NATIONAL DEAFNESS AND OTHER COMMUNICATION DISORDERS ADVISORY COUNCIL

September 15, 2017

National Institutes of Health Bethesda, MD

MINUTES

The National Deafness and Other Communication Disorders Advisory Council convened on September 15, 2017 in Building 31, Conference Room 6, National Institutes of Health (NIH), Bethesda, MD. Dr. James F. Battey, Jr., Director, National Institute on Deafness and Other Communication Disorders (NIDCD), served as Chairperson. In accordance with Public Law 92-463, the meeting was:

Closed: September 15, 2017: 8:30 a.m. to 10:00 a.m. for review of individual grant applications; and

Open: September 15, 2017: 10:20 a.m. to 1:40 p.m., for the review and discussion of program development needs and policy.

Council members in Attendance¹:

Ms. Lisa Adams Dr. Jian-Dong Li

Dr. Sarah Blackstone
Dr. Diane Bless
Dr. Susan Ellis-Weismer
Dr. Sue Kinnamon
Dr. David Lee
Dr. M. Charles Liberman
Ms. Nanci Linke-Ellis
Dr. Christoph Schreiner
Dr. H. Steven Sims
Dr. Richard Smith

Council members absent:

Dr. Judith Gierut Dr. Donald Wilson

Council ex-officio members in Attendance:

Dr. Judy Schaffer for Dr. Lucille Beck (VA)

Ms. Christa Themann (CDC)

Dr. Lynn Henselman for Dr. Kristen Casto (DOD)

Council Ad-Hoc members in Attendance:

Dr. John Patrick Carey Dr. Sandra Gordon-Salant

Dr. Neil Segil Dr. Charlotte Yeh

The complete Council roster is found in Appendix 1.

1For 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:

Dr. Kathy Bainbridge Mr. James Burton Dr. Laura Cole Dr. Judith Cooper Dr. Janet Cyr

Ms. Susan Dambrauskas

Mr. Hoai Doan
Dr. Nancy Freeman
Ms. Maria Garcia
Dr. Andrew Griffith
Mr. Howard Hoffman
Ms. Debbie Holmes
Ms. LaTanya Holmes
Ms. Joanne Karimbakas

Dr. Kelly King

Dr. Eliane Lazar- Wesley

Dr. Chuan-Ming Li Ms. Lonnie Lisle Dr. Trinh Ly

Dr. Castilla McNamara

Dr. Roger Miller Ms. Kristen Mullsteff Mr. Eddie Myrbeck Mr. Eric Nunn

Dr. Kausik Ray

Dr. Alberto Rivera-Rentas

Mr. Mark Rotariu
Dr. Elka Scordalakes
Dr. Lana Shekim
Dr. Kathy Shim
Dr. Sheo Singh

Ms. Nanette Stephenson

Dr. Melissa Stick Dr. Susan Sullivan Ms. Kelli Van Zee Dr. Bracie Watson Ms. Ginger Webb Mr. Timothy Wheeles Mr. Baldwin Wong Dr. Shiguang Yang

Other federal employees present during portions of the meeting:

Dr. Biao Tian, CSR Dr. Wind Cowles. CSR

Dr. Ying-Yee Kong, CSR

Ms. Bonnie Matheson, OD

Dr. Michael Lauer, OD

Members of the public present during open portions of the meeting:

Dr. Christopher Platt

Mr. Dan Eckstein, NOVA Research Company

Ms. Barbara Kelley, Hearing Loss Association of America

Ms. Kitty Werner, American Academy of Audiology

Dr. Julie Mennella, Monell Chemical Senses

CLOSED SESSION

I. Call to Order and Opening RemarksDr. James F. Battey, Jr.

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

II. 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 conflict of appearance thereof 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, but would be open to the public at approximately 10:00 a.m.

III. Council Consideration of Pending Applications

A. Research Project Grant Awards

Consideration of Applications: On the Council's agenda was a total of 135 investigator-initiated R01 grant applications; 108 applications had primary assignment to NIDCD, in the amount of \$37.9 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.

B. Special Programs Actions

- 1. NIH Mentored Patient-Oriented Research Career Development Award (K23): The Council recommended support of one application.
- 2. NIH Pathway to Independence Award (K99): The Council recommended support of one application.
- 3. NIH Support for Conferences and Scientific Meetings (R13): The Council recommended support of four applications.
- 4. NIH Exploratory/Development Research Grant Award (R21): The Council recommended support of seven applications.
- 5. NIDCD Early Career Research (ECR) Award (R21): The Council recommended support of eleven applications
- 6. NIDCD Clinical Center Research Grant (P50): The Council recommended support of one application.
- 7. NIH Small Business Technology Transfer (STTR) Phase I (R41): The Council recommended support for three 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 for one Phase II (R44) application.
- 10. Noise-Induced Synaptopothy in the Human Auditory System (R01): The Council recommended support for one application.

Next, Dr. Battey welcomed Dr. Andrew Griffith, Director of NIDCD's Division of Intramural Research. As stipulated by law, each institute must provide annually to its National Advisory Council an overview of the Intramural Research Program. The overview includes reports of the Board of Scientific Counselors (BSC), and the responses of the Scientific Director. This presentation is informational; Council members are not asked to recommend approval or disapproval of the reports or to modify them in any way. However, the Council may make recommendations to the Director, NIDCD regarding such research on the basis of the materials provided.

Dr. Griffith presented Reports of the BSC regarding the review of several intramural laboratories. He then presented his responses to the reports and responded to questions from Council.

[Executive Secretary Note: During the BSC presentation, attendance was restricted to the Council members, the Executive Secretary and a few senior NIDCD administrators.]

OPEN SESSION

Dr. Battey welcomed additional staff and visitors to the open session of the meeting.

Recognition of Ad-Hoc Members

The NDCD Advisory Council slate for new members has been delayed. In order to supplement the expertise of the Council following the 2017-member retirements additional scientific expertise was required. Four members of our research community graciously agreed to serve as Ad Hoc Consultants and to review summary statements and other materials in order to advise the Council members and the Director, NIDCD during the meeting. I'd like to briefly introduce these consultants:

<u>Dr. John Patrick Carey</u> is Professor in the Department of Otolaryngology-Head and Neck Surgery and Chief in the Division of Otology, Neurotology, and Skull Base Surgery at the Johns Hopkins University. He received his medical degree from Washington University. His research interests include the normal vestibular reflexes and how they change with age, novel intratympanic treatments (i.e., middle ear injections) for conditions like Meniere's disease and sudden hearing loss, and the mechanisms of vestibular migraine. Dr. Carey has special interest in health and diseases of the inner ear that affect both balance and hearing mechanisms. He has extensive experience in superior canal

dehiscence syndrome, Meniere's disease, vestibular migraine, and other causes of vertigo. Dr. Carey and his colleagues developed the operation to repair the superior canal using image-guided surgery. Dr. Carey has authored or co-authored a multitude of peer-reviewed publications. He has received many honors and awards such as a Presidential Citation from the American Otological Society in April 2015 for his contribution to understanding the pathophysiology of vestibular science. Dr. Carey is a member of numerous professional societies.

<u>Dr. Sandra Gordon-Salant</u> is Professor and Director of the Doctoral Program in Clinical Audiology in the Department of Hearing and Speech Sciences at the University of Maryland, College Park. She earned her Ph.D. in Audiology at Northwestern University. Her research interests include the effects of aging and hearing loss on auditory processes, as well as signal enhancement devices for hearing-impaired listeners. She has served as Editor of the Journal of Speech, Language, and Hearing Research, Associate Editor of the Journal of the Acoustical Society of America-Express Letters, and member of the National Academy of Sciences' Committees on Disability Determination for individuals with Hearing Impairments and Medical Evaluation of Veterans for Disability Determination. She has published numerous articles and book chapters on the topic of age-related hearing loss and speech understanding problems of older people. She is the senior editor of the book, The Aging Auditory System. Dr. Gordon-Salant received the Al Kawana Award for outstanding contributions to research from the American Speech-Language-Hearing Association in 2013. Her research has been supported by the National Institute on Aging of the NIH for the past 30 years.

<u>Dr. Neil Segil,</u> is Professor of Research in the Department of Stem Cell Biology and Regenerative Medicine and Department of Otolaryngology-Head and Neck Surgery at the University of Southern California. He received his Ph.D. from Columbia University. His research is focused on the development aspects of cell cycle regulation as they relate to the inner ear, hearing loss and regeneration. The long-term goal of Dr. Segil's research is the treatment of deafness through regeneration of the sensory hair cells. He is on the Editorial Board of the journal Hearing Research and has served on several committees of the Association for Research in Otolaryngology. Dr. Segil has published extensively, serves often as a reviewer of grant applications, and frequently presents at meetings. He has received patents for his inventions in the areas of treatment or prevention. Dr. Segil was a member of the Board of Scientific Counselors for NIDCD from 2009-2014.

<u>Dr. Charlotte Yeh</u> is the Chief Medical Officer for American Association of Retired Persons Services, Inc. She received her medical degree from Northwestern University Medical School. Her professional interests include enhancing care for older adults. She has become widely recognized for her commitment to the consumer voice in health care, in addition to being a sought-after speaker on issues that matter to people 50+ such as brain health, caregiving, hearing, care coordination and healthy living. Dr. Yeh has over 30 years of experience in healthcare. She is a board-certified emergency physician. She worked as Physician-in-Chief for the Department of Emergency Medicine at Tufts Medical Center in Boston. Dr. Yeh has received numerous awards and honors for her efforts on behalf of patients. In 2012, she was awarded the National Asian Pacific American Corporate Achievement Award for her leadership and commitment to diversity in the workplace. She has lectured frequently on blending clinical practice with the legal requirements of the Emergency Medical Treatment and Labor Act.

My thanks to each of you for assisting us with this important work.

Dr. Battey thanked Dr. Nanci Linke-Ellis for extending her service on the Advisory Council also in an effort to assist with the work.

Consideration of Minutes of the Meeting of January 27, 2017

Dr. Battey called the members' attention to the minutes of the May 19, 2017 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 2019 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, January 26, 2018, in Building 31, Conference Room 6 on the NIH campus, Bethesda, Maryland.

Budget Update

Dr. Battey began his presentation by pointing out that this is the first time in FY 2017 that we have presented a complete FY 2017 budget picture. There was a nice increase of \$13.5 million for NIDCD from the FY 2016 Final Allocation to the FY 2017 Operating Plan. These increased funds were used to support the increased cost of non-competing Research Project Grants.

Dr. Battey went on to display the FY 2018 Budget Level proposed amounts, as compared to the FY 2017 Operating Level established by the budget legislation passing in May 2017. The three separate and not equal requests for funds include the President's Budget Request and the House and Senate Appropriations Bills. He noted that the House and Senate have proposed modest increases while the President has proposed a decrease, based on a significant policy change to indirect costs calculations. FY 2018 appropriation levels will be revealed when the Congress passes budget legislation that the President signs. Our 2018 fiscal year will begin on October 1st under a Continuing Resolution (CR) that runs through December 8th.

[A copy of the slides Dr. Battey used for this budget presentation is included in Appendix II]

NIH policy requires that the National Advisory Council for each institute review the activities of their respective intramural program once a year. Dr. Andrew Griffith, Scientific Director of NIDCD's Division of Intramural Research presented the 2017 report.

Board of Scientific Counselors

Dr. Griffith updated the Council on the membership of the Board of Scientific Counselors. Dr. Andrew Groves from the Baylor College of Medicine is the Chair of the committee; the committee currently has 5 members and on average 20% of the membership is replaced annually. Three new member appointments have been delayed by current Department of Health and Human Services (DHHS) hiring limitations.

Personnel

The intramural program is currently composed of 10 tenured investigators and two tenure-track investigators along with a large contingent of supporting scientists. The planned retirement of Dr. Barry Horwitz, one of the tenured investigators was noted. There are also four individuals in the Surgeon-Scientist Career Development program.

Highlights

Dr. Griffith provided information about the NIDCD's Otolaryngology Surgeon-Scientist Program that is geared toward an integration of clinical and basic research opportunities in a mentored environment. The goal is to provide early career faculty development through graduated independence and resources. In addition, the intramural program provides a culture of scholarly inquiry and scientific rigor in conjunction with opportunities to maintain their important surgical skills. He also noted the strategic relationships for NIDCD with three local hospitals including the Walter Reed National Military Medical Center where these surgeon-scientists can not only build their skills as researchers, but also as surgeons in the field of otolaryngology.

The fourth EARssentials course was held in July 2017 at the Porter Neuroscience Research Center with the focus being, "Concepts and Techniques of Contemporary Hearing Research." The primary target audience was new NIDCD intramural trainees; however, the course was offered free of charge and was open to any interested individual, even scientists from outside the NIH. The week-long course included morning lectures and afternoon laboratory sessions. In 2017, attendees included trainees from six extramural research organizations.

Dr. Jordan announced to members and staff that there would be renovations to the Conference area of Building 31 during 2018. Plans are to hold two Advisory Council meetings at the Natcher Conference Center and one will be held in the Porter Neuroscience Research Center. He promised to update everyone as the meetings are moved.

[Executive Secretary Note: As of the writing of these minutes, construction has been delayed. The plan for January 2018 meeting now is that it will occur in the usual location in Building 31, Room 6C6.]

Next, Dr. Jordan introduced the NIH's Next Generation Researchers Initiative using the NIH Guide Notice as a springboard (NOT-OD-17-101). The goal of this initiative is to ensure the long-term stability of the biomedical research enterprise. He noted that the goal is to launch independent careers for Early Stage Investigators (ESI) and retain them as they become Early Established Investigators (EEI)in a way that enhances workforce diversity.

The NIH has had the ESI program for almost 10 years. The current environment is particularly challenging for many new- and mid-career investigators. The NIH has taken numerous steps to balance, strengthen, and stabilize the biomedical workforce including; Special Council Review policy, New Investigator/Early Stage Investigator policies, initiatives from the Advisory Council to the NIH Director, and focused programs for early-career

investigators. The new NIH policy adds the next step to bolster this group of young investigators as an Early Established Investigator (EEI). The EEI is a PD/PI who is within 10 years of receiving the first substantial independent NIH R01-equivalent research award as an ESI. A meritorious application with a designated PD/PI EEI may be prioritized for funding if:

- The EEI lost or is at risk for losing all NIH research support if not funded by competing awards this year, or,
- The EEI is supported by only one active award.

Dr. Jordan then pointed out that the NIH is developing evidence-based strategies to identify, grown and retain ESIs and EEIs across these critical career stages. The approach for the future includes maintaining an updated census/status of ESIs and EEIs while encouraging the development and testing of metrics that can be used to assess the impact of NIH grant support on scientific progress. Also, there will be greater emphasis on current NIH funding programs designed for early-stage and mid-career investigators such as; NIH Common Fund's New Innovator Awards and an array of IC-specific programs utilizing the R35 funding mechanism. By providing funding priority for applications from EEIs, the NIH intends to stabilize the career trajectory of research investigators.

Dr. Jordan spoke next of the Notice of Changes to the NIH Policy for issuing Certificates of Confidentiality (NOT-OD-17-109) in response to the 21st Century Cures Act. This requires that the "Secretary, HHS shall issue Certificates of Confidentiality to persons engaged in biomedical, behavioral, clinical or other research, in which identifiable, sensitive information is collected." These Certificates protect the privacy of subjects by limiting the disclosure of identifiable, sensitive information. This policy is effective October 1, 2017 and retroactive to December 13, 2016.

IX. The Flavor World of Childhood: Basic Biology and Implications for Health"Dr. Julie Mennella

Dr. Battey welcomed Dr. Julie Mennella, Member at the Monell Chemical Senses Center in Philadelphia, Pennsylvania to discuss her research on early childhood experiences with food and flavor preferences as they relate to growth and disease.

Early life experiences—both biological and social—explain trajectories of health decades later. In this talk, I will review the evidence base that explains why and how the basic biology of children makes them vulnerable to the current food environment rich in added sugars and salt. This biology also explains why children initially reject foods such as green vegetables as well as the liquid medicines given them to combat an illness. If this is the bad news, the good news is that a variety of early flavor experiences, beginning even before the child has their first 'taste' of food, can shape preferences. Flavors transmit from the maternal diet to amniotic fluid and mother's milk, and repeated experiences with the flavors of healthy foods can shape and modify food preference with far-reaching effects on behavior. This emerging body of knowledge from both human and animal model research suggest that early life experiences could have a significant impact in addressing many of chronic diseases that plague modern society which derive in large part from poor food choice, dictated by our taste preferences.

 Dr. Cooper discussed NIDCD's plans to reissue a Funding Opportunity Announcement to solicit more complicated clinical trial applications (i.e., require FDA oversight, to establish efficacy, or increased risk to participants). Council Members discussed and unanimously endorsed the concept.

Dr. Cooper then introduced Drs. Shekim and King to update the Council regarding the interpretation with the World Health Organization.

The NIDCD, like many NIH Institutes, is active in global health research and conducts and supports research at foreign institutions. Drs. Lana Shekim and Kelly King reviewed the process of collaboration in global health research among NIH ICOs and the HHS Office of Global Affairs. This process is coordinated by the Fogarty International Center. Historical context to NIDCD engagement with the World Health Organization was noted.

In May 2017, the World Health Assembly adopted a resolution on prevention of deafness and hearing loss. NIDCD was tasked to prepare the United States government position for the World Health Assembly meeting, and was invited to participated in a follow-up stakeholders' meeting in July. The resolution and a summary of meeting were provided.

Dr. Battey welcomed Dr. Michael Lauer, Deputy Director for Extramural Research at the NIH to discuss the upcoming NIH Clinical Trials Reforms.

Dr. Lauer began with a story from a 2011 article in the British Journal of Medicine (BMJ) which stated that there were problems with Clinical Trials making the statement, "There are many [NIH-funded] trials not covered by [FDAAA], such as trials of behavioral interventions and surgical procedures. No policies exist to make sure that the public has access to results from NIH funded research that is not published." BMJ 2011;344:d7292 doi: 10.1136/bmj.d7292 (Published 3 January 2012)

Next, he noted that the article was met with doubt. He referenced an article he co-authored in 2013, when in his position at the NHLBI, that tried to refute the earlier claims and found much to his dismay that they might be right. He displayed a table comparing Cumulative Publication Rate to Months after Trial Completion from which the team concluded that "A number of parties share responsibility, including funders, investigators, academic medical centers, [universities], clinical research organizations, and ... journals."

N Engl J Med 2013;369:1926-34

Citing a later BMJ article titled, "Publication and reporting of clinical trial results: cross sectional analysis across academic medical centers and displaying a table that displayed the Studies published or results reported within 24 months (%), the quote from the article, "Despite the ethical mandate and expressed values of academic institutions, there is poor performance and noticeable variation in the dissemination of clinical trial results across leading academic medical centers." BMJ 2016;352:i637

To indicate just how serious this is he references an NPR Opinion article by Dr. Harlan Krumholz of the Yale School of Medicine from February 2016," Academic Medical Centers Get an F in Sharing Research Results" which makes the following points:

- "We have a bottleneck at our nation's bastions of research excellence. Too many times, study results are neither reported on the government website, clinicaltrials.gov, nor published in a journal.
- The failure to share results is so pervasive that it seems inappropriate to blame individuals. Instead it is a systemic problem.
- Not reporting results violates the basic principle of the scientific method. It hurts
 patients, society, and science. It dishonors the people who gave their consent and
 bore the risk of participating...
- The holding back of the results impedes progress toward scientific breakthroughs, corrupts the medical literature and wastes research funding" http://www.npr.org/sections/health-shots/2016/02/23/467712481/academic-medical-centers-get-an-f-in-sharing-research-results

As if not enough evidence had been compiled seeking change, the United States Government Accounting Office (GAO) Report to Congressional Committees from March of 2016 indicated that "Additional Data Would Enhance the Stewardship of Clinical Trials across the Agency citing two facts:

- "NIH's OD reviews some data on clinical trial activity across NIH but has not finalized what additional data it needs or established a process for using these data to enhance its stewardship.
- NIH is limited in its ability to make data-driven decisions regarding the use of its roughly \$3 billion annual investment in clinical trials." https://www.gao.gov/products/GAO-16-304

Since 2014, the NIH has been responding to this negative data. First, the Notice of Revised NIH Definition of "Clinical Trial" was issued in a Notice to the community (NOT-OD-15-015). The revision was designed to make the distinction between clinical trials and clinical research studies clearer and to enhance the precision of the information NIH collects, tracks, and reports on clinical trials. It is not intended to expand the scope of the category of clinical trials. No changes have been made to the NIH definition of a "Phase III clinical trial."

In September 2016 the policy for Clinical Trials Regulation and Results Information Submission was published as a federal register notice that stated, "A fundamental premise of all NIH-funded research is that the results must be disseminated.... In research involving human beings, scientists have an ethical obligation to ensure that the burden and risk that volunteers assume comes to something, at the very least by ensuring that others are aware of the study and that its findings contribute..."

https://www.federalregister.gov/documents/2016/09/21/2016-22379/nih-policy-on-the-dissemination-of-nih-funded-clinical-trial-information

Since the summer of 2016 NIH has been communicating in public forums like the article that appeared September 2016 in the Journal of the American Medical Association showing that the NIH is moving "Toward a New Era of Trust and Transparency in Clinical Trials" as well as through policy notices like NOT-OD-16-149 "NIH Policy on the Dissemination of NIH-Funded Clinical Trial Information," as well as publishing blogs in the Extramural Nexus. He also showed the improved NIH Clinical Trials website https://grants.nih.gov/policy/clinical-trials.htm that outlines the policies and procedures the NIH is implementing to enhance accountability.

Dr. Lauer concluded with this thought, "It is important that we get this right. We have an ethical mandate to assure the public that the results of all NIH-funded trials will be made available in a timely manner. We know that under the current state of affairs, over half of all

completed NIH-funded trials are not reported out within 2.5 years of completion; the problem is widespread and pervasive. This is an unacceptable state of affairs; it should not be optional to report results. We look forward to continuing to work with you as we move towards higher levels of trust and transparency. https://nexus.od.nih.gov/all/2017/09/08/continuing-to-clarify-the-nih-definition-of-a-clinical-trial/

XII. Adjournment

The meeting was adjourned at 1:40 p.m. on September 15, 2017.

XIII. Certification of Minutes

| accurate and correct ² . | | | |
|---|---|--|--|
| 10-24-17 | /Craig A. Jordan/ | | |
| | Craig A. Jordan, Ph.D. Executive Secretary National Deafness and Other Communication Disorders Advisory Council | | |
| 10-24-17 | /James F. Battey, Jr./_ | | |
| | James F. Battey, Jr., M.D., Ph.D. Chairman National Deafness and Other Communication Disorders Advisory Council | | |
| | Director National Institute on Deafness and Other Communication Disorders | | |
| | | | |
| Ginger Webb Council Assistant NDCD Advisory Council | | | |

We certify that, to the best of our knowledge, the foregoing minutes and attachments are

² These minutes will be approved formally by the Council at the next meeting on January 26, 2018, and corrections or notations will be stated in the minutes of that meeting.

APPENDICES

| APPENDIX 1 | NDCD Advisory Council Roster | 14 |
|------------|--------------------------------|----|
| APPENDIX 2 | NIDCD Director's Report Slides | 16 |

Roster

National Deafness and Other Communication Disorders Advisory Council

(Terms end on 5/31 of the designated year)

Chairperson

James F. Battey, Jr. M.D., Ph.D., Director National Institute on Deafness and Other Communication Disorders Bethesda, MD 20892

| ADAMS, Lisa C., J.D. Founding Member and President Massachusetts Hearing Aids for Children Coalition Newton, MA 02458 | 2020 | LEE, David J., Ph.D. Professor Department of Public Health Sciences University of Miami School of Medicine Miami, FL 33136 | 2018 |
|--|------|--|------|
| BLACKSTONE, Sarah W., Ph.D. President and CEO Augmentative Communication, Inc. Monterey, CA 93940 | 2019 | LI, Jian-Dong, M.D., Ph.D. Georgia Research Alliance Eminent Scholar Director, Center for Inflammation, Immunity and Infection | 2018 |
| BLESS, Diane M., Ph.D. Professor Emeritus Departments of Communicative Disorders And Surgery | 2018 | Professor, Department of Biology Georgia State University Atlanta, GA 30303 | |
| University of Wisconsin – Madison School of Medicine Madison, WI 53792 | | LIBERMAN, M. Charles, Ph.D. Director, Eaton-Peabody Laboratory Department of Otology and Laryngology Harvard Medical School | 2019 |
| ELLIS WEISMER, Susan, Ph.D. Oros-Bascom Professor | 2020 | Boston, MA 02114 | |
| Department of Communication Sciences and Disorders Waisman Center University of Wisconsin-Madison Madison, WI 53705 | | LINKE ELLIS, Nanci Consultant Ellis Consultancy Culver City, CA 90232 | 2020 |
| GIERUT, Judith A., Ph.D. Professor Emerita Department of Speech and Hearing Sciences Program in Cognitive Sciences Indiana University Bloomington, IN 47405-7002 | 2020 | SCHREINER, Christoph, M.D., Ph. D. Professor and Vice Chairman Department of Otolaryngology – Head and Neck Surgery Center for Integrative Neuroscience School of Medicine University of California, San Francisco San Francisco, CA 94158 | 2019 |
| KINNAMON, Sue C., Ph.D. Professor Department of Otolaryngology University of Colorado, Denver Aurora, CO 80045 | 2019 | SIMS, H. Steven, M.D. Associate Professor and Director Department of Otolaryngology- Head and Neck Surgery University of Illinois Medical Center Chicago, IL 60612-7333 | 2020 |

SMITH, Richard J. H., M.D. 2018 Professor Department of Otolaryngology University of Iowa – Carver College of Medicine Iowa City, IA 52242 WILSON, Donald A., Ph. D. 2019
Senior Research Scientist and Deputy Director
Emotional Brain Institute
The Nathan S. Kline Institute for Psychiatric
Research
Professor
New York University School of Medicine
Orangeburg, NY 10962

Ad Hoc

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

GORDON-SALANT, Sandra, Ph.D. Director, Doctoral Program in Clinical Audiology University of Maryland College Park, MD 20742 SEGIL, Neil, Ph.D. Professor of Research Keck School of Medicine University of Southern California Los Angeles, CA 90033

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

Ex Officio

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

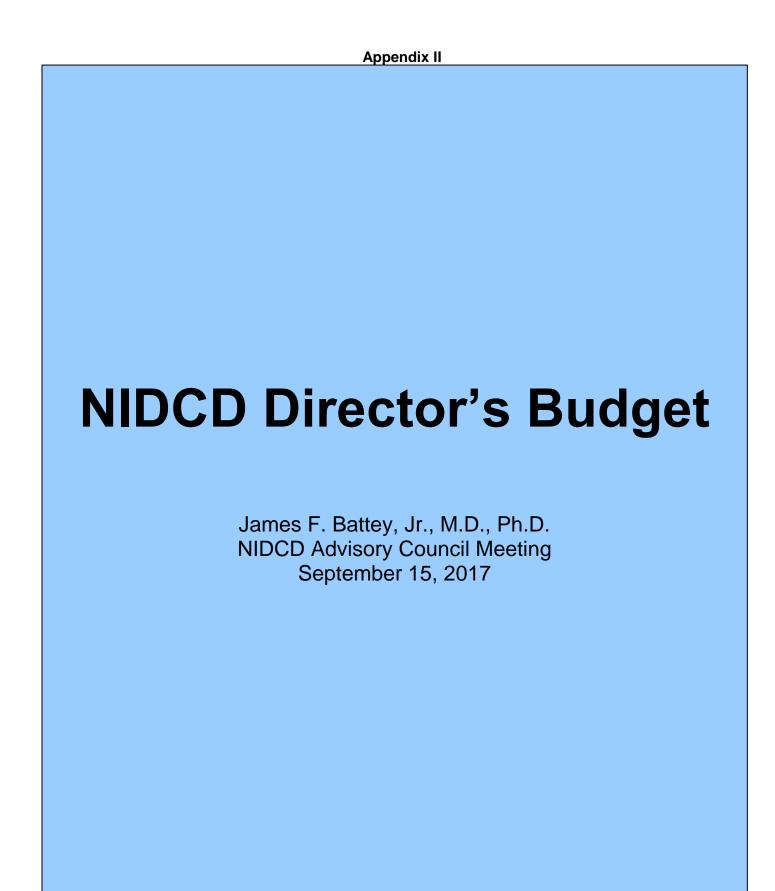
THEMANN, Christa, M.S. CCC-A
Research Audiologist
Hearing Loss Prevention Team
Division of Applied Research and Technology
National Institute for Occupational Safety
And Health (NIOSH)
Cincinnati, OH 45226

PRICE, Thomas E, M.D. Secretary Department of Health and Human Services Washington, DC 20201

COLLINS, Francis S., Ph.D., M.D. Director National Institutes of Health Bethesda, MD 20892

Executive Secretary

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



National Institute on Deafness and Other Communication Disorders

September 2017 Council Budget Mechanism (Dollars in thousands)

| | FY 2016 Final Allocation | | | FY 2017 Operating Plan | |
|--------------------------|-----------------------------|-----------|--------|---------------------------|--|
| Budget Mechanism | Number | Amount | Number | Amount | |
| Research Projects | | | | | |
| Noncompeting | 549 | \$210,401 | 582 | \$226,500 | |
| Admin. Supplements | 22 | 1.017 | 25 | 2,000 | |
| Competing | 218 | 81.768 | 193 | 73,400 | |
| Subtotal | 767 | 293,186 | 775 | 301,900 | |
| SBIR/STTR | 30 | 12,682 | 34 | 13,500 | |
| Subtotal, RPG's | 797 | 305,868 | 809 | 315,400 | |
| Research Centers | 15 | 16,507 | 8 | 14,124 | |
| Other Research | 66 | 10,881 | 62 | 10,000 | |
| Total Research Grants | 878 | 333,256 | 879 | 339,524 | |
| Individual Training | 127 | 5,675 | 125 | 5,700 | |
| Institutional Training | 157 | 7,469 | 160 | 7,800 | |
| R & D Contracts | 32 | 17,986 | 37 | 20,500 | |
| Intramural Research | | 37,450 | | 39,430 | |
| Research Mgmt. & Support | t | 20,515 | | 22,950 | |
| TOTAL | _ | \$422,351 | _ | \$435,904 | |

National Institute on Deafness and Other Communication Disorders

September 2017 Council

FY 2018 Budget Levels

FY 2017:

Operating Level \$435,904,000 *

FY 2018:

President's Budget Request \$325,846,000 House Appropriations Bill \$443,624,000 ** Senate Appropriations Bill \$451,768,000 **

^{*} Reflects Secretary's transfer of \$971,000.

^{**}As reported-out by the Full Appropriations Committee.