

**DEPARTMENT OF HEALTH AND HUMAN SERVICES
NATIONAL INSTITUTES OF HEALTH**

**214th Meeting of the
NATIONAL DIABETES AND DIGESTIVE AND KIDNEY DISEASES ADVISORY COUNCIL
DIVISION OF DIGESTIVE DISEASES AND NUTRITION SUBCOMMITTEE
Meeting Summary**

**Wednesday, September 9, 2020
Zoom Video Conference**

Open Session

- 1) Dr. David Saslowsky opened the meeting by welcoming everyone.
- 2) The minutes of the May 12, 2020 subcommittee meeting were approved.
- 3) Dr. Saslowsky reviewed one DDDN Funding Opportunity Announcement and six Notices of Special Interest; one of the notices is COVID-19 related.
- 4) Four DDDN Initiative Concept Clearances were presented during the Open Session of the full Council (more details on the clearances can be found in the appendix):
 - a) Program to Advance the Careers of Scientists from Underrepresented Groups Conducting Nutrition, Obesity, and Diabetes Research
 - b) Identification and Characterization of Bioactive Microbial Metabolites for Advancing Research on Microbe-Diet-Host Interactions
 - c) Endoscopic Therapy for Barrett's Esophagus with Low-grade Dysplasia: The SURVENT Trial
 - d) Functional Screen of Genes within IBD GWAS Loci
- 5) Planned Workshops and Seminars (more details can be found in the appendix):
 - a) **Seminar Series: Advancing the Careers of Researchers from Groups Who Are Underrepresented in Academia (URiA)** <https://www.uab.edu/norc/education-enrichment/workshops/norc-minority-symposium> will begin on September 11, 2020 and continue as a five part series through October 30, 2020 via Zoom. URiA is sponsored by the Nutrition Obesity Research Centers (NORCs) in collaboration with the American Society for Nutrition, The Obesity Society, and other research organizations. The series will be focused on strategies to close the gap in research funding success for URiA groups followed by breakout group discussions. Presentations will cover the disparities, challenges and barriers, and potential solutions along with discussion of sub-group concerns. The goal of the seminar series is to write a summary of recommendations.
 - b) **Pancreatic Pain: Knowledge Gaps and Research Opportunities in Children and Adults** workshop will be held on July 21, 2020 at the Omni William Penn Hotel in Pittsburgh, PA. The purpose of this workshop is to explore recent advances in neurobiology, genetic and circulating biomarkers of pain, emerging methods to identify mechanisms and inform treatment strategies, and therapeutic approaches including non-narcotic drugs and cognitive behavioral therapy.

- c) **Autoimmune Hepatitis in the US Research Challenges & Opportunities** virtual workshop will be held during the spring/summer of 2021 with the goal to publish and potentially promote a new research initiative on autoimmune hepatitis.

Question (Tom Nealon): Will there be any discussion on children and adolescents versus adults?

Answer (Averell Sherker): Yes. A significant portion of the meeting will be spent discussing the pediatric variant.

- 6) Completed Workshop (more details can be found in the appendix):
- a) **Sensory Nutrition and Disease Workshop** <https://www.niddk.nih.gov/news/meetings-workshops/2019/sensory-nutrition-disease-workshop> was held November 12-13, 2019 at the Natcher Conference Center. The objectives of the workshop were to understand both the hedonic pathways linked to tasting and sensing of food and understand the physiological roles of chemosensory receptors and how these taste and smell sensors are involved in nutrition. A workshop manuscript should be published soon describing the research gaps and opportunities discussed.
- 7) Open Discussion of Support Mechanisms for Underrepresented Scientists (as a continuance of Dr. Griffin Rodgers talk during the full council session):
- a) **Ron Sokol (Council Member)**: If mentoring is going to be key for the success of the younger investigators... early stage investigators or students' (i.e. medical and PhD), shouldn't a mentoring grant continue to be made available? Some of us were a bit dismayed that NIDDK stopped funding K24 grants, which are specifically designed to mentor clinical and translational research investigators by a mid-level to early senior level investigator. It was discussed before that a lot of the problems experienced was caused by the mentor, mentee relationship. Maybe the mentor really doesn't have the support to dedicate the appropriate amount of time to the mentee and ensure the mentee becomes independent and successful; I really wonder if there shouldn't be a discussion among the DDN staff and DDN council members about whether we think K24s would be a value in that respect.
- **David Saslowsky**: Targeting mentoring of underrepresented minorities and scientists in the early career stage using this method would be something to consider.
 - **Stephen James**: The K24 we had was clinical in its orientation so we would not want to restrict them entering to only clinical.
 - Mentors may not be able to succeed or may be under too much pressure, even with grants support to act alone; mentors need to have a little bit of team backup to help them out.
 - Perhaps there are ways to combine more than one K24 grantee to network with other similar grantees to share the burden and resources available, rather than to act as a sole person, like many NIH traditional grants.
 - Somehow, we must relieve the burden on mentors to allow them to mentor with the many demands on their time, even if they get some grant support to do that. I'm not sure how, but we may have to create a new mechanism to do that.
 - **Gregory Germino**: One of the problems has been again, the limited support provided to the program as it is restricted to some travel money to attend annual meetings and a little bit of infrastructure to glue and keep the network as a cohort.
 - To follow up on Steve's comment, perhaps there is a way to use resources or develop a structure that would provide stronger financial support for the mentors, as well as pilot funds for mentees to apply for.

- Again, structures that would help bring together tools and support for the mentors.
- b) **Ron Sokol (Council Member):** Should there be a health disparities study section that addresses some of the areas the young minority faculty want to study, but don't fare well in, in our traditional study section makeup? Maybe we shouldn't be trying to direct them into something that's fundable but have a study section that reviews the important health disparities research and other research that young underrepresented faculty find most appealing to them as long as these are important to our national health.
- **David Saslowsky:** This is also an important issue and may not be mutually exclusive as there can be different backgrounds and experiences. We shouldn't close pathways for people that are passionate about a certain area of research, but on the other hand, if you expand the horizons that are currently available, that could also result in successes for a portion of other groups.
 - **Stephen James:** It's not just how do you recruit underrepresented minorities, but what should the research be? What's missing? That's another part of the whole equation. A different kind of pivot to the kinds of research that needs to be done, that aren't being done. How can this idea be best supported?
 - Creating a study section is an administrative step that comes much later once the research programs needing peer review are figured out. The "horse" has to be the research needing to be done, and the "cart" creating study sections that are appropriate for reviewing that kind of research.
 - Council member Gary Wu has experience with the R25 programs at Penn State. Has it been successful recruiting underrepresented minorities?
 - **Gary Wu (Council Member):** Yes, they have been quite successful in getting people who are interested in basic science research at an earlier stage. We do have examples of underrepresented minorities, both in wet bench research as well as human subject research with Jim Lewis and Jonathan Katz who have taken the lead at the University of Pennsylvania.
 - From what I've heard, NIDDK is doing quite a good job in getting people interested in doing research in the underrepresented minority community; no question that it can always be better.
 - It seems like NIDDK has a pipeline, but then there is a bottleneck and that bottleneck seems to be getting those people into positions in academic institutions, their first job. This would allow them to blossom and essentially move forward. So, to the point being made, I think that the R25 is very meritorious. I can show examples where individuals are recruited into the program and they come back after their college experience applying for research fellowships and so forth. But I think the bottleneck may still be getting those people into academic positions as faculty members.
 - Along those lines, I'm thinking about partnerships with academia. The notion may be that certain areas of research that underrepresented minorities in science are actually very interested in pursuing but don't rise to the top, in terms of priority or an unusual study section. Possibly, NIDDK could reach out to academic institutions and find out what academic institutions are prime in doing these types of studies. Then, maybe, NIDDK can transform some type of partnership or alliance as NIDDK has been identified as having great programs.
 - Is there a way to incentivize the institution in a way to expand the underrepresented minority pool of junior faculty members? My notion is that once they get over that hurdle with the right type of mentorship (if they have a faculty position), then perhaps, they will have crossed that critical threshold that will make them more likely to have success.

- **Stephen James:** We are also aware of very successful programs at Vanderbilt with recruiting underrepresented minorities, council member Richard Peek, have you had any interaction with those kinds of efforts at Vanderbilt?
- **Richard Peek (Council Member):** At Vanderbilt, they've created a dean for diversity to ensure these issues are looked at with every faculty member that is hired.
- What Gary was saying is very important because we don't have an R25, but there is a T35 mechanism that brings a lot of medical students from all different disciplines to Vanderbilt and other places across the country; many of them are underrepresented.
- I think it is important to try and find out from people who have either been unsuccessful or who have been successful in navigating this path forward to independence. What are the barriers that have been experienced? What was a hinderance in moving forward? Or what prevented them from submitting an application? It struck me to hear how few African Americans were submitting R01s within NIDDK; that's a huge problem. To find out why either they're not submitting or to learn more about the people that have been successful, what kind of things they had to navigate... I think that that would be very informative in planning a process going forward.
- The topics in the NORCs presentation Mary Evans gave would be very applicable across multiple layers within NIDDK and across NIH. If there are any ways, for example, the digestive disease research centers could help disseminate the series, I think that would be very important because our members are struggling with a lot of the same issues as the NORCs are.
- **Stephen James:** Going through the pandemic, we have learned how to host more virtual meetings which in turn have become a cost savings and can have a much larger impact. The NORCs program was intended to be something local (in-person), now it can be held nationally as we can take advantage of some of the tools and technologies available to us. Presumably the students who are now going to school virtually will be very amenable to receiving information in this kind of format.
- As to the role of academic organizations, professional and lay organizations, there are things you can do that we NIDDK cannot. Program Officials across the board do not have access to minority status data at all. We are in no way allowed to touch any central information that individuals may put into their ERA record. We can't look at it, we can't analyze it and we are absolutely prohibited from doing questionnaires. Therefore, we cannot follow up on people who applied and didn't get an award. Greg, would you like to add anything to this very controversial issue?
- **Gregory Germino:** The data that Dr. Katrina Serrano presented regarding NIDDK and NIH in respect to race, ethnicity and gender... we have that information, but that's in close hold. A dashboard is given to us, so a lot of the information that Dr. Serrano presented regarding the application rates and success rates for different groups within NIDDK and NIH came from a dashboard that was just created last spring, and access was given to a very small number of staff at each institute; the very highest being at the leadership level with the purpose to act and drill down to get that information out. Because of the privacy issues, this information is not available to staff in general.
- The Building Infrastructure Leading to Diversity (BUILD) initiative, which was an NIH Common Fund program has been a \$500 million investment over approximately the last decade to focus on undergraduates to help establish a pipeline. Although it has been a big investment, there hasn't been much of a dent yet. We have plenty of programs, including the KUH, DEM and Vanderbilt summer programs where we bring in people in our mission areas to have a summer experience leveraging what we

- do. We receive plenty of interest in these programs, it's just a matter of capturing the interest and moving it along.
- We'll be talking about this more during January's council, but when we looked at how well health disparities science did during peer review, the problem wasn't so much that it reviews poorly, it was that the institute's funding them are often like the National Institute in Minority Health and Health Disparities, in that they have very small pay lines. Therefore, part of this is a question about priorities, so we'll present this data in January and review.
 - **Stephen James:** A few of these things we might be able to do without waiting... As we prioritize, we're always looking for the "low hanging fruit;" things that can have an impact and are measurable in a relatively short term, even though it's a very long-term problem with many dimensions. If any of you have any ideas that are the low hanging fruit variety, we are always interested in hearing about them, even if they are local such as the R25s.
- c) **Gary Wu (Council Member):** In partnerships, not only with academia, but with National Societies who have a deep reach into communities. An example of this would be the American Gastroenterological Association (AGA) Fostering Opportunities Resulting in Workforce and Research Diversity (FORWARD) program for underrepresented minorities. I've sat in on several meetings they've had and it's really a wonderful opportunity to get a national society involved because they have a pretty deep reach into the community and can help significantly with mentorship issues. I didn't realize the NIH had limits to information to track in terms of race. I'm wondering if through the program like FORWARD, an NIDDK funded grant mechanism could gather the information in a more anonymous way.
- **Stephen James:** The issue is whether we can get the information legally and anonymously... how, can we protect the confidentiality?
 - The AGA program is also co-supported by an R25 grant from the NIDDK minority office; there should be three in total, one per division.
- d) **Penny Gordon-Larsen (Council Member):** In terms of another low hanging fruit, given how critical it is for all scientists to get their first R01, are there more opportunities for a training program where early career scientists can be a guest reviewer? There could be a program where underrepresented minority scientists are given an opportunity to sit in on a study section, have more grant writing workshops or other kinds of things that would benefit them.
- Also, can there be more done with bias training through the Center for Scientific Review (CSR) or study section review in terms of topic...? Clearly health equity is a huge priority for NIDDK and for other institute's; the fact that some of these topics aren't reviewing as well, there could be training on it.
 - **Stephen James:** This is a very good idea; I don't think I could have ever figured out how to write an R01 grant if I hadn't been on a peer review study section to see what really happens. This is certainly something to point out to the CSR who is taking the leadership in that program... a very good idea. It makes a huge impact to have been on any kind of study section for a more senior type grant to see how they're reviewed and what happens. If you haven't experienced it then it's tough unless the mentor is going to somehow impart all that wisdom to scientist, which often doesn't happen.
- e) **David Saslowsky:** One other modality that was mentioned this morning was Diversity Supplements for Principal Investigators (PIs) of our R01s, P01s, U01s, etc. Does anyone have any thoughts as to if these awards should be more empowered or is it not effective? Have they been effective from any of your experiences?
- **Penny Gordon-Larsen (Council Member):** They're incredibly valuable, but because they're not peer reviewed and the award goes to the PI of the holding grant, not the underrepresented scientist, they take a bit of a hit in terms of reputation for the

candidate. Therefore, if there is a way to make a bigger deal about the awardee as opposed to the PI of the parent grant, that would be beneficial.

- **Stephen James:** Right, I think you also made the point that there's perhaps a hidden reluctance to go that pathway because of the potential for perceived bias... that it's not a real grant that you earned; and the thought that it will be much better if one gets a competitive award in terms of the academic process for what one would get credit for versus getting a supplement. That's a very good idea to rethink how that could be done.
 - **David Klurfeld (Council Member):** I think there's an easy way to accomplish that, why not just have the minority scientist listed as a Co-PI on the supplement grant?
 - Back to the point about Minority Health having the lowest payline of any IC, why not have your staff look at grants that have just missed the payline (i.e. 10th or 12th percentile), to see if there's anything relevant to NIDDK, why not pick that up?
 - **Stephen James:** We do in fact do that, not in a systematic way, but we certainly are aware, and they pass the hat periodically, as do many of the offices. One of the problems is there are a lot of offices and they all pass the hat throughout the year with the request to pick the application up... and it's usually not the best ones they have.
- f) **Stephen James:** The other problem we will address in the future is, what is the research? For example, we often will look at applications that have multiple disease components and some of the diseases might be heart disease or stroke; something that is not in our mission. Many applications are often cross cutting across different mission areas for different institute's and that's a problem. That should be a problem that can be overcome, but at the moment, as the NIDDK is a more traditional disease oriented institute, we sometimes see more than half that isn't in our mission... the same thing happens with NIDDK applications ending up with other institutes. Something for NIH to sort out... This is part of the issue of underrepresented minority research; the fact that a lot of it is also cross cutting.
- **Gregory Germino:** I also think this is a problem we have to tackle because a lot of what was just described is that there's a clustering of conditions and problems and trying to silo them is not the best way to address them systematically and effectively. The NIH is having these discussions at large as to how do we move forward in this space, both in terms of diversity and in terms of our mission and our portfolios.

Closed Session

Council members reviewed competing applications, five applicants with >\$1M in NIH funding (direct costs) and two budget restorations. There were no appeals, foreign applications or skipped applications to review. In all discussions, Council members concurred with NIDDK/DDDN.

Comments and critiques regarding discussion topics and initiatives from council members are welcome and should be emailed to Drs. James and Saslowsky.

-Appendix-