MINUTES

MEETING OF THE CAREER ADVISORY BOARD, SCHOOL OF PHYSICS AND ASTRONOMY, UNIVERSITY OF MINNESOTA; VIA VIDEO CONFERENCE HELD APRIL 17, 2020

PURSUANT TO NOTICE DULY GIVEN, a meeting of the Career Advisor Board (CAB) was held on April 17, 2020, via video conference.

Board members in attendance: Matt Abroe, Ethan Bock, Dan Bruzzone, Dan Friker, Brad Givot, Paul Kelley, Lisa Lust, Mark Madland, Donna Norberg, Mohac Tekmen, Paul Way, Addis Woldesenbet

The meeting was called to order at 12:30 p.m. The following actions were taken by the Board:

COVID-19 Response

The board recognizes the impact of COVID-19 response measures to career opportunities. While the duration of impact is uncertain, CAB agrees there will continue to be high unemployment over the short-term.

The board members agree that leveraging existing CSE Career center resources is the best approach to generate awareness for employment opportunities. "Hiring now" opportunities and other Career Center resources should be in high-traffic physical and web locations within the department.

Approved Feedback on the Physics and Astronomy Roadmap for Career Education (Draft, April 2020)
The board members agree that the roadmap and recent endowment are very strong starts. Following the roadmap review led by Shaul Hanany, CAB approved the additional opportunities listed below:

- Package and distribute the roadmap in a manner that will help drive accountability and engagement with faculty and students. It is extremely important to have faculty ownership and engagement in order to have success and sustainability.
- 2) CAB recommends increased advisor support for internships during the late stages of a degree.
 - Companies are more likely to hire interns who are in the latter stages of their education cycle.
- 3) Where possible work with CSE Career Center to promote physicists to corporate participants of career events, as strong recruiting targets.
- 4) Timing of roadmap elements should be reviewed for alignment with the MS degree as well as internship and/or interview schedules. Intern/interview schedules may require action very early in the academic year.

- 5) Consider seeking out undergraduate oriented colloquia to help build culture, networks, presentation skill exposure, and exposure to career options amongst undergraduates.
- Include an annual survey in the roadmap to measure progress. Student feedback is critical in determining success.
 - o Example survey statements for students to rate:
 - I feel I'm prepared for a career interview.
 - I have a network of contacts who I solicit for career prospects.
 - I understand the internship opportunities available for physics students.

Recommendations for Additional Roadmap Elements

The board recommends "soft skills" be considered as a necessary element of career preparedness and for inclusion in the roadmap. Physics faculty should emphasize the importance of strong communication to any career. CAB recommends pursuing the following opportunities for reinforcing writing and public speaking skills:

- Identify experts to utilize for communication feedback and instruction (internal or external to the department).
- 2) Require graduate students to present annually either formally, through "mock" opportunities to practice with research team, poster sessions, or oral exams within course rubric.
- 3) Require undergraduate students to present in the last two years of a degree program using "my experience as an undergraduate," a course project, or a lab report as subject matter. Consider oral exams within course rubric for undergraduate students.
- 4) Provide feedback to students on presenting skills using presentation review forms (to be completed by the audience and communications specialists) and video recording tools for self-review.

Website Feedback

The board members agree that the career awareness web content is beneficial. CAB suggests stronger utilization of the new website for up to date information and issues. The department may also benefit from providing access to existing tools or resources tied to specific demographics, in support of diversity efforts.

Hands-on relevant experiences (Arduino, Raspberry-Pi, Big Data, Coding) to help build a strong student resume, and might be linked on the site.

There being no further business, the meeting adjourned. The next regular meeting will be scheduled and communicated within 12 months.

Paul Way

Board Chair