

## **SBME's Career Accelerator**

### **WELCOME MENTEE'S!**

On behalf of the School of Biomedical Engineering, welcome to SBME's Career Accelerator! We believe you'll benefit from this experience as you gain valuable insights into potential career pathways and build your professional network.

This guidebook<sup>1</sup> was created to support you develop a meaningful mentorship experience. In this guide you'll find information on:

1. Program Overview
2. Expectations
3. Individual Development Plan
4. Plan Development, Refinement & Implementation
5. Advice to a Scientist
6. Evaluation
7. Resources

### **1. PROGRAM OVERVIEW**

UBC's School of Biomedical Engineering (SBME) has partnered with STEMCELL Technologies and Advice to a Scientist (AtaS) to offer Career Accelerator, a new mentorship program for SBME's graduate students. The program will support students to identify possible career options and learn how to transition into those careers following training. SBME's Career Accelerator seeks to support you as you build your professional network, explore career pathways, and develop communication and leadership skills.

### **2.0 EXPECTATIONS**

In SBME's Career Accelerator, mentees are encouraged to<sup>2</sup>:

**MANAGE THE RELATIONSHIP** – Mentees take equal responsibility for working to build a rapport with their mentors and ensuring that times are booked for meetings. Be prepared with an agenda for your meetings with mentor.

**SET CLEAR GOALS** – Create SMART goals (see Individual Development Plan). Identify barriers to goal achievement and provide potential solutions. Undertake honest self-assessment regularly. Share mistakes and perceived areas for improvement

**BE CLEAR ABOUT OBJECTIVES** – Mentees need to consider what they want from their mentors such as: advice about a particular career path, advice about a particular skill set, or some other goal or objective. Mentees communicate these objectives to their mentors, recognizing that these may change

<sup>1</sup> The content for this guidebook was adapted from CIHR's IDP Resource Website: <https://cihr-irsc.gc.ca/e/50516.html>

<sup>2</sup> Expectations adapted from Faculty of Medicine's [Mentoring Framework](#)

over time. Set goals and timetables for completion of projects and invite reflections on progress towards them.

**TAKE ADVANTAGE OF OPPORTUNITIES PROVIDED BY THE MENTOR** – Mentors may be able to introduce their mentee to others in related fields of study or provide opportunities for social and professional engagement in a variety of communities.

**ACCEPT RESPONSIBILITY FOR YOUR OWN DEVELOPMENT** – Mentees must make their own decisions; mentors can provide advice and feedback, but mentees are responsible for their careers.

**SEEK INFORMATION** – Mentees should come to meetings prepared with questions so that meeting times are focused and useful. Be open to suggestions, advice, feedback. Listen and ask questions. Be open about thoughts and feelings, provide feedback on what works and what does not.

**CONFIDENTIALITY** – Maintain confidentiality of relationship.

## 2.2 TIME COMMITMENTS

Students are required to commit to 45-minute meetings every two months, and mentor-mentee pairs are expected to meet quarterly during the program's cycle (October to April). We encourage virtual meetings to increase accessibility, but pairs are welcome to meet in-person.

## 2.2 PROGRAM TIMELINE

Date	Milestone
August- Sept	Mentor recruitment and selection
September	Student Recruitment (IDP)
Late October	Mentor-mentee matched
October 28 <sup>th</sup>	Orientation and Program Kick-off event
Oct/Nov	1 <sup>st</sup> Meeting - AtaS Icebreaking Activity - Discuss IDP, develop goals and outcomes
November 30 <sup>th</sup>	Submit Exploring Science post-interview deliverables
January 15 <sup>th</sup>	Submit article topic for AtaS review
April	Mentee completes self-evaluation and reviews IDP outcomes with mentor
May 1 <sup>st</sup>	Receive feedback on your article
May 8 <sup>th</sup>	Submit revised article for AtaS publishing
May 12 <sup>th</sup>	Evaluation: Final Report (student) & Survey due

### 3. INDIVIDUAL DEVELOPMENT PLAN

SBME's Career Accelerator used an Individual Development Plan (IDP) to identify mentors and match students. An IDP is a tool that supports trainees prepare for the career of their choice by establishing career goals and identifying skill gaps. Through the IDP, mentors are matched with students whose career goals are a good fit.

Through the initial IDP, students will have the opportunity for self-evaluation and reflection, and together with their mentor, will develop an action plan to track goals and progress. The IDP will also serve as a communication tool, enabling both parties to set expectations and training outcomes.

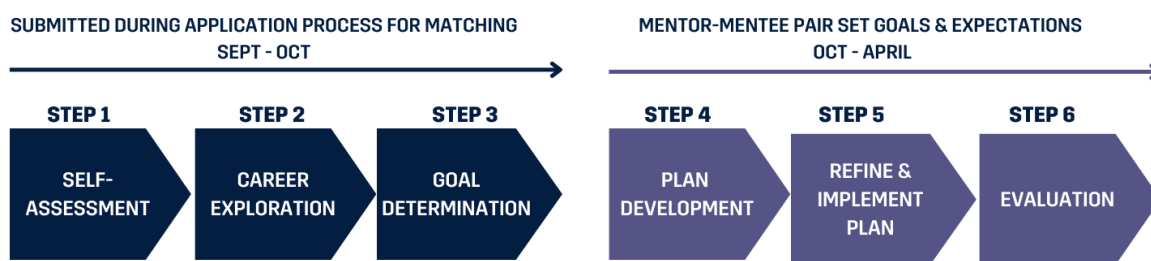
For more information about IDP's, [please visit CIHR's IDP Resource website.](#)

#### 3.2 GOAL SETTING

During your initial meeting, you'll review and discuss your IDP. Please seek your mentor's input for goal setting and plan development. This will involve an insightful discussion between the mentor and student. Please use the content and reflections from Steps 1, 2 and 3 to develop goals and make plans for implementation (Steps 4 & 5) (Figure 1). We have provided an example IDP template which was developed by CIHR to support planning for Steps 4 and 5.

#### CIHR's IDP Template

Through quarterly check-ins, you'll be able to assess progress and outcomes and set new goals (Steps 4 & 5). At the end of the program, SBME will ask mentors and mentees to reflect on their outcomes and evaluate success based on the goals laid out in the IDP (Step 6).



*Figure 1*

### 4. PLAN DEVELOPMENT

Insights from the IDP in Steps 1, 2, and 3, and your initial discussion can be used to prepare a plan. Ensure that both goals and objectives are SMART (specific, measurable, achievable, relevant and time-bound). The questions in Figure 2 can support the mentee-mentor pair outline a plan of action that is effective, precise and measurable.

Questions for mentee-mentor pairs to outline a plan of action:

For Mentee	For Mentor
<ul style="list-style-type: none"> <li>Does my action plan define how I will reach my goals (as well as the objectives within each goal)?</li> <li>Are the components of my action plan SMART:               <ul style="list-style-type: none"> <li>Specific?</li> <li>Measurable?</li> <li>Achievable?</li> <li>Relevant?</li> <li>Time-bound?</li> </ul> </li> <li>What will work best for me in my environment:               <ul style="list-style-type: none"> <li>Explicit step-by-step plan?</li> <li>A higher level plan?</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Has my trainee written goals and objectives that are SMART?</li> <li>Are they challenging but attainable? Are the timelines realistic?</li> <li>How can I support my trainee? How can I facilitate skills development? How can I encourage success in achieving their goals?               <ul style="list-style-type: none"> <li>What mentorship can I provide?</li> <li>What access to resources or experiences can I facilitate? (e.g. opportunities to make presentations)</li> <li>Who in my network can help my trainee?</li> </ul> </li> </ul>

*Figure 2*

## 4. PLAN REFINEMENT & IMPLEMENTATION

Plan refinement involves a discussion between the mentor and mentee about the student, their IDP and the goals and objectives outlined in the IDP, with the aim to improve it. The IDP is a living document and can be revised multiple times as required. Review and revision are essential to implementing an effective IDP. As this discussion moves the IDP from the development phase to the implementation phase, the conversation can assure that expectations are clear, the goals and objectives are SMART and that the student and mentor have a shared understanding of the plan and are committed to the plan.

### IN ADVANCE OF THE MEETING

One or two weeks prior to your meeting:

1. Trainee will provide a copy of their IDP for review and prepare questions for their mentor.
2. Mentors can use the template IDP plan refinement & implementation sections (Steps 4 & 5) to provide insights, and any useful resource and/or network that can help refine the plan.

The questions in Figure 3 can support the plan refinement and implementation of the mentee's IDP.

Questions to support the plan refinement and implementation of the mentee's IDP:

For Mentee	For Mentor
<ul style="list-style-type: none"> <li>• What insights does my mentor(s) have?</li> <li>• How can I leverage my mentor(s) to identify and facilitate opportunities to develop skills, acquire experiences and expand my network?</li> <li>• How can I use my IDP and related discussions about it to support my progress toward my career goals, noting that the IDP is a living document and may evolve as I develop?</li> <li>• How will my mentor(s) and I use my IDP to track my progress? How often will we meet?</li> <li>• Do my mentor(s) and I both agree on my IDP?</li> </ul>	<ul style="list-style-type: none"> <li>• Based on my review of my trainee's IDP, can I bring forward any insights?</li> <li>• What am I able to commit to in order to best support my trainee and facilitate the implementation of their plan?</li> <li>• How can I encourage my trainee? How can I manage expectations and increase their confidence to reach their goals that may evolve as they develop?</li> <li>• How will my trainee and I use the IDP to track progress? How often will we meet?</li> <li>• Do my trainee and I both agree on this IDP?</li> </ul>

Figure 3

## 5. ADVICE TO A SCIENTIST

**Advice to a Scientist** (*AtaS*, [www.advicetoascientist.com](http://www.advicetoascientist.com)) is an initiative that was co-founded by Dr. Nika Shakiba (University of British Columbia, UBC) and her postdoc supervisor, Dr. Ron Weiss (Massachusetts Institute of Technology) with the mandate to provide open-access advice-sharing in the science, technology, engineering, math and medicine (STEM) community. It is now co-run By Dr. Jennifer Ma (Science and Visual Communication Specialist) who is the creative director and project manager.

Their initiative strives to provide open and equitable access to resources and mentorship in scientific training. **AtaS is built on the core belief that advice and mentorship are key ingredients that empower individuals to succeed in STEM. By breaking down borders and barriers, we want to make this accessible to everyone.** To achieve this, *AtaS* has developed a website that serves as a hub where scientists, scientists-to-be, and future-scientists can find and share advice on topics relevant to the scientific training and development pipeline. This online hub is composed of several concurrent projects that allow us to work towards achieving our mandate, such as Articles and the new "Exploring Science" initiative. You will learn more about these below, as well as how they relate to your experience in this program.

### 5.1 ARTICLES

*AtaS's* website features articles that follow a scientific review-inspired format in which authors summarize the current best practices and relevant resources on topics, such as "[work-life balance and how to prevent burnout](#)" and "[how to study for an oral comprehensive exam](#)". These articles aim to distill the collective wisdom of the scientific community. All articles follow a defined format,

including a section in which key messages from cited resources are synthesized as easily-accessible advice—so-called “tangible tips”.

## 5.2 WRITING YOUR ARTICLE

With support from Advice to a Scientist (AtaS), you will be asked to write an article that captures your experiences in the program. The reviews seek to capture the collective knowledge of the mentorship program and provide open-access resources on mentorship (e.g., building your network, clarifying educational plans, developing leadership skills, and exploring career pathways) for all students at UBC.

## FREQUENTLY ASKED QUESTIONS

### How many articles should students submit?

- At minimum 1, but more is welcome!

### How are article topics chosen?

- Students should propose a topic and submit for approval before moving forward with the full article (Jan 2023)
- We encourage students to connect the topic to their goals in the IDP

### When should it be submitted to AtaS?

- Please submit your topic for approval by **January 15<sup>th</sup> 2023**, with the full article submitted no later than **May 8<sup>th</sup>, 2023**.

Please submit to **Saba Vatanpour**, Editor at AtaS ([sabavatanpour@gmail.com](mailto:sabavatanpour@gmail.com)) using the subject line “AtaS article SBME-STEMCELL partnership”. Please also cc Nika Shakiba ([nika.shakiba@ubc.ca](mailto:nika.shakiba@ubc.ca)).

### Are there resources or guides for writing an article?

Yes! Please use AtaS’s article template found [here](#). Examples of some article can also be found [here](#) and [here](#).

Following revisions, the articles are submitted to our illustrator(s) and a unique art piece is created to accompany each article before publishing on AtaS’s website.

### 5.3 EXPLORING SCIENCE

Scientists-in-training often look to examples of their peers and predecessors to inform their own career trajectory, yet the scientific community does not have a centralized database to explore career paths and the experiences (formal and informal training, mentors, and other experiences) that drove individuals on those paths. AtaS's new initiative, "Exploring Science" will be an interactive and visual database on which the career trajectories of members of the STEM community can be visualized and searched.

In addition to review-style articles, students will participate in AtaS's Exploring Science project. Students will collect and build **career trajectory roadmaps** by interviewing their mentors throughout the program and will share these experiences through the Exploring Science database.

### 5.4 INTERVIEWING YOUR MENTOR & DEVELOPING CAREER ROADMAPS

To help you get to know your mentor, you will conduct an interview at your early meetings to learn about your mentor's career trajectory. The goal of this exercise is two-fold: not only will it give you and your mentor an opportunity to reflect on their career-defining moments together to inspire your next steps, the information you collect will also be used to create a career roadmap for your mentor in the Exploring Science database.

Please refer to the document entitled "**Exploring Science: Instructions for interviewing your mentor**" for more information on the process, as well as the interview questions you will use. Using this set of interview questions provided, you will uncover the professional trajectory of your mentor, identifying both traditional experiences (their training and education background, work experience, etc.) as well as extracurricular and other impactful experiences (key mentors that influenced them, talks they saw or books they read, etc.) that shaped their trajectory. The interview process will guide the mentor on a self-reflection exercise where they look back on their career development journey, list out things that they did to get them where they are, highlighting key experiences that shaped their path, both good and bad.

During the Orientation and Program Kick-off event, we will walk you through the interview process as well as provide a guidance package that includes

1. a list of questions to ask your mentor to ensure you capture a complete image of their trajectory and the information needed for the Exploring Science database.
2. instructions on how to record these interview results using 2 prepared tables that need to be filled in.

Please submit your completed tables as .xls files to Saba Vatanpour at AtaS ([sabavatanpour@gmail.com](mailto:sabavatanpour@gmail.com)) using the subject line "AtaS Exploring Science SBME-STEMCELL partnership". Please also cc Nika Shakiba ([nika.shakiba@ubc.ca](mailto:nika.shakiba@ubc.ca)).

## 6. EVALUATION

At the end of the program, mentors and mentees will review the IDP, reflect on outcomes and evaluate success based on the goals laid out in the IDP. Mentees will be asked to complete a final report (max 500 words), to reflect on their experiences and discuss how the program contributed to their research and career goals. In addition, the mentee-mentor pair will be asked to fill out a program evaluation survey. Survey results will help organizers evaluate and improve the mentorship program.

## Final Report Guidelines

- Please reflect on your mentorship experience and how this Program contributed to your research and career goals
- Please reflect on your goals & action plan, then reflect on your outcomes and evaluate success based on your IDP
- Max 500 words – please email directly to [Danielle.walker@ubc.ca](mailto:Danielle.walker@ubc.ca) by **May 12<sup>th</sup>, 2023**

## Survey

Please fill out the program evaluation survey by **May 12<sup>th</sup>, 2023**:  
[https://ubc.ca1.qualtrics.com/jfe/form/SV\\_bsalohecgr24dsmq](https://ubc.ca1.qualtrics.com/jfe/form/SV_bsalohecgr24dsmq)

## 7. MENTORSHIP RESOURCES & SUPPORT

### 1. CIHR'S IDP Training Modules and Resources

These modules have been developed for trainees and mentors

- Module 1: Introduction to IDPs (8 min.)
- Benefits of IDPs for Trainees
- Benefits of IDPs for Mentors
- Benefits of IDPs for Canadian Economy
- Module 2: Trainee Role (15 min.)
- IDP Learning Objectives Worksheet
- Module 3: Mentor Role (8 min.)

### 2. UBC Centre for Student Involvement and Careers Mentor Handbook

### 3. Health & Wellness: <https://students.ubc.ca/health>