

# National Human Genome Research Institute

## Workforce Plan: FY 2002-2003

### **1. What skills are currently vital to the accomplishment of the agency's goals and objectives?**

The skills vital to the accomplishment of the agency's goals and objectives are excellence in performing scientific and administrative duties and responsibilities, which accelerate the mission of the NHGRI in the world-class environment of the NIH. The skills necessary are those of molecular and computational biologists, bioethicists, other MDs and PhDs, geneticists, clinicians, and genetic counselors who can teach and who have the skills to deal with patients on very sensitive issues plus scientists with skills and expertise in proteomics and pharmacogenomics. Additionally, the NHGRI needs staff with management and interpersonal skills; skills in dealing with the public to procure, contract, hire, retain, relocate and advise; skills in analyzing the federal rules and regulations in Personnel, Procurement and Grants Management, to name only a handful of fields. All these skills, whether they are in the person of the scientist or in the person who supports the scientist, combine as a unit to make the hypothesis become a reality and allow the NHGRI to accomplish its mission.

### **2. What changes are expected in the work of the agency (e.g., due to changes in mission/goals, technology, new/terminated programs or functions, and shifts to contracting out)? How will this affect the agency's human resources? What skills will no longer be required, and what new skills will the agency need in the next five years.**

The NHGRI has been a leader in both science and technology at the NIH. The changes expected in the NHGRI, due to changes and expansion in our goals as recommended and discussed by the Blue Ribbon Committee and the Institute Advisory Committee, are the expansion of our Clinical Program, increased emphasis on informatics and computational biology, and the inclusion of Proteomics in our Division of Intramural Research. The most notable of these changing skill sets needed to meet Institute goals, are the computational bioinformatics and biology skills needed to support the various databases maintained within the NHGRI.

Much of our bioinformatics program has been contracted out to acquire this highly sought after skill set. As scientific goals change, technologies to accomplish the goals change as well. Maintaining skill levels of current employees and to recruit new technicians, support staff, and scientists with the skills needed by these ever changing technologies is a high priority at NHGRI.

Additionally, microarray technology is a new technology in NHGRI developed to understand changes in the patterns of gene expression. This is another prime example of developing technologies where expertise will be in high demand.

All of this will challenge those giving administrative support to our scientists. For example, these changes will impact on the Grants Management Branch due to the fact that the new science will require the management and understanding of new scientific knowledge and the skill to translate and articulate it to the public. Additionally, this will impact on the Human Resources Branch in creatively recruiting in a highly competitive arena for the leaders in these unique scientific and computer fields, and on the Administrative Branch, which will support these new positions.

### **3. What recruitment, training, and retention strategies are being implemented to help ensure that the agency has, and will continue to have, a high-quality, diverse workforce?**

NHGRI has been, and will continue, reaching out and hiring from underrepresented communities. Institute statistics show that we have been successful in this effort and the Director and Scientific Director affirm that they will continue seeking even greater parity between the genders and representation among all diverse communities.

The Institute is presently planning a new initiative for increasing diversity among genome researchers by recruiting for a genome scientist who is knowledgeable about minority recruitment, and will be responsible for training a diverse group for careers in science.

Also, in order to continue attracting a high quality diverse workforce, the NHGRI will use, when appropriate, financial incentives including recruitment/relocation bonuses and allowances, cost of living differentials and above the minimum appointments. Additionally, the NHGRI is part of the NIH pilot to establish a corporate image for recruiting for all of the Institutes. This pilot has been implemented by a recruitment trip to Los Angeles, California which was successful in attracting Hispanic summer students to the NIH.

To attract outstanding candidates, the NHGRI enhances the recruitment package by enlisting the use of loan repayments, metro subsidies, flexi place and flexi time, compressed work schedules, and the use of credit hours. The NHGRI appropriately makes full use of retention allowances, cash awards, time-off awards and submission of nominations for awards to the NIH, DHHS and CC to reward and motivate its staff.

The Institute has developed an NHGRI Training and Career Development Program (TCD) to enhance the training experience of pre- and post-doctoral fellows. This program focuses on five primary areas: NIH/NHGRI resources and information, mentorship, conflict resolution/problem solving, minority recruitment and grants and fellowships.

The NHGRI genetics counseling program is a joint effort between the Johns Hopkins University and NIH to educate new genetic counseling students. These students are supported by the Institute throughout their graduate education, and the students participate in clinical studies at both NIH and JHU.

The NHGRI also has a very active Clinical Fellows Program. These fellows are trained in clinical genetics through both internal training and a contract with Georgetown University for training in cytogenetics, which is not available at NIH. This clinical rotation provides a much-needed skill for our clinical fellows. Out-sourcing was the only manner of providing this service.

**4. How is the agency addressing expected skill imbalances due to attrition, including retirements over the next five years?**

The NHGRI is aware of the employees eligible for retirement by monitoring the NIH HRDB database. As a result of the HRDB information, NHGRI staff is mentoring employees, instructing, delegating responsibilities and offering training opportunities in the different occupational series.

Most of our Intramural appointments are time-limited and are so due to the changing face and direction of the science. The Fellowship Program, the Clinical Fellows Program, and the Genetic Counseling Program are career development programs that present a large pool of candidates within the NIH from which NHGRI can draw when employees retire. The NHGRI has collaborations with historically black colleges and works with the NHGRI Training and Career Development Program to maintain a diverse workforce.

Additionally, in order to handle skill imbalances due to attrition and retirement, the NHGRI encourages and supports all training to enhance the whole person. Technical courses for computer proficiency, training in new lab or safety requirements and training in computer specific programs i.e., IMPACT, ITAS, etc. are all available through the NIH Training Catalogue, which is on-line and available to all staff.

**5. What challenges impede the agency's ability to recruit and retain a high-quality, diverse workforce?**

As our understanding of the human genome increases, more opportunities exist for applications of this knowledge. Better screening techniques and drugs targeted to specific organs and diseases based on one's individual genetic make-up, present enormous possibilities for the private sector. In order to remain competitive in this environment one must offer a fair compensation package and remove as many non-productive and time-consuming administrative activities as possible. Pay banding and other flexible pay systems are necessary. It is also essential that we have high level, competent, administrative managers who can make the most efficient use of the resources available to NIH.

**6. Where has the agency successfully delegated authority or restructured to reduce the number of layers that a programmatic actions passes through before it reaches an authoritative decision point (e.g., procuring new computers, allocating operating budgets, completely satisfying a customer's complaint, processing a benefits claim, and clearing controlled correspondence)? Where the can the agency improve its processes to reduce the number of layers that a programmatic action passes through before it reaches an authoritative decision point? Please provide at least two examples of each.**

In a similar vein, the Office of Grants Management and the Office of Scientific Review were incorporated into the DER. Prior to this reorganization, grants management staff was located in the Office of Administrative Management and the review staff was located in the Office of the Director. This reorganization provided a better match of structure with function by consolidating organizational components involved in managing extramural activities into one umbrella organization under the leadership of the Director, DER. These organizational changes have made us better able to serve our grantees, our public customers. Additionally, a major Institute contract was restructured to put control directly with the DIR components which used its services. This allowed the contract to be managed by staff who were closely involved in the contract services, thus providing greater interaction and efficiency.

The NHGRI piloted the government purchase card and held the first “level-one” purchase card at NIH. Purchase cards were distributed to approximately 60 individuals ranging from purchasing agents to technicians to tenured scientists. The DIR scientists and technicians fully support the effectiveness of the purchase card program. The DIR was able to absorb a purchasing agent position upon retirement of one purchasing agent because of the use of the purchase card.

The DIR devotes resources to the NHGRI web site to further scientific education for our external customers as well as within NIH. The site includes news releases and current bibliographies of scientific staff at NHGRI. The site contains a large education section to be used by educators and students alike.

**7. What barriers (statutory, administrative, physical, or cultural) has the agency identified to achieving workforce restructuring?**

Hiring a potential employee at the first step of a grade regardless of the quality of the candidate, and the difficulty to fire an unproductive staff member in a timely manner are some of the statutory and administrative barriers in achieving workforce restructuring. Agencies in managing their workforce should have the authority to use buy-outs, early retirement and better training programs when they deem it necessary and judicial to restructure the workforce.

Physical barriers that inhibit workforce restructuring are several. The physical layout of the NIH campus is not disability friendly. Architectural changes need to be made in many buildings. NHGRI is geographically dispersed across the NIH campus and at several off campus sites, including Baltimore. This produces inefficiencies and impedes scientific collaboration. Recommendations for future space needs are being developed now and need to be approved and funded quickly.

## NHGRI 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	1	3
Other MD/PhDs, in FTE positions	3	3	6
Other MD/PhDs in non-FTE positions (IRTA, VF)	10	11	21
Other lab/clinical staff => GS-13	2	2	4
Other lab/clinical staff =< GS-12	11	7	18
Admin/support staff => GS-13	1	1	2
Admin/support staff =< GS-12	0	1	1
Infrastructure support => GS-13	1	1	2
Infrastructure support =< GS-12 <sup>2</sup>	1	1	2
Summer and other temps not listed above (include summer IRTAs)	10	2	12
<b>TOTAL INTRAMURAL</b>	<b>41</b>	<b>32</b>	<b>73</b>
<b>EXTRAMURAL</b>			
HSA/SRAs and other senior level science administrators => GS-13	3	1	4
Other science administration positions =< GS-12	1	2	3
Grants Management and R&D Contract Staff => GS-13 <sup>3</sup>	0	0	0
Grants Management and R&D Contract Staff =< GS-12 <sup>3</sup>	0	1	1
Administrative and support staff => GS-13	2	1	3
Administrative and support staff =< GS-12	1	3	4
Infrastructure support => GS-13	0	1	1
Infrastructure support =< GS-12 <sup>2</sup>	1	1	2
Summer and other temps not listed above	0	0	0
<b>TOTAL EXTRAMURAL</b>	<b>8</b>	<b>10</b>	<b>18</b>
<b>IC TOTAL</b>	<b>49</b>	<b>42</b>	<b>91</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.			