

## Mentoring Topics – Recommendations Mentoring for UBC Science Faculty Members

Preamble	A discussion between mentor and mentee should be framed in terms of what's best for junior faculty members (or their students), given their research/teaching interests and goals, and past experiences. In this document you can find a variety of topics (concrete questions) for mentoring discussions broken into several areas. Most are useful for both assistant professors and instructors, although topics pertaining to 'Research' are aimed at assistant professors, and those pertaining to 'Teaching/Educational Activities beyond the Classroom' are aimed primarily at instructors. The last area listed below pertains to additional considerations for post-tenure faculty (associate professors). Mentoring discussions on any of the topics below will hopefully shave a few bumps off the road, rather than erect new hurdles.
Research	<ul> <li>Am I clearly articulating my research "niche", i.e., what distinguishes my research from that of others in my field? In grant proposals? To colleagues? On my webpage?</li> <li>"I'd like to use presentations about my work at other universities, institutions, workshops to get word about my research out and to get feedback. How do I get invited to give these talks?"</li> <li>I need to work on building/strengthening my research group/lab (e.g., getting a weekly seminar going, getting equipment, building group rapport). How do I focus the limited time I can spend on this, so as to maximize the benefit to our research? How can I best approach others in the group for help?</li> <li>What's a reasonable amount of conference travel? How do I make the most of attending a meeting?</li> <li>Should I send published reports to colleagues? How can I let others in the department know about my work? What's the line between sharing news of accomplishments and appearing self-congratulatory?</li> <li>I'm doing interdisciplinary research. How do I educate my colleagues about ways to effectively evaluate my research?</li> </ul>
Funding	<ul> <li>What's a good level of research funding to aim for, given my research goals? What are good funding sources? What about funding for post-docs and graduate students? How do I position myself to be successful?</li> <li>Who can I ask for feedback on proposal drafts? What should I be including in the budget of a grant proposal?</li> <li>I'm interested in creating research ties with industry. How do I position myself? What are the challenges with intellectual property? How do I meet my own goals in the context of an industrial collaboration?</li> <li>How do I get the opportunity to be involved in collaborative research? What are the advantages, what the pitfalls? How can I distinguish my contributions from those of others, particularly senior colleagues?</li> <li>How do I assess the opportunity and cost tradeoffs in being involved in a collaborative grant? What are the overheads in being involved in a multi-principal investigator grant?</li> <li>On collaborative efforts, how are the authors listed? Where do graduate student names go? How important is first authorship? How is alphabetical listing of authors viewed?</li> </ul>



Teaching	<ul> <li>What breadth, in terms of classes at different levels/areas, should I aim to have covered by the time I come up for tenure?</li> <li>How much flexibility is there in teaching schedules? Who controls the schedule?</li> <li>What do you think are the pros and cons of developing new courses? For me? For students? For the department?</li> <li>How might I use a special topics course to get a new research project off the ground? Can I introduce specialized courses in my research area?</li> <li>What's typical in terms of time spent on course preparation? How might I best use the time spent? Where's the line between sufficient preparation and over-preparation?</li> <li>What can I expect of a teaching assistant (TA)? How can I best train and support my TA? What are my responsibilities for evaluation of my TA's performance? When and how can I request to have a specific student be a TA for my course?</li> <li>Are there department/Faculty of Science (FoS at UBC) standards for grading? What degree of freedom do I have in determining course content and exam structure?</li> <li>Who could I ask to visit my class and provide me with informal/formative feedback on my teaching? Should I consider taking a workshop offered by UBC's Teaching and Academic Growth (TAG) or attending the Science Support Series offered by the Science Centre for Learning and Teaching (Skylight) to broaden my understanding of teaching and learning?</li> <li>Unexpected issues have come up while teaching (e.g., surprisingly low grades on midterms, requests from students that seem unreasonable, cheating cases, complaints from students, students with mental health problems). How should I handle these? Who else can offer some perspective?</li> </ul>
Teaching/Educational Activities beyond the Classroom	<ul> <li>What are department or FoS expectations in terms of contributions to education outside of the classroom? What kinds of contributions can I make?</li> <li>What education conferences are good for me to attend? What's a reasonable amount of conference travel? How do I make the most of attending a meeting?</li> <li>Why might I give presentations on education at other universities, institutions, workshops? How often? How important is this? How do I get invited to give these talks?</li> </ul>
Undergraduate and Graduate Student Supervision	<ul> <li>What factors should I consider, so I can pace myself with respect to the number of students I take on as a supervisor? How many is too many? What are the time intensive aspects of student supervision (e.g., reading several theses in August)? How should I balance number of Master's (MSc) and PhD students for the kind of research I am doing?</li> <li>What things are good to work out with a student before making a commitment to be their supervisor (e.g., research topic, funding, expectations for meetings)?</li> <li>What are other supervisors doing that seem to let them effortlessly take on more students than I'm taking on? Quantitatively, how much time do supervisors spend with their students? Does it vary from student to student and how? How hands-on should I be? How much should I push them to be independent?</li> <li>If students have their own research ideas for which I'm the best suited faculty member but I still don't know much about it, can I meaningfully supervise that student on that project? How?</li> <li>How do I bring out the best in the students I am supervising? How can I identify research problems that suit their interests and technical strengths (given constraints on the scope of my research projects)?</li> <li>Is it a good idea for me to take on undergraduates to do research? When is it worthwhile to supervise an independent honours thesis? What should I expect undergraduates to accomplish?</li> </ul>



	<ul> <li>My student is not making progress in the past few months. What can and should I do? My student is telling me his/her personal difficulties. What can and should I do to support the student?</li> <li>I'd like to find somebody to work on a topic quite urgently, but the only student available and interested doesn't have the right skill set. How do I decide whether to take on the student? How might I provide the student with the support needed to do the work?</li> <li>What information should I keep on file about my students? (Remember that you may need to write reviews and recommendations for them. Mentors can help look over letters of recommendation.)</li> <li>How do I identify and recruit good students? What qualities should I be looking for?</li> <li>Do I need to commit to a graduate student before they get to UBC, or can I wait until after they have taken a class from me?</li> <li>How do I determine whether to recommend an MSc student to go on for a PhD? If I know a student wants to go on but I am not sure if the student is ready, what is a good approach to let the student know about my concerns, and when is a good time?</li> <li>I've been asked to be on a student's supervisory committee. What are the pros and cons of being involved? What is the expected time commitment?</li> <li>For students that I can fund from NSERC grants, can the department support top-ups (e.g., through TAships), that go beyond the limit allowed by NSERC?</li> </ul>
Post-doctoral Fellow Supervision	<ul> <li>Should I hire a post-doctoral fellow? What's different about working with a post-doc, rather than a graduate student? Are there special sources of funding for post-docs?</li> <li>What are my responsibilities, as the host of a post-doctoral fellow?</li> </ul>
Merit Review, Reappointment, Tenure, and Promotion Processes	<ul> <li>How will my teaching record be evaluated when I come up for promotion? What importance is placed on peer observation of teaching, and on student evaluations? How are peer evaluations done, and how often? What should I be doing now to ensure that I can document my contributions to teaching (e.g., curriculum development, supervision of undergraduate research), and the quality of my teaching?</li> <li>What are department or FoS expectations regarding publication record for reappointment, tenure and promotion? How do publications in journal/chapters in edited collections/conferences/books compare? How much "new" work is appropriate for a publication? When is it time to worry if I haven't been publishing?</li> <li>What information should I include in my activity report for the annual merit review? How do I assess the results?</li> <li>I have an appointment at UBC, in another department, centre or institute. How does that affect the various review processes?</li> <li>For the promotion or tenure process, what external referees should I list? How much prior contact with a potential referee makes them unsuitable for the list? (Is having been on a panel together acceptable, but not a professional friendship?) What is an "arms-length" referee? What should I do to make sure that potential referees are likely to be well informed about my work?</li> <li>What information, beyond that requested, should I provide to the head? E.g., copies of congratulatory letters?</li> <li>How do I get feedback on how I am doing, during the pre-tenure period? How often is reasonable to ask for feedback? Who should I ask?</li> <li>I'm feeling very stressed, as the tenure and promotion deadlines are approaching. How can I</li> </ul>

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Service in the University	• How much committee work should I expect to perform within the department, FoS, the university? Can I get on a committee that is synergistic with my interests? Should I document my contributions? Can I get feedback on how I am doing?
Service in the Research and Professional Communities	<ul> <li>What kind of, and how much professional service outside of the university is typical for an assistant professor or instructor? How much paper and proposal reviewing, participation in program committees, or journal editorships, is reasonable for me, at this stage of my career?</li> <li>How might I weigh the prestige of organizing a national or international event in my field versus the time commitment, given my own goals and other commitments right now? Is it ok to say "no" to someone who has helped me out in the past? How might I do this diplomatically?</li> <li>As a member of an underrepresented group, I find myself i n service roles beyond those agreed-upon with my Head (informal mentoring of students, service to professional societies etc.). Could some of this count as part of my service load?</li> </ul>
Family, Personal Issues	<ul> <li>What policies does UBC have for family and personal leave? How do I request such leave? Is there an appeals procedure if my request is turned down?</li> <li>How much does it hurt me professionally to take a leave? Does it matter what kind of leave I take? Could/should I be academically active during the leave? How do other people weigh the pros and cons of going on leave?</li> <li>What programs and assistance does the university provide for child care?</li> <li>If I'm involved in a controversy or dispute, where do I go for help?</li> </ul>
Networking, Recognition, Awards	<ul> <li>How do I build a good rapport with my colleagues?</li> <li>How do I change perceptions people already have regarding the quality of my work?</li> <li>How do I get nominated for awards? What are the pros and cons of being nominated for an award?</li> <li>How do I build a network of colleagues outside the department, within and outside UBC?</li> <li>What support from staff is available to junior faculty? How can I foster a good relationship with my former graduate advisor?</li> <li>If I have concerns about the direction a person or committee is taking on an issue, what's a good way to articulate my concerns?</li> <li>If I have ideas about how a person or a committee should handle an issue, how can I be most effective in putting forward my ideas?</li> <li>If I think that a person has concerns about the way I am handling an issue, what's the best way for me to address this?</li> <li>I've been asked to do X (e.g. serve on a committee, organize a conference session, engage in outreach). Should I say "no"? What am I going to stop doing, in order to do X?</li> </ul>



Mentoring Associate Professors	<ul> <li>What should be different at this advanced stage of my carrier?</li> <li>What kind of and how much service in the department and outside of the university is typical for an associate professor?</li> <li>How should I distribute my time to incorporate an increased 'service' component to my work?</li> <li>How do I build an international reputation in my research field that is necessary for promotion to a full professor?</li> <li>How many papers a year should I author? How many of these should have me as the lead author?</li> <li>How does the process of promotion to full professor differ from the tenure review process and promotion to associate professor?</li> <li>I'm interested in taking my research in a different direction and expect to need time to ramp up in the new area. How might this impact the timing and chances of a successful promotion?</li> <li>I'm active/interested in leadership roles within the department/university. How can I gain the skills and experience to be successful in these roles?</li> <li>I've had a "dry" period for a few years now since promotion to associate professor and would like to turn things around. What strategies might work?</li> </ul>
Acknowledgements	Many thanks to professors Rachel Pottinger and Anne Condon (UBC Computer Science), and Maya Kopylova (UBC Earth & Ocean Sciences) who adapted and complemented the list of questions per area from <u>Rachel Thomas' Exemplary Junior Faculty Mentoring Programs</u> .

