

**NATIONAL DEAFNESS AND OTHER COMMUNICATION DISORDERS
ADVISORY COUNCIL**

September 12, 2014

**National Institutes of Health
Bethesda, MD**

MINUTES

The National Deafness and Other Communication Disorders Advisory Council convened on September 12, 2014 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 12, 2014: 8:30 a.m. to 10:20 a.m. for review of individual grant applications; and

Open: September 12, 2014: 10:35 a.m. to 1:45 p.m., for the review and discussion of program development needs and policy.

Council members in Attendance¹:

Dr. Diane Bless	Dr. Joseph Perkell
Ms. Joan Kaye	Dr. James Schwob
Ms. Tisha Kehn	Dr. Elba Serrano
Dr. David Lee	Dr. Robert Shannon
Dr. Jian-Dong Li	Dr. Richard Smith
Dr. Paul Manis	Dr. Helen Tager-Flusberg
Dr. Charlotte Mistretta	Dr. Debara Tucci
Dr. David Myers	Dr. Monte Westerfield

Council members absent:

Dr. Tommie Robinson

Ex-Officio Members Participating:

Dr. Rick Davis

Ex-Officio Members Not Participating:

Dr. Lucille Beck

Dr. Michael E. Hoffer

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. Adebolajo Adeyemo	Dr. Castilla McNamara
Dr. Kathy Bainbridge	Dr. Roger Miller
Mr. Chris Carlsen	Mr. Christopher Myers
Dr. Laura Cole	Mr. Edward Myrbeck
Ms. Naomi Cole	Mr. Eric Nunn
Dr. Judith Cooper	Dr. Christopher Platt
Dr. Janet Cyr	Dr. Kausik Ray
Ms. Susan Dambrauskas	Mr. Chris Rosado
Mr. Hoai Doan	Mr. Mark Rotariu
Dr. Amy Donahue	Dr. Lana Shekim
Dr. Nancy Freeman	Dr. Sheo Singh
Dr. Thomas Freidman	Dr. Daniel Sklare
Ms. Maria Garcia	Ms. Nanette Stephenson
Dr. Andrew Griffith	Dr. Melissa Stick
Mr. Howard Hoffman	Dr. Susan Sullivan
Ms. Debbie Holmes	Dr. Jean Tiong-Koehler
Dr. Gordon Hughes	Dr. Bracie Watson
Ms. Phalla Keng	Ms. Ginger Webb
Dr. Lisa Kennedy	Mr. Timothy Wheelles
Dr. Eliane Lazar-Wesley	Mr. Baldwin Wong
Dr. Chuan-Ming Li	Mr. Chad Wysong
Dr. Christine Livingston	Dr. Shiguang Yang
Ms. Melissa McGowan	

Other federal employees present during portions of the meeting:

Dr. Lynn Luethke, CSR
Dr. Christine Melchior, CSR
Dr. Biao Tian, CSR
Dr. Pamela Collins, NIMH
Dr. Paek Lee, CSR

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

Ms. June Martin, A.G. Bell
Ms. Rebekka Lueptow, Independent Consultant
Ms. Kirstie Saltsman, I.Q. Solutions
Ms. Margaret Rogers, ASHA

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. Drs. Bless, Lee and Li were welcomed to the group as new council members with the promise of a more formal introduction in the Open Session.

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 10:30 a.m.

III. Council Consideration of Pending Applications

A. Research Project Grant Awards

1. Consideration of Applications: On the Council's agenda was a total of 83 investigator-initiated research grant applications; 77 applications had primary assignment to NIDCD, in the amount of \$23.9 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 16th percentile.

B. Special Programs Actions

1. NIH Mentored Clinical Scientist Development Award (K08): The Council recommended support of two applications.
2. NIH Research Career Enhancement Award for Established Investigators (K18): The Council recommended support of one application.
3. NIH Pathway to Independence (PI) Award (K99): The Council recommended support of three applications.
4. NIH Small Grants (R03): The Council recommended support of seven applications.
5. NIH Support for Conferences and Scientific Meetings (R13): The Council recommended support of two applications.
6. NIH Exploratory/Development Research Grant Award (R21): The Council recommended support of six applications.
7. NIH Small Business Technology Transfer Grants (STTR): The Council recommended support of one Phase I (R41) application.

8. NIH Small Business Innovation Research Awards (SBIR): The Council recommended support of two Phase I (R43) applications.
9. NIH Small Business Innovation Research Awards (SBIR): The Council recommended support of one Phase II (R44) application.

IV. Report of the Board of Scientific Counselors Dr. Andrew Griffith

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. They then presented their 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

V. Opening Remarks..... Dr. Battey

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

Recognition of New Members

Dr. Battey welcomed the following new members to the Advisory Council:

- **Dr. Diane Bless** is Professor Emeritus in the Departments of Communicative Disorders and Surgery, at the University of Wisconsin-Madison. She received her doctoral degree from the University of Wisconsin-Madison in Communicative and Behavioral Disorders. Her research interests focus on the lifespan change in voice production, efficacy of treatment of vocal dysphonias, assessment/measurement of laryngeal function, and physiological effects of voice treatments. She has extensive experience in evaluating/treating patients with voice, resonance and airway disorders. Dr. Bless has received many honors and awards including ASHA’s Frank R. Kleffner Lifetime Clinical Career Award, the American Laryngological Association’s James E. Newcomb Award for outstanding literature contributions, and her university’s 2012 award for excellence in mentoring. She is involved with several professional societies such as the American Speech-Language Hearing Association and the American Cleft Palate Association. Dr. Bless has made many presentations at national/international meetings. She is published widely, serves on editorial boards, and contributed significantly to grant application reviews.
- **Dr. David Lee** is Professor at the Department of Public Health Sciences at the University of Miami, where he also serves as Director of Graduate Programs. He also serves as the Research/Data Dissemination Director at the Florida Cancer Data System. He received his doctoral degree in Preventive Medicine and Community Health from the University of Texas Medical Branch at Galveston. His professional interests include research in epidemiology of sensory impairments and multisensory systems, aging, tobacco control and occupational

health. Dr. Lee has received many honors and awards, currently serving on the Oversight Committee for the Conservation of Hearing Study. He is a member of many professional organizations such as Association for Research in Vision and Ophthalmology, is widely published in journals, books, and magazines; and is frequently invited to give talks and lectures

- **Dr. Jian-Dong Li** is the Georgia Research Alliance Eminent Scholar and Professor, Department of Biology at Georgia State University. He also serves as the Director of the Institute for Biomedical Sciences. He received his medical degree from Tsingtao University School of Medicine, China and earned his doctoral degree in BioMedical Sciences from University of California. His research interests focus on understanding the molecular basis of inflammatory diseases and further developing novel anti-inflammatory therapeutic agents. Dr. Li has special interest related to research with inflammation, particularly human inflammatory disease such as otitis media. Dr. Li has received numerous awards for his research contributions, served in many editorial roles, and is widely published. Recently, he served as Program Chair for the International Symposium on Recent Advances in Otitis Media. He has received numerous patents for his inventions in the areas of disease treatment or prevention.

Consideration of Minutes of the Meeting of May 9, 2014

Dr. Battey called the members' attention to the minutes of the May 9, 2014 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 2016 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 30, 2015, in Building 31, Conference Room 6 on the NIH campus, Bethesda, Maryland.

VI. Report of the Division of Intramural Research..... Dr. Andrew Griffith

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 (DIR) presented the 2014 report.

Board of Scientific Counselors

Dr. Griffith updated the Council on the membership of the Board of Scientific Counselors (BSC). Dr. Marci Lesperance of the University of Michigan continues as the Chair of the committee; the committee currently has 8 members and on average 20% of the membership is replaced annually.

Porter Neuroscience Research Center

Dr. Griffith provided the exciting news that the move is complete into the new space at the Porter Neuroscience Research Center. The entire intramural science program is now housed on the NIH Main campus in two locations, the NIH Clinical Center and the Porter Neuroscience Center.

Personnel

There are currently 10 tenured investigators and two tenure-track investigators along with a large contingent of supporting scientists. There are currently three individuals in the Surgeon-Scientist Career Development program. The intramural program is currently recruiting new Tenure-Track Investigators and Surgeon Scientists.

Training Opportunities

The first *EARssentials* course was held in June, 2014 at the Porter Neuroscience Research center with the main focus being, “Concepts and Techniques of Contemporary Hearing Research”. The primary target audience was new NIDCD intramural trainees who were able to attend both lecture and lab sessions. The lecture component was open to all interested staff.

A new intramural fellowship mechanism has been developed entitled the *Robert Wenthold Postdoctoral Fellowship in Communication Sciences*. This opportunity was developed to recognize and support the most promising fellows with a competitive award granted to 1 - 2 fellows per year who have 0-2 years of postdoctoral research experience in an intramural or extramural laboratory. The award allows flexible design of research training and career development, cross-training, and opportunities for structured co-mentoring. Central funding by the Scientific Director’s office will allow any laboratory to house one of these fellows without the usual budget concerns.

VII. Report of the Director, NIDCDDr. Battey

Budget Update

Dr. Battey began his presentation by displaying the President’s NIDCD Budget Request for FY 2015. He pointed out that there has been little Congressional action yet on the FY 2015 budget for NIH and that these numbers were likely to change. As a consequence, there is a great deal of uncertainty about what the eventual budget level will be and it is very likely that NIH will begin FY 2015 without an appropriation, operating under a Continuing Resolution. In recognition of this high level of uncertainty, NIDCD has adopted a conservative fiscal plan for FY 2015. Once other components of the NIDCD budget are considered there would be \$283.0 million available for research project grants. From this total, \$11.5 million is reserved for Small Business Research grants, \$1.7 million for administrative supplements, \$207.2 million for commitments to noncompeting grants, \$993 thousand for commitments carried over from FY2014, and \$13.8 million for program requirements. An additional estimated \$2.6 million is available from end of year FY 2014 funds. Of the remaining \$50.5 million, twenty percent (\$10.1 million) is designated for High Program Priority (HPP). Consequently, there is \$40.4 million available for the initial pay line across the year’s three Council meetings. This should allow funding of applications up through the 16th percentile. The \$10.1 million for HPP applications will be available to support additional applications throughout the year.

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

VIII. “Global Health at the National Institute of Mental Health (NIMH)”Dr. Pamela Collins

Dr. Battey introduced Dr. Pamela Collins, Director of the Office for Research on Disparities and Global Mental Health from the National Institute of Mental Health (NIMH). Dr. Collins accepted our invitation to discuss her research in a presentation entitled, “Global Health at the National Institute of Mental Health.”

Mental and behavioral disorders account for a significant proportion of the burden of noncommunicable disease in high, middle, and low-income countries and are the leading causes of disability worldwide. Yet, marked inequities in financing of health services and supply of human resources for mental health care are evident between countries and within countries. Global mental health research requires that investigators address questions of equity while acknowledging the global economic, political, and cultural interconnections that shape the experience of mental illness and the lives of people with mental illness. A global research perspective can facilitate exploration of the underlying mechanisms that produce difference and disparity in diverse populations. Global

mental health research requires partnership and collaboration, embrace of bidirectional learning, and recognition of the growing need for attention to chronic and non-communicable diseases in high-, middle-, and low-income countries.

One key area of focus in NIMH's global mental health portfolio is research to reduce the treatment gap in low- and middle-income countries. NIMH is investing in research to test the effectiveness of innovative task-shifting interventions for the delivery of mental health interventions in settings where resources for mental health care are scarce. Our hope is that these studies will provide lessons for mental health care delivery in low resource contexts globally.

IX. Scientific PresentationDr. Tom Friedman

Dr. Battey introduced Dr. Tom Friedman, Chief, Section on Human Genetics from the NIDCD Intramural program. Dr. Friedman accepted our invitation to discuss his research in a presentation entitled, "*From formal genetics to hearing function: An unexpected continuum of nonsyndromic to syndromic deafness.*"

Dr. Friedman outlined the scientific strategy used in the Laboratory of Molecular Genetics to identify and characterize deafness genes. The strategy includes multiple phases such as ascertaining large families segregating deafness, acquiring clinical data, genetic mapping, exome sequencing, engineering animal models, cell biologic and biochemical studies, and more. Often, one phase helps to inform another phase in an iterative process. Progress on identifying deafness mutations and insights into ear function requires integrating a variety of scientific disciplines.

After a short background on the genetics of deafness and how assumptions about deafness genes have changed over time, Dr. Friedman presented three examples where different mutations of the same gene cause nonsyndromic or syndromic deafness. Different recessive mutations in the gene *TBC1D24* have been identified that associate with nonsyndromic deafness, with epilepsy, or with DOORS syndrome, a syndrome presenting with both seizures and deafness. In the cochlea, *TBC1D24* is found to be abundant in the spiral ganglion neurons, which may explain the impact of mutations on hearing.

Mutations in the genes encoding cadherin (*CDH23*) or protocadherin 15 (*PCDH15*) have been shown to cause both nonsyndromic deafness and Usher type I syndrome. Both proteins, *CDH23* and *PCDH15*, have been shown to be important in stereocilia tip links that are required for hearing.

Mutations in *CLPP*, a protease component of the mitochondrial stress response signaling pathway, have been associated with nonsyndromic deafness and with Perrault syndrome that has cardinal features of deafness as well as ovarian dysgenesis or premature failure. *CLPP* is more abundant in certain areas of the cochlea, e.g., Deiter's cells, inner pillar cells, and Hensen's cells.

After presenting details about each of the three research efforts, Dr. Friedman closed with a discussion of future directions and the following broad conclusions.

- Most nonsyndromic deafness genes do not encode inner ear cell-specific molecules, but rather are expressed in a variety of organ systems.
- Mutations of any gene, no matter how widely expressed in the body, could be a cause of a phenotypically restricted human disorder.
- Consider "nonsyndromic deafness" as a provisional classification.

X. Report of the Director, Division of Scientific Programs Dr. Judith Cooper

Dr. Cooper introduced Dr. Daniel Sklare, NIDCD Research Training Officer, who emphasized that NIDCD is strongly committed to nurturing the research careers of promising clinician-investigators within its research mission areas. These clinician-scientists are crucial translators of scientific advances into healthcare practice as investigators, supporters, and/or research managers. He described two long-standing Mentored Clinician-Scientist Development Award programs (K08/K23) and recounted accomplishments and lessons learned. Dr. Sklare reported that NIDCD expects its K08/K23 awardees to have at least two years of prior research training/experience. NIDCD's K08/K23 have done well when competing for subsequent independent NIH research support. He indicated that the number of K08/K23 awards has declined in recent years and outlined a number of other new and existing programs being used by NIDCD to support clinician –investigators. They include:

- developing plans for a new “pre-K08/K23” program for new clinician faculty seeking to forge a research career trajectory, but lacking necessary research and grant writing experience;
- supporting the ASHA/NIDCD Lessons for Success Conference (since 2005);
- supporting a T35 program establishing a network of short-term research traineeships for clinical audiologists in Au.D. programs (since 2007);
- piloting two nationwide clinician-scientist mentoring programs that provide “distance-mentoring” (i.e. Skype/social media-facilitated) for promising individuals lacking local research mentors (2011-2015); and,
- offering one-year supplements to existing NIDCD grants for medical students to gain research experience in basic, translational or patient-oriented research in the chemical senses (2014-2017).

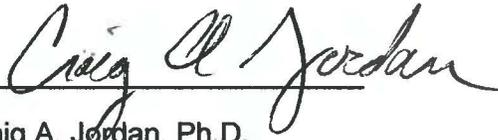
XI. Adjournment

The meeting was adjourned at 1:45 p.m. on September 12, 2014.

XII. Certification of Minutes

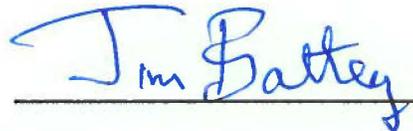
We certify that, to the best of our knowledge, the foregoing minutes and attachments are accurate and correct.

10/16/14



Craig A. Jordan, Ph.D.
Executive Secretary
National Deafness and Other Communication
Disorders Advisory Council

10-16-2014



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

² These minutes will be approved formally by the Council at the next meeting on January 30, 2015, and corrections or notations will be stated in the minutes of that meeting.

APPENDICES

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Appendix 1

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

BLESS, Diane M., Ph.D. Professor Emeritus Departments of Communicative Disorders And Surgery University of Wisconsin – Madison School of Medicine Madison, WI 53792	2018	MISTRETTA, Charlotte M., Ph.D. William R. Mann Professor Department of Biologic and Materials Sciences Associate Dean for Research and Ph.D. Training School of Dentistry University of Michigan Ann Arbor, MI 48109	2015
KAYE, Joan Executive Director Sophie’s Soundcheck New York, NY 10128	2016	MYERS, David G., Ph. D. Professor Hope College Department of Psychology Holland, MI 49422	2017
KEHN, Tisha A. Executive Director Association for Chemoreception Sciences Minneapolis, MN 55406	2015	PERKELL, Joseph S., Ph.D., D.M.D. Research Affiliate Research Laboratory of Electronics Massachusetts Institute of Technology Cambridge, MA 02446	2016
LEE, David J., Ph.D. Professor Department of Public Health Sciences University of Miami School of Medicine Miami, FL 33136	2018	ROBINSON, Jr., Tommie L., Ph.D. Director, Scottish Rite Center for Childhood Language Disorders Children’s Hearing and Speech Center Children’s National Medical Center Washington, DC 20009	2016
LI, Jian-Dong, M.D., Ph.D. Georgia Research Alliance Eminent Scholar Director, Center for Inflammation, Immunity and Infection Professor, Department of Biology Georgia State University Atlanta, GA 30303	2018	SCHWOB, James E., Ph.D., M.D. Bates Professor, Department of Developmental, Molecular and Chemical Biology Tufts University School of Medicine Boston, MA 02111	2015
MANIS, Paul B., Ph.D. Thomas J. Dark Distinguished Research Professor Department of Otolaryngology/Head and Neck Surgery University of North Carolina Chapel Hill Chapel Hill, NC 27599	2015	SERRANO, Elba E., Ph.D. Regents Professor Department of Biology New Mexico State University Las Cruces, NM 88003	2017

NIDCD Director's Budget

James F. Battey, Jr., M.D., Ph.D.
NIDCD Advisory Council Meeting
September 12, 2014

National Institute on Deafness and Other Communication Disorders

September 2014 Council Budget Mechanism (Dollars in thousands)

<i>Budget Mechanism</i>	FY 2014		FY 2015	
	Operating Budget		President's Budget	
	<i>Number</i>	<i>Amount</i>	<i>Number</i>	<i>Amount</i>
Research Projects				
Noncompeting	572	\$209,988	553	\$209,489
Admin. Supplements	53	2,600	27	750
Competing	180	63,640	173	61,614
Subtotal	752	276,228	726	271,853
SBIR/STTR	29	11,100	29	11,350
Subtotal, RPG's	781	287,328	755	283,203
Research Centers	21	17,500	21	18,100
Other Research	68	12,100	69	12,600
Total Research Grants	870	316,928	845	313,903
Individual Training	119	4,875	122	5,075
Institutional Training	149	7,000	152	7,295
R & D Contracts	31	18,321	32	20,500
Intramural Research		37,220		37,220
Research Mgmt. & Support		19,940		19,940
TOTAL		\$404,284		\$403,933

National Institute on Deafness and Other Communication Disorders

September 2014 Council Competing Research Project Grants (Dollars in thousands)

September Council Funds for FY 2015 Competing R01's

Based on flat budget - \$403.035 million

(\$ in thousands)

Total RPG budget	\$282,974
Less SBIR/STTR budget	-11,500
Less Administrative Supplements budget	-1,700
Less Noncompeting budget (zero reduction)	-207,155
Less FY15 "Carryover" Commitments from prior Council meetings	-993
Less FY15 Program Requirements	-13,750
Plus FY14 funding for Sept 2014 applications	2,600

Total

\$50,476

20% HPP

80% Regular

	\$10,095	\$40,381
For FY 2015		
Per Council Round	\$3,365	\$13,460