Postdoc Gender Issues:
 patching the Leaky Pipeline

Kathleen Flint Ehm, Ph.D.
National Postdoctoral Association

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www.nationalpostdoc.org www.nationalpostdoc.org/advance
NPA ADVANCE is a project to adapt and disseminate promising institutional practices that can help women postdocs successfully transition to faculty careers.

We provide:
- Summary of current data on postdocs and gender
- Clearinghouse of promising practices for institutions
- Technical assistance to institutions seeking to implement programs for postdoc women
- Forthcoming resource guide

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The Leaky Pipeline of Scientist Women

Figure adapted from Mary Ann Mason, based on study from Goulden, Mason & Frasch 2009, “Staying Competitive Patching America’s Leaky Pipeline in the Sciences.”
The Leaky Pipeline of Scientist Women

"...at every academic career milestone the proportion of women in science and engineering declines. ... In examining the transition into academic positions..., the declines are greatest in fields requiring a period of postdoctoral study"


Figure adapted from Mary Ann Mason, based on study from Goulden, Mason & Frasch 2009, “Staying Competitive Patching America’s Leaky Pipeline in the Sciences.”
Postdoc Demographics

- Most in life/health sciences (66%)
- Most aged 30-35 (58%)
- Most married or partnered (69%)
- Most are visa holders (57%)
- 42% are women
- 34% have children

DATA SOURCES: NSF Graduate Students and Postdoctorates in Science and Engineering: Fall 2007; Sigma Xi Postdoc Survey: postdoc.sigmaxi.org
#1 Reason: Family Formation

- Leading reason for career goal change: Issues related to children
  - For men: career advancement & compensation
  - Postdoc women with new children during postdoc twice as likely to change goal as:
    - postdoc men with new children, and
    - postdoc women with no kids/no plans for kids

- Dual-career concerns
  - More likely than men to make career concessions for partner

DATA SOURCES:
#2: Lack of Confidence & Isolation

- **Lack of Confidence**
  - Less confident they will obtain PI position and tenure, despite feeling their preparation is adequate\(^1\)
  - Lack of encouragement, mentoring and role models\(^2,3\)
- **Feelings of isolation/alienation\(^2\)**

Lingering Structural Problems

• Limited family-friendly benefits for trainees
  • Lack of maternity guidelines
    • Leave often negotiated case-by-case
    • Few institutions offer paid leave to trainees
    • Lack of awareness of unpaid leave protections
      • e.g. Title IX covers pregnancy discrimination
  • No “dual-career” assistance
    • Few incentives to “keep” contingent researchers
Lingering Structural Problems

• “Postdoc clock” vs. “Biological clock”
  • “Short enough, but long enough”
    • Family needs can cause delays
  • Delays can impact:
    • Funding durations
    • Fellowship & grant eligibility
    • CV evaluation
    • Both postdoc and PI
Lingering Structural Problems

• “Work, work, work” ethic often precludes professional development
  • Including mentoring

• Low salaries
  • Secondary issue for postdocs
  • Finances linked to: Childcare, mortgages, immigration, dual-career decision-making
How can we start to patch the leaky pipeline for postdocs?
What Can Institutions Do?

- MENTORING
  - Reward mentoring as “core” activity
  - Offer structured programs to encourage multiple mentors
    - Include mentoring training

- PROFESSIONAL & CAREER DEVELOPMENT
  - Negotiating, Networking, Grant Writing, Research & Career Planning
What Can Institutions Do?

- FAMILY-FRIENDLY POLICIES & BENEFITS
  - Clear guidance on:
    - Maternity/parental leave guidelines
      - Including paid and unpaid options
    - Flexible work arrangements
  - Provide assistance where possible:
    - Childcare services & subsidies
    - Provide postdocs access to dual-career assistance
What Can Institutions Do?

- FAMILY-FRIENDLY POLICIES & BENEFITS
  - Consider “permanently” hiring your own postdocs, which can help “dual-career” geographical constraints.
  - Include postdocs in any institution-wide assessment of climate for women.
Thank you!

Questions? Please contact me at: kflint@nationalpostdoc.org
DISCUSSION QUESTIONS

1. What are some strategies for offering “targeted” programs, such as those directed at women or underrepresented minorities?

2. How could institutions boost their Title IX compliance prior to an audit? Who might be the key players in such an implementation? How might we ensure that the concerns of postdocs are included?

3. How can institutions work with PIs to address concerns and foster proactive solutions for managing interruptions due to postdoc maternity leave? What are the key issues? What are some creative solutions?
4. How can institutions foster a culture where postdoc mentoring and professional development are considered “core” activities and not distractions from research?

5. What kinds of individual or organizational partnerships can postdoc offices develop to address the gender-related concerns of postdocs? Within the institution? External to the institution?

6. Other topic(s) of interest to you?