Carnegie Mellon University

Office of Undergraduate Affairs

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Dear Members of the Carnegie Mellon Women's Association,

On behalf of the Mellon College of Science, it is with great pleasure that I nominate Ms. Zhiyao (Olivia) Li for the 2020 CMWA Student Award Scholarship. I have known Olivia since her arrival on campus in the fall of 2016—I've served as an instructor in a first year seminar course she took and have had several conversations with her since that time about her undergraduate experience. She embodies all that a student receiving this type of award should—she is a strong advocate for women in science and math, she empowers others to reach their fullest potential, and she is passionate about Carnegie Mellon and the Mellon College of Science. I am incredibly proud that she is a member of our community!

Olivia is currently set to graduate in May with a BS in Physics and minors in both Mathematical Sciences and Photography—you can already tell that she's a woman with varied interests and passions! She has performed incredibly well in her studies at CMU, making the MCS Dean's List nearly every semester. Her advisors in the Physics department describe her as "academically exceptional" and a leader amongst her peers as she's a certified advanced tutor at CMU's Academic Development office (supporting advanced physics courses). She's been performing research in the laboratory of Dr. Rachel Mandelbaum since May of 2018 that combines astrophysics and artificial intelligence—again her advisors describe her work as "state of the art" and she has a number of presentations at local and national conferences to demonstrate the strength of her work. Specifically relevant here, she has attended and presented at a number of conferences aimed at Women in Physics/Astronomy, sharing her passion for her work and inspiring other undergraduate women to pursue their interests in these areas.

Balancing her academics/research, Olivia is also very involved in many activities on campus and off campus that support and encourage other women, particularly in activities that connect to her love of physics and math. Olivia is currently the president of the CMU Women in Science (WiS) organization. This group has existed for decades under the guidance of 2 faculty members in MCS, and about 6 years ago, the group dissipated and stopped meeting regularly. In the spring of 2017, Olivia and some other students came to me to ask if they could re-ignite the group by coordinating some events connecting women in science at CMU. I fully supported the idea and they ran with it! Since that time, the group meets weekly throughout the academic year, hosting faculty and staff in science to talk about their successes and struggles with current undergraduates. Olivia specifically initiated a "underrepresented figures in science" talk series—they are hosting the next of these sessions remotely next week! The group also coordinates a number of outreach events with K-12 students and have interacted with hundreds of K-12 students over the past 3 years. Olivia (along with several other WiS members) have volunteered to support me in outreach activities that I've coordinated at my children's elementary school, most recently creating kaleidoscopes with students in February of 2020. I can say first-hand that this support of young scientists is truly impactful and inspiring! Olivia's leadership of the organization has been impactful as well as she helps to plan for events and activities throughout the year that support all students (particularly women) interested in science at CMU.

As if the information provided so far hasn't been enough to impress you, for the past 2 years, Olivia has also served as the women's epee captain and recruiting chair for the CMU Fencing Club. Here, she led her teammates in competition locally and at national-level tournaments. Balancing this demanding physical activity's practice schedule with everything else I've described truly demonstrates the holistic excellence that Olivia demonstrates to her advisors, instructors, and peers in MCS. We are incredibly proud of all that she has accomplished and look forward to her continued successes as she pursues her doctoral degree in Physics beginning this fall. We can't wait to see the amazing accomplishments yet to come!

Sincerely,

Maggie Braun, Ph.D.

Associate Dean for Undergraduate Affairs, Mellon College of Science Teaching Professor, Department of Biological Sciences

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