



Online Ethics Center  
FOR ENGINEERING AND SCIENCE

# Individual Development Plans/Agreements

## Description

An exercise around developing individual development plans and agreements, part of [Instructor's Guide to Prepare Research Group Leaders as RCR Mentors](#).

## Body

### NOTES TO THE INSTRUCTOR:

- While these are often characterized as “mentor-trainee contracts,” the focus should be less on what they are called, and more on how creating or using these kinds of documents can help educate our trainees in or about RCR.
- There are certainly several good IDP instruments already available, primarily targeting postdoctoral trainees. We argue here, however, whether already existing or newly created, and whether for post-docs or graduate students, an IDP can be useful even if the focus is not particularly on what we think of as RCR. It is, in fact, this aspect of these instruments that is so crucial. What we might think of as simply scientific practice actually has ethical implications, and while we’re training our post-docs/graduate students about these practices in general, we can also discuss the ethical implications.
- Many of these tools – the FASEB IDP, and the myIDP in Science Careers -- are easily adapted to those discussions. For instance, myIDP has one rather brief section focusing specifically on RCR, and includes the following elements:
  - Careful recordkeeping practices
  - Understanding of data ownership/sharing issues
  - Demonstrating responsible authorship and publication practices

- Demonstrating responsible conduct in human research
- Demonstrating responsible conduct in animal research
- Can identify and address research misconduct
- Can identify and manage conflict of interest

However, the other sections also contain elements of “RCR”. For example, under Research Skills, they have the skills of “navigating the peer review process”; “interpretation of data”; and “statistical analysis.” Under Professionalism, they include “complying with rules and regulations.” The entire sections of Communication and Management and Leadership Skills are full of elements considered typical RCR topics, as well as some that should be part of our discussions of ethical practice in research [e.g., time management].

- What is presented here is really just a bare-bones example of an instrument meant to be created between a trainee and his/her PI, and used as a jumping off point for conversations about RCR, specifically, and the ethical dimensions of our work, broadly. Alternatively, you could go through each element of the myIDP on screen and have each participant talk about the relevance of any particular item to their practice and how they would relate that practice to the responsible conduct of research.

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Increasingly, various science organizations have proposed agreements or “individual development plans” (IDPs) to spell out mutual obligations for mentors and postdocs (AAMC, 2008a) and mentors and graduate students (AAMC, 2008b). The value of such agreements is summarized in a widely cited manual for training of graduate students (University of Michigan, 2011):

*Departments can affirm that mentoring is a core component of the educational experience for graduate students by developing a compact or agreement, relevant to the discipline or field of study, for use by faculty and the students with whom they work. Such a document would list the essential commitments and responsibilities of both parties, set within the context of the department’s fundamental values. This could be included in the departmental handbook and reviewed — or even signed — by both parties to acknowledge the mentoring relationship.*

The Federation of American Societies for Experimental Biology (FASEB) provides on their website an IDP for postdocs, which is not only a template for planning one’s

career, but also “serve[s] as a communication tool between individuals and their mentors” (<http://www.faseb.org/portals/0/pdfs/opa/idp.pdf>). Additionally, Science Careers has “myIDP” (<http://myidp.sciencecareers.org>), a tool which also includes skill, interest and values assessments, and provides a very useful framework for thinking through the ethical implications of our scientific practice. The presumption is that such plans/agreements/instruments will open channels of communication and serve as a reminder of mutual roles and responsibilities for a successful training experience.

### **Discussion Questions**

1. Which of the sample development plan items (next page) is/are appropriate to your discipline?
2. Would such a development plan be useful or counterproductive in promoting responsible conduct?

### **Exercise**

Using the sample plan as a starting point, design an IDP for your research group. In doing so, consider:

1. What should be changed? Deleted? Added?
2. How and when would you use such an agreement?

Present your draft agreement to the workshop participants.

### **Sample Development Plan**

<b>Student</b>	<b>Mentor/Advisor</b>
1. If in doubt, ask	1. If in doubt, ask
2. Meet with advisor once each _____.	2. Meet with student individually once each _____.
3. With mentor, define milestones for research and dissertation.	3. With trainee, define milestones for research and dissertation.

4. Request performance evaluations once each _____.	4. Provide performance evaluations once each_____.
5. Perform self-evaluation once each_____.	5. Request student self-evaluation once each_____.
6. Strive to meet expectations for recordkeeping, data ownership, sharing of data, credit, and authorship.	6. Provide guidance for expectations about recordkeeping, data ownership, sharing of data, credit, and authorship.
7. Maintain research records sufficient for others to reconstruct what was done.	7. Review original research records once each _____.
8. Pursue opportunities for professional development (e.g., writing, speaking, mentoring, learning and teaching about research ethics).	8. Propose opportunities for professional development (e.g., writing, speaking, mentoring, learning and teaching about research ethics).
9. Comply with government and institutional guidelines and regulations for the conduct of research.	9. Provide adequate information about relevant government and institutional guidelines and regulations for the conduct of research.
10. If e-mail communication is breaking down, schedule an in-person meeting.	10. If e-mail communication is breaking down, schedule an in-person meeting.

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