Institutional Strategies for Advancing Postdoc Women’s Careers

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NPA 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, 2010 Summit on Gender and the Postdoctorate presentation, “Staying Competitive: Patching the 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, 2010 Summit on Gender and the Postdoctorate presentation, “Staying Competitive: Patching the Leaky Pipeline in the Sciences.”
Important Caveats

1. **Factors, Not Reasons**

   - “Leaving” academia can include:
     - Opting against current job
     - Opting against next job
     - Inability to get next job

   - Often no “smoking gun” for attrition
     - Reasons can be incredibly complex
2. *Men leave the pipeline, too*

- Only 31% of *all* postdocs get TT jobs
- Women just leave at a greater rate
- Interventions aimed at women will likely “lift all the boats”

DATA SOURCES: [1] NSF *Science and Engineering Indicators 2008* (Fig 3-41);
Who are the postdocs?

- Most in biomedical sciences (67%)
  - 15% Physical Sciences
  - 11% Engineering
- Most aged 30-35 (58%)
- Most married or partnered (69%)
- Most are visa holders (57%)
- 38% are women
- 34% have children

The Leaky Pipeline of Scientist Women

So... why do they leak out?
#1 Factor: Family Formation

- Children
- Dual-career partners
  - Geographic constraints right when postdocs need mobility
- “Postdoc clock” vs. “Biological clock”
  - Long enough, but short enough
  - Family needs can cause delays
#2: Lack of Confidence & Isolation

- Lack of confidence they can succeed\(^1\)
- Lack of encouragement, mentoring and role models\(^2,3\)
- Feelings of isolation\(^2\)

DATA SOURCES:
*Sex Roles*, 58, 235
International Postdoc Women

- More extreme geographic constraints
- Visa concerns impact job search
  - Timing and geographic constraints
  - For self and dependents
Structural Issues with Postdoc

- “Itinerant journeyman” model conflicts with family formation
  - short; temporary; encourages mobility
- Limited family-friendly benefits for trainees
- Low salaries
- “PI as only mentor” model is limiting
- Neither student nor faculty, postdocs often feel “in limbo”
Navigating The Leaky Pipeline

What can we do?

- Funding Agencies
- Institutions
- Professional Societies
- Postdoc Supervisors/PIs
- Postdocs
What Can Institutions Do?

• POSTDOCTORAL POLICIES
  • Adopt NPA’s recommended institutional practices, if you haven’t already

• PROFESSIONAL & CAREER DEVELOPMENT
  • Negotiating, Networking, Grant Writing, Research & Career Planning, etc.
  • Use NPA Core Competencies to establish training curriculum
What Can Institutions Do?

• FAMILY-FRIENDLY POLICIES & BENEFITS
  • Clear guidance on:
    • Maternity/parental leave guidelines
    • Flexible work arrangements
  • Provide assistance where possible:
    • Affordable childcare services & subsidies
    • Provide postdocs access to dual-career assistance
What Can Institutions Do?

- MENTORING
  - Reward mentoring as “core” activity, even for postdocs
  - Offer structured programs to encourage multiple mentors outside of PI
    - Consider group-based mentoring
    - Offer structured mentoring activities
  - Offer mentor training
    - Raise awareness of postdoctoral policies, family-friendly policies
What Can Institutions Do?

- MENTORING (cont).
  - Foster mechanisms for regular feedback and communication with postdoctoral supervisor
  - Foster peer mentoring mechanisms
Thank you!

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