

a Faculty Quick Guide to Individual Development Plans

Today's early career researchers face a multitude of challenges. Our students and postdocs will need to thoughtfully identify and enact strategies to maximize their chances of success.

The Individual Development Plan (IDP), initially introduced to science by the Federation of American Societies for Experimental Biology (FASEB), is widely valued as a process to help early career researchers increase research productivity while strategically advancing their career development (reviewed in *Science*¹). The NIH now requires² all PI's to describe in progress reports institutional and investigator-specific policies for IDP use with graduate students and postdocs funded on any NIH mechanism.

“Beginning October 1, 2014, annual progress reports [for any grant mechanism] are required to include a description of whether the institution uses IDPs or not...”

- NIH Notice NOT-OD-14-113

What is an IDP?

An Individual Development Plan is a set of goals for the next 6-12 months that includes:

- **Research project goals** (e.g., research milestones, papers, presentations).
- **Skill development goals** (e.g., research skills and knowledge, professional skills, and career-specific skills)
- **Career advancement goals** (e.g., learning about career options, building a professional network specific to top-choice paths, updating CV)

The IDP can include goals for research or other projects that the trainee needs to accomplish as part of his or her doctoral thesis or postdoctoral training. And, as a “development” plan, ***the IDP must by definition also include goals intended to advance the student or postdoc developmentally toward their desired career path(s).***

“My hope is that... IDPs will be embraced by faculty as an important component of career preparation for the next generation of biomedical researchers.

*- Sally Rockey, PhD
NIH Deputy Director for
Extramural Research*

The IDP is created by the student or postdoc, and greatly benefits from feedback by mentors. It is ideal for the trainee to receive guidance from multiple mentors, including mentors familiar with their targeted long-term career path.

[Learn more about IDPs >](#)

How can an IDP help my students and postdocs?

A number of studies have identified positive correlations between deliberate career planning and measures of career success.³ A 2003 national survey of 7600 postdocs found that postdocs who developed and discussed a structured plan with their mentor at the outset of their training published more first-author papers, experienced fewer conflicts with their mentor, and reported greater satisfaction with their training experience.⁴

Specifically, we expect that an IDP will

- **Help trainees see the big picture.** Creating an IDP should start with self-reflection on progress to date and assessment of what needs to be accomplished next. This is a valuable opportunity for trainees to stop and see the forest from the trees.
- **Focus trainee's efforts.** To make the plan realistic, the trainee will need to prioritize.
- **Provide a framework for conversations with mentors, helping mentees clarify expectations, get advice, and receive feedback.** Because the IDP includes research-related goals, it will help trainees prepare for meetings with their Thesis Research Advisory Committee (TRAC) and thesis advisor. It also provides a framework through which these mentors can give the trainee feedback on her or his professionalism and skills. These conversations clarify expectations and reduce likelihood of conflict.
- **Empower trainees to be proactive in their own goal setting and development.** Trainees initiate and oversee the process of self-assessment and planning.
- **Increase efficiency and productivity... on their research project and career development.**

What are the UMMS institutional IDP expectations for students?

As of Fall 2014, all PhD students in the third or later year are required to create an IDP annually.

Fall:

1. Student reflects on progress toward prior research and career goals, areas of needed growth, big-picture goals for the coming year, and resources needed to achieve those goals. (Submitted to the GSBS's confidential IDP Portal.)
3. Student seeks advice from mentors on goals within their IDP, and then revises their IDP. Mentors may include their thesis advisor, TRAC, and someone with in-depth knowledge about the career path(s) the student is targeting.
4. Student outlines a complete plan for the coming year, including specific goals and their timeframe for completion. (Submitted to the GSBS's confidential IDP Portal.)

Third year students will draft their IDP as part of a required mini-course, "Career Planning and Creating Your IDP." A supplemental workshop is available for later-stage students who desire it.

Spring:

1. Student reflects on progress toward goals.
2. Student sets a meeting to discuss progress with his/her thesis advisor. This meeting is intended to coordinate with the thesis advisor's submission of the annual Assessment of Student Research Performance. Student also checks in with additional mentors as needed.

Students repeat this process every year, from Year 3 to completion of the PhD.

Students' progress is tracked by the GSBS.

[Detailed instructions for students are available.](#)

What are the UMMS institutional IDP expectations for postdocs?

As approved by Chairs' Council (and starting in November 2014), all postdocs receive brief training in creating an IDP as part of the course, Responsible Conduct of Research, which is required for all postdocs within 3 months of hire. Postdocs are encouraged to draft an IDP annually and review it with you (their research advisor) and other mentors.

You are encouraged to develop a policy for compliance for postdocs within your research group, and to report this policy where necessary on grant progress reports. One option is to suggest that the postdoc create an IDP using myIDP, a website platform hosted by *ScienceCareers* and AAAS. The postdoc can email a pdf "certificate of completion" to you, and discuss their annual goals with you and other mentor(s).

What resources are available to help my students and postdocs create an IDP?

- **Online tool:** myIDP is an online career planning tool hosted by *ScienceCareers* and AAAS (co-authored by Dr. Fuhrmann, Assistant Dean in the Graduate School for Biomedical Sciences). This free, self-explanatory website will walk a student or postdoc through the process of creating an IDP and provide related resources. [Go to myIDP >](#)
- **IDP workshops:** The Graduate School of Biomedical Sciences' [Center for Biomedical Career Development \(cBCD\)](#) offers instruction to guide trainees through the creation of their first IDP to all third year students in a 5-session mini-course. Students and postdocs who want similar support through later years of their training are welcome to attend annual follow-up workshops.
- **Local resources for setting and achieving goals:** *Staged launches starting in Fall 2014:* A [new cBCD website](#) will offer resources to help trainees develop specific goals for their professional skills development, career exploration, or career preparation.

- **Access to career-specific mentors:** *Launching in 2015-16:* Career Pathways learning communities (meeting quarterly) will connect groups of students and postdocs with a scientist who is intimately familiar with their career path(s) of choice. Within each learning community, this “career mentor” will provide a valuable added perspective to the career-related and skills-related portions of the IDP.
- **Individual appointments with cBCD staff:** Dr. Fuhrmann, who directs the Center for Biomedical Career Development (cBCD) at UMMS, is co-author of the award-winning website myIDP and oversees the IDP process at UMMS. Students and postdocs can meet with Dr. Fuhrmann or Dr. Morgan Thompson (Assistant Director) to discuss any aspect of their IDP or broader career development.

What is the PI’s role in the IDP process?

As requested by our faculty, below are some suggestions collated from multiple sources, including mentors and mentees who have worked with IDP’s at UMMS and other institutions.

- **Provide constructive feedback** to each trainee to help her/him assess both their strengths and areas for growth in their research-related skills as well as in professional skills such as writing, presentation, interacting with colleagues, giving and receiving feedback. Be specific (examples are very informative). You can [download a skills assessment form](#) from myIDP to assist with this.
- **Help your trainee assess whether the short-term goals in their IDP are attainable and realistic.** [Goal-setting is a skill](#), and it can take years of practice to set appropriate short-term goals.
- **Communicate your openness and flexibility about career-related discussions.** Some trainees may feel comfortable discussing these personal goals with their research advisor; others may prefer to consider options on their own. Regardless, encourage them to seek out resources to assist them with this process.
- **Encourage your trainee to be open to multiple career options.** Trainees’ career interests and life circumstances can change. And, all careers are highly competitive—within academia and beyond. Early-career scientists should be ensuring that their professional record and career-related knowledge allow them to be competitive for more than one career path.
- **Encourage your trainee to seek additional mentorship on their career-related goals.** Additional conversations with scientists in their careers of interest will help your mentee learn about the career, set realistic and appropriate goals, and build his/her professional network.
- **Encourage your trainee to attend conferences, workshops, and other professional development opportunities within their career paths of choice.** The GSBS expects research advisors to fund student and postdoctoral attendance to conferences in the field of their current research group. Starting in 2015, students and postdocs can apply for Professional Development Scholarships to fund travel and fees for uniquely valuable opportunities outside of their current field.
- **Introduce your trainee to others in your professional network.** Having a LinkedIn profile may help you keep in touch with scientists within and outside of academia.

For NIH: Where do I report on IDP's in the RPPR?

Section B.4. requires that you report *“opportunities for training and professional development provided to anyone who worked on the project or anyone who was involved in the activities supported by the project.”* Your program officer may have a specific preferred format and level of detail for this section. Our understanding is that NIH wants each PI to discuss specific professional development activities pursued by the trainees supported by the grant, including investigator-specific and institutional policies related to IDPs. To describe institutional efforts specific to IDPs, you can use this language:

UMass Medical School recognizes the critical importance of preparing our graduate students and postdoctoral scholars for success within a broad spectrum of scientific careers. All graduate students in year 3 and above are required to create an annual Individual Development Plan (IDP). The curriculum for graduate students now incorporates a career planning and development mini-course that guides students through the creation of their first IDP. Updates and re-evaluation are required and monitored by the Graduate School of Biomedical Sciences. All incoming postdocs receive training in how to create an IDP as part of the required onboarding course in Responsible Conduct of Research.

Please contact us if you prefer more detailed template language outlining professional development opportunities offered through the cBCD (including our NIH-funded BEST initiatives) or Office for Postdoctoral Scholars.

- ¹ Austin, J. and Alberts, B. Editorial: Planning Career Paths for Ph.D.s. *Science*, September 7, 2012.
- ² National Institutes of Health. NOT-OD-14-113: Descriptions on the Use of Individual Development Plans (IDPs) for Graduate Students and Postdoctoral Researchers Required in Annual Progress Reports beginning October 1, 2014 (posted August 4, 2014).
- ³ Reviewed in Hobin, J.A., Fuhrmann, C.N., Lindstaedt, B., Clifford, P.S. (2012) You Need a Game Plan, *ScienceCareers*, September 7, 2012.
- ⁴ Davis, G. (2005). “Doctors Without Orders.” *American Scientist*, **93** (3), supplement 1-13.

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