Careers in Science: Alternatives and Opportunities Beyond the Bench

Karolinska Institute 8 November 2008
Career Development Framework

- Personal Social Development
- Educational Achievement and Lifelong Learning
- Career Planning and Management
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- Personal Social Development
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Career Planning and Management

# 1 Create and manage a career plan that meets your career goals.
Career Planning and Management

# 2 Use a process of decision-making as one component of career development.
Individual Development Plan for Postdoctoral Fellows

Individual Development Plans (IDPs) provide a planning process that identifies both professional development needs and career objectives. Furthermore, IDPs serve as a communication tool between individuals and their mentors. While IDPs have been incorporated into performance review processes in many organizations, they have been used much less frequently in the mentoring of postdoctoral fellows. An IDP can be considered one component of a broader mentoring program that needs to be instituted by all types of research institutions.

Goals
Help individuals identify:
- Long-term career options they wish to pursue and the necessary tools to meet these; and
- Short-term needs for improving current performance.

Benefits
Postdoctoral fellows will have a process that assists in developing long-term goals. Identifying short-term goals will give them a clearer sense of expectations and help identify milestones along the way to achieving specific objectives. The IDP also provides a tool for communication between the postdoctoral fellow and a faculty mentor.

Outline of IDP Process
The development, implementation and revision of the IDP require a series of steps to be conducted by the postdoctoral fellow and their mentor. These steps are an interactive effort, and so both the postdoctoral fellow and the mentor must participate fully in the process.

BASIC STEPS

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<thead>
<tr>
<th>For Postdoctoral Fellows</th>
<th>For Mentors</th>
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<tbody>
<tr>
<td><strong>Step 1:</strong> Conduct a self-assessment</td>
<td>Become familiar with available opportunities</td>
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<td><strong>Step 2:</strong> Survey opportunities with mentor</td>
<td>Discuss opportunities with postdoc</td>
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<td><strong>Step 3:</strong> Write an IDP, share with mentor and revise</td>
<td>Review IDP and help revise</td>
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<td><strong>Step 4:</strong> Implement the plan</td>
<td>Establish regular review of progress and help revise the IDP as needed</td>
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<td><strong>Revise the IDP as needed</strong></td>
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Career Planning and Management

# 3 Use accurate, current and unbiased career information during career planning and management.
Career Support

Q: How can AAAS advance my career?

A: Shaping a career in science has never been a solitary experience. Helping today's and tomorrow's scientists forge a successful career is one way we advance science and serve society.

AAAS career development programs provide information, training, and opportunities for collaboration among scientists, policy makers, professional organizations, non-profits, government, and industries regardless of geographic origin or career stage.

Career Development Resources
- Science Careers: Career Development Advice
- Communicating Science: Tools for Scientists and Engineers
- Tips for Graduates: Advice on Job Search, Resume Writing and More
- Fellowship, Internship, and Funding Resources
- Networking: Scientists Network
- Science Careers Forum

Fellowships & Internships
- Center for Science, Technology, and Congress Internship
- Center for Science, Technology, and Society Policy Internship
- EDF-UNICEF U.S. Internship for Students with Disabilities
- Media, Science and Engineering Fellows
- Next Wave Graduate Science Research Scholars
- Minority Science Writers Internship
- Science and Human Rights Internship
- Science & Technology Policy Fellows
- Science News Writing Internship
- Fellowships for Scientists from Developing Regions
- Scientific Freedom, Responsibility, and Law Program Internships

Job Search Assistance
- Employment at AAAS
- Science Careers Jobs

Meetings and Events
- Scientific Meetings Calendar
The Job Market

Hydrogeologists Tap into Demand for an Irreplaceable Resource
Great disciplinary collaborations and a steady stream of new environmental problems give groundwater experts plenty of work to do.

In the Geosciences, Business Is Booming
Flat federal funding means tighttimes in academia, but jobs abound in the petroleum, mining, and environmental consulting industries.

Geoscientists in High Demand in the Oil Industry
The next generation of petroleum geologists will face unique challenges in meeting the world's energy demands.

Taken for Granted: The Fat Lady Sings
After the latest chapter in a long battle, employees at a steel plant in Pennsylvania are still waiting to join the United Auto Workers union.

A Scientist in the Service of Clean Sports
Olympian and immunologist Gaspard Baranescu found a winning match for his scientific and sporting interests at the World Anti-Doping Agency.
Career Planning and Management

# 4 Master academic, occupational and general employability skills in order to obtain, create, maintain, and/or advance your employment.
Career Planning and Management

# 5 Integrate changing employment trends, societal needs and economic conditions into your career plan.
Academic Career Options

- Primary, Elementary, and Secondary School
  - Teaching, Administration, Curriculum Development
- School System Administration
  - Curriculum and Instructional Development
  - Research, Evaluation and Program Administration
Academic Career Options

Colleges and Universities
- Traditional Faculty Career
- Program Administration
- Curriculum and Instructional Development
- Research and Grant Administration
- Student Services

National / Transnational Systems
- EU Bologna Process
- Ministry of Education and Research - Sweden
Corporate / Private Sector Options

Industrial Research and Development
Consulting
Investment & Finance
Intellectual & Property Law
Science Writing & Journalism
Editing & Publishing
Sales, Marketing, Product Support
Human Resources
Government Sector Options

Patent Examination
Scientific Regulation
Public Policy
Program Administration
Agency Leadership & Management
Non-Profit / NGO Sector Options

Research & Evaluation
Scientific Regulation & Monitoring
Public Policy Advocacy
Program Administration
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Science Writing & Journalism
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SHAPING A CAREER IN SCIENCE HAS NEVER BEEN A SOLITARY EXPERIENCE