Recommendations for Postdoctoral Policies and Practices

The National Postdoctoral Association (NPA) believes that appropriate training of the next generation of independent scientists requires that institutions set policies to encourage individual responsibility, foster effective mentoring, and recognize the value and contributions of postdoctoral scholars. This commitment to better preparation must be made at the highest levels, with institutional leaders providing: incentives and programs that promote good mentoring, an atmosphere that fosters diversity of ideas and experiences, professional development opportunities, including education on the myriad career options available to them upon graduation, appropriate recognition and compensation for postdoctoral fellows.

After considering the recommendations of stakeholders, most notably the Committee for Science, Engineering and Public Policy (COSEPUP)\(^1\), and collecting data from over 100 institutions, the NPA recommends implementation of the following institutional policies and practices for postdoctoral training.

1. Establish a postdoctoral office/association that actively engages and represents postdoctoral scholars

1.1 Establish a Postdoctoral Office (PDO)

1.2 Establish a Postdoctoral Association (PDA)

The presence of both a postdoctoral office (PDO), staffed by permanent employees and a postdoctoral association (PDA), run by the postdocs themselves, provides an excellent mechanism to facilitate open lines of communication with the administration and gives postdocs an independent and accessible avenue to provide input to the administration. PDO’s and PDA’s have different roles, functions and scope. The NPA provides online toolkits developed in collaboration with AAMC/GREAT to assist in the formation of PDAs, and PDOs (please visit the NPA Web site at [http://www.nationalpostdoc.org/publications/toolkits](http://www.nationalpostdoc.org/publications/toolkits) for more information). If creating a postdoctoral office is not feasible (i.e., if your institution has too few postdocs to warrant such an office), an existing academic department should be given the responsibility of overseeing postdoctoral researchers, i.e. Vice-Provost for Research or Division of Graduate Studies. If the establishment of a postdoctoral association is not feasible, the appropriate office should establish defined policies to keep postdoctoral scholars engaged in planning and executing programs designed for their benefit. Additionally, the postdoctoral Office and the postdoctoral Association should strive to accomplish the goal of implementing the recommendations outlined in this document.

1.3 Setup and maintain a postdoctoral listserv and social media outlets

The Postdoctoral Office (PDO) should establish a listserv to communicate important information to the postdocs within each institution. Additionally, the PDO should use social media outlets such as LinkedIn, Facebook and Twitter to disseminate information to current and past postdocs.

1.4 Establish a Postdoctoral Advisory Committee

The Postdoctoral Office activities and postdoctoral policies should be directed by a Postdoctoral Advisory Committee. This Committee should consist of directors of postdoctoral office/training/research programs, faculty. Administrators from the postdoctoral office, human resources, grant management, international/diversity office, and most importantly postdoctoral scholars (elected by the postdoctoral scholar community) should be included.

1.5 Ensure postdoctoral scholar representation on relevant institutional committees

Postdoctoral scholars should be represented (representatives should most preferably be chosen/elected postdoctoral scholars) on institutional committees that have operational or governance oversight of issues pertinent to the postdoctoral community.

2. Establish postdoctoral policies

An institution must recognize that its postdoctoral population has unique needs and concerns that differ substantially from those of other subsets of the university/institute population and create and implement policies that pertain specifically to postdoctoral scholars.

Postdoc-specific policies that should be clearly delineated include:

Administrative Policies

2.1 Adopt a clear definition of “postdoc” and to ascribe to each postdoc the employment categorization that they occupy—whether that is fellow, employee, or scholar

The National Institutes of Health (NIH) and the National Science Foundation (NSF) have agreed to the following definition of a postdoc:

A postdoctoral scholar (“postdoc”) is an individual holding a doctoral degree who is 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 institution should have straightforward policies detailing whether postdocs are treated as employees in all cases or only in certain cases (e.g. based on source of funding). The appointment process should be uniform and ensure that postdocs are aware of the terms of their employment and that sufficient funds are available to provide financial support for the duration of their appointments. It is not necessary to create new policies for every circumstance, but institutions should clearly define which existing policies apply or do not apply to postdocs.

2.2 Identify and establish policies to deal with issues concerning postdocs

Institutions should have policies outlined regarding misconduct, grievances, authorship disputes, and concerns with regards to intellectual property. Policies should incorporate international and diversity postdoc issues and be easily accessible.

2.3 Create and disseminate a postdoctoral handbook
A handbook that includes important policy information, as well as local information, is an indispensable reference and resource for postdocs. Ideally, this handbook would be produced as a collaborative effort between the postdoctoral office, the postdoctoral association, the international scholar's office, and the human resources office. Among other resources, the handbook should contain information on the implications of funding support from training grants (individual and institutional) versus research grants; authorship and intellectual property policies; and an overview of conflict resolution and misconduct policies, with contact information for the appropriate ombudsman office. Postdocs should be provided with a hard copy of this document at the start of their training. Additionally, this document should be easily accessible online for future reference.

2.4 Utilize a centralized appointment process

A specific process for appointing postdocs should be adopted. This process will enable an institution to accurately know how many postdocs work at their institution and to evaluate the working conditions of their postdoctoral scholars. An appointment letter detailing terms of the appointment, verifying the existence of sufficient funds for the duration of employment, delineating conditions for re-appointment, detailing stipend information, and explaining benefits should be part of this process. The letter should be filed with the postdoctoral affairs office, if such an office exists, in addition to the department chair or dean.

2.5 Establish policies that give postdocs access to university facilities such as the fitness center, library, as well as career and professional development resources and university events

Providing such access is a low to no-cost way of making postdocs feel part of the community.

2.6 Conduct an orientation program for new postdocs

Providing an orientation program for new postdocs within three months of starting allows an institution to get a better understanding of the demographics of the postdocs and to ensure postdocs understand expectations, are aware of services, programs, benefits available to them, so postdocs can make the most of their appointments.

2.7 Conduct an exit interview

An exit questionnaire provides feedback regarding the success of the postdoctoral program at the institution and enables the institution to track the career pursuits of the postdocs. Maintaining such outcome data over time would inform the institution about the effectiveness of their training programs, help establish an alumni network, and enable policy decisions to be driven by data. Additionally, information from several institutions would provide valuable data regarding the scientific workforce. These interviews would ideally be conducted by the administrative body overseeing postdoctoral research at an institution but, regardless, should be conducted by an impartial entity and in such a way as to encourage honest feedback without fear of reprisal.

2.8 Conduct an annual survey of postdocs

Utilizing an annual survey provides PDAs and PDOs with valuable information regarding the needs and concerns of their postdoctoral population. The information obtained from the survey should be used to aid in determining the specific issues that are important to postdocs on an institution-specific basis.

Training policies

2.9 Provide professional development and advanced training for postdocs
The National Postdoctoral Association (NPA) has established six core competencies (www.nationalpostdoc.org/competencies) to offer guidance on relevant training for postdocs. These competencies are meant to serve primarily as: (1) a basis for self-evaluation by postdoctoral scholars and (2) a basis for developing training opportunities that can be evaluated by mentors, institutions, and other advisors.

Given that the expressed purpose of the postdoctoral position is to receive additional advanced training in preparation for an independent career, institutions should provide guidelines and standards for this training and resources to support this training. The institution should consider that, in an era of increasing complexity for the research enterprise, postdoctoral scholars pursue professional opportunities not only in academia but also in industry, government, nonprofits, and entrepreneurship. The variety of career options available today demands a diverse array of skills, such as writing grant proposals and mastering the principles of effective resource management, that are often neglected during doctoral study and postdoctoral research. The postdoctoral experience will be more relevant to career and professional development if the scholar is offered opportunities to acquire, develop, or improve these professional skills.

2.10 Establish time frame for postdoctoral transition to independence

Institutions should define the maximum length of time an individual may be classified as a postdoc, after which they should be moved into a permanent employee position. This total should take into account the number of years previously spent at other institutions in a postdoctoral position. In cases involving family leave and other extenuating circumstances, extensions to this limit may become appropriate.

2.11 Facilitate effective mentoring and personal responsibility through career planning with an annual review

Establishing good communication between postdocs and mentors is critical for a successful relationship. The NPA recommends the use of the individual development plan (IDP), adapted as appropriate for different fields of study and to reflect any institutional guidelines. (See http://myidp.sciencecareers.org/ for more information). The IDP opens communication, identifies expectations, establishes objective criteria for success, recognizes the importance of training and service, and should be flexible to allow new opportunities to be pursued when they appear. The IDP should include defined time and resources devoted to research and career development activities independent of the mentor’s research. The entrance questionnaire is an excellent opportunity to introduce the IDP and discuss particular aspects that should be included, and the exit questionnaire could be used to determine perceived and actual benefits of an IDP. An annual review of the plan and the progress made is needed to ensure that the expectations of both parties are being met and that appropriate modifications of the plan or the approach to the plan are made.

2.12 Provide career counseling and development services

Postdocs today face enormous competition and diverse career options. Mentors are unlikely to be able to provide all the necessary information and tools to facilitate transition to independence without institutional assistance. Institutions that provide career development programs and resources recognize their role and responsibility to their postdocs and help them make the most of their time at the institution. Resources could include career counseling, career exploration and panels, mentoring, lab management resources, internships or teaching opportunities, grant writing classes, access to relevant Web-based resources and small, competitive career-enhancement awards.

Benefits Policies

2.13 Establish a minimum baseline salary/stipend, plus a salary/stipend scale
Many institutions adopt the NIH National Research Service Award (NRSA) stipend scale as a minimum for departments funded through the NIH. The NRSA scale provides a baseline stipend for postdocs who have recently graduated and adjusts upwards based on the number of years of experience. While adopting this scale may be a realistic starting point for many institutions, the NPA strongly recommends a minimum baseline salary/stipend of $50,000 for a postdoc who is less than 1 year from receiving her/his Ph.D. Equal salaries should be paid to national and international postdocs.

Institutions should also provide some mechanism to ensure that guidelines recognize regional costs of living and are followed, whether through department heads, postdoctoral offices, or offices of grants and contracts administration.

2.14 Provide a comprehensive, fair, and equitable benefits package to postdocs, comparable to that which is received by standard employees whether national or international at the same institution.

Institutions should provide postdocs with a benefits package that is equitable when compared with other full-time employees at the institution. This benefits package should minimally include health and dental insurance plans for postdocs. Additionally, institutions should provide policies for vacation and sick days allowed for postdocs, as well as for family leave benefits.

2.15 Extend family-friendly benefits to all postdocs

Institutions should recognize that many postdocs are at a stage of life when establishing a family is as important as their professional development. Therefore they should extend benefits to all postdocs that are reflective of the institution’s commitment to other employees. These benefits should include: adherence to the family and medical leave act for non-employees, maternity/paternity leave, access to on-site child care and/or subsidies, access to dependent coverage for health insurance, support programs for foreign spouses, and part-time status for postdocs.

2.16 Allow matched contributions to a retirement program

Given the increasing age of postdocs and length of time spent as a postdoc, the opportunity to contribute to retirement accounts is an important resource. Recognizing the temporary nature of the postdoctoral position, institutions may establish special rules for vesting by postdocs and for allowing employer-matched contributions.

3. Maintain an office for international scholar services

Postdocs who are non-U.S. citizens face unique challenges that their mentors may not be able to meet without additional assistance from elsewhere in the institution. A dedicated office for international scholars is a critical resource for both prospective scholars and those who are already at the institution. The postdoctoral office (PDO) should work closely with the office for international scholar services to ensure that the particular needs of international postdocs are being addressed. Programs to support international postdocs could include offering legal seminars or International Coffee Hours for example.

4. Establish a Diversity Office to ensure diversity and inclusion

Institutions should seek to promote diversity and ensure equal opportunity, inclusion, leadership, and activities for all postdocs, regardless of race, ethnicity, sex, disability, country of origin, field of research, socio-economic status, religion, age, marital status, sexual orientation, or gender identity.

Specifically, institutions should also:
4.1 Have formal recruitment mechanisms in place to ensure diversity of the postdoctoral population

4.2 Have support systems in place to ensure the retention and success of postdocs from under-represented and other non-traditional backgrounds

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