



## Opportunities to Address Clinical Research Workforce Diversity Needs 2010 (2006)

According to the U.S. Census Bureau, the demographics of the United States will change dramatically over the next five decades. By 2050, whites will comprise 53 percent of the general population, Hispanics 25 percent, Asians 9 percent, and blacks 15 percent. Females will outnumber males by over 6 million, and the average age of the population will become older, with one in five people over the age of 65. For the biomedical community, these changes present challenges for both research and healthcare delivery since the demographics of the workforce do not match those of the country. Therefore, there is a need to replenish and diversify the clinical research workforce. This will lead to many benefits, including new perspectives and opportunities for scientific advancement and an

intensified focus on understanding and eradicating health disparities among ethnic and racial groups.

*Opportunities to Address Clinical Research Workforce Diversity Needs 2010* reviews the current state of knowledge about the clinical research workforce based on a workshop of clinical researchers, medical school deans, and sponsors of clinical research. It aims to identify ways to recruit and retain more women and underrepresented minorities into the clinical research workforce to meet the population challenges of the future.

### THE NEED FOR GREATER DIVERSITY IN THE CLINICAL RESEARCH WORKFORCE

Women and underrepresented minorities are crucial to replenishing the clinical research workforce. Minority healthcare professionals are more likely to serve minority populations, and minority patients are more likely to select healthcare professionals with their own ethnic background. Women are also critical to clinical research as participants in clinical trials and as researchers. A driving factor in the need to recruit women is that they are likely to be the majority of M.D. recipients in the future, and therefore, the pool from which researchers must be drawn. In the past few decades, the number of M.D.s awarded to women has steadily increased; in 2003 females accounted for almost 50 percent of medical school enrollment.

### RECOMMENDATIONS

The following recommendations addressing data needs, training, nursing professionals, the career pipeline, and professional societies were identified in the report.

#### Data Needs

A fundamental difficulty in examining clinical research issues is the lack of data on funding levels, training programs, and the workforce. Therefore, the National Institutes of Health (NIH) should initiate a process to develop definitions and methodologies needed to classify and report clinical research spending for all federal agencies, with advice from relevant experts and stakeholders including federal sponsors and academic centers. This would allow a better understanding of the training and funding landscape and enable accurate data collection and analysis of the clinical research workforce.

## **Training**

Clinical research training programs are supported by public and private sources and implemented at academic institutions. The effectiveness of programs should be evaluated on a regular basis to determine their efficacy.

- The Department of Health and Human Services should work with federal clinical research sponsors to identify and describe all federally sponsored training programs for clinical research. The information provided should identify support for each level of training and each clinical research discipline. Organized links to these programs should be available on a website, including programs offered at NIH, the Agency for Healthcare Research and Quality (AHRQ), the Veterans Administration (VA), the Centers for Disease Control and Prevention (CDC), and the Health Resources and Services Administration. This resource should also list the programs offered by private sponsors for clinical research training.
- Academic institutions should document and make publicly accessible the programs for enhancing the participation of women and minority trainees in clinical research. The sponsors of federal, foundation, and industry clinical research training programs should continue to support the existing efforts to train, develop, and sustain the careers of clinical researchers.
- Federal sponsors (NIH, CDC, AHRQ, VA, Department of Defense) should ensure adequate representation of women and minorities in study section review panels that evaluate clinical research.
- Federal agencies and academic institutions should periodically evaluate how well their current training programs are enhancing the racial and ethnic diversity of trainees, and they should modify these programs as needed to increase the programs' effectiveness in clinical research.

## **Nursing Professionals**

The shortfall of nursing professionals is compounded in clinical research by the long time required for specialized training and the low number of nursing faculty involved in clinical research. This could be curtailed by expanding training efforts including increasing fast-track B.S.N.-Ph.D. programs, training grants in clinical research, summer programs, fellowships, and training sabbaticals. Therefore, there needs to be a push for appropriately trained nursing professionals in the clinical research workforce, especially minorities. Additional attention should be paid to the clinical research training of nurse-scientists, nursing students, and nursing faculty at all academic levels.

## **Replenishing the Pipeline: A Flexible Career Path**

- Academic institutions should develop strategies to attract and reward mentors in clinical research training, especially women and minorities who serve as mentors.
- Federal sponsors of clinical research should strengthen the existing funding mechanisms and create new ones that allow flexibility in career training, such as second-career programs, reentry mechanisms, and service payback agreements. In addition, other entry routes into the clinical research path, including short-term training programs, should be developed.

## **The Role of Professional Societies**

Professional societies play a major role in the scientific community as publishers of journals, sponsors of awards, and representatives of their members. Therefore, specialty medical and nursing societies should form a new consortium with an enhanced role in fostering a diverse clinical research workforce.

## **COMMITTEE ON OPPORTUNITIES TO ADDRESS CLINICAL RESEARCH WORKFORCE DIVERSITY NEEDS FOR 2010**

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## **For More Information**

Copies of *Opportunities to Address Clinical Research Workforce Diversity Needs 2010* are available from the National Academy Press; call (800)624-6242 or (202)334-3313 (in the Washington metropolitan area), or visit the NAP website at [www.nap.edu](http://www.nap.edu). For more information on the project, contact staff at (202) 334-2644 or visit the Policy and Global Affairs website at [www.nationalacademies.org/pga](http://www.nationalacademies.org/pga).