

Report No. 3657

MEMORANDUM

- To: Faculty Council of April 29, 2020
- From: Professor Emeritus Safwat Zaky Chair, Engineering Alumni Network (EAN) Awards Committee
- Date: March 26, 2020
- Re: Report of the Engineering Alumni Network Awards Committee: Candidates for the Induction into the 2020 Engineering Alumni Hall of Distinction, the Engineering Alumni Medal, 2T5 Mid-Career Award, 7T6 Early Career Award, Malcolm McGrath Award and Honourary Member – Engineering Alumni Association Award

REPORT CLASSIFICATION

This is a routine matter for Faculty Council's information.

1) The Committee recommends that the following distinguished graduates of the Faculty be inducted in the Engineering Hall of Distinction:

Patricia Burchat, EngSci 8T1 Howard Ginsberg, EngSci 8T9 Allen Lau, ElecE 9T1 Shumin Zhai, MIE PhD 9T5

2) The Committee recommends that the Engineering Alumni Medal be awarded in 2020 to our distinguished graduate:

Ted Davison, Eng Phys. 6T0

3) The Committee recommends that the 2T5 Mid-Career Award be awarded in 2020 to our distinguished graduates:

Michael Helander, EngSci 0T7 Angela Tran, ChemE 0T5 4) The Committee recommends that the 7T6 Early-Career Award be awarded in 2020 to our distinguished graduates:

Bin Liu, CivE 1T4

5) The Committee recommends that the Malcolm McGrath Award be awarded in 2020 to our distinguished graduate:

Eric Matusiak, MechE 9T1

6) The Committee recommends that the L.E. (Ted) Jones Award be awarded in 2020 to our distinguished graduates:

Kate Sohn, EngSci 1T9+PEY

7) The Committee recommends that the Honourary Member – Engineering Alumni Association be awarded to a distinguished non-graduate:

Professor Cristina Amon, Dean Emerita, Faculty of Applied Science & Engineering, University of Toronto

8) The current membership of the Committee includes:

Professor Safwat Zaky (Chair) Isi Caulder (EAN Executive Board) Sonia De Buglio (Ex-Officio) Paul Cadario David Colcleugh Elias Kyriacou

Kathy Milsom Alex Perelgut Mathew Szeto Chris Twigge-Molecey

9) The annual EAN Awards Ceremony & Reception will be held November 5, 2020 at Hart House. Last year total attendance was over 140 guests.

Re: Brief description of the accomplishments and contributions of the award winners.

Hall of Distinction

Patricia Burchat, EngSci 8T1,

is described as a Stanford Gem. She is a highly recognized and awarded Professor in the Department of Physics, with research interests in the area of experimental particle physics. Strongly dedicated to the promotion of education, she made highly impactful contributions, such as the introduction of active learning in the classroom and mentoring and supporting young women.

Howard Ginsberg, EngSci 8T9

is the Director of the Spine Program at St. Michael's Hospital and an Affiliate Faculty member at U of T. Combining neurosurgery and engineering, he made many contributions to the field, including ablation using picosecond infrared laser in brain surgery. His innovations have been widely recognized throughout the world as significant advancements in the field.

Allen Lau, ElecE 9T1

describes himself, quite rightly, as a serial entrepreneur who is a champion of the Canadian start-up ecosystem. He co-founded Wattpad, which changed the entertainment world, and co-founded Two Small Fish with his wife, which invests globally in transformative companies. He is a member of the Canadian Council, advocating for government support of technology and innovation.

Shumin Zhai, MIE PhD 9T5

developed gestural typing, or swiping, on touch screens. Starting at IBM, then with their support, founded a highly successful start-up. He was later recruited by Google, where he developed GBoard and perfected an algorithm for gestural typing that is now widely in use on Samsung and other Android cell phones. His contributions have been nothing short of transformational.

Engineering Alumni Medal

Ted Davison, Eng Phys. 6T0

is a pioneer in the field of control systems and the recipient of the two highest international recognitions in the field, the Quaza Medal and the invitation to deliver the Bode Lecture. He was one of the earliest to emphasize the importance of robustness in multivariable systems. He is a top theorist, who is also in demand as a consultant to industry, and a lover of the arts, holding the Royal Conservatory of Music A.R.T.C. in piano.

2T5 Mid-Career Award

Michael Helander, EngSci 0T7

is President and CEO of OTI Lumonics in Toronto. The company prospered under his leadership, becoming a world-class materials design centre with a formidable computing capability, including human talent and infrastructure for quantum computing. He is serving the University as a strategic advisor and a Board member of the Creative Destruction Lab.

Angela Tran, ChemE 0T5

sees her mission as helping others achieve their potential. As the first employee of Version One Ventures, she has helped raise over \$100m for 50 start-ups. focusing on entrepreneurs who have a vision of making positive change in the world. She founded the Skule Alumni Chapter in the Bay area in California and was selected by the Canadian Government to advise the G7 on innovation policy.

7T6 Early-Career Award

Bin Liu, CivE 1T4

is a co-inventor of BuzzClip – an ultrasonic device that provides feedback to the visually impaired. With help from U of T's Impact Centre, he studied the assistive technology market and founded iMercive – a highly successful business that is making an enormous difference for the visually impaired, nationally and internationally, particularly in India.

Malcolm McGrath Award

Eric Matusiak, MechE 9T1

provided over 20 years of untiring and dedicated volunteer service to the Faculty and the Engineering Alumni Network, guided by his love for the institution as well as his insight and business experience. He was instrumental in creating the Engineering Alumni Board and served as its first President.

L.E. (Ted) Jones Award

Kate Sohn, EngSci 1T9+PEY

has been highly praised for her love of the performance arts and her unrelenting effort to promote music and dance among the students. She also provided outstanding leadership in many Skule activities.

Honourary Member

Professor Cristina Amon,

was named an Honourary member of the Engineering Alumni Network in recognition of her vision, dedication, and extraordinary service to the Faculty as Dean over 13 years. She has overseen the introduction of many new and innovative programs, expanded support for interdisciplinary research and increased collaboration with other Faculties. Her wise leadership has also led to a substantial strengthening of the Faculty's finances and the addition of much needed new space.