

What is an IDP?

The IDP (Individual Development Plan) is a planning and communication tool used by the student, his/her advisors, and the NRT faculty to:

- 1) self assess students' skills, interests, and values,
- 2) identify career options that best match students' skills, interests, and values,
- 3) set individual short- and long-term career and professional training goals,
- 4) monitor progress toward the implementation of short- and long-term career and professional training goals
- 5) assess the effectiveness of NRT training elements in helping trainees achieve professional and career goals

How should I use it?

Upon entering the NRT program, trainees will be first asked to complete the AAAS Individual Development Plan IDP (a.k.a., MyIDP), following the template shown here:

<http://myidp.sciencecareers.org/>. After completing MyIDP, students will be asked to also complete the IDP template shown below in this document. We refer to the template below as the *NRT-IDP*. The NRT-IDP was adapted from the OSU post-doctoral scholar IDP. You can find more information about the OSU post-doc IDP here:

<http://gradschool.oregonstate.edu/postdocs/individual-development-plan>.

Why do I need to work on two IDPs templates?

Both the NRT IDP and MyIDP refer to the six competency skills for a scientist that were assembled by the National Post-doctoral Association (<http://www.nationalpostdoc.org/?CoreCompetencies>) to assess students' skills, interests, and values. Additionally, the NRT-IDP includes competency skills related to professional goals of our program, namely *cross-disciplinary knowledge and communication of NRT core concepts, development of collaborative trans-disciplinary research skills¹*, and proficiency with concepts and practices of *Diversity, Equity and Inclusion*.

While the MyIDP template has a user-friendly portal to easily navigate through the questionnaire, store responses, and evaluate them, we think that it falls short of monitoring

¹ By cross-disciplinary we refer to some unspecified level of merging across disciplines. Multidisciplinary is the simplest level of merging, without clear linkages across disciplines. Interdisciplinary is an intermediate level of merging, often involving two-way interactions across disciplines (e.g., from math to biology and from biology to math). Trans-disciplinary is the highest level of disciplinary merging, where boundaries across disciplines are no longer recognizable (e.g., mathematical biology), often applied to an applied problem.

progress toward the accomplishment of your short- and long-term career and professional training goals via the NRT Program. Also, the AAAS MyIDP is focused on academics. In contrast, the NRT-IDP template highlights resource planning and monitoring your progress throughout graduate school here at OSU. Additionally, it helps to set up communication and expectations with your mentor and focus on professional skills that are germane, and of interest to a broader group of students and professionals (i.e., not only academics). This is why we ask you to fill both templates.

Where can I get help to work with the IDP?

Your faculty mentor should be the primary resource in helping you through the IDP. In addition, we have assigned a NRT faculty member² to each research cluster (students + faculty mentor). The NRT faculty will:

1. help you walk through the NRT IDP and MyIDP templates
2. provide insight on the disciplinary and professional training available through the NRT program
3. in collaboration with the NRT external evaluator, use the IDP as an assessment tool of the NRT program activities

We also have a 1.5 hour IDP primer during the IFC, and we require that your faculty mentor attend that session to work on the NRT IDP with you.

When should I start working on the IDP?

The sooner, the better. Ideally, individual trainees and their mentor(s) will work through MyIDP before attending the GEO 508 Intensive Field Course (IFC). During the first day of the IFC, trainees will receive additional background information about IDPs, and will have an opportunity to start filling in the NRT-IDP.

Bear in mind that the IDP is an evolving document. We ask you to return a copy of your IDP two weeks after the end of the IFC. That will be your first attempt at this. Later in the year, during the Winter Benchmark meeting³, we will ask you and your faculty mentor to check progress on the NRT-IDP so that you can update it with new knowledge acquired during the academic year.

² Assignment is TBD

³ These are meetings between the faculty mentor, the student and one or two NRT representative meant to check student progress in the NRT program

NRT-IDP template

Before answering these questions we require that each student goes through the steps of the AAAS Individual Development Plan (MyIDP, <http://myidp.sciencecareers.org/>) and becomes familiar with the six competency skills based on the National Post-Doctoral Association (<http://www.nationalpostdoc.org/?CoreCompetencies>). If you would like, you can print out your answers from the MyIDP portal for your own use.

A. Career Goals (to be filled out by the NRT trainee).

- What are your short-term career goals? Describe your time line for achieving them.
- What are your long-term career goals? Describe your time line for achieving them.
- When will you begin a job search? If you do not know, estimate. If you have already begun a search, briefly describe.

B. Research Project(s) (to be filled out by the NRT trainee and validated by the mentor(s))

- Briefly describe the aims and experimental approaches of your current research project(s), including the NRT interdisciplinary chapter and other chapters done in fulfillment of your graduate degree at OSU. At the beginning of the NRT program you may not yet have a clear idea of what your interdisciplinary project will look like. That is OK, you will be able to refine the project idea later in the program.

C. Expectations for Contribution to Research Project(s) (to be filled out by the mentor(s) and validated by the trainee)

- Please provide a detailed list. Examples: supervise 1 undergraduate student on independent research project that will produce a poster; complete experiment xx described on pages yy-zz of the student's proposal; complete data analyses for experiments xx and xx and submit summary to mentor; etc.

D. Professional Development Plan (to be filled out by the trainee and mentor(s) in collaboration). See Tables below.

For more information and links to resources, download the complete [Core Competencies](#) document.

Table 1. Competency skills of a scientist (in your discipline)

Competency	Goals from your own discipline (What do you, the trainee, expect as outcomes?)	Expected activities/efforts of trainee (For each goal, think about how you will achieve it. By which mechanism(s)?)	Responsibilities of faculty mentor(s) (For each goal, think about how you will support your student to achieve it. By which mechanism(s)?)
(1) Discipline specific conceptual knowledge (gain understanding of a new theory or concept, develop fluency with respect to a methodology/method of analysis, learn how to use a new computational tool)			
(2) Research skill development (includes experimental design, new measurement or analysis technique, data analysis, peer review process)			
(3) Communication skills (includes writing publications and grants, CV, teaching portfolio, job interview skill, poster and oral presentations, teaching, networking, with diverse audiences)			

<p>(4) Professionalism (can include interpersonal relationships, multicultural competency, institutional obligations, service to institution and society, diversity, equity and inclusion training)</p>			
<p>(5) Leadership and management skills (can include staff and project management; time management; budget preparation and management; strategic planning, serving as mentor and role model; running meetings; delegating responsibilities)</p>			
<p>(6) Responsible conduct of research (can include data sharing and ownership; authorship criteria; human subjects, animal research and IRB; scientific misconduct – identifying and reporting; conflicts of interest)</p>			

Table 2. Competency skills of an OSU NRT program participant

Competency	Goals (what do you, the trainee, expect as outcomes?)	Expected Activities/Efforts of trainee (for each goal, think about how you will achieve it. By which mechanism(s)?)	Responsibilities of NRT mentors(s) (For each goal, think about how you will support your student to achieve it. By which mechanism(s)?)
<p>(1) Cross-disciplinary conceptual knowledge of the OSU NRT core concepts (includes a) Coupled Natural Human systems - CNH b) Risk and Uncertainty Quantification and Communication – R&U c) Analyses of Data as Evidence- DE)</p>		<p>Examples: Geo 508, MRM series, classes which constitute the minor</p>	
<p>(2) Development of collaborative research skills (can include learning about challenges and rewards of collaborative working structures; how alternative disciplinary perspectives on a concept affect group formation; and applying those alternative perspectives to produce collaborative research)</p>		<p>Examples: - Complete MRM professional series - Engage in internship with</p>	

<p>(3) Cross-disciplinary communication (can include writing publications, posters and oral presentations; networking, etc. regarding the three core concepts and the complexity of cross-disciplinary issues to diverse audiences)</p>		<ul style="list-style-type: none"> - Attend professional training on communication provided by OSU Graduate School 	
<p>(4) Diversity, equity and inclusion (includes achieving competency in communication in groups composed of multicultural and multidisciplinary disciplinary experts; exploring implicit biases; developing cultural sensitivity and awareness)</p>		<p>Example:</p> <ul style="list-style-type: none"> - Engage in internship with - Actively participate in guided self-reflection activities during IFC - Attend and engage with all diversity, equity, and inclusion elements of the MRM professional series - Demonstrate respect within NRT groups (students, faculty, administrators, etc.) 	<p>Example:</p> <ul style="list-style-type: none"> - Establish an environment of trust and openness within student groups and across student-mentor - Co-create clear guidelines for meeting (process, interpersonal relationships, mediation, conflict resolution, etc.)