ACADEMIC COUNCIL MEETING of April 20, 2010 McKenna Auditorium 3:30 p.m. – 5:00 p.m.

Members present: John Affleck-Graves, Panos Antsaklis, A.J. Bellia, Robert Bernhard, Neil Delaney, Dennis Doordan, Stephen Fallon, Mary Frandsen, Glynnis Garry, Nasir Ghiaseddin, Thomas Gresik, Paul Huber, Dennis Jacobs, Rev. John Jenkins, C.S.C., Lionel Jensen, A. Graham Lappin, John LoSecco, Michael Lykoudis, Kelly Martin, Chris Maziar, Kathleen McDonald, John McGreevy, Scott Monroe, Nell Newton, William Nichols, Susan Ohmer, Hugh Page, Rev. Mark Poorman, C.S.C., Donald Pope-Davis, Ava Preacher, Grant Schmidt, Jim Seida, Cheri Smith, Greg Sterling, Ann Tenbrunsel, Carolyn Woo

Members and Observers excused: Ryan Brellenthin, Seth Brown, Thomas Burish, Laura Carlson, Rev. John Coughlin, O.F.M., Greg Crawford, John Gaski, Peter Kilpatrick, Cathy Pieronek, Joseph Powers, Bill Rayball, J. Keith Rigby, Julianne Turner, John Welle, Jennifer Younger

Observers present: Kevin Barry, Dale Nees, Harold Pace

Observers absent: Brandon Roach, Daniel Saracino

1. Welcome and opening prayer:

Father Jenkins welcomed members and invited Prof. Susan Ohmer to give the opening prayer.

2. Approval of minutes:

The minutes of the March 18, 2010 meeting were unanimously approved with the following emendations: Kevin Barry removed from Members present list; Remy Constable changed to Remie, p. 2; Engineer changed to Engineering, p. 28.

3. End of Year Committee Reports:

a. Advanced Studies Subcommittee—John LoSecco, chair

The end-of-the year report of the Advanced Studies subcommittee was presented by Prof. John LoSecco. While the committee considered several potential topics for consideration in the 2009-2010 academic year, rumors of potential post-doctoral irregularities on campus led the committee to undertake as its primary project a better understanding the role of post-doctoral scholars at ND. A post doctoral position is a limited-term educational opportunity which is expected to prepare the candidate for a sustainable career in research and teaching; it can be funded internally or externally and may be administered internally or externally. These factors can make tracking post-docs difficult. The goals of the committee were to assess the post-doctoral situation at ND, to compare our situation to other peer institutions, and to make recommendations that would enhance the post-doctoral experience here and better integrate these scholars into the rest of campus life.

The committee was very fortunate that the Vice President of Research and the Dean of the Graduate School, members of the committee, provided assistance that included detailed reports by Liz Rulli and Mary Hendriksen, as itemized in the appendix attached. Since the recent division of the Office of Research and the Graduate School, an important question is which administrative unit is best equipped to handle post-doctoral concerns.

The committee considered issues such as health and retirement benefits for post-docs. While health insurance is offered, there is no provision for contributions to a retirement plan. Other issues studied were career counseling and placement: post-docs are not formally included in these activities at this time, although the NSF now requires that grants include a mentoring plan for post-doctoral scholars. We hope to be able to centralize this requirement to relieve the research groups of this responsibility. The number of post-docs at ND is estimated to be 135, which is small compared with peer institutions. A post-doc to graduate student ratio at many research institutions is about two to three times larger than at ND.

Recommendations: The committee has not had time to formulate a post-doctoral scholar policy for ND. The AAU guidelines on post-doctoral scholars may provide a good starting point, although the committee considers it prudent to determine how these can be best adapted to the aspirations and principles to which the University of Notre Dame holds. This would be a good starting point for the committee in the next academic year (Prof. LoSecco noted that since the committee will hold its last meeting of the academic year today, it may be able to formalize this intention at that meeting).

On other topics, the committee was asked to nominate two members to review the proposal for the new Department of Applied and Computational Mathematics and Statistics; Julianne Turner served in that capacity. The committee reviewed and approved the proposal from the Classics Department to initiate a masters' degree program. The proposal was subsequently approved by the Academic Council (see March 18, 2010 minutes).

Prof. LoSecco, on behalf of the Academic Affairs subcommittee, asked Father Jenkins to accept this report. Seeing as there were no comments or questions on the report, Father Jenkins accepted the report and thanked Prof. LoSecco for his work.

b. Faculty Affairs Subcommittee—Ann Tenbrunsel

Prof. Tenbrunsel gave a chronological report of the work of the Faculty Affairs subcommittee. Members looked at revisions to the Academic Articles, focusing on the appeals process for research librarian/SPF faculty. Beginning with a working draft that had been produced by the working group in May 2009, in Fall 2009, the subcommittee made a number of substantial edits and additions. Therefore, the document was re-proposed and re-circulated to deans, directors, the Faculty Senate, and the faculty at issue. Feedback was collected, and the revised document presented to the Academic Council and approved by the Council in January, 2010. The changes made include creating consistency with the T & R faculty appeals process, making changes in deadlines for filing of appeals and getting comments back, and the creating a university committee for appeals by research librarian faculty and SPF.

In Fall 2009, the working group took up the issue of the Conflict of Commitment policy. As a sign of things to come, Prof. Tenbrunsel noted that this study took six months, in part because the issue is so complicated. A draft was developed and sent to the deans; it was sent to the Faculty Affairs subcommittee in February, 2010. At that point, a discussion was held on the best way to solicit feedback on this draft; it was decided that each dean and the subcommittee member from that College would determine the best way to collect feedback from that College. Having collected most of that feedback, the subcommittee discussed changes to the policy and also the creation of a 'frequently asked questions' document that might accompany the policy and provide some clarity down the road to faculty for whom the policy becomes relevant. Thus, the policy revision and creation of those mechanisms are currently underway.

The working group also considered the SPF classification: the goal is to bring consistency and clarity to this designation. Brandon Roach is currently gathering benchmarking data to help move this discussion forward.

In January, 2010, the Faculty Affairs subcommittee reviewed and approved the dissolution of the Department of Economics and Policy Studies and the renaming of the Department of Economics and Econometrics as the Department of Economics (see February 25, 2010 minutes). Also at that January meeting, the subcommittee reviewed the proposal for the creation of the Department of Applied and Computational Mathematics and Statistics. The proposal was approved, with a set of suggested clarifications and summaries prepared by Prof. Lionel Jensen, from which a revised proposal was created. Dean Greg Crawford was invited to the February, 2010 subcommittee meeting, where the revised proposal was re-examined.

From the 2008-09 academic year, the issue of 'faculty flourishing' re-arose. Progress on that issue was presented to the full Council at the end of the 2008-09 academic year. Following that, Prof. Jensen and Dean Peter Kilpatrick presented it to the deans and chairs advisory group in Summer 2009. A developed draft was presented to the subcommittee in November 2009, when a committee was formed to move the project forward. In early April 2010, Prof. Jensen met with the two co-chairs of the deans and chairs advisory group to arrange a set of recommendations and a template for moving this forward.

The subcommittee has worked hard and committed a lot of time and effort to produce a useful final report document. Two challenges of importance were noted from this report. One: the continuity of the working group crossing academic years. While not insurmountable, there is a loss of momentum. Two: what is the proper vetting process for issues that can benefit from faculty input? A strong template from the academic articles revision process has been used; should that remain the template or should there be another template for issues that might be smaller in scale?

Prof. Tenbrunsel noted some issues for consideration for the 2010-11 academic year: the conflict of commitment policy, the SPF designation and faculty flourishing are still viable. Prof. Tenbrunsel particularly thanked the members of the subcommittee and those of the working group, as well as the General Counsel's Office and the Provost's Office for their tremendous help.

Prof. Tenbrunsel, on behalf of the Faculty Affairs subcommittee, asked Father Jenkins to accept this report. Seeing as there were no comments, Father Jenkins accepted the report.

c. Undergraduate Studies Subcommittee—Hugh Page

At the beginning of the 2009-2010 academic year, the subcommittee identified seven issues as meriting the attention of the committee:

- 1. Completion of revisions to the Academic code
- 2. Consideration of the problem of Friday classes
- 3. Close examination of the assessment of student work and the validity of grades at the undergraduate level
- 4. Undergraduate dual degree programs
- 5. Evaluation of the Core Curriculum subcommittee's strengths, weaknesses, and challenges to date
- 6. Determination of the number of core and undergraduate requirements taken by students at ND rather than via coursework at other 4-year institutions
- 7. Further discussion of the implications of advanced placement credit on both the undergraduate curriculum and the intellectual development of students.

From this list, two matters were selected as major priorities: A. vetting of proposed changes to the Academic Code, and B. a more thoroughgoing and deliberate examination of AP usage by students as well as AP norms and policies at the college and departmental levels.

A. A final copy of the revision to the proposed revisions of the Code and accompanying road map indicating major changes were solicited from the Ad Hoc drafting committee, a body consisting of assistant and associate deans of the undergraduate colleges and the Registrar, Dr. Harold Pace. Extensive review of the recommended proposed changes to the Code was conducted, with members of the drafting committee in attendance to aid the subcommittee

in understanding the rationale and implications of the emendations. Deans from each College and the School of Architecture were invited to attend and/or provide feedback on the proposed revisions. Input was also received from representatives of the Faculty Board of Athletics and the university's Counsel's Office. While the committee completed the vetting process on April 8, 2010, several issues in need of further consideration emerged from these meetings. The first concerns the relationship of the Academic Code to regulations governing academic matters in the Law School and in the Graduate School. The question is this: should the Code be shaped so as exclusively to address undergraduate academic life? The second issue centers on terminology within the Code that lends itself to a range of interpretations--for example, the requirement that students spend their "last year in residence." The third has to do with the subtle, and not-so-subtle, impact of certain changes—for example, a new grade point average threshold of 2.0 for the second semester of a student's first year—on the nature of the undergraduate experience itself. Such a modification could be said to alter the time frame for first year academic transition from two semesters to one. The fourth concerns a set of interrelated curricular challenges—for example, whether and how much AP credit a student should be allowed to use toward a degree, the parameters within which students may pursue more than one undergraduate degree, and both the quantity and disciplinary focus of first year requirements—that proposed alterations to one or more altered sections of the Code bring to the surface. Prudence suggests that such issues be discussed before the Code assumes its final form.

Because of the significance of these issues, Dean Page recommended that the penultimate draft of the Code be commended to a small working group, the constitution of which should be determined by the Provost, for additional work. That group should be tasked with 1. Working through policy-related issues that the Undergraduate Studies committee has bracketed for future deliberations. 2. Soliciting feedback on the proposed revision from faculty not directly involved in the re-drafting, such as department chairs, directors of undergraduate studies, and members of the Deans' Council. 3. Literary editing of the final version for grammar, clarity and succinctness. 4. Submitting the revised Code to the university's Counsel's Office for legal review. 5. Bringing the final version forward to Academic Council for approval not later than the end of the Fall 2010 semester.

B. The committee conducted a productive discussion of AP credit and related issues. It was aided by presentation from the results of a series of FYS's focus groups on AP credit and student intellectual engagement, conducted by Erin Doyle Ponisciak, an FYS advisor. An AP subcommittee under the leadership of Dean John McGreevy has met several times to look at this issue and hopes to make a set of recommendations by either the end of the current academic year or during the Summer 2010.

Looking ahead to the 2010-11 academic year, the subcommittee would do well to consider the recommendations of this year's AP subcommittee, and recommend action items for Academic Council vote. Members should also consider the return to the issue of academic dual degree programs if resolution has not been reached through other venues, and that of assessment strategies and grading policies for undergraduate student work. As outgoing chair, Dean Page will pass on all pertinent documentation from meetings to the Council, including the most recent draft of the Academic Code.

Dean Page, on behalf of the Undergraduate Studies subcommittee, asked Father Jenkins to accept this report. Seeing as there were no comments, Father Jenkins accepted the report.

As there was no new business, Father Jenkins drew the meeting to a close. On this occasion of the final meeting of the academic year, he thanked members for their efforts. He noted the importance to the health of the university of the governance of academic life by a group of faculty and academic administrators. When this is done well, it takes a lot of work and effort. The reports given today addressed issues which are important for the university, even if they seem trivial. They have significant consequences, and the committees addressed them seriously, thoughtfully, diligently, using wide consultation and achieving great progress. Father Jenkins acknowledged the level of commitment made by faculty to service on this, and other university, bodies. He offered his gratitude and the university's gratitude, noting the value of this work to the life of the university. He said, 'this is a better place and the academic life is healthier because of your efforts.'

The meeting was adjourned.

The Role of Post Doctoral Fellows at Notre Dame 2009-2010 Year-End Report, Advanced Studies Committee, Academic Council

John LoSecco (Chair), Robert Bernhard, Laura Carlson, Gregory Crawford, Mary Frandsen, Peter Kilpatrick, Kelly Martin, Christine Maziar, William Rayball, Gregory Sterling, Julianne Turner, John Welle, Jennifer Younger

Summary

Our group set out to understand the role of post docs at Notre Dame. We compared our current practices to those of peer institutions. We considered adopting a variation of the AAU guidelines on post doctoral scholars. At our concluding meeting we decided to strongly endorse the AAU definition of a post doctoral scholar. The responsible administrative officer, the Vice President for Research, was authorized to formulate guidelines consistent with the AAU recommendations. We expect that the advanced studies subcommittee will review and endorse these policies next academic year.

Administrative Responsibilities

The committee is responsible for reviewing proposals that would have an impact on advanced studies at Notre Dame

The committee was asked to nominate two members to review the proposal for a new department of Applied and Computational Mathematics and Statistics. Ultimately one of our committee members, Julie Turner, did serve in the review.

The committee reviewed and approved a proposal from the Classics department to initiate a masters degree program. The proposal was subsequently approved by the academic council as a whole.

Introduction

The first few meetings the group explored a number of topics for further study. Some of our potential subjects, such as a medical school were under study elsewhere at Notre Dame. Rumors of some potential irregularities with regard to post doctoral scholars led us to adopt this as a goal for the academic year. Both the Vice President for Research and the Dean of the Graduate School are members of our committee and the topic falls administratively under these offices. Since the recent division of the office of research and the graduate school an important question was which administrative unit was best equipped to handle post docs.

A post doctoral position is a limited term educational opportunity which

is expected to prepare the candidate for a sustainable career in research and teaching. They can be funded internally or externally. They may be administered internally or externally which can make tracking them difficult.

Goals

Our goals were to assess the post doctoral scholars situation at Notre Dame; to compare our situation to other peer institutions and to make recommendations that would enhance the post doctoral experience here and better integrate these scholars into the rest of campus life.

Activities

We were fortunate that the Vice President for Research and the Dean of the Graduate school provided assistance which included detailed reports by Liz Rulli and Mary Hendriksen as itemized in the **References** below.

We considered issues such as health and retirement benefits for post docs. While health insurance is offered there is no provision for a retirement plan. We looked at issues such as career counseling and placement. Post docs are not formally included in these activities at this time. The NSF now requires that grants including post doctoral support provide a mentoring plan. We had hoped to be able to centralize this requirement to relieve the research groups of the responsibility.

The number of post docs at Notre Dame was estimated at about 135, which is small compared to other peer institutions. A post doc to graduate student ratio at many research universities was about 2 to 3 times larger than at Notre Dame.

Recommendation

The committee has not had enough time to formulate a post doctoral scholars policy for Notre Dame. The AAU guidelines may provide a good starting point but it would be prudent to determine how these can best be adapted to the aspirations and principles to which the University of Notre Dame holds.

At our concluding meeting, on April 20, we endorsed the AAU definition of a post doc and authorized Bob Bernhard to draft a University post doctoral scholars policy consistent with AAU guidelines. These can be used to finalize the work early in the Fall semester.

References

- AAU Postdoctoral Education Committee Report, March 31, 1998, http://www.aau.edu/reports/PostdocRpt.pdf
- Liz Rulli, Assistant Vice President for Research, "Non-Faculty Research and Teaching Appointments", November 11, 2009
- Mary Hendriksen, Executive Assistant to Dean Gregory Sterling, "Benchmarking Study of Institutional Policies on Postdoctoral Scholars", December 7, 2009
- Liz Rulli, Assistant Vice President for Research, "Postdoctoral Appointments", February 25, 2010



ASSOCIATION OF AMERICAN UNIVERSITIES

COMMITTEE ON POSTDOCTORAL EDUCATION

REPORT AND RECOMMENDATIONS

MARCH 31, 1998

COMMITTEE MEMBERS

Steven B. Sample, President, University of Southern California (Chair)
S. James Adelstein, Executive Dean for Academic Programs, Harvard Medical School Joseph Cerny, Vice Chancellor for Research and Dean of the Graduate Division, University of California, Berkeley
David L. Goodstein, Vice Provost, California Institute of Technology
Richard L. McCormick, President, University of Washington
J. Dennis O'Connor, Chancellor, University of Pittsburgh (*through 1995*)
Frank E. Perkins, Dean of the Graduate School, Massachusetts Institute of Technology (*through 1995*)
Bernard J. Shapiro, Principal and Vice Chancellor, McGill University
Joab L. Thomas, President, Pennsylvania State University (*through 1995*)
John D. Wiley, Provost, University of Wisconsin-Madison

COMMITTEE STAFF

John C. Vaughn, Executive Vice President, Association of American Universities

ASSOCIATION OF AMERICAN UNIVERSITIES COMMITTEE ON POSTDOCTORAL EDUCATION

REPORT

Postdoctoral education plays an important role in the research enterprise of the United States. Postdoctoral appointments provide recent Ph.D. recipients with an opportunity to develop further the research skills acquired in their doctoral programs or to learn new research techniques. In the process of developing their own research skills, postdoctoral appointees perform a significant portion of the nation's research and augment the role of graduate faculty in providing research instruction to graduate students.

Postdoctoral education has been a part of American higher education for over 100 years. The Johns Hopkins University began to support postdoctoral fellows shortly after the institution was founded in 1876. In the 1920s the Rockefeller Foundation established a formal program of postdoctoral fellowships for recent Ph.D. graduates in the physical sciences. The Foundation recognized the fact that physics had become so complex that training through the doctorate was not sufficient preparation for a research career. Recipients of these awards were known as "postdoctoral fellows," or simply "postdocs."

Postdoctoral education grew only modestly during the first half of the twentieth century. But the advent of the Cold War brought with it a boom in postdoctoral appointments. More recently, postdoctoral education has grown rapidly. From 1975 to 1995, the number of postdoctoral appointees in science, engineering, and health-related disciplines more than doubled, from 16,829 to 35,379 (Figure below). Moreover, the proportion of Ph.D.s accepting or seeking postdoctoral appointments in these disciplines increased from 25 percent in 1975 to over 37 percent in 1995. Although postdoctoral education has grown rapidly, it remains a highly concentrated enterprise: as shown in the Appendix attached, more than two-thirds of 1995 postdoctoral appointees were studying in just 50 institutions out of the nearly 350 doctorate-granting institutions surveyed.



Figure. Science and Engineering Postdocs

Committee on Postdoctoral Education

Despite the increasingly prominent role played by postdoctoral education in the national research enterprise, there is reason to question how well this particular form of education has been incorporated into the overall academic enterprise. In many respects, postdoctoral education at the end of the twentieth century appears to resemble Ph.D. education at the end of the nineteenth century. In 1890, Ph.D. programs were a relatively new form of education in this country, lacking a consistent set of standards and expectations. Today there is cause for concern over the similarly *ad hoc* evolution of postdoctoral education. Some specific points of concern are:

- The steady growth in the number of postdoctoral appointments nationally—and the increasing number of those appointments that are being granted to foreign Ph.D.s on temporary visas
- The increasing number of postdoctoral appointees in their second, third, and even fourth appointment
- The widely held perception that the postdoctoral appointment is being used as an employment holding pattern
- The apparent transition, at least in some disciplines, of the postdoctoral appointment from an elective activity to a required credential
- The growing number of reports of dissatisfaction expressed by postdocs.

To address these concerns, the Association of American Universities formed the Committee on Postdoctoral Education in 1994. The Committee was charged to examine postdoctoral education and develop recommendations for the future management of this activity.

The Committee conducted three informal surveys of selected major research universities to gain insight into campus policies and practices governing postdoctoral education and to sample the views of postdocs. Given the varying conceptions of postdoctoral education, the Committee recognized the need to establish a working definition of a postdoctoral appointment for its surveys. After a great deal of discussion among committee members, graduate deans, provosts, and presidents and chancellors of research universities, the Committee developed the following definition of a postdoctoral appointment, which was used consistently in the surveys.

DEFINITION OF A POSTDOCTORAL APPOINTMENT

- The appointee was recently awarded a Ph.D. or equivalent doctorate (e.g., Sc.D., M.D.) in an appropriate field; and
- the appointment is temporary; and
- the appointment involves substantially full-time research or scholarship; and
- the appointment is viewed as preparatory for a full-time academic and/or research career; and
- the appointment is not part of a clinical training program; and
- the appointee works under the supervision of a senior scholar or a department in a university or similar research institution (e.g., national laboratory, NIH, etc.); and

• the appointee has the freedom, and is expected, to publish the results of his or her research or scholarship during the period of the appointment.

The committee surveys solicited information and views from university administrations; university departments in four disciplines—biochemistry, mathematics, physics, and psychology; and postdocs in each of those departments. The surveys were not intended to provide comprehensive quantitative descriptions, but rather to provide insights through sampling of campus policies and practices and the views of postdocs.

Among the key findings of the surveys were the following:

- 1) Most institutions make little or no attempt to control the number or the quality of postdoctoral appointees on campus.
- 2) As was the case with Ph.D. students in the 1890s, most postdocs today are identified and recruited principally through professional contacts with faculty members.
- 3) It is common for institutions either to have no time limits on the length of postdoctoral appointments or regularly to ignore or waive established limits.
- 4) Few institutions report having campuswide compensation policies for postdoctoral appointees, and few report making any serious efforts to ensure that foreign and domestic postdocs receive equal compensation (as is required by federal law).
- 5) Most institutions report that they classify postdoctoral appointees as employees with attendant employment benefits; postdocs themselves, however, list benefits as one of their top areas of needed improvement.
- 6) Few institutions have policies established specifically for postdoctoral appointees: most institutions report that conflict-of-interest policies for faculty and staff apply to postdocs, but few institutions have policies governing outside business interests, consulting, or teaching activities by postdocs. Moreover, procedures for resolving postdoc misconduct or grievances vary widely and are often nonexistent.
- 7) Virtually no institutions have formal job placement procedures for postdocs.
- 8) In roughly two-thirds of surveyed departments, all assistant professors hired in the last five years have had postdoctoral experience; in two fields—biochemistry and physics—more than 80 percent of the departments surveyed said they would not even consider hiring someone without postdoctoral experience. Thus, in these fields, a postdoctoral appointment has become the *de facto* terminal academic credential.
- 9) Nearly half of the Ph.D.s who graduated from the surveyed departments in the last two years have gone on to postdoctoral appointments; in biochemistry, 80 percent have gone on to postdoctoral positions.
- 10) Upon completion of their appointments, roughly 60 percent of recent postdocs in surveyed departments have gone on to employment in research universities in some capacity. About one-fourth of postdocs in surveyed departments have gone into another postdoc position, about one-fourth into tenure-track faculty positions, and about 10 percent into non-tenure-track faculty positions.

- 11) A substantial majority of departmental officials and postdocs themselves view a postdoctoral appointment as a necessary step in an academic career, as opposed to being simply a holding pattern for Ph.D.s who cannot find a tenure-leading appointment or other appropriate employment.
- 12) Postdocs identify stipends, benefits, and career advising and job placement assistance as the aspects of postdoctoral education in most need of improvement.
- 13) Two-thirds of postdocs say that obtaining a tenure-track faculty position at a research university is their expected career path.

DISCUSSION

Although the Committee's surveys were small and informal and were focused exclusively on leading research universities, several findings stand out. Most fundamentally, the lack of institutional oversight of postdoctoral appointments, coupled with the evolution of postdoctoral education in a number of disciplines into a virtual requirement for a tenure-track faculty appointment, creates an unacceptable degree of variability and instability in this aspect of the academic enterprise.

As with the Ph.D. at the end of the nineteenth century, postdoctoral education is evolving as a series of *ad hoc* and unsystematic responses to varied and often competing interests and pressures. Most universities lack the kind of central administrative oversight of postdoctoral appointments that they maintain for undergraduate and graduate students. Moreover, most institutions appear to have few policies designed for postdocs specifically; such policies appear often to be an amalgam of policies designed for students, faculty, and staff.

The lack of clear central oversight of postdoctoral education raises serious questions about how successfully institutions are meeting their obligations to postdocs as trainees and professional colleagues.

Upon completion of their appointments, most postdocs appear to find employment in research positions in their field of training. However, although the preponderance of postdocs *expect* to end up in a tenure track position, only one-fourth of recent postdocs in the surveyed departments actually entered such a position. Given this disparity between expectations and outcomes, it is not surprising that postdocs rank better career advising and job placement high on their list of recommended improvements; currently, institutions give little or no attention to these activities.

RECOMMENDATIONS

The Committee strongly recommends that the following definition of a postdoctoral appointment be universally adopted and consistently applied by all universities, government agencies, and private foundations involved in postdoctoral education:

DEFINITION OF A POSTDOCTORAL APPOINTMENT

- The appointee was recently awarded a Ph.D. or equivalent doctorate (e.g., Sc.D., M.D.) in an appropriate field; and
- the appointment is temporary; and
- the appointment involves substantially full-time research or scholarship; and
- the appointment is viewed as preparatory for a full-time academic and/or research career; and
- the appointment is not part of a clinical training program; and
- the appointee works under the supervision of a senior scholar or a department in a university or similar research institution (e.g., national laboratory, NIH, etc.); and
- the appointee has the freedom, and is expected, to publish the results of his or her research or scholarship during the period of the appointment.

The Committee recommends that each university act promptly to develop policies and practices for systematically incorporating postdoctoral education into its overall academic program. To assist in accomplishing this systematization of postdoctoral education, the Committee makes the following suggestions as a model for consideration by individual institutions:

- 1) Consistent with the definition above, the postdoctoral appointment should remain a temporary appointment with a primary purpose of providing additional research or scholarly training for an academic or research career.
- 2) A central administrative officer should be assigned responsibility for monitoring postdoctoral policies to assure consistent application of those policies across the institution.
- 3) The university should establish core policies applicable to postdoctoral appointments. These policies should cover such matters as employment or student category; realistic institutional minimum stipends and benefits; fractional appointments; workers' compensation; publication rights; faculty responsibilities for mentoring and evaluation of postdoctoral appointees; career advising and job placement; misconduct; grievance procedures; and education in research

protocol issues such as ethics, conflicts of interest, and outside consulting. In particular, all postdoctoral appointees should have access to a comprehensive health care plan for themselves and their families.

- 4) The university should establish explicit guidelines for recruitment and appointment of postdocs and for the duration of their appointments; such guidelines should take into account time spent in prior postdoctoral appointments at other institutions. Initial postdoctoral appointments should be no longer than two to three years in duration, and should be renewed only on the basis of career advancement and achievement by the postdoctoral appointee. As a general rule, the total time spent in postdoctoral appointments by a given individual should not exceed six years. Exceptions to such guidelines should be granted only after careful review by the department and an appropriate central administrative officer.
- 5) All postdoctoral appointees should receive a letter of appointment jointly signed by the faculty mentor and the department chair or other responsible university official; a statement of goals, policies, and responsibilities applicable to postdoctoral education should accompany the letter.
- 6) The university should periodically evaluate the balance of interests among postdoctoral appointees, their faculty mentors, their home departments, and the institution as a whole, in order to assure that the legitimate educational needs and career interests of postdocs are being fully met.
- 7) Departments and faculty mentors should provide career advising and job placement assistance appropriate to their postdoctoral appointees.
- 8) The university should provide a certificate or letter of completion for postdoctoral appointments to assist postdocs in securing subsequent employment.

In addition to the foregoing suggestions for consideration by individual institutions, the Committee recommends that each academic discipline consider the role of postdoctoral education in professional development in that discipline, and give careful attention to the extent to which postdoctoral education should be viewed as elective or obligatory by students for whom entry into that discipline is their primary professional goal.

March 31, 1998

Grand Totals—345 Institutions	Total 35,379	Science 23,367	Engineering 2,628	Health Fields 9,384
First 50 Institutions	Total	Science	Engineering	Health Fields
1 Harvard University	1,836	1,124	27	685
2 University of California, San Francisco	1,147	303	0	844
3 Stanford University	1,013	585	73	355
4 University of California, San Diego	995	562	62	371
5 University of Washington	901	551	29	321
6 Yale University	881	578	11	292
7 University of Pennsylvania	833	423	21	389
8 University of California, Berkeley	820	690	58	72
9 University of Michigan	724	317	120	287
10 The Johns Hopkins University	689	301	38	350
11 University of California, Los Angeles	687	339	32	316
12 University of Colorado	605	303	36	266
13 Washington University in St. Louis	564	310	5	249
14 Cornell University	557	336	57	164
15 University of North Carolina, Chapel Hill	553	341	6	206
16 University of Wisconsin-Madison	540	321	60	159
17 Massachusetts Institute of Technology	494	353	116	25
18 University of Minnesota	466	352	69	45
19 Duke University	438	260	5	173
20 University of Southern California	428	232	31	165
21 University of Iowa	359	128	15	216
22 Columbia University	354	268	27	59
23 University of Arizona	344	313	18	13
24 Case western Reserve University	332 221	1/5	38	119
25 University of Taxas SW Medical Ctr at Dallas	331	170	2	155
20 University of Texas S w Medical Cu at Danas	327	222	52	105
27 The Onio State Oniversity 28 University of California Invina	323	234	32	22
20 University of California, fivine	322	270	21	25
20 Indiana University	313	195	10	104
21 Dringston University	307	221	4	82
32 California Institute of Technology	302	250	40	0
32 University of Pochester	208	202	41	86
34 Vashiya University	296	179	10	117
35 Vanderbilt University	290	220	5	62
36 University of California Davis	287	172	11	99
37 University of Virginia	282	191	26	64
38 Northwestern University	281	220	58	2
39 Tufts University	200	111	4	164
40 Thomas Jefferson University	273	179	0	94
41 University of Texas M.D. Anderson Cancer Ctr	267	151	0	116
42 University of Florida	255	184	33	38
43 University of Massachusetts	250	181	5	64
44 Rutgers, The State University of New Jersev	248	176	43	29
45 Texas A & M University	248	220	24	4
46 University of Illinois, Urbana-Champaign	246	190	48	8
47 Rockefeller University	244	244	0	0
48 SUNY - Buffalo	243	192	17	34
49 Michigan State University	241	220	16	5
50 Mayo Graduate School of Medicine	239	96	0	143
Total, First 50 institutions	23,844	14,632	1,438	7,774

Appendix Postdoctoral Appointments in U.S. Universities

Non-Faculty Research and Teaching Appointments Office of Research November 11, 2009

Liz Rulli, Assistant Vice President for Research Phone: 631-3072 E-mail Irulli@nd.edu

Position classifications administered through the Office of Research Background:

- The positions historically administered by Graduate Studies/Office of Research are intended for individuals to develop credentials for an academic appointment or of a temporary nature that does not constitute an employment relationship.
- These are staff (not faculty or student) positions within the HR system.

Position classifications administered through the Office of Research

SENIOR RESEARCH ASSOCIATE

Senior scholars from the academy or industry. Typically these individuals have extensive experience. Many have extensive publications in highly rated journals, may have served on prestigious boards, be Fellows (Science), some are former Deans.

POSTDOCTORAL RESEARCH ASSOCIATE

All have PhD (or equivalent) and are receiving a stipend from Notre Dame. These are intended for individuals to develop credentials for an academic appointment.

RESEARCH ASSOCIATE

Do not have PhD but have attained the minimum of a bachelor's degree (or equivalent) and are receiving a stipend from Notre Dame. Are <u>NOT</u> continuing degree-seeking students.

VISITING SCHOLAR

Must have a minimum of a bachelor's degree or equivalent. Some have PhD. For example, a professor on sabbatical with their own funding who is coming here to conduct research. Do NOT receive a stipend from Notre Dame. Usually doing their own research.

RESEARCH VISITOR

All are continuing degree-seeking students at another university. This may be graduate or undergraduate. May or may not receive stipend from Notre Dame.

SORIN POSTDOCTORAL SCHOLARS AND TEACHING SCHOLARS

Duties and responsibility is to teach and continue research and publish. Receive stipend. The appointments are normally limited to university of Notre Dame Graduates.

AAU Definition of a Postdoctoral Appointment

The Committee strongly recommends that the following definition of a postdoctoral appointment be universally adopted and consistently applied by all universities, government agencies, and private foundations involved in postdoctoral education:

DEFINITION OF A POSTDOCTORAL APPOINTMENT

- The appointee was recently awarded a Ph.D. or equivalent doctorate (e.g., Sc.D., M.D.) in an appropriate field; and
- the appointment is temporary; and
- the appointment involves substantially full-time research or scholarship; and
- the appointment is viewed as preparatory for a full-time academic and/or research career; and
- the appointment is not part of a clinical training program; and
- the appointee works under the supervision of a senior scholar or a department in a university or similar research institution (e.g., national laboratory, NIH, etc.); and
- the appointee has the freedom, and is expected, to publish the results

From: ASSOCIATION OF AMERICAN UNIVERSITIES COMMITTEE ON POSTDOCTORAL EDUCATION REPORT AND RECOMMENDATIONS MARCH 31, 1998

NSF Postdoctoral Mentoring Requirements

The National Science Foundation has recently required that any grants including post/doc support to include a mentoring plan.

Examples of mentoring activities include, but are not limited to: career counseling; training in preparation of grant proposals, publications and presentations; guidance on ways to improve teaching and mentoring skills; guidance on how to effectively collaborate with researchers from diverse backgrounds and disciplinary areas; and training in responsible professional practices. The proposed mentoring activities will be evaluated as part of the merit review process under the Foundation's broader impacts merit review criterion. Proposals that do not include a separate section on mentoring activities within the Project Description will be returned without review.

[From NSF GPG Chapter 88 – Section C.2d(i)]

Non-faculty teaching and research positions as of July 31, 2009

Position Title	Headcount
Postdoctoral Research Associate	127
Senior Research Associate	3
Research Associate	32
Visiting Scholar	90
Research Visitor	51
Sorin Postdoctoral Scholar	3
Teaching Scholar	8

Appointment Process Office of Research Role

- Receives request for appointment form and SPAF (faculty, chair, dean or director).
- Interfaces with Office of General Counsel for international (visa) appointments.
- Issues formal appointment letter for signature.
- Completes data entry within HR system.
- Serves as a first stop for new internationals to present visa documents.
- Processes reappointments and separations.
- Monitors time in position.
- Assists with unusual contractual, employee relations or other situations that arise.

Challenges

- Proof of degree requirement
- Research Associate classification
- Visiting Scholars with teaching responsibilities
- Contract employment, performance and funding issues
- Long-term post doc appointments (< 5 years).

Memorandum

To: Members of the Advanced Studies Committee of the Academic Council

From: Mary Hendriksen, Executive Assistant to Dean Gregory E. Sterling

Re: Benchmarking study of institutional policies on postdoctoral scholars

Date: December 7, 2009

Summary: While the private AAU universities I examined may have slightly different names and descriptions for their postdoctoral scholars, there is one constant:

There are normally two, even three, classifications for these individuals—all based on the postdoctoral scholars' source of funding rather than a description of their tasks or responsibilities. The classifications maintain compliance with complicated federal tax code provisions and employment legislation. Postdocs with different classifications may be performing identical tasks, yet appointees funded from *university-administered* research grants, contracts, or other university sources—usually called "associates"—are considered employees of the university. Other postdocs—often called "fellows"—are funded from training grants to the university *or* from funding awarded to the trainee from an outside source. Postdocs in this second category receive compensation via a stipend and are not employees of the university.

An individual's classification determines whether he/she qualifies for certain employee benefits—although the current standard is to extend at least medical and routine institutional benefits to all postdocs, regardless of their funding source or classification.

See also:

Table 1: Total Undergraduates/First Professional/Graduate Students/PostdoctoralScholars/Faculty at Notre Dame and AAU Privates in 2007(the last year for which the data is available)—sorted from highest postdoc count tolowest

Table 2: Total Postdoctoral Scholars at Notre Dame, AAU Privates, and AAUAspirants from 1988-2007

Comparison of Notre Dame with AAU Privates: Students, Postdoctoral Scholars, Faculty

Institution	Number Undergraduate	Percent Undergraduate	Number First Professional	Percent First-	Number Graduate	Percent Graduate	Student Total	Postdoctoral Scholars	Faculty
	Ondorgraduate	Undergraduate		Professional	Cruduate	Craduate		Contraite	
Harvard	8,206	37%	2,786	13%	10,912	50%	21,904	4,760	1,314
Johns Hopkins	5,445	37%	460	3%	8,829	60%	14,734	1,400	765
Stanford	6,547	40%	998	6%	8,847	54%	16,392	1,394	956
MIT*	4,140	41%	0	0%	5,918	59%	10,058	1,037	963
Yale	5,298	47%	1,239	11%	4,808	42%	11,345	988	911
U. Penn	10,836	51%	2,368	11%	8,223	38%	21,427	915	1,081
Columbia	6,778	33%	2,169	10%	11,772	57%	20,719	808	1,121
Duke	6,374	48%	1,687	13%	5,290	40%	13,351	759	1,006
Cornell	13,501	68%	915	5%	5,361	27%	19,777	697	1,543
Emory	6,672	55%	1,642	14%	3,726	31%	12,040	632	747
Cal Tech*	913	43%	0	0%	1,220	57%	2,133	620	283
Wash. Univ. St. Louis	6,578	55%	1,262	11%	4,089	34%	11,929	552	626
Vanderbilt	6,490	57%	1,248	11%	3,656	32%	11,394	495	694
Northwestern	8,636	51%	1,446	8%	6,944	41%	17,026	381	1,013
New York University	20,469	57%	3,439	10%	11,752	33%	35,660	373	1,290
Princeton*	4,845	67%	0	0%	2,416	33%	7,261	349	691
U. Rochester	4,954	59%	415	5%	2,986	36%	8,355	349	476
U. Southern California	15,959	52%	2,705	9%	12,104	39%	30,768	328	1,316
U. Chicago	4,884	38%	1,111	9%	6,884	53%	12,879	286	866
Brown	5,876	74%	372	5%	1,726	22%	7,974	197	614
Carnegie Mellon*	5,560	59%	0	0%	3,944	41%	9,504	164	606
Case Western	4,079	48%	1,672	20%	2,704	32%	8,455	147	554
Notre Dame*	8,364	72%	599	5%	2,694	23%	11,657	135	763
Rice*	2,998	59%	0	0%	2,087	41%	5,085	135	491
Brandeis*	3,223	65%	0	0%	1,737	35%	4,960	101	311
Tulane	5,636	62%	1,414	0%	2,066	23%	9,116	85	454
Syracuse*	12,771	73%	663	4%	4,011	23%	17,445	36	879

*Denotes no medical school.

TECHNICAL NOTES & DEFINITIONS:

Data supplied by Paul Mueller, Ph.D., Senior IR Analyst, Office of Institutional Research, University of Notre Dame

Enrollment data for fall 2007 are collected in spring collection 2008 (IPEDS Enrollment Survey) and released by IPEDS in August 2008.

Postdoc counts are sourced from the survey "NSF-NIH Survey of Graduate Students & Postdoctorates in Science and Engineering." It includes postdocs in science, engineering, and the social sciences but not the humanities.

For IPEDS reporting, students are defined as all students enrolled in courses creditable toward a diploma, certificate, degree, or other formal award. Students enrolled in courses that are part of a vocational or occupational program, including those enrolled in off-campus centers are included. High school students taking regular college courses for credit are reported in the classification in which they are recorded by the institution.

Undergraduate students are all students enrolled in 4 or 5-year bachelor's degree programs, associate's degree programs, or any vocational/technical programs that grant degrees or certificates below the baccalaureate level. Students who have already earned a bachelor's degree but are taking undergraduate courses FOR CREDIT should be included as undergraduates.

IPEDS classifies first-professional students as those students enrolled in programs leading toward a first-professional degree in the fields of chiropractic, dentistry, law, medicine, optometry, osteopathy, pharmacy, podiatry, theology, and veterinary medicine (see Discipline Classifications for deviations from this including treatment of master's of divinity and master's of business administration).

Graduate students are those students enrolled in graduate programs that are not first-professional programs.

Student enrollment full-time equivalences (FTE) are computed according to IPEDS formula. A part-time undergraduate is equivalent to .392857 full-time, a part-time first-professional student is equivalent to .545454 full-time, and a part-time graduate student is equivalent to .382059 full-time (nces.ed.gov/ipeds/pdf/webbase 2003/EF_Form.pdf).

This computation of student FTEs is also used to calculate faculty-to-student ratio and all "per student" ratios throughout the report.

Schools without first-professional programs have an implied first-professional enrollment of zero. Implied zeros are included in the calculation of the first-professional enrollment median for AAU Privates.

Institutions without an asterisk have medical schools. For purposes of illustration, at Harvard, 1200 of the 4,760 postdocs hold medical degrees; at Johns Hopkins, the number is approximately 500 of 1400; and, at Stanford, the number is 253 of 1,394.

(1) Definition of a Postdoctoral Scholar

The 1998 report of the Association of American Universities' (AAU) Committee on Postdoctoral Education recommended that research universities adopt the following definition of a postdoctoral appointment:

- The appointee was recently awarded a Ph.D. or equivalent doctorate (e.g., Sc.D., M.D.) in an appropriate field; and
- the appointment is temporary; and
- the appointment involves substantially full-time research or scholarship; and
- the appointment is viewed as preparatory for a full-time academic and/or research career; and
- the appointment is not part of a clinical training program; and
- the appointee works under the supervision of a senior scholar or a department in a university or similar research institution (e.g., national laboratory, NIH, etc.); and
- the appointee has the freedom, and is expected, to publish the results of his or her research or scholarship during the period of the appointment.

See: <u>www.aau.edu/reports/PostdocRpt.pdf</u> [Attached, see p. 5, in particular]

Most private AAU institutions have explicitly adopted this definition of a postdoctoral scholar and refer as well to a definition adopted jointly in January 2007 by the National Science Foundation and the National Institutes of Health:

"[A postdoctoral scholar is] an individual who has received a doctoral degree (or equivalent) and is engaged in a temporary and defined period of mentored advanced training to enhance the professional skills and research independence needed to pursue his or her chosen career path." [http://grants.nih.gov/training/q&a.htm?print=yes&#post]

See, for example, the Harvard and Duke postdoc definitions: <u>http://www.postdoc.harvard.edu/pap_definition.html</u> <u>http://www.postdoc.duke.edu/attachments/Duke%20University%20Postdoctoral%20Polic</u> <u>y%20revised%20July%201%202009.pdf</u>

(2) Classifications: Employee or non-employee

To maintain compliance with complicated federal tax code provisions and employment legislation, most AAU private universities classify their postdocs according to their funding source. Appointees funded from *university-administered* research grants, contracts, or other university sources are usually classified as "associates" and—the critical point—are **employees** of the university.

Other postdocs—called "trainees" (e.g., Washington University in St. Louis), or, more frequently, "fellows" (e.g., Brown, Case Western, Cornell, Rice, Yale) are funded from **training grants** to the university *or* from funding awarded to the trainee from an outside source. Postdocs in this second category receive compensation via a stipend and are not employees of the university.

A few private AAU institutions—e.g., Chicago, Harvard, and Penn—have established three categories of postdocs by distinguishing whether those paid via stipends are engaged in university research or "independent" research. Thus, at Chicago (see below), "postdoctoral scholars" are university employees, while "postdoctoral fellows" have been "awarded a fellowship or traineeship for postdoctoral study by an extramural agency and the fellowship or traineeship is paid through a University account." A third category, "postdoctoral fellow — paid direct" is used "when the Postdoctoral Researcher has been awarded a fellowship or traineeship for postdoctoral Researcher has been awarded a fellowship or traineeship directly to the Postdoctoral Researcher, rather than through the University."

Here are a few examples of the classifications:

(a) Brown University (two categories):

Brown University makes two types of postdoctoral appointments, Postdoctoral Fellows (PDF) and Postdoctoral Research Associates (PDRA). Both are intended to enhance and support the academic and research development of the appointee. Individuals holding postdoctoral appointments are supervised and mentored by a senior scholar, and are guaranteed freedom to publish. Since these appointments are intended to contribute to career development, they have limited terms.

It is important to note that Postdoctoral Research Associates are Brown employees, while Postdoctoral Fellows are not. This difference in employment status means that PDRAs receive salary and PDFs receive stipends; this requires different tax treatment. Moreover, although both PDRAs and PDFs have access to health and dental insurance through Brown, payment and withholding arrangements differ.

http://www.brown.edu/Administration/Dean of the Faculty/policies/PostDocs.html

(b) Princeton University (two categories):

The rank of postdoctoral research associate is typically used for postdoctoral appointments that are supported by external project grants or University (department, institute, center or program) funds. Researchers at this rank are expected to contribute their skills to the research programs of the appointing unit and/or supporting project.

Postdoctoral research fellows are supported by Princeton University-sponsored training grants or fellowships from private or public agencies and may also receive salary supplements from the University. The University may or may not be given the responsibility of administering the disbursement of their stipends; this will not affect their appointment rank. They carry out their research and training programs in University facilities using resources allocated by the sponsoring department, institute, center or program. Postdoctoral research fellows must have completed all requirements for the Ph.D. before their appointments can be approved.

http://www.princeton.edu/dof/policies/publ/res_spec/rules_and_procedures_toc/chapter_5/#comp000046402e1c000000323419fa

(c) University of Chicago (three categories):

The title of a Postdoctoral Researcher appointment is determined by the requirements of the funding agencies. a. Postdoctoral Scholar An appointment is made in the title "Postdoctoral Scholar" when (1) the agency funding the salary requires or permits the appointee to be a University employee, or (2) whenever University discretionary funds are used to support the position. In their capacity as Postdoctoral Researchers, Postdoctoral Scholars are University employees. b. Postdoctoral Fellow An appointment is made in the title "Postdoctoral Fellow" when the Postdoctoral Researcher has been awarded a fellowship or traineeship for postdoctoral study by an extramural agency and the fellowship or traineeship is paid through a University account. In their capacity as Postdoctoral Researchers, Postdoctoral Fellows are not University employees. c. Postdoctoral Fellow — Paid Direct An appointment is made in the title "Postdoctoral Fellow — Paid Direct" when the Postdoctoral Researcher has been awarded a fellowship or traineeship for postdoctoral study by an extramural agency and the agency pays the fellowship or traineeship directly to the

Postdoctoral Researcher, rather than through the University. In their capacity as Postdoctoral Researchers, Postdoctoral Fellows — Paid Direct are not University employees.

https://internationalaffairs.uchicago.edu/pdf/postdoc_researcher_policy.pdf

(d) Yale University (two categories):

Postdoctoral appointees may be appointed by or affiliated with a department or other academic unit authorized to make non-ladder academic appointments, such as the MacMillan Center and the Institution for Social and Policy Studies. There are two categories of appointees: Postdoctoral Fellows and Postdoctoral Associates . The difference arises from the requirements of the funding source. Appointees funded from Yaleadministered research grants, contracts, or other University sources in order to provide services related to the supported research are classified as Postdoctoral Associates; they are employees of the University even though they are considered trainees. Postdoctoral Fellows are also trainees, but they are not Yale employees. They may be funded either from training grants to the University or from funding awarded to the trainee from an outside source.

http://www.vale.edu/postdocs/documents/handbook/HBPolicies.pdf

(3) Benefits extended to postdoctoral scholars

Every institution differs in the benefits it offers to both its postdoctoral associates and fellows. The standard among private AAU institutions for associates is certainly provision of medical, dental, disability, vacation, tuition, and ordinary staff privileges (library, athletic facilities, etc.). Cornell is on the most generous end of the spectrum by extending retirement benefits, childcare grants, and tuition assistance to postdoctoral associates.

As for stipend-postdocs or fellows, again, benefits differ according to institution. All institutions I examined offer medical/dental benefits to their stipend postdocs engaged in university research—which is, as one might expect, the recommendation of the National Postdoctoral Association [see http://www.nationalpostdoc.org/]. At Brown and Rice, academic departments/centers are responsible for providing the funds for health and dental insurance for fellows at the level of individual participation, then fellows may elect to purchase higher levels of coverage. Duke extends benefits to fellows by mandating that they enter the university for one month as an "employee." Then, the fellows become eligible for University benefits by virtue of their status as "former employees." At Harvard, with its three categories of postdocs, fellows engaged in university research are accorded all benefits as associates except for flexible spending accounts, while "direct pay" postdoctoral fellows (those "engaged in research for their own benefit or that of a third party") are excluded from all benefits.

(4) Reporting lines

Many AAU private institutions have established offices of postdoctoral affairs. Some are lodged in the graduate school (e.g., Brown, Case Western, Northwestern). Others report to an office or vice provost for research (Cornell, Stanford, University of Pennsylvania, Washington University in St. Louis) or to the provost directly (e.g., Columbia, Harvard, University of Chicago, University of Southern California).

(5) Professional development

In keeping with the emphasis in the postdoctoral realm on "mentored advanced training," (the joint NSF and NIH definition), among the best practices in this area are establishing a special postdoctoral office that:

- publishes a postdoctoral scholars' handbook,
- establishes expectations for mentors and mentees,
- provides templates for individual development plans (IDPs),
- subsidizes a postdoctoral association with professional development and social opportunities for appointees, and
- organizes grievance procedures.

Case Western, Cornell, Harvard, Northwestern, and Yale are examples of institutions that appear to place a strong emphasis on providing and monitoring professional development opportunities for their postdocs.

(6) Recommendations: An active National Postdoctoral Association exists [see <u>http://www.nationalpostdoc.org/</u>] for both informational and advocacy purposes. The site contains useful definitions and data. An institutional membership (\$600/year) provides access to benchmarking data for all member institutions (nearly all AAU privates are members) as well as a "postdoctoral office toolkit," which contains information on developing a definition of a postdoctoral scholar and postdoctoral policies; providing benefits to postdocs; developing a postdoctoral scholars' handbook, and providing career development resources.

(7) List of postdoctoral scholars' websites for selected private AAU institutions:

Brown University:

http://www.brown.edu/Administration/Dean of the Faculty/policies/PostDocs.html

Case Western Reserve University http://www.case.edu/provost/gradstudies/postdoctorate/index.html

Columbia University http://postdocs.columbia.edu/

Cornell University http://www.postdocs.cornell.edu/index.php

Duke University <u>http://postdoc.duke.edu/</u> <u>http://postdoc.duke.edu/attachments/Duke%20University%20Postdoctoral%20Policy%20</u> <u>revised%20July%201%202009.pdf</u>

Harvard University http://www.postdoc.harvard.edu/index.html

Johns Hopkins University (appears to be decentralized administration for postdocs—each school responsible for its own postdocs) <u>http://www.jhu.edu/postdoc/AboutPostDoctoral/</u>

Northwestern University http://www.tgs.northwestern.edu/postdocaffairs/

Princeton University: http://whttp://www.princeton.edu/dof/about_us/ ww.princeton.edu/dof/policies/publ/res_spec/rules_and_procedures_toc/chapter_5/#co mp000046402e1c000000323419fa

Rice University http://graduate.rice.edu/default.aspx

Stanford University http://rph.stanford.edu/9-4.html

University of Chicago https://internationalaffairs.uchicago.edu/pdf/postdoc_researcher_policy.pdf

University of Pennsylvania http://www.upenn.edu/almanac/volumes/v54/n17/policy.html University of Southern California http://policies.usc.edu/policies/postdoctoral011003.pdf

Vanderbilt University (School of Medicine) http://bret.mc.vanderbilt.edu/postdoc/

Washington University in St. Louis http://artsci.wustl.edu/~jlcohen/Postdoc_Policy.doc

Yale University (printouts of website attached as one of the best examples of a private AAU postdoctoral affairs office) http://www.yale.edu/postdocs/index.html

		1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Notre Dame	Notre Dame	54	53	58	61	81	55	71	65	76	84	89	96	90	120	134	157	133	140	144	135
AU Privates	Brandeis	83	93	92	89	84	75	77	108	125	85	79	100	97	91	81	92	110	104	100	101
	Brown	103	75	95	90	106	93	88	99	120	135	155	187	81	106	94	95	89	207	200	197
	Cal Tech	298	296	331	282	302	297	300	300	322	446	471	497	495	529	527	528	496	533	493	620
	Carnegie Mellon	119	112	89	84	93	91	120	116	130	141	150	144	130	140	168	200	149	159	166	164
	Case Western Reserve	186	247	280	266	307	319	309	331	344	310	318	310	365	281	322	340	287	224	101	147
	Columbia	461	489	427	425	414	389	411	384	513	503	379	352	352	315	302	353	627	793	807	808
	Cornell	350	393	445	480	550	601	601	557	599	560	554	607	610	689	735	635	651	718	681	697
	Duke	340	349	335	365	371	386	459	438	476	453	609	571	646	635	665	679	696	755	771	759
	Emory	82	108	114	113	130	150	148	128	144	188	201	200	373	415	452	532	590	606	605	632
	Harvard	1,763	1,900	2,280	2,395	2,521	2,583	2,857	2,191	2,394	2,505	3,417	3,291	3,491	3,597	3,698	3,852	3,862	4,169	4,286	4,760
	Johns Hopkins	596	640	711	758	829	849	934	724	761	929	1,006	1,239	1,029	1,159	1,301	1,313	1,424	1,442	1,329	1,400
	MIT	433	445	408	433	416	435	464	494	481	514	456	498	794	828	986	940	879	851	971	1,037
	New York University	197	169	185	184	186	184	172	213	224	223	329	293	313	284	326	274	290	297	329	373
	Northwestern	260	240	233	258	260	255	329	280	165	149	258	249	206	251	156	234	351	301	318	381
	Princeton	247	251	274	258	261	266	289	302	293	309	319	315	320	339	348	340	368	349	340	349
	Rice	85	74	97	101	101	101	113	87	105	126	127	118	123	107	127	135	137	173	140	135
	Stanford	765	817	789	938	1,000	1,045	1,009	1,013	1,072	1,231	1,089	1,242	1,196	1,210	1,214	1,236	1,283	1,259	1,405	1,394
	Syracuse	53	43	58	47	43	41	43	55	41		35	38	28	27	33	36	51	43	49	36
	Tulane		24	31	44	49	52	71	67	68	61	56	64	70	67	86	95	99		53	85
	U. Chicago	259	414	414	404	300	195	164	340	362	364	281	348	355	361	392	335	311	313	312	286
	U. Penn	432	508	548	606	680	757	796	817	849	1,051	904	917	928	950	976	896	897	910	817	915
	U. Rochester	209	208	234	261	287	317	280	298	278	265	287	268	291	263	296	282	313	308	290	349
	U. Southern California	306	283	376	366	377	402	434	428	414	461	479	558	515	549	543	535	419	395	266	328
	Vanderbilt	182	218	207	235	264	258	252	287	349	351	398	406	397	408	439	504	568	507	505	495
	Washington in St. Louis	378	400	404	488	504	565	540	564	651	666	633	582	667	639	620	645	464	415	411	552
	Yale	688	749	832	897	839	831	870	878	882	756	742	696	544	551	1,046	1,018	998	1,032	978	988
	-																				

Total PostDoctoral Scholars at Notre Dame, AAU Privates, and AAU Aspirants

AAU Aspirant	Boston College	14	15	18	13	19	18	27	20	28	24	30	36	38	37	39	27	19	50	41	36
	Boston U.	37	32	33	36	46	51	121	112	123	126	98	183	84	77	102	139	123	159	258	296
	Dartmouth	48	58	62	77	89	94	87	94	110	95	73	115	107	98	138	159	235	224	203	193
	George Washington	25	29	11	31	33	17	35	37	16	16	37	50	53	55	50	43	25	8	19	27
	Georgetown	58	57	71	77	82	82	81	71	75	75	80	70	59	76	62	57	46	44	170	163
	Georgia Tech	40	51	47	66	67	70	59	76	101	33			98	64	34	31	31	197	208	187
	Rensselaer	55	67	69	72	67	61	63	75	55	58	56	46	72	64	75	74	59	68	95	66
	Tufts	193	180	213	219	267	265	282	279	254	264	257	243	435	428	407	331	344	347	350	119
	U. Miami	79	103	121	127	139	151	161	156	174	137	186	138	154	141	115	126	257	229	236	249
	Wake Forest	45	58	67	65	60	84	79	107	101	92	124	96	104	103	96	120	77	114	154	144

Year corresponds to the fall term of the academic year Source: NSF-NIH Survey of Graduate Students & Postdoctorates in Science & Engineering (cEX053A_nsfpostdoc.sps) Office of Strategic Planning & Institutional Research

		1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
	Notre Dame	54	53	58	61	81	55	71	65	76	84	89	96	90	120	134	157	133	140	144	135
	Max	1763	1900	2280	2395	2521	2583	2857	2191	2394	2505	3417	3291	3491	3597	3698	3852	3862	4169	4286	4760
AAU Privates	75th Percentile	432	437	424	468	482	533	521	541	578	560	595	579	637	638	718	671	685	793	798	796
Summary	Median	260	267	306	274	301	307	305	317	347	364	354	350	369	385	416	429	442	415	376	438
	25th Percentile	182	126	132	131	144	159	152	149	149	188	215	212	227	254	200	244	288	297	217	219
	Min	53	24	31	44	43	41	43	55	41	61	35	38	28	27	33	36	51	43	49	36

Data : Postdoctoral Appointments used in Provost Burish's 2006 presentation to the faculty. Source: The National Science Foundation (NSF) and National Institutes of Health (NIH) Survey of Graduate Students and Postdoctorates in Science and Engineering (graduate student survey). Universe of Institutions: Notre Dame, AAU Privates, AAU Aspirants

Constraints: Slides that appeared in Provost Burish's 2006 presentation to the faculty were sourced from The Center for Measuring University Performance. The Center sourced this data from webcaspar.nsf.gov. When updating the data for this presentation, Institutional Research compared The Center data with data directly sourced from webcaspar.nsf.gov. Over ten percent of the cells compared varied from one source to the other. Because of these differences, we have moved to sourcing the data directly from NSF.

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Postdoctoral Appointments Office of Research February 25, 2010

Liz Rulli, Assistant Vice President for Research Phone: 631-3072 E-mail Irulli@nd.edu

Position classifications administered through the Office of Research

SENIOR RESEARCH ASSOCIATE

Senior scholars from the academy or industry. Typically these individuals have extensive experience. Many have extensive publications in highly rated journals, may have served on prestigious boards, be Fellows (Science), some are former Deans.

POSTDOCTORAL RESEARCH ASSOCIATE

All have PhD (or equivalent) and are receiving a stipend from Notre Dame. These are intended for individuals to develop credentials for an academic appointment.

RESEARCH ASSOCIATE

Do not have PhD but have attained the minimum of a bachelor's degree (or equivalent) and are receiving a stipend from Notre Dame. Are <u>NOT</u> continuing degree-seeking students.

VISITING SCHOLAR

Must have a minimum of a bachelor's degree or equivalent. Some have PhD. For example, a professor on sabbatical with their own funding who is coming here to conduct research. Do NOT receive a stipend from Notre Dame. Usually doing their own research.

RESEARCH VISITOR

All are continuing degree-seeking students at another university. This may be graduate or undergraduate. May or may not receive stipend from Notre Dame.

SORIN POSTDOCTORAL SCHOLARS AND TEACHING SCHOLARS

Duties and responsibility is to teach and continue research and publish. Receive stipend. The appointments are normally limited to university of Notre Dame Graduates.

AAU Definition of a Postdoctoral Appointment

The Committee strongly recommends that the following definition of a postdoctoral appointment be universally adopted and consistently applied by all universities, government agencies, and private foundations involved in postdoctoral education:

DEFINITION OF A POSTDOCTORAL APPOINTMENT

- The appointee was recently awarded a Ph.D. or equivalent doctorate (e.g., Sc.D., M.D.) in an appropriate field; and
- the appointment is temporary; and
- the appointment involves substantially full-time research or scholarship; and
- the appointment is viewed as preparatory for a full-time academic and/or research career; and
- the appointment is not part of a clinical training program; and
- the appointee works under the supervision of a senior scholar or a department in a university or similar research institution (e.g., national laboratory, NIH, etc.); and
- the appointee has the freedom, and is expected, to publish the results

From: ASSOCIATION OF AMERICAN UNIVERSITIES COMMITTEE ON POSTDOCTORAL EDUCATION REPORT AND RECOMMENDATIONS MARCH 31, 1998

Non-faculty teaching and research positions as of October 2009

Position Title	Headcount
Postdoctoral Research Associate *	125
Senior Research Associate	5
Research Associate	21
Visiting Scholar	71
Research Visitor	37
Sorin Postdoctoral Scholar *	7
Teaching Scholar *	5
Total Non-faculty appointments	271
*Total Postdoctoral appointments	137

Comparison to AAU Definition

- Of I 37 Postdoctoral Appointments as of October 2009:
 - 8 have held these positions for 4 years; 3 for 5 or more years
 - 23 have received their PhD more than 5 years ago
 - Of those holding positions 5 years or less, 20 received PhD over 5 years ago
 - These numbers may omit Visiting Scholars who are postdoctoral fellows who have their own funding

NSF/NIH Survey of Graduate Students and Postdoctorates in Science and Engineering

- Postdocs are defined as meeting both the following qualifications:
- I) Hold a recent doctoral degree, <u>generally</u> awarded within the last 5 years
- 2) Has a limited appointment, <u>generally</u> no more than 5-7 years
 - Primarily for training in research or scholarship and
 - Working under the supervision of a senior scholar in a unit affiliated with your institution

NSF/NIH Survey of Graduate Students and Postdoctorates in Science and Engineering

- Of I37 post docs 98 will be reported in NSF Survey for Fall 2009
 - Reflects Science and Engineering disciplines per NSF definition
 - Does not currently include post docs in research centers (17)
- Historically data collected via departmental selfreporting