

The University of Washington

The Status and Future of Postdoctoral Training at the UW

A Proposal

For the Creation of an Office of Postdoctoral Affairs

Presented by:

The University of Washington Postdoctoral Association

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Executive Summary

The University of Washington (UW) is the first among public universities and second among all universities in obtaining federal research awards (1). Its premiere status is due to its ability to attract and train outstanding research scientists and foster a rich collaborative environment. Among the most productive members of the research community at this university are the postdoctoral scholars. Currently, there are over 1200 postdoctoral scholars, or "postdocs," who have chosen to further their research training at UW. Together, they comprise a large and enormously productive workforce that performs cutting edge research, obtains competitive research grants, authors peer-reviewed journal articles, teaches UW courses, and mentors undergraduates, graduate students, and technical staff. In addition, postdocs represent the UW at national and international disciplinary conferences and participate in outreach activities that serve the broader Pacific Northwest community.

Postdocs have a unique, dual role within the university, as they are both mentors and mentees. Since postdocs are paid trainees, the status of postdocs is often confusing. In fact, because postdocs lack both administrative oversight and defined status as faculty, staff, or students, the administration and laboratory principal investigators (PIs) are often unaware of what benefits and resources are available to postdocs. Furthermore, while the UW has incredible scientists, resources, and opportunities, many postdocs find themselves isolated in their research laboratories without knowledge of the many peers, services, resources, and training programs available to them. Altogether, the lack of a defined postdoctoral training category within the university administration results in many lost opportunities to highlight and maximally benefit from the contributions of postdocs.

To address these issues, the UW Postdoctoral Association (UWPA) was formed in October 2004 (2). Its formation was inspired by a Howard Hughes Medical Institute-sponsored workshop for postdocs on teaching and mentoring. Strikingly, this retreat offered the first opportunity for many postdocs working within the same department to meet each other. The mission of the UWPA is to enhance the postdoctoral experience at UW. Several recent studies conducted nationwide have concluded that improving the training structure and administrative oversight for postdocs at academic institutions will boost their productivity, increase their chances for achieving personal career goals, and enhance their contributions to the university community (3-9). We feel that the implementation of a UW Office of Postdoctoral Affairs will provide the structure, oversight and voice needed for postdocs at our institution. The creation of this office will significantly enhance the experience of postdocs, ease the burden of administrative and financial responsibilities of principal investigators, and make the UW a national leader in postdoctoral training. The impact of high quality postdoctoral training will enable UW to recruit more talented and scholarly postdoctoral fellows as well as enhance the contribution of the postdoctoral community to the mission of the university.

Guiding Principles

The UWPA developed this proposal to establish an Office of Postdoctoral Affairs (OPA) based on data gathered from postdocs, faculty, and administrators at UW, other peer institutions, and recent national studies sponsored by respected entities such as the National Science Foundation (NSF) (3, 4), the National Research Council (NRC) (5, 6), the National Academy of Sciences (NAS) (7), Sigma Xi (8), and the Burroughs Wellcome Fund (BWF) and the Howard Hughes Medical Institute (HHMI) (9). The primary function of this office will be to coordinate all information, resources, and opportunities related to postdoctoral training at UW. The ideas and suggestions in this proposal are based on the following guiding principles:

1. Postdocs are professionals with terminal degrees in an apprenticeship to prepare for permanent, independent careers as scientists, educators, and public servants.
2. Multiple national studies suggest that improving the structure and oversight of postdoctoral training at academic institutions will enhance the experience of postdocs, principal investigators, host institutions, and the research community as a whole.
3. The UW provides excellent educational and training opportunities for its faculty, staff, and students. The OPA and the UWPA will work together to make similar opportunities readily available to postdocs by either allowing postdocs to utilize previously restricted resources, or by using existing programs as models to create new opportunities for postdocs.
4. The UW is a national leader in research, and postdocs are at the core of this enterprise. Postdocs play a vital role in research, teaching, and service at UW. Fostering the training, education, and professional opportunities for postdocs is implicit in the mission of the university and will provide an outstanding model for other research institutions nationwide.

Ten Point Action Plan

An Office of Postdoctoral Affairs (OPA) should be established at the UW to improve professional opportunities for postdocs and to enhance their contributions to the University community.

1. The OPA will be guided by an administrative official (e.g. a Dean, Vice President or Provost) whose explicit responsibilities will include the oversight, management, and direction of postdoctoral affairs at UW. An advisory committee comprised of UWPA representatives and faculty members will serve this official and the OPA.
2. The OPA will collect and manage a database of all postdocs at the UW, including information on department, title, funding sources, duration of training, and post-UW career. The OPA should manage an email list of all postdocs at UW for the dissemination of information.
3. The OPA will create a letter of appointment and a training guide for postdoctoral fellows and their PIs that includes title, length of appointment, salary, funding source, grievance procedures, and explicit responsibilities of the postdoc, mentor, and department. The OPA will oversee the use of this letter and training guide by departments and mentors.
4. The OPA will create a template for an individual development plan (IDP) and/or a postdoctoral training evaluation form to be completed annually by both the postdoc and the mentor. The OPA will oversee the use of these forms by departments, mentors, and postdocs.

5. The OPA will coordinate and equalize postdoc benefits across campus, including health, dental, and disability insurance, retirement benefits, vacation, sick time, family leave and childcare.
6. The OPA will assist departmental administrators in coordinating visa applications and work permits for postdoctoral fellows from foreign countries.
7. The OPA will develop an orientation session specifically for all new postdocs arriving at UW.
8. The OPA will create a postdoc handbook or orientation packet with information on UW policies and benefits, services provided by human resources, professional training and career development resources, funding opportunities, and information regarding life in Seattle and the greater Puget Sound area.
9. The OPA will encourage departments to form faculty committees that oversee the training of postdocs and provide additional mentoring support for postdocs in their respective departments.
10. The OPA will coordinate and disseminate information on training opportunities for postdocs in research practices, grant and manuscript writing, teaching, mentoring, leadership, professional development, and traditional and alternative career opportunities.

Background and Significance

Postdoctoral researchers, or “postdocs,” are professionals holding terminal degrees in a specific area of study. Postdoctoral training prepares these researchers for permanent career appointments as either academic researchers or professionals at non-academic institutions. During this crucial training period, postdocs perform cutting edge research, apply for competitive funding awards, author peer-reviewed journal articles, present their work at disciplinary conferences, teach courses, participate in outreach activities, and mentor undergraduates, graduate students and professional staff. Postdocs currently constitute a population of at least 1,200 full time researchers at the University of Washington (UW) who are not tracked, measured, or overseen by any administrative body. Postdocs share common ambitions, responsibilities, and concerns. These both overlap with and are distinct from those of professional staff, graduate students and faculty. Yet, the resources available to these other groups within the UW are often not available to or not appropriately designed for postdocs. We propose that the establishment of a permanent UW Office of Postdoctoral Affairs (OPA) would increase the productivity and success of postdocs, reduce the administrative and financial burden of postdocs on PIs and departments, and better serve the mission of UW.

The increasing duration and importance of postdoctoral research experience in shaping academic careers has attracted national attention in recent years. The average length of postdoctoral training has significantly increased and the number of young PhDs obtaining tenure track positions has declined (5). In a 1998 publication, the NRC reported on the patterns of professional trajectories of PhD scientists over several decades (5):

“Over the last 2 decades, there has been a substantial decline in the fraction of young PhDs in the life sciences who have obtained tenure-track positions on university and college faculties—the positions considered most desirable by many life scientists. If the decline continues at its current rate, fewer than one-third of today's graduates can be expected to obtain faculty appointments, to which a majority of students have aspired. ”

“A second problem, perhaps more difficult to solve, is the increase in the fraction of young scientists who, after extensive postdoctoral apprenticeships, still have not obtained “permanent” full-time positions in academe, industry, government, or private research organization. As illustrated in [figure 3.12](#), in 1995, 39% of life-science PhDs 5–6 years after receipt of their doctorates held postdoctoral fellowships or other nonfaculty jobs in universities, were employed”

Although the NRC focused on scientists in the life sciences, concerns about the increasing length of postdoctoral training periods are a common concern across many disciplines. While other disciplines may show higher rates of successful academic employment, postdocs in any discipline would benefit from increased structure and oversight.

As postdoctoral training is now a prominent part of a professional research career, institutional support for postdocs plays an important role in job placement and professional success. Institutions are responding to this need by supporting postdoctoral associations and offices to address postdoctoral training issues. A ‘National Postdoctoral Association’ has even been established, which provides information to postdocs on the formation of local, institutional postdoctoral associations, holds annual conferences, and distributions recommendations for postdoctoral policies and practices (10). The NAS study “Enhancing the Postdoctoral Experience for Scientists and Engineers” also provides information and guidelines for establishing offices of postdoctoral affairs (7). Postdoctoral associations and offices enhance the postdoctoral experience and improve recruitment of highly competitive postdoc candidates, career development, and job search success. *The Scientist* recently reported institutional rankings for postdoctoral training, as evaluated by resident postdocs (11). Rankings were reported for the best 15 U.S. institutions (including private and government institutions), and the top 10 academic institutions nationwide. Ranking second overall was the Fred Hutchinson Cancer Research Center (FHRC), our

neighbor institution. The UW, however, did not make either list. Top rated public universities included the University of North Carolina-Chapel Hill, the University of Michigan, and the University of Alabama-Birmingham. Importantly, 12 of the top 15 places for postdocs to work in the US have a postdoc office, association, and/or advisor. The undefined status of postdocs and lack of institutional recognition at UW may have contributed to its absence on the top lists. Sigma Xi, for example, was unable to poll institutions that do not track postdocs (8). The lack of postdoctoral oversight at UW became evident in preparing this proposal: we were unable to easily obtain an approximate count of the number of postdocs at the university. Due to a lack of tracking, the university and most departments were unable to report on the success rate or career paths of former postdoctoral researchers. In the increasingly competitive labor market, demonstrating career success following training at the UW will help recruit the most outstanding postdoc candidates to this campus. Recruitment of more competitive postdoc candidates to research groups at the UW will result in more postdocs obtaining external funding through prestigious fellowships and young investigator career awards.

The UW faculty and administration have previously identified postdoc affairs as an important issue on our campus. In the late 1990's, a Postdoc Subcommittee within the Research Advisory Board and Faculty Council on Research was formed in response to the Association of American Universities Report on Postdoctoral Education (12). This Postdoc Subcommittee issued a report in 1999 making recommendations regarding postdoc retirement benefits, career counseling, grievance procedures, and letters of appointment (Appendix A). However, these recommendations have not yet been implemented, and we have not found any evidence of follow-up to the 1999 report. The formation of this committee was a positive first step in recognizing and addressing the importance of more structured postdoctoral training. The formation of a permanent OPA is critical for the successful implementation of the recommendations made by this committee.

The UWPA developed this proposal to establish an Office of Postdoctoral Affairs based on data gathered from postdocs, faculty, and administrators at UW, other peer institutions, and recent national studies by the NSF (3, 4), NRC (5, 6), NAS (7), Sigma Xi (8), and the BWF and the HHMI (9). These studies have been highlighted in a number of leading science and education publications (13, 14). Very recently, a national survey conducted by Sigma Xi and the Alfred P. Sloan foundation showed that administrative oversight and postdoctoral training opportunities were the two most positively correlated factors with postdoc publishing rate, job satisfaction and advisor rating (8). Strikingly, postdocs from institutions without administrative oversight (such as the UW) were more than twice as likely to report conflicts with their advisor. Productivity was less well correlated with salary and benefits levels, which were just less than half the median income for similarly aged terminal degree holders. Extrapolating from the data in this survey, the creation of an OPA at the UW and the official recognition of the UWPA could boost postdoc productivity by 576 publications per year (an increase from 1 to 1.4 publications/year from our 1200 postdocs). Therefore, the establishment of an OPA at UW would benefit both the postdocs and the UW research community as a whole. In addition to the clear benefit of building the publication records of UW faculty and postdocs, greater job satisfaction among postdocs will make UW a leading institution for postdoctoral training.

Status and Impact of Postdoctoral Fellows at the University of Washington

An informal survey on postdoc employment was conducted at the department-level by the UWPA (Table 1). This volunteer survey identified 1260 postdocs in responding departments, and to our knowledge is the only estimate of postdoc numbers at the UW. This number is similar to the numbers reported by other well respected academic research institutions, such as MIT (900), Stanford (1200), and Johns Hopkins (1200), all of which have postdoctoral associations that track and serve postdocs (15). Due to the lack of any formal postdoc tracking mechanism, we were unable to obtain an accurate estimate of the average duration of postdoc appointments or source(s) of funding during the appointments. However, it is clear

that postdocs contribute significantly to the diversity of the UW research faculty and staff: approximately 45% of all postdocs are women and 33% are from foreign countries. We were unable to determine the minority status of postdocs, but an OPA would have access to such information. Postdocs also cut across all sections of the university, the majority representing the College of Arts and Sciences and the School of Medicine.

The departmental survey was followed up with an in-depth survey of post-doctoral respondents in three representative departments: Genome Sciences, Biology, and Psychology (Table 2). In these departments, 60% of postdocs obtained external sources of funding for their own salary support, despite not being able to serve as PI on grants according to UW policy. The 25 postdoc respondents produced 82 peer-reviewed publications and presented 84 conference proceedings. The same 25 postdocs mentored 82 students for an average of 6.5 hrs per week. Over half provide expertise to the scientific and local communities via grant and paper peer review duties, high school outreach, and professional society committee responsibilities. Thus, postdocs contribute substantially to the scientific activities of their research group, are awarded funding to support their own salaries, and are often heavily involved in senior roles such as directing students, writing and reviewing grants and manuscripts, and representing the UW in community outreach activities.

Specific Aims for the Office of Postdoctoral Affairs

Aim 1: Administrative Oversight

In order to effectively enhance postdoctoral training at the UW, information on the current members, alumni, services and resources relevant to the postdoctoral population at UW must be collected and maintained in a centralized location, where postdoc-related materials and events can be coordinated by administrative staff.

Aim 2: Human Resources

Services already provided at UW should be modified to include postdoctoral fellows and/or specifically targeted to postdoctoral fellows. Information and assistance with human resources for postdocs should be centralized and coordinated by administrative staff of the OPA.

Aim 3: Professional Training and Career Development

In order for the UW to produce the next generation of faculty, opportunities for professional training and career development must be available to postdocs. We highlight critical areas for postdocs and suggest specific solutions to improve the availability and specificity of UW resources and services to postdoctoral fellows.

Aim 4: Implementation of the UW Office of Postdoctoral Affairs

The structure of the OPA is yet to be determined. The UWPA views funding, administrative structure, and space as three major issues that need to be addressed in order to create an effective OPA.

Specific Aim 1: Administrative Oversight

We believe that an institutional office with an administrative staff is essential to organize a university-wide effort to recognize and serve over 1200 postdoctoral fellows. We see organization, coordination, and dissemination of information as the major functions of the administrative arm of the OPA. There are many services already provided by the university that benefit the postdoc population; however, many of these resources remain unknown to and therefore, underutilized by postdocs. One of the primary functions of the OPA would be to increase awareness of the resources and opportunities provided by the university by maintaining a website, a listserv, and a calendar of postdoc-related events.

1.1 Management of Postdoctoral Fellow Database: The OPA would be responsible for managing a university-wide list of postdoctoral researchers and would be aware of all incoming and outgoing postdoctoral fellows throughout the year. Unlike graduate students, postdocs may join a lab at any time during the year and tracking incoming and outgoing postdocs would be impossible for the UWPA to accomplish without institutional support. The OPA will also serve as a central resource for postdocs as they prepare for arrival at UW and during their time here.

In addition to maintaining a list of active postdoctoral fellows at UW, this office would track the funding sources, publications, teaching and mentoring responsibilities, as well as job placement for each postdoctoral fellow in order to better gauge the effectiveness of postdoctoral training at the UW and the contributions made to the research mission of the UW by the postdoctoral community. This could be accomplished by an annual survey of all active appointees, and an exit survey upon termination of the appointment.

1.2 Website Administration: The office would manage a website on postdoctoral training at UW. Along with contact information for the office, the website content should include information and links to campus resources for postdocs as well as national resources on topics such as professional training, career development, and human resources. We envision that the website will be used as a primary source for postdocs to find information on programs at UW that are relevant to them, discover resources that exist outside of the University, inform postdocs of activities sponsored by the UWPA, and network with peers within and between departments and schools. It is imperative that the OPA establish a mechanism for disseminating information and resources that is comprehensive and current. The OPA website would also be a great resource for PIs and departmental administrators processing paperwork for postdoctoral fellows.

1.3 Coordinate and centralize information on UW resources and services: The office should maintain current information specific to the postdoctoral population. There are multiple types and sources of information that should be centralized and made available to postdocs via the OPA. This would include contact information for appropriate UW units that provide services for postdocs (e.g. Human Resources and Research Funding Services) as well as a list of currently available programs within, or coordinated by, the OPA. The status of the current postdoc population should be centralized at the OPA (e.g. number, diversity statistics, time spent at UW). In addition, the current UW policies on postdoctoral appointments should be maintained at the OPA. By coordinating and centralizing information regarding both postdocs and the resources available to them, the OPA will become the natural liaison between postdocs and the departments and units that train them.

Specific Aim 2: Human Resources

The decision to hire a postdoctoral fellow is made by the PI, not the department chair or dean. In addition, the title held by postdoctoral fellows varies by department. Some postdocs are classified as academic staff while others are classified as faculty. Most postdoctoral fellows are funded by PI grants, while some are funded through training grants or independent fellowships. Combined, these factors lead to significant variation in the titles, salaries and benefits conferred to postdocs. We propose that the following mechanisms be put into place in order to streamline salary and benefits for postdocs and maximize their effectiveness while at the UW:

2.1 Job Title and Benefits: Postdoctoral fellows hold many different titles across the UW campus, titles such as “Senior Fellow” and “Research Associate.” Because of this and the many different sources of funding, postdoctoral fellows at the UW do not receive the same information regarding benefits and status. Postdoc titles and benefits should be made uniform across the university to guarantee equal access for all postdocs and streamline the administrative process. The University of California system just

instituted a similar universal health care and benefits plan for all postdocs (16). In addition, the UW Subcommittee on Postdocs (see Appendix A) recommended that retirement benefits for postdocs at UW be expanded to include all titles.

2.2 Letter of Appointment: The OPA should develop and disseminate a Letter of Appointment for all postdocs. Such a mechanism is in place for postdocs in some departments, but should be applied university-wide. The OPA should oversee and assist in the use of this letter by PIs and departments. In 1999, the UW Subcommittee on Postdocs (see Appendix A) recommended a letter of appointment for postdocs. While we are unsure how many departments currently utilize an official letter of appointment for postdocs, it is clear from UWPA membership that many do not.

2.3 Postdoctoral Fellow Orientation: When relocating, postdoctoral fellows are dependent on services provided by HR, their PI, and their new colleagues in the lab. The orientation offered by HR at UW does not address postdoctoral training issues. Current HR seminars and packets cover only basic benefits and are intended for permanent faculty and staff. The OPA will serve as an informational resource for postdocs and assist HR in developing materials specifically for postdocs. Orientation materials specific for postdoctoral fellows would ensure that incoming postdocs could begin working as soon as they arrive and have all the necessary tools to be successful at UW and in Seattle. Orientation packets distributed to new postdoctoral fellows on arrival would be extremely useful in guiding newcomers to reasonable housing, transportation, services (insurance, DMV) and the basic benefits and resources that UW provides. Many departments at UW have developed similar orientation packets for graduate students. In addition, models of postdoc handbooks are available from peer institutions such as the University of North Carolina-Chapel Hill, the University of Alabama at Birmingham, and FHCRC (17-19).

2.4 Visas and International Postdocs: International postdocs represent an important and influential component of the research community at universities in the United States. The UW is no exception. Approximately 30% of the postdocs at UW are from foreign countries. These scholars are essential contributors to the research mission of this university. They bring with them specialized expertise they have gained in their field, coupled with new perspectives and ideas on how to approach problems. International postdocs also assist in building relationships between their research groups within the U.S. and overseas, aiding collaborative efforts. In addition, these scholars contribute unique cultural perspectives and diversity to campus life.

International postdocs have very specific needs prior to and during their training at U.S. institutions, especially given recent changes in immigration policy (20). By providing support tailored to international postdocs the OPA could achieve the following: (1) provide a referral base for services that already exist at UW, such as language services at the International Services Office (ISO), housing for scholars etc. (2) increase awareness amongst candidates of funding opportunities and situations specific to international postdocs, (3) increase awareness of visa and appointment issues/requirements and university offices that coordinate this process (ISO) for prospective postdocs, PIs, and departmental administrators to help process applications in a timely manner, (4) provide a means of raising the profile of the UW to attract overseas candidates, and (5) put international postdocs in contact with each other to share information. In addition, the OPA should work together with the ISO to develop an information session for departmental administrators regarding the procedures for appointing international postdocs and processing international postdoc visas and work permits. This will help to eliminate the confusion faced by postdoc candidates and their PIs in this process and avoid delays in appointments.

Because the needs of the international postdoctoral community are unique, the materials generated for all postdocs should include sections dedicated to international postdoc issues. For example, the OPA website should contain information for potential international postdocs that can be accessed by both prospective and recently appointed foreign postdocs. The postdoc orientation packet and training guide should contain

sections to help both PI's and postdocs address the challenges associated with bringing international scholars to the U.S. (e.g. a checklist for the postdoc and PI regarding appointment and visa applications). There are also many relocation issues that differ in the U.S. from other countries: finding a health care provider, determining a reasonable rental price, and getting a new driver's license. Orientation materials specific for international postdocs should provide information on housing, benefits, funding, cultural adjustment, language courses and links to the Puget Sound community.

Another way to help international postdocs adjust to living and working in the U.S. would be to coordinate an international-postdoc peer network, ideally in conjunction with the Ambassador Program at the Fred Hutchinson Cancer Research Center (FHCRC). The network would operate by pairing international postdocs who are arriving at UW with a current postdoc from the same home country or region. The local host would then facilitate the transition process by helping acquaint the incoming postdoc with specific programs and policies at UW and also with life in Seattle. By combining efforts with FHCRC, we could increase the probability of being able to match incoming postdoctoral fellows with someone from the same country or region. Such a program could serve as a model for graduate students as well.

2.5 Conflict Management: Traditionally, postdoc training has been entirely reliant on the opportunities made available to the postdoc by his/her advisor. Lack of oversight can lead to situations where a postdoc and a faculty advisor are trapped in a professional relationship that is not productive or mutually beneficial. By developing tools for the evaluation of postdoctoral progress, in concert with the letter of appointment, the OPA will help promote effective and productive postdoc training to the benefit of labs, departments, and colleges. However, not all conflicts are avoidable, and the UW has resources for overcoming conflicts in the workplace and restoring a productive work environment. The proper route to departmental and university support for resolving conflicts depends on appointment and enrollment status of the postdoc. Currently, postdocs could be classified either as academic staff, students or faculty, and would receive varying guidance in conflict resolution because of these differences in appointment. The OPA should work with HR to identify a single, effective route for conflict resolution and should assist postdocs and PIs in following university policy to resolve workplace conflicts when they arise.

Specific Aim 3: Professional Training and Career Development

Improving and expanding the resources for career development would benefit not only current postdoctoral trainees but further improve the reputation of UW as a premier institution for postdocs across a wide range of disciplines. We highlight critical areas of professional training and career development and suggest specific solutions for improving the availability of UW resources and services to postdoctoral fellows.

3.1 Postdoctoral Training Guide and Individual Development Plan: The postdoctoral period is defined as a training position that prepares the individual to function independently as a scientist. A postdoctoral training guide would help postdocs focus on the skills needed to advance. The training guide would ideally be used in conjunction with mentors to facilitate conversation and more strategically plan the postdoctoral training period. Departments should supplement the postdoctoral training guide with material related to individual disciplines. The focus should be on outlining the skills and core competencies that postdoctoral trainees, and their mentors, should aim to achieve during their training periods. Such skills would include technical skills, scientific integrity, grant writing, manuscript composition, oral presentation, course development, teaching, student mentorship and supervision, budget development, lab management, and leadership.

Periodic evaluations of students, faculty and staff are commonplace at research universities, and are critical for career success. Postdocs, however, receive no such feedback at the UW. An evaluation form

would help postdocs to identify their individual strengths and weaknesses and to develop plans to build on their strengths and improve upon areas of weakness. A mechanism for postdoctoral fellow evaluation is currently in place at FHCRC where postdocs complete an annual self-evaluation form on their progress, and then use their self-evaluation to facilitate conversation with their mentor on career development. In addition, the Federation for American Societies for Experimental Biology (FASEB) society website provides a model individual development plan (IDP) for postdocs (21). This IDP is currently being utilized by academic institutions such as Case Western Reserve University. We propose that a thorough IDP or evaluation form be developed and implemented at UW to help facilitate communication of goals and expectations between PIs and postdocs and improve postdoc development of research skills, career focus, and personal growth.

Finally, the OPA will encourage UW departments with postdocs to establish and maintain a postdoctoral advisory committee that would guide and advise postdoctoral fellows during their training. Academic departments typically have a committee dedicated to graduate student training and/or curriculum development. The postdoctoral advisory committee would mainly be a resource for fellows and a mechanism by which to increase department collegiality, cohesion, and inclusion of postdocs within the departmental structure. For example, a postdoctoral advisory committee could meet informally with all postdocs within the department at least once annually. This event, perhaps a lunch sponsored by the department, would not only allow postdocs to meet each other (see below), but would also establish additional faculty ties and resources for mentoring, advice, and collaboration.

3.2 Peer Networking: Peer networking is essential component of professional success. A striking example of the lack of peer networking opportunities available for postdocs at UW was illustrated during the HHMI-sponsored Future Faculty Fellows workshop in September, 2004. Postdocs working within the same departments, and the same Schools and Colleges, met each other at this workshop for the very first time. To our knowledge, there are currently no social or scientific events that specifically bring together postdocs from within or across departments, other than Future Faculty Fellows. Without any budget, the UWPA has hosted two research seminars, three happy hours, and two Town Hall seminar trips in the past eight months. These activities have been attended by groups of 5-25 postdocs from departments all over campus. Additionally, plans for a postdoc family picnic and “Career Resource Fair” are being discussed. While we envision that the UWPA will take an active role in conceptualizing and planning social and scientific events for postdocs, our goal is that the OPA will assist in coordinating, funding, and marketing these events. The events that have been hosted so far by the UWPA remind us that postdocs are indeed very isolated, and that collaborations and peer interactions are crucial to success as postdocs and professionals at UW.

3.3 Leadership Training: UW President Mark Emmert recently announced a leadership initiative that “recognizes, enhances, and sustains leadership at all levels of the community” (22). Because postdocs are uniquely positioned between laboratory directors and undergraduate and graduate students, adding high-quality leadership training to the skill sets of postdocs will enhance the productivity of UW research laboratories. In addition, postdocs that are effective leaders will likely move on from UW to important and influential career posts around the world, further enhancing the university's status as a leader in research, teaching, and service. We propose that the OPA and the UWPA collaborate with two existing UW entities to provide leadership training for postdocs: the Leadership Institute for Tomorrow (LIFT UW) and Conflicts in Context: A Leadership Institute for Professional Development Skills (CCLIPS).

LIFT UW is an organization of graduate students that supports leadership-training workshops given by Christopher J. Loving, founder of Loving Leadership and a visiting scholar at UW. LIFT UW seeks to help graduate students and postdocs develop critical communication, self-awareness and interpersonal skills (23). Recently, LIFT UW invited UWPA members to participate in a workshop entitled: *How to Be Influential in Graduate School and Beyond*. The response of postdocs who attended was extremely

positive. In fact, a number of postdocs have already registered for the next LIFT workshop on time management. We envision that the combined training of postdocs and graduate students in LIFT UW workshops will enhance the ability of both populations to be effective leaders on campus, as well as more attractive candidates in their respective job searches.

CCLIPS is a proposed training program for graduate students, postdocs, and faculty that will focus on the common ethical issues that arise in everyday interpersonal relationships. Kelly Fryer-Edwards, Ph.D. (Department of Medical History and Ethics) sought the involvement of UWPA members when writing the proposal for the CCLIPS program. CCLIPS will provide practical and skills-based training (versus more common lecture-and factual-based formats) in how to recognize and respond to ethical dilemmas that arise daily in scientific research. CCLIPS will be an evaluated program that will build the capacity of postdocs to mentor new students in ethical research practice- a responsibility that is usually, and unfortunately, left solely to the lab director. Similar to the LIFT UW program, CCLIPS will allow postdocs to train side-by-side with graduate students and faculty, bringing together the populations that naturally co-exist in the laboratory.

3.4 Manuscript and Grant Writing: Scientific writing is a required skill for any successful academic faculty position and is especially important for writing grants and manuscripts. The level of training in manuscript and grant writing varies widely between research groups, as some students and postdoctoral fellows are very involved in the writing process, while in other groups, the PI composes all of the manuscripts and grants. The UW Howard Hughes Medical Institute (HHMI) Undergraduate Biological Sciences Education Program offers a science writing mini-course entitled “The Art and Science of Scientific Writing,” for both senior graduate students and postdoctoral fellows in the winter quarter. However, this workshop has limited availability. The OPA should work with the HHMI and current writing service providers, such as the Writing Center in the Department of Psychology, to develop workshops on manuscript writing for postdocs. Ideally, a university-wide research and writing resource center could provide consultation services to all individuals (faculty, postdoctoral fellows, staff, and students) supporting the research mission of UW. For example, a research and writing resource center could host seminars on publishing in top-tier scientific journals (like *Science* or *Nature*), open access publishing, how to review a manuscript in a timely manner, and the art of the manuscript cover letter.

UW has several programs dedicated to assisting students and employees with finding and writing grants. However, as postdoctoral fellows are neither students nor principal investigators, they are not eligible for some of these services and cannot apply for many of the types of grants discussed in such workshops. Two of the primary resources on campus for searching grant databases and writing grants are (1) Grants and Funding Information Services (GFIS) within the library system, and (2) Research Funding Services (RFS) within the School of Medicine and the Health Science Libraries. Currently, GFIS serves masters and doctorate level graduate students only, while RFS serves the research community. In order to address the funding needs of the postdoctoral community, the OPA should assist GFIS in identifying which of its services could include postdoctoral fellows and other Ph.D. level research staff. The OPA will also work with RFS to develop specific seminars and workshops specifically for postdocs. These seminars and workshops would cover the following topics: (1) UW training grants that fund postdoctoral fellows, (2) grant-writing for starting postdoctoral fellows, and (3) grant-writing for advanced postdoctoral fellows.

3.5 Teaching and Mentoring: Many postdocs do not receive formal training in teaching and have not accumulated any teaching experience during their research training. Fortunately, the UW has many programs that function to improve teaching and learning across campus. Some of the resources for instructors include the Center for Instructional Development and Research (CIDR) and Catalyst. Courses offered in the Graduate School, in collaboration with CIDR, discuss teaching and learning strategies and explore the different goals and responsibilities of academic scholars at various levels (GRDSCH630), but registration for these courses is limited to graduate students. The OPA could coordinate with CIDR to

create additional sections of these courses for postdocs—to help them gain teaching experience and prepare for faculty appointments.

There are few advertised teaching opportunities for postdoctoral fellows at UW, although many academic institutions look for quality teaching experience in their faculty applicants. Unfortunately, many postdocs struggle to find teaching opportunities at the university level that are sensitive to ongoing research commitments. One successful UW program, the HHMI-sponsored Future Faculty Fellows program, provides teaching opportunities to postdocs with minimal impact on their research program. Participants in this program attend a two-day teaching workshop and then develop a seminar-style course in collaboration with other postdoctoral fellows and with guidance from UW faculty. However, this program is offered only once per year, with only a handful of teaching opportunities. The OPA could work with individual departments to develop additional seminar courses taught by postdocs for graduate and undergraduate students. This would provide postdoctoral fellows with the teaching opportunities needed to be competitive for academic positions that require teaching experience. We roughly estimate that the need could be met via one postdoc-led course per department per quarter. Development of such courses could be done under the guidance of each department's postdoctoral advisory committee. In addition, mentoring opportunities are available to postdoctoral fellows at UW through the Undergraduate Research Program (URP). An open line of communication and collaboration between the OPA and the URP would facilitate the missions of both of these organizations in teaching and mentoring undergraduates.

3.6 Outreach: In addition to teaching classes and mentoring undergraduate and graduate students in the lab, there are many teaching and mentoring opportunities for scientists in the community in the form of outreach programs. These outreach programs serve grade school, middle school, high school, and minority students as well as the teachers who educate them. Examples include the local science fairs, events organized by the Northwest Association for Biomedical Research, and the Washington Biotechnology Foundation Student Expo (24, 25). These programs provide unique opportunities for scientists to volunteer their time and expertise for the benefit of the community as well as obtain valuable teaching/mentoring experience without an enormous time commitment. However, these programs tend to be promoted either within departments, or via word-of-mouth, and there is no centralized resource that lists all of the outreach programs sponsored by the UW or other Puget Sound organizations. Establishing a centralized resource for outreach programs would benefit not just postdoctoral fellows, but anybody within the university interested in volunteering their time and using their expertise to benefit the community.

3.7 Job Preparation: The importance of career development support is perhaps best stated on the UW's 'Re-envisioning the Ph.D.' website: "*[Multiple] sources all suggest that doctoral students and Ph.D.'s want and need more extensive preparation for obtaining employment within the academy and beyond*" (26). Although this program within the Graduate School ended in 2003, its goals and findings are still relevant. UW has a number of career related services and resources that are available to students, both undergraduate and graduate. The Center for Career Services (CCS) provides many of these services; however, postdoctoral fellows, despite their status as temporary trainees, do not have free access to the resources and services offered by CCS. One way to address the problem of extended-length postdoc positions is to provide specific guidance to postdoctoral fellows in the pursuit of careers in both academic and non-academic institutions.

At an institutional level, the OPA should work with CCS to provide resources for and expand its services to the postdoctoral fellow community. Expansion of the CCS mission would provide postdoctoral fellows access to career counseling services as well as workshops on preparing job application materials (e.g. curriculum vitae and resume writing, cover letters) and the job application process (e.g. interviewing skills, negotiation strategies). In addition to literal career advice, OPA/CCS counselors should be

prepared to discuss lifestyle issues that impact career choices of postdocs. These issues might include concerns about balancing their own career advancement while supporting the career of a spouse, funding and job options for job searches that are geographically limited, and resources for parents in academia.

Currently, individual departments or faculty distribute academic job announcements, because search committees seeking to fill a position will contact a department chair or colleague for assistance in their search. Creating a centralized location for this information, such as CCS or the OPA, is essential to disseminate information on relevant job opportunities. In addition, a central resource for academic job announcements would be helpful to postdoctoral trainees whose cross-disciplinary research makes them a competitive candidate in more than one field. Creating such a resource would, of course, require the cooperation of departments across campus.

Finally, the postdoctoral advisory committee formed by each department (see above) would be particularly useful for postdocs who are going through the academic job search. The postdoctoral advisory committee could advise candidates on the quality and competitiveness of their application materials and be available for practice job talks and chalk talks. The benefit of establishing postdoc advisory committees by department would be the focused guidance and advice to the specific research field of the postdoctoral fellow. Critical feedback from junior and senior faculty within departments, prior to the submission of job applications and interviews, would increase the competitiveness of UW postdoctoral fellows and facilitate the placement of UW postdocs in academic positions around the country and the world.

Specific Aim 4: Implementation of the UW Office of Postdoctoral Affairs

The structure of the OPA is yet to be determined. The UWPA has had extensive discussion over several months about how to best implement an Office of Postdoctoral Affairs, and we have used recommendations from national studies and organizations as a guide to develop our ideas into the following plan (7, 8, and 10). We see three major issues that need to be addressed in order to create an effective OPA:

4.1 Funding: As postdoc salaries are typically paid from PI grants or institutional training grants, postdocs are actually employees of the Office of Research (OR). Increased productivity of postdocs would be good for units across the entire university, but would reflect most positively on the outputs of the OR. Money to support the OPA, and the programs needed to increase postdoctoral effectiveness, will most likely need to come from OR. We suggest that PIs be charged a postdoc training fee of \$100 per postdoc per year to fund the OPA. This is a rather modest sum for PIs, yet would create a minimum \$120,000 budget to at least partially fund the OPA, the necessary staff and senior administrator. Additionally, funds from indirect costs could be set aside for postdoctoral training and/or institutional postdoctoral training grants could lend supplemental funds for administration of the OPA.

4.2 Administrative Structure: The administrative structure suggested in this proposal is based on recommendations described in the 2000 report by the National Academy of Sciences for establishing a postdoctoral office (7). The OPA needs a permanent upper level administrator that reports to the Office of Research. The responsibilities of this administrative official (e.g. a Dean, Vice President or Provost) include the oversight, management, and direction of postdoctoral affairs at UW. Apart from overseeing the office, duties would also include the evaluation of the performance of the office, the programs designed for postdocs, and the impact of the OPA on postdoc performance. The latter of these includes publication rates, conference presentations, teaching effectiveness, job satisfaction at the UW, and job placement afterwards. Importantly, an advisory committee comprised of postdoc representatives from the UWPA and faculty members will serve the OPA and the administrative official.

The office itself needs to be staffed sufficiently to carry out two types of tasks. The first is the coordination of human resources relevant to tracking and reaching postdocs. This includes management of the postdoctoral fellow database and incorporating necessary updates to reflect new arrivals and recent departures, along with the destinations and progress of postdoctoral alumni. The HR tasks also include providing the orientation materials to new postdocs and collecting the data necessary to maintain a website. We envision that the staff carrying out these functions will serve as the liaison between the OPA, and departmental administrators, HR, and the ISO. The second major task of the office is to develop and coordinate career development services and opportunities for postdocs. Duties we can foresee are the management of the website and an email listserv to inform postdocs of available resources and scheduled events. The staff carrying out these functions of the OPA would serve as the liaison to RFS, CCS, CIDR and other units providing resources that could be used by postdocs in their professional development.

4.3 Space: The OPA needs permanent office space for administrators as well as office support equipment. In addition, access to meeting space(s) is necessary. To facilitate interaction between postdocs and the OPA, additional cubicles and desk space are needed for UWPA representatives and postdocs wishing to utilize OPA resources. While we propose funding be provided by the Office of Research, it may be more practical to locate the OPA alongside, or within the Graduate School. Many of the resources and networks the OPA will need to utilize are already established by the Graduate School. Proximity of the OPA to experienced staff/administrators in a location such as the Graduate School may facilitate the work of the office. This will allow programs developed by the OPA to more easily be adapted by the Graduate School (or vice versa) and create synergy between the OR and the Graduate School.

Summary

The UWPA is committed to improving the postdoctoral experience at UW. We feel that the most effective mechanism by which to accomplish this goal is to create and work closely with a UW Office of Postdoctoral Affairs. Multiple national studies conducted by highly respected funding agencies and scientific entities concur: administrative oversight and structure of the postdoctoral training period enhances productivity, increases job satisfaction, and improves the future success of postdoctoral fellows. In addition, a UW OPA will significantly decrease the administrative burden on principal investigators and departments, make UW a national leader in postdoctoral training, and increase the recruitment of highly talented and skilled postdoctoral scholars to the UW campus. Finally, postdocs who experience high-quality training experiences at UW will go on to academic or other professional positions and help to build the national and international reputation of the University of Washington as a premiere research institution.

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Table 1. Postdoctoral Data from Responding Departments.

College/School	Department	# Postdocs	Title(s)	Male	Female	Foreign	UW train grants	PI grants	outside sources	average time	faculty jobs
A&S	Biology	24	Res Assoc Postodoc Trainee	14	10	NA	2	15	5	NA	NA
A&S	Chemistry	80	Res Assoc	64	16	NA	0	76	4	2.5 yrs	NA
A&S	Psychology	23	Res Assoc Res Assoc Trainee	10	13	2	0	16	7	3 yrs	NA
Engin	Chemical Engineering	23	Res Assoc Res Assoc Trainee	14	9	20	0	16	7	1-4 yrs	NA
Engin	Comp. Science & Engineering	2	Res Assoc	1	1	2	0	2	0	3-9 mo	NA
Engin	Materials Sci. & Engineering	14	Res Assoc, Act Inst Act Asst Prof Temp	12	2	13	0	0	14	3-5 yrs	1
Sch of Med	Biochemistry	47	Sr Fellow	30	17	19	2-3	42	2-3	5 yrs	NA
Sch of Med	Bioengineering	34	Sr Fellow Trainee Res Assoc	21	13	24	5	29	0	2 yrs	at least 3
Sch of Med	Genome Sciences	34	Sr Fellow Sr Fellow Trainee	19	15	14	NA	NA	NA	NA	NA
Sch of Med	Immunology	66	not provided	39	27	16	7?	44	15	NA	NA
Sch of Med	Medicine**	277	Sr Fellow, Fellow Sr Fellow Trainee	126*	140*	56	66	NA	55	3 yrs	NA
Sch of Med	Pharmacology	36	Sr Fellow Act Instructor Visiting Sci	18	18	17	NA	NA	NA	NA	NA
Sch of Med	Physiology & Biophysics	40	Sr Fellow Sr Fellow Trainee Visiting Sci	29	11	15	9	20	11	max 6 yrs	NA
Inst. Learn/ Brain Sci		7	Res Assoc	3	4	3	0	7	0	3 yrs	at least 5
TOTAL		707		274	156	201					
% of TOTAL				58	42	29					

NA: Data not available

**The Dept. of Medicine is comprised of 14 non-degree granting Divisions.

* Male/Female data from department of Medicine is incomplete.

Table 2. UW Postdoc Impact Data

Department	1 st Author	nth Author	Conference Presentations	Students Mentored	Time Spent Mentoring	Community Outreach	Received own funding?
Genome Sciences	0	0	3	1	5	manuscript review	yes
	5	1	1	3	8	outreach 2-3 hrs per month	yes
	4	1	2	0	0	NHLBI committee	received NRSA, declined
	2	1	1	0	0	0	0
	0	3	1	3	5	summer mentoring program	yes, NRSA
Average	2.2	1.2	1.6	1.4	3.6		
Total, Gen. Sci.	11	6	8	7	18	4 of 5	4 of 5
Biology	0	1	0	2	2	0	0
	0	1	2	5	15	lecture in Argentina	writing
	0	0	0	0	0	0	full
	1	0	2	1	8	guest lecture	0
	1	2	5	4	6	0	full
	8	7	34	7	15	Audobon, internet teaching	yes, accptd pos. at UC Berkely
	1	1	3	4	15	Ad hoc reviewer, 3 journals, NSF	full plus supplies
	0	0	0	1	6	0	full
	1	1	0	2	5	high school research mentor	full
	0	0	0	0	0	0	0
	4	1	4	5	8	high school research mentor	0
	0	1	0	1	2	0	0
	1	0	1	2	3	Ad hoc reviewer USDA/NRI	full
Average	1.3	1.2	3.9	2.6	6.5		
Total Biology	17	15	51	34	85	7 of 13	7 of 13
Psychology	0	3	1	15	10	0	0
	3	2	6	9	15	0	1 (NRSA)
	8	9	0	5	10	two APA committees	3
	2	0	1	5	3	patients	pending
	1	0	1	5	7	rep on AAUp, 2 hours/month	1 (private foundation)
	2	2	6	3	3	1 campus initiative	0
	2	2	10	5	5	committee chair, 8-10 hours/wk	1 post doctoral training grant
Average	2.6	2.6	3.6	6.7	7.6		
Total Psychology	15	18	25	41	53	5 of 7	4 of 7
AVERAGE	1.8	1.6	3.4	3.5	6.2		
TOTAL	43	39	84	82	156	16 of 25	15 of 25

The Post Doc Subcommittee of the Research Advisory Board and the Faculty Council on Research was formed to address the Association of American Universities Report on Postdoctoral Education which is attached as Appendix A.

In the view of both the authors of the Association of American Universities (AAU) Report and this subcommittee, postdoctoral experience has become an essential part of an extended apprenticeship system as scholars who have received their terminal degrees move toward independent professional status. The holders of such positions hold terminal degrees, often have families, and should be provided with positions which reflect that status. Such individuals should have their responsibilities and rights clearly specified, be able to discharge their responsibilities to their families, and be able to begin to make investments toward their eventual retirement. (Many of the Research Associates and Senior Fellows are in their thirties.)

The University of Washington employs 'Post Docs' under two titles, Research Associate and Senior Fellow, which may be either Faculty appointments, or advanced trainee appointments. The holders of these appointments serve the University, their Departments, and their advisors in a wide variety of roles; they are also professionally benefited in a similarly wide variety of ways. Because of this diversity of roles, it is both difficult and undesirable to formulate rigid structures to govern the appointments across the campus.

In order to assess how well the system is working, the subcommittee offered the current appointees the opportunity to comment on various aspects of the system. A survey was posted on the web, and the appointees were sent mail soliciting their participation. The letter of solicitation, and the survey instrument are respectively available as Appendices B and C of this report. The responses are available as Appendix D.

The system appears to be working reasonably well. About 10% of those to whom we sent letters took the opportunity to respond to the survey, and many of the responses were positive in whole, or in part. However, there were several recurrent themes to which the University should respond. The subcommittee has the following recommendations:

Recommendations

Benefits

All Research Associates/Senior Fellows who are paid by the University receive health benefits for themselves. Depending upon the nature of their

funding sources, they may or may not receive subsidized benefits for their dependents.

Research Associates are members of the faculty and participate in the University of Washington Retirement Plan. As participants, they are eligible to contribute 5% of their pay to their retirement account, and this contribution is matched by the University. For Research Associates age 35 or over, the rate is 7.5%. The benefit is much appreciated by the Research Associates. The cost of the University contributions is paid by the supporting budget, usually a grant, through the benefit loading which also pays for the health benefits for the Research Associate and his or her family. Senior Fellows who are employees, and who therefore receive a salary, have the same benefits.

Senior Fellows who are trainees, and who therefore receive a stipend, are not treated as well. This disparity results in considerable unhappiness. The National Institute of Health (NIH) grants which support most of these traineeships do not allow the payment of retirement benefits or health benefits for the trainee's family. The University does provide full health benefits by requiring that the employing Department pay for the additional health benefit. The University does not require the Departments to offer retirement benefits (and they do not). In order to fund the additional health benefits, the Departments must draw on other funds; often the Institutional Funds provided by the NIH are used, leaving the Fellows with little or no funds for travel, books, or other miscellaneous expenses.

Orientation programs for the health plans for faculty are currently part of the retirement plan orientation. As a result of the ineligibility of the Trainees for the retirement plan, they at present do not participate in an orientation program for their health benefits.

A further factor compounding the problem is that Senior Fellows are often recruited on a grant which does pay for the full benefit package. The Fellow is then encouraged to seek independent funding through the National Research Council (NRC); if they are successful, they then become Trainees with reduced benefits, and NIH imposed salary caps.

In the view of the subcommittee, the policies regarding benefits for the Trainees are clearly inequitable and should be addressed:

1. *Trainees who do not or can not participate in the retirement plan should participate in one of the semi-monthly orientation programs offered for*

- classified staff so that they can be informed about their health benefits;*
- 2. Research Associates and Senior Fellows should be fully informed in writing and in advance of the terms and conditions of the appointment which they will hold if they are successful in seeking an NRC Traineeship;*
 - 3. The University should allow Trainees to participate in the University of Washington Retirement Plan; and*
 - 4. The NIH policies are contrary to good public policy, and the recommendations of the AAU report on Postdoctoral Appointments. The University should join the AAU in pressing for a change in NIH policies to allow the grants to pay for both health and retirement benefits.*

Career Counseling

There was a widespread desire for access to the University's Career Counseling and Placement services. These services are operated by the Office of the Vice President for Student Affairs, and are available without charge to registered students. Research Associates and Senior Fellows are regarded as 'alumni' by the Office of Career Services, and are charged a fee to use the services.

In the view of the subcommittee, it should be University policy to actively encourage Research Associates/Senior Fellows to envisage a wide variety of careers, and to utilize whatever services are available to that end.

- 1. Letters of appointment should contain information about the Office of Career Services, and the services it offers; and*
- 2. The University should make these services available to Research Associates/Senior Fellows without charge.*

Grievance Procedures

Postdoctoral Research Associates and Senior Fellows, regardless of the type of appointment, are considered to be members of the Faculty. As such,

Faculty Grievance Procedures, including the Ombudsman and the Adjudication Procedures described in Chapter 28 of the Faculty Code are available to Research Associates and to Senior Fellows.

The University should clarify and more widely disseminate its grievance procedures. The procedures should be referred to in the Letter of Appointment discussed below.

Departmental and Faculty Responsibilities

Departmental and Faculty responsibilities should be spelled out in an appropriate document such as a Grants Information Memorandum, and reinforced by a letter from the President to Deans, Directors, and Chairs. In particular, Departments making postdoctoral appointments should establish a set of policies regarding the terms and conditions of those appointments.

The employing Departments should be required to adopt policies clarifying and making explicit that in making Research Associate and Senior Fellow appointments, the Department and the employing Faculty are accepting responsibility for:

1. *Mentoring the Research Associate/Senior Fellow;*
2. *Providing an environment in which the Research Associate/Senior Fellow can develop his or her professional competence;*
3. *Providing appropriate recognition of the Research Associate/Senior Fellow's work and progress;*
4. *Periodically evaluating the Research Associate/Senior Fellow's work and progress; and*
5. *Providing advice and assistance in finding a subsequent position.*

Letter of Appointment

Research Associates and Senior Fellows should receive a Letter of Appointment from the Department Chair which spells out the responsibilities of the

appointee, the term of the appointment, vacation policy, what raise and promotion opportunities are available, and conflict resolution procedures available in the Department and University. A sample Letter of Appointment is attached as Appendix E.

In particular, the Letter of Appointment should:

1. *Spell out the expectations of the Department and the Supervisor;*
2. *Present the term of the appointment, the salary, and vacation policy;*
3. *Describe the prospects for raises, and the procedures used in determining those raises;*
4. *Describe the prospects, if any, for appointment to other positions, and describe what criteria and procedures are used in making such decisions; and*
5. *Either give a mechanism for conflict resolution, or refer the appointee to an appropriate document giving such a mechanism.*

If you would like to comment on these recommendations, please contact David Boulware.

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