The National Deafness and Other Communication Disorders Advisory Council (NDCDAC) convened on May 29, 2020 via videoconference at the National Institutes of Health (NIH) in Bethesda, MD. Dr. Debara L. Tucci, Director, National Institute on Deafness and Other Communication Disorders (NIDCD), served as Acting Chairperson. In accordance with Public Law 92-463, the meeting was:

Closed: May 29, 2020: 9:00 a.m. to 10:30 a.m. for review of individual grant applications; and

Open: May 29, 2020: 10:30 a.m. to 12:55 p.m., for the review and discussion of program development needs and policy.

Council members in attendance:

Ms. Lisa Adams          Ms. Barbara Kelley
Dr. John Carey          Ms. Nanci Linke-Ellis
Dr. Ruth Anne Eatock    Dr. Cynthia Morton
Mr. Richard Einhorn     Dr. Dan Sanes
Dr. Susan Ellis-Weismer Dr. H. Steven Sims
Dr. Lisa Goffman        Dr. Ben Strowbridge
Dr. Sandra Gordon-Salant Dr. Charlotte Yeh
Dr. Robert Hillman      Dr. Fan-Gang Zeng

Council Members Absent:
None

Ad-Hoc Council Members in attendance:

Dr. Sue Kinnamon
Dr. Andrew Groves

Council ex-officio members in attendance:

Ms. Christa Themann
Dr. Lakeisha Henry
Dr. Judy Schafer

¹ For the record, it is noted that members absent themselves from the meeting when the Council is discussing applications (a) from their respective institutions or (b) in which a real or apparent conflict of interest might occur. This procedure applies only to individual discussion of an application and not to “en bloc” actions.
NIDCD employees present during portions of the meeting:

<table>
<thead>
<tr>
<th>Name</th>
<th>Name</th>
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<tbody>
<tr>
<td>Dr. Kathy Bainbridge</td>
<td>Mr. Christopher Myers</td>
</tr>
<tr>
<td>Mr. James Burton</td>
<td>Mr. Eric Nunn</td>
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<tr>
<td>Dr. Laura Cole</td>
<td>Dr. Amy Poremba</td>
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<tr>
<td>Dr. Judith Cooper</td>
<td>Ms. Lisa Portnoy</td>
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<tr>
<td>Dr. Janet Cyr</td>
<td>Dr. Kausik Ray</td>
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<tr>
<td>Ms. Susan Dambrauskas</td>
<td>Dr. Alberto Rivera-Rentas</td>
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<tr>
<td>Mr. Hoai Doan</td>
<td>Dr. Elka Scordalakes</td>
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<tr>
<td>Ms. Emma Eggerman</td>
<td>Dr. Lana Shekim</td>
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<tr>
<td>Dr. Nancy Freeman</td>
<td>Dr. Kathy Shim</td>
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<tr>
<td>Ms. Maria Garcia</td>
<td>Dr. Sheo Singh</td>
</tr>
<tr>
<td>Mr. Howard Hoffman</td>
<td>Dr. Melissa Stick</td>
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<tr>
<td>Dr. Craig Jordan</td>
<td>Dr. Susan Sullivan</td>
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<tr>
<td>Ms. Joanne Karimbakas</td>
<td>Ms. Nanette Stephenson</td>
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<tr>
<td>Dr. Kelly King</td>
<td>Dr. Debara Tucci</td>
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<tr>
<td>Ms. Mimi Lee</td>
<td>Dr. Bracie Watson</td>
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<td>Dr. Chuan-Ming Li</td>
<td>Mr. Mitchell Wainberg</td>
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<td>Dr. Trinh Ly</td>
<td>Ms. Ginger Webb</td>
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<tr>
<td>Dr. Castilla McNamara</td>
<td>Mr. Eric Williams</td>
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<tr>
<td>Dr. Roger Miller</td>
<td>Mr. Baldwin Wong</td>
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<tr>
<td>Mr. Eddie Myrbeck</td>
<td>Dr. Shiguang Yang</td>
</tr>
</tbody>
</table>

Other federal employees present during portions of the meeting:

- Dr. Biao Tian, CSR
- Dr. Alexei Kondratyev, CSR
- Dr. Andrea Kelley, CSR
- Dr. John Bishop, CSR
- Dr. Maribeth Champoux, CSR
CLOSED SESSION

Call to Order and Opening Remarks ......................................................... Dr. Debara L. Tucci

The meeting was called to order by Dr. Tucci, Director, NIDCD, who expressed appreciation to the entire Council for their service and advice.

Council Procedures ................................................................................... Dr. Craig A. Jordan

Procedural Matters

Dr. Jordan discussed important procedural matters, including requirements imposed by the Government in the Sunshine Act and the Federal Advisory Committee Act. The necessity of members to avoid any conflict of interest and even any appearance of a conflict was stressed, as was the need to maintain confidentiality concerning the proceedings and materials related to the closed portion of the meeting. Dr. Jordan announced that the Council meeting would be closed for consideration of grant applications during the morning session and would be open to the public at approximately 10:30 a.m. via Videocast.

Council Consideration of Pending Applications ......................... Dr. Judith Cooper and Staff

Research Project Grant Awards

Consideration of Applications: On the Council’s agenda was a total of 113 investigator-initiated R01 grant applications; 96 applications had primary assignment to NIDCD, in the amount of $36.5 million first-year direct costs. It is anticipated that, of the applications competing at this Council, NIDCD will be able to award grants to R01 applications scoring up through the 13th percentile.

Special Program Actions

1. NIH Mentored Scientist Research Career Development Award (K01): The Council recommended support of one application.
2. NIH Mentored Patient-Oriented Research Career Development Award (K23): The Council recommended support of one application.
3. NIH Pathway to Independence Award (K99): The Council recommended support of two applications.
4. NIH Support for Conferences and Scientific Meetings (R13): The Council recommended support of six applications.
5. NIH Research Enhancement Award (R15): The Council recommended support of two applications.
6. NIH Exploratory/Development Research Grant Award (R21): The Council recommended support of nine applications.
7. NIDCD Early Career Research (ECR) Award (R21): The Council recommended support of ten applications.
8. NIH Small Business Innovation Research Awards (SBIR): The Council recommended support for three Phase I (R43) applications.
9. NIH Small Business Innovation Research Awards (SBIR): The Council recommended support of three Phase II (R44) applications.

10. NIH/NSF Collaborative Research in Computational Neuroscience (CRCNS) (R01): The Council recommended support of two applications.


12. NIH Common Fund Pilot Projects Investigating Understudied G Protein-Coupled Receptors, Ion Channels and Protein Kinases (R03 Clinical Trial Not Allowed): The Council recommended co-fund support of one application.

OPEN SESSION

Opening Remarks ........................................................................................................Dr. Tucci

Dr. Tucci welcomed additional staff and visitors to the open session of the meeting which was available to the public from the NIH Videocast website. (https://videocast.nih.gov/watch=37452)

Dr. Tucci updated the council about some COVID-related flexibilities that are available for review on the NIH Grants website. The NIH and NIDCD is trying very hard through this time to give maximal flexibility to our investigators and our scientific community. Many initiatives are going on trans-NIH and NIDCD is participating in those initiatives as appropriate. Many of the initiatives have to do with developing treatments and vaccines for COVID. NIDCD has an interest in better understanding the issues around loss of taste and smell as a possible early indicator of the viral infection. NIDCD has published an initiative to capitalize on this recent finding.

Dr. Tucci thanked the following retiring members for their service on the Advisory Council and promised a certificate of appreciation by mail after the meeting. Each member was provided an opportunity to share with the Council their perspective on council service.

- Ms. Lisa Adams
- Dr. Susan Ellis-Weismer
- Dr. Lisa Goffman
- Dr. Sue Kinnamon
- Dr. H. Steven Sims

Consideration of Minutes of the Meeting of January 31, 2020

Dr. Tucci called the members’ attention to the minutes of the January 31, 2020 meeting of the Advisory Council. The minutes were approved as written.

Confirmation of Dates for Future Council Meetings

Dates for the Council meetings through September 2022 have been established. A list of these meetings was distributed to the Council members and posted on the web site prior to this meeting. The next meeting of the Council is scheduled for Friday, September 11, 2020.
Executive Secretary Note: The September council meeting will be virtual and held in the afternoons of Thursday, September 10, 2020 from 12:00 p.m. until 4:00 p.m., and Friday September 11, 2020 from 10:00 a.m. until 2:00 p.m. EST.]

**NIDCD Budget Report**

NIDCD’s Budget Officer, Mr. Eric Williams, presented information on the current and previous fiscal year budgets. He shared the NIDCD’s 2020 Budget Operating Plan as compared against the FY 2019 final allocation. The FY2020 budget benefits from a $18 M increase. That increase is largely applied to the out-year commitments of the grants awarded in prior years. The Administrative Supplements line has been increased to $3 M which will allow support of anticipated supplemental requests related to the COVID-19 pandemic. He indicated that NIDCD will likely recoup some funds that would have been spent on travel and contracting efforts that will be scaled back due to the pandemic.

[A copy of the slides Mr. Williams used for this budget presentation is included in Appendix 2]

**Report of the Division of Scientific Programs**

Dr. Cooper presented concepts that represent the early planning stages for what might become initiatives (such as requests for applications or notices of special interest) or other activities (such as workshops or working groups). Concepts requiring clearance also may include scientific topics that NIDCD intends to continue using as vehicles for receipt of applications. Concepts are discussed with the NDCD Advisory Council and through other public venues. The concepts presented at this meeting included:

Re-Issuances
- NIDCD Research Dissertation Fellowship for Au.D. Audiologists
- NIDCD Mentored Career Development Award for Post doctorate Au.D./Ph.D. Audiologists
- NIDCD Research Career Enhancement Award for Established Investigators
- NIDCD Cooperative Agreement for Clinical Trials in Communication Disorders NIDCD Clinical Trials in Communication Disorders

New Concept
- Research Training for Residency in Otolaryngology

Members unanimously approved the proposed concepts. Council approval of a concept does not guarantee that it will become an initiative. That decision would be based on scientific and programmatic priorities and the availability of funds.

**From Sugar to Sweet: Transduction and Transmission of Taste**

Dr. Tucci welcomed Dr. Sue Kinnamon to discuss her research on taste receptors. Dr. Kinnamon is Professor and Vice Chair of Research in the Department of Otolaryngology—Head & Neck Surgery at the Anschutz Medical Campus of the University of Colorado in Aurora. Research in her laboratory focuses on the mechanisms used by taste receptor cells to detect and transduce sweet, salty, sour, bitter and umami tastes, and how these qualities are transmitted to the nervous system. She uses a variety of approaches including
electrophysiology, calcium imaging, immunocytochemistry and molecular biology on various lines of transgenic mice.

In this talk Dr. Kinnamon described experiments done in close collaboration with Dr. Thomas Finger’s laboratory in which they identified ATP as a crucial transmitter linking taste cells to sensory nerve fibers. Type II taste cells, those that respond to bitter, sweet, or umami release ATP via a large pore ATP release channel to activate purinergic P2X receptors on the sensory nerve fibers. Knockout or pharmacological blockade of the P2X receptors blocks all taste qualities, including sour taste which is mediated by Type III taste cells. The role of ATP in sour taste is still not clear, since these cells release serotonin via synaptic vesicles to activate 5-HT3 receptors on the afferent nerves. However, all taste nerve fibers, including those with 5-HT3 receptors, also express purinergic P2X receptors, and full activation requires ATP as well as 5-HT. Pharmacological blockade of P2X3 receptors is a treatment for chronic cough in humans, and loss of taste is a common complaint in patients receiving this treatment.

Dr. Kinnamon also gave a short update on the global efforts to understand the role of COVID-19 in causing taste and smell loss.

**Council Discussion: Recovery of NIDCD Research from COVID-19 Impacts**

Dr. Tucci invited the council members to discuss the impact of COVID-19-related work stoppages on the NIDCD research enterprise and the hurdles in restarting research activities. The common assumption is that all research/training activities ranging from basic to clinical and translational science have been effectively halted or greatly curtailed. The focus of the discussion was to identify the consequences of the extensive hold on research activity and to advise on the prioritization of “re-start” activities germane to the four topic areas listed below:

- **Basic Science** moderated by Dr. Ruth Anne Eatock
- **Clinical/Translational Science** moderated by Dr. Sandra Gordon-Salant
- **Training, Career Development, Early Stage Investigators (ESI)** moderated by Dr. John Carey
- **Administrative/Operational Hurdles** moderated by Dr. Robert Hillman

Members were appreciative of the flexibilities NIH has made available, such as the flexibility to reassign MD trainees to clinical service and supporting researcher salaries regardless of their level of productivity. Members reported numerous challenges at their home institution including significant loss of institutional financial support, lack of consistent guidance on safety practices, when/how to reopen laboratories, onerous policies that are not seemingly evidenced based, IRBs focus limited to COVID-19 related protocols, redirecting research efforts to training and clinical service, and how to provide training traditionally done in a hands-on manner. Members expressed concerns for the training of future researchers and mentioned the critical nature of access to cleaning supplies, PPE, full-functioning animal colonies, and a dependable stream of human subjects that may take an extended time to return to acceptable levels.

Members raised several questions and/or suggestions for NIDCD/NIH to consider when attempting to stabilize and help the recovery of research efforts. Those comments included considering ways to stabilize the research workforce, such as bridge funding; extending the time of eligibility for training grants, fellowships, and Career Development awards; change the culture of peer review to take into account pandemic ramifications. Some suggested that NIH might
consider modifying the eligibility and payback obligations associated with Loan Repayment programs and extending the flexibility to reassign MD trainees to clinical service.

They also wondered if NIH could provide additional flexibilities for research grant budgets to address the increased needs of research staff for daycare, transportation, and PPE.

Members stressed the importance that NIH communicate to Congress and other parts of the government about the long-term impacts of COVID-19. They indicated that NIH is seen as an authoritative and consistent source of advice that might be used to inform best practices for research institutions and/or facilitate forums for idea sharing through the community.

Dr. Tucci thanked the council and the moderators of each section, Drs. Eatock, Gordon-Salant, Carey and Hillman for their discussions and advice on COVID-19 impacts and research recovery.

Adjournment

The meeting was adjourned at 12:55 p.m. on May 29, 2020.
Certification of Minutes

We certify that, to the best of our knowledge, the foregoing minutes and attachments are accurate and correct.²

7/22/2020 ____________________________________________________________________________
Craig A. Jordan, Ph.D.
Executive Secretary
National Deafness and Other Communication Disorders Advisory Council

7/21/2020 ____________________________________________________________________________
Debara L. Tucci, M.D., M.S., M.B.A.
Acting Chair
National Deafness and Other Communication Disorders Advisory Council

Director
National Institute on Deafness and Other Communication Disorders

Ginger Webb
Council Assistant
NCDCD Advisory Council

² These minutes will be approved formally by the Council at the next meeting on September 11, 2020, and corrections or notations will be stated in the minutes of that meeting.
## APPENDICES

<table>
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<tr>
<th>APPENDIX</th>
<th>Title</th>
<th>Page</th>
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<tbody>
<tr>
<td>1</td>
<td>NDCD Advisory Council Roster</td>
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<tr>
<td>2</td>
<td>NIDCD Budget Officer Slides</td>
<td>12</td>
</tr>
</tbody>
</table>
Roster
National Deafness and Other Communication Disorders Advisory Council
(Terms end on 5/31 of the designated year)

Acting Chairperson
Debara L. Tucci M.D., Director
National Institute on Deafness and Other Communication Disorders
Bethesda, MD  20892

ADAMS, Lisa C., J.D.  2020
Founding Member and President
Massachusetts Hearing Aids for Children Coalition
Newton, MA  02458

GORDON-SALANT, Sandra, Ph.D.  2021
Director, Doctoral Program in Clinical Audiology
University of Maryland
College Park, MD  20742

CAREY, John Patrick, M.D.  2021
Professor, Department of Otolaryngology
The Johns Hopkins University
School of Medicine
Baltimore, MD 21205

HILLMAN, Robert E., Ph.D.  2022
Co-Director and Research Director
Center for Laryngeal Surgery and Voice Rehabilitation at Massachusetts General Hospital and Professor of Surgery: Harvard Medical School
Boston, MA  02114

EATOCK, Ruth Anne, Ph.D.  2023
Professor of Neurobiology
Dean of Faculty Affairs,
Biological Sciences Division
University of Chicago
Chicago, IL 60637

KELLEY, Barbara  2023
Executive Director
Hearing Loss Association of America
Bethesda, MD  20814

EINHORN, Richard  2022
Consultant
Einhorn Consulting, LLC
New York, NY  10025

LINKE ELLIS, Nanci  2020
Specialty Marketing Consultant for Hearing Loss and Vision Impaired Audiences
Culver City, CA  90232

ELLIS WEISMER, Susan, Ph.D.  2020
Oros-Bascom Professor
Department of Communication Sciences and Disorders
Waismann Center
University of Wisconsin-Madison
Madison, WI  53705

MORTON, Cynthia C., Ph. D.  2022
William Lambert Richardson Professor of Obstetrics, Gynecology and Reproductive Biology and Professor of Pathology, Harvard Medical School
Kenneth J. Ryan, M.D. Distinguished Chair in Obstetrics and Gynecology and Director of Cytogenetics, Brigham and Women’s Hospital Chair in Auditory Genetics, University of Manchester
Boston, MA  02115

GOFFMAN, Lisa, Ph.D.  2020
Professor and Nelle Johnston Chair Callier Center for Communication Disorders
School of Behavioral and Brain Sciences
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Dallas, TX    75235

SANES, Dan H., Ph. D.  2023
Professor
Center for Neural Science
New York University
New York, NY  10003
SIMS, H. Steven, M.D.  2020
Associate Professor and Director
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Head and Neck Surgery
University of Illinois Medical Center
Chicago, IL  60612-7333

STROWBRIDGE, Ben W., Ph.D.  2023
Professor of Neuroscience
Departments of Neuroscience and
Physiology/Biophysics
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School of Medicine
Cleveland, OH  44106

Ad Hoc Members

GROVES, Andrew K., Ph.D.
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Chair in Neuroscience
Baylor College of Medicine
Houston, TX  77030

KINNAMON, Sue C., Ph.D.
Professor
Department of Otolaryngology
University of Colorado, Denver
Aurora, CO  80045

Ex Officio

BECK, Lucille B., Ph.D.
Director
Audiology and Speech Pathology Service
Department of Veterans Affairs
Washington, DC  20422

HENDERSHOT, Christa, M.S. CCC-A
Research Audiologist
Hearing Loss Prevention Team
Division of Applied Research and Technology
National Institute for Occupational Safety
And Health (NIOSH)
Cincinnati, OH  45226

THEMANN, Christa, M.S. CCC-A
Research Audiologist
Hearing Loss Prevention Team
Division of Applied Research and Technology
National Institute for Occupational Safety
And Health (NIOSH)
Cincinnati, OH  45226

AZAR II, Alex M.
Secretary
Department of Health and Human Services
Washington, DC  20201

Executive Secretary

JORDAN, Craig A., Ph.D.
Director, Division of Extramural Activities
National Institute on Deafness and Other
Communication Disorders
Bethesda, MD  20892

YEH, Charlotte S., M.D.  2021
Chief Medical Officer
AARP Services, Inc.
Washington, DC  20049

ZENG, Fan-Gang, Ph.D.  2022
Professor, Otolaryngology School of Medicine
and Director, Center for Hearing Research
University of California, Irvine
Irvine, CA  92697

YEH, Charlotte S., M.D.  2021
Chief Medical Officer
AARP Services, Inc.
Washington, DC  20049

ZENG, Fan-Gang, Ph.D.  2022
Professor, Otolaryngology School of Medicine
and Director, Center for Hearing Research
University of California, Irvine
Irvine, CA  92697
NIDCD Council
Budget Report

Eric Williams, Budget Officer
NIDCD Advisory Council Meeting
May 29, 2020
## National Institute on Deafness and Other Communication Disorders (NIDCD)

Comparing FY19 (Actual) and FY20 (Projected) Operating Plans  
(Dollars in thousands)

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<th>FY 2019 Final Allocation</th>
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<td>TOTAL</td>
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*Projected