

Individual Development Plan for Postdoctoral Research Associates

The **Individual Development Plan (IDP)** provides a planning process that identifies professional development needs and career objectives for postdoctoral research associates. Furthermore, the IDP serves as a communication tool between postdocs and their mentors.

Goals of the IDP

IDPs help postdocs identify:

- Short-term needs for improving current performance; and
- Long-term career options they wish to pursue and the necessary tools to meet these

Benefits of the IDP

- Identifying short-term goals will give postdocs a clearer sense of expectations and help identify milestones for achieving specific objectives.
- Postdocs will have a process that assists in developing and achieving long-term career goals.
- The IDP promotes communication between the postdoc and the principal investigator (PI).

The 2005 Sigma Xi postdoc survey suggested that the postdoctoral experience is most successful when expectations and goals are established early. High satisfaction, positive postdoc-advisor relations, reduced incidences of conflict, and increased research output were all correlated with whether or not postdocs and their advisors met early to discuss research goals.¹

Local results from the comprehensive 2005 Sigma Xi survey indicated that 10% of TSRI postdoc respondents set up a formal, written plan of research and training expectations with their P.I. at the beginning of their appointment.² Data from 2005-2006 informal entrance surveys conducted by the Postdoctoral Services Office showed similar findings. Results from exit surveys conducted in 2005-2006 indicate many postdocs did not report “met goals for postdoctoral experience” as a reason for leaving TSRI. Without goals and expectations discussed at the onset of, or during, the postdoctoral appointment, many postdocs may be unable to accurately assess their own progress. Unfocused or unclear career goals and lab expectations could also contribute to unmotivated and unproductive postdocs; the aim of the IDP is to mitigate these troublesome issues.

The National Academies have also addressed the idea of research plans formed between postdocs and P.I.s. In their 2000 report, the Committee on Science, Engineering, and Public Policy stated:

¹Davis, G. (2005). *Doctors without orders: Highlights of the sigma xi postdoc survey*. Retrieved July 19, 2006, from <http://www.postdoc.sigmaxi.org>

² Results available from http://www.scripps.edu/services/sof/other/PostdocSurvey/scripps/all/About_You.html

The postdoc and advisor should meet early and write down at least a rough research roadmap, including the extent to which the two will collaborate: What are the postdoc's obligations to the lab? How much support and oversight can the postdoc expect? How long should the project take? What are realistic goals: publication? Other benchmarks? How long is funding guaranteed, and how likely is renewal? This exercise is easy to neglect or avoid in the rush of new beginnings. But clear terms of appointment are essential to prevent later misunderstandings, and they should be established as early as possible.³

Outline of the IDP process

The development, implementation, and revision of IDPs require a series of steps to be conducted by postdocs and their mentors. These steps are an interactive effort, and so both the postdoc and the mentor must participate fully in the process.

How to complete the IDP

<i>Basic Steps</i>	<i>...For Postdocs</i>	<i>...For Mentors</i>
Step 1	Conduct a self-assessment	
Step 2	Write an IDP Share IDP with mentor and revise	Review IDP and help revise
Step 3	Implement the plan Revise IDP as needed	Establish regular progress review
Step 4	Survey opportunities with mentor	Discuss opportunities with postdoc

Execution of the IDP Process (for Postdocs)

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 on the Postdoctoral Services Office website). Some of the skills and strengths that are relevant to career decisions in research include: technical abilities (breadth and depth of expertise), writing skills, oral communication skills, organizational ability, leadership, self-motivation, decision-making, creativity, work ethic, problem solving abilities, knowledge (depth and breadth), perseverance, ability/desire to take risks.
- 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. 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?

³ Committee on Science, Engineering, and Public Policy (2000). *Enhancing the postdoctoral experience for scientists and engineers*. Washington, DC: National Academies Press.

Step 2. 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, skill levels and goals will almost certainly evolve over time as a postdoc. 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:

- Identify specific skills and strengths that you need to develop (based on discussions with your mentor). Mentors should provide honest feedback - both positive and negative - to help you set realistic goals.
- Identify a research project and necessary level of commitment to match your abilities and career goals.
- Define the approaches to obtain both the research goals you have chosen and the specific skills and strengths (e.g., courses, technical skills, teaching, supervision) you need to acquire and/or build upon.
- Define milestones and anticipated time frames for goal acquisition.
- Discuss your draft IDP with your mentor. Agree on a development plan that will allow you to be productive in the laboratory and adequately prepare you for your chosen career.
- Revise the IDP as appropriate.

Step 3. Implement the 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 to assess progress, expectations and changing goals. Revise the plan on the basis of these discussions.

Step 4. Survey potential career paths.

- Identify career opportunities and target those that interest you for further exploration.
- With your mentor, assess how your current skills and abilities match the competencies required of your chosen career(s).
- As necessary, revise your IDP to prioritize your developmental areas and discuss with your mentor any skills or strengths you need to further develop before successfully transitioning.

Individual Development Plan for Postdoctoral Research Associates

The following is a template for an Individual Development Plan (IDP) modeled after IDPs from the Federation of American Societies for Experimental Biology and Vanderbilt University Biomedical Research Education & Training. While the actual format of the IDP is entirely up to you (e.g., short Q/A outline, longer narrative, etc.), you are encouraged to consider the example themes & questions presented below.

Note the following template assumes that annual reviews are scheduled between you and your P.I. You should talk to your advisor about scheduling regular meetings to discuss your research progress and career plans. For your first year at TSRI, consider scheduling a 6-month (or sooner) check-in with your P.I. as well.

Basic Information

Name of Postdoctoral Research Associate: _____

Department: _____ P.I.: _____

Date: _____

Career Goals

- What are your long-term career goals? Describe your timeline for achieving them.
- What research activity and other training are needed and best suited towards obtaining your career goals?
- What are your short-term career goals? Describe your timeline for achieving them.
- In reference to your career goals, what resources can your PI provide or help you find?
- When will you begin a job search? If you do not know, estimate.

Research Project(s)

- Describe the aims and experimental approaches of your research project(s). How does this project fit into a bigger picture of work in this area? What is the anticipated significance of your contributions?
- What new skills and expertise are required for success?
- How does this project fit into your plans for the future? What types of skills and side projects can you develop to help you become independent?

Plans for Up-Coming Year

- List your Research Project Goals for the up-coming year, identify milestones and project time lines for completion. If possible, think in terms of publishable papers.
- Anticipated publications to submit in the up-coming year (indicate projected titles and major take-home messages):
- Fellowship or other funding applications planned for the up-coming year:
- Anticipated collaborations to establish in the up-coming year:
- What are your plans for improving your scientific writing skills and your oral presentation skills in the up-coming year?
- Anticipated research techniques to learn in the up-coming year:

- Anticipated meeting and workshop attendance in the up-coming year. What will you be presenting?
- Anticipated other professional training for the up-coming year (e.g. teaching, course work, etc.):
- How can your PI help you achieve your goals for the upcoming year? What do you want/need from your PI/mentor?

Annual Progress Report

- List or briefly describe major research accomplishments this year (do not include publications or presentations here):
- List new techniques/expertise acquired this year:
- List references for publications submitted or published this year. List references for abstracts that were presented at meetings. In each case, underline your name in the author list.
- List grants/fellowships applied for this year:
- List grants/fellowships received for this year:
- List honors/awards received this year:
- List intellectual and/or technical collaborations established or continued this year:

- List accomplishments this year in other aspects of career development (e.g. SOF event organization, committees, career workshop attendance, course work, etc.). Include teaching/supervising graduate students or training new postdocs in the laboratory:
- Describe and explain your level of satisfaction with your research progress in the past year:
- Describe and explain your level of satisfaction with other aspects of your career development in the past year: