Supporting the Needs of Postdocs


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2017 National Postdoctoral Association
Institutional Policy Report

Introduction
What Is the NPA’s mission, and What Is a Postdoc?

Since 2003, the National Postdoctoral Association (NPA) has sought to enhance the research training experience for postdoctoral scholars (or postdocs), who, by definition, are individuals holding doctoral degrees and who are engaged in a temporary period of mentored research and/or scholarly training for the purpose of acquiring the professional skills needed to pursue a career path of his or her choosing. The NPA has consistently provided postdoc scholars with a unified national platform that provides advocacy, education, and professional development. By working closely with federal agencies such as the National Institutes of Health (NIH) and the National Science Foundation (NSF), as well as professional societies and postdoctoral support offices at institutions across the country, the NPA has developed policies and programs that improve the training experience for postdocs. The NPA provides resources that postdocs and postdoctoral program administrators need for success, and it hosts an annual conference where all members can network and develop their professional and leadership skills. The NPA’s Institutional Policy Survey is designed as a longitudinal survey of its member postdoc offices. The organization is using these data to measure the progress and growth of postdoc services and benefits over time. “Improvements have continued to be made in the postdoc experience,” notes Kate Sleeth, chair of the NPA Board of Directors. “However, there are still areas for growth. The NPA is committed to providing guidance and resources to our membership and advocating at the national level to ensure that improvements continue to be made.”

The Need for Data Collection and Analysis

The various fields of research that postdocs study are diverse and often interdisciplinary. Data collection on the postdoc community is vital to advocate at both the institutional and agency level to provide postdocs with more equitable benefits and competitive compensation. Moreover, further research into this field can help promote a more audible dialogue for the public and for policy makers. The research presented in this report seeks to improve the quality of life for postdocs who, for example, are hoping to make the next big breakthrough in cancer treatment, attempt to find a way to bring humans to Mars, or work to improve education access around the world, among many other significant areas of research.

2014 NPA Institutional Policy Report

In 2014, the NPA published the NPA Institutional Policy Report 2014: Supporting and Developing Postdoctoral Scholars:’ addressing issues in the postdoc world such as professional development programs, compensation, and benefits, to name a few. The report concluded that the quality of programs and availability of postdoc offices (PDOs) have improved significantly over the past decade. Concerns remained, however, about minimal funding for PDOs, limited health and retirement benefits, training lasting longer than five years, a lack of training programs, and a lack of exit surveys. This 2017 report will highlight some of the advances made since the recommendations in the 2014 NPA Institutional Policy Report, as well as areas where work remains to be done.

Previous Studies and Recommendations

Although the first postdoc fellowships were formed more than a century ago, reports examining the postdoc world were rare until the 1990s. Since 2000, various associations, societies, and organizations have published a number of reports on the importance of postdoctoral fellows in the research enterprise, and how the postdoctoral training period could be improved. As a result of these early studies, postdocs...
began to be discussed at a national level, the NPA was formed, and the association has maintained a constant voice for the postdoc community. In 1998, the Association of American Universities (AAU) conducted the first major examination of the postdoc world. Their report highlighted the gradual expansion of the postdoc population and the need for postdocs studying on temporary visas. Furthermore, their report brought to light general concerns regarding unclear appointment processes as well as overall postdoc dissatisfaction.\(^1\)

A joint effort in 2000 by the National Academy of Sciences (NAS), the National Academy of Engineering (NAE), and the Institute of Medicine (now called the National Academy of Medicine [NAM]) fostered the publication of a comprehensive review of the postdoc world. Their report, Enhancing the Postdoctoral Experience for Scientists and Engineers, was the first of its kind that provided information on postdocs. The survey, which launched in August 2016, was open for eight months, during which time 130 institutions (68 percent of those surveyed) completed the survey, and 102 (54 percent) completed it. The comprehensive survey is critical to understanding the current state of the postdoc community and how to improve it. The topic areas covered in the survey include the following: demographics of the institution and its postdoc population; structure of the institution’s postdoc office; postdoc policies; appointment process and length of appointment; postdoc handbook, exit survey, administrative policies that pertain to postdocs, postdoc performance reviews, and tracking of alumni; postdoc compensation and benefits; career and professional development; other institutional services.

Maximize the ability to make comparisons between the two surveys, the survey task force used the follow-up surveys because it builds the base for all other efforts. When working closely with the PDA, the PDO is able to stay current with the needs of its institution’s postdoc population. The PDO administrator becomes the liaison between postdocs and their institution’s career services office to incorporate all postdoc policies—from working with human resources on the classification and appointment processes to postdoc training and other institutional services.

Overview of Findings

Establish an Active Postdoc Office and Association

At the heart of every strong set of institutional postdoc policies and programs is a vital and vibrant postdoc office (PDO) and postdoc association (PDA). This recommendation is first among the NPA Recommendations for Postdoctoral Policies and Practices because it builds the base for all other efforts. When working closely with the PDA, the PDO is able to stay current with the needs of its institution’s postdoc population. The PDO administrator becomes the liaison between postdocs and their institution’s career services office to incorporate all postdoc policies—from working with human resources on the classification and appointment/renewal process of postdocs, to assisting the international community in gaining access to the institutional postdoc office and postdoc association sustaining members.

Methodology

2016 NPA Institutional Policy Survey

The 2016 NPA Institutional Policy Survey was distributed to 190 NPA institutional sustaining members. The postdoc administrator at the sustaining member institution is often the person who best understands the current policies, benefits, and resources for postdocs at their respective institutions. The survey included 82 possible questions, which sought to ascertain basic demographics, benefits, resources, and policies at the institutional level. The average respondent took between 30 and 60 minutes to complete this survey, depending on the accessibility of their data on their institution. The survey, which launched in August 2016, was open for eight months, during which time 130 institutions (68 percent of those surveyed) completed the survey, and 102 (54 percent) completed it. The comprehensive survey is critical to understanding the current state of the postdoc community and how to improve it. The topic areas covered in the survey include the following: demographics of the institution and its postdoc population; structure of the institution’s postdoc office; postdoc policies; appointment process and length of appointment; postdoc handbook, exit survey, administrative policies that pertain to postdocs, postdoc performance reviews, and tracking of alumni; postdoc compensation and benefits; career and professional development; other institutional services.

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2016 NPA Institutional Policy Survey Respondents (continued)

University of North Carolina Chapel Hill
University of Notre Dame
University of Oklahoma Health Sciences Center
University of Pennsylvania
University of Pittsburgh
University of Rochester
University of South Florida
University of Tennessee Health Science Center
University of Texas Health Science Center at San Antonio
University of Texas Health Science Center at Houston
University of Texas Medical Branch
University of Utah
University of Virginia
University of Washington
University of Wisconsin-Madison
University of Connecticut
Upstate Medical University
Van Andel Research Institute
Virginia Commonwealth University
Washington University in St. Louis
Wayne State University
Whitehead Institute for Biomedical Research
Woods Hole Oceanographic Institution
Yale University
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With the important role the postdoc plays in the research enterprise. This is the role the postdoc administrator has at NPA member institutions across the country. Given the importance of a strong PDO presence at an institution, arguably one of the most significant outcomes of the NPA advocacy efforts has been the increase in the number of institutions with a formal PDO or at least a dedicated staff member for postdoc affairs. When the NPA began in 2003, there were only about 25 PDO/institutional Members across the country. This list grew to 167 members in 2014, and the growth trend has continued so that there are 190 NPA PDO/institutional members in 2017. There has also been a parallel and consistent growth in the prevalence of a PDO, at 84 percent of institutional respondents in our 2016 survey.

The organizational structure of a PDO is tailored to the institution’s unique culture. We consistently find that the PDO structure depends on the configuration of the institution’s hierarchy and that structure defines whether the PDO exists within a graduate education division, stands alone under research affairs, or resides at the provost level of a university. Interestingly, where the PDO resides can be different from where it receives its funding.

**Provide Sufficient Budgets to PDOS**

To adequately assist postdocs, it is critical for PDOS to have an operating budget and dedicated staff, which allows a PDO to perform functions such as enforcing policies, appointing postdocs, coordinating training programs, mediating disputes between postdocs and their advisors, and/or providing career counseling.

The distribution of PDO budgets (excluding personnel salaries) in the 2016 survey did not change from the 2013 survey data. The 2016 survey asked members of PDO budgets and found that 61 percent of PDOS share resources with other offices at their institution. This arrangement is not surprising, given how much PDOS interact with other offices and that they are understaffed the majority of the time. The average full-time equivalent (FTE) staff for a PDO was 1.24 FTEs, and the median was 1 FTE. Having at least one dedicated staff person is important to a PDO’s success, but the demands on only one dedicated staff person of serving an institution’s entire postdoc population are still daunting. There are PDOS with only one staff member who serve more postdocs than the average number across institutions (449 postdocs). By sharing resources, we know anecdotal evidence that a PDO is able to better serve their postdoc population because they receive help with carrying the workload of implementing programs, as well as drafting and enforcing policy.

**Establish Administrative Policies**

Part of creating a good training environment for postdocs is to have established administrative policies in the event of authorship disputes, termination due to grant funding loss or other causes, along with other grievance issues. The survey question covering this topic asked whether the policies listed in the figures are in place and include postdocs at the institutional level of policy or whether there is a specific postdoc policy. It is encouraging to see that institutions generally have policies that include postdocs. The NPA contends, however, that establishment of postdoc-specific policies is essential, because in cases such as termination, authorship, misconduct, grievance, and intellectual property, postdocs are in a position of lesser power than their advisors. Creating a postdoc-specific termination policy, for example, enacts the safeguards necessary in case grant funding runs out for an international postdoc on a temporary visa. Under such a policy, the postdoc could be given time to find another position so they are not in lapse in their work status. The survey results do not show a high percentage of postdoc-specific policies for any of the types queried.

**Define the Appointment Process**

The appointment process of postdocs in an institution in which PDOS should exert a degree of control when postdocs are entering the institution. Although the survey did not cover the topic of uniform postdoc titles, the NPA supports this concept. Defined titles for postdoc appointments in the payroll system of an institution are critical for the successful tracking of postdocs. The 2014 NPA report, like most of the previous postdoc reports, strongly recommended that institutions have a specific process for appointing postdocs. Many of these policies and important resources can be outlined in a uniform appointment letter that all postdocs sign before starting their appointment. The percentage of institutions that have adopted an appointment policy since the last survey has increased. In 2013, 87 percent of institutions reported having a clear appointment process and this number rose to 94 percent in the 2016 survey.

Because postdocs are primarily hired by their advisors and may not gain exposure outside of the research group, it is critical for them to know from the beginning about the PDO as their institutional home base for support. The PDO often serves as the gateway to all other institutional services, and the NPA advocates that an orientation program is the best mechanism to present this information to postdocs. The number of NPA member institutions that reported holding an orientation program is another area that showed growth, from 70 percent in 2013 to 85 percent in 2016. An orientation program can address a variety of topics—such as the importance of institutional identification, where to obtain an ID card, and what institutional services and amenities are available to postdocs—as well as provide an opportunity to connect with peers and begin networking outside of their research group to mitigate feelings of isolation.

Many institutions with postdocs are located in major cities. The cost of living in these areas is often exceptionally high, and a significant amount of the average postdoc’s stipend goes toward housing. Furthermore, for foreign postdocs the process of finding a place to live can be exceptionally difficult. Only 46 percent of respondents reported providing monetary or non-monetary housing assistance to postdocs.

**Provide Fair Postdoc Compensation**

One of the key areas for which the NPA has consistently advocated since its inception is higher postdoc pay and this point is central in the NPA Recommendations for Postdoctoral Policies and Practices. The NIH NRSA stipend scale provides a framework that is used beyond the NIH’s internal research program; at many institutions, it serves as the gold standard for minimum stipend in institutional policies regardless of funding source. Our 2013 and
The 2016 survey data show that the NIH NRSA stipend scale is the driving force for what institutions decide to pay their postdocs. The largest increases in the NRSA stipend scale have historically come after publication of reports or legislation that addressed the issue of nonexempt workers. The report recommended raising the starting NRSA stipend level to $42,000 in 2014. The increase was after the release of these reports, the NIH promised in 2001 after the release of these reports to raise NRSA stipend levels from about $31,000 to $45,000 over the next few years. Stepwise increases occurred for a few years, but because of a recession and a relatively flat NIH budget, postdoc stipend levels were either frozen or raised by only 1–2 percent per year for the next several years. The next biggest increase occurred because the NIH Biomedical Research Workforce Working Group recommended raising the starting NRSA stipend level to $42,000 in 2014.

The most recent increase in postdoc compensation came as a result of the FLSA legislation that Congress passed in May 2016 to raise the minimum salary for all United States nonexempt workers from $23,600 to $47,476 per year, or allow for overtime pay. To become an exempt worker, one must be paid more than the FLSA minimum salary. Postdocs were explicitly included in this legislation’s working population. The new regulations became controversial on many academic campuses because this increase in the minimum salary now meant postdocs, if paid less than $47,476, would be eligible to receive overtime pay for any time worked more than 40 hours per week. Because postdoc work hours depend on their research and do not fit into a typical 9 a.m. to 5 p.m. schedule, this legislation had institutions discussing postdoc compensation more than ever before. In October 2016, 21 states filed an emergency motion for a preliminary injunction, and after this case was consolidated with another lawsuit filed by the U.S. Chamber of Commerce and other business groups, a Texas federal judge filed an injunction 10 days prior to the December 1, 2016, implementation date. On August 31, 2017, the court officially concluded that the FLSA overtime rule was invalid. Prior to the anticipated FLSA implementation, institutions had already spent a lot of effort analyzing postdoc compensation, and most had told their postdocs that they would be receiving a raise. Additionally, Francis Collins, director of NIH, announced that NIH would move forward with the higher compensation levels for NRSA stipends regardless of what happened with FLSA. This strong support for raising the compensation of postdocs is evident in the data collected from the 2016 NPA Institutional Policy Survey and from a small follow-up survey conducted in February 2017 to see what decisions NPA member institutions had made after the injunction halted implementation of new FLSA regulations.

Although it is critical to establish a baseline postdoctoral salary to support fair compensation as well as inclusion, it is important for institutions to require an annual stipend increase. The vast majority of responding institutions have a minimum stipend for postdocs that are either required (84 percent) or recommended (6 percent), but the majority do not require annual stipend increases: 36 percent require an annual increase and 43 percent recommend it. The remaining 21 percent of institutions do not have a policy that requires annual increases.

When postdocs move from their principal investigator’s grant to their individual fellowships, they often lose access to health insurance or can only sign up for lesser health insurance.

Although most postdoc employees receive insurance benefits and paid time off, the postdocs who have their own funding (individually funded and externally funded postdocs) show a sharp decline in access to benefits. This point is critical to raise, because a postdoc that successfully writes and is awarded a prestigious fellowship should not lose benefits. The data, however, clearly show that when postdocs move from their principal investigator’s grant (institutioanlly funded postdoc) to their individual fellowships (individually funded postdoc), they often lose access to health insurance. Some institutions provide an option for these individuals to sign up for graduate student health insurance, but it is often a lesser insurance and
Institutions that offer the same benefits to all postdocs consistently have postdoc titles separate from faculty and staff.

Postdocs are at a stage in life where this benefit cannot be overlooked; furthermore, they represent a low-risk, highly educated population that can be insured at a rate that is lower than a typical university employee pool. Although the implementation varies among institutions that offer the same benefits to all postdocs, the consistent element is that the institution has defined postdoc titles so it can administratively separate the group from faculty and staff. Establishing defined and enforced postdoc titles allows institutions to address this group’s unique needs.

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Only 9 percent of survey respondents answered the following question: “Does your institution collect data on the number of U.S. citizen postdocs from the following groups: with a disability?” Only 36.5 percent of these respondents answered “yes.” Because the high percentage of missing data, the percentage of postdocs with a disability across institutions cannot be accurately stated. Similarly, the NPA sought to understand whether institutions are tracking postdocs from disadvantaged backgrounds, and only 9 percent of survey respondents indicated that they have been. Again, this response rate does not provide accurate data to fully understand the effect of economic background on current postdocs.

Conduct Exit Surveys

The NPA’s Recommendations for Postdoctoral Policies and Practices has continuously encouraged institu-tions to conduct exit surveys at the end of a postdoc scholar’s appointment to collect honest feedback about the individual’s experience and to have information about a next location so that the postdoc’s future endeavors can be tracked. The data collected in these surveys could inform institutional policy decisions that affect future postdocs. Additionally, tracking postdocs after their appointments could help develop a comprehensive alumni network.

According to the 2016 NPA Institutional Policy Survey, the percentage of institutions administering exit surveys remains at 45 percent, despite recommendations from NPA and NAS in their report, "The Postdoc Experience Revisited." Among the 55 percent of institutions that do not administer exit surveys, the primary reason reported was that the PDOI is not integrated into the appointment process, and they do not know when a postdoc is leaving the institution. Without this knowledge, it is significantly more difficult to introduce an initiative and collect these data.
The NPA continues to stand by its currently published recommendations for postdoctoral policies and practices.11 The presence of a strong PDO and PDA at every institution where postdocs train continues to be a strong predictor of institutional commitment to the education and training of their postdoc population. The support offered from PDOs across the country remains a deciding factor in the postdocs’ overall experience, and potential postdocs might note this factor when choosing an institution. The NPA recommends the creation of or expanded development of PDOs since the 2014 report; however, improvement in this area and other areas is still needed.

The radar graph at right shows the degree to which institutions are meeting the NPA’s recommendations and where progress can be made. The closer a dot is to the edge of the graph, the closer the percentage of institutions possessing that queried policy is to 100 percent. According to this graph, institutions as a whole are doing very well at maintaining an office for international scholars. This graph also shows, however, that a great deal of progress can be made regarding institutions conducting exit surveys, providing family benefits, and in several other areas. The NPA will continue to advocate for these recommendations, as they have been shown to positively affect the postdoctoral experience, and the NPA will continue to evaluate progress through comparative radar graphs in the coming years.

These data additionally provide an important resource for institutions to evaluate their policies in comparison with those of their peer institutions. In some instances, showing an opportunity to provide the same or better level of benefits or policy can strengthen their advocacy for policy changes. Examples of successful advocacy have included providing the same institutional benefits for all postdocs regardless of funding source, providing access to career services programs, or establishing a uniform appointment process for all postdocs.

Recommendations and Conclusions

The NPA recommends that more institutions adopt and enforce parental leave policies and offer more family-friendly benefits for postdocs. Recent studies have concluded that women’s research productivity is related to an increase in parental leave policies.5 Paid maternity leave is currently low, especially at public institutions. Given that postdoc training often occurs when many people begin to establish families, policies offering parental leave and family benefits can provide a degree of security at such an important time, while also potentially helping to stem the leaky pipeline of women leaving academia at higher rates than their male counterparts.13

Implement More Postdoc Tracking

The percentage of institutions that track postdocs after their appointment is exceptionally low. It is critical, however, that we begin to better understand which career sectors postdocs transition into, as well as trends over time. It has been noted that this tracking will be most pertinent at the institutional level14 because of regional and field-specific nuances, but the overall recommendation stands that institutions should establish a system to contact postdocs after their training and track where they become employed. Continued contact with postdocs after their appointment period also provides data about the effectiveness of their training, which can also enhance recruiting strategies as well as foster a loyal alumni network. We know anecdotally from conversations with PDOs that provide career coaching that postdoc alumni provide strong networking opportunities for current postdocs who are exploring career options.

Recommendations for Postdoctoral Policies and Practices. There are a number of areas, however, in which there are opportunities to grow and in which institutions can improve the postdoc experience. Much of these findings have been stated previously, through a variety of reports, workshops, conferences, etc., and although the NPA’s findings are promising, the importance of these areas cannot be emphasized enough. Institutions must establish clear postdoc appointment periods and clear postdoc policies to adequately protect the postdoctoral fellows as well as their faculty. Additionally, the NPA reiterates the recommendation that more institutions conduct exit surveys upon the completion of a postdoc’s training. Above all, the postdoc experience is considered a time of advanced training, and it is imperative that institutions evaluate the quality and quantity of current postdoctoral career development and work to provide more training programs for postdocs.

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References


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