

## American Statistical Association

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Dr. Francis Collins Director, National Institutes of Health 31 Center Drive Bethesda, MD 20892

Dear Director Collins,

Thank you for hosting the NIH Constituents' Meeting this fall. The American Statistical Association (ASA) was pleased to be represented. As a follow-up, you invited a brief summary of the issues from our perspective. I'm pleased to have this opportunity to summarize the principal issues of biostatisticians and statisticians with regard to NIH. In the following, I will refer to statisticians and biostatisticians together as "biostatisticians."

I believe you are keenly aware of the importance and integral involvement of biostatisticians in the work NIH does and funds. I continually hear about the need for more biostatisticians from academicians, companies, and federal agencies ranging from FDA and NCHS to the U.S. Census Bureau and BLS. The unemployment rate for biostatisticians is low, and new graduates receive many job offers and good salaries.

I appreciate all the support NIH provides for biostatisticians and their training. The expansion of the Summer Institutes for Training in Biostatistics from three to eight this year is terrific. This is an NIH (NHLBI and NCRR)-funded program that brings quantitatively talented undergraduates into leading biostatistical programs for a summer to introduce them to the exciting field of biomedical research. The goal is to encourage them to go to graduate school in biostatistics or a related field. The traditional T32 training grants and R01 research funding are also positive actions.

The ASA—through its members, staff, and leadership and with the help of your staff—is working to help educate our members about the various lines of support. There are also steps that can be taken by NIH that would help address the high demand for biostatisticians.

Before delineating some of these steps, let me emphasize the importance of master's degree recipients. Master's degree biostatisticians are fundamental and invaluable contributors to statistical work in industry, government, and academia—a fact we fear is too often

underappreciated by those in other disciplines and perhaps officials at NIH. For many programs, earning an MS is not a consolation prize for failing the PhD qualifying exam.

I ask for your help in addressing the need for more biostatisticians, largely through the existing training grant program, in the following areas:

- Heightening awareness: NIH-wide program announcements for training grants for biostatisticians and other opportunities for biostatisticians
- Master's students: new programs that support the training of master's students and education of review panels concerning the value of master's students to this field so an MS graduate from a T32 training grant in biostatistics is not given a negative score
- Grant support: broaden training grant support beyond traditional areas observational studies and clinical trials—to statistical genetics and genomics, biomathematics, and related quantitative areas
- Proposal review: ensure an appropriate number of biostatisticians are on review panels and ask program officers to consider the appropriateness of review comments
- Funding support: provide adequate support to fully fund the training grants to biostatisticians (prior to ARRA, we understand that some training grants were only partially funded)

Finally, I ask you to support the funding of methodology grants for biostatisticians and preserve the Biostatistical Methods and Research Design (BMRD) study section. With the rapid growth of data, it is important to have the statistical techniques to deal with new challenges. The statistical methods needed for tomorrow have yet to be invented or developed. Without new methodology, for example, the potential of the genomics era is not likely to be optimized. It is unfortunate that our more senior and experienced biostatistical colleagues have had so many demands on their time that many have not submitted their own methodology R01 grants. As a result, the number of R01 grant submissions has declined recently, in concert with the arrival of the Clinical Translational Science Awards. This decline has led to the potential by the Center for Scientific Review to merge the BMRD with another study section, which would be less than ideal and perhaps further discourage methodology grant submissions. While NIH has been supportive, I ask for your help to further encourage statistical methodological research.

Thank you for your consideration.

Sincerely,

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Sally C. Morton, PhD President, The American Statistical Association