Using Individual Development Plans to enhance both research productivity and career development

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Will encouraging the career development of research trainees decrease their research productivity?
As thoughtful mentors, we have multiple (sometimes conflicting) goals…

train world-class researchers and facilitate their career exploration and preparation, while optimizing research productivity.

What is an Individual Development Plan?

A list of goals for the next 9-12 months (and beyond).

Created by mentee, informed by discussions with mentors.

About mentee’s progress and development.

Informed by his/her long-term career goals.

- Research progress
- Professional skills
- Career preparation

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Why are IDP’s so important?

Having a structured plan can increase productivity, reduce conflicts, increase satisfaction.

- Postdocs who discussed plan with mentors: more first-author papers, fewer conflicts with advisor, higher satisfaction with postdoctoral experience (Davis (Sigma Xi), 2006)
- Goals impact performance
  - direct attention to activities related to goal
  - Inspire action toward goal
  - Increase persistence toward goal
  - Reviewed in Locke & Latham, Am Psychol, 2012
- Increased performance if individual sets goals (versus goals set by managers)
  (Latham, Mitchell, Dossett, J Appl Psychol, 1978)

Hobin, CBE-Life Sci Ed, 2014

Why are IDP’s so important?

Having a structured plan can increase productivity, reduce conflicts, increase satisfaction.

Careers in science are competitive. Be strategic, be flexible, watch for lucky opportunities, advocate for yourself.

Throughout your career, you will need to navigate your own career development.

Success in training and transitioning onward Promotion within first professional position Transitioning to a new position or career path

NIH requires that PI’s report whether or not trainees complete an IDP.
NIH Encourages Institutions to Develop Individual Development Plans for Graduate Students and Postdoctoral Researchers

**Notice Number:** NOT-OD-13-093

NIH encourages grantees to **develop institutional policies** requiring an IDP be implemented for every graduate student and postdoctoral researcher supported by any NIH grant by October 1, 2014. At that time, NIH will begin to encourage grantees to report the use of those IDPs on the progress report, regardless of the type of NIH grant that is used for support.

My hope is that institutions and faculty will join NIH as full partners in the effort to better prepare graduate students and postdocs for their chosen careers, and that **IDPs will be embraced by faculty as an important component of career preparation for the next generations of biomedical researchers.**

- Sally Rockey, Deputy Director for Extramural Research, NIH (July 23, 2013)
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IDP’s required by private foundations

AHA RESEARCH INSIDER: JUNE EDITION

Beginning with the July application deadlines, Predoctoral Fellowship, Postdoctoral Fellowship, and Fellow-to-Faculty Transition Award applicants must include an Individual Development Plan (IDP) in their applications.

The IDP will replace the Fellow’s Career Goals section. The sponsor must reference the IDP in the mentorship plan. Consideration of the IDP is now part of the AHA’s peer review criteria for these three training programs.

AHA will use the FASEB IDP tool at http://myidp.sciencecareers.org/. Applicants should register with the site, complete the IDP and review it with the sponsor; select the sections that AHA requires, and print as a PDF. The resulting PDF document will then be uploaded into the AHA application. Full instructions: PDF and online.

New AHA Open Science policies will go into effect with applications due in July 2014 and new awards beginning January 2015.

Agenda

• How to create an IDP?
• myIDP: an online tool
• Following through on the plan
• Mentors: how to facilitate an IDP discussion
• Institutional implementation of IDP’s
• IDP resources

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How to create an IDP?

Step 1.
Self-assess:
- Progress
- Challenges
- Skills
- Long-term career goal*

* Critical step!

How to create an IDP?

Step 2.
Write big-picture goals:
What do you want to accomplish this year?
- Project / research
- Career advancement
- Skills development
How to create an IDP?

**PROJECTS: (Research/teaching)***
- By mid of February: Crystal structure
- By mid of March: Crystal structure
- By mid of April: Crystal structure

**Write and publish paper**
- By end of March: Submit paper
- By end of April: Submit paper
- By end of May: Submit paper

**Learning outcomes:**
- Review data analysis
- Help with data analysis
- Help with interpretations

**Skills Development (Data collection and analysis)**
- November: HKL Manual and textbook (done)
- December: HKL Manual and textbook
- January: HKL Manual and textbook
- February: HKL Manual and textbook
- March: HKL Manual and textbook
- April: HKL Manual and textbook
- May: HKL Manual and textbook
- June: HKL Manual and textbook
- July: HKL Manual and textbook
- August: HKL Manual and textbook

**CAREER ADVANCEMENT**
- Spring: Attend Gordon Research Conference
- May: Attend Gordon Research Conference
- June: Attend Gordon Research Conference
- July: Attend Gordon Research Conference

**Step 3. Get down to specifics:**
Fill in SMART goals for each broader goal.

- **S** – Specific
- **M** – Measurable
- **A** – Action-oriented
- **R** – Realistic
- **T** – Time-bound

Make informed decisions.

How to create an IDP?

**Step 4. Arrange goals in chronological order**

Is this plan realistic? Revise!
An online career planning tool

Authors:
- Jennifer Hobin
- Cynthia Fuhrmann
- Philip Clifford
- Bill Lindstaedt

ScienceCareers – Jim Austin
AAAS technical team
- Michael Savelli
- Zdenek Becka
- Melissa Rosenthal

Career counselors, statistician, ...

myIDP.sciencecareers.org

Trainees create a confidential account.

- Email address will not be used for spam
- Information is confidential

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Trainee can print out a pdf-version of the blank skills assessment, so that mentor can provide feedback.

<table>
<thead>
<tr>
<th>Scientific Skills Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Quick Tips</strong></td>
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<tr>
<td><strong>1.</strong></td>
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<td><strong>2.</strong></td>
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<td><strong>High-potential:</strong></td>
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<td><strong>Skills:</strong></td>
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<td><strong>Interests:</strong></td>
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<tr>
<td><strong>Values:</strong></td>
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</tbody>
</table>

Trainee can print out a pdf-version of the blank skills assessment, so that mentor can provide feedback.
Tips for building a professional network.

**Why is this important?**
The most effective way to learn about a highly specialized career is to get advice from someone who has traveled down a similar path before you. The process of gathering information about a career path from another professional who is experienced in that field is called "informational interviewing.

Through the informational interviewing process, you can learn:
- the pros and cons of a career path
- how to make a seamless transition into that new path
- how to conduct an effective job search in that field

**How to conduct an informational interview:**
1. Email an invitation to your informational interview "target" (download example correspondence).
2. Tell him or her that you want advice on a job offer.
3. Set up a 30-60 minute appointment to talk.
4. Take a personalized list of questions related to your top issues, and develop other general questions.
5. Conduct the informational interview.
6. Follow up with a thank you note (download example correspondence).
7. If appropriate, follow up periodically.

**Keep a log.**
- Click the Tip Activities tab above, and keep track of your informational interviews. Include information such as the person’s name, their title, and what you learned from that discussion. These notes will be helpful if you follow up with him or her later to share your progress.
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Outputs a printed, unique Individual Development Plan
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Email or print a Certificate of Completion

- Marks sections completed
- Trainee marks whether they have discussed IDP with mentor
- University can decide what it wants to require
- Keeps actual content of IDP confidential
- Download or email to administrator/PI

Common reactions…

- This is clarifying!
- It is a relief to have a roadmap.

- This is daunting!
- How can I get all this done?!?
Strategies for achieving your goals

- Write down goals

“The discipline of **writing something down is the first step toward making it happen.** In conversation you can get away with all kinds of vagueness and nonsense, often without even realizing it. But there’s something about putting your thoughts on paper that forces you to get down to specifics. That way, it’s harder to deceive yourself or anybody else.”

- Lee Iacocca

Strategies for achieving your goals

- Write down goals
- List the goals chronologically
- Map *start* and *end* dates onto a calendar
Strategies for achieving your goals

- Write down goals
- List the goals chronologically
- Map start and end dates onto a calendar
- What resources will you need? Ask for them.
- Consider how to hold yourself accountable
  - Goals that are “important but not urgent”
- Set an “IDP check-in meeting” for 6 months later
- Expect to revise the plan

Mentor: Facilitating an IDP meeting

1. Ask mentee to do pre-work:
   - Progress to date on prior goals (Achievements? Challenges?)
   - Skills self-assessment.
   - Goals for coming year. (Skills? Career? Project?)
   - What resources will you need?
     - Money?  Time off?  Access to resources?  Help developing a skill?
     - Connect to other professionals?  Additional mentors?
Mentor: Facilitating an IDP meeting

2. **In the meeting, prompt mentee to discuss:**
   - Progress to date on prior goals (Achievements? Challenges?)
   - Skills self-assessment.
   - Goals for coming year. (Skills? Career? Project?)
   - What resources will you need?
   - Are there additional critical areas of growth?
   - What are your [mentee’s] priorities? How will mentee ensure progress?
   - Is the plan realistic? Are there other ways to reach these goals?

Schedule a follow-up meeting 3-6 months later as a check-in.

Trainees: Be strategic

- Attend workshops to develop career-specific skills
- Talk to people in the career path (informational interview)
- Stay current through newsletters, Twitter feeds, other social media
- Join professional societies; attend events
- Volunteer locally or nationally
- Show initiative (create a student/postdoc group on-campus)
- Get direct experience

- Participate in URBEST!
What can we do as an institution?

Our approach (UMass Medical School):
IDP's and career planning are integrated into the curriculum along with opportunities for mentoring, exploration, and training.

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Pilot IDP mini-course has promising results

High satisfaction

Are you glad you participated in this course?
– 24 / 26 respondents reported “yes” (92% response rate)

“My original expectations of the class were negative. I was concerned it would waste my time. It has proven to be a great course so far. Lots of useful information!”

“The course forced me to start thinking about plans and careers—which I had been putting off.... it was extremely helpful.”

“I spent a total of 10 hours but maybe I saved 2-3 months of personal development time.”

Pilot IDP mini-course has promising results

Suggestive outcomes 4 months later

Participants were more likely* to...
• Have taken action toward preparing for their career in the past 12 months
• Report greater knowledge of and satisfaction with UMMS career development resources
• Report having a back-up plan if they cannot find a position related to their first-choice career path upon graduation

* Comparing 11 course participants’ responses to 25 non-participants. Small sample size means these data are exploratory only.
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Planning via an IDP will help our trainees:

- Consider the big picture
- Be proactive earlier
- Focus their efforts
- Seek help from mentors
- Clarify expectations
- Minimize conflicts
- Maximize productivity

...for research and career development

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