

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

**May 21, 2004**

**National Institutes of Health  
Bethesda, Maryland**

**MINUTES**

The National Deafness and Other Communication Disorders Advisory Council convened on May 21, 2004 in 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:

Open: May 21, 2004: 8:30 a.m. to 11:30 a.m., for the review and discussion of program development needs and policy; and

Closed: May 21, 2004: 12:30 p.m. to 2:10 p.m. for review of individual grant applications.

Council members in attendance:<sup>1</sup>

Dr. Barry W. Ache  
Dr. Noma Anderson  
Dr. Gary K. Beauchamp  
Dr. Patricia D. Cayne  
Dr. Richard A. Chole  
Dr. Beverly S. Emanuel  
Dr. Ray D. Kent

Dr. David J. Lim  
Dr. Richard T. Miyamoto  
Dr. John J. Ngai  
Dr. Adrian A. Perachio  
Dr. Donata Oertel  
Dr. Brenda M. Ryals

Council members not attending:

Dr. John P. Madison  
Ms. Susan M. Greco  
Dr. Nicolas Linares-Orama  
Dr. Ingo R. Titze

<sup>1</sup>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.

Ex-Officio Members Not Participating:

Dr. Lucille B. Beck  
Dr. John R. Franks  
Dr. Michael E. Hoffer

The Council roster is found as Appendix 1.

Various members of the public, as well as NIDCD staff and other NIH staff, were in attendance during the open session of the Council meeting. A complete list of those present for all or part of the meeting is found in Appendix 2.

**I. Call To Order and Opening Remarks ..... Dr. James F. Battey, Jr.**

The meeting was called to order by Dr. Battey, Director, NIDCD, who thanked Council members for their service and advice to the Institute. Dr. Lucille Beck, Nicolas Linares-Orama, Dr. Ingo Titze, Ms. Susan Greco and Dr. John Madison had scheduling conflicts which prevented them from attending today's meeting.

Dr. Battey announced that Dr. Judith Cooper has agreed to serve the NIDCD both as Director, Division of Scientific Programs, and as Acting Deputy Director, NIDCD, a position formerly held by Dr. Donald Luecke, who will be retiring later this year. Dr. Battey commented that Dr. Cooper's breadth of knowledge of NIDCD activities will make her invaluable in her new role as Deputy Director.

**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 avoiding conflict of interest, or the 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 open to the public during the morning session, but would be closed for consideration of grant applications during the afternoon.

Consideration of Minutes of the Meeting of January 23, 2004

Dr. Battey called members' attention to the minutes of the January 23, 2004 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 2005 have been established. A list of these meetings was distributed to the Council members. The next meeting of Council is scheduled for Friday, September 10, 2004 on the NIH campus, Bethesda, Maryland.

**III. Report of the Director, NIDCD ..... Dr. Battey**

Budget Considerations:

Dr. Battey announced that the FY2004 NIH Budget has finally been approved, and that current budget planning is based on the FY2004 Conference allowance. Dr. Battey described how the \$272.5 million available for new and competing research project grants was allocated for FY2004. From this total, \$9.1 million is reserved for Small Business Innovation Research grants, \$1.2 million for administrative supplements, \$196.1 million for commitments to noncompeting grants, \$75 thousand for carryover commitments from prior Council meetings, and \$10.4 million for program requirements in FY2004. Twenty percent of the remaining \$57.4 million is designated for High Program Priority (HPP). When apportioned for the three Council meetings in FY 2004, \$3.8 million is available for HPP applications at the May meeting. The budget has \$15.3 million available for the initial payline at this meeting, which should allow funding of all applications up to the 24.0 percentile, plus additional HPP applications. A copy of the slides Dr. Battey used for his budget presentation is included in these minutes as Appendix 3.

**IV. Report of the Director, Division of Extramural Activities..... Dr. Jordan**

Dr. Jordan presented the report of the Director of the Division of Extramural Activities. He began his presentation by introducing two new Scientific Review Administrators, who recently joined the Division's Scientific Review Branch. They are Da-Yu Wu, Ph.D., and Shiguang Yang, DVM, Ph.D. Dr. Wu came to the Institute from the University of Southern California, with expertise in neural development and regeneration; neural basis of human emotion and behavior; and neuronal stress and apoptosis using siRNA. Dr. Yang came to the Institute from the American Type Culture Collection (ATCC), and his expertise lies in the areas of neural peptide regulation of appetite; chemotherapy discovery using animal models; and infectious diseases, such as malaria.

Next, Dr. Jordan updated the Council on the status of the FY04 NIH Roadmap Initiatives, for which awards will be made on or before September 24, 2004. Roadmap applications will undergo an expedited second level review by the Advisory Council of the lead Institute, and all Councils will be informed of Roadmap applications.

Dr. Jordan continued his presentation by discussing the NIH Public Trust Initiative, which extends beyond, and is critical to the Roadmap Initiative. The goal of this initiative is to improve the public's health by promoting public trust in biomedical and behavioral research. Dr. Jordan explained how the framework of the Public Trust Initiative relates to the research spectrum and NIH Roadmap. Initial steps will involve doing an inventory of current NIH activities and a national survey of the public to discern issues regarding public trust and the research enterprise. Results of the inventory and survey will be used to develop specific solicitations and initiatives.

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

Dr. Judith Cooper presented the report of the Director of the Division of Scientific Programs (DSP). Dr. Cooper opened her presentation by announcing that three NIDCD-supported scientists have won the highest government honor for outstanding scientists or engineers who are beginning independent careers--the Presidential Early Career Award for Scientists and Engineers (PECASE). This award highlights extraordinary potential for scientific leadership. The awardees include Dr. Andrew Griffith, NIDCD; Dr. Dana Boatman, Johns Hopkins University; and Dr. Richard Walker, Oregon Hearing Research Center. Information about the recipients' research can be found at [http://www.nidcd.nih.gov/news/releases/04/05\\_21\\_04.asp](http://www.nidcd.nih.gov/news/releases/04/05_21_04.asp)

Next, Dr. Cooper introduced Dr. Amy Donahue, who talked about the Workshop on Translational Research (TR) in Hearing and Balance, which was held on April 27-28, 2004 in Bethesda, Md. The purpose of the workshop was to increase translational research in hearing and balance/vestibular to take scientific advances to the patients; identify barriers to and opportunities in translational research; determine what we can do better with what we have; and decide which new activities should be initiated. Seventeen extramural scientists participated.

Detailed information about the workshop, including the minutes of the meeting, can be found at <http://scientificprograms.nidcd.nih.gov/translational/index.html>

**VI. Council Member Presentation..... Dr. Ray Kent**

Council member presentations involve a synopsis of their research, interests, and/or other efforts related to the broad interests of the communities served by NIDCD. These presentations serve to familiarize staff and other members of Council with each member's research/expertise, in order to facilitate stronger interactions among Council members and staff members.

Dr. Ray Kent accepted an invitation to speak to Council about his studies of speech production. Following is an abstract of his presentation:

### **Biological Substrates of Speech**

This brief presentation considers evidence that the system of speech production is unique among human motor systems with respect to evolutionary, genetic, developmental, functional, and phenotypical properties. Although speech is often described as overlaid on the basic vegetative processes of mastication and deglutition, studies indicate that the special requirements of speech may have influenced several aspects of hominid anatomy, including nerve canal size, vocal tract geometry, and muscle morphology. Research in genetics has shown that speech/language impairments are associated with at least seven different chromosomes. Progress has been made in the identification of genetic factors that may pose a risk for several common disorders of communication. A multifactorial polygenic model appears to be suitable in understanding the etiology of stuttering, phonological/articulatory disorders, and specific language impairment. Studies of the craniofacial muscles indicate that they are remarkably polymorphic in their muscle fibers and differ considerably in this respect from skeletal muscles. The heterogeneity of muscle fiber types, both within and across craniofacial muscles, helps to explain (1) functional and developmental aspects of speech, and (2) the effects of neuropathology and structural anomalies on speech production. In general, the muscles of the speech production system are designed to allow for variable rates of contraction, fatigue resistance, and intricate coordination.

Both the development of speech and a variety of speech disorders can be better understood from a synthesis of these biological substrates. Speech as a motor skill is progressively defined through the lifespan in accord with anatomic changes and communicative demands. Adult-like precision of motor control is achieved at about 16 years of age. Biological properties are relevant to understanding motor system selectivity of certain diseases, the progression of symptoms in neurodegenerative diseases, and the differential effects of behavioral, pharmacological, and surgical interventions.

### **VII. Scientific Presentation ..... Dr. Heinz Arnheiter**

Dr. Battey welcomed and introduced Dr. Heinz Arnheiter, Chief, Mammalian Development Section, Laboratory of Developmental Neurogenetics, National Institute of Neurological Disorders and Stroke, NIH. Dr. Arnheiter accepted our invitation to discuss his research in a presentation entitled "*Black Spots On White And White Spots On Black and What This Has To Do With Seeing And Hearing*"

Following is an abstract of his presentation:

A detailed knowledge of the molecular mechanisms that govern the generation of distinct cell types from unspecified precursors will not only help us understand fundamental principles of normal ontogeny but also explain, and ultimately correct, instances where development has derailed and disease has resulted. We are focusing on the developmental role of the basic-helix-loop-helix-zipper transcription factor MITF. This factor is critical to the development of neural crest-derived pigment cells, called melanocytes, and of neuroepithelium-derived pigment cells that form the retinal pigment epithelium. Neural crest-derived pigment cells are responsible for skin and hair coloration but are also found in the inner ear in a structure called the stria vascularis that forms the outer wall of the cochlear duct and controls the ionic composition of the endolymph. In mice with mutations in *Mitf*, these strial pigment cells are missing, the endolymph is abnormal, and the cochlear hair cells no longer respond to sound. Similar inner ear pigment cell abnormalities are thought to be the cause for deafness in human MITF mutations as they occur in individuals with Waardenburg IIa or Tietz syndrome, but the mechanisms by which these cells exert their inner ear function are not entirely clear.

Our research concentrates on the mechanisms by which *Mitf* controls the development of pigment cells. Available evidence suggests that *Mitf* acts at multiple levels. It likely has a negative role on cell proliferation, both in the neural crest and the retinal pigment epithelium, it regulates the survival of melanocyte precursor cells, and it is ultimately responsible for the differentiation of both melanocytes and retinal pigment cells. The levels of active *Mitf* in cells must be tightly controlled to safeguard against premature cell differentiation, cell death, or prolonged cell proliferation. Such control is in part achieved at the level of extracellular signaling-induced post-translational modifications of *Mitf*. Phosphorylation, for instance, has been shown to transiently increase *Mitf* activity, perhaps by facilitating interactions with transcriptional co-factors, and then to decrease protein stability. We are testing this and other biochemical models by targeted mutations in mice and have found, for instance, that by mutating serine-73 to a non-phosphorylatable alanine we obtain a mouse whose *Mitf* protein exerts a dominant-positive effect. This means, it reduces in hetero-allelic combinations the severity of pigment cell deficiencies associated with other *Mitf* mutations. These observations lead to the tentative conclusion that removing a phosphorylation site may lead to increased protein stability that is able to compensate, if not over-compensate, the presumed reduction in protein activity. In other models we show that a second site mutation in *Mitf* may correct pigment cell deficiencies resulting from a first mutation, and that interactions of *Mitf* with other gene products lead to modifications of eye disease phenotypes. The results show how *Mitf* exerts its function in a network of other factors, both extracellular and intracellular, and hint at mechanisms by which such interactions modulate the disposition of pigment cells that play critical roles in sensory organ development and function.

**VIII. Training Camp: The NIDCD Fellowship Program ..... Dr. Daniel Sklare**

Dr. Daniel Sklare, Research Training Officer, Division of Scientific Programs, discussed the NIDCD Fellowship Program.

The goals of this program are to 1) identify and support those candidates who have the highest potential to develop into successful scientists; and 2) facilitate the transition of such individuals from the research training stage to the independent investigator stage. Dr. Sklare discussed the qualifications and features of specific awards, including the Ruth L. Kirschstein National Research Service Awards (NRSAs); and Career Development Awards (K-Awards). He also described several landmark developments in the program, the review and funding process involved for fellowship applications, and general trends in growth and success rates.

**IX. Potential Agenda Topics (Open Discussion) ..... Dr. Battey**

Dr. Battey initiated a discussion with Council to solicit topics they may wish to discuss at a future meeting. Council members raised the concern that research on human subjects is being negatively impacted by the Health Insurance Portability and Accountability Act (HIPAA) Privacy Rule. One impact of HIPAA is that archival human data is to be destroyed in a relatively short time frame and this raises a concern from researchers that valuable resources will be lost prematurely. Some archival tissue banks have been in existence for decades and are yielding important findings as new technologies are being developed and allowing new types of questions to be addressed. It was noted that HIPAA does contain an exceptions possibility for the destruction of archival data, but individual institutions are very wary to exercise such an option. The HIPAA rules are being seen as a barrier to clinical research and the Council members recommended that this issue be discussed at a future Council meeting. Dr. Battey pointed out that the Council's concern about 'barriers to clinical research' appears to relate to goals of the NIH Roadmap and future discussions might pursue this relationship.

**CLOSED SESSION**

**X. Council Consideration of Pending Applications**

The Council gave special attention to applications involving issues related to protection of human subjects, animal welfare, biohazards and/or women/minority/children representation in study populations as identified by the initial review groups. The Council individually discussed applications being considered for High Program Priority, from New Investigators, and whenever additional discussion was required.

**A. Research Project Grant Awards**

1. Consideration of Applications: On the Council's agenda was a total of 112 investigator-initiated research R01 grant applications; 101 applications had primary

assignment to NIDCD, in the amount of \$26.3 million first-year direct costs. It is anticipated that, of the applications competing at this Council, NIDCD will be able to award investigator-initiated R01 grants to applications scoring up to the 24.0 percentile.

## **B. Special Programs Actions**

1. Mentored Clinical Scientist Development Award (K08): The Council recommended support for two applications.
2. Research Program Projects (P01): The Council recommended support for one application.
3. Research Centers Applications (P50): The Council recommended support for one application.
4. Small Grants (R03): The Council recommended support for nine applications.
5. Academic Research Enhancement Awards (AREA) (R15): The Council recommended support for four applications.
6. NIH Exploratory/Developmental Research Grant Award (R21): The Council recommended support for four applications.
7. Small Business Technology Transfer (STTR): The Council recommended support for two Phase I (R41) applications.
8. Small Business Innovation Research Awards (SBIR): The Council recommended support for eight Phase I (R43) applications; and five Phase II (R44) applications, as funds allow.
9. Neurotechnology Research, Development and Enhancement (PA-04-006): The Council recommended support for one R21 application.
10. Collaborative Research in Computational Neuroscience (CRCNS) – Innovative Approaches to Science and Engineering Research on Brain (PAR-04-514): The Council recommended support for two R01 applications.

**XII. Adjournment**: The meeting was adjourned at 2:10 p.m. on May 21, 2004.



### **XIII. Certification of Minutes**

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

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

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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

Jeannie Combs  
Council Assistant

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<sup>2</sup> These minutes will be formally considered by the Council at its next meeting; corrections or notations will be incorporated in the minutes of that meeting.

## **APPENDICES**

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## APPENDIX 1

### Roster

#### National Deafness and Other Communication Disorders Advisory Council

##### Chairperson

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

ACHE, Barry W., Ph.D. Professor Whitney Laboratory University of Florida Brain Institute Center for Smell and Taste Gainesville, FL 32610	2007	GRECO, Susan M. Executive Director Deafness Research Foundation Washington, DC 20036	2005
ANDERSON, Noma B., Ph.D. Director and Professor School of Health Florida International University Miami, FL 33199	2006	KENT, Raymond D., Ph.D. Professor Department of Communicative Disorders University of Wisconsin; Waisman Center Madison, WI 53705	2006
BEAUCHAMP, Gary K., Ph.D. Director and President Monell Chemical Senses Center Philadelphia, PA 19104	2005	LIM, David J., M.D. Executive Vice President, Research Head, Dept of Cell and Molecular Biology House Ear Institute Los Angeles, California 90057	2005
CAYNE, Patricia D., Ph.D. Educational Neuropsychologist (Retired) Private Practice New York, NY 10022	2006	LINARES-ORAMA, Nicolas, Ph.D. Professor of Language Pathology Director, Filius Institute University of Puerto Rico San Juan, PR 00936-4984	2004
CHOLE, Richard A., M.D., Ph.D. Lindburg Professor and Head Department of Otolaryngology Washington University School of Medicine St. Louis, MO 63110	2005	MADISON, John P., Ed.D. Associate Professor (Retired) Department of English National Technical Institute for the Deaf Elmira, NY 14905	2004
EMANUEL, Beverly S., Ph.D. Professor Department of Pediatrics Abramson Research Center, Rm. 1002 Children's Hospital of Philadelphia Philadelphia, PA 19104	2004	MIYAMOTO, Richard T., M.D. Professor & Chairman Department of Otolaryngology-HNS School of Medicine Indiana University Indianapolis, IN 46202	2006

NGAI, John J., Ph.D. 2007  
Professor of Neurobiology  
Department of Molecular & Cell Biology  
Helen Wills Neuroscience Institute  
University of California, Berkeley  
Berkeley, CA 94720

OERTEL, Donata, Ph.D. 2007  
Professor  
Department of Physiology  
University of Wisconsin  
Madison, WI 53706

PERACHIO, Adrian A., Ph.D. 2006  
Professor & Vice President for Research  
Department of Otolaryngology  
University of Texas Medical Branch  
Galveston, TX 77555

RYALS, Brenda M., Ph.D. 2007  
Professor  
Department of Communication Sciences  
and Disorders  
James Madison University  
Harrisonburg, VA 22807

TITZE, Ingo R., Ph.D. 2004  
Distinguished Professor  
Department of Speech Pathology  
and Audiology  
University of Iowa  
Hawkins Drive  
Iowa City, IA 52242

### **EX-OFFICIO MEMBERS:**

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

FRANKS, John R., Ph.D.  
Chief, Bioacoustics and  
Occupational  
Vibration Section  
Physical Agent Effects Branch  
Division of Biomedical and Behavioral Science  
National Inst for Occupational Safety & Health  
Cincinnati, OH 45226

HOFFER, Michael E., M.D.  
Co-Director  
Department of Defense Spatial Orientation  
Center  
Department of Otolaryngology  
Naval Medical Center  
San Diego, CA 92134

THOMPSON, The Honorable  
Tommy G.  
Secretary  
Department of Health and  
Human Services, Room 615F  
Hubert H. Humphrey Building  
Washington, D.C. 20201

ZERHOUNI, Elias Adam, M.D.  
Director  
National Institutes of Health  
Bethesda, MD 20892

### **EXECUTIVE SECRETARY**

JORDAN, Craig A., Ph.D.  
Chief, Scientific Review Branch  
Director, Division of Extramural  
Activities, NIDCD  
Bethesda, MD 20892

## Appendix 2

### ATTENDANCE LIST

Other than Council members, attendees at the May 21, 2004 Council meeting included:

#### NIDCD Staff:

##### Office of the Director

Cooper, Judith, Ph.D., Acting Deputy Director

##### Office of Health Communication and Public Liaison

Allen, Marin, Chief

##### Office of Administration

Kerr, W. David, Executive Officer

##### Financial Management Branch

Rotariu, Mark, Budget Officer

Lee, Mimi, Budget Analyst

Wysong, Chad, Budget Analyst

##### Science Policy and Planning Branch

Wong, Baldwin, Chief

Cole, Laura, Ph.D., Science Policy Analyst

Montney, Lisa, Emerging Leader Program

##### Division of Extramural Activities

Jordan, Craig A., Ph.D., Director

Holmes, Debbie, Secretary

Stephenson, Nanette, Program Assistant

##### Grants Management Branch

Stone, Sara, Chief

Dabney, Sherry, Grants Management Officer

DaSilva, Maria, Program Assistant

Doan, Hoai, Grants Management Specialist

Hamilton, Gail, Grants Management Specialist

McNamara, Castilla, Grants Management Specialist

Ranney, Meigs, Grants Management Officer

Scientific Review Branch

Stick, Melissa J., Ph.D., M.P.H., Chief  
Azadegan, Ali, D.V.M., Ph.D., Scientific Review Administrator  
Oaks, Stanley C., Ph.D., Scientific Review Administrator  
Singh, Sheo, Ph.D., Scientific Review Administrator  
Wu, Da-Yu Ph.D., Scientific Review Administrator  
Yang, Shiguang, DVM, Ph.D., Scientific Review Administrator

Division of Scientific Programs

Voice, Speech, Language, Smell and Taste Branch

Cooper, Judith, Ph.D., Program Director, Language Program  
Davis, Barry, Ph.D., Program Director, Smell and Taste Program  
Shekim, Lana, Ph.D., Program Director, Voice and Speech Program  
Sklare, Daniel A., Ph.D., Program Director, Research Training and  
Development Program

Hearing and Balance/Vestibular Branch

Donahue, Amy, Ph.D., Chief; and Program Director, Hearing  
Freeman, Nancy, Ph.D., Program Director, Hearing  
Luethke, Lynn, Ph.D., Program Director, Hearing  
Miller, Roger, Ph.D., Program Director, Hearing  
Platt, Christopher, Ph.D., Program Director, Balance/Vestibular  
Watson, Bracie, Ph.D., Program Director, Hearing

Clinical Trials, Epidemiology and Biostatistics Branch

Gulya, Julie, M.D., Chief; and Program Director, Clinical Trials  
Hoffman, Howard, Program Director for Epidemiology & Biostatistics  
Hayat, Matthew, Biostatistician  
Jelen, Janet, Program Analyst

Center for Scientific Review, NIH

Ni, Weijia, Scientific Review Administrator

Others

Arnheiter, Heinz, Chief, Mammalian Development Section, Laboratory of  
Developmental Neurogenetics, NINDS  
Brown, Mark, Masi Max Resources  
Chappell, Jodi, Director of Health Care Policy, American Academy of Audiology

Appendix 3

**NIDCD Director's Report Slides**

As Presented By

James F. Battey, Jr., M.D., Ph.D.  
Director, NIDCD

NIDCD Advisory Council Meeting

May 21, 2004

# National Institute on Deafness and Other Communication Disorders

## Budget Mechanism (Dollars in thousands)

<i>Budget Mechanism</i>	<u>FY 2004 Appropriation*</u>		<u>FY 2005 President's Request**</u>	
	<i>Number</i>	<i>Amount</i>	<i>Number</i>	<i>Amount</i>
Research Projects				
Noncompeting	668	\$196,091	683	\$211,264
Admin. Supplements	(27)	1,200	(27)	1,256
Competing	232	66,100	198	56,767
Subtotal	900	263,391	881	269,287
SBIR/STTR	46	9,100	47	9,300
Subtotal, RPG's	946	272,491	928	278,587
Research Centers	25	21,000	25	21,952
Other Research	60	8,500	63	8,847
Total Research Grants	1,031	301,991	1,016	309,386
Individual Training	147	5,700	147	5,700
Institutional Training	185	7,900	190	8,158
R & D Contracts	55	19,100	56	20,763
Intramural Research		32,265		33,446
Research Mgmt. & Support		15,097		16,054
<b>TOTAL</b>		<b>\$382,053</b>		<b>\$393,507</b>

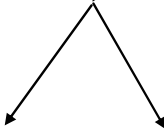
\* Reflects rescission of \$2,424 thousand, and includes \$1,312 thousand for NIH Director's Roadmap

\*\* Includes \$2,478 thousand for NIH Director's Roadmap



# National Institute on Deafness and Other Communication Disorders

## May 2004 Council Competing Research Project Grants (Dollars in thousands)

Total RPG Funds FY04 Appropriation	\$ 272,491	
Less SBIR/STTR Budget	-9,100	
Less Administrative Supplement Budget	-1,200	
Less Noncompeting Estimate	-196,091	
Less FY04 "Carryover" Commitments from prior Council meetings	-75	
Less FY04 Program Requirements	-10,350	
Plus FY 03 Funds utilized for Sept. Council	1,735	
<i>Total</i>	<i>\$ 57,410</i>	
		
	<u>20% HPP</u>	<u>80% Regular</u>
For FY 2004	\$11,482	\$45,928
Per council meeting	\$3,827	\$15,309