Roles and Opportunities for Staff Scientists in Biomedical Research

A National Academies Workshop

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The Next Generation of Biomedical and Behavioral Researchers: Breaking Through

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The Next Generation of Biomedical and Behavioral Researchers: Breaking Through

Committee’s Focus

- Ensure the nation’s successful launch and sustainment of careers among the next generation of researchers
- Evaluate the barriers that prospective researchers encounter
- Evaluate the extent to which employers can facilitate smooth transitions into independent research careers
Problem: Rise in Applicants, Not in Awardees
Problem: Increasing Age to Independence

Age at first-R01 equivalent by degree type, Data provided courtesy of NIH
Problem: The High Costs to Becoming a Biomedical Researcher

The Numbers:
- ~12 years of post-baccalaureate training
- ~80% of US biomedical PhD’s enter postdocs
- Later age for research independence (~43-46 yrs old)
- 18% secure tenured or TT positions within 10 years of doctorate

Percentage of U.S. trained biomedical individuals living in the United States, sector of employment by cohort and position, 1993-2013. Prepared by Donna Ginther, University of Kansas,
Review Of Prior Work Relevant To Study
Appendix B

This report will only make an impact if we examine why recommendations of the past have not improved circumstances.

- **Support staff scientists:**
  - NIH should encourage study sections to urge institutions to create position categories reflecting the value and stature of staff scientists.
  - The research community should employ more staff scientists.
Deeper Dive: Increase Staff Scientist Positions

- Few established paths exist for non-faculty researchers/staff scientists.

- Can manage technologies in core or shared facilities, train graduate and undergraduate researchers, provide collaborative support, and increase research transparency and stability.

- Little clarity about how to secure these positions and advance professionally, but some promising testimony about job satisfaction.

- Could these positions address the backlog of postdoctoral researchers and bring greater equilibrium to the research system?
Increase Staff Scientists
Report Recommendation 5.3

- Staff scientist positions could provide more stable, non-faculty research opportunities
- Research institutions and NIH should develop mechanisms to increase staff scientist positions
- Research institutions should experiment with providing career tracks with clearly defined review and promotion processes, as well as opportunities for professional development
- Staff scientists should receive a salary and benefits commensurate with their experience and responsibilities
Key Takeaways: More Information is Needed on Staff Scientists in Biomedical Research

- Stakeholders are interested in increasing staff scientist positions to alleviate the supply-demand imbalance and make important contributions.

- Very little data or evaluations available about staff scientist positions, experiences, or impact on research.

- Well suited for pilot projects that provide appropriate evaluation criteria and position tracking.

- The National Academies of Sciences plans to host a workshop in 2019 to discuss potential roles, responsibilities, sources of funding, and career progressions.
Topics for the National Academies Workshop

- **Recognize and Define** - What does the position entail and what are the paths for professional advancement?

- **Evaluate** - What are relevant metrics and how can they be assessed? How do we avoid mirroring the standard academic track?

- **Fund** - Are there opportunities for independent funding? Should they be considered NIH key personnel? How should they be included in grant applications?

- **Current programs** - Learn about current staff scientist roles at a variety of research institutions.

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Questions?

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