

The Postdoc Experience: National Trends and Local Resources

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The Postdoc and Scientific Workforce Trends

- *The scientific job market has changed dramatically over time*
- Research Universities 1972 → 2003:
 - Recent PhDs hired as full-time faculty: 60% → 31%
 - PhDs in postdoc positions: 22% → 48%
- Top reasons for taking a postdoctoral position:
 - ***Postdoc position generally expected in field 30.7%***
 - Additional training in doctorate field 21.8%
 - Association with a particular person or place 18.1%
 - Training outside doctorate field 14.2%
 - Other employment not available 11.6%



Who are the postdocs?

- ~50,000 postdocs in US
- Most in life/health sciences
- 42% women
- 78% caucasian (US-based postdocs)
- 60% postdocs international, 54% hold visas
- 58% aged 30-35, 10% > 40
- 69% married/partnered
- 34% have children



Postdoc Career Outcomes

- ~60% of postdocs intend to pursue a faculty career
- However, most postdocs aren't staying in academia
 - ~20% of postdocs obtain faculty jobs
 - 38% of PhD Scientists were in tenure track positions in 2001
- Rising overseas competition makes S&T workforce valuable
- Mixed Message: Lack of scientists? or Overproduction of PhDs?
 - ➔ Thinking flexibly about your career can take advantage of these opportunities!



NATIONAL
POSTDOCTORAL
ASSOCIATION

- Established in 2003 as the result of a convergence of national concern and interest in the postdoc experience
- The NPA is the only national organization representing the interests of postdoctoral scholars.
- Mission: To advance the U.S. research enterprise by maximizing the effectiveness of the research community and enhancing the quality of the postdoctoral experience for all participants.



What is the NPA?

- Member Organization
 - Run by and for postdocs
 - Institutions and postdoc allies are also members
- Many offerings for the individual postdoc and postdoc office & association:
 - National and Institutional Policy Advocacy
 - Programs & Resources
 - Meetings & Events



National Advocacy

- Regularly consults with NIH, NSF, DOE National Labs, OSTP, EPA, AAMC/GREAT Group
- New trends:
 - View of postdoc as a training position
 - Increasing importance of mentoring of postdocs
 - Support for postdocs transitioning to independence
 - Recognition of the importance of international scholars to the US S&T workforce



National Advocacy

- New NIH and NSF postdoc definition
 - “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.”
- American Association of Medical Colleges Compact between Postdoctoral Appointees and their Mentors
 - Recommends training components of a postdoc
 - Lays out roles and responsibilities of BOTH the PI and postdoc



National Advocacy

- New NSF mentoring provision
 - NSF grants must include a mentoring plan for all funded postdocs
 - Passed in 2007; NSF working on implementation
- NIH Clarification: Mentoring can be included in grant effort reporting
 - Where mentoring is “not readily separable” from other research activities



National Advocacy

- National Academies report the Gathering Storm
 - Highlights importance of international scholars to the US research enterprise
- NPA white paper on visa reform to US policy makers and agency leaders
 - "International Postdoctoral Researchers and Their Importance to the Advancement of U.S. Science, Technology and National Security"



Institutional Advocacy

- Foster policy change at the institutional level
 - Support Postdoc Offices (PDO) and Associations (PDA) nationwide
 - Foster new PDOs and PDAs
- New trends:
 - Rise of PDOs and PDAs -- Doubled since 2003
 - More defined postdoc policies
 - Including standardized classifications, minimum salaries
 - Establishment of postdoctoral training programs
 - Policies affecting postdocs become more data-driven
 - Sigma Xi Postdoc Survey: structured oversight → productive postdocs



Institutional Advocacy

- NPA Recommended Practices, portions have been adopted by over 160 institutions

Key among these are:

- Postdoc definition
- Standardized classification and appointment processes
- Postdoc handbook
- Recommended salary minimum
- Extend benefits to all postdocs
- Establish a training curriculum
- Offer career services
- Encourage IDP and performance evaluation



Online Resources

[Log-in](#)



NATIONAL POSTDOCTORAL ASSOCIATION

providing a national voice and seeking positive change for postdocs

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NPA Home

Save The Date! April 25th - 27th, 2008



The [NPA's Sixth Annual Meeting](#) will be held in Boston, MA. Tentative agenda, logistics and sponsorship information are now available.

NEWS

- ◆ [Seeking New NPA Leaders - NPA Board Call for Nominations](#)
 - ◆ [NPA Calls for Immigration Reform](#)
 - ◆ [White House Approves Postdoc Mentoring Provision](#)
 - ◆ [NIH Clarifies Policy on Postdoc Mentoring](#)
- [Past news items](#)

PROGRAM HIGHLIGHTS

- ◆ Include the NPA in your postdoc handbook! See new sample text in [Developing a Postdoctoral Fellows Handbook](#).
- ◆ View the recently updated [Institutional Policy Database](#).
- ◆ The Summer issue of [The POSTDOCKET](#) is now available to NPA members and subscribers.

Get Involved & Stay Informed

- ◆ Join the NPA: An investment in your future!
- ◆ Free Subscription
- ◆ Join the POSTDOCKET Editorial Team: Associate Editor Position Available
- ◆ Join the Marketing & Public Relations Committee
- ◆ Volunteer with the NPA
- ◆ Make a Donation

Facts, Figures and Quotes

- ◆ "I hope you will be the champion of the next generation of scientists." Dr. Elias Zerhouni, NPA Annual Meeting 2007.



Programs & Resources

- International Postdoc Survival Guide
 - with new Guide to Visas!
- Article Clearinghouse on Postdoc Issues
 - incl. articles on taxes and retirement for postdocs
- Toolkits for Postdoc Associations & Offices
- Database of Institutional Policies
- Data resources on postdocs
- Research integrity programs for postdocs



Programs & Resources

- NPA Job Board
- Active Committees *(a great way to get involved!)*
- Newsletter & E-mail Alerts
- Member Health Insurance Options
- Member Discounts:
 - Legal services for international postdocs
 - Lab Essentials publications from Cold Spring Harbor
 - Zipcar
 - and more



Meetings & Events

- Regional Events:
 - Postdoc Preparation Institutes
 - Legal Seminars for International Scholars
- Annual Meetings:
 - 5th Annual Meeting in Berkeley, last Spring 2007
Keynote: Elias Zerhouni, NIH Director
 - 6th Annual Meeting in Boston, April 25-27, 2008
Keynote: John Marburger, President's Science Advisor



NPA Overview: Membership

- **Argonne is an NPA Sustaining Member**

- Free affiliate memberships for Argonne postdocs and staff!
- Access to resources and web content
- Discounts on meetings & other services
- Receive e-alerts and news
- *Sign up online for immediate access*
http://www.nationalpostdoc.org/affiliate_membership





What Can You Do for Postdocs?

- Advocate for change within national funding agencies, professional societies and other organizations
- Get involved in the NPA!
- Use national policies to affect change locally
- Start a Postdoc Association!



What Can You Do for Postdocs?

- Advocate for change within national funding agencies, professional societies and other organizations
 - Talk about postdoc issues at professional meetings, agency review panels, etc.
 - Use the NPA's Postdoc Fact Sheet for talking points



What Can You Do for Postdocs?

- Get involved in the NPA!
 - Affiliate membership is free
 - Join an NPA Committee: Advocacy, Outreach, Resource Development, Meetings
 - Receive professional development skills from committee and advocacy work
 - Negotiating
 - Public speaking
 - Team building
 - Writing for an array of audiences
 - Leadership



What Can You Do for Postdocs?

- Use national policies to affect change locally

For Example:

- New mentoring policies at NSF & NIH advocate for postdoc mentoring
 - how can your institution foster mentoring?
- National data correlate structured environments with productive postdocs
 - advocate for structured services and training programs for postdocs
- *You'd be surprised what you can get if you ask!*



What Can You Do for Postdocs?

- Start a Postdoc Association (PDA)!
 - PDAs have been instrumental at many institutions at initiating dialogue and fostering positive change
 - Having a PDA is part of the “structured oversight” that is found to foster postdoc productivity



Starting a Postdoc Association

- What is a PDA?
 - An organization of postdoctoral scholars affiliated with a research institution
 - In contrast to an advisory body or council appointed by the administration, the association is democratically operated with leadership elected by postdocs



Starting a Postdoc Association

- What does it do?
 - Serves as an advocate and resource for postdocs
 - Holds regular meetings, professional development programs, social activities
 - Often consults with the administration on policies, programs and services for postdocs
 - Can be an important partner for a postdoc office



Starting a Postdoc Association

- What are the benefits of a PDA?
 - Postdocs speak with a common voice
 - Helpful for postdocs *and* administration
 - Meet other postdocs
 - Strengthen professional development & career opportunities for all postdocs
 - Foster positive change
 - Also, for PDA volunteers:
 - Broaden transferable skills
 - Learn more about how your institution works



Starting a Postdoc Association

- What do you need to start one?
 - Money? – Maybe not
 - Support from admin? – It helps
 - Engagement of postdoc volunteers? – *Absolutely*
 - And...maybe some advice/guidance
 - NPA has a toolkit on starting and maintaining a PDA
 - http://www.nationalpostdoc.org/pda_toolkit
 - NPA also offers consultation to new organizations
 - Look to other PDAs as resources
 - Including local resources: U Chicago PDA



What Can You Do for Yourself?

- Think about your career broadly
 - Even if headed for academia, make a “Plan B”
 - Transferable Skills Make You Flexible
 - Strengthen and enhance those skills
- Do Your Homework
 - Consult career resources like *ScienceCareers.org*
 - Informational Interviewing
 - Broaden your network



What Can You Do for Yourself?

- Take Advantage of Institutional Offerings
 - PDO (or PDA?) workshops
 - Participate in performance evaluation (horrible, but useful)
- Develop an Individual Development Plan (IDP)
 - Identifies professional development needs and career objectives
 - Developed in dialogue with your supervisor
 - Serves as both evaluation and mentoring tool
 - IDP can help you develop a “Plan B”
 - FASEB IDP Template: <http://opa.faseb.org/pdf/idp.pdf>



Take Away Message

- Join the NPA – *it's free!*
- Broaden your view of what a PhD can do
- Work with your PDO to help get the training and services you need
- Stay abreast of national advances for postdocs
- Consider starting/joining a PDA
- *Start an IDP today*



Thank You!



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<http://www.nationalpostdoc.org>