

ChEM-H CBI Individual Development Plan- third and beyond year graduate students

Student Name:

Advisor Name:

Date:

SCIENTIFIC/RESEARCH GOALS AND OBJECTIVES

Do you have a clear/defined plan and endpoint for your project?

How confident are you in your ability to complete it by Year 5?

How firm a grasp do you feel you have of the field in which you work? If insufficient, what help do you need in identifying relevant readings or other means to be a true expert in your field?

What are your near-term research goals? For each goal, specify any areas where you feel you need help or additional training (e.g., the need to learn high-throughput sequencing). Include any techniques you want to learn, scientific collaborations, etc.

CHALLENGES

Describe any unusual or unanticipated challenges you experienced this year in trying to accomplish the goals you set out last year with your advisor.

What actions have you taken to meet these challenges?

How can your advisor help you?

RIGOR AND REPRODUCIBILITY

Please describe how your research and experimental design addresses the 4 focus areas of reproducibility.

Rigor of the prior research-Describe the strengths and weaknesses of the rigor of the prior research/preliminary data. Describe plans to address weaknesses in the prior data as applicable to your experiments.

Scientific Rigor of the Experimental Design- Describe how the experimental design, methodology, analysis, interpretation, and reporting will produce unbiased and reproducible results.

Biological variables- Explain how variables (sex, age, weight, underlying health conditions, race and/or ethnicity) are factored into your experimental design, analyses, and reporting about animal or human studies.

Authentication of resources- Describe methods to ensure the identity and validity of key biological or chemical resources for your experiments.

SAFETY

Please list necessary safety trainings that you have completed.

Are there additional safety trainings that you need to conduct your research? Please list and describe your plans for completing the training.

DEVELOPMENT ACTIVITIES

List your recent involvement in the past year and/or current plans you have for the following areas:

ACADEMIC COURSEWORK/TRAINING:

TEACHING/MENTORING:

PROFESSIONAL DEVELOPMENT:

CONFERENCES:

SERVICE/OUTREACH:

Which experience or experiences have been most valuable to you, your research, and/or your professional goals?

SKILLS

One of the most important parts of your PhD training is to develop a skill set transferrable beyond graduation. Use this worksheet to assess and identify skills that you would like to target in the coming year, marking your perceived current ability level from weak (1) to strong (3) relative to where you think a student should be at the end of their PhD studies. Ask your advisor how s/he agrees or disagrees. Spaces have been provided after each section to allow you and your advisor to add any additional skill targets. An honest self-assessment and discussion will help you set your training goals.

RESEARCH SKILLS & SCIENTIFIC THINKING	Perceived ability 1=weak; 2=neutral; 3=strong
Broad-based knowledge of science	
Critical reading of scientific literature	

Experimental design	
Interpretation of data	
Creativity and innovative thinking	
Statistical analysis	

WRITING	Perceived ability 1=weak; 2=neutral; 3=strong
For a scientific publication	
For a research proposal	
For a lay audience	
Grammar/structure	
Editing your own writing	

ORAL COMMUNICATIONS	Perceived ability 1=weak; 2=neutral; 3=strong
To a specialized audience	
To a lay audience	
In a classroom	
One-on-one	
English fluency	

LEADERSHIP/PERSONNEL MANAGEMENT	Perceived ability 1=weak; 2=neutral; 3=strong
Delegating; providing instruction	
Providing constructive feedback	
Dealing with conflict	
Leading and motivating others	
Setting expectations	
Serving as a role model	

PROFESSIONALISM/INTERPERSONAL	Perceived ability 1=weak; 2=neutral; 3=strong
Identifying and seeking advice	
Upholding commitments/deadlines	
Maintaining positive relationships	
Approaching difficult conversations	

PROJECT MANAGEMENT	Perceived ability 1=weak; 2=neutral; 3=strong
Planning projects	

Breaking down complex tasks	
Time management	
Managing data and resources	

What are the top one or two skills that you plan to focus on for the next year?

MENTORING

Mentoring is a distributive process, allowing you to take advantage of the talents and experiences of many people throughout your training. You may want to consider using all or some of the IDP as an impetus for conversations with each of your mentors, not just your advisor. In the space below, consider the breadth of mentoring you currently receive.

Who are the members of your Reading Committee?

Have you held your annual Reading Committee meeting this year?

Frequency and productivity of meetings:

	How often do you meet?	Is this helpful?	Assistance with scheduling
Thesis Advisor:			
Reading Committee (as group)			
Reading Committee (one-on-one)			
Additional mentors			
Collaborators			

What have you found most beneficial of the mentoring you have received? Is there anything that would improve the mentoring you receive?

PROFESSIONAL AND PERSONAL DEVELOPMENT

What are your long-term goals? (What activities do you want to be doing on a daily basis 5-10 years after graduation?)

—What professional and/or other factors inform these goals?

For each goal you listed above, identify one or two shorter-term objectives that may be important to achieving that goal.

—How will you meet these goals next year?

What guidance would help you with your development and exploration of career options?

What features of the lab group and your relationships with colleagues are most helpful and supportive to your personal development?

Are there any factors that you are concerned may negatively affect your progress?

What features of the lab group and your relationships with colleagues are most helpful and supportive to your personal development?

What help can your advisor or other faculty/staff provide? Indicate if you need help finding professional or personal development resources.

Your success as a student is tightly linked to your wellness. What are you doing to maintain this?

ACTION PLAN

What is the projected timeline for completing your current projects and publishing your work? In what quarter do you expect to graduate?

What skills (~1-2) did you identify as important development targets for the coming year?

List any activities in which you and your mentor agree you should participate to achieve your academic objectives in the coming year.

If you know, what will be your financial support for the next year?

In order to aid your success, are there any additional actions that can be initiated or continued by you? By your mentor?

When are you and your mentor going to follow up on your IDP and progress? (An annual meeting is only the minimum required.)

Is there anything else you would like to discuss with your advisor/mentors at this time?