

IEEE ENGINEERING IN MEDICINE AND BIOLOGY SOCIETY
Election of a Member to the Administrative Committee

FOR STUDENT REPRESENTATIVE
For a One-Year Term 1 January 2020 – 31 December 2020
(To fill a vacancy)



JINGZHI AN (GSM'15-M'17-GSM'18) is a Ph.D. candidate studying statistics and control engineering at the Harvard-MIT Division of Health Science and Technology under the mentorship of Dr. Emery N. Brown, and a M.D. candidate at the Duke-NUS Medical School. Jingzhi received a B.Eng in Biomedical Engineering from Imperial College London, where she was awarded the Governor's Prize for graduating at the top of her cohort. Jingzhi is a recipient of the A*STAR National Science Scholarship; the Ngee Ann Kongsi Distinguished Scholars Award for excellence in MCAT; and the Martha Gray Prize for excellence in her graduate work on closed-loop delivery of medical coma. Jingzhi also earned the Kaufmann teaching certificate from the MIT Teaching and Learning Laboratory, and a certificate in healthcare from the MIT Sloan School of Management.

Jingzhi is committed to supporting her community. At Imperial College, she was the president of the Bioengineering society and founded Bioengineering Day, an annual event celebrating bioengineering and connecting students with industry mentors. At Duke-NUS, she led the MedTech Connection and organized regular meet-ups between medical students and leaders in medical technology. At MIT, Jingzhi developed and taught the course Introduction to Physiological Closed-loop Control, and organized academic symposia as the chair of the Committee on Scholarly Interaction at the largest graduate student residence in the US. Jingzhi was also a clinician and director of research at Crimson Care Collaborative (CCC), a student-staff collaborative clinic by Harvard Medical School, where she initiated a project to optimize clinic operations using data analytics and received the CCC Shining Star Award.

Position Statement: In today's competitive world, students who want to advance their careers in academia or industry need effective mentorship and internship opportunities, venues to share their research, and leadership experiences beyond those offered by day-to-day training at our home institutions. In the past year, EMB AdCom created the International Student Conference series to provide students with opportunities beyond EMBC to share their work and gain leadership experience. This was a great initiative, which given the opportunity to serve as your student representative of the AdCom, I would continue to support. In addition, I will also make it my mission to create more mentorship and an internship opportunities through EMB.

Last year, I was selected to be a fellow of the Impact Program hosted by the MIT Institute for Medical Engineering and Science (IMES). The Impact Program helped me refine my research statement and identify the most promising paths to achieving real-world impact—all under the guidance of faculty from a broad range of academic institutions and companies in the Boston area. Many students in biomedical engineering face similar challenges when communicating multi-disciplinary work to a diverse audience, and when identifying stakeholder interests in their research projects. The Impact program helped the fellows overcome these challenges by providing frequent personal feedback from mentors across many fields of expertise, by setting-up career development opportunities, and most importantly, by helping us create a long-lasting professional network that included faculty and fellows from other cohorts. I hope to use the EMB AdCom platform to create a similar program to benefit the student members of EMB.

EMB is a global network that connects a diverse and multi-disciplinary group of engineers at various stages of their careers. It is hard to imagine a better environment to find mentors and internship opportunities. Furthermore, the student representative of the AdCom has access to more senior representatives and is the perfect position to engender these types of collaborations. For example, past student representatives have organized the Lunch with Leaders series at EMBCs. I have always made it a priority to attend these lunches and have enjoyed them very much. However, effective mentorship should not be limited to an hour-long chat once a year. Perhaps we can turn Lunch with Leaders into a longer, more structured and focused mentorship/internship program that will be similar to the MIT IMES Impact Program.

Given the opportunity to serve in the AdCom as your student representative, I will

1. Continue to support and grow the International Student Conference series
2. Build accessible, student-oriented mentorship programs to help students refine their research goals, identify opportunities for broader impact, and to build lasting, valuable relationships to expand their professional networks.

You can trust me to be a responsible and effective student representative because I have a record of balancing academic development with innovative leadership initiatives such as those described in my biosketch. Starting in June 2019, I will also be taking a gap year between completing my Ph.D. and continuing my M.D. training so I will be able to focus on realizing the goals of student members of EMB.



FARAH DEEBA (GSM'15-M'16-GSM'17) has been an EMBS member since 2016. She actively participated in EMBC 2016 and EMBC 2018. She authored two papers presented at EMBC 2016 and one paper presented at EMBC 2018. She also co-chaired a session "Ultrasound Elastography: Phase II" at EMBC 2018.

Farah Deeba is currently a PhD candidate in Robotics and Control Lab at University of British Columbia. She completed her undergraduate in Electrical and Electronic Engineering at Bangladesh University of Engineering and Technology. After that, she completed her M.Sc. in Electrical and Computer Engineering at University of Saskatchewan. She won several honors and awards as the recognition for her academic excellence and research.

Farah Deeba is working to improve health care using accessible technology, such as ultrasound and capsule endoscopy. She has published six peer-reviewed journals and ten conference papers. Farah is also playing leadership roles as a counsellor in graduate student society of University of British Columbia.

Position Statement: After working as a graduate counsellor in Graduate Student Society, UBC and a member at Women in Engineering, I have realized the importance of student participation in every field of science and technology. As a student, I would be able to bring new perspective in the question of emerging technology fields and summer school ideas. Also, I would like to increase participation of students from around the globe. We can work towards increasing travel awards targeted towards increasing diversity. I would be very passionate to work towards these objectives and invest my time as required.