

July 23, 2024

CCUBC Awards Committee

Dear Selection Committee Members,

It is a complete pleasure to be nominating Dr. Turlough Finan for the CCUBC Career Achievement Award. Over the course of his career, Turlough has consistently been at the forefront of research in his area, has been truly outstanding in his educational leadership and mentorship, and has willingly stepped into key administrative service roles. It is for these reasons that he makes an exceptional candidate for this prestigious Career Achievement award.

On the research end, Turlough's work focuses on symbiotic bacteria, with a primary interest in the nitrogen-fixing microbe *Sinorhizobium meliloti*. He was part of the pioneering consortia that reported the sequence of the *S. meliloti* genome in the journal *Science* in 2002. This was not only one of the first bacterial genome sequences reported, but it was complicated by the fact that the genome comprises three distinct replication units – a chromosome and two enormous 'megaplasmids'. Since then, Turlough has continued to publish impactful papers focusing on the genetics, genomics, and synthetic biology potential of this important soil organism. By way of example, his findings have been published repeatedly in the prestigious *Proceedings of the National Academy of Science, USA* (2001, 2006, 2010, 2021). His synthetic biology work has led to numerous and incredibly fascinating discoveries in different biological systems, like the recently discovered phage (bacterial virus) defense mechanism reported by his group in 2023 in *Cell Host & Microbe*. He has repeatedly been invited to deliver plenary and keynote lectures at international meetings (e.g., at the 2018 North American Nitrogen Fixation Conference), and in 2021, was recognized by the *Canadian Society of Microbiologists*, with the *Murray Award for Career Achievement*, which recognizes the consistent research excellence of outstanding Canadian microbiologists. Turlough's work has been supported by several Genome Canada Grants, by some of the highest awards given by the NSERC Discovery Grant panel (averaging ~\$80k/year since at least 2007), and by multiple, successive NSERC Discovery Accelerator Supplement Awards. As this all suggests, Turlough is a superb scientist.

Beyond his outstanding science, Turlough is also a highly effective mentor and leader within the educational realm. Within his lab, he has supervised 35 graduate students (23 MSc and 12 PhD students) and 9 post-doctoral fellows. What is remarkable, however, is the number of these individuals who have gone on to academic positions. Six of his graduate students have taken up faculty positions within Canada (George diCenzo at Queens; Allyson MacLean at Ottawa; Shawn McClelland at UNB; Brian Driscoll at McGill; Ivan Oresnik at Manitoba; and Trevor Charles at Waterloo), with another three of his post-doctoral fellows securing faculty positions across the

world (Barney Geddes – University of North Dakota, USA; Catharine White at Coast Mountain College, Canada; and Ralf Voegele at Hohenheim University, Germany).

From a service perspective, Turlough served as Chair of McMaster's Biology Department from 1999-2004, 2005-2008, and stepped in to serve as Acting Chair in 2018-2019. His 9-year term as Chair coincided with a period of intense renewal within the department, with 12 new research-track faculty members being hired during this time. Turlough has been an important mentor to these new faculty members throughout the course of their careers. By way of example, he initially worked to ensure that the time of these new investigators was protected as they established their research programs, and did a terrific job of creating an environment in which we all supported each other. Since then, he has been the source of exceptional advice to many of us, as we have begun navigating our own administrative trajectories. Turlough has further been a strong advocate for the importance of teaching-track faculty members within the Biology department, and has encouraged and supported the careers of these pedagogical leaders within the department. Thanks in part to his support, these individuals have thrived, with two of these teaching-track faculty members currently holding the positions of Associate Dean, Undergraduate Studies for the Faculty of Science, and Vice-Provost Teaching and Learning for McMaster University. Turlough's more recent one-year term as Acting Chair was a generous service to the in-coming Chair (Marie Elliot), offering her both an opportunity to take her planned research leave, and an opportunity to closely shadow someone with a wealth of experience in this position. Turlough's thoughtful mentorship during that time allowed Marie to step into the position with a much greater understanding and appreciation for all that the position entailed.

Beyond his departmental service, Turlough has also been an integral member of the Canadian microbiology community. He co-led the 2010 Canadian Society of Microbiologists Annual Conference (which, at the time, was the most successful conference ever), and has served multiple 3- year terms on the NSERC Discovery Grant Panel Review Committee (including 2008-2012 and 2022-2025).

Turlough Finan has excelled in all aspects of research, service, educational leadership and service, and we can think of no one more deserving of the CCUBC Career Achievement Award.

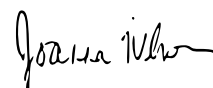
With best wishes,



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