

IDP Outline Guidelines

Individual Development Plans (IDPs) are a customized roadmap for your professional training and goals and will enable you to make the most of your postdoc. The IDP process will guide you to reflect on your skills and your career aspirations, and translate those into specific actions toward achieving new skills and professional goals.

The 2005 Sigma Xi Postdoc survey of US postdoctoral scholars showed that postdoctoral scholars who created a written career plan or IDP with their mentors were 23% more likely to submit papers, 30% more likely to publish first-authored papers, and 25% less likely to report that their mentor did not meet initial expectations.

While self-reflection is a great exercise, development plans are meant to be a two-sided conversation, with your mentor providing feedback and support to enhance your training experience. Give the mentor portion of this form to your PI and schedule a follow-up conversation with them to finalize a plan together.

This outline serves as a starting place to develop a comprehensive training plan that is customized for you. You and your mentor can share this one page outline with collaborators and/or outside mentors that may work with you, or use this as a guide when writing grant applications, letters of recommendation, or any other document that references your training goals. It is not as extensive / comprehensive as some of the other IDP templates out there, and so you should feel free to dive into the resources listed below if you want to go into more detail than is provided by this template. The goal here is to make sure that all research teams cover the basic questions that will create a supportive training environment, ensuring that everyone is on the same page about your professional development.

1. Skills assessment – what skills do I currently have?

Assessing your skills regularly will highlight your successes during your training and help you identify areas that you need to work on. Identify your strengths among the skills below as a starting place for our IDP workshop.

Research Skills

- Developing new research directions
- Experimental design
- Data evaluation
- Review and evaluation of scientific literature
- Problem solving/troubleshooting
- Statistical analysis
- Computer skills
- Lab records and data management

Professional Skills

- Oral presentation skills
- Manuscript writing skills
- Grant/fellowship writing skills
- Teaching skills (in a classroom)
- Teaching skills (one-on-one)

Time Management

- Meeting deadlines
- Establishing priorities

Interpersonal Skills

- Reliability
- Communicating effectively in writing
- Communicating effectively verbally
- English proficiency
- Identifying mentors
- Utilizing mentors effectively
- Mentoring others
- Ability to give and receive feedback constructively
- Networking/meeting new colleagues
- Ability to work in a team
- Collegiality towards others

Management and Leadership Skills

- Independent management of own research project
- Developing/managing budgets
- Chairing a meeting
- Establishing priorities for a team
- Delegating responsibility
- Leading and motivating others
- Supervising/managing people
- Working within an organization

There are many tools online that will enable you to quantify your skill sets. Below are two that we recommend:

<http://myidp.sciencecareers.org> - Widely adopted IDP template that contains within it self-assessment tools that predict compatible biomedical career pathways.

<http://postdocs.usc.edu/mentoring/idp/> - USC has created self-assessment forms and IDP templates that are specific for STEM, humanities, and social science disciplines.

<https://www.npacommunity.org/resource/resmgr/Docs/competency-checklist.pdf> - The National Postdoctoral Association has identified core competencies that postdocs from all disciplines should gain throughout their training, and this checklist is one way of scoring your progress.

2. Career aspirations – what career pathways interest me? What do I like to do?

Your career path should make the most of your skills and match your professional values. Below are some resources to help you identify how your skills and values could be applied towards a career:

- <http://myidp.sciencecareers.org> - Widely adopted IDP template that contains within it self-assessment tools that predict compatible biomedical career pathways.
- <http://www.visualdna.com/quizzes/> - The 'Who Am I?' Quiz offers insight into your work style and personality traits that contribute to what you value in a career.
- <http://www.nationalpostdoc.org/careers/career-planning-resources/143-an-overview-of-career-options-for-phds> - The National Postdoctoral Association offers an overview of many of the career options available to those with PhD degrees.

It's okay if you haven't settled on a path just yet. Think about the things that you like to do and the qualities that you value in a work environment to begin to explore what career might be the right fit.

3. Desired skills – setting goals for the skills I want.

Identify a few areas that you would like to work on over the next six months, and write goals to make progress. Your goals should be wicked **SMAHT** -

- **Specific & Sensible** – *Is it focused and unambiguous? Considering difficulty and timeframe, is this goal attainable?*
- **Measureable** – *Could someone identify whether or not you achieved this goal?*
- **Action-oriented** – *What action(s) do you need to take to get there?*
- **Help** – *What support will you need? Where can you get it?*
- **Time-bound** – *What timeframe are you accountable to?*

4. Professional development – what support can I take advantage of?

Professional development can exist in many forms. Listed below are general ideas to kick off your thinking, but work with your PI and the offices here at Boston University that support you (like PDPA) to identify the right professional development opportunities that will enable you to meet your goals.

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| <ul style="list-style-type: none"> • Attend BU-sponsored professional development events • Participate in a mentoring circle • Present your work at a conference | <ul style="list-style-type: none"> • Attend networking events • Build your scholarship through teaching • Arrange a job interview or informational interview • Arrange a job shadowing experience or an informational interview with BU alumni |
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References:

1. <http://www.faseb.org/portals/2/pdfs/opa/idp.pdf>
2. <https://c.ymcdn.com/sites/www.npacommunity.org/resource/resmgr/Docs/competency-checklist.pdf>
3. <https://www.med.upenn.edu/postdoc/documents/IDPFormforPennpostdocs.Jan10.pdf>



IDP OUTLINE – trainee portion

1. SKILLS ASSESSMENT – what skills do I currently have?

2. CAREER ASPIRATIONS – what career pathways interest me? What do I like to do and what do I value about my work environment?

3. DESIRED SKILLS – setting goals for the skills I want.

4. PROFESSIONAL DEVELOPMENT – what support can I take advantage of?



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4. PROFESSIONAL DEVELOPMENT – what support can I take advantage of?

Use the space below to reflect on your self-assessments and career aspirations / professional values while considering the following questions (refer to page 4):

1. How do your strengths align with your current role? Where are the gaps?

2. If you are unsure of what career path is of interest to you, how can you apply your strengths towards career exploration?

3. How can the information in boxes 1 and 2 be used to prioritize the goals that you set in box 3?

What are the qualities of an effective IDP?

IDPs are a roadmap to your postdoctoral training. Any map is better than no map at all! However, some maps are more effective than others – use these pages to review a sample IDP and how to distinguish effective from less effective IDPs.

We have included a sample IDP from a biomedical postdoc on pages 8 and 9. Review this IDP using the rubric on the last page 10 – *is this example good, average, or does it need work? Why?*

EXAMPLE – Biomedical postdoc

1. SKILLS ASSESSMENT – what skills do I currently have?

Research Skills:

- Collaboration: Work closely with a diverse group including clinicians, computational biologist, junior and senior scientist.
- Develop new research directions for the lab/ independent research
- Bench Science specialty- Cancer Research
 - ☐ Experimental design- mouse modeling
 - ☐ Cancer prevention
 - ☐ Lung Cancer

Professional Skills:

- Initiated the development of infrastructure in a relatively new lab
- Communication effectively both orally & written
- Successfully written a NIH funded grant
- Teaching-
 - ☐ 3 semesters of TAing (classroom) & one on one in biology & chemistry.
 - ☐ Completing a course in evidence based undergrad STEM teaching.
 - ☐ Mentor many graduate students
- Lead the Organization of 2 symposia for ~200 people
 - ☐ Managing the budget
 - ☐ Organizing meeting
 - ☐ Delegating responsibilities

2. CAREER ASPIRATIONS – what career pathways interest me? What do I like to do and what do I value about my work environment?

- Academic Faculty
- Academic Administration
- Academic Policy
- I enjoy 1st and foremost training young scientist and encouraging them to pursue their passion for science.
- I enjoy working with groups to develop and execute scientific research- lung cancer prevention & mouse modeling.
- Ensuring that trainees have all of the institutional support needed for success.

3. DESIRED SKILLS – setting goals for the skills I want.

- Research skills – submit paper to JNCI by February 2016
GOALS: Complete final paper draft, seek input from our collaborators and prepare for submission.
- Funding- prepare and submit a K-grant
GOAL: Complete aims for grant April 2016 & submit by Dec 2016
- Policy- Help organize a committee for post-docs to enable participation in administrative task forces
GOAL: Attend NPA meeting to gain insight to support the development of PDA.
- Research skill- Enhance computationally skills
GOAL: Work with the computational group to understand basic methods.
- Research skill- transgenic mouse modeling
GOAL: Work group at Dana Farber to hone these skills over the next year.

4. PROFESSIONAL DEVELOPMENT – what support can I take advantage of?

- Attend career seminars on science policy offered through BU's BEST Program – ask at least one question of speaker and exchange information with them post-talk to improve networking skills
- Participate in PDPA postdoc retreat – present poster, meet other postdocs, and attend seminar on facilitating effective meetings
- Take advantage of computational trainings that are offered at BU
- Work with other faculty at BU to enhance local collaborative efforts and training.

Now use the rubric below to score this IDP.

	Good (3)	Average (2)	Needs Work (1)
Skills assessment	Skills assessment is completed twice per year and covers a wide range of skills (e.g. National Postdoc Association competencies, graduate program's Technical Standards) expected for degree or training completion.	Skills assessment is completed once per year and covers a adequate range of research skills.	Skills assessment is completed infrequently and does not address a wide range of skills.
Set SMAHT goals <i>*slide 16 of ppt</i>	Trainee and mentor align on at least three goals that meet all SMAHT guidelines.	Trainee and mentor align on areas to work on, but goals do not meet all SMAHT characteristics.	Trainee and mentor do not align on goals, or areas to work on are not discussed.
Relate goals and trainee interests to career options	Trainee and mentor have regular conversations that allow trainee to openly explore career options and/or seek career advice.	Trainee and mentor have infrequent conversations that allow trainee to openly explore career options and/or seek career advice.	Trainee and mentor do not have regular conversations that allow trainee to openly explore career options and/or seek career advice.
Identify professional development opportunities proactively	Trainee participates in one professional development opportunity every six months.	Trainee participates in one professional development opportunity every year.	Trainee participates in professional development opportunities infrequently, if at all.

Based on the example IDP and the rubric, how would you revise what you have written so far?

IDP OUTLINE – mentor portion

1. SKILLS ASSESSMENT – what skills does my trainee currently have?

2. CAREER ASPIRATIONS – how can I support my trainee’s career goals? What does my trainee like to do?

3. DESIRED SKILLS – helping my trainee set goals for the skills they need to be successful.

4. PROFESSIONAL DEVELOPMENT – what support can my trainee take advantage of? How can I advocate for my trainee?