Individual Development Plan

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 graduate students. 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

Students 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 student and a faculty mentor.

Outline of IDP Process

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

BASIC STEPS

	… for Students	*… for Mentors*
Step 1:	Conduct a self assessment	Become familiar with available opportunities
Step 2:	Survey opportunities with mentor	Discuss opportunities with student
Step 3:	Write an IDP, share IDP with mentor and revise	Review IDP and help revise
Step 4:	Implement the plan Revise the IDP as needed	Establish regular review of progress and help revise the IDP as needed

Execution of the IDP Process

… for Students

Step 1. Conduct a Self Assessment.

- Assess your skills, strengths and areas which need development. Formal assessment tools can be helpful. (Examples can be found in *Resources: Self Assessment* at the end of this document).
- Take a realistic look at your current abilities. This is a critical part of career planning. Ask your peers, mentors, family and friends what they see as your strengths and your development needs.
- Outline your long-term career objectives. (For useful information see *Resources: Career Opportunities* at the end of this document). Ask yourself:
  -What type of work would I like to be doing?
  -Where would I like to be in an organization?
  -What is important to me in a career?

Step 2. Survey Opportunities with Mentor.

- Identify career opportunities and select from those that interest you.
- Identify developmental needs by comparing current skills and strengths with those needed for your career choice.
- Prioritize your developmental areas and discuss with your mentor how these should be addressed.

Step 3. Write an IDP.

The IDP maps out the general path you want to take and helps match skills and strengths to your career choices. It is a changing document, since needs and goals will almost certainly evolve over time as a postdoctoral fellow. The aim is to build upon current strengths and skills by identifying areas for development and providing a way to address these. The specific objectives of a typical IDP are to:

- Establish effective dates for the duration of your graduate programs.
- Identify specific skills and strengths that you need to develop (based on discussions with your mentor).
- Define the approaches to obtain the specific skills and strengths (e.g., courses, technical skills, teaching, supervision) together with anticipated time frames.
- Discuss your draft IDP with your mentor.
- Revise the IDP as appropriate.

Step 4. Implement Your Plan.

The plan is just the beginning of the career development process and serves as the road map. Now it's time to take action!

- Put your plan into action.
- Revise and modify the plan as necessary. The plan is not cast in concrete; it will need to be modified as circumstances and goals change. The challenge of implementation is to remain flexible and open to change.
- Review the plan with your mentor regularly. Revise the plan on the basis of these discussions.

…for Mentors

Step 1. Become familiar with available opportunities.
By virtue of your experience you should already have knowledge of some career opportunities, but you may want to familiarize yourself with other career opportunities and trends in job opportunities (refer to sources such as National Research Council reports and *Science* career reviews; see also *Resources: Career Opportunities* at the end of this document).

Step 2. Discuss opportunities with student.
This needs to be a private, scheduled meeting distinct from regular research-specific meetings. There should be adequate time set aside for an open and honest discussion.

Step 3. Review IDP and help revise.
Provide honest feedback - both positive and negative - to help students set realistic goals. Agree on a development plan that will allow students to be productive in the laboratory and adequately prepare them for their chosen career.

Step 4. Establish regular review of progress.
The mentor should meet at regular intervals with the student to assess progress, expectations and changing goals. On at least an annual basis, the mentor should conduct a performance review designed to analyze what has been accomplished and what needs to be done. A written review is most helpful in objectively documenting accomplishments. (An example is provided as an attachment – this can be modified to fit the needs of the student and mentor).

Sample Annual Review

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*Resources**

Self Assessment

Fiske, P. S. (2001). Put Your Science to Work: The Take-Charge Career Guide for Scientists. Washington, D.C.: American Geophysical Union.

Bolles, R. N. (2002). What Color is your Parachute? A Practical Manual for Job-Hunters and Career-Changers. Berkeley, Calif.: Ten Speed Press.

The Postdoc Experience

Kern, S. (2002). Fellowship Goals for PhDs and MDs: A Primer on the Molecular Biology Postdoctoral Experience. *Cancer Biology and Therapy* 1: 74-75.

National Academy of Sciences. (2000). Enhancing the Postdoctoral Experience for Scientists and Engineers: A Guide for Postdoctoral scholars, Advisers, Institutions, Funding Organizations, and Disciplinary Societies. Washington, D.C.: National Academy Press.

Career Opportunities

American Association for the Advancement of Science. Science's Next Wave. [On-line]. Available: http://sciencecareers.sciencemag.org/

The Scientist. Archives: Profession. [On-line]. Available: http://www.the-scientist.com/fragments/careers/careers_about.jsp

The Chronicle of Higher Education. Career Network Advice Columns. [On-line]. Available: http://chronicle.com/jobs/

Federation of American Societies for Experimental Biology. (1997). Graduate Education: Consensus Conference Report. Bethesda, M.D. FASEB. [On-line]. Available: http://opa.faseb.org/pages/Publications/educationreport.htm

Heiberger and Vick, eds. (1996). The Academic Job Search Handbook (2nd ed.). University of Pennsylvania Press.

Reis, R. M. (1997) Tomorrow's Professor. Preparing for Academic Careers in Science and Engineering. New York: IEEE Press. 1997.

On-line Listserv: Tomorrow's Professor. Available: http://ctl.stanford.edu/Tomprof/index.shtml

Barker, K. (2002). At the Helm: A Laboratory Navigator. Cold Spring Harbor, NY: Cold Spring Harbor Laboratory Press.

Resources on Non-Academic Careers

Robbins-Roth, C. ed. (1998). Alternative Careers in Science. Leaving the Ivory Tower. San Diego, Calif.: Academic Press.

Kreeger, K. Y. (1999). Guide to Nontraditional Careers in Science. London: Taylor & Francis Group.

***these resources are not considered endorsements, per se*