

**Individual Development Plan for Predoctoral Trainees in the T32 Training Program in Molecular and Cellular Biology**

The Training Program in Molecular and Cellular Biology (MCB) at the University of California Davis is directed by Dr. James S. Trimmer. This Training Program provides continued training of predoctoral graduate students engaged in research on fundamental and applied biological questions in the area of molecular and cellular biology.

According to this [notice](http://grants.nih.gov/grants/guide/notice-files/NOT-OD-14-113.html), NIH has requested institutions to develop and implement Individual Development Plans for graduate students supported by NIH awards. This Individual Development Plan was created in 2013 for the MCB T32 Program Trainees to help them achieve their career goals.

“A goal without a plan is just a wish.” – Antoine de Saint-Exupery

What is an Individual Development Plan?

An Individual Development Plan (IDP) for graduate students is an individually - tailored career development tool to create a plan of action, and to set short and long term goals in order to achieve career objectives.

An effective IDP should help prioritize, set goals, develop and implement a plan of action, and periodically assess progress. An effective IDP would be a dynamic, moving document as goals will likely evolve over time. IDP can also allow graduate students to take ownership of their career, obtain valuable input and feedback from mentors and Training Program leadership, and facilitate better communication between Trainees and their Trainers. Trainees can begin IDP at any stage of their graduate career.

Overview of the IDP Process

1. Complete a self-assessment. Assess your current skills and competencies.
2. Formulate goals for the upcoming year.
3. Assess progress at the end of the year.
4. Implement the IDP. Revise as needed.
5. Back to step 1.

All materials here are based on:

<http://education.scripps.edu/postdoctoral/professional_development/files/TSRI-Grad-IDP-long.pdf>

<http://myidp.sciencecareers.org/>

<http://www.faseb.org/portals/2/pdfs/opa/idp.pdf>

<http://www.grad.umn.edu/sites/grad.umn.edu/files/idpgradpdf_1.pdf>

**Individual Development Plan - Template**

Name: Click here to enter text.

Date: Click here to enter text.

Mentor’s Name: Click here to enter text.

Additional advisors (if any): Click here to enter text.

Thesis Committee Members: Click here to enter text.

General Questions:

1. How many years have you been in graduate school? Click here to enter text.
2. Have you chosen a dissertation topic? Click here to enter text. If yes, state the title of your dissertation.

Click here to enter text.

1. Please provide a brief overview of your research project.

Click here to enter text.

1. Do you have a “Next Step Career Goal” after graduate school? (Postdoctoral training, job, etc. – Don’t be alarmed if you don’t have a career goal.)

Click here to enter text.

**Step 1: Self - Assessment:**

**Step 1 – Part 1: Assess your strengths, weaknesses and skills**

Evaluate your skills and abilities in the following areas where:

5 = Highly proficient

1 = Needs improvement

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| --- | --- | --- | --- | --- | --- |
| **Overall Core Scientific Knowledge** | 1 | 2 | 3 | 4 | 5 |
|  | Knowledge of literature in the field | 1 | 2 | 3 | 4 | 5 |
|  | Knowledge of literature related to project | 1 | 2 | 3 | 4 | 5 |
|  | Knowledge area:  | 1 | 2 | 3 | 4 | 5 |
|  | Knowledge area:  | 1 | 2 | 3 | 4 | 5 |
|  |  |  |  |  |  |  |
| **Laboratory or Bench Skills (e.g., microscopy, animal skills):** |  |
|  | Skill set:  | 1 | 2 | 3 | 4 | 5 |
|  | Skill set:  | 1 | 2 | 3 | 4 | 5 |
|  | Skill set:  | 1 | 2 | 3 | 4 | 5 |
|  | Other: (define) | 1 | 2 | 3 | 4 | 5 |
|  |  |  |  |  |  |  |
| **General Research Skills (e.g., designing experiments, creativity):** |  |
|  | Designing experiments | 1 | 2 | 3 | 4 | 5 |
|  | Analytical skills | 1 | 2 | 3 | 4 | 5 |
|  | Problem solving/troubleshooting | 1 | 2 | 3 | 4 | 5 |
|  | Creativity/developing new research directions | 1 | 2 | 3 | 4 | 5 |
|  | Independence/Being productive in an unstructured environment | 1 | 2 | 3 | 4 | 5 |
|  | Other: (define) | 1 | 2 | 3 | 4 | 5 |
|  |  |  |  |  |  |  |
| **Professional Skills:** |  |
|  | Oral presentation skills | 1 | 2 | 3 | 4 | 5 |
|  | Fellowship/grant writing skills | 1 | 2 | 3 | 4 | 5 |
|  | Manuscript writing skills | 1 | 2 | 3 | 4 | 5 |
|  | General scientific writing skills | 1 | 2 | 3 | 4 | 5 |
|  | Teaching skills (TA or mentoring students in the lab) | 1 | 2 | 3 | 4 | 5 |
|  | Being mentored | 1 | 2 | 3 | 4 | 5 |
|  | Other: (define) | 1 | 2 | 3 | 4 | 5 |
|  |  |  |  |  |  |  |
| **Leadership and Management Skills:** |  |  |  |  |  |
|  | Leading and motivating others | 1 | 2 | 3 | 4 | 5 |
|  | Managing projects and time | 1 | 2 | 3 | 4 | 5 |
|  | Organizational skills | 1 | 2 | 3 | 4 | 5 |
|  |  |  |  |  |  |  |
| **Interpersonal Skills:** |  |  |  |  |  |
|  | Getting along with others  | 1 | 2 | 3 | 4 | 5 |
|  | Conflict resolution | 1 | 2 | 3 | 4 | 5 |
|  | Networking/meeting new colleagues | 1 | 2 | 3 | 4 | 5 |

**Step 1 – Part 2: Ask your mentor or other trusted colleague to assess your strengths, weaknesses and skills,** and then return the list to you for discussion.

Evaluator’s Name: Click here to enter text.Relationship: Click here to enter text.

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| --- | --- | --- | --- | --- | --- |
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|  | Conflict resolution | 1 | 2 | 3 | 4 | 5 |
|  | Networking/meeting new colleagues | 1 | 2 | 3 | 4 | 5 |

**Step 2 – Set goals for the next year**

In this section, you will set goals for developing your skills and accomplishing your projects. Areas where you could set goals could be related to your research project, acquiring scientific knowledge, lab skills, writing skills, oral presentation, communication, career development, time management, etc.

**Setting Goals: Research Projects**

What are the **scientific questions** that you will be working towards answering in the next year? You could list your aims or sub aim, complete a figure for a paper, etc. What are the experimental approaches that you are currently pursuing? Are there other approaches that you could try? How long are you willing to keep trying before you drop each of these experiments/projects? What result or deadline will trigger when you begin the next approach?

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| --- | --- | --- |
| Scientific Question | Experimental Approach | Time Frame |
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**Setting Goals: Scientific Knowledge**

In what areas do you want to acquire more **scientific knowledge**? Do you plan to do more reading in this area? Discuss with specialists? Attend conferences? How much time do you think you will need to set aside (per week, per month, etc.)?

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| Knowledge Area | Method for Knowledge Development | Time Frame |
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**Setting goals: Lab Skills**

What new skills and expertise are required for success? How will you gain exposure to these skills? How much time would you set aside to develop this skill?

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| Lab Skills | Method for Skill Development | Time Frame |
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**Setting Goals: Oral Presentation Projects and Skills**

What talks and posters do you plan to present in the next year (could be at lab meetings, journal clubs, in-house seminars and scientific meetings)? Are there any specific skills you would like to work on in the coming year? What are your plans to develop oral presentation skills (attend workshops, volunteer to give more presentation, get feedback from mentors, colleagues)? What is your time frame to attain these skills?

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| Presentation (When? / Where?) | Skills to work on and methods employed for Skills Development | Time frame to develop skills |
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**Setting Goals: Writing Projects and Skills**

Are there any writing projects that you will be initiating this year or continuing from last year (Fellowships, manuscripts, grants)? What will you do to develop these skills (attend workshop, seek editing assistance, learn how to use software like EndNote etc.)?

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| --- | --- | --- |
| Writing Projects | Method for Skill Development | Time Frame |
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**Setting Goals: Manuscript and Grant writing:** List the stages and sub-steps toward finishing the project (Introduction, methods etc.) Set goals/deadlines for each stage within the writing process.

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| Manuscript/ Grant title | Elements of the paper or grant (abstract, introduction, methods etc.) | Time Frame |
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**Setting Goals: Career Development**

1. What are your current careers of interest?

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1. List activities that you will complete during the next year to learn more about and move closer to your major careers of interest. (Attend workshops, advice from counselors, host for career luncheons or conduct informational interviews with people in your careers of interest, read/research potential career paths etc.).

 Click here to enter text.

Note: myIDP.sciencecareers.org is a FREE online IDP service where you can complete exercises to help you examine your skills, interests, and values. Once you complete, the site provides you a list of 20 scientific career paths with a prediction of which ones best fit your skills and interests. You can use this site to learn more about potential career options.

**Setting Goals: Time management**

\* Prioritizing your goals: After you have completed all sections, identify the areas that you feel belong in your top priority list.

Ask yourself how many hours do you spend per week doing work-related activities? - Is this a good balance to achieve your goals at work and in your personal life? Do you want to increase or decrease this time in the coming year? Provide a rough estimate of your time:

**A)** What % of your time at work was spent on each of the following activities during the past year? (List under column A)

**B)** To reach your goals, how would you like to change the amount of time spent on each of these types of activities: increase, same, or decrease? (List under Column B)

**C)** What is your goal for % of your time at work spent on each activity during the upcoming year? (List under Column C)

|  |  |  |  |
| --- | --- | --- | --- |
| **Activities** | **A** | **B** | **C** |
| **Advancing your Research** |  |  |  |
| Performing research |  |  |  |
| Discussing your research with mentors, collaborators, others |  |  |  |
| Attending science seminars  |  |  |  |
| Attending conferences  |  |  |  |
| Reading in your field (reviews, papers, etc.) |  |  |  |
| Reading to expand your knowledge of other fields |  |  |  |
| Writing fellowships, abstracts, papers  |  |  |  |
| Other lab management, lab duties  |  |  |  |
| **Teaching (TA), Mentoring (e.g. UG students), and Leadership**  |  |  |  |
| Teaching in the classroom  |  |  |  |
| Mentoring in UG students in the lab  |  |  |  |
| Volunteer or leadership activities (committees, etc.)  |  |  |  |
| **Career and Professional Development**  |  |  |  |
| Course work |  |  |  |
| Attending training/career development seminars/workshops |  |  |  |
| Networking to promote your goals (socializing, emails, etc.) |  |  |  |
| Career exploration (informational interviews, reading about careers etc. |  |  |  |
| Activities not directly promoting your goals |  |  |  |
| Other |  |  |  |

***Note: some of these activities may not be relevant in your first year, but will become important closer to your graduation.***

**Step 3 – Annual Progress Report**

 • List or briefly describe major research accomplishments this year. What were your main goals for the past year? Which goals did you meet? If you did not meet a goal, why not?

 Click here to enter text.

• List new techniques/expertise acquired this year:

 Click here to enter text.

• List publications or abstracts submitted or published this year. In each case, underline your name in the author list.

 Click here to enter text.

• List grants/fellowships applied for this year:

 Click here to enter text.

• List grants/fellowships received for this year:

 Click here to enter text.

• List honors/awards received this year:

 Click here to enter text.

• List accomplishments this year in other aspects of career development (e.g. committees, career workshop attendance, course work, etc.):

 Click here to enter text.

• Describe and explain your level of satisfaction with your research progress in the past year:

 Click here to enter text.

• Describe and explain your level of satisfaction with other aspects of your career development in the past year:

 Click here to enter text.

**Step 4: Implement Your IDP**

Generating your IDP is just the beginning of the career development process and serves as the road map. Now it’s time to take action!

• Discuss your plan with your mentor(s): Plan an annual (or more frequently if appropriate) meeting with your mentor to review and discuss your IDP.

• Discuss your plan with Training Program Leadership: Plan an annual (or more frequently if appropriate) meeting with Training Program Leadership to review and discuss your IDP.

• Put your plan into action: Read it over regularly (monthly, semi- annual, annual basis) to check your progress.

• Revise and modify the plan as necessary: The plan is dynamic; it will need to be modified as circumstances and goals change. The challenge of implementation is to remain flexible and open to change.

**Trainer’s Feedback**

A note to Trainers:

Please go through the IDP with your student and provide feedback on pertinent factors. Ask the student to revise the IDP as needed.

Click here to enter text.

Trainer’s Name: Click here to enter text.

Trainer’s Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_