

Individual Development Plan (IDP)

for PhD students

Your doctoral training is a period of growth toward your independent career. Your relationship with your supervisors/mentors is a key aspect of that growth; maintaining clear, open communication is important to optimize your training and research experience. The Individual Development Plan (IDP) is designed to help catalyze this communication, help you reflect on your goals, make plans to help achieve these goals and to address challenges that arise along the way. There is no single prescribed pathway to doctoral success. Rather, every student takes a unique path - designing that path requires reflection on your part and collaboration with your supervisors and mentors.

This IDP can be just for yourself so that you can reflect and self-assess. You can also choose to hand in your PhD Progress (section B) to your PhD office and/or you can ask your supervisors/mentors for feedback (section C) in order to get advice that will help you to broaden your skill set. The IDP is not mandatory and is designed to help you in a way that suits your needs best.

This questionnaire was designed by Stanford University's BioSci Careers and adapted for the Berlin Life Science community by the Career Development Initiative.

Section A: Step back and self-assess!

YOUR PROJECT:

Answer the following questions and reflect on the progress of your project. You can use your answers as a guide for discussion with your supervisor, your mentor or your peers. The answers will help you to develop an action plan, either by yourself or in collaboration with your supervisor (section D).

Project Progress – Q1: What specific question does your PhD thesis intend to answer? How familiar are you with the academic literature related to this topic?

Project Progress – Q2: Do you have a good grasp of how this project fits into the work done in your lab?



A. Step back and self-assess!

Project Progress – Q3: Do you have a good grasp of how this project fits into the field as a whole? Are you able to answer questions and critically discuss your data and the data of others?

Project Progress – Q4: Is your project progressing? In case your project is “risky” in terms of results, is there a back-up plan?

Project Progress – Q5: What are your near-term research goals (next year)?

Project Progress – Q6: What are the challenges of your project? Have you thought of a way to overcome them?

Project Progress – Q7: What have you learned in terms of experimental techniques since you started? Do you need additional support to improve in some experimental technique? How could you get this support?



A. Step back and self-assess!

Project Progress – Q8: Are you improving your presentation and science communication skills? Are you given enough opportunities to practice (group meetings, conferences, etc.)?

Project Progress – Q9: Do you have access to feedback and insights from experts in the field beyond your lab members?

Project Progress – Q10: Do you think the project is going at a pace and a direction that will allow you to graduate with the necessary publications within your desired timeframe?

Project Progress – Q11: Are you collecting full data sets (e.g. sufficient experimental replicates) of all promising experiments for future publications?

YOUR PERSONAL DEVELOPMENT:

While working on your PhD, it is easy to lose sight of the bigger picture of your career and personal goals. It is therefore useful to take a step back once in a while to self-assess. What have you learned so far? What is it that you still need to make your dreams come true? Have you stumbled upon something you would like to dig into deeper? Have you considered all of your options? The following questions aim to guide this process of self-assessment and to help you get a better understanding of yourself and your career strategy. Hopefully, this process will help you to design your own education and make the most of your time as a PhD student.



A. Step back and self-assess!

Personal Progress – Q1: What activities do you envision yourself doing on a daily basis in 5-10 years (e.g. taking care of your family, living in your home-country, teaching, writing grants, etc.)?

Personal Progress – Q2: Have you started to think about your long-term goals (e.g. to make a big discovery in your field, to have a good work-life-balance, to have a secure vs. flexible lifestyle, etc.)? What are they?

Personal Progress – Q3: Have you thought about what factors inform these goals? If so, list any early thoughts you have.

Personal Progress – Q4: What features of the lab group and your relationships with colleagues are most helpful and supportive to your personal development?

Personal Progress – Q5: Are there any factors you are concerned about which may negatively affect your progress? What actions have you taken to overcome these challenges? Do you have someone in mind that might offer you support?

A. Step back and self-assess!

Personal Progress – Q6: One of the most important parts of your PhD training is to develop a skill set that is transferable beyond graduation. Check the boxes for skills that you would like to target in the coming year (☐). Evaluate your strengths and weaknesses (1=weak, 3=strong) below relative to where you think a student should be at at your stage of PhD studies. You can ask your supervisor to make a similar assessment and hopefully this honest self-assessment and discussion will help you set goals for further training.

RESEARCH SKILLS & SCIENTIFIC THINKING

- Broad-based knowledge of science
- Critical reading of scientific literature
- Experimental design
- Interpretation of data
- Statistical analysis
- Creativity and innovative thinking

Target skill

1 2 3 ☐

1 2 3 ☐

1 2 3 ☐

1 2 3 ☐

1 2 3 ☐

1 2 3 ☐

LEADERSHIP/PERSONNEL MANAGEMENT

- Delegating; providing instruction
- Providing constructive feedback
- Dealing with conflict
- Leading and motivating others
- Serving as a role model
- Setting expectations

Target skill

1 2 3 ☐

1 2 3 ☐

1 2 3 ☐

1 2 3 ☐

1 2 3 ☐

1 2 3 ☐

WRITING

- For a scientific publication
- For a research proposal
- For a lay audience
- Grammar/structure
- Editing your own writing

Target skill

1 2 3 ☐

1 2 3 ☐

1 2 3 ☐

1 2 3 ☐

1 2 3 ☐

PROFESSIONALISM/INTERPERSONAL

- Identifying and seeking advice
- Upholding commitments/deadlines
- Maintaining positive relationships
- Approaching difficult conversations

Target skill

1 2 3 ☐

1 2 3 ☐

1 2 3 ☐

1 2 3 ☐

A. Step back and self-assess!

ORAL COMMUNICATION

To a specialized audience

To a lay audience

In a classroom

One-on-one

English fluency

Target skill

1 2 3 ☐

1 2 3 ☐

1 2 3 ☐

1 2 3 ☐

1 2 3 ☐

PROJECT MANAGEMENT

Planning projects

Breaking down complex tasks

Time management

Managing data and resources

Target skill

1 2 3 ☐

1 2 3 ☐

1 2 3 ☐

1 2 3 ☐

Personal Progress – Q7: What help can your supervisor or other faculty/staff provide? Do you have a mentor (a peer, a professor or someone outside academia)?

Personal Progress – Q8: Your success as a student is tightly linked to your physical and mental wellness. Are you actively taking care of both? How?

Suggestions for your next steps:

- Go over your answers and think about a plan for the next year for your personal development. You can check for events, courses, workshops etc. online, e.g.:

<https://www.bihealth.org/en/institute/equal-opportunity/career/>

<https://www.bihealth.org/en/offers/academy/schedule/>

https://www.drs.fu-berlin.de/oc_event/book?pid=509

<https://www.mdc-berlin.de/content/training-events>

<https://www.ecn-berlin.de/events/events-2.html>

- Science Careers has come up with a questionnaire to help life-scientists self-assess and to facilitate their understanding which career path suits them best. Why not try it out?

<https://myidp.sciencecareers.org/>



B. Your PhD Progress

Section B: Your PhD Progress

This section aims to help you get an overview of the progress of your PhD project and to serve as a guide when discussing with your supervisor(s).

PhD Progress – Q1: Who are your PhD supervisors, do you maintain sufficient communication with all of them?

PhD Progress – Q2: Do you feel supported by your supervisor(s) and do you have the impression they make enough time to approach your challenges (at least scientifically)?

PhD Progress – Q3: Do you think that the project is going at a pace and a direction that will allow you to graduate with the necessary publications within a reasonable timeline?

PhD Progress – Q4: How do you feel your project is progressing? How does this progress compare to your original proposal? In case your project is “risky”, is there a back-up plan that is realistic alternative?



B. Your PhD Progress

PhD Progress – Q5: Specify any areas (scientific or soft-skills) in which you feel that you need help or additional training. Include any techniques you want to learn or skills you would like to develop.

PhD Progress – Q6: Describe any unusual or unanticipated challenges you have experienced this year in trying to accomplish your goals. What actions have you taken to meet these challenges?

PhD Progress – Q7: What requirements do you need to complete your PhD program (e.g. Medical Neurosciences) and what is your plan to fulfill them?

PhD Progress – Q8: . How are you funded? When does your funding run out? Have you figured out the next step for funding (contract prolongation, Abschluss-Stipendium, etc.)? Have you discussed your options with your supervisor?



B. Your PhD Progress

PhD Progress – Q9: Many students find it useful to participate in additional training, teaching, conferences, outreach and other activities. List any involvement you have already or you are thinking about in the following areas (please explain what you hope to gain from any of the activities and experiences below and how they will help you reach your goals):

Academic coursework/training:

Teaching/mentoring:

Professional development:

Conference/retreat attendance:

Service/outreach:

PhD Progress – Q10: Do you need any help finding opportunities for further training or teaching?

PhD Progress – Q11: Are there courses you already took that you would highly recommend to other PhD students?

PhD Progress – Q12: What guidance would help you with your development and exploration of career options?



C. Supervisor Feedback

Section C:	Supervisor feedback
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Honest and open discussions between student and supervisor are an important part of PhD training. Fruitful feedback can help you to develop skills and to improve. You can ask your supervisor(s) to use these questions as a guide for a feedback discussion. The answers will help you to develop an action plan (section D) together with your supervisor(s).

Feedback – Q1: Does the student have access to opportunities that will help him/her to improve in experimental techniques? Could additional support be provided?

Feedback – Q2: Is the project progressing? In case the project is “risky” in terms of results, is there a back-up plan?

Feedback – Q3: Is the student progressing in their understanding of the field of research? Is he/she able to answer questions, critically discuss data and put it into the context of the field?

Feedback – Q4: Is the student improving in terms of presentation and science communication skills? If not, what should the student particularly work on?



C. Supervisor Feedback

Feedback – Q5: Has the student participated in any conferences this year? Does the student need support with gaining such experience (e.g. funds, feedback, etc.)?

Feedback – Q6: Does the student get feedback and insight from other experts in the field?

Feedback – Q7: Do you think that the project is going at a pace and a direction that will allow the student to graduate with the necessary publications within a reasonable timeframe?

Feedback – Q8: What particular strengths does the student have (e.g. fast, meticulous, organized, friendly, creates a good atmosphere in the lab, knowledge of the field, etc.)?

Feedback – Q9: Are you satisfied with the work of the student in general? If not, what could your student do to improve and how could you support this effort?

C. Supervisor Feedback

Feedback – Q10: Have you discussed with your student his/her career aspirations for the future?

Feedback – Q11: How could the student still improve? Please fill in the table below and discuss it with your student. Evaluate his/her strengths and weaknesses (1=weak, 3=strong) below relative to where you think a student should be at the end of their PhD studies, checking the boxes for skills that you would like the student to target in the coming year (☐).

RESEARCH SKILLS & SCIENTIFIC THINKING	Target skill	LEADERSHIP/PERSONNEL MANAGEMENT	Target skill
Broad-based knowledge of science	1 2 3 ☐	Delegating; providing instruction	1 2 3 ☐
Critical reading of scientific literature	1 2 3 ☐	Providing constructive feedback	1 2 3 ☐
Experimental design	1 2 3 ☐	Dealing with conflict	1 2 3 ☐
Interpretation of data	1 2 3 ☐	Leading and motivating others	1 2 3 ☐
Statistical analysis	1 2 3 ☐	Serving as a role model	1 2 3 ☐
Creativity and innovative thinking	1 2 3 ☐	Setting expectations	1 2 3 ☐
WRITING	Target skill	PROFESSIONALISM/INTERPERSONAL RELATIONSHIPS	Target skill
For a scientific publication	1 2 3 ☐	Identifying and seeking advice	1 2 3 ☐
For a research proposal	1 2 3 ☐	Upholding commitments/deadlines	1 2 3 ☐
For a lay audience	1 2 3 ☐	Maintaining positive relationships	1 2 3 ☐
Grammar/structure	1 2 3 ☐	Approaching difficult conversations	1 2 3 ☐
Editing own writing	1 2 3 ☐		

C. Supervisor Feedback

ORAL COMMUNICATION	Target skill	PROJECT MANAGEMENT	Target skill
To a specialized audience	1 2 3 <input type="checkbox"/>	Planning projects	1 2 3 <input type="checkbox"/>
To a lay audience	1 2 3 <input type="checkbox"/>	Breaking down complex tasks	1 2 3 <input type="checkbox"/>
In a classroom	1 2 3 <input type="checkbox"/>	Time management	1 2 3 <input type="checkbox"/>
One-on-one	1 2 3 <input type="checkbox"/>	Managing data and resources	1 2 3 <input type="checkbox"/>
English fluency	1 2 3 <input type="checkbox"/>		

D. Action Plan

Section D: Action plan

This action plan is to be developed jointly by the student and the supervisor during or after the discussion. Keep it around so that you stay on track and use it to assess your progress at your yearly/monthly check-ins, as determined by the two of you.

Project Timeline	What is the anticipated timeline for completing your current projects?
Target skills	What skills did you identify as important development targets for the coming year?
Activities	List any activities in which you and your supervisor agree you should participate to achieve your academic objectives in the coming year.
Financial support	If you know, what will be your financial support for the next year?
Additional actions	In order to aid your success, are there any additional actions that can be initiated or continued by you? By your mentor?
Following up	When are you and your mentor going to follow up on your IDP and progress?
Other	Is there anything else you would like to discuss with your supervisor at this time?