

#### The Graduate and Professional Student Senate

# Program Review of the Department of Biostatistics

#### Winter 2013

The Graduate and Professional Student Senate (GPSS) conducts reviews of academic programs that coincide with the Graduate School's Program Review process. GPSS reviews are a vital component of the final Program Report. The data collected and presented by the GPSS serves as a primary source of graduate and/or professional student feedback in the Program Review process.

For more information about the GPSS Program Review process or questions regarding this report, please contact gpssexe@uw.edu.

#### **Review Scope and Purpose**

This review contains a summary of graduate student opinions and feelings regarding their department. It does not seek to give a general overview of the academic program or the department. The report and Catalyst survey were prepared by GPSS Special Assistant Leo Baunach and GPSS Senators Ragan Hart and Devin Bedard. For more general information regarding the academic program, faculty, courses, and research, please see the Comparative Literature Department Self-Study.

The Graduate and Professional Student Senate (GPSS) sponsored a Catalyst Survey for graduate students in Biostatistics between January 8<sup>th</sup> and February 3<sup>rd</sup>, 2013. 23 of 134 students in the program, 18%, completed the survey. Of the respondents, six were Master's students, two were doctoral candidates, and fifteen were doctoral students. All were enrolled as full-time students.

Most questions used a five-point scale of 'Excellent, Very Good, Good, Fair, Poor,' or 'Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree.'

The purpose of this survey was to ensure the voice and opinion of the students within this program was included in the review process and thereby taken into account during the planning of the future direction of the program. A complete compilation of the data is presented in the appendix. The original survey data is available from the GPSS upon request. The report also reflects discussions from the site-visit.

# **Executive Summary**

Graduate Students in Biostatistics were extremely pleased with their experience in the Department. There were some minor issues related to program space and facilities. Students were proud of the sense of community in Biostatistics, and expected to complete their degree with any debt. They were happy with the Department's focus on research, the encouragement to seek out various research opportunities and the high quality of the faculty. Overall, they found coursework and research to be rigorous and rewarding, and the Department's faculty and staff to be very responsive and helpful.

## I. Academic Program

Approval was very high of academic standards in the department, which 78% considered excellent. More than 95% of students rated the intellectual quality of the faculty as excellent, and 73% felt the same about their fellow graduate students. 48% 'strongly agreed' that the program fostered a sense of intellectual community. More than 90% felt that collaboration and teamwork was encouraged by the department.

All surveyed students felt that the program supported their research and professional goals. 50% strongly agreed that there were adequate opportunities to engage in interdisciplinary work, and an additional 45% agreed. One student commented that "This is a phenomenal department and program - the training has no comparison. It is extremely tough, but [it is] a very supportive department so in the end it all feels worthwhile."

The course load was acknowledged to be very heavy, but most students were satisfied with the content and the rigor. They felt all classes had contributed to their training and intellectual experience. 73% considered the amount of coursework appropriate to the degree, but a significant number (21%) were neutral about the course load and one student strongly felt that it was not appropriate. Students were generally pleased with UW's focus on the theoretical aspects of biostatistics. There were several topics which they identified as absent or covered in a cursory manner, but did not wish to increase the current requirements. The availability of researchers affiliated with other departments and institutions like the Hutchinson Cancer Research Center was considered a valuable resource, and helped to address curriculum gaps. Still, some indicated that self-direction and self-teaching was needed for success in the program. One student praised the reduction of requirements related to real analysis, which provided more time for students to take courses on topics they otherwise would have missed.

Because some students conduct research in biology through their Research Assistantships, it was suggested that the requirements for this area might be loosened or exceptions given. The prioritizing of flexibility, as a middle road between ever-increasing requirements and the broad and complex variety of topics in the field, was seen by some as the way forward.

## II. Research Experience

Among respondents, 73% felt that they had received a high level of training before beginning their own research, and some had already worked as research assistants before beginning their own projects. However, others felt that research should be built into the classes so as to better prepare PhD students for the transition to their own research projects, which can be an abrupt change after 2-3 years of absorbing coursework. They were pleased that first year students were being encouraged to conduct a research project and felt that the need for research experiences earlier on was already being addressed.

Among those that had gone through the process of formulating a research topic, 33% found guidance and advice from faculty to be excellent, 44% rated it very good and 22% rated it as good. 47% of those that had conducted research felt that they had been provided with excellent guidance once they had undertaken their projects. There was some concern about the process of finding a faculty advisor, which is sometimes haphazard. More structure and transparency, such as a list of faculty and researchers accepting students, was desired. In the past, a seminar for beginning students has been held that provided a way for them to meet faculty and familiarize themselves with the research taking place in the Department. The departmental retreat was seen to partially fulfill this function, but there was positive reaction to the idea of a seminar. This was seen as particularly important because the overall departmental seminars were often beyond the comprehension of students and lacked relevance to their immediate academic and research activities. The encouragement of contact and lunches between speakers and students was praised. However, students felt that more informal and accessible seminars would be helpful.

Overall, students felt encouraged by the Department to seek out international and national research opportunities and projects. Roughly half felt very highly encouraged to seek out and pursue these opportunities. Additionally, almost half felt highly encouraged to make their research socially relevant.

43% had attended a professional or academic conference, and 35% overall had presented a paper or poster at such a meeting.

# III. Career Counseling / Job Search

Everyone was 'satisfied' or 'very satisfied' with the quality and quantity of counseling they had received regarding their future careers. Approval was particularly high regarding advice on employment in academia, and slightly lower but still positive for opportunities outside the academy. 26% found advice on the latter category to be good and 43% found it very good. The main form of guidance for students came from job posting that were circulated by staff.

Most survey respondents were in the early or middle stages of their degree and had not yet begun to seriously consider their post-graduation plans. There was no concern about the availability of resources, but those surveyed lacked experience in these subjects. 38% felt they had received good or fair advice on how to search for a job, and 56% had received very good or excellent guidance on this process. Numbers were similar for preparing a curriculum vitae and slightly lower, though still generally positive, on preparing for an interview.

## IV. Advising

60% were very satisfied with the quality of advising, and 65% were very satisfied with the quantity of communication with their advisor. The quality and helpfulness of support staff was commended.

Among students who had completed their oral and written examinations, there was general approval that they received adequate preparatory advice. 17% believed they had not received adequate advice on written examinations and a similar number had failed to receive adequate advice on oral examinations. For students who had selected a faculty advisor, 93% felt that they had received adequate guidance in the selection process. The small number of respondents that had reached the stage of preparing a final thesis or dissertation draft and preparing for their final defense were all satisfied with guidance.

## V. Departmental community

Students felt that the department was very open to diversity and international students. 90% rated openness as very good or excellent, and 73% felt that the department had a very high or excellent level of commitment to building a diverse cohort. Approval of the support given to diverse and international students once enrolled in the program was similarly high.

52% felt that the overall sense of community in the program was excellent, and 43% rated it as very good. There was universal acclaim of the collaborative attitude among students that prioritized community over competiveness.

# VI. Funding

Some 82% of respondents expected to have no debt upon graduation. The remainder expected to have less than \$10,000 upon degree completion. Most students had been able to find adequate financial support through fellowships and teaching assistantships.

About 90% felt that criteria for financial support was usually made clear by the Department, however one student commented that the rules were sometimes unclear.

In general, students had some financial concerns due to rising tuition, fees and cost of living, but commended the department's responsiveness and help on these issues. One noted that "I think the funding has fallen behind other top competing universities' departments, but I think effort is being made to change that." Another felt that the Department "has been very responsive to students' concerns about funding concerns (e.g. rising fees)."

#### VII. General

There was particular concern about program space and facilities compared to other aspects of the program. 34% rated it as 'good,' and 17% as fair. However, 40% found facilities to be very good or excellent. There was wide approval of the shared office for first and second year students, which helped create a sense of community among the cohort and balanced private space for studying with opportunities for collaboration. Students beyond their second year enjoyed having

more private office space near faculty, but the quality was variable and office space was spread out across several areas. While a number of factors beyond the control of the Department play into access to office space, students said they would appreciate better notifications and information about availability. 47% found space and facilities to be a minor obstacle or somewhat of an obstacle, but no one found it to be a major obstacle.

Overall, work and financial commitments were a minor obstacle for 47% of students. No potential obstacle was rated as a 'major obstacle' by more than one respondent. Program structure and requirements constituted a minor obstacle for 40%, but there were no significant complaints on this topic.

Students who chose to attend UW had considered and applied to a wide range of prestigious universities, including Harvard (7 students). University of Michigan (4), UC Berkeley (3) and John Hopkins (3). Some 87% of these students said they would 'definitely' recommend the UW to prospective students in their field. One student noted that "This program has been a perfect fit for me thus far."