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The FASEB Journal / Volume 30, Issue 8 / pp. 2673-2683

Research

Labor and skills gap analysis of the biomedical research workforce

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First published: 13 April 2016

https://doi.org/10.1096/fj.201500067R

PDF

ABSTRACT

The United States has experienced an unsustainable increase of the biomedical research workforce over the past 3 decades. This expansion has led to a myriad of consequences, including an imbalance in the number of researchers and available tenure-track faculty positions, extended postdoctoral training periods, increasing age of investigators at first U.S. National Institutes of Health R01 grant, and exodus of talented individuals seeking careers beyond traditional academe. Without accurate data on the biomedical research labor market, challenges will remain in resolving these problems and in advising trainees of viable career options and the skills necessary to be productive in their careers. We analyzed workforce trends, integrating both traditional labor market information and real-time job data. We generated a profile of the current biomedical research workforce, performed labor gap analyses of occupations in the workforce at regional and national levels, and assessed skill transferability between core and complementary occupations. We conclude that although supply into the workforce and the number of job postings for occupations within that workforce have grown over the past decade, supply continues to outstrip demand. Moreover, we identify practical skill sets from real-time job postings to optimally equip trainees for an array of careers to effectively meet future workforce demand.—Mason, J. L., Johnston, E., Berndt, S., Segal, K., Lei, M., Wiest, J. S. Labor and skills gap analysis of the biomedical

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