

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

**January 30, 2015
National Institutes of Health
Bethesda, MD**

MINUTES

The National Deafness and Other Communication Disorders Advisory Council convened on January 30, 2015 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: January 30, 2015: 8:30 a.m. to 9:40 a.m. for review of individual grant applications; and
Open: January, 30, 2015: 10:00 a.m. to 1:20 p.m., for the review and discussion of program development needs and policy.

Council members in Attendance¹:

Dr. Diane Bless	Dr. Tommie Robinson
Dr. Alan Brightman	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	

Council members absent:

Dr. Monte Westerfield

Ex-Officio Members Participating:

None

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	Dr. Roger Miller
Dr. James Battey	Ms. Kristen Mullsteff
Dr. Laura Cole	Mr. Christopher Myers
Dr. Judith Cooper	Mr. Edward Myrbeck
Dr. Janet Cyr	Mr. Eric Nunn
Ms. Susan Dambrauskas	Dr. Christopher Platt
Mr. Hoai Doan	Dr. Kausik Ray
Dr. Amy Donahue	Dr. Alberto Rivera
Dr. Nancy Freeman	Mr. Mark Rotariu
Dr. Andrew Griffith	Dr. Elka Scordalakes
Mr. Howard Hoffman	Dr. Lana Shekim
Ms. Debbie Holmes	Dr. Sheo Singh
Dr. Gordon Hughes	Dr. Daniel Sklare
Ms. Nichelle Johnson	Ms. Nanette Stephenson
Dr. Craig Jordan	Dr. Melissa Stick
Ms. Phalla Keng	Dr. Susan Sullivan
Dr. Lisa Kennedy	Dr. Jean Tiong-Koehler
Dr. Eliane Lazar-Wesley	Dr. Bracie Watson
Dr. Chuan-Ming Li	Ms. Ginger Webb
Ms. Melissa McGowan	Mr. Timothy Wheelles
Dr. Castilla McNamara	Dr. Shiguang Yang

Other federal employees present during portions of the meeting:

Dr. Christine Melchior, CSR
Dr. Biao Tian, CSR
Dr. Catherine Bennett, CSR
Dr. Andrea Kelly, CSR

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

Dr. Richard Rabbitt, University of Utah
Mr. Andy Bopp, HIA
Ms. Maureen Corrigan, AAO-HNS
Ms. Susan Lott, ASHA
Ms. Sara Reardon, Nature

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. Dr. Brightman was welcomed to the group as a new council member 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 10:00 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 129 investigator-initiated research grant applications; 108 applications had primary assignment to NIDCD, in the amount of \$34.3 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 15th percentile.

B. Special Programs Actions

1. Institutional National Research Training Award (T32): The Council recommended support of seven applications
2. NIH Research Career Enhancement Award for Established Investigators (K18): The Council recommended support of one application.
3. Mentored Patient-Oriented Research Career Development Award (K23): The Council recommended support for three applications.
4. NIH Pathway to Independence (PI) Award (K99): The Council recommended support of two applications.
5. NIH Small Grants (R03): The Council recommended support of eight applications.
6. NIH Support for Conferences and Scientific Meetings (R13): The Council recommended support of three applications.
7. Academic Research Enhancement Awards (AREA) (R15): The Council recommended support of two applications.

8. NIH Exploratory/Development Research Grant Award (R21): The Council recommended support of five applications.
9. NIH Small Business Innovation Research Awards (SBIR): The Council recommended support of four Phase I (R43) applications.
10. NIH Small Business Innovation Research Awards (SBIR): The Council recommended support of one Phase II (R44) application.
11. RFA-DC-15-001 Special Topic Research Education Course: Exploring Auditory and Vestibular Biology (R25): The Council recommended support of one application.

OPEN SESSION

IV. 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 member to the Advisory Council:

- **Dr. Alan Brightman** created Yahoo’s Accessibility Group in 2006 and led it for 7 years. This group continues to be responsible for ensuring that all Yahoo products are as accessible as possible to individuals with disabilities. His current focus within Yahoo Labs is on ways the Internet can mitigate loneliness among senior citizens. Previously Alan was the founder of Apple Computer’s Worldwide Disability Solutions Group when he was responsible for ensuring that all Apple products were accessible to children and adults with disability. He has authored several books for children and adults aimed at fostering a fuller understanding and inclusion of marginalized members of society. He earned his Ph. D. in Education from Harvard and a honorary doctorate from the University of Massachusetts and a Lifetime Achievement Award from Boston University.

Consideration of Minutes of the Meeting of September 12, 2014

Dr. Battey called the members’ attention to the minutes of the September 12, 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, May 29, 2015, in Building 31, Conference Room 6 on the NIH campus, Bethesda, Maryland.

V. Report of the Director, NIDCDDr. Battey

Budget Update

Dr. Battey began his presentation by displaying the 2015 Appropriation level as compared to the FY 2014 budget. He apologized that the details of the FY2015 Appropriation were not yet available, as the details were pending approval by OMB and HHS. He indicated that the FY2015

Appropriation is approximately \$1 million more than FY 2014 so the budget mechanism details would be very similar to FY 2014. Moving on to the second budget page, Dr. Battey indicated that once other components of the NIDCD budget are considered there would be \$285.6 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, \$209.4 million for commitments to noncompeting grants, \$993 thousand for commitments carried over from FY2014, and \$15 million for program requirements. An additional estimated \$2.4 million is available from end of year FY 2014 funds. Of the remaining \$49.5 million, twenty percent (\$9.9 million) is designated for High Program Priority (HPP). Consequently, there is \$39.6 million available for the initial pay line across the year's three Council meetings. This should allow funding of applications up through the 15th percentile. The \$9.9 million for HPP applications will be available to support additional applications throughout the year.

Dr. Battey called upon Mr. Mark Rotariu, NIDCD Budget Officer, to facilitate the discussion in response to questions from members. During that discussion it was pointed out that the President recently announced, in the State of the Union Address, that he is requesting a significant increase for NIH in FY 2016. Although not currently available, the details of the FY 2016 President's Budget would be made public on February 2nd, this coming Monday.

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

VI. Report of the Division of Scientific ProgramsDr. Cooper

Dr. Battey introduced Dr. Cooper, Director of the Division of Scientific Programs. Dr. Cooper spent a few minutes recognizing and thanking Dr. Daniel Sklare on the day of his retirement for his thirty years of service to the government. She particularly highlighted his dedication to mentoring trainees and the care with which he has managed the Training and Career Development portfolios at NIDCD. Dr. Sklare's long-term pursuit of developing the next generation of NIDCD investigators has been quite successful as many of our R01 investigators of today, matured through the Training and Career Development programs under Dr. Sklare's dedicated guidance. Dr. Sklare's retirement was celebrated by friends and colleagues with a standing ovation.

Dr. Cooper next introduced Dr. Alberto Rivera-Rentas who will be taking on the role of Research Training Officer. Dr. Rivera-Rentas comes to NIDCD most recently from the National Center for Complementary and Integrative Health Research and prior to that, the National Institute of General Medical Sciences. During his years at NIH, Dr. Rivera-Rentas has managed numerous programs involving student development, research training, educational grants, fellowships, career development awards, and other research programs. The Division of Scientific Programs, NIDCD is very pleased to welcome Dr. Rivera-Rentas to the institute.

Next, Dr. Cooper introduced two other members of her staff, Drs. Amy Donahue and Roger Miller for reports on recent events in their areas of expertise.

Dr. Donahue reported on an ongoing Institute of Medicine (IOM) Consensus Study on Accessible and Affordable Hearing Health Care for Adults. NIDCD is one of several federal agencies sponsoring the study, along with the Hearing Loss Association of America. Dr. Donahue presented the background to the study development, including a discussion of hearing loss as a public health issue, a 2009 NIDCD research workshop

on Accessible and Affordable Hearing Health Care (AAHHC) for Adults with Mild- to Moderate Hearing Loss and a 2014 IOM Workshop on Hearing Loss and Health Aging. She provided information on the IOM Consensus study process and provided the specific IOM study questions.

Specifically, the IOM will establish an ad hoc committee that will address how to improve accessibility to and affordability of hearing health care for adults, with a focus on non-surgical devices and services. The committee will:

- Provide a contextual background addressing the importance of hearing to individual and societal health, productivity, and engagement. This may include issues such as isolation, social connectivity and well-being, and economic productivity;
- Address federal regulations for hearing aid dispensing;
- Address hearing health care access and affordability (devices and services); and
- Provide recommendations aimed both at solutions that are implementable and sustainable in the short term as well as those that may require a longer timeframe for implementation.

The study recommendations are expected to be available in May/June 2016 with a project completion in August 2016. Council was very supportive of the study and looks forward to the IOM study recommendations.

Dr. Miller reported on a recent NIDCD workshop that considered the potential to accelerate research and development of new algorithms for speech signal processing through the use of a research tool that employs open design principles and provides next generation computing power in a portable form factor. Participants agreed that this research tool offered great potential to accelerate research and development efforts for acoustic signal processing. There will be substantial challenges to create the hardware, software, and infrastructure required to use it effectively. Once it became available, however, it would be widely used as a reference platform, lower barriers for development of new software, and speed the incorporation of new hardware capabilities as they become available from commercial semiconductor chip manufacturers. Ideally, it would narrow the gap between academic development and commercial use of acoustic signal processing algorithms.

VII. Report of the Division of Extramural Activities Dr. Jordan

Dr. Battey introduced Dr. Jordan who began his talk by reminding the Council members that each January they vote to approve the Council Operating Procedures for the coming year. The document specifies what issues are brought before the Council, what specific types of grant actions staff may take between Council meetings and the necessary reporting to Council. No changes were proposed for the document in 2015. The Council approved the 2015 Operating Procedures unanimously.

Next, Dr. Jordan provided a summary of the Interim Actions Reports provided to council over the last four meetings. The Interim Actions Report is the primary reporting vehicle used to fulfill the Council Operating Procedures.

With his final series of slides, Dr. Jordan provided a brief background to the 2015 NIDCD Biennial Inclusion Report, the reporting process, purpose, and the general content of the report. In addition to the NIDCD mission and a description of the institute's research portfolio, the report addresses:

- Aggregate tracking and inclusion data for human subjects recruited into NIDCD research protocols for FY 2013 and 2014.
- Procedures for ensuring policy compliance.
- NIDCD review and administrative procedures for the inclusion of women and minorities as subjects in clinical research, including staff training requirements.
- Bibliography of articles that include analyses of data for sex/gender, race, and/or ethnicity.

After a short discussion, members of the Council endorsed the report as written.

VIII. Scientific Presentation.....Dr. Richard Rabbitt

Dr. Battey introduced Dr. Richard Rabbitt, Professor in the Department of Bioengineering and Adjunct Professor of Surgery in the Division of Otolaryngology at the University Of Utah School Of Bioengineering.. Dr. Rabbitt accepted our invitation to discuss his research in a presentation entitled, "*Stimulating Cells with Light and Origin of Endogenous Infrared Excitability.*"

Inner ear hair cells and spiral ganglion neurons respond to pulsed infrared (IR) laser light through endogenous heat-sensitive biochemical mechanisms, and through photoacoustic activation of mechano-sensitive ion channels. The photothermal mechanisms are particularly interesting because they provide a means to optically excite cells even in the complete absence of light-sensitive receptor proteins. A major advantage of optical stimulation over electrical current is that light is easier to focus and steer. This has led to speculation that pulsed IR light might be useful for high fidelity cochlear or vestibular implants. Whether or not this comes to fruition depends on how pulsed IR excites cells. Our recent work has revealed key molecular targets and the primary mechanisms of action. Excitation, or inhibition, occurs primarily through thermal modulation of molecular rate constants governing protein conformation and function. Synaptic transmission is exquisitely sensitive to IR heat pulses. A single IR pulse raising the temperature 0.25°C μ s is sufficient to evoke release of a barrage of synaptic vesicles. Mitochondrial calcium cycling is also highly sensitive to pulsed IR light. In many cases the molecular mechanisms can be described quantitatively on the basis of first principles, facilitating current applications as a controlled stimulus in basic science and future applications in therapeutic devices. [Supported by R01 DC011481]

IX. Adjournment

The meeting was adjourned at 1:20 p.m. on January 30, 2015.

X. Certification of Minutes

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

3-11-15



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

3.11.15



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 May 29, 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	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
BRIGHTMAN, Alan J., Ph.D. Vice President & Research Fellow Yahoo Labs New York, NY 10032	2017	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. Chief, Division of Hearing and Speech 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		

NIDCD Director's Budget

James F. Battey, Jr., M.D., Ph.D.
NIDCD Advisory Council Meeting
January 30, 2015

National Institute on Deafness and Other Communication Disorders

January 2015 Council Budget Mechanism (Dollars in thousands)

<i>Budget Mechanism</i>	FY 2014 Final Allocation		FY 2015 Appropriation	
	<i>Number</i>	<i>Amount</i>	<i>Number</i>	<i>Amount</i>
Research Projects				
Noncompeting	567	\$209,711		
Admin. Supplements	51	2,603		
Competing	179	63,971		
Subtotal	746	276,285		
SBIR/STTR	30	11,132		
Subtotal, RPG's	776	287,417		
Research Centers	21	17,822		
Other Research	67	12,193		
Total Research Grants	864	317,432		
Individual Training	112	4,728		
Institutional Training	148	7,032		
R & D Contracts	31	18,056		
Intramural Research		37,233		
Research Mgmt. & Support		19,803		
TOTAL		\$404,284		\$405,302

National Institute on Deafness and Other Communication Disorders

January 2015 Council Competing Research Project Grants (Dollars in thousands)

January Council Funds for FY 2015 Competing R01's

Based on Appropriation of \$405.302 million

(\$ in thousands)

Total estimated RPG budget	\$285,627
Less estimated SBIR/STTR budget	-11,500
Less estimated Administrative Supplements budget	-1,700
Less estimated Noncompeting budget	-209,387
Less FY15 "Carryover" Commitments from prior Council meetings	-993
Less FY15 Program Requirements	-14,950
Plus FY14 funding for Sept 2014 applications	2,426

Total

\$49,523

20% HPP

80% Regular

For FY 2015	\$9,905	\$39,618
Per Council Round	\$3,302	\$13,206