

October 7, 2011

Shirley Tilghman, PhD
President, Princeton University
Chair, NIH Advisory Committee to the Director Working Group on the Future
Biomedical Research Workforce

Dear Dr. Tilghman,

The Endocrine Society appreciates the opportunity to comment on the Request for Information (RFI): Input into the Deliberations of the Advisory Committee to the NIH Director Working Group on the Future Biomedical Research Workforce. Founded in 1916, The Endocrine Society is the world's oldest, largest and most active organization devoted to research on hormones and the clinical practice of endocrinology. Today, The Endocrine Society's membership consists of more than 14,000 scientists, physicians, educators, nurses and students in more than 100 countries. Society members represent all basic, applied and clinical interests in endocrinology.

The Society encourages the Working Group to frame its deliberations after first defining the scope and the needs of the biomedical research workforce, as training foci and procedures should produce workers to fill roles throughout the defined scope. NIH should consider whether the workforce comprises research scientists alone or whether it includes scientifically trained individuals who are applying their research training in non-traditional fields such as intellectual property, patent law, technology transfer, research administration, secondary education, and policy. Further complicating the workforce analysis is the fact that biomedical research trainees themselves constitute a large portion of the workforce, and established investigators rely upon their trainees not only to perform bench research but also to infuse their work with fresh ideas and energy.

The Society is pleased to have the opportunity to provide comments on these timely and highly relevant issues. Below we outline specific concerns that should be of top priority for the Working Group in their deliberations.

Supply and demand and measuring trainee outcomes

The Society appreciates the Working Group's identification of workforce supply and demand as a critical issue. In a climate where an increasing number of highly trained individuals are choosing to pursue careers outside of academia, NIH should be encouraged to reevaluate the assessment and measures of success of trainees based on both academic and non-academic accomplishments. For example, trainees who are employed in law or policy provide necessary expertise for increasingly complicated roles.

Those who choose to teach in a high school provide insight and expertise to excite another generation of students who may pursue science careers.

Training for multiple career paths

The Society encourages the Working Group to consider developing NIH-supported training mechanisms that would help prepare trainees for a wide range of careers. The Society favors the incorporation of standard supplemental training for students and post-docs relevant to multiple career paths, including bench and non-bench professions, across institutions. Supplemental funding would be necessary to install training opportunities not directly related to research, and NIH should consider mechanisms to provide funds for these opportunities, inasmuch as they would enhance trainees' core competencies. For example, training related to laboratory and financial management would be beneficial to all trainees regardless of future career paths. The inclusion of foundational training in core capabilities, such as running a laboratory, mentoring and collaborating with others, along with formal training in technical writing, speaking, teaching science (at the high school, undergraduate, and medical/graduate levels), law courses relevant to science, and business training would simultaneously improve research-related training and prepare PhD graduates with a skill set applicable to broad career choices. Encouraging the establishment of joint training programs, such as biomedical science PhD/MBA programs, would further the expansion of training available to students.

Retention of women in the biomedical workforce

As women now comprise at least 50% of many graduate schools for the sciences, efforts to support and retain women during graduate and post-doctoral training should be considered a priority. Some studies suggest that drop-out from academic tracks and a biomedical career is related to the perception that these careers are not compatible with family life. NIH should consider ways to support family leave for graduate and post-doctoral trainees while compensating or allowing for Principal Investigators to obtain temporary assistance or extend project support. Supporting leave and compensating Principal Investigators would help prevent drop-out and discrimination against hiring female trainees.

Professional/staff scientist positions

The creation of additional staff scientist positions presents a potential opportunity to balance the needs of current trainees and established investigators. This approach would offer bench careers to those trainees who do not pursue tenure-track positions and would help maintain the workforce upon which established investigators rely. However, the costs of salary and benefits for staff scientists are measurably higher than those for trainees. Furthermore, while there is value in the certainty of a highly skilled, more permanent workforce, the transient nature of the training experience serves to continuously supply research laboratories with fresh ideas and unique perspectives. The loss of this ingenuity could be detrimental to the scientific enterprise.

The Endocrine Society is supportive of the Working Group's efforts to address these difficult issues and believes that a dissection of the needs of the biomedical research

workforce is necessary in order to sufficiently address the issues outlined in the RFI. We thank you for the opportunity to provide comments and look forward to additional information regarding the deliberations of the Working Group. If the Society can be of any further assistance please contact Katie Moore at kmoore@endo-society.org.

Sincerely,

A handwritten signature in cursive script that reads "Janet E. Hall". The signature is written in black ink and is positioned to the left of the typed name.

Janet E. Hall, MD
President, The Endocrine Society