

Minutes of CGSR Meeting #15 on 2/11/2019

The Committee on Graduate Studies and Research (CGSR) held its 15th meeting of AY '18/'19 on February, 11 2019 (Monday) in FI 207.

Present: R. Rao (Co-Chair), S. Scarlata (Co-Chair), S. Johnson, B. Choate (GS), M. Timko, T. Camesano (Dean of Graduate Studies), G. Fischer, M. Rolle, B. Vernescu (Vice Provost for Research)

Absent: none.

Guests: Laurie Leshin (President, WPI), Kristin McAdams (Academic Program), Michael McGrade (Dean of Graduate Admissions),

Professor Rao called the meeting to order at 11:01 AM

1. The minutes of the February 4, 2019 meeting were approved.
2. K. McAdams introduced draft schedules for the 2019/2020 AY. The draft calendars are included as attachments to the minutes for faculty and staff comment.
3. President Laurie Leshin joined CGSR to discuss the importance of graduate studies and research, especially as we approach discussions of WPI's next strategic plan. President Leshin pointed to 50% growth in research funding in the past 3 years, which denotes a transition to a more substantial player in the research space, in alignment with the goals of the current strategic plan, *Elevate Impact*. This growth requires thoughtful implementation of support, structure, and systems that allow faculty and students to focus on research. Student support and improving student experience is another important aspect that needs to be considered thoughtfully. During President Leshin's time, the number of graduating PhDs has grown from 30 to 70. A remaining objective to be addressed is reducing tuition charges on grants over some period of time; B. Vernescu has made a request to begin this process for next year's budget. A second, more aspirational objective is "first year fellowships for all", which would help faculty recruit the most talented PhD students possible. Most faculty have been supportive of the proposal to provide first-year fellowships, but there is some concern on campus that students will come for a single year and then leave; and to retain top graduate students more general to make sure that they graduate at high rates and after a reasonable number of years. Lastly, some of our "core" programs lack critical mass, whereas students anticipate more highly interdisciplinary programs. This may suggest an opportunity to reduce the number of programs so that the remaining programs are highly interdisciplinary, competitive, and attractive to incoming students. S. Scarlata pointed out that CGSR has refined the process for establishing interdisciplinary programs. CGSR discussed with President Leshin the benefits of adding new programs, as compared with consolidating existing programs. There was general agreement that a potentially tractable approach would be to launch several new interdisciplinary programs and use these programs to refine strategy. Availability of first-year fellowships could smooth this transition, as it would allow talented students to be recruited and provide them with a year to select projects and advisors outside of their undergraduate department. WPI hosted a major graduate recruiting weekend Feb 8-9, and conversations with the prospective students suggest that existing professional development programs, international experiences, internships (e.g., as GQPs), etc. differentiate the WPI graduate student experience; first-year fellowships for all and increased visibility and availability of interdisciplinary will continue to build on these points of differentiation. Prof. Rao reinforced the importance of professional development for prospective graduate students; students are interested in augmenting their experience by

earning certificates in related areas or to develop key skills that will benefit them in their careers. President Leshin suggested that this mindset would be compatible with an increased emphasis on graduate-level certificates more generally, an emphasis that could benefit both current Ph.D. students and professionals seeking continuing education opportunities. President Leshin made the point that faculty buy-in will depend on demonstrating the benefit to students. R. Rao drew a comparison with the M.S. programs and their ability to generate revenue that can incentivize faculty participating; and the potential for certificate programs to fill a similar role. Some of these certificate programs might adapt on-line or blended learning models to obtain scale. B. Vernescu suggested that growth in graduate education will likely be driven by acquisition of specific skills, which will require offering non-traditional courses that are responsive to evolving market needs. G. Fischer raised a concern that WPI's project-based education model may not be scaleable, which may necessitate separate branding and marketing. T. Camesano made the point that the quality of the applicant pool has improved greatly in the past 3-5 years and credits the faculty taking more active and wholistic views of student recruiting; she asked for more support to cultivate this attitude to develop a more robust pipeline, a notion that President Leshin supported. B. Choate provided from his experience as a WPI undergraduate and now graduate student, indicating that the motivation for returning to graduate school was a lack of challenge in industry. He voiced concern that students know that student expectations should be managed as they acquire more training, so that they understand that training and industry needs are not always well matched. Otherwise, students may be disillusioned with spending time and effort acquiring training that is not utilized in industry. A potential solution is working with industry and alumni to identify industrial needs to develop programs with maximum benefit. And, he asked how these new courses would be taught; President Leshin indicated that the goal will be to grow the faculty from 250 to 300 to increase both teaching and research capacity, while maintaining WPI's balance of both areas.

The meeting adjourned at 12:00 PM.

Respectfully submitted,
Michael Timko
CGSR secretary (C19)