Therapeutics

In animal models, we have very promising results. We are studying cells that are targeting the myelin in the central nervous system. These cells are a specialized treatment that directly targets only immune cells that cause disease, while leaving other immune cells alone. The goal is to prevent the axonal degeneration and neurodegeneration that occur as a result of multiple sclerosis (MS). What we have shown is that these cells can actively target the autoimmune response and prevent the formation of MS plaques in the brain, leading to a reduction in symptoms and a potential cure for MS.

Motivated to help people with MS, Josef Buttigieg says, “I want to make a difference,” he says. He grew up in Canada, where his family immigrated from Italy. Josef studied biology at the University of British Columbia, where he started looking for laboratories to do medical research for his graduate work. He found the life sciences content to be the most interesting and chose to pursue a career in this field. He is currently working on a project to develop a new treatment for MS that could potentially change the course of the disease.

In closing, we wish our current SPRINTers and mentors, Charbel Baaklini and Nima Alaeiilkhchi, well as our former SPRINT alumni and 97% of respondents reported that the summer school program helped them develop a variety of skills; 100% of former mentors and mentees were inspired by the variety of research being done. The endMS summer school is a valuable resource for anyone interested in learning more about the MS field. For more information, please see page 2.

Additional information about the application process will be available later. To read a message from previous summer school attendees, please see page 2.

The SPRINT mentorship program has helped them develop a variety of skills; 100% of former mentors and mentees were inspired by the variety of research being done. The endMS summer school is a valuable resource for anyone interested in learning more about the MS field. For more information, please see page 2.

As a SPRINTer Charbel learned to “sift through the literature in a systematic and comprehensive way.” It also enabled him to learn more about the clinical aspects of MS.

The interaction with many motivated young researchers was an inspiration.

I always loved finding new treatments and helping people.”

Charbel Buttigieg received his BSc in biology with Honors from the University of British Columbia and his PhD from the University of Toronto. He is currently working as a researcher at the National Research Council of Canada. He is also a SPRINT mentor and has helped many people learn more about the MS field.

In summary, Charbel Buttigieg and Nima Alaeiilkhchi have made significant contributions to the MS field and have helped many people learn more about the disease. They are both inspiring role models for young researchers and we wish them well in their future endeavors.

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**The 2021-2022 SPRINTers and Mentors**

**2021-2022 SPRINTers**

Nima Alaeiilkhchi

Richard Yan, Joseph Buttigieg

Anna Pang, Alexander Kaphingst

Shuang Yang, Justin Chou

**2021-2022 SPRINT Mentors**

Jodie Gawryluk, V. Wee Yong

Lisa Walker, Mark Freedman

/

**Spotlight on the Future**

We are delighted to present the 11th edition of the endMS National Training Program’s Spotlight on the Future newsletter. Within the pages of this newsletter, you will find the profiles of our 11th graduating group of SPRINTers and their mentors, a welcome message from next year’s Summer School hosts, updates from our alumni, and some results from a recently completed alumni survey.

The endMS National Training Program is supported by the Canadian Institutes of Health Research (CIHR), the National Science and Engineering Research Council (NSERC), and the Canadian Medical Association (CMA). It is also supported by the MS Society of Canada and the Canadian Multiple Sclerosis Society.
with the aim of or rather, a lack thereof. Alexandra Jackson, who lived with MS, the high prevalence of cognitive impairment in those with MS. Zhang, introduced him to the importance of MS. Later on, when he was studying at the University of Saskatchewan, Zitong dealt with magnetic resonance imaging metrics. 

I hope to focus on quality-of-life improvements. During his 5-year long stint as a TA, Zitong dealt with magnetic resonance imaging metrics. “MS is a condition that affects so many Canadians.” Originally from Manitoba, SPRINT Mentor, Jodie Gawryluk, has also been an important mentor. She adds, “they allowed me the opportunity to grow as a woman and contribute to my academic development.” When Isabelle initially chose the University of Calgary, there, she discovered the importance of MS. “It sometimes feels as though there is no cure for MS, or why relapsing-remitting MS shifts into progressive MS is what continues to motivate me.”

It is often the case that MS researchers are aware of the need for change on a certain topic, for more open publication, their caregivers. In my opinion, hearing and addressing the needs of people with MS puts a different twist on the discussion for consensus is harder than expected to generate knowledge. “I am allowing my grandmother’s legacy to live on through me.”

Isabelle Tottenham completed her BSc (with Honours) in neuroscience at the University of Guelph-Humber in Toronto. After hearing a lecture from Dr. V. Wee Yong, she was a graduate student. "MS is a condition that affects so many Canadians.” Originally from Manitoba, SPRINT Mentor, Jodie Gawryluk, has also been an important mentor. She adds, “they allowed me the opportunity to grow as a woman and contribute to my academic development.” When Isabelle initially chose the University of Calgary, there, she discovered the importance of MS. “It sometimes feels as though there is no cure for MS, or why relapsing-remitting MS shifts into progressive MS is what continues to motivate me.”

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The former Canada Research Chair (Tier 1, 2004 – 2018) and President of the International Society of Neuroimmunology (2014-2016), Dr. George S. Robertson, said, "I think the combination of instruction, hands-on experience and networking is invaluable."
Hiring this milestone required us to conduct two surveys in April 2022. The first, a survey of the endMS SPRINT alumni of the program (2021–2022), was designed to gather information on the impact of the program on the career trajectories of SPRINT alumni. The second survey focused on our SPRINT mentors. The SPRINT in the program.

SPRINT in the program.

The survey was emailed to SPRINT alumni, out of which two only could be reached. Of the 8 surveys sent, 58 (62.7%) responses were received. The vast majority of respondents (89.7%) said they were currently active in MS research (96%) or had been active in MS research over the past 5 years. Two-thirds of (77%) reported that they are currently living in Canada and of those (22.4%) currently residing outside Canada, 38.4% were still training. The majority (89.7%) of those who were reported being currently active in MS research stated that the SPRINT program had increased their interest to continue in MS research. 77% indicated that the program helped them in their career trajectory. For the open text question, the qualitative analyses (see Figure 2) revealed that networking was the primary benefit and was the foundation of other advantages such as the development of independent research skills, knowledge translation and new research methods. Some themes emerged, including the lasting impact

In summary, the main benefits of endMS SPRINT include: networking, skill development, and professional development. From these, trainees leverage new opportunities and growth, and the building of capacity and community among alumni researchers across the country.

SPRINT in the program.

The survey was sent to 29 mentors and 26 (93%) responded. Mentors were interested in participating, and would encourage others to become mentors — and would also encourage their trainees to participate in SPRINT (see Figure 2). The qualitative analyses of the open text revealed that networking was the primary benefit and was the foundation of other advantages such as the development of independent research skills, knowledge translation and new research methods. Some themes emerged, including the lasting impact of the program. Specifically, on the SPRINT, sense of community, as well as on their capacity to move forward, their place in the meaningful meeting and support they received.

SPRINT Mentor Survey

This year of medical school at the University of British Columbia. She was awarded a doctoral fellowship with Dr. V. Wee Yong at Strasbourg University in France. In her 4th year of medical school, she plans to investigate multiple sclerosis. Marjan is also a member of the program in many ways, including through professional development which enabled them to gain supervisory experience, enhanced their collaboration, and allowed them to explore new areas of inquiry (see Figure 1). The qualitative analyses of the open text revealed that networking was the primary benefit and was the foundation of other advantages such as the development of independent research skills, knowledge translation and new research methods. Some themes emerged, including the lasting impact

In summary, the main benefits of endMS SPRINT include: networking, skill development, and professional development. From these, trainees leverage new opportunities and growth, and the building of capacity and community among alumni researchers across the country.