PhD Student: Dissertation

Your Name:

Dissertation Advisor:

Date:

Setting goals and taking stock of your accomplishments are essential to meaningful progress in both scientific training and professional development. An important tool toward this end is the Individual Development Plan (IDP). The IDP is intended to help you *i*) design, monitor, and measure progress in training, *ii*) articulate short- and long-term goals, and *iii*) identify relevant developmental activities. Your advisor, or your advisory committee, is an invaluable resource in this process, providing feedback and helping you to generate an action plan.

HOW TO COMPLETE YOUR IDP

1. Step back and assess.

It's easy to lose sight of the big picture. An IDP is designed to provide perspective – perspective on your progress as a researcher, on your development in general, and your goals. The more thought given the IDP, the greater the return, so be sure to give sufficient time and reflection to the process.

2. Download this form to complete the first three sections.

This IDP form is a fillable PDF document. The first three sections cover your dissertation research, research skills, and professional development.

3. Use the link within this form to access the fourth section ('Achievements').

The fourth section of the IDP pertains to your achievements over the past year. You'll need to access and complete this section online. Once completed, this section will be accessible to your advisor(s), graduate group, and the BGS office. It will also be used by you to certify that all but the Action Plan has been completed and that a time has been scheduled to meet with your advisor(s) to complete the Action Plan.

Note: BGS requires certification by August 1. Your graduate group may require you to complete the IDP before this date, however, for example to fit advisory timelines.

4. Complete the Action Plan.

With the Achievements section now available to your advisor(s), please send her or him a copy of the IDP form with the completed first three sections. You will review all the sections and complete the last page of the form, the Action Plan, together.

Who sees your IDP?

• The IDP, with the exception of the 'Achievements' section (below), is a confidential document between you and your advisor. If you wish, you may share the IDP with others, for example your graduate group chair, thesis committee, other faculty, and students – this is your choice.

• The Achievements section is completed online through a link in this document. The information, as part of the IDP, will be included with what you share with your advisor. It will be available to your graduate group and the BGS office as well.

| DISSERTATION RESEARCH | RESEARCH SKILLS | PROFESSIONAL DEVELOPMENT | ACHIEVEMENTS | ACTION PLAN |

PhD Student: Dissertation

Student: [Student Name]
Advisor: [Advisor Name]
Date:

This section of the IDP focuses on the objectives and challenges of your dissertation research. Its primary intent is to define the details and scope of what is needed for continued progress and eventual completion of your work.

OBJECTIVES RELEVANT TO DISSERTATION RESEARCH

Do you have a defined path and/or endpoint for your dissertation work? Discuss briefly.

When do you expect you will finish the key experiment(s)/project(s)?

What are your near-term research goals? For each goal, specify your confidence in attaining it and any areas where you feel you need additional training or collaboration.

Is there anything your advisor(s), or other mentors, can do differently to help?

CHALLENGES RELEVANT TO DISSERTATION RESEARCH

Describe any unusual or unanticipated challenges you experienced this year in trying to accomplish the goals described in last year's document.

What actions did you take in response to these challenges, and have these actions allowed you to overcome the challenges?

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The attainment of skills relevant to scientific inquiry is at the heart of PhD training and is central to the pursuit of career opportunities following graduation. Use this worksheet to rank your skills **from weak (1) to strong (3)** as you currently perceive them relative to those you think a student at your level should have; **leave blank if not applicable**. Mark as well any skills you wish to target for improvement over the next year.

Detailed resources for many of the skills itemized here can be found at the BGS Career Development website.

RESEARCH SKILLS & SCIENTIFIC THINKING

	1	2	3	Target skill
Broad-based knowledge of science	○	○	○	☐
Knowledge of current discipline	○	○	○	☐
Critical reading of scientific literature	○	○	○	☐
Experimental design	○	○	○	☐
Programming skills	○	○	○	☐
Interpretation of data	○	○	○	☐
Computational analysis	○	○	○	☐
Statistical analysis	○	○	○	☐
Troubleshooting	○	○	○	☐
Data management (notebook)	○	○	○	☐
Creativity and innovation	○	○	○	☐
Initiative/independence	○	○	○	☐
	○	○	○	☐

WRITING

	1	2	3	Target skill
Grammar/structure	○	○	○	☐
Clarity/precision/intent	○	○	○	☐
For a research proposal	○	○	○	☐
For a scientific publication	○	○	○	☐
	○	○	○	☐

ORAL COMMUNICATION

	1	2	3	Target skill
One-on-one	○	○	○	☐
Lab meetings	○	○	○	☐
English fluency	○	○	○	☐
	○	○	○	☐

PROJECT MANAGEMENT

	1	2	3	Target skill
Planning	○	○	○	☐
Breaking down complex tasks	○	○	○	☐
Time management	○	○	○	☐
Managing data and resources	○	○	○	☐
	○	○	○	☐

MENTORING/TEACHING

	1	2	3	Target skill
Delegating; providing instruction	○	○	○	☐
Providing constructive feedback	○	○	○	☐
Setting expectations for others	○	○	○	☐
	○	○	○	☐

PROFESSIONALISM

	1	2	3	Target skill
Identifying and seeking advice	○	○	○	☐
Upholding commitments/deadlines	○	○	○	☐
Networking/collaborations	○	○	○	☐
Dealing with conflict	○	○	○	☐
Lab citizenship	○	○	○	☐
Work ethic	○	○	○	☐
	○	○	○	☐

Other skills, or comments?

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Graduate training provides preparation for a range of career paths in science, technology, and innovation. As professions value the skills and traits cultivated in PhD training, the ability to identify and explore interests during this period of time is especially worthwhile. BGS provides a variety of resources relating to careers and professional development in and apart from academia as does Penn's Career Services.

What are your long-term goals, in the sense of what kinds of activities you might want to be engaged in after you complete PhD training?

What factors inform these goals (e.g. skills, interests, values, colleagues, current activities)?

Are you currently most interested in a specific career or set of careers, whether in or apart from academic research? If so, which?

For each of the long-term goals or, if listed, careers above, identify one or two short-term objectives that may be important to their exploration and/or achievement.

Are you getting the support and resources you require to satisfactorily explore career options?

Has anything negatively affected your progress in development?

The fourth section, 'Achievements,' is completed online through this link (https://www.med.upenn.edu/apps/bgs-forms, then "New Forms" > "Individual Development Plan") to enable access not only to your advisor(s) but to your graduate group and the BGS office as well.

(Note: Once you've saved any content in the Achievements section, you can access it again through the same link, but using "My Forms" instead of "New Forms.")

When you have completed the Achievements section, please certify in this section (i.e., online) that this and the first three sections of the IDP have been completed and that you have set up a time to meet with your advisor(s) to discuss these sections and the Action Plan.

Remember to forward to your advisor(s) the IDP form with the completed first three sections.

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The action plan highlights your priorities in research and career development in the next year. It is to be developed jointly by the student and the mentor during or after the discussion.

PROJECTED TIMELINE
What is the projected timeline for achieving key objectives and publishing your work. When do you anticipate graduating?

TARGET SKILLS
What skills did you identify for improvement over the next year.

PROFESSIONAL DEVELOPMENT ACTIVITIES
What are your identified objectives regarding long-term goals or careers, and how might these be pursued in the coming year?

ADDITIONAL ACTIONS
What additional actions that should be initiated by *i*) you, *ii*) your advisor(s), and *iii*) other mentors in order to facilitate your success?

FOLLOWING UP
What is the schedule for you and your advisor(s) to meet and follow up on the action plan or other items of your IDP? (An annual meeting is only the minimum required.)

OTHER
Are there any items you would like to discuss with your advisor(s) or other mentors at this time?