Individual Development Plan (IDP): Guidelines for Research Advisors & Mentors

Summary of forms:
- Form 1 (Self-Assessment)
- Form 2 (Individual Development Plan)

Introduction

An Individual Development Plan (IDP) is a personal action plan designed to help students and postdocs clarify their academic responsibilities and expectations, and take more ownership of their professional development. Ideally, they are completed with feedback and advice from their research advisor and/or other faculty mentor(s). IDPs can be a useful advising tool, helping both parties align their goals and expectations, identify areas for improvement, and track progress.

The IDP includes six suggested core competencies: Research, Teaching & Mentoring, Leadership & Teamwork, Oral & Written Communication, Place & Culture, and Career Development. Students can prioritize the areas most relevant to their goals and skip sections as needed. The mentee first completes a self-assessment (Form 1), then develops a detailed action plan (Form 2), which is then revisited and updated regularly throughout their appointment. While the IDP is primarily completed by and for the mentee, we strongly recommend research advisors review and provide feedback at all stages.

Preparing an IDP

(*Suggested timeline in parentheses*)

	Student/Postdoc…	Your Role
Step 1 *(within 10 days)*	*… completes self-assessment (Form 1)*	Review self-assessment and provide feedback
Step 2 *(within 30 days)*	*… drafts IDP (Form 2)*	Review draft IDP and provide feedback
Step 3 *(within 45 days)*	*… revises based on feedback and submits final IDP (Form 2)*	Review/approve IDP
Ongoing *(once per semester)*	Each semester, meet to review progress and outline future activities. Student/postdoc updates IDP (Form 2). Suggest they re-do written Self-Assessment (Form 1) annually.	

Tips & Best Practices

- After your mentee has completed each form, set up a meeting to review and discuss it. Provide positive and constructive feedback. This is a great chance to identify areas where they could use more training/practice, or boost their confidence if you feel they have underrated some of their skills. Be on the lookout for any gaps that need addressing for their long-term success.

- Familiarize yourself with available resources and opportunities so you can provide the best and most up-to-date advice and information. Refer your mentee to any resources you think might be useful.

- Make sure their action plan helps them with their research productivity AND adequately prepares them for their chosen career. Respect that your mentee's career aspirations might be different than yours, and they may need different preparation. Many mentees may be unsure about their ultimate career goals, in which case, help them make a plan to explore options (e.g., online platforms such myIDP – see Resources below).

- For effective goals that are more likely to be achieved, **the best milestones are SMART**:

    Specific (Is the milestone focused and unambiguous?)
    Measurable (Can you measure whether you have achieved the milestone?)
    Actionable (Is there an action required on your part?)
    Realistic (Considering difficulty and timeline, is the milestone achievable?)
    Timely (By when will you complete the milestone?)

    This is the part mentees tend to struggle with the most. Vague goals like "get better at programming" or "practice public speaking" are good intentions but hard to act on. Instead, we advise defining specific milestones that help them practice those skills (e.g., "develop Python code to <plot/analyze/etc>", or "give a department seminar in the spring").

- Review their updated IDP as needed (recommend once per term; minimum of once per year). Encourage them to re-do the self-assessment (Form 1) once per year. This will help gauge progress and re-prioritize as needed.

Resources

Online IDP Platforms
- myIDP – online IDP platform for STEM from AAAS/Science:
  http://myidp.sciencecareers.org/
  Includes a career exploration module with ~20 scientific career paths, ranked by how well they match your skills and interests.
- ImaginePhD – career planning tool for humanities/social sciences: http://imaginephd.com

More on IDPs
- Eason, D.E., B.C. Bruno and D. Böttjer-Wilson (2020) Individual Development Plans (IDPs): An underutilized advising tool in the geosciences. *GSA Today*, 30(7): 34-35, https://doi.org/10.1130/GSATG3GW.1
- Hobin JA, Clifford PS, Dunn BM, Rich S, Justement LB (2014). Putting PhDs to Work: Career Planning for Today's Scientist. *CBE Life Sci Educ* 13(1): 49-53, https://doi.org/10.1187/cbe-13-04-0085
- Vincent BJ, Scholes C, Staller MV, Wunderlich Z, Estrada J, Park J, Bragdon MDJ, Rivera FL, Bietta KM, DePace AH (2015) Yearly planning meetings: Individualized Development Plans aren't just more paperwork. *Mol Cell* 58, https://www.cell.com/molecular-cell/pdf/S1097-2765(15)00307-X.pdf

Mentoring
- National Academies of Sciences, Engineering, and Medicine (2019) The Science of Effective Mentorship in STEMM. Washington DC: The National Academies Press. http://nap.edu/25568
- BWF-HHMI (2006) Making the Right Moves: A Practical Guide to Scientific Management for Postdocs and New Faculty. (See Ch. 5: Mentoring and Being Mentored) https://www.hhmi.org/science-education/programs/making-right-moves
- AAAS ScienceCareers.org has many articles on mentoring: http://sciencecareers.sciencemag.org