period of each of these days, members cannot transact personal business, enter into personal activities with the Legislative or Executive branches of Government, or discuss with NIH staff matters pertaining to their institution's federally funded activities. During this same period, members of Council also must not discuss with members of Congress proposed or pending legislation or appropriations that concern the Public Health Service or DHHS.

Freedom of Information and Privacy Act

The Freedom of Information Act (FOIA) of 1967 and the Privacy Act of 1974 have significantly affected the NIH review and disclosure processes. Under FOIA, a person may obtain access to any Government record, including records about himself or herself, unless the records fall within one of nine exemptions to the Act. The Privacy Act, on the other hand, is limited to records about individuals which are maintained in a "system of records" from which information is retrieved by his or her name or other personal identifier.

For example, under FOIA, third parties may receive copies of awarded grant applications, but they may not receive copies of applications that were scored but not funded or applications that were not recommended for further consideration. Also, under the Privacy Act, Principal Investigators may have access, upon request, to documents generated during the review of their grant applications. Such documents include site visit reports and summary statements, but not individual reviews. Reviewers' written comments are not retained after their substance has been incorporated into summary statements or site visit reports.

Emoluments Clause of the U.S. Constitution

The Emoluments Clause of the United States Constitution applies to all U.S. Government employees, including most Special Government Employees (SGE's). The Clause places constitution limitations on a SGE advisory committee member's employment by a foreign government, including political subdivisions of a foreign government. This provision has particular relevance to positions with foreign universities that are government-operated rather than private institutions. United States Constitution, art. I 9, cl. 8.

The Emoluments Clause **applies at all times during an SGE's appointment**, and not just the periods of time during their actual duty on behalf of NIH. During an SGE's advisory committee appointment, they cannot be an employee of a foreign government entity. Without the consent of Congress, they cannot receive any present, emolument, office, or title of any kind whatsoever from a foreign state. They cannot accept concurrent outside employment with a foreign government or a political subdivision of a foreign government, including a public university or commercial enterprise* owned or operated by a foreign government. The constitutional ban does not apply to employment with, or presents or emoluments received from, a foreign privately owned corporation or an international organization. An emolument includes salary, honoraria, transportation, per diem allowances, household goods shipment costs, and housing allowances.

Under the Foreign Gifts and Decorations Act, 5 U.S.C. 7342, Congress has authorized employees, including advisory committee members, to accept items from a foreign government that do not exceed minimal value (currently \$350). The Act authorizes acceptance of items over minimal value when such items consist of an educational scholarship, medical treatment, or expenses for travel taking place entirely outside the United States, thus permitting hotel and meal reimbursements in the foreign country, but not airfare for flights originating or terminating in the United States. The statutory restriction on gifts over minimal value extends to the spouse and dependents of the employee.

The restrictions of the Emoluments Clause are constitutional, and are not matters of policy that can be waived or reconsidered. Questions regarding possible conflicts relating to the Emoluments Clause may be referred to the Deputy Ethics Counselor for the institute the SGE committee member advises, or to the Committee's Executive Secretary.

* A list of foreign entities that are considered independent of their foreign government may be found at: http://ethics.od.nih.gov/Topics/foreign.htm

The Freedom of Information and Privacy Acts

	FREEDOM OF INFORMATION REFORM ACT OF 1986 (P.L. 93-570)	PRIVACY ACT OF 1974 (P.L. 93-579, DEC. 1974)	
PURPOSE	To allow access by the public to government records.	To provide safeguards for an individual against invasion of personal privacy.	
SCOPE	Applies to all Federal agencies, including executive and military departments and independent regulatory agencies.	Applies to all Federal agencies, including executive and military departments and independent regulatory agencies.	
	Pertains to:	Pertains to:	
	methods whereby public may obtain records;	any system of records from which information is retrieved by an individual's name, identifying number, or other identifying particular assigned to	
	• types of records available to the public;	an individual;	
	exemptions that permit agencies to withhold certain types of records	any system of records maintained by a government contractor if the agency provides by contract for the "operation by or on behalf of the agency to accomplish an agency function."	
REQUIREMENTS	Requires Federal agencies to:	Requires Federal agencies to:	
	publish in the Federal Register organizational descriptions and locations of agency records;	permit individuals to determine what records pertaining to them the agency collects, maintains, uses, or disseminates;	
	make all Agency opinions, orders, policy statements, manuals, and instructions available for public inspection and copying;	permit individuals to prevent records pertaining to them obtained for a particular purpose from being used or made available for another purpose without their consent;	
	publish rules stating time, place, fees (as authorized), and procedure to be followed for requesting records;	 permit individuals to gain access to information pertaining to them in agency records, to have a copy made of their records, and to correct or amend their records; 	
	 make records promptly available to any person following the established guidelines for requesting such records; 	collect, maintain, use, or disseminate records of identifiable personal information in a manner that assures that such action is for a necessary and lawful purpose, that the information is current and accurate for its intended use, and that adequate safeguards are provided to	
	make available for public inspection a record of the final votes of each member in every Agency proceeding, except as exempted;		
	 release all portions of records not covered by FOIA exemptions. Exemptions that may apply to grants records include those permitting the deletions of commercial information, information that would invade personal privacy, and internal government options and advice. 	 prevent misuse of information; be subject to civil or criminal sanctions as a result of willful or intentional actions which violate any individual's rights under the Act; publish annually a notice in the Federal Register indicating the existence and 	
		character of the system records	
SUMMARY	Makes possible disclosure of policy, procedures, and records to the public.	Safeguards the privacy of individuals in the face of disclosure.	

Travel Procedures for NIDDK Advisory Council Members 2019

When you travel to the National Diabetes and Digestive and Kidney Diseases Advisory Council (NDDKAC) meeting, **you are considered a Government employee** of the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), and therefore traveling on official Government business. Your expenses are reimbursed according to Federal travel regulations.

In order for you to be reimbursed in a timely manner and to ensure that you will be reimbursed for your travel expenses, please be sure to read the information below.

Note: If you will **not be attending** the meeting, please call Dr. Karl Malik at (301) 594-8843 to inform him of your absence.

Overview of Expenses and Reimbursement

Allowable consultant expenses for members of NDDKAC are as follows: **Air/Rail Transportation.** Round-trip transportation (from home to Bethesda, Maryland, and back).

Ground Transportation. This includes costs for taxis (including a 15 percent tip), shuttle services, parking, tolls, subway fare, and any other reasonable transportation costs.

Travel by Privately Owned Vehicle. If you drive your car to the meeting or to the airport, you will be reimbursed for the miles, tolls, and parking expenses incurred. The current Government rate is \$0.54 per mile.

Hotel. You will be reimbursed for the Government room rate and associated taxes.

Meals and Incidental Expenses (M&IE). This is a fixed rate, currently \$76.00 per day for the Washington, D.C., metropolitan area. You will receive ¾ of the M&IE rate for a maximum of 2 travel days. For any non-travel days spent at the meeting, you will receive the full per diem less any meals provided.

Honorarium. You will receive a \$200.00 honorarium for each day or fraction of a day that you attend the Advisory Council meeting. These checks are processed separately using Electronic Funds Transfer.

Travel Instructions

Per Federal travel regulations, all Government employees are required to use their agency's travel management center. Therefore, you are required to book your air or train fare through Omega World Travel (OWT) and you must book coach class. Please mention you are attending the "NIDDK Advisory Council Meeting in Bethesda, Maryland".

It is the Council member's responsibility to contact Omega Travel at 855-326-5407 (M-F 7am-10pm; for after-hours emergencies please contact 855-326-5407) to confirm/change the travel reservation. All airline tickets will be processed as electronic tickets. When using Omega World Travel, the ticket will be paid for by the National Institutes of Health. When air/rail transportation is used, travelers must use the most economical means. All travel should be by the most direct route.

What do I need to do to make a change on my airfare so I can be reimbursed for additional expenses due to changes?

If you need to make a change on your airfare, you are required to contact OWT (see phone numbers above). We recommend that you carry their after-hours number with you in case you need to make a change to your airfare or train ticket.

What if I don't contact OWT? How will this affect my reimbursement?

Please note that if you book either business class for airfare and/or a train ticket, you will not be reimbursed. In addition, you cannot pay the difference for a change in your airfare or train ticket by paying the additional money in cash. Again, you must contact OWT; they will charge additional travel expenses to our government account. *Travelers who choose to not use Omega World Travel to make their travel reservations will not be reimbursed by NIH/NIDDK*.

Will I receive a confirmation from OWT of my airfare or train ticket reservations?

Yes. OWT will process your reservation with an electronic ticket and send you a confirmation notice via email. Retain this confirmation number.

Can I be reimbursed for rental car expenses?

Rental car expenses are rarely approved and must be pre-approved on the travel order. Under no circumstances will rental care expenses be reimbursed without prior authorization.

Can I be reimbursed for the expense of using a sedan instead of a taxi

You can always be reimbursed for taxis but not for use of a sedan.

What documents should I carry with me when I travel?

OWT's phone numbers in case you need to make a change in your itinerary

OMEGA WORLD TRAVEL Business Hours: (855) 326-5407

(M-F: 7am-10pm EST)

After-hours Emergency: (855) 326-5407

- A government-issued photo ID (license, passport, etc.)
- A **copy of your electronic ticket** with confirmation number.
- The **NIH travel order** to verify that you are traveling on official Government business. NIDDK will fax the travel order to you prior to your travel.

Hotel Information

NIH/NIDDK books and pays for hotel rooms for all Council members. Hotel room confirmation numbers will be submitted to you prior to your departure. Also please confirm your check-in and check-out dates, especially if arriving late. You will be lodging at the Hyatt Regency Bethesda.

Hyatt Regency Bethesda 7400 Wisconsin Avenue Bethesda, MD 20814 T: (301) 657-1234 F: (301) 657-6453

http://bethesda.hyatt.com/en/hotel/home.html?src=agn mls hr lclb blocal bethe

Expense Reimbursement

After completion of travel, Council members must file a Travel Expense Form (sample attached). It is necessary to include:

- Travel stubs or the travel itinerary showing the price of the ticket
- Other travel related receipts over \$75.00 (e.g., receipts for taxi fares, tolls, parking fees)
- Original hotel bill
- Rental car receipt (reimbursement must be pre-approved).

Travelers are reimbursed for three-quarters of a day's per diem on arrival and departure days. No receipts are needed. (See M&IE above.)

Travel Expense forms and receipts should be sent within 5 days of your complete travel to:

Bratati Chowdhury, Program Specialist Division of Extramural Activities National Institute of Diabetes and Digestive and Kidney Diseases Two Democracy Plaza, Room 7100 ex.10 6707 Democracy Boulevard Bethesda, MD 20892-5452

Once your completed Travel Expense Form with all receipts attached is received, you will be sent a travel voucher for your signature. The travel voucher is a document prepared at the conclusion of your trip itemizing all claims for reimbursement.

After the travel voucher is received at NIH, the payment will be deposited into your banking account within 14 business days in the amount indicated on the travel voucher as "NET TO TRAVELER."

Note: Your honorarium will be processed separately as noted above.

If you have any questions, please do not hesitate to contact Bratati at 301-594-8843 or email her at bratati.chowdhury@nih.gov.

NIDDK ADVISORY COUNCIL TRAVEL EXPENSE FORM

(NIDDK Advisory Council Meeting)

REQUIRED	RECEIPTS: (Please attach to this form)	
•	Travel Stubs/Itinerary with total price of ticket	\$
•	Original Hotel itemized receipt:	
	- Room Rate	\$
	- Hotel Taxes	\$
	- Phone Calls (\$5.00 per day are reimbursable)	\$
•	Other travel-related receipts over \$75.00	\$
•	Rental car (reimbursement must be pre-approved)	\$
OTHER REI	MBURSEABLE EXPENSES:	
•	Privately-Owned Vehicle (Number of Miles x \$0.58 cents)	\$
•	Parking Fees	\$
•	Taxis:	
	- From Residence to Terminal	\$
	- From Terminal to Hotel	\$
	- From NIH Campus to Terminal	\$
	- From Terminal to Residence	\$
	- Other	\$
•	Tolls	\$
•	Other miscellaneous expenses	\$
	(Please describe:)
Incidental Exp on official gov in travel. PRINT NAM	AIM ANY MEALS FOR REIMBURSEMENT. The amount of the senses (M&IE) reimbursed is set at a fixed rate of \$76.00 per per remnent business. You will receive 3/4 of the M&IE rate for the sense of the sense	r day while you are
SIGNATURE	DATE:	
	DAIE:	

RESPONSIBILITIES OF NIDDK ADVISORY COUNCIL MEMBERS

(A Cheat Sheet for New NIDDK Council Members)

I. Before the meeting

Early Concurrence

- All grant applications (excluding those from foreign organizations) which have no concerns noted that would represent a bar to award (e.g., for human subjects, animal welfare, biohazards, etc.) or need Special Council Review, will follow an expedited concurrence process.
- A few weeks prior to the meeting NIDDK will alert the early concurrence committee members that these applications are available in the Electronic Council Book (ECB).
- As a new member it is unlikely that you will be asked to be a member of the early concurrence committee, but during this process all Council members are provided the list of all applications eligible for early concurrence for review and any member may bring any of these applications to full Council consideration.

Bottom line: You may wish to spend a little time looking over the early concurrence list to see if you have any concerns--and if you do let Karl Malik know A.S.A.P.

Council Materials

- About ten days before the Council meeting Council Members are notified that materials for the meetings are available for their review.
- These materials are available via the ECB using the same access information that was earlier given for access to the early concurrence list.
- Scientific members are frequently asked in advance to review particular applications or proposed actions in the closed portion of the subcommittee meeting, and they are often provided additional materials.

<u>Bottom line:</u> Please thoroughly review these materials prior to the meeting & contact the appropriate NIDDK Division Director if you have any concerns or if you would like additional information.

Additional Requests

- Occasionally a Division Director, or other NIDDK staff member, will contact a Council member
 to request that they participate as a discussant of a presentation at an open portion of the meeting.
- If available, the slide set or additional materials will usually be provided to the Council member.

<u>Bottom line:</u> Please review these materials & come to the meeting prepared to participate as requested. Please be sure that <u>you understand & follow any specific guidance</u>—especially when considering appeals. NIDDK needs advice on the merit of the appeal, not the merit of the application.

Attendance

Members are encouraged to attend the entire Council meeting. Staff will work with you or your
assistant to arrange travel plans that will allow you plenty of time to catch your flight after the
meeting.

Bottom line: Please don't plan on leaving Council meetings early.

II. At the meeting

Closed Sessions

- Council members are requested to come prepared to fully participate in the closed sessions.
- Members are reminded that all matters discussed or materials available for discussion in closed sessions and the discussions themselves are confidential and should not be shared with anyone outside of the meeting.

Bottom line: What happens in closed session stays in closed session.

Open Sessions

- Council members are requested to come prepared to participate fully in the open sessions, including the discussions that follow presentations.
- Members are encouraged to provide specific feedback to NIDDK staff about any of the matters discussed or potential matters or issues they would like to hear discussed at a future meeting.
- Remember that <u>members of the public, of advocacy groups, and of the press may attend our Council meetings</u> and anything that you say in the open sessions of Council meetings could be reported.

Bottom line: Please interact & give us your perspective and advice, but be careful about seeming/being too prescriptive in open session and also please be careful in open session not to say anything that you (and we) might regret if it gets reported and appears in print.

III. After the meeting

Special Requests

- Occasionally Council members may be requested to review certain matters (for example, an appeal that arrived too late for consideration at the meeting) after the meeting.
- Please provide the requested advice within the timeframe allowed and treat all of these matters as confidential, just as you would were they are being considered within closed session.

Bottom line: *These matters are essentially an extension of the closed session.*

What do we really want from you?

- Your scientific expertise
- Your understanding of patient and clinical issues
- Your wise council about our general portfolio
- Your thoughts about NIH/NIDDK policies, the public landscape and help in avoiding pitfalls
- Your outreach and advocacy on behalf of NIH/NIDDK both within your community and to the public to explain the processes, the considerations, the rigor, and the fairness of how we do business and the important work that we support
- Your help in keeping NIDDK at the cutting edge of science and scientific administration

What should you be careful about?

- Keeping closed session materials and discussions confidential
- Paying attention to and avoiding/disclosing any real or apparent conflicts of interest as soon as they arise

- Advocating to elected officials while on official government travel
 - You are a special government employee when you are traveling to attend Council meetings and during this time you are not allowed to advocate!
- Keeping in mind that anything you say in the open sessions of the Council meeting (both the main sessions and open sessions of the sub-councils) could wind up in print
- Not appearing to be too prescriptive in your remarks You represent NIDDK's broad community rather than advocating for a particular segment of that community
 - o Sparking disease or research area wars is not in anyone's best interest

NIDDK Advisory Council Orientation Reference Links January 2019

General background information about Council

Advisory Council page on the web:

http://www.niddk.nih.gov/about-niddk/advisory-coordinating-committees/national-diabetes-digestive-kidney-disease-advisory-council/Pages/advisory-council.aspx

Advisory Council Charter:

https://www.niddk.nih.gov/-/media/Files/Advisory-Coordinating-Committees/NIDDK-Advisory-Council/NIDDK-Council-

Charter 508.pdf?la=en&hash=3901A7570B4BBD2ED690347BA34DE098

Advisory Council Operating Procedures:

http://www.niddk.nih.gov/about-niddk/advisory-coordinating-committees/national-diabetes-digestive-kidney-disease-advisory-council/operating-procedures/Pages/operating-procedures.aspx

Advisory Council Membership Roster:

http://www.niddk.nih.gov/about-niddk/advisory-coordinating-committees/national-diabetes-digestive-kidney-disease-advisory-council/members/Pages/advisory-council-members.aspx

General background information about NIDDK and funding

NIDDK Mission:

http://www.niddk.nih.gov/about-niddk/meet-the-director/mission-vision/Pages/mission-vision.aspx

• NIDDK Organization:

http://www.niddk.nih.gov/about-niddk/offices-divisions/Pages/default.aspx

NIDDK Division of Extramural Activities:

 $\frac{http://www.niddk.nih.gov/about-niddk/offices-divisions/division-extramural-activities/Pages/default.aspx}{}$

NIDDK Division of Intramural Research:

http://www.niddk.nih.gov/about-niddk/offices-divisions/division-intramural-research/Pages/default.aspx

• NIDDK Funding Policy:

 $\frac{http://www.niddk.nih.gov/research-funding/process/award-funding-policy/Pages/award-funding-policy.aspx}{}$

Administrative matters regarding Council membership

Confidentiality, Conflict of Interest & Lobbying
 (Ethics Training for Special Government Employees):
 https://www.oge.gov/Web/OGE.nsf/Resources/Special+Government+Employees

 Procedures for Avoiding Conflict of Interest for Special Government Employees: http://oma1.od.nih.gov/manualchapters/management/1810-1/

Travel Reimbursement:

http://www.niddk.nih.gov/about-niddk/advisory-coordinating-committees/national-diabetes-digestive-kidney-disease-advisory-council/travel-expenses-reimbursement/Pages/advisory-travel-expenses-reimbursement.aspx

The Grant Process

NIH Grants Process Overview, from application to award:

http://grants.nih.gov/grants/grants process.htm

Types of NIH grants:

http://grants.nih.gov/grants/funding/funding_program.htm

 About Funding Mechanisms, including information about how NIDDK utilizes certain funding mechanisms:

http://www.niddk.nih.gov/research-funding/process/apply/about-funding-mechanisms/Pages/AboutFundingMechanisms.aspx

Peer Review Policies & Practices:

http://grants.nih.gov/grants/peer/peer.htm

Grant Policies & Regulations

■ FOIA & Privacy:

http://www.nih.gov/icd/od/foia/5usc552.htm

See also: http://www.niddk.nih.gov/Pages/niddk-privacy-statement.aspx

NIH Grants Policy & Guidance:

http://grants.nih.gov/grants/policy/policy.htm

NIH Intellectual Property Policy:

https://grants.nih.gov/grants/intell-property.htm

• NIH Invention Reporting (iEdison):

https://s-edison.info.nih.gov/iEdison/

NIH Public Access Policy:

http://publicaccess.nih.gov/

NIH Genomic Data Sharing Policy:

http://grants.nih.gov/grants/guide/notice-files/NOT-OD-14-124.html

Research Integrity/Research Misconduct:

https://grants.nih.gov/grants/research_integrity/index.htm

• Information about NIH grant applications from foreign countries:

http://grants.nih.gov/grants/foreign/index.htm

Simplified NIH Policy for Late Application Submission:

http://grants.nih.gov/grants/guide/notice-files/NOT-OD-15-039.html

New Biographical Sketch Format required for grant applications submitted for due dates on or after May 25, 2015:

http://grants.nih.gov/grants/guide/notice-files/NOT-OD-15-032.html