Biomedical Research Workforce Working Group Implementation Update

June 2013

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Background

- Charge
  - Develop a model for a sustainable and diverse U.S. biomedical research workforce that can inform decisions about training of the optimal number of people for the appropriate types of positions that will advance science and promote health.
  - Based on this analysis and input from the extramural community, make recommendations for actions that NIH should take to support a future sustainable biomedical infrastructure.
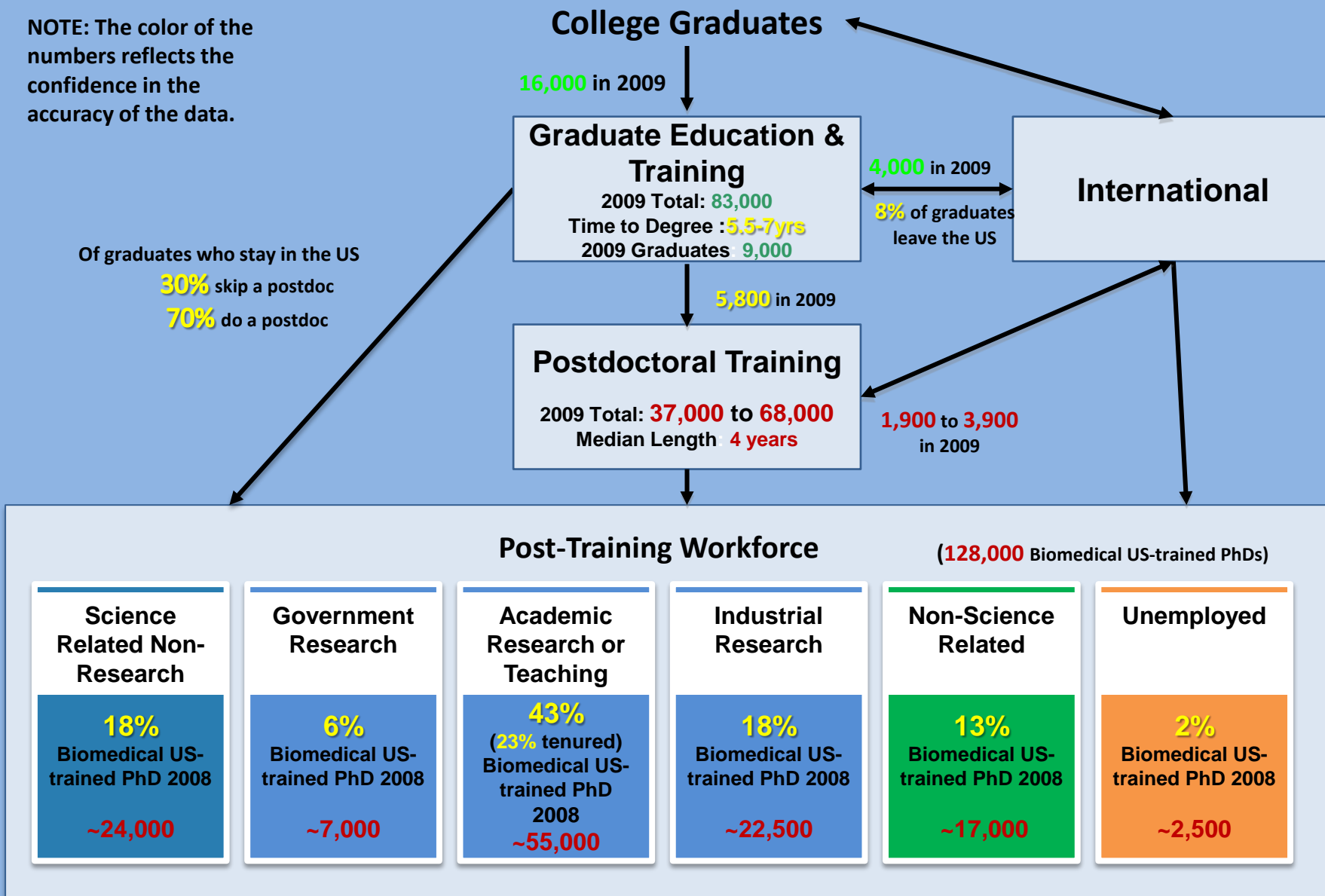- Report
  - Executive Summary http://acd.od.nih.gov/bmw_report.pdf
  - Report http://acd.od.nih.gov/Biomedical_research_wgreport.pdf
  - Supplementary Web Site http://report.nih.gov/investigators_and_trainees/ACD_BWF

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Snapshot of the PhD Biomedical Research Workforce

WG Conclusions

Weighing all the data analyzed, the working group concluded that:

- The large upsurge in US-trained PhDs, increased influx of foreign-trained PhDs, and aging of the academic biomedical research workforce make launching a traditional, independent, academic research career increasingly difficult.

- The long training time and relatively low early-career salaries when compared to other scientific disciplines and professional careers may make the biomedical research career less attractive to the best and brightest of our young people.

- The current training programs do little to prepare people for anything besides an academic research career, despite clear evidence that a declining percentage of graduates find such positions in the future.

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WG Recommendations

The working group made specific recommendations on:

- **Graduate Students** - diversify and shorten the PhD and increase support on training grants and fellowships.

- **Postdoctoral Researchers** - shorten the pathway to an independent career, increase support on training grants and fellowships, enhance the training aspects of the postdoc, and improve pay and benefits.

- **Information Collection, Analysis and Dissemination** - fill data gaps, routinely tracking of student and postdoc career outcomes, and institute ongoing analysis of the workforce

- **Physician Scientists** - conduct a focused follow-on study.

- **Staff Scientists** - study sections should be receptive to these positions in applications.

- **Salary Support** – long term approach to gradually reduce the percent of funds from NIH.

- **Diversity** – stronger coordination of programs and rigorous evaluation.

Solicit public input

REQUEST INFORMATION

- A Request for Information (RFI) inviting comments and suggestions on the implementation was published on February 21, 2013 and closed on April 22, 2013.

- Contained additional information about our thinking on each of these topics

- Information about your experiences, at both the personal and institutional levels, will be invaluable as we consider the best ways to proceed.

- Responses are being collated and summarized

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DP7 BEST Program - Broadening Experiences in Scientific Training

- Common Fund program seeking innovative approaches to complement traditional research training in biomedical sciences at institutions that receive NIH funds.

  - **http://grants.nih.gov/grants/guide/rfa-files/RFA-RM-12-022.html**

  - **One application per institution**

  - **Up to $250,000 in direct costs per year**

  - **Closed May 10, 2013**

  - **Over 100 applications**

  - **Review on July 11-12 and July 16-17.**

- Encourage institutions to leverage funds with existing institutional offices and programs, local resources outside the institution, or that partner with industry or other entities.

- Must include rigorous analysis to demonstrate impact.

- Proven approaches will be widely disseminated throughout the biomedical research community; awardees will meet to exchange ideas.

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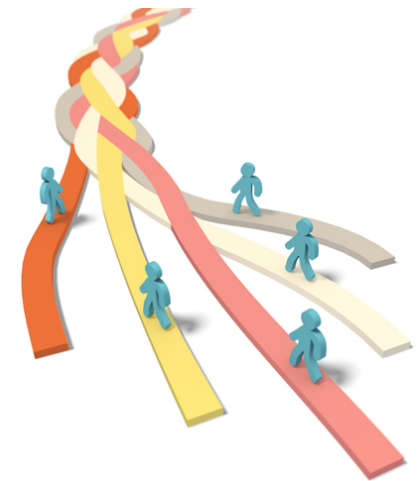
Other initiatives

- Improve graduate student and postdoctoral training by:

  - Putting IDPs in place for all trainees

  - Reducing the length of graduate training

  - Providing F30s and F31s from all ICs – fully implemented for applications received after April 2014.

- Increase postdoctoral stipends – to be implemented in FY2014

- Consider policies on benefits – developing comprehensive survey

- Shorten eligibility period and increase support for K99/R00 – implemented for applications received after February 2014

Other initiatives cont.

- Develop a simple and comprehensive tracking system for trainees

  - Automate training grant tables to include structured data

  - Develop SciENCV

  - Incorporate unique identifier

- Initiate discussion with the community to assess NIH support of faculty salary – developing pilot survey

- Create functional unit at NIH to assess the biomedical research workforce

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