National Postdoctoral Association

14th Annual Meeting
Plenary II

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Managing Your Postdoc: Mastering the Core Competencies

Preparing Postdocs for a Career in Academics

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What are academic research orientated departments looking for in new hires

- “Doing great science in an exciting area.”
- “Broad impact beyond their own area.”
- “Good taste in problems to solve.”
- “Flexibility to evolve - like to see change from PhD and Postdoc work and still be successful.”
- “Collegial and collaborative, i.e. Interested in departmental colleagues research.”
- “Co-authorship on multiple papers beyond their own projects; indicates ability to attract and work with grad students and postdocs.”
- “Ability to convincingly communicate.”
NPA Core Competencies

1. Discipline-specific conceptual knowledge
2. Research skill development
3. Communication skills
4. Professionalism
5. Leadership and management skills
6. Responsible conduct of research

*Acquired personal skill demonstrated in ones ability to provide consistently adequate or high level of performance in a specific job function. (BNET business Dictionary)

** Requisite or adequate abilities or qualities (Webster)
1. Discipline Specific Knowledge

• Scientific method-define a novel problem, develop hypothesis and approaches, implement experiments, analyze data
• Communicate results (oral and written), project to the future and acquire funding.
• Critical abilities for academic career.
2. Research Skill Development

- Mastery of research methodology
- Adaptability to new technology
- Lab management
- Critical evaluation of literature
- Interdisciplinary, multidisciplinary, collaborative
3. Communication Skills

• Comprehensive writing skills
• Effective oral (speaking/teaching) skills
• Interpersonal skills
4. Professionalism

- Workplace
- Institution
- Disciplinary
- Societal
5. Leadership and Management Skills

- Team Work
- Motivating others
- Recruiting, hiring and firing
- Finances and budgeting
- Data management and record keeping
- Time management and establishing priorities
- Strategizing and visioning
- Delegating
- Diversity
- Mentoring
6. Responsible Conduct of Research

- Best practices
- Ethical norms and behaviors
- Training requirements
- 6 tenets of RCR
How to develop these skills and demonstrate that you have these skills?

• Individually
  • Identify your skills and experiences (IDP)
  • Work on skills for academic job market (cover letter, CV, interviews)
  • Publish, collaborate, independent funding

• Institutionally
  • Career services, workshops, seminars
  • NIH (BEST, NRMN and IRACDA) NSF (Advance, AGEP) etc. program offerings

• Extra-institutionally
  • Professional societies
  • Networking groups
  • Teaching experiences
  • Internships and externships
  • Technology coursework