The Policy Agenda of Postdocs in the US: Converging Streams?^{*}

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Abstract

The current policy agenda for postdoctoral fellows (postdocs) in the US is grounded in the 2000 report, *Enhancing the Postdoctoral Experience for Scientists and Engineers: A Guide for Postdoctoral Scholars, Advisers, Institutions, Funding Organizations, and Disciplinary Societies.* The report, by the National Academy of Sciences Committee on Sciences, Engineering, and Public Policy (COSEPUP), spurred actions by a number of national and local institutions to address postdocs' concerns. Steps have also been taken to improve data collection about postdocs and to establish a new agenda for policy and research. The National Postdoctoral Association (NPA), the National Science Foundation (NSF), and COSEPUP are stakeholder groups playing key roles in these policy initiatives.

The COSEPUP report laid out an agenda of ten action points related to the postdoc experience:

1. Award institutional recognition, status, and compensation commensurate with the contributions of postdocs to the research enterprise.

2. Develop distinct policies and standards for postdocs, modeled on those available for graduate students and faculty.

3. Develop mechanisms for frequent and regular communication between postdocs and their advisers, institutions, funding organizations, and disciplinary societies. 4. Monitor and provide formal evaluations (at least annually) of the performance of postdocs.

5. Ensure that all postdocs have access to health insurance, regardless of funding source, and to institutional services.

6. Set limits for total time of a postdoc appointment (of approximately five years, summing time at all institutions), with clearly described exceptions as appropriate.

7. Invite the participation of postdocs when creating standards, definitions, and conditions for appointments.

8. Provide substantive career guidance to improve postdocs' ability to prepare for regular employment.

9. Improve the quality of data both for postdoctoral working conditions and for the population of postdocs in relation to employment prospects in research.

10. Take steps to improve the transition of postdocs to regular career positions (p. 99).

In the intervening years, institutions have taken steps to address many of these points. Consistent with these recommendations, the 2007 America COMPETES Act (section 7008) added a requirement that postdocs funded out of NSF grant funds have a mentoring plan included at the proposal stage and documented in annual reports. An evaluation based on data from the Sigma Xi survey documented benefits to postdocs from professional development and structured oversight, but little change in satisfaction associated with improvement to compensation (Davis 2009).

The NPA, founded in 2002, has hosted annual meetings since 2003. A review of annual meeting agendas from 2003-2012 reveals that policy and collective action have been some of the most consistent priorities at these meetings (National Postdoctoral Association 2012). Other consistent themes at the meetings have been mentoring, diversity, careers, funding, and immigration. Topics that have appeared for the first time on these meeting agendas since 2010, potentially indicating emerging areas of interest, include unionization, industry careers, entrepreneurship, and teaching.

Collective action by postdocs has included the formation of postdoc unions (Gerwin, 2010; "State certifies union of Rutgers postdocs," 2009). Postdocs at the University of Connecticut created a union affiliated with the American Federation of Teachers (AFT) in 2004. In 2006, organization by the United Auto Workers (UAW) resulted in the creation of the union now known as Postdoctoral Researchers Organize/UAW (PRO/UAW) at 10 University of California campuses. Rutgers postdocs also affiliated with the AFT in 2009.

The NSF has initiated a project to improve collection of data on postdocs (Oliver and Rivers 2006; Survey Sciences Group 2008). This project has proceeded through two phases. In the first phase, Survey Sciences Group focused on developing sampling strategies to capture postdocs believed to be missing from current data collection efforts: those on temporary visas who earned their PhD outside the US, those with doctorates other than the PhD. and those outside of academia. In the second phase, Survey Sciences Group tested the feasibility of their proposed sampling strategy, including the use of FastLane data on funding sources for postdocs. While many feasibility challenges were identified, the project has now progressed to development of survey items that can be used in a survey of postdocs and potentially integrated into existing surveys such as the SDR.

The NAS COSEPUP has established a committee to undertake a project on "The State of the Postdoctoral Experience for Scientists and Engineers Revisited." As described on the NAS Current Projects System website (accessed April 3, 2012) the committee has been charged with addressing the following questions:

1. General characteristics of postdoctoral fellows and positions in the U.S.

- How many postdoctoral fellows are there in the U.S.? Where are they working, in what fields, and for how many years?
- 2. Current conditions for postdocs

Are expectations of principal investigators made clear? Do postdocs receive adequate professional status and privileges as well as salary and benefits? Are the rules clear about credit they receive for their discoveries in the lab, and are they receiving adequate career guidance and development?

3. Institutional provisions.

Do postdocs serve as investigators on grants? Are questions of intellectual property identified and provided for? At universities, is teaching required; if not, is it encouraged or discouraged?

4. Career paths

Where do postdocs come from? What do we know and what can we learn about what postdocs do after they complete their programs. How well are the postdoc programs matched with the career opportunities that are open to them?

5. Recent trends and changes

Have previous recommendations been implemented and to what effect? Are there other developments in the research enterprise that have had a significant effect on postdocs?

6. Participation in the research enterprise Are postdocs being invited to review journal articles and to write grant proposals, either formally by journals and agencies or informally by PIs, and is this experience useful? What are the impressions of postdocs about peer review today? Are postdocs being used effectively in research? Are postdocs acquiring the skills they need to become productive independent researchers

in the future?

Considered in light of one of the most widely used theories of policy agenda formation, Kingdon's multiple streams theory, the current status of postdocs on the policy agenda appears potentially favorable for federal policy action. In Kingdon's model, windows of opportunity for policy change open when streams of problems, policy solutions, and politics converge. Formation of the COSEPUP committee represents a measure of success in persuading policymakers to acknowledge the issues facing postdocs as problems worthy of policy response. The committee's report will provide an opportunity for a stream of proposed policy solutions to come to the attention of policymakers. At this writing, the third stream, politics, is also at the precipice of considerable change in the wake of the 2012 election. As a result of this confluence of events, postdocs may be facing a key window of opportunity to influence the US federal policy agenda.

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