

# National Institute on Deafness and Other Communication Disorders

## Workforce Plan: FY 2002-2003

1. The NIDCD conducts and supports research and research training in the areas of hearing, balance, smell, taste, voice, speech and language, and their disorders. These processes of sensing and interpreting are fundamental to the way individuals perceive the world around them and to their ability to communicate effectively with others.

Many communication disorders are complex, with multiple components and causes. Some of these are due to complex genetic traits, where multiple genes are involved. Others are directly associated with a single underlying problem that has multiple effects.

One gene can affect the functioning of other genes, or small differences in several genes can cumulatively affect susceptibility to a disorder. Thus, it is necessary to understand the complex interactions of these genetic factors. Such knowledge could lead to development of effective prevention and treatment strategies.

The NIDCD Intramural Program is currently emphasizing research into the genetics of human communication. This work has led to the discovery of many genes in recent years. Our plans to continue this line of research will require an ongoing search for outstanding geneticists and other scientists who can complement the research team already in place.

Otitis media is a disorder of children that costs the United States approximately \$5 billion per year. The NIDCD intramural program is developing a vaccine against otitis media that has the potential to reduce these costs substantially. It will be necessary to maintain a team of immunologists who can continue to work on this problem.

These and other intramural scientists will require an ongoing team of support staff in the form of technicians, secretaries and administrative staff to conduct their research without undue interruptions. Without the support of these dedicated staff, the scientists would have to spend far too much time handling administrative details while losing valuable research time.

2. The NIDCD anticipates workforce changes in the following areas over the next five years.
  - a. There will be fewer postdoctoral trainees and more staff scientists and technicians. This will be in recognition of the fact that the number of positions for principal investigators will not grow as rapidly as the number of Ph.D.'s

coming out of school. The Staff Scientist positions will offer these individuals a stable research position.

- b. The NIDCD intramural program will concentrate its efforts in a few scientific areas in which it excels rather than in trying to cover the wide range of scientific areas that are included in its mission areas.
  - c. There will be a decreasing need for non-scientific support staff. Changes in technology will enable professional staff to do much of the work previously handled by support staff. Professional staff will also need to apply their skills over a wider range of subject areas and to learn new skills.
3. The NIDCD has developed two training programs that are designed to bring more young people into scientific research. One of these involves a collaboration with the University of Maryland that enables graduate students to conduct their research in NIDCD laboratories. The other is a partnership program with institutions that have a high proportion of disadvantaged students that brings young disadvantaged students to the NIDCD for research experience with the goal of kindling their interest in science.

The NIDCD has placed a heavy emphasis on the loan repayment program and has used it to recruit young otolaryngologists to conduct clinical and basic research in its intramural program. It is extremely difficult to persuade physicians to enter research and without the lure of loan repayment, the number of such recruits would become vanishingly small.

In addition, the NIDCD is participating in a telework pilot program with the intention of applying the lessons learned in this pilot to a broader application of telework in the future.

4. The NIDCD trains a substantial number of IRTA's, Visiting Fellows, Research Fellows and clinical Fellows for three to five years. Some of the most outstanding of these remain with the Institute as tenured scientists or Staff Scientists.

It is also anticipated that senior positions in science policy and financial management will need to be filled in the next few years. The NIDCD has participated in the Presidential Management Intern Program and the Management Intern Program through both encouraging rotations in the Institute and hiring of interns coming off the programs. The high quality of these individuals will help to assure the continued strength of the offices that train and hire them.

5. Some of the challenges in recruiting and retaining a high quality diverse workforce are:

- a. Burdensome recruitment and selection processes that often take a year or more to complete because of a high level of stratification in the review and approval process.
  - b. Salary limitations, especially bunching of pay at top salary caps that prevents the payment of adequate compensation to outstanding scientists.
  - c. An inadequate pool of diverse applicants that makes it virtually impossible to hire qualified disadvantaged scientists.
6. Some examples of removing layers and enhancing decision making are:
- a. The consolidation of extramural programs into one division from two divisions. This has enabled the extramural scientific program and review staff to work more closely together when developing scientific initiatives. It has also streamlined the communication between the Institute Director and the extramural staff.
  - b. Putting all Council materials on an intra net, thereby increasing the ease of access for Council members. This has resulted in greater participation by Council members at the Council meetings since it has made it easier for them to review the grant applications. It has also increased their satisfaction with the review process. It is not always easy to persuade members of the public to serve on the Council and anything we can do to make their jobs easier will make council membership more attractive.
  - c. The wide dissemination of purchase cards to all parts of the Institute. This has resulted in a substantial increase in customer satisfaction among our scientists. They have been able to order and receive supplies and equipment far more rapidly than in the past. It has also made it easier for the administrative staff who support the scientists to provide the services and products the scientists need and to track the orders more effectively.
7. One of the barriers to effective restructuring is the lack of space for clinical research. The NIDCD currently has a small clinical research program and would like to expand that program, but without additional space for clinical research, such an expansion is impossible. It is unlikely that further clinical space will become available for a number of years.

Another barrier to effective restructuring is the difficulty in bringing on young people directly out of college. The programs now available to bring on these people are specialized and aimed at specific groups such as those eligible for the PMI program or disadvantaged groups that qualify for targeted programs. Unlike in private industry, it is very difficult for regular college graduates to qualify for a professional position in the federal government. Thus, while we can decline to fill supervisory and management positions when incumbents leave, we have a hard time bringing in qualified young people to work at the entry-level positions.

## NIDCD Hiring Plans for FYs 2002/2003

	FY 2002	FY 2003	Total
<b>INTRAMURAL</b>			
Senior Investigators <sup>1</sup>	0	2	2
Investigators <sup>1</sup>	2	2	4
Other MD/PhDs, in FTE positions	10	12	22
Other MD/PhDs in non-FTE positions (IRTA, VF)	16	16	32
Other lab/clinical staff => GS-13	1	2	3
Other lab/clinical staff =< GS-12	7	8	15
Admin/support staff => GS-13			0
Admin/support staff =< GS-12	5	6	11
Infrastructure support => GS-13			0
Infrastructure support =< GS-12 <sup>2</sup>			0
Summer and other temps not listed above (include summer IRTAs)	12	12	24
<b>TOTAL INTRAMURAL</b>	<b>53</b>	<b>60</b>	<b>113</b>
<b>EXTRAMURAL</b>			
HSA/SRAs and other senior level science administrators => GS-13	1	1	2
Other science administration positions =< GS-12			0
Grants Management and R&D Contract Staff => GS-13 <sup>3</sup>			0
Grants Management and R&D Contract Staff =< GS-12 <sup>3</sup>			0
Administrative and support staff => GS-13	1	2	3
Administrative and support staff =< GS-12	6	1	7
Infrastructure support => GS-13			0
Infrastructure support =< GS-12 <sup>2</sup>			0
Summer and other temps not listed above			0
<b>TOTAL EXTRAMURAL</b>	<b>8</b>	<b>4</b>	<b>12</b>
<b>IC TOTAL</b>	<b>61</b>	<b>64</b>	<b>125</b>
<sup>1</sup> Using OIR professional designations			
<sup>2</sup> Include all wage grade positions related to infrastructure in this group			
<sup>3</sup> Includes 1101, 1102, 301 and 303 series where individual is engaged in these activities on a full-time basis.			