

DEPARTMENT OF HEALTH AND HUMAN SERVICES
NATIONAL INSTITUTES OF HEALTH

220th Meeting of the
NATIONAL DIABETES AND DIGESTIVE AND KIDNEY DISEASES ADVISORY COUNCIL
DIVISION OF DIGESTIVE DISEASES AND NUTRITION SUBCOMMITTEE
Meeting Summary

Wednesday, September 7, 2022
Zoom Video Conference

Open Session

- 1) Dr. Stephen James opened the meeting by welcoming everyone. Dr. James also extended a special thanks to Drs. Penny Gordon-Larsen and Gary Wu for their combined service on the DDDN council as this will be their final council meeting.
- 2) The minutes of the May 12, 2022, subcommittee meeting were approved.
- 3) There were no DDDN Initiative Concept Clearances to discuss.
- 4) Discussion from the Full NIDDK Advisory Council Session included topics covering K08s, the Loan Repayment Program, Research Project Grants, and Training Programs. The following questions were asked:
 - a) **Question:** With award amounts increasing for Research Project Grants, has there been any discussion on moving back to having modular budgets for grants?
 - b) **Answer:** There has been discussion at the NIH level but there has not been any movement to require modular budgets for investigator initiated R01 applications.
 - c) **Question:** Is the TL1 program that is being implemented in the division of Kidney, Urologic, and Hematologic (KUH) Diseases something we should keep our eyes on when considering training programs moving forward?
 - d) **Answer:** The TL1 that KUH is leading is a pilot that DDN is watching closely to see if value could be added to DDN's training programs.
- 5) Dr. Saslowsky shared key dates regarding the NIH policy for Data Management and Sharing <https://grants.nih.gov/grants/guide/notice-files/NOT-OD-21-013.html> and information on Repositories for Sharing Scientific Data <https://sharing.nih.gov/data-management-and-sharing-policy/sharing-scientific-data/repositories-for-sharing-scientific-data>
 - a) **Question:** With annual non-competing renewals, will it be required to share the data annually or at the end of the grant cycle?
 - b) **Answer:** Starting in 2023, scientific data should be shared no later than the time of publication and if not published, no later than the end of the award.
- 6) Dr. Saslowsky reviewed four DDDN Funding Opportunity Announcements and reminded everyone that current NIDDK funding opportunities can be found at <https://www.niddk.nih.gov/research-funding/current-opportunities>.

- a) RFA-DK-20-020: NIDDK Research Education Program Utilizing Stimulating Peripheral Activity to Relieve Conditions (SPARC) Generated Resources (R25 Clinical Trial Not Allowed).
 - **Question:** Will this only include peripheral nerves, or will it also include the autonomic and sympathetic nervous systems?
 - **Answer:** It will include everything in the autonomic nervous system.
 - b) RFA-DK-22-013: Drug Induced Liver Injury Network (DILIN) Clinical Centers (U01 - Clinical Trial Optional)
 - c) RFA-DK-22-508: Limited Competition for the Continuation of the Drug Induced Liver Injury Network Data Coordinating Center (DILIN) (U01 -Clinical Trial Not Allowed)
 - **Question:** Have you considered reaching out to the Office of Dietary Supplements (ODS) for co-funding, specifically on applications related to dietary supplements and liver injury?
 - **Answer:** Yes, the NIDDK has representation in the ODS; the office also releases announcements to help provide supplements to ongoing research in NIDDK.
 - d) PAR-23-204: Catalyst Award for Early-Stage Investigators (ESIs) Pursuing Research on HIV Comorbidities, Coinfections, and Complications (DP1- Clinical Trial Optional)
- 7) Planned Workshops (more details can be found in the appendix):
- a) **Yet to be Chartered: Lymphatic System in Health and Disease**
<https://www.niddk.nih.gov/news/meetings-workshops/2022/yet-to-be-charted-lymphatic-system-in-health-and-disease> will be held via webinar September 19 – 20, 2022. The objective of this meeting is to have international experts discuss current research, explore knowledge gaps, and identify opportunities in lymphatic disease research. Session topics will include the state of research in lymphatics, lymphatic development and homeostatic function, lymphatics in inflammation and diseases of the gastrointestinal system, lymphatic dysfunction diseases, lymphedema, and the community’s perspective: living with lymphatic disease and new technologies in lymphatic imaging and mapping.
 - b) **Workshop on Housing and Obesity: Gaps, Opportunities, and Future Directions for Advancing Health Equity** <https://www.niddk.nih.gov/news/meetings-workshops/2022/workshop-housing-obesity> will be held via webinar November 14-15, 2022. The overall goal of this workshop is to accelerate research on the role of housing insecurity, including housing affordability, quality, stability, and its neighborhood context on behaviors and pathways underlying risk for obesity-related health disparities across the lifespan. The workshop will emphasize existing research that connects housing policies and programs with obesity and address methods for housing and obesity research, including study design, measures, data linkages and analytic approaches.
- 8) Completed Workshops (more details can be found in the appendix):
- a) **Integrated Physiology of the Exocrine & Endocrine Compartments in Pancreatic Diseases Workshop** <https://www.niddk.nih.gov/news/meetings-workshops/2022/integrated-physiology-exocrine-endocrine-compartments-pancreatic-diseases-workshop> was held at the Natcher Conference Center on June 29-30, 2022. The goal of this 1.5-day workshop was to gather clinical and basic science investigators who are interested in diseases of the exocrine and/or endocrine pancreas and achieve an understanding of how the two compartments interact in disease. This workshop provided an opportunity for investigators in exocrine diseases to come together with those studying islets in diabetes to foster interdisciplinary discussion and identify areas for advancement. A conference summary manuscript is in progress.

- b) **Clinical Trials in Pancreatitis: Opportunities and Challenges in the Design and Conduct of Patient-Focused Clinical Trials in Recurrent Acute and Chronic Pancreatitis Workshop** <https://www.niddk.nih.gov/news/meetings-workshops/2022/clinical-trials-pancreatitis> was held at the University Club in Pittsburgh, PA on July 20, 2022. The objectives of this meeting were to identify gaps and recommendations, help attendees understand the principles and requirements of clinical trials for treatment approaches for Recurrent Acute and Chronic Pancreatitis, and use workshop recommendations to inform possible future funding initiatives by NIDDK. Further discussions are underway to plan an outcomes document and a conference summary manuscript is in the process of being submitted for publication.

Closed Session

Council members reviewed competing applications. There were no special council review applications, foreign applications, budget restorations, appeals or skipped applications to review and vote on.

Comments and critiques regarding discussion topics and initiatives from council members are welcome and should be emailed to Drs. James and Saslowsky in advance of the next meeting.

-Appendix-

Planned Meetings and Workshops



YET TO BE CHARTED: Lymphatic System in Health and Disease

September 19–20, 2022



Patricia Greenwel, NIDDK
Selen Catania, NHLBI
Ilsa Rovira, NHLBI



NIH National Institute of
Diabetes and Digestive
and Kidney Diseases

Rationale for Workshop

- The lymphatic system is very complex and affects the function of most organs in the body. A better understanding of this system could lead to the development of novel therapies for conditions affecting lymphatics, including lymphedema, inflammatory bowel disease and obesity.
- The purpose of this 2-day workshop is to bring together basic, translational and clinical scientists who are interested in the role of the lymphatic system in health and disease to present the latest advances in the field, engage in interdisciplinary discussions and to identify knowledge gaps and opportunities in lymphatic disease research.

Organizing Committee

- Babak Mehrara, MD, Memorial Sloan Kettering Cancer Center
- Andrea Radtke, PhD, National Institute of Allergy and Infectious Diseases
- Gwendalyn Randolph, PhD, Washington University School of Medicine
- Patricia Greenwel, PhD, National Institute of Diabetes and Digestive and Kidney Diseases
- Selen Catania, PhD, National Heart, Lung and Blood Institute
- Ilsa Rovira, MS, National Heart, Lung and Blood Institute

Agenda

Keynote Topics

- Mechanisms of Lymphatic Contractile and Valve Dysfunction in Metabolic Syndrome - Michael Davis, PhD, University of Missouri School of Medicine
- NIH Efforts to Facilitate Lymphatic Research and Current Knowledge in Lymphatic Mapping - Zorina Galis, PhD, NHLBI
- Finding a Drug for Lymphedema: From Bedside to Bench and Another Round Trip - Stanley Rockson, MD, Stanford University School of Medicine

Session 1: Lymphatics Development and Role in Homeostatic Function

Session 2: Lymphatics in Inflammation and Diseases of the Gastrointestinal System

Session 3: Lymphatic Dysfunction Diseases

Session 4: Lymphedema

Session 5: Community's Perspective: Living with Lymphatic Disease

Session 6: New Technologies in Lymphatic Imaging and Mapping

Session 7: Gaps, Opportunities, and Conclusions

Invited participants include senior leaders in the field as well as junior and early-stage investigators who are working in areas related to this workshop.

Workshop on Housing and Obesity: Gaps, Opportunities, and Future Directions for Advancing Health Equity



November 14–15, 2022



Mary Evans, NIDDK

- **Sponsors:** National Institutes of Health (NIH), Centers for Disease Control and Prevention (CDC), and the U.S. Department of Housing and Urban Development (HUD)
- **Format:** Virtual, 12-5P ET
- **Workshop Co-Chairs:** Danya Keene, Ph.D., Yale University
Craig Pollack, Ph.D., Johns Hopkins University
- **Purpose:** To explore the role of housing insecurity in obesity-related health disparities, the evidence base for housing-related interventions to address obesity disparities, and future directions to advance health equity for all.

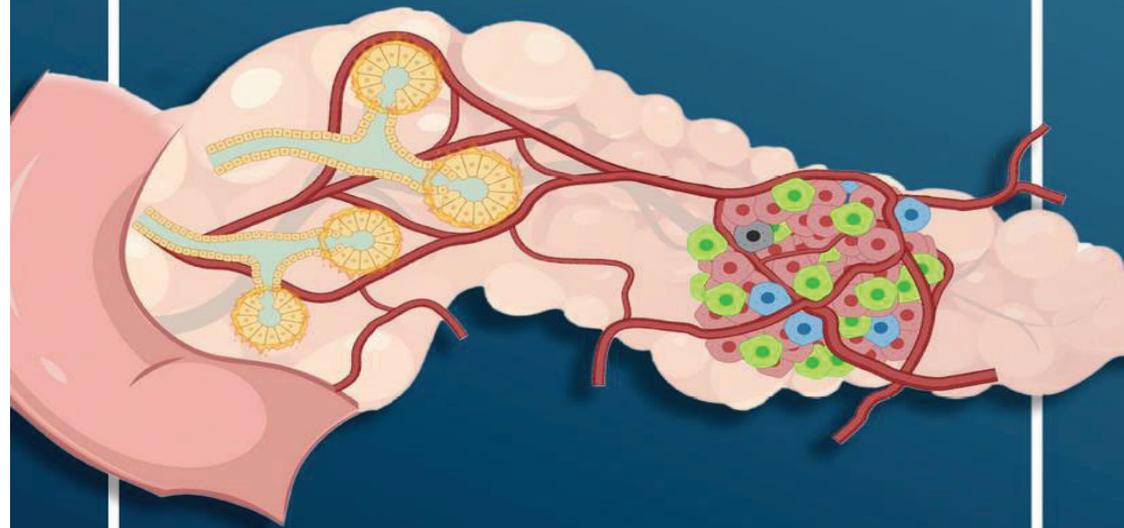
Workshop on Housing and Obesity: Gaps, Opportunities, and Future Directions for Advancing Health Equity

- Increasing levels of housing insecurity contribute to the burden of obesity through multiple, interacting mechanisms at the individual-, interpersonal, community, and societal-levels.
- Includes inadequate availability and access to healthy and affordable food, lack of safe green spaces, transportation, and other challenges. Moreover, housing insecurity is rooted and sustained in historical systemic racism and is a driver of present-day residential segregation.
- Workshop will emphasize interventional programs and evaluation connecting housing policies and programs with obesity in addition to rigorous methods appropriate for housing and obesity research, including study design, measures, data linkages and analytical approaches.
- Free and Open to the Public; Registration Required:
<https://www.niddk.nih.gov/news/meetings-workshops/2022/workshop-housing-obesity>

Completed Meetings and Workshops

INTEGRATED PHYSIOLOGY *of*
the EXOCRINE & ENDOCRINE
COMPARTMENTS *in* PANCREATIC
DISEASES WORKSHOP

JUNE 29–30, 2022



Rationale for Workshop

- Investigations into the basic biology and pathophysiology of the endocrine and exocrine pancreatic compartments have largely avoided being informed by inter-compartmental interactions.
- The purpose of the 1.5 day workshop was to bring clinical and basic scientists together who are interested in diseases of the endocrine and exocrine pancreas to understand how the two compartments interact in physiological and pathophysiological processes, to engage in interdisciplinary discussions and to identify areas for advancement.

Organizing Committee

- Teresa Mastracci – Indiana Univ
- Stephen Pandol – Cedars Sinai
- Maïke Sander – UC San Diego
- Ashok Saluja – Univ of Miami
- Melena Bellin – Univ of Minnesota
- Joana Almaca – Univ of Miami
- David Whitcomb – Univ of Pittsburgh
- Maren Laughlin – DEM/NIDDK
- Norann Zaghoul – DEM/NIDDK
- Jose Serrano – DDN/NIDDK
- Dana Andersen – DDN/NIDDK

Workshop Agenda

- Welcome – Griffin P. Rodgers NIDDK
- Overview of Pancreatic Anatomy, Physiology and Function – David Whitcomb
- New Insights into Anatomy and Physiology
 - Development and Maturation – Joana Almaca
 - Vascular Flow and Regulation – Manami Hara
 - Neuronal Innervation – Abdelfattah El Ouaamari
 - Stellate Cells – Minote Apte
- Diabetes in the Setting of Exocrine Disease
 - Diabetes After Acute Pancreatitis – Dhiraj Yadav
 - Diabetes After Chronic Pancreatitis – Mark Goodarzi
 - Cystic Fibrosis-related Diabetes – Rebecca Hull
 - Endocrine Effects of Exocrine Dysfunction – Mark Goodarzi

Workshop Agenda

- Metabolic Influences on the Exocrine Pancreas
 - Beta-cell Drivers of Pancreatic Cancer – Mandar Muzumdar
 - Obesity and PDAC – Zobeida Cruz-Monserrate
 - Decreased Exocrine Mass in T1D – Martha Campbell-Thompson
 - Hyperinsulinism Effects on Exocrine Cells – Janel Kopp
 - Acinar Cell Heterogeneity – Steven Artandi
- Genetic Drivers of Pancreatic Diseases
 - Genetic Drivers of Exocrine Disease – Miklos Sahin-Toth
 - Genetic Drivers of Diabetes – Kyle Gaulton
 - Genetic Drivers of Pancreatic Cancer – Alison Klein

Workshop Agenda

- Tools for Integrated Pancreatic Analysis
 - Histology and MRI Biomarkers – Temel Tirkes
 - Organoids and Pancreas-on-a-Chip – Alex Kleger
 - Innervation Mapping in T2D – Sarah Stanley
 - Pancreas Slices – Ed Phelps
- Exocrine-Endocrine Cross-Talk
 - Exocrine Ductal System and CFRD – Anjaparavanda Naren
 - Exocrine Effects of Beta-cell ER Stress – Randy Kaufman
 - Inflammatory Signaling from Adipose Tissue – Bryan Bergman
 - Translational Regulation of Cross-talk – Teresa Mastracci

Workshop Summary

- Agenda:
 - In addition to invited faculty presentations, 6 abstracts were selected for oral presentation from over 20 abstracts submitted and accepted for poster presentations
- Attendance:
 - 100 people attended in-person and an additional 150 attended on-line
- Deliverables
 - Conference Summary Manuscript in progress
 - Recommendations to inform possible future funding initiatives by NIDDK

CLINICAL TRIALS IN PANCREATITIS

Opportunities and Challenges in the Design
and Conduct of Patient-Focused Clinical Trials
in Recurrent Acute and Chronic Pancreatitis



July 20, 2022



The University Club
123 University Place,
Pittsburgh, PA

WITH THE ADDITIONAL SUPPORT OF THE NATIONAL PANCREAS FOUNDATION.

Rationale for Workshop

- Recurrent acute and chronic pancreatitis are characterized by pain, disability and late-stage complications. No FDA-approved drugs currently exist to treat these conditions but interest in developing therapeutic strategies has increased.
- This one-day workshop featured discussions to help attendees understand the principles and requirements of clinical trials for treatment approaches for these diseases.

Organizing Committee

- Co-chairs: Tonya Palermo (UW) and Phil Hart (OSU)
- Federal: Dana Andersen, Jose Serrano and Aynur Unalp-Arida (NIDDK) and Erica Lyons (FDA)
- Non-Federal: Vern Chinchilli (PSU), Zobeida Cruz-Monserrate (OSU), Evan Fogel (IU), Chris Forsmark (UFI), Linda Martin (Mission-Cure), Søren Olesen (Aalborg Univ), Stephen Pandol (Cedars-Sinai), Emily Perito (UCSF), Anna Phillips (UPittsburgh), Hanno Steen (Harvard), Temel Tirkes (IU), David Whitcomb (UPittsburgh), Ying Yuan (MDAnderson)

Agenda

- Session 1: Introduction and Patient Perspectives
- Keynote: Overview of key considerations in clinical trials – Robert Dworkin (URochester)
- Patient perspectives on pancreatitis: The NPF/FDA Voice of the Patient Report – Dana Andersen
- Considering participant burden to optimize recruitment and retention – Greg Cote' (OHSU)
- Q & A for all speakers

Agenda

- Session 2: Outcomes and Endpoints in Trials
- Defining appropriate patient populations for inclusion in clinical trials in pancreatitis – Anna Phillips (UPittsburgh)
- Outcome measures and endpoint assessments in pancreatitis – John Windsor (Univ Auckland)
- Selection of outcome measures for drug development in pancreatitis: a regulatory perspective – Aysegul Goza (FDA)
- Q & A for all speakers

Agenda

- Session 3: Considerations for clinical trial design
- Design and execution of proof-of-concept and feasibility clinical trials – Ian Gilron (Queens Univ)
- Design of trials to assess efficacy of invasive treatments – Joe Elmunzer (MUSC)
- Approach to complex or innovative clinical trial design – Tonya Palermo (UW)
- Q & A for all speakers

Agenda

- Session 4: Additional Considerations
- Design and conduct of clinical trials in children and adolescents – Jennifer Rabbitts (Seattle Childrens)
- Scientific public-private partnerships and foundations – Megan Golden (Mission-Cure) and Chris Forsmark (NPF)
- Ethics in clinical trials: disease-specific applications – Lindsay McNair (WCG Clinical)
- Opportunities for investigators for conducting clinical trials in pancreatitis – Stephen Pandol (Cedars-Sinai) and Dhiraj Yadav (UPittsburgh)
- Q & A for all speakers and Panel Discussion

Workshop Summary

- Attendance:
 - Over 100 people attended this in-person workshop
- Recommendations:
 - The need for a consensus-driven clinical outcomes document to guide clinical trials in pancreatitis was stressed by FDA staff
 - Guidance was provided on processes for use of already approved drugs for the treatment of inflammation
- Deliverables:
 - Further discussions underway to plan outcomes document
 - A conference summary manuscript is in progress to be submitted for publication
 - Recommendations may inform possible future funding initiatives by NIDDK

Suggestions for scientific
emphasis and future
workshops?