

# Network of Minority Health Research Investigators (NMRI)



## NMRI News Fall 2021



National Institute of  
Diabetes and Digestive  
and Kidney Diseases

*In accordance with the NIH guidance to either postpone large meetings because of the COVID-19 pandemic and public safety or hold them virtually, the 2020 NMRI Annual Meeting was canceled.*



## A Message from Dr. Agodoa

The Network of Minority Health Research Investigators (NMRI) was established to address the pressing need to increase the representation of minority health researchers among the National Institutes of Health (NIH) grantees. The Director of the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) took the lead in addressing the need for greater diversity in the biomedical research community by establishing the Office of Minority Health Research Coordination (OMHRC). The NIDDK formed the Network to foster communication among biomedical research investigators and technical personnel interested in minority health research.

The NMRI continues to—

- Encourage minority health investigators to conduct research in areas related to NIDDK's mission, including diabetes; endocrinology; metabolism; digestive diseases; nutrition; and kidney, urologic, and hematologic diseases.
- Promote two-way communication between the NIDDK and NMRI members.
- Recommend strategies to support and advance underrepresented individuals and others in biomedical research.
- Advance scientific knowledge and contribute to reducing and eliminating racial and ethnic health disparities.

More than 700 members have joined the NMRI since 2003, and the Network continues to grow. The success of the NMRI in achieving its mission is rooted in the dedication of the senior members who mentor entry-level researchers and serve as role models. Senior members of the Network help junior members develop grant applications, navigate the tenure process, and learn to balance faculty commitments. Mentoring occurs during NMRI's annual and regional workshops, by email, and by telephone, with the help of the NMRI Membership Directory, which facilitates mentor-mentee relationships and collaborations among members with similar research interests. The NMRI's success depends on the members' leadership and input. The NIDDK provides the necessary resources to support those endeavors.

A NMRI 10-year (2008–2018) program evaluation has been completed and reported in the February 2019 issue of *Ethnicity & Disease*. The data revealed that 64 percent of postdoctoral researchers and assistant professors are seeking promotion to tenure-track assistant and associate professor positions. Members' consistent reasons for participating in the Network include career development, emotional support, mentorship, and developing and refining grant writing skills.

Best wishes for a successful year of research, mentoring, and community!

**Lawrence Y.C. Agodoa, M.D., FACP**  
Director, OMHRC, NIDDK, NIH

## Awards and Accomplishments

**Emilyn Alejandro, Ph.D.**, University of Minnesota, was promoted to Associate Professor with tenure and received the 3-year McKnight Presidential Fellow Award to continue her studies in fetal origins of obesity and type 2 diabetes (T2D).

**Susan D. Brown, Ph.D.**, University of California (UC) Davis School of Medicine, was awarded an NIDDK R01 to study optimizing a scalable intervention to maximize guideline-recommended diabetes testing after gestational diabetes mellitus (GDM). She also was awarded a P30 grant to launch the Diabetes Research for Equity through Advanced Multilevel Science Center for Diabetes Translational Research (commonly called DREAMS-CDTR). She serves as co-investigator and Health Equity Co-Lead.

**Leonor Corsino, M.D., M.H.S.**, is a tenured Associate Professor of Medicine at the Duke University School of Medicine.

**Deidra C. Crews, M.D., Sc.M., FASN, MACP**, Johns Hopkins University School of Medicine, was promoted to Professor of Medicine in the Division of Nephrology in 2020 and was awarded a \$20 million grant from the NIH to establish a Mid-Atlantic Center for Cardiometabolic Health Equity (MACCHE). She will co-lead this effort.

**Ilse S. Daehn, Ph.D.**, Icahn School of Medicine at Mount Sinai, is an Associate Professor, and her laboratory is advertising postdoctoral research opportunities to help develop a multidisciplinary approach to understanding the mechanisms involved in glomerular cell crosstalk in the pathogenesis of diabetic kidney disease. She also published a paper titled “Disability Innovation Strengthens STEM” in the September 3, 2021, issue of *Science*.

**Sherita Hill Golden, M.D., M.H.S.**, Johns Hopkins Medicine, was selected as a 2021 *Baltimore Sun* 25 Women to Watch: Best in Advocacy, Business, and Health and was elected to the National Academy of Medicine in 2021.

**Absalon Gutierrez, M.D.**, The University of Texas Health Science Center at Houston, received a first NIH R01 grant to study the pharmacogenetics of the response to glucagon-like peptide-1 in Mexican Americans with prediabetes.

**Patricia C. Heyn, Ph.D., FGSA, FACRM**, University of Colorado Denver Anschutz Medical Campus, received a 5-year R13 grant from the National Institute on Aging (NIA) to investigate how to address recruitment and retention of diverse older adults into aging research to support the Florida Registry for Aging Studies.

**Cristal M. Hill, Ph.D.**, Louisiana State University, Pennington Biomedical Research Center, received an NIA-sponsored Maximizing Opportunities for Scientific and Academic Independent Careers (commonly called MOSAIC) Postdoctoral Career Transition Award to Promote Diversity K99 Award for her project titled “Dietary Protein Restriction Remodels Adipose Tissue to Defend against Age-Related Metabolic Decline.”

**Marja Hurley, M.D.**, University of Connecticut, was designated University of Connecticut Board of Trustees Distinguished Professor; she is the first Black woman to receive this honor from the university.

**Javier A. Neyra, M.D.**, is Associate Professor at University of Kentucky and was awarded an NIDDK grant (R56DK126930) to study artificial intelligence to predict outcomes in patients with acute kidney injury on continuous renal replacement therapy and an NIDDK R01 grant (R01DK128208) to investigate the relation of soluble klotho with cardiovascular disease, chronic kidney disease (CKD) progression, and blood pressure in the systolic blood pressure intervention trial.

## **START PLANNING:**

**Announcing the NMRI 20th Annual Workshop**

**April 20–22, 2022**

**Virtual Meeting**

**Rudy M. Ortiz, Ph.D.**, UC Merced, was recipient of the university's 2021 Academic Senate Distinguished Senate and Non-Senate Faculty Awards, Contributions to Diversity Award in recognition of extraordinary contributions to diversity in research, teaching, and/or service in his Division.

**Sylvia E. Rosas, M.D., M.S.**, Harvard Medical School, was awarded the 2021 American Society of Nephrology (ASN) Distinguished Leader Award, is President-elect of the National Kidney Foundation, and is principal investigator of the NIDDK-sponsored apolipoprotein L1 (APOL1) Long-term Kidney Transplantation Outcomes (APOLLO) and Kidney Precision Medicine Project (KPMP).

**Lovoria B. Williams, Ph.D., M.S.N., APRN-BC, FAANP, FAAN**, University of Kentucky, received an NIDDK R01 grant to support the Enhancing the Diabetes Prevention Program: Fit & Faithful Project to promote weight loss among non-responders in a community-based lifestyle intervention; the proposal's specific aims were reviewed within NMRI the year prior.

## **Member Collaborations**

NMRI scholars are encouraged to network and identify opportunities for junior and senior Network members to collaborate.

**Susan D. Brown, Ph.D.**, Associate Professor, UC Davis, and Adjunct Investigator, Kaiser Permanente Division of Research, collaborated on an *American Journal of Preventive Medicine* paper describing an approach to enhance participant engagement (retention and attendance) in clinical trials: "[Methods-Motivational Interviewing Approach for Enhanced Retention and Attendance](#)."

**Deidra C. Crews, M.D., Sc.M., FASN, MACP**, Johns Hopkins University School of Medicine, collaborated with Dr. Lisa Cooper, Johns Hopkins University, to establish the MACCHE to address cardiometabolic health disparities among socially disadvantaged populations across Maryland: "[Mid-Atlantic Center for Cardiometabolic Health Equity Launched with \\$20 M from NIH](#)."



## NMRI 19th Annual Workshop Sponsors

The NMRI would like to thank the professional societies that sponsored travel awards to the previous NMRI Annual Workshops. Due to COVID-19, the 2021 Workshop was held virtually and no travel awards were issued.

### Annual Workshop Travel Award.

Attending the NMRI Annual Meeting is a great way to learn more about the Network. Scholarships are available to support attendance.

### Are you a nephrologist or kidney researcher?

The ASN offers a limited number of travel awards to attend the NMRI Annual Workshop. Application materials are available on the ASN website: [www ASN-online.org/grants/travel/nmri.aspx](http://www ASN-online.org/grants/travel/nmri.aspx).

### Never attended an NMRI workshop? Junior faculty member?

Have an abstract to present? Limited travel awards are available through the generosity of our professional society sponsors for eligible members to attend the NMRI Annual Meeting. For more information, contact Ms. Winnie Martinez, NIDDK, [winnie.martinez@nih.gov](mailto:winnie.martinez@nih.gov).

# Report from the NMRI 19th Annual Workshop

Highlights of the NMRI 19th Annual Workshop follow. A full meeting summary is available via the NMRI member profile online portal or upon request. For more information, contact Ms. Winnie Martinez, NIDDK, [winnie.martinez@nih.gov](mailto:winnie.martinez@nih.gov).

The NMRI met for its 19th Annual Workshop April 28–30, 2021, in its first virtual meeting. **Lawrence Agodoa, M.D., FACP**, Director, OMHRC, NIDDK, NIH, welcomed participants and invited everyone to introduce themselves via the chat. Participants ranged from predoctoral and premedical students to tenured professors, and their research areas and areas of study included diabetes mellitus (DM), epidemiology, endocrinology, health disparities, hematology, nephrology, nutrition, and obesity. Several participants were first-time attendees of a national NMRI workshop; this meeting had far more first-time attendees than prior meetings.

**Patricia Heyn, Ph.D., FACRM**, Associate Professor, University of Colorado Denver, Anschutz Medical Campus, and chair of the

NMRI Planning Committee, also welcomed participants from across the United States to the NMRI 19th Annual Workshop and expressed appreciation to the NMRI leadership for their continued support. She explained that the NIDDK established the OMHRC in 2000 to coordinate the development of the Institute's strategic plan to reduce minority health disparities. In 2002, the NIDDK launched the NMRI in alignment with the strategic plan and set forth the fourfold mission outlined by Dr. Agodoa in his opening message. Dr. Heyn highlighted that NMRI's leadership has the following expectations of the Network: consistent participation and engagement in the NMRI activities; the reporting of publications, grants, presentations, promotions, and tenure; feedback via post-meeting evaluations and surveys; recruitment of one or more members per year to the Network; facilitation of establishing NMRI chapters; encouragement of one or more professional societies to support the Network; and attendance at annual and regional meetings.

## PRE-WORKSHOP ACTIVITIES



**Winnie Martinez**, Program Officer, OMHRC, NIDDK, NIH, welcomed participants to the pre-workshop activities of the NMRI 19th Annual Workshop, consisting of concurrent poster sessions, an NMRI

Mentor and Mentee Program session, and a specific aims review session.

## POSTER PRESENTATIONS

In concurrent sessions, the 20 poster presenters across the three categories (Basic, Clinical, and Translational) were invited to introduce themselves and to present their research. All speakers who presented posters at this year's workshop were thanked for their time and willingness to share their research with the NMRI community. Senior NMRI members moderated the sessions: **Cheedy Jaja, D.V.M., Ph.D., M.A., M.P.H., M.S.N.**, Associate

Professor, University of South Carolina; **Absalon Gutierrez, M.D.**, Associate Professor of Medicine, The University of Texas Health Science Center at Houston; **Daisy D. De León, Ph.D.**, Professor, Loma Linda University School of Medicine; **Juan Sanabria, M.D., M.S.**, Professor, Case Western Reserve University and Marshall University; and **Lynda M. Brown, Ph.D.**, Grant Director, Funding Pathways.

## MENTOR/MENTEE SESSION

Junior investigators had the opportunity to meet with one of several senior NMRI investigators who had offered to serve as mentors. During the session, each mentor met with his or her mentee to answer questions and give advice.

## SPECIFIC AIMS REVIEW

Junior investigators had the opportunity to meet with one of several senior NMRI investigators who had offered to serve as proposal reviewers. During the session, reviewers and junior investigators met to discuss research proposal aims and scope.

## Interactive Parallel Discussions—Session I

Participants attended one of five breakout room discussions focused on various topics that prove to be challenging to early-career academics, including career planning and advancement, laboratory or research financial management, and personnel issues. Meeting participants attended the session of their choice. Moderators facilitated each breakout room discussion.

The discussion leaders were **Jason Hoffert, Ph.D.**, Scientific Review Officer, Grants Review Branch, NIDDK, NIH; **Patricia Heyn, Ph.D.**, Associate Professor, University of Colorado Denver, Anschutz Medical Campus; **James Mack, Ph.D.**, Scientific Review Officer, Center for Scientific Review, NIH; Francisco Villarreal, M.D., Ph.D., Professor, UC San Diego; **Mark Rolsch, Ph.D., M.S.**, Health Science Officer, U.S. Department of Veterans Affairs; **Roland J. Thorpe, Jr., Ph.D.**, Professor, Johns Hopkins Bloomberg School of Public Health; and **Wendy L. Bennett, M.D.**, Associate Professor, Johns Hopkins School of Medicine.

The Session 5 discussion is presented in detail here.

### SESSION 5: COMMUNITY AND FAITH-BASED RESEARCH SUBGROUP

**Lynda M. Brown, Ph.D.**, Grant Director, Funding Pathways, and subgroup co-chair, welcomed attendees to the first virtual Community and Faith-Based Research (CFBR) Subgroup meeting and provided a brief overview of the group. The NMRI CFBR Subgroup is made up of researchers conducting studies in community-based and faith-based settings. The basic purpose is to provide a forum for dialogue, share resources, and engage in collaborative writing and research projects. The CFBR is reorganizing after being on a recess, and NMRI members or researchers who have attended a NMRI meeting in the past 3 years are welcome to join.

### **Marino A. Bruce, Ph.D., M.Div., M.S.R.C.,**

Professor, University of Mississippi Medical Center (UMMC), and subgroup co-chair, provided an introduction into community-based and faith-based research. Describing his background and beginning in this field as one of the first co-directors of the Community Engagement Research Core at the Vanderbilt University/Meharry Medical School Clinical and Translational Science Award Hub, Dr. Bruce remarked that a community—a group of people linked in common perspectives, geographic location, culture or ethnic heritage, age, or religion—is not homogenous and rarely speaks with one voice. He noted some reasons for academia and community to partner and elaborated on the fact that community engagement has been a part of the scientific community for some time. The goals are to build trust, enlist new resources and allies, create better communication, and improve overall health outcomes among the population. In academia, knowledge is its own reward, research is theory driven, and success is measured by publications and funding. Conversely, in the community, knowledge is useful for problem-solving; research is for who needs it; and success is measured by problems solved, lives saved, and conditions improved. The spectrum of community involvement encompasses outreach, consultation, connection, collaboration, and shared leadership. Dr. Bruce acknowledged a national leader in the community engagement research field, Dr. Keith C. Norris, at the University of California, Los Angeles, who also is a senior NMRI member.

Regarding faith-based research, Dr. Bruce explained that faith institutions are a part of communities but are specific, noting the diversity of faith (or belief) within populations and within institutions (e.g., Christian denominations). A clear understanding of what faith-based means for a church and its spiritual leaders and aligning the conceptual framework of the research study with theological foundation, especially with covenants (a formal, serious agreement or promise), are essential. In closing, Dr. Bruce remarked on the purpose of this work, with the motto “In lifting others, we rise.” He ended with a quotation from Dr. Martin Luther King, Jr.: “The means we use must be as pure as the ends we seek.”

## Interactive Parallel Discussions—Session II

Session II provided participants the opportunity to switch discussion rooms.

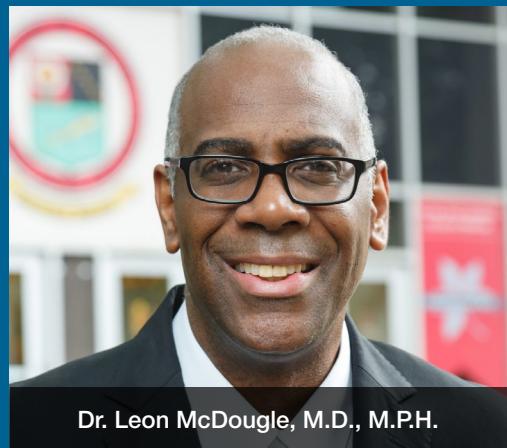
### NIH Mock Study Section Parallel Sessions

This session provided the opportunity for participants to attend mock study sessions for different types of NIH awards—R01 Basic/Clinical, K01 Basic/Clinical, and R21 Basic/Clinical. During these sessions, session leaders reviewed and critiqued sample grant applications. Meeting participants attended the session of their choice.

The discussion leaders were **Rudy M. Ortiz, Ph.D.**, Professor, UC Merced; **Ann Jenkins, Ph.D.**, Scientific Review Officer, NIDDK, NIH; **Mark A. Lawson, Ph.D.**, Professor, UC San Diego; **Maria Davila-Bloom, Ph.D.**, Scientific Review Officer, Grants Review Branch, NIDDK, NIH; **Jose Romero, Ph.D.**, Associate Physiologist, Brigham and Women's Hospital, Harvard Medical School; and **Ryan Morris, Ph.D.**, Scientific Review Officer, NIDDK, NIH.

### KEYNOTE ADDRESS

During his presentation titled “The Art and Science of COVID-19 Vaccine Dissemination,” **Dr. Leon McDougle, M.D., M.P.H.**, Chief Diversity Officer, Professor, The Ohio State University, Wexner Medical Center, detailed COVID-19 cases and race and ethnicity issues and discussed COVID-19 vaccine dissemination in the community with a focus on his state of residence, Ohio. Dr. McDougle also is the current President of the National Medical Association (NMA), the Chair of the NMA COVID19 Task Force on Vaccines and Therapeutics, and a member of the National Collegiate Athletic Association COVID-19 Medical Advisory Group. He explained that in December 2020, the Centers for Disease Control and Prevention (CDC) reported that hospitalizations were four times higher and death rates nearly three times higher in Black, Hispanic, and American Indian (AI)/Alaska Native (AN) populations than among European Americans. In March 2021, these rates slightly



Dr. Leon McDougle, M.D., M.P.H.

declined, with the exception of the AI/AN population. Researchers at the University of Southern California and Princeton University reported reductions in the life expectancy of Americans due to COVID-19 and the disproportionate effect on the Black and Latino populations, thus eliminating progress made in reducing the gap of Black life expectancy since 2006. According to the Kaiser Family Foundation (KFF) COVID-19 Vaccine Monitor, when asked about receiving a COVID-19 vaccination, Black and Hispanic populations had higher responses in the “wait and see” category, with the highest indecision in the 18–29 years of age group. Over time, vaccine confidence has increased and now extends across all races.

After emphasizing the role of health professional organizations in service to diverse communities during the COVID-19 pandemic, Dr. McDougle noted the structured forces (e.g., church, media, fraternities and sororities, and professional organizations) already in place in the Black community that can serve as a basis for building a powerful, united front that extends to addressing this pandemic. By example, the NMA, Rainbow People United to Serve Humanity (PUSH) Coalition, and National Bar Association partnered to craft a 12-point *Joint Statement of the Response to COVID-19*, which they released in April 2020. The NMA COVID-19 Task Force on Vaccines and Therapeutics—composed of NMA members, some of whom also were affiliated with the CDC advisory committees—in December 2020 issued an *Advisory Statement on FDA's EUA Approval for Pfizer and Moderna Vaccine*.

Dr. McDougle described various initiatives that highlighted the importance of conversing with the African American and Black community to address vaccine confidence, including town halls led by the NMA, Rainbow PUSH Coalition, Michigan State University's Deborah Furr-Holden, Ph.D., and the Black Coalition Against COVID19 (BCAC). Finally, Dr. McDougle described tools, initiatives, and areas ripe for investigation and research in which the NMRI could play a role. He closed his presentation by noting the OSU Wexler Medical School 21-Day Anti-Racism Challenge® (modeled after designs by America and Moore, LLC) and introduced and had attendees view a short video from this Challenge, focusing on intergroup anxiety in a multiracial setting.

## Confronting the Perils of COVID-19 with Science Discussions

This session provided the opportunity for participants to discuss COVID-19 research topics in the context of the NIDDK mission. Experts in the field moderated the sessions, and meeting participants attended the breakout session of their choice. Topics were (1) Diabetes and Obesity Risk Factors in the Latino Community, (2) Kidney Disease Implications, (3) Immune and Vascular Systems as Drivers of End-organ Damage, (4) Addressing Health Disparities, and (5) Physical Activity and Diet Protective Findings—Do We Have a Case?

The discussion leaders were **Absalon Gutierrez, M.D.**, Associate Professor of Medicine, The University of Texas Health Science Center at Houston; **Myra Kleinpeter, M.D., M.P.H.**, Associate Professor of Clinical Medicine, Tulane University School of Medicine; **Francisco Villarreal, M.D., Ph.D.**, Professor, UC San Diego; **Heather Tarleton, Ph.D.**, Associate Professor, Loyola Marymount University; **Patricia Heyn, Ph.D.**, Associate Professor, University of Colorado Denver, Anschutz Medical Campus; and **Leon McDougle, M.D.**, Chief Diversity Officer, OSU.

## WELCOME REMARKS

**Griffin P. Rodgers, M.D., MACP**, NIDDK Director, welcomed participants to the NMRI

19th Annual Workshop.

He expressed appreciation to

**Lawrence Y. Agodoa, M.D.**, Director, OMHRC, NIDDK, NIH, and

**Winnie Martinez**,

OMHRC, NIDDK, NIH, for steering the NMRI, which has matured

into a signature NIDDK

program. Dr. Rodgers explained that, through its integrated research programs, the NIDDK supports investigations into a wide array of chronic diseases that include three of the most burdensome affecting Americans today: obesity, T2D and CKD. These conditions, which often can lead to a lifetime of pain and affliction, affect many people, and all are associated with health disparity in the United States. These disparities are exacerbated further by the COVID-19 pandemic. After detailing the Institute's response to the COVID-19 pandemic, Dr. Rodgers elaborated on how the NIDDK supports research training and career development programs for the next generation of biomedical researchers. The aim is to build a ladder to traverse the many obstacles faced by young scientists interested in research careers utilizing NIDDK programs, including the early-stage investigator renewal bonus, "Life After K" workshop, and Diversity Supplement Program.

Dr. Rodgers remarked on NIDDK's support for the NMRI as a key element of its program for increasing biomedical workforce diversity. He continued that the Network currently has approximately 200 members, of whom 20 percent are senior members. More than 700 members have attended the annual workshop in the past 10 years, and members have received several grants, had numerous publications, and been well represented at national and international conferences. The OMHRC has implemented Professional Society Programs to Promote Diversity (R25), with the goal of recruitment and retention of diverse individuals to pursue careers in the biomedical workforce reflecting the NIDDK mission areas. In closing, Dr. Rodgers encouraged participants to visit the NIDDK website for up-to-date information.



## SCIENTIFIC PRESENTATIONS

The workshop's three scientific presenters, who were selected from the pool of submitted abstracts, were announced and presented with plaques commemorating their achievements. These abstract winners were given the opportunity to present their research during the NMRI Annual Meeting. **Absalon Gutierrez, M.D.**, The University of Texas Health Science Center at Houston, moderated the session, introduced the speakers, and invited them to present their research, which is summarized here. Full abstracts are contained in the 2021 NMRI Annual Meeting Program book and are available upon request from NIDDK Program Officer Ms. Winnie Martinez at [winnie.martinez@nih.gov](mailto:winnie.martinez@nih.gov).



**Boubakari Ibrahimou, Ph.D., M.S.**, Associate Professor, Florida International University, "Prevalence of Hysterectomy: Role of Preeclampsia on Racial Disparity and Diabetes"

Dr. Boubakari Ibrahimou presented results of a study focused on determining the relationship between the incidence of hysterectomy in pregnant women in association with preeclampsia and investigating the interaction between preeclampsia and other risk factors (e.g., diabetes, race/ethnicity) on the likelihood of having a hysterectomy. This study analyzed Florida Bureau of Vital Health Statistics data collected from 2005 to 2014, evaluating a cohort of more than 2 million women. The results showed that in this cohort, 656 of the women had a hysterectomy; 60 percent were non-Hispanic white and were between the ages of 18 and 35 years; and Black women older than age 35 had a gestational age of less than 37 weeks and were more likely to have had a hysterectomy. The prevalence of preeclampsia was increased significantly in women with a hysterectomy (8.3%) compared with hysterectomy-free women (5%). Except for ethnicity and education level, all other co-variates (e.g., age and race) were associated with the probabilities (i.e., odds) of having a hysterectomy. Women with preeclampsia had 1.7 times the odds of having a hysterectomy,

women with diabetes had 1.6 times, and Black women had 1.3 times.

Dr. Ibrahimou summarized that preeclampsia is an effect modifier for race, diabetes, and method of delivery. Compared to white women, American Indian women with preeclampsia were 17.36 times as likely to have a hysterectomy. Similarly, compared to nondiabetic women, diabetic women with preeclampsia were 14 percent less likely to have a hysterectomy. Cesarean deliveries with preeclampsia have 3.74 times the odds of having a hysterectomy compared to vaginal deliveries. Additionally, a significant interaction between race and ethnicity exists. Compared to white women, Black Hispanic women and Hispanic women of other races were 1.420 and 1.353 times more likely to have a hysterectomy, respectively. The study concluded that the Hispanic ethnicity is a protective factor for white women but is a risk factor for Black women and those of other races. The reason for this distinction is unclear and should be investigated further in future studies.



**George Vasquez Rios, M.D.,** Clinical and Research Fellow, Icahn School of Medicine at Mount Sinai, "Pre-operative Plasma Tumor Necrosis Factor Receptor 1 (TNFR1), TNFR2, and Kidney Injury Molecule 1 (KIM-1) and the Association with Death, Chronic Kidney Disease, and Cardiovascular Events in Cardiac Surgery Patients: The Translational Research Investigating Biomarker Endpoints in Acute Kidney Injury (TRIBE-AKI) Study"

Dr. George Vasquez Rios described a study evaluating the association of preoperative plasma biomarkers in cardiac surgery patients. Recent TRIBE-AKI data revealed that approximately 28 percent of the 613 adult patients in the study undergoing cardiac surgery developed incident or progressive CKD and were associated with lower baseline estimated glomerular filtration rate, DM, and cardiovascular comorbidities. Postoperative

biomarkers (48 to 72 hours) of kidney injury and inflammation showed elevated levels of basic fibroblast growth factor, KIM-1, and TNFR1 in plasma in both cardiac-associated acute kidney injury (CA-AKI) and non-CA-AKI patients. Data from a larger population of post-hospitalized patients in the Assessment, Serial Evaluation, and Subsequent Sequelae in Acute Kidney Injury (ASSESS-AKI) Study showed that TNFR1 and TNFR2 were associated with worse kidney outcomes, heart failure, and all-cause mortality, and the associations were statistically significant.

Dr. Vasquez Rios led this ancillary study to the TRIBE-AKI to evaluate the predictive role of kidney-related biomarkers—KIM-1, TNFR1, and TNFR2—following cardiac surgery. A total of 1,300 participants from six academic centers in North America who underwent cardiac surgery from 2007 to 2010 were enrolled, with a 5- to 6-year follow-up. Serum biomarkers were measured 2–7 days prior to surgery. Patients at high risk for acute kidney injury (AKI) or who had a prior kidney transplant or end-stage renal disease were excluded from the trial. The study outcomes were death, CKD (incident or progressive), and cardiovascular events. The study concluded that long-term complications—including death, kidney disease progression, and cardiovascular events—are common among individuals who undergo cardiac surgery after adjusting for multiple clinical covariates. The preoperative levels of KIM1, TNFR1, and TNFR2 associated strongly with long-term risk for death, CKD progression, and cardiovascular events after cardiac surgery. All three biomarkers improved the discrimination of adverse outcomes and can serve to risk-stratify patients prior to surgery.



**Susan D. Brown, Ph.D.**

Associate Professor, UC Davis, and Adjunct Investigator, Kaiser Permanente Division of Research, “Patient Factors Associated with the Uptake of Postpartum Diabetes Screening: Studies among Diverse Women with Gestational Diabetes in an Integrated Health System”

Dr. Susan D. Brown reported on two studies assessing postpartum diabetes screening after GDM. In Study 1, the aim was to identify factors associated with subsequent uptake of American Diabetes Association (ADA)-recommended postpartum screening. The study sample consisted of 1,642 women identified in the Gestational Diabetes Effects on Moms trial who completed a baseline survey. The study sample was racially and ethnically diverse. Postpartum screening was assessed using electronic health records, and patient factors included the ADA risk score, which incorporates several risk factors for T2D. The results showed that 94 percent of women attended the routine postpartum visit and 54 percent had the screening, suggesting that other factors are contributing. Chinese American women were more likely to complete the screening than non-Hispanic white women. Ninety-four percent of women recalled receiving provider advice about screening, which also was associated with a higher likelihood of screening. Several factors were associated with a lower likelihood of screening, such as elevated ADA risk score, perinatal depression, preterm delivery, having two or more children, and having less education.

Study 2 evaluated the patient perspective on screening to identify barriers, benefits, and beliefs, as well as modifiable targets for future interventions. An online survey was used to assess 162 unscreened women who had GDM; 67 were pregnant and 95 were postpartum. The data revealed that 52 percent believe that most women with GDM do not get screened, 58 percent believe that their 10-year risk of diabetes is low, and 31 percent indicated being afraid to receive negative news.

Dr. Susan Brown summarized that uptake of guide-recommended postpartum diabetes screening varied by patient factors, despite system-level strategies. In addition to practical barriers, patients cited psychosocial barriers. Collectively, these findings highlight the need for multicomponent interventions that target key barriers.

## MINORITY HEALTH AND GENDER SCIENTIFIC RESEARCH

**Roland J. Thorpe, Jr., Ph.D.**, Professor, Johns Hopkins Bloomberg School of Public Health, presented his research he titled “Black Men’s Health: An Example of Health Disparities and Minority Research” and began by introducing a current survey on minority research. He explained that three components of his research at the Hopkins Center for Health Disparities Solutions include social factors as they affect men’s health: race, place, and health (namely the role of segregation). Dr. Thorpe underscored that Black men’s health is a public health problem. Research has shown that Black men have lower life expectancy and increased mortality from diseases (e.g., heart disease, prostate cancer) than white men. To determine why Black men in the United States are less healthy and die sooner than white men, Dr. Thorpe investigated common behaviors between the two groups. The results revealed that a pattern of health “repair” rather than health “maintenance” holds true for men in general but is more prevalent in Black men and is obvious even with the COVID-19 vaccinations.

Dr. Thorpe elaborated on the role of segregation (a differentiation of two or more groups within a geographical area) and how it affects health disparities. The Exploring Health Disparities in Integrated Communities (EHDIC) Study was designed by Dr. Thorpe and colleagues to assess the nature of health disparities, in which African Americans and white Americans live under similar conditions and environmental settings. Using the 2000 U.S. Census Bureau data of a southwest Baltimore (SWB), Maryland, cohort, the results showed minimal race differences in obesity, hypertension, or diabetes in the EHDIC-SWB compared with a 2003 National Health Interview Survey matched cohort (non-racially balanced, representative of the general U.S. population). These data suggest that changing the social and environmental conditions where people live can be beneficial to health. To further examine these findings, in 2019, Dr. Thorpe and his colleagues Dr. Thomas A. LaVeist, Tulane University School of Public Health and Tropical Medicine, and Dr. Harold W. Neighbors, Michigan State University, launched the [Black Men’s Health Project](#) to better understand health challenges

unique to Black men. Participants were encouraged to learn more about and to inform their colleagues of this project.

**Wendy L. Bennett, M.D., M.P.H.**, Associate Professor of Medicine, Johns Hopkins School of Medicine, presented a broad overview of evidence demonstrating the importance of understanding sex and gender differences in health. She titled her presentation “Opportunities for Research and Funding in Sex and Gender and Women’s Health Equity Research.” Focusing research on excess weight gain in pregnancy and prevention, Dr. Bennett and her colleagues at Johns Hopkins conducted a study investigating the Boston Birth Cohort. The results showed that excess gestational weight associated with preeclampsia and GDM and slightly increased the chance of having a cesarean delivery. The most common pregnancy complication, GDM, affects 7 percent of births in the United States, with the highest prevalence in Native American and Hispanic women. In recent years, the largest increase in GDM has been among African American women. Dr. Bennett noted the importance of clinicians’ educating and counseling women about their diabetes risk and introducing interventions focusing on lifestyle changes and weight loss. She also noted the need for diabetes research in women to investigate the disproportionate death rate from diabetes complications, specifically cardiovascular disease, than men.

In terms of sex and gender differences, Dr. Bennett explained that epidemiological studies have shown that the prevalence of CKD is higher in women than men, but she explained that this might be overestimated using kidney function equations. Although hypertension and DM are common CKD risk factors in both men and women, the risk in women is further exacerbated from lupus. Men have higher rates of CKD progression and are more likely to initiate dialysis, but women on dialysis have greater hospitalization rates, lower quality of life, and greater symptom severity after starting dialysis compared with men. Research evaluating these sex-specific differences, as well as prevention and treatment strategies, is limited.

Dr. Bennett pointed out the considerations in design, conduct, and reporting of research

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to address sex and gender differences. She highlighted funding opportunities for sex and gender research, including the NIH Office of Research on Women's Health (ORWH) Building Interdisciplinary Research Careers in

Women's Health K12 program, NIH Administrative Supplements for Research on Sex/Gender Differences, and the ORWH-facilitated Specialized Centers of Research Excellence on Sex Differences NIH-wide program.

## UPDATES FROM THE NETWORK OF MINORITY HEALTH RESEARCH INVESTIGATORS

### NMRI Leadership for Tomorrow: My Path

**Mark A. Lawson, Ph.D.**, Professor, UC San Diego, and senior NMRI member, described his career journey and how it intersects the NMRI. He noted that starting a new career can seem intimidating without the knowledge of where the path is leading. As current Professor in Residence in Obstetrics/Gynecology and Reproductive Sciences at the UC San Diego School of Medicine and the director of the UC President's Postdoctoral Fellowship Program, Dr. Lawson reflected on his first NMRI meeting in 2002. He emphasized focusing on what motivates you toward your journey to your career. After detailing his path from earning his undergraduate degree to his first faculty position to a research career, Dr. Lawson spoke on how he locally spearheaded UC San Diego's support of the Society for Advancement of Chicanos/Hispanics and Native Americans in Science with a large funding initiative. He mentored several students and postdoctoral fellows, some of whom have participated in the NMRI. He has—through his volunteer committee leadership, faculty position, and other roles at UC San Diego—helped hire diverse faculty into the UC system.

In closing, Dr. Lawson remarked on how the NMRI helped him pursue a career, overcome obstacles, and make an impact on the careers of other researchers. He continued that the NMRI is an organization that adds career dimensions beyond the NIH Biosketch or curriculum vitae, and he encouraged the next generation of biomedical researchers to join this or a similar organization to expand and grow their personal networks.

## Planning Board

**Patricia Heyn, Ph.D.**, Associate Professor, University of Colorado Denver Anschutz Medical Campus, expressed appreciation to the NIDDK, poster presenters, and speakers for supporting the workshop. She acknowledged the 2019 and 2021 NMRI Planning Board members and thanked them for their service. Members were encouraged to complete the post-workshop evaluation, send details on accomplishments to Ms. Martinez for the NMRI 2021 Fall Newsletter, update contact and biographical sketch information in the NIDDK NMRI site, and forward any ideas for a white paper or grant collaborations to the Planning Board.

**Bessie Young, M.D., M.P.H.**, Professor, University of Washington, Chair-Elect, 2022 NMRI Planning Board, expressed appreciation to Dr. Heyn for her ongoing service to the NMRI and this Board, and she acknowledged the 2022 Planning Board members. Dr. Young announced that the 2022 Annual NMRI Workshop will be the 20th anniversary of the Network and could be in-person or a hybrid meeting. She encouraged members to stay engaged with the NMRI by staying alert to emails from OMHRC and attending the annual and regional meetings.

## Oversight Board

**Myra Kleinpeter, M.D., M.P.H.**, Associate Professor of Clinical Medicine, Tulane University School of Medicine, provided an update on the Oversight Board's activities and noted future plans on behalf of **Marja Hurley, M.D.**, Professor, University of Connecticut, Chair-Elect, 2022 NMRI Oversight Board. This Board is composed of 10 members and two *ad hoc* members who represent the varied constituencies of the NMRI, as well as representatives from the NIH. Activities during 2019 and 2020 included convening by conference call every 3 months and

responding to the June 2020 Executive Order to reduce the number of Federal Advisory Committees. Dr. Kleinpeter explained that the NMRI leadership was instructed to rename the Oversight and Planning Committees to the Oversight and Planning Boards, and new mandates were issued. The Oversight Board advocates for funding, recruits new members, and coordinates with professional societies and organizations to facilitate informal gatherings at scientific conferences, such as the NMRI Annual Workshop. Dr. Kleinpeter acknowledged current members of the Board and encouraged participants to consider joining.

**Shirley Blanchard, Ph.D.**, Associate Professor, Creighton University, *ad hoc* member, Oversight Board, reminded participants that the Oversight and Planning Boards designed a survey to evaluate the NMRI program. The survey (paper and electronic form) was administered from 2008 to 2018, and results revealed that of the members who attended meetings and workshops, 34 percent were senior members and 66 percent were junior members. This 2:1 ratio of junior to senior researchers promotes mentoring and networking opportunities at the meetings. Regarding the 2021 survey demographics, 23 males and 40 females responded to the survey, with the highest participation in the 31–45 age group followed by the 46–55 age group. The highest degree categories were Ph.D. and M.D., career status of assistant and associate professors were nearly equal, and 58 had not received a promotion or tenure. Dr. Blanchard encouraged the Network members to continue to complete the annual survey, provide journal titles for manuscripts published, and report on promotions and tenure, all of which assists the OMHRC in meeting its funding commitments for the diversity programs.

On behalf of NMRI Mentorship Program lead and *ad hoc* member, Oversight Board, **Virginia Sarapura, M.D.**, Professor of Medicine, University of Colorado Anschutz Medical Campus, Dr. Blanchard provided an overview of this program, noting the accomplishments and its purpose and goals. Mentors can help with publications, grants, promotions, and work-life balance. The selection process involves two approaches. At the time of meeting registration, (1) junior NMRI members can request a mentor from a previous NMRI meeting or from the NMRI Directory, or (2) senior NMRI members can volunteer to be mentors. According to survey

data and NMRI annual meeting participation, the Mentorship Program is the second-highest reason to attend the NMRI meeting. The mentorship advice is quoted by 15 percent as being beneficial for promotion and tenure. In 2021, more than 30 mentors and 30 mentees signed up to participate in the program.

## NMRI CFBR Subgroup Update

**Marino Bruce, Ph.D., M.Div., M.S.R.C.**, Professor, UMMC, presented the CFBR Subgroup report, noting that this Subgroup has been in existence for approximately 4 years. The interest in community- and faith-based research has been substantial, and approximately 30–40 NMRI members and attendees have expressed interest in this topic. Prior to this meeting, a brief survey was conducted to collect contact information and areas of interest. Two parallel breakout sessions were convened of the reconstituted Subgroup. Participants heard a presentation on CFBR, and both sessions were well attended. Dr. Bruce highlighted common themes of interest that emerged from the discussions: (1) convening between the NMRI annual meetings; (2) mentoring for writing, funding, and best practices; (3) establishing a clearinghouse for journal articles, books, and funding sources; and (4) maintaining a community of support for those engaged in CFBR.

The next steps will be to establish a formal contact list and then organize a teleconference to provide the report from the breakout sessions. Efforts also will focus on gathering and disseminating the existing resources, determining the need for smaller working groups, facilitating collaboration, and establishing and implementing protocols for documentation.

## CLOSING REMARKS

**Lawrence Y. Agodoa, M.D.**, Director, OMHRC, NIDDK, NIH, and **Winnie Martinez**, OMHRC, NIDDK, NIH, thanked participants and senior NMRI members for supporting the NMRI 19th Annual Workshop. Dr. Agodoa remarked that the NIDDK provides the necessary resources to support the Network, but NMRI's success depends on the members' leadership and input. He expressed appreciation to the NMRI Board chairs for their service. Ms. Martinez reminded members to update their NMRI profiles to keep the Network Directory current and accurate.

## NMRI Leadership Opportunities

The NMRI Planning and Oversight Boards offer opportunities to become more involved in the Network. Annual and regional planning committees are responsible for planning all aspects of upcoming meetings, from identifying speakers to setting agendas. The Oversight Board facilitates the development of mentoring relationships, the identification of new members, and the recruitment of professional organizations to support the network. These boards are described in detail on the NMRI website at [NMRI Boards](#).

Another opportunity to become involved in the Network is the CFBR Subgroup that is composed of researchers conducting studies in community- and faith-based settings. Individuals must be a NMRI member or have attended a NMRI meeting in the past 3 years to join this Subgroup. For more information, contact Ms. Winnie Martinez, NIDDK, [winnie.martinez@nih.gov](mailto:winnie.martinez@nih.gov).

## THE NMRI ON THE WEB

The NMRI website contains several resources for members:

- **NMRI workshops and meetings:** Upcoming NMRI events are announced at <https://www.niddk.nih.gov/research-funding/research-programs/diversity-programs/network-minority-health-research-investigators-nmri>. Please visit this site for additional information about future meetings and access to past meeting reports, presentations, and other resources.
- **Resources for junior investigators and mentoring and career development:** Information about the funding process, tips for reviewers, and mentoring and career development resources—including for the fields of endocrinology and hematology—are available at <https://www.niddk.nih.gov/research-funding/research-programs/diversity-programs/network-minority-health-research-investigators-nmri/member-resources>.
- **The 2019 NMRI Membership Directory:** Contact information for NMRI members is provided and available upon request. For more information, contact Ms. Winnie Martinez, NIDDK, [winnie.martinez@nih.gov](mailto:winnie.martinez@nih.gov).
- **The NMRI Mentor/Mentee Program:** This program gives young investigators the opportunity to work closely with senior investigators in research areas of interest to both the mentor and mentee. Forms to sign up to be a mentor or and mentee can be requested at <https://www.niddk.nih.gov/research-funding/research-programs/diversity-programs/network-minority-health-research-investigators-nmri/mentor-mentee-program>.

- **The NMRI newsletter:** Previous editions are available at <https://www.niddk.nih.gov/research-funding/research-programs/diversity-programs/network-minority-health-research-investigators-nmri/newsletters>.

## NMRI Frequently Asked Questions

### Who is eligible for NMRI membership?

NMRI membership is available only to investigators who are—

- At the postdoctoral level or higher
- Interested in minority health research, including individuals from traditionally underserved communities (African American, Hispanic American, American Indian, Alaska Native, Native Hawaiian, and Pacific Islanders)
- Conducting research in diabetes; endocrinology; metabolism; nutrition; or digestive, kidney, urologic, or hematologic diseases
- U.S. citizens or individuals with permanent resident status

Medical students from underrepresented minority groups are welcome to attend NMRI meetings if they are conducting research in one of the NIDDK mission areas noted above.

### How do I apply for membership?

Individuals who qualify should apply for membership on the [NMRI History and Mission Website](#). Please click the “NMRI Online System” link to create an account and apply for membership.

## **Whom do I contact with questions about the NMRI?**

Direct your questions or comments to NMRI Program Officer Ms. Winnie Martinez, who oversees the NMRI, at [winnie.martinez@nih.gov](mailto:winnie.martinez@nih.gov).

## **Does the NMRI have a website with more information?**

The NMRI maintains and frequently updates its [Main Website](#). The website contains information about the NMRI, including meeting announcements, and NIDDK funding opportunities. Summary reports from past NMRI meetings and be accessed from the NIDDK Meetings and Workshops web page.

## **How can I find a mentor if I am an NMRI member?**

The NMRI Oversight Board, which created the NMRI Mentor Program, maintains a list of NMRI members who have volunteered to serve as mentors. The biographies and research interests of NMRI members are listed in the NMRI Membership Directory available by request.

## **How do I sign up to be a mentor if I am an NMRI member?**

If you are a member and would like to volunteer as a mentor, go to the NMRI Mentor/Mentee Program page and request the Mentee form found at <https://www.niddk.nih.gov/research-funding/research-programs/diversity-programs/network-minority-health-research-investigators-nmri/mentor-mentee-program>.

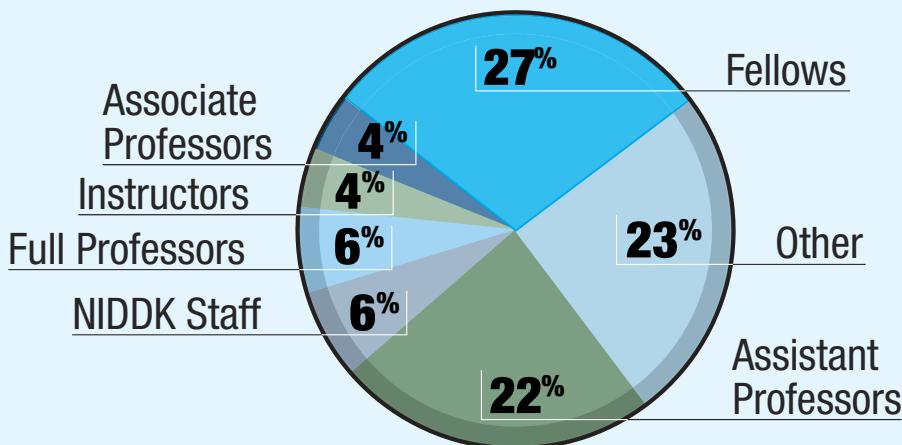
## **SNAPSHOT OF THE NMRI**

Established in 2003, the NMRI is 700 members strong and growing. The NMRI 19th Annual Meeting attracted more than 80 attendees from across the biomedical research community. Many of the attendees were new NMRI members, and many of those were K awardees.

The attendees came from all levels of the biomedical research community:

Among the attendees from outside academia were leaders from professional societies (**Ricardo Azziz, M.D., M.P.H., M.B.A.**, Chief Executive Officer, American Society for Reproductive Medicine) and faith-based funding organizations (**Lynda M. Brown, Ph.D.**, Grant Director, Funding Pathways).

### **Snapshot of NMRI Attendees**



## NMRI Members Are a Vital Force in the Biomedical Research Community

We know about the 2019 NMRI Annual Workshop attendees, but we would like to update the career progress that has been made by all of our members. NMRI members, please complete the NMRI Questionnaire <https://www.scgcorp.com/NMRSurvey/> and update your NMRI profile for the NMRI directory so we can analyze how the careers of our membership and our members' impact on the biomedical research community have grown over the Network's 19-year history.

## NMRI 19th Annual Workshop Poster Abstracts

The posters submitted for presentation at the NMRI 19th Annual Workshop represented outstanding research conducted at a broad range of academic institutions. The poster authors and titles are listed below. Abstracts are available in the 2021 NMRI Annual Meeting Program book. To obtain a copy, contact NIDDK Program Officer Ms. Winnie Martinez at [winnie.martinez@nih.gov](mailto:winnie.martinez@nih.gov).

*Susan D. Brown, Mara Greenberg, Monique M. Hedderson, Yeyi Zhu, Ai-Lin Tsai, Juanran Feng, Jenna L. Ritchie, Charles P. Quesenberry, Assiamira Ferrara:* "Patient Factors Associated with the Uptake of Postpartum Diabetes Screening: Studies among Diverse Women with Gestational Diabetes in an Integrated Health System"

*Joshua Peterson, Renato Jensen, Benjamin Allington, Linhai Cheng, Cally Tucker, Jamie Soto, Renata Pereira, Marcelo Correia, Evan Dale Abel:* "Dynamin-Related Protein-1 (DRP1) Deficiency in Skeletal Muscle Is Associated with Higher Energy Expenditure, Weight Gain Resistance and Better Glucose Tolerance in Aging Mice"

*LaShara A. Davis, Yaquelin Arevalo Iraheta, Erica Ho, Terri Menser, Shailesh M. Advani, Amy D. Waterman:* "Harnessing Experiential Expertise: Can Storytelling Be Used to Offset Known Disparities in Living Donation among Minorities?"

*Pablo Garcia, Maria Montez-Rath, Heather Moore, Johnie Flotte, Chris Fults, Martha S Block, Jialin Han, Mary Dittrich, Julie Parsonnet, Glenn M Chertow, Geoffrey A Block, Shuchi Anand:* "SARS-CoV-2 Vaccine Acceptability in Patients on Hemodialysis: A Nationwide Survey"

*Marja Hurley, Liping Xiao, Donyell Williams:* "FGF23-Neutralizing Antibody Rescues Reduced Bone Nodule Formation in Bone Marrow Stromal Cell Cultures from Sickle Cell Disease Mice"

*Boubakari Ibrahimou, Shelbie Burchfield, Ning Sun:* "Prevalence of Hysterectomy: Role of Preeclampsia on Racial Disparity and Diabetes"

*Shilpa Krishnan, Christopher Kopreski:* "Identifying Needs and Barriers to Stroke Rehabilitation for Minorities in Metro Atlanta: A Qualitative Analysis"

*Sharifa Love-Rutledge, Quiana Wilkerson Vidal, Genoah Collins, Luis Mercado, Evann Fowler, Madushika Wimalaranthne:* "Young Adult LEW.1WR1 Rats Develop Dysregulated Islet Function and Liver Insulin Responses"

*Wairimu Magua, Aileen C. Johnson, Geeta M. Karadkhele, I. Raul Badell, Payaswini Vasanth, Aneesh K. Mehta, Kirk A. Easley, Joseph B. Rickert, Christian P. Larsen:* "Impact of Belatacept and Tacrolimus on CMV Viral Load Dynamics in Moderate and High-Risk CMV Serostatus Kidney Transplant Recipients"

*Ngozi Mbue, Jing Wang, Stanley Cron, John Mbue, Jane Anderson:* "Diabetes Self-Monitoring Intervention for African American Veterans: A Feasibility Implementation Study"

*Parveen Kumar, Vikram Saini, Tanecia Mitchell:* "Oxalate Reduces Macrophage Metabolism and Antibacterial Response to Uropathogenic *E. coli* Infection"

*Javier A. Neyra, Joshua Lambert, Victor Ortiz-Soriano, Daniel Cleland, Jon Colquitt, Paul Adams, Brittany D. Bissell, Lili Chan, Girish N. Nadkarni, Ashita Tolwani, Stuart Goldstein:* "Assessment of Prescribed Versus Achieved Fluid Balance during Continuous Renal Replacement Therapy and Mortality Outcome"

*Ted Kheng Siang Ng, Alex Tagawa, James J. Carollo, Patricia C. Heyn:* "Insulin-Like Growth Factor 1 (IGF-1) Is a Biomarker of Objective Cognitive Impairment but Not Subjective Cognitive Complaint in Cerebral Palsy"

*Arthur H. Owora:* Short-Term Hemoglobin A1C and Triglyceride Trajectories Predict Excess Healthcare Utilization among African Americans Diagnosed with Type 2 Diabetes"

*Ariana Pichardo-Lowden, Guillermo Umpierrez, Erik B. Lehman, Matthew D. Bolton, Christopher J. DeFlitch, Vernon M. Chinchilli, Paul M. Haidet:* "Clinical Decision Support Improves Management of Disglycemia and Reduces Hospital Length of Stay"

*Cetewayo Rashid, Sara Tenlep, Jianzhong Chen, Andrew Morris, Youssef Roman, Faven Butler, Ali Alghubayshi:* Tris(1,3-Dichloro-2-Propyl) Phosphate Is a Metabolism-Disrupting Chemical in Male Mice

*Youssef Roman, Faven Butler, Ali Alghubayshi:* "Genetic Epidemiology of Hyperuricemia and Gout across Major Racial Groups: Population Genetics Database Analysis"

*Julia Roncoroni, Salina Wu Whitaker, Tayler Hendrix, Yixiao Dong:* "Insomnia in Latinx by Nativity and Country of Origin"

*Juan Sanabria:* "Activation of SRC-P/PI3K at the A1-NA/K-ATPASE Modulates Survivin/SMAC Ratio Promoting an Apoptotic 'Switch' in NASH-Related Hepatocellular Carcinoma (HCC): A Translational Study"

*George Vasquez Rios, Steven Coca, Dennis Moledina, Mark Wurfel, Eddie Siew, Amit Garg, Chi-yuan Hsu, Vern Chinchilli, Chirag Parikh:* "Plasma Tumor Necrosis Factor Receptors Predict Kidney Disease Progression and Adverse Clinical Outcomes after Hospitalization in Patients with and without Acute Kidney Injury"

*George Vasquez Rios, Steven G. Coca, Dennis G. Moledina, Yaqi Jia, Eric McArthur, Sherry G. Mansour, Heather Thiessen-Philbrook, Michael G. Shlipak, Jay L. Koyner, Amit X. Garg, Chirag R. Parikh:* "Pre-operative Plasma TNFR1, TNFR2, and KIM-1 and the Association with Death, Chronic Kidney Disease, and Cardiovascular Events in Cardiac Surgery Patients: The TRIBE-AKI Study"

*Fern Webb, Lori Bilello, Ross Jones, Kristen Morgan, Ann-Marie Knight:* "Association between COVID-19 Symptoms and Diabetes Status among Those Experiencing Homelessness"

*Jennifer Shrodes, Jessica N. Radabaugh, Amaris Williams, Joshua J. Joseph:* Cooking Matters for Diabetes Improves Diabetes Self-Care







National Institute of  
Diabetes and Digestive  
and Kidney Diseases