



***The Graduate and Professional  
Student Senate***

***Program Review of  
Molecular and Cellular  
Biology Interdisciplinary  
Graduate Program  
Fall 2010***

*The Graduate and Professional Student Senate (GPSS) conducts program reviews of academic departments to coincide with Graduate School's Program Review process. GPSS reviews are a vital component of the final Graduate School Program Report. These reports are the primary source of student feedback in the review process.*

*For each review, the graduate students in the program in question are administered a survey requesting their feedback about their program. The survey results are analyzed into a data report. Two GPSS Senators conduct an in-house interview session with available graduate students. The Senators take their results and the survey data and compile the final report.*

*For more information about the GPSS Program Review Process or questions regarding this Report please contact [gpsspa@u.washington.edu](mailto:gpsspa@u.washington.edu)*

## **Interview Summary**

The following is a brief assessment of the MCB graduate program review. The organizational structure of the MCB Program is somewhat unique. MCB is comprised of faculty from ten basic science departments (Biochemistry, Biological Structure, Biology, Genome Sciences, Global Health, Immunology, Microbiology, Pathology, Pharmacology, Physiology and Biophysics) in the College of Arts and Sciences, the School of Public Health and the School of Medicine at the UW, and from five divisions (Basic Sciences, Clinical Research, Human Biology, Public Health Sciences, Vaccine and Infectious Disease) at the FHCRC.

The mission of MCB is to offer training beyond the graduate programs offered by individual departments. Students have the opportunity to select research opportunities in a wide variety of labs and take coursework structured to their individual needs from across program offerings.

A few of the participants voiced comments about the initial orientation session as being somewhat tedious and not useful, but most of the students who agreed also conceded to the orientations basic utility. One of the international students voiced dissatisfaction in having to attend one of the mandatory grant writing class which in his particular case, because of eligibility, did not make sense for him. Grants are this program's key source of funding.

Aside from these minor points, all of the students seemed very happy with their program. One major concern for the the participants was discussing way to keep abreast of each others research. The nature of the program allows individuals to tailor they focus on their interests in laboratory work, as they drift apart from their peers in their research, staying aware of their peers research through (more) interdisciplinary conferences was a topic of discussion.

The students attending the review were almost entirely first and second years, which may reflect the fragmentation of the program after rotations are over, so there was little information on milestones and issues that crop up later in grad school. Students generally felt that the MCB program at UW is more personal than MCB programs at other institutions, which may be due to good contact with the administration; Drs. Emerman and Raible are seen as accessible and helpful by the students. Some students suggested some sort of "core" MCB course or courses, potentially a lit review, to allow them to better understand research within MCB but outside their

particular area of interest. This could help to foster collaboration and increase student cohesion within the department.

Overall the students who participated in the interview expressed satisfaction with the program.

The MCB program is a large and well funded interdisciplinary program. Students in good standing are guaranteed financial support and Teaching Assistantships. There are 141 students and 250 faculty mentors currently in MCB, with 19 new students who joined in Autumn 2010. The MCB program is recognized as one of the best in the country, and admission is competitive. Each year 15-20 students are selected from between 200-300 applicants. All of the participants expressed satisfaction with the quality of faculty and resources in their program. Most of the students said that they chose the MCB program at the University of Washington over other programs because of the program's resources, prestige and location.

## Survey Data Summary

A survey was administered to graduate students in the Department of Molecular and Cellular Biology. 27 students out of 134 enrolled students completed the survey resulting in a 20% response rate.

### Educational Status

Among the students that responded, 12 identified as doctoral students and 15 identified as doctoral candidates. The majority of students were pursuing a degree in Molecular and Cellular Biology and 11 students were in joint degree programs. All 27 students were attending school full-time.

### Academic Program

Table 1. Evaluation of the academic quality of program, faculty and faculty-student relationships

	Excellent	Very good	Good	Fair	Poor
Academic standards in the program	8	15	3	1	-
Integration of current developments in field	11	9	7	-	-
Program space and facilities	11	13	2	1	-
Intellectual quality of the faculty	22	4	1	-	-
Intellectual quality of fellow graduate students	14	7	4	1	1

Table 2. Student's evaluations of graduate program

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	No opinion
Program activities foster sense of intellectual community	4	17	4	2	-	-
Program content supports my research or professional goals	11	13	3	-	-	-
The amount of coursework required seems appropriate	13	11	3	-	-	-
Program structure encourages collaboration and/or teamwork	12	6	8	1	-	-
Program structure provides opportunities to engage in interdisciplinary work	18	9	-	-	-	-

### Research experience

Table 3. Student's experiences with research, publications and conferences

	Yes	No
Received adequate training before beginning own research or scholarly work	22	5
Received adequate faculty guidance in formulating a research topic	25	2
Conducted research in collaboration with one or more faculty members	21	6
Received funding through a faculty member's grant	16	11
Have attended a professional conference	15	12
Have presented paper or poster at a professional conference	15	12

### Career counseling and job search

Table 4. Student's satisfaction with career counseling

Very satisfied	3
Satisfied	15
Dissatisfied	2
Very dissatisfied	-
No opinion	7

Table 5. Career counseling from faculty

Did you receive advice on the following topics from your advisor or other faculty members?	Yes	No
Employment opportunities inside academia	12	15
Employment opportunities outside academia	10	17
How to search for a job	4	23
How to prepare a resume or curriculum vitae	10	17
How to prepare for an interview	4	23

### Advising

Table 6. Student's satisfaction with the quality of advising in the program

Very satisfied	12
Satisfied	12
Dissatisfied	3
Very dissatisfied	-
No opinion	-

Table 7. Satisfaction with amount of communication with advisor

Very satisfied	Satisfied	Dissatisfied	Very dissatisfied	No opinion
16	8	3	-	-

All 27 students identified as doctoral students and they were asked specifically about the type of advising they had received in relation to their PhD.

Table 8. Type of advising received

Have you received advice on the following?	Yes	No	No opinion	Not applicable	No response
Preparing for oral examinations	19	-	4	4	-
Preparing for written exams	9	2	3	13	-
Developing thesis/dissertation proposal	15	3	4	5	-
Selecting thesis/dissertation advisor	21	5	1	-	-
Doing your research	25	1	-	-	1
Plagiarism and other violations of the standards of academic integrity	21	3	3	-	-
Your thesis/dissertation draft	2	1	3	21	-
Preparing for your final defense	1	1	3	22	-

#### Departmental climate

Table 9. Student's perception about sense of community in the department

Excellent	Very good	Good	Fair	Poor	No opinion
4	11	10	1	1	-

Table 10. Issues of diversity

	Yes	No	Unsure	No opinion	No response
Program open to cultural diversity	26	-	1	-	-
Program committed to attracting and retaining underrepresented students	25	-	2	-	-
Program provides support for needs of diverse students	16	2	4	5	-

## Finances

Table 11. Student's funding

	More than 9 quarters	7-9 quarters	4-6 quarters	1-3 quarters	None	No answer
Teaching assistantship	-	-	-	12	15	-
Research assistantship	5	1	6	7	8	-
Non-service fellowship	2	-	1	-	24	-
Traineeship or grant	8	2	1	8	7	1
Need-based financial aid/loans	1	-	-	1	24	1
Personal funding	-	1	-	-	25	1
Other	1	1	-	2	21	2

Table 12. Are the criteria for financial support eligibility clear?

Usually	20
Sometimes	4
Never	1
No answer	1
Other:	1

Table 13. Does the program provide sufficient funding?

Yes	25
No	-
Unsure	-
No opinion	1

Other comment: Personal funding is guaranteed, however there is inadequate training grant funds for students in some departments and divisions

## General assessment

Table 14. Quality of their overall academic experience at this university

Excellent	9
Very good	16
Good	1
Fair	1
Poor	-
Other	-

Table 15. Obstacles to student's academic progress

	Not an obstacle	A minor obstacle	A major obstacle	Not applicable	No response
Work/financial commitments	21	4	-	2	-
Family obligations	17	9	1	-	-
Availability of faculty	16	9	2	-	-
Program structure and requirements	18	9	-	-	-
Dissertation topic/research	15	8	2	2	-
Course scheduling	16	10	1	-	-
Immigration laws or regulations	14	-	-	13	-

The majority of students (n=24) said it was “very likely” that they would be able to complete their degree objective. Three students said it was “somewhat likely.”

Table 16. Recommending program and university

	Definitely	Probably	Maybe	Probably not	Definitely not	No opinion
Would you recommend this University to prospective students in your field?	21	5	1	-	-	-

A few students provided some additional comments:

1. I think the most negative aspect of the MCB program is the relationship between MCB and the other departments. When we join a lab, we effectively also join the department(s) of our PI. However, certain departments go out of their way to exclude MCB students participating in seminars, journal clubs, retreats, etc. The same sort of effect exists in finding TAs--MCB students get the leftover option, which may contribute to a general lack of interest in many MCB students TAing.
2. I'm a first year student, and have not yet chosen a lab (currently doing rotations) so many of the questions about finding jobs and thesis advising are not yet applicable. I answered no to many of these, due to them not yet coming up in my academic career, not because I think the program is doing a poor job of disseminating this information to students at that stage.
3. Please note in my answers that when I specified I had been funded by a grant for 1-3 quarters, I have only been here two quarters; thus, I have received the best possible funding for my entire time here. Moreover, the academic strength and flexibility of this program and the support of all involved - researchers, advisers, and program staff - has been absolutely fantastic.



4. While I've been pleased overall with the program, I really strongly feel that the UW-based administration for the program is not particularly competent (and I say 'UW-based' to differentiate them from the administration based at Fred Hutchinson). I have had numerous problems over requirements, deadlines, and communication with the office staff, and they verge on hostile when concern is expressed about such matters. Both myself, and other students I personally know, have had enough problems with the staff to lead us to try and avoid all contact with them entirely if possible.
5. MCB is an "umbrella program" so much of my guidance is from the department of my thesis advisor, which is how programs like this should function. MCB provides many opportunities to take advantage of, however, some students use the flexibility of the program to skate by and do not become great scientists - and while it does occur, it is not commonplace. I would say a greater number excel tremendously; though in a department as large as MCB, there will inevitably be the extremes.