endMS Research and Training Network

"RESEARCH IS FORMALIZED CURIOSITY. IT IS POKING AND PRYING WITH A PURPOSE."

— ZORA NEALE HURSTON

sprint
(Scholar Program for Researchers IN Training)

THE 2022-2023 SPRINTERS AND MENTORS

OUR SPRINTERS:
Syamala Buragadda
Haritha Desu
Adam Groh
Gracious Kasheke
Colleen Lacey
Katherine Sawicka
Fiona Tea
Karine Thai
Emily Wuerch

AND OUR MENTORS:
Afolasade Fakolade
Tim Kennedy
Jacqueline Quandt

WELCOME TO OUR 12TH EDITION

We are delighted to present the 12th edition of the endMS National Training Program's *Spotlight on the Future Newsletter*. Within the pages of this year's newsletter, you will find the profiles of our 12th graduating group of SPRINTers and their mentors, a welcome message from next year's Summer School hosts, and some exciting updates from our alumni.

Firstly, we extend our heartfelt gratitude to the Université Laval in Quebec, and to Drs. Manu Rangachari and Luc Vallières, for co-hosting this year's endMS Summer School. Working behind the scenes, their team contributed to this wonderful event. Special thanks also go to our 2022-2023 SPRINT mentors, Drs. Timothy Edward Kennedy, Afolasade Fakolade and Jacqueline Quandt.

This year's Summer School was a huge success. Held at Université Laval, in Quebec City from June 19th through 22nd, 2023, attendees were treated to a variety of presentations that enhanced their knowledge about ***Translating Basic MS Research into Clinical Practice***.

During full days of intensive learning, 40 graduate students, post-doctoral and clinical fellows attended sessions on a wide variety of fascinating topics, including: T and B cells, autoantibodies, neurodegeneration, myeloid cells and microglia. Cutting-edge techniques were also explored, including: single-cell RNA sequencing, mass cytometry and the new technology of lipid nanoparticles. During a "Lived Experience Panel" session, participants had the opportunity to hear personal stories and interact with individuals living with MS. Summer School attendees also participated in lab tours, workshops, career development sessions and networking activities. Outside of these activities, participants explored the historical city of Quebec.

This year, nine new SPRINTers were welcomed to the program. (The full list of current SPRINTers and mentors, are included on page 9.)

On June 20th, our graduating SPRINTers presented the following innovative interdisciplinary team projects:

1) ***To what extent do trials of digital health technologies for persons with MS consider usability principles during development and evaluation?***
2) ***Moving Towards Better Outcomes: The Neuroprotective Role of Exercise in Multiple Sclerosis.***
3) ***Investigating differences in fluid biomarkers between progressive MS subtypes.***

Summer School was an enriching and inspiring experience for all who attended. The feedback from participants about their experiences at the Summer School was extremely positive. Trainees wrote that they appreciated the diversity and depth of topics and research presented, and were grateful for the opportunity to interact with people living with MS.

We sincerely thank the co-hosts, committee members, faculty, presenters, facilitators, panel members, organizers, volunteers and those living with MS who generously gave of their time and shared their knowledge and their experiences.

We look forward to continuing to learn and work together to expand the community of trainee researchers. The 2024 endMS Summer School will be held in Winnipeg, Manitoba. Please see page 9 for a message from the hosts.

Additional information about the application process will be made available in December.

It is with great pride that we bid SPRINT alumni continued success in their future endeavors. For alumni updates, please see page 15.

In closing, we wish our current SPRINTers and mentors, a year of rewarding collaborations, enlightening research and prolific discovery. We look forward to seeing you in Winnipeg in June, 2024!

DR. CHRISTINA WOLFSON
DIRECTOR, NATIONAL TRAINING PROGRAM

ANIK SCHOENFELDT
MANAGER, NATIONAL TRAINING PROGRAM

2022 - 2023
SPRINTERS & MENTORS

SYAMALA BURAGADDA

Originally from India, **Syamala Buragadda** now lives in St. John's, Newfoundland, where she is working towards her PhD in clinical epidemiology at the Memorial University of Newfoundland.

After obtaining a bachelor of physiotherapy degree from the Sri Venkateswara Institute of Medical Sciences University in India, and a masters in physiotherapy from the NTR University of Health Sciences in India, Syamala earned a fellowship diploma in clinical rehabilitation from the London Academy of Sports & Health Sciences in the United Kingdom.

For 10 years, Syamala worked as a researcher at King Saud University, where she conducted research on a variety of topics. Currently, Syamala is exploring the heart brain-connection and the neuroprotective role of exercise on brain function in people with MS. Syamala describes this as an avenue of research "with the potential to advance our understanding of MS, improve treatment strategies, and enhance the overall well-being and quality of life of individuals living with MS."

Syamala's interest in MS initially developed during her undergraduate studies, when she had two classmates who were living with MS. "It struck me how drastically MS affected their career-building years. I think this sparked a drive in me to help people in my age group who look healthy, but may not feel healthy."

Given that 70 % of people with MS experience difficulties with walking, Syamala says she feels fortunate to be researching walking difficulties in individuals with different neurological conditions, including MS. Reflecting upon her earlier experiences as a physiotherapist, Syamala says that witnessing the challenges faced by patients first-hand ignited a deep sense of empathy and compassion within her, and drove her to seek innovative and effective strategies to enhance their quality of life.

When asked if she believes a cure for MS will be found in her lifetime, Syamala replies in the affirmative. "Yes. Definitely, and I am confident and positive about it.

Syamala believes SPRINT was instrumental in both helping her grow as a researcher and

"It struck me how drastically MS affected their career-building years. I think this sparked a drive in me to help people in my age group who look healthy, but may not feel healthy."

in providing invaluable support. "Through SPRINT, I have gained access to a diverse range of resources, mentorships, and networking opportunities that have greatly enhanced my research skills and expanded my horizons. The mentorship relationships I have formed through SPRINT have given me a sense of direction, encouragement, and a deeper understanding of the research process… this interdisciplinary approach has challenged me to think creatively, enabling me to tackle research questions from multiple angles and make novel contributions to my field."

When discussing the networking opportunities SPRINT provided, Syamala says, "Through seminars and collaborative projects, I have built a strong professional network, allowing me to establish connections and collaborations that are vital for career growth."

Her long-term career goal is to become a clinician scientist, and health policymaker – specifically, at the World Health Organization. "My passion for addressing the needs of individuals with MS and my deep understanding of the challenges they face have fueled my commitment to pursue a career in policymaking. I aspire to utilize my research expertise, knowledge of healthcare systems, and understanding of the social and economic impact of MS to influence policy decisions that prioritize the well-being and empowerment of individuals with MS."

The mother of two children, Syamala says she enjoys experiencing new cultures and environments. "Now, I enjoy being part of St. John's vibrant arts and cultural community and would love to explore new places around the world in the future." She also enjoys taking long walks in nature and spending quality time with loved ones. "Whether it's having meaningful conversations, going on outings, or simply sharing laughter, being in the company of family and friends helps me unwind and recharge."

HARITHA DESU

Dr. Haritha Desu was born in India but grew up in the United States. She now lives in Montreal, Quebec where she is pursuing her postdoctoral studies at the Centre de Recherche du Centre Hospitalier de l'Université de Montréal (CRCHUM).

Haritha obtained her BSc in biology and psychology from Stony Brook University in New York, and her PhD in neuroscience from the University of Miami, in Florida.

While completing her undergraduate degree, Haritha worked part-time as a data coordinator in a pediatric MS centre, while also taking neuroscience classes at Stony Brook University. It was during this period that Haritha's interest in MS research was sparked. She recalls wanting to understand why, at that time, there were no treatments that promoted repair, although there were some that could slow disease progression.

After completing her undergraduate studies, Haritha decided to complete a PhD in neuroscience.

Currently, Haritha is a postdoctoral fellow in Dr. Catherine Larochelle's lab and is focusing on understanding how T cells interact with neuroglial cells in the central nervous system. She reveals that they are trying to identify potential neuroprotective targets that can protect the nervous system from the deleterious effect of T cells in MS. "I am focusing on identifying molecules that could promote repair of the nervous system after injury," she explains.

When discussing the challenges inherent to her field, Haritha says, "As a scientist that works in a lab and has primarily a basic science background, it can sometimes be hard to truly understand the purpose of the work that we are doing and the impact it will have for people with MS. Furthermore, wet lab research can sometimes be pretty lonely since we tend to have tunnel vision for our projects/goals. That is why the SPRINT program which includes the endMS Summer School is an amazing opportunity to overcome these roadblocks, since it provides the chance to hear the experiences of people with MS — and also interact with other MS researchers, and broaden our knowledge of other fields as well."

Haritha's interest in SPRINT stemmed from her desire to expand her horizons on the type of MS research that was being conducted outside her field. Expanding upon her experience, Haritha says, "The SPRINT program has helped me network with MS researchers in Canada, which was especially helpful since I only arrived in Canada eight months before participating in SPRINT."

Haritha says she was particularly impressed by the panel session in which individuals with MS and their caregivers shared their day-to-day experiences. "Having the opportunity to learn directly from them on what their challenges are and what would be impactful for them,

"I am focusing on identifying molecules that could promote repair of the nervous system after injury."

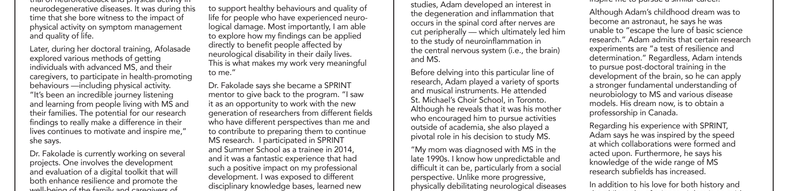
was invaluable. These experiences are what allow researchers that work in a lab, like me, to conduct meaningful research in a bedside-to-bench-to-bedside manner," she says.

Courtesy of SPRINT, Haritha says she has "learned how to collaborate, interact and successfully complete a project involving researchers across disciplines and institutes. More specifically to our project, I have learned how to conduct a systematic/scoping review."

When asked if she believes a cure for MS will be found in her lifetime, Haritha replies, "Yes. And if not, then at the very least we will have found treatment options that will significantly improve the quality of life of people living with MS."

Haritha's long term career goal is to conduct MS research as an academic PI (Principal Investigator) and identify mechanisms/therapeutic targets to improve remyelination/repair of the central nervous system and consequently improve the symptoms of MS.

When not pursuing her academic goals, Haritha enjoys reading novels, spending time with friends and travelling.



AFOLASADE FAKOLADE

SPRINT Mentor, **Dr. Afolasade Fakolade** hails from Lagos Nigeria, but currently lives in Kingston, Ontario, where she works as an assistant professor at Queen's University.

Afolasade completed her medical rehabilitation in physical therapy (BMR PT) degree at Obafemi Awolowo University, Nigeria, and her MSc in neurorehabilitation at Cardiff University in Wales. She then obtained her PhD in rehabilitation science from Queen's University, in Ontario before completing a postdoctoral fellowship in exercise promotion at the University of Ottawa.

During her MSc studies in neurorehabilitation, Afolasade worked as a research assistant on a randomized controlled trial of neurofeedback and physical activity in neurodegenerative diseases. It was during this time that she bore witness to the impact of physical activity on symptom management and quality of life.

Later, during her doctoral training, Afolasade explored various methods of getting individuals with advanced MS, and their caregivers, to participate in health-promoting behaviours —including physical activity. "It's been an incredible journey listening and learning from people living with MS and their families. The potential for our research findings to really make a difference in their lives continues to motivate and inspire me," she says.

Dr. Fakolade is currently working on several projects. One involves the development and evaluation of a digital toolkit that will both enhance resilience and promote the well-being of the family and caregivers of individuals with MS. Another project involves the development of an approach to characterize "what usual MS rehabilitation actually looks like in Canada." She hopes that the findings generated from these studies will inform health and social care programming for persons living with MS and their families.

Before delving into a career in research, Afolasade contemplated becoming a structural engineer. As a youth with a penchant for building things, Afolasade assumed she would use those particular talents in her future career. As an adult however, a chance encounter with a physiotherapist (one who had provided rehabilitation services for her father after he'd had major surgery), ultimately changed her career trajectory and her future goals.

"I worked as a physiotherapist for a few years across various rehabilitation settings in Nigeria and the UK, providing services to people with neurological conditions and their families. The knowledge and experience I gained through this role, continues to help me stay committed to asking questions on how best

"It's been an incredible journey, listening and learning from people living with MS and their families. The potential for our research findings to really make a difference in their lives continues to motivate and inspire me,"

to support healthy behaviours and quality of life for people who have experienced neurological damage. Most importantly, I am able to explore how my findings can be applied directly to benefit people affected by neurological disability in their daily lives. This is what makes my work very meaningful to me."

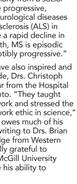
Dr. Fakolade says she became a SPRINT mentor to give back to the program. "I saw it as an opportunity to work with the new generation of researchers from different fields who have different perspectives than me and to contribute to preparing them to continue MS research. I participated in SPRINT and Summer School as a trainee in 2014, and it was a fantastic experience that had such a positive impact on my professional development. I was exposed to different disciplinary knowledge bases, learned new research skills, and developed relationships and collaborations that are still in existence to date."

Witnessing the enthusiasm, commitment and talent of this year's SPRINTers inspired and motivated Dr. Fakolade. She says that being a mentor has "provided an opportunity to collaborate with three excellent trainees in fields that are completely different from my own and contribute to their learning. I think this is a great way to ensure continuity in MS research in Canada."

When not working, Afolasade enjoys travelling, exploring new cuisines, cooking, and reading thriller novels.

ADAM GROH

Originally from Toronto, **Adam Groh** currently lives in Montreal, Quebec, where he is pursuing a PhD in neuroscience and conducting research at the Montreal Neurological Institute-Hospital of McGill University.



After completing his BSc with a minor in music, Adam received his MSc in anatomy and cell biology from the University of Western Ontario. During the early days of his academic career, Adam studied the structure and function of autonomic nerves that control the pelvic organs. His objective was to define the contributions of tiny abdominal nerves that are often erroneously destroyed by surgeons during cancer resection (an error that often leaves patients infertile). As a result of these studies, Adam developed an interest in the degeneration and inflammation that occurs in the spinal cord after nerves are cut peripherally — which ultimately led him to the study of neuroinflammation in the central nervous system (i.e., the brain) and MS.

Before delving into this particular line of research, Adam played a variety of sports and musical instruments. He attended St. Michael's Choir School, in Toronto. Although he reveals that it was his mother who encouraged him to pursue activities outside of academia, she also played a pivotal role in his decision to study MS.

"My mom was diagnosed with MS in the late 1990s. I know how unpredictable and difficult it can be, particularly from a social perspective. Unlike more progressive, physically debilitating neurological diseases like Amyotrophic lateral sclerosis (ALS) in which most people share a rapid decline in physical and mental health, MS is episodic and not always as perceptibly progressive."

Other individuals who have also inspired and encouraged Adam include, Drs. Christoph Licht and Nades Palaniyar from the Hospital for Sick Children in Toronto. "They taught me to take pride in my work and stressed the importance of a strong work ethic in science," he recalls. Adam says he owes much of his knowledge of scientific writing to Drs. Brian Allman and Tyler Beveridge from Western University. Adam is equally grateful to Dr. Jo Anne Stratton at McGill University who helped him improve his ability to

"Certain research experiments are a test of resilience and determination."

mentor students, design largescale studies, collaborate effectively, "and ultimately become an independent scientist."

Adam's interest in science began at a young age, thanks to a childhood friend he met at the age of three. "He only spoke Russian, and I only English, but we made things work. I didn't know it at the time, but his father was a world-renowned physicist who would engage me in a variety of stimulating activities throughout my childhood and inspire me to pursue a similar career."

Although Adam's childhood dream was to become an astronaut, he says he was unable to "escape the lure of basic science research." Adam admits that certain research experiments are "a test of resilience and determination." Regardless, Adam intends to pursue post-doctoral training in the development of the brain, so he can apply a stronger fundamental understanding of neurobiology to MS and various disease models. His dream now, is to obtain a professorship in Canada.

Regarding his experience with SPRINT, Adam says he was inspired by the speed at which collaborations were formed and acted upon. Furthermore, he says his knowledge of the wide range of MS research subfields has increased.

In addition to his love for both history and the philosophy of science, Adam is an avid reader and hopes to write books. During his spare time — when not compiling material for his future oeuvres, Adam admits to being "obsessed" with baking bread. He also loves to go for long runs and muses, "horror films aren't bad either."

GRACIOUS KASHEKE

Gracious Kasheke was born in Halifax, Nova Scotia. He is currently studying at Dalhousie University as a PhD student in the Department of Pharmacology, in the Brain Repair Centre located on Dalhousie's medical campus.

Gracious received his BSc Honours in neuroscience, and a certificate in neurotechnology and innovation, from Dalhousie University.

During his undergraduate studies, Gracious became fascinated with the research being performed in the field of neuroscience. After becoming familiar with MS through teachings on neurological disorders, and after learning about the pathophysiology of MS, Gracious felt his courses lacking very little focus on the life experiences of individuals living with neurological disorders. "To address this gap in knowledge, I sought a better understanding of how MS affected people on a day-to-day basis," he says.

Subsequently, Gracious helped organize an event in conjunction with MS Canada (formerly MS Society of Canada), in which MS researchers and individuals living with MS shared their expertise and experiences. "This event had a profound impact on me. Hearing about the challenges faced by individuals with MS encouraged me to become more involved in MS research. As a result, I facilitated volunteer initiatives at Dalhousie University in conjunction with the MS Society, and embarked on a career as an MS researcher."

These days, Gracious' research focuses on promoting repair with safe and novel compounds. Thus far, he has tested several compounds which are known to enhance the innate repair mechanisms and which have shown a capacity to improve symptoms of MS. "Common symptoms of MS lead to abnormal gait, ... we are therefore using motion tracking software to identify the degree of improvement these compounds can promote," he explains.

Prior to embarking on his current academic path, Gracious worked as a coach at a soccer camp. "When I was younger, I aspired to become a professional soccer player. The biggest lessons were hard work, smart work, and teamwork. In order to achieve big goals, it is absolutely necessary to put in a lot of effort, but it is equally important to apply that effort in the right ways. Additionally, it is virtually impossible to achieve something big without the help of others. I think this has made me appreciate working within a team," he reveals.

Expanding upon the importance of team work, Gracious discusses his SPRINT experience. "It really opened my eyes to the possibility of collaboration between researchers from different institutions.

"It is virtually impossible to achieve something big without the help of others. I think this has made me appreciate working within a team."

I enjoyed developing a project with the highly talented researchers who were a part of my SPRINT group. The guidance and expertise from our mentor allowed for us to pursue our ideas with important feedback to maintain relevance and accuracy on the topic. I hope to work with many of the SPRINTers (both mentors and mentees) in the future."

One particular mentor who has played a significant role in Gracious' academic pursuits is Dr. George Robertson. "I began some work with him towards the end of my undergraduate degree and have continued on with my graduate studies in his laboratory. His mentorship and guidance have provided an environment where I can pursue those ideas while developing as a professional."

When discussing his plans for the future, Gracious says, "Ultimately, I want to be a practice as a physician and perform research focusing on the genetic and epigenetic profiles of neurons and glia in individuals with MS." Gracious believes that information from these profiles may inform key biochemical pathways to be targeted by new therapies that will promote repair and recovery in individuals with MS.

"To me, these topics may provide key insight into developing a cure for MS," he says.

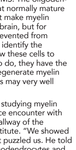
In his spare time, Gracious loves playing soccer, basketball, and board games with his friends.

TIM KENNEDY

SPRINT Mentor, Professor **Timothy Edward Kennedy**, PhD, received his Honours BSc in biology and psychology, from McMaster University, in Hamilton, Ontario before obtaining his MA, MSc, and PhD, in Physiology and Cellular Biophysics from Columbia University in New York City. He later went on to complete a post-doctoral fellowship at the University of California, San Francisco.

For the past twenty-seven years, Tim has been living in Montreal where he has worked as a professor in the Department of Neurology and Neurosurgery, and the Department of Anatomy and Cell Biology, while directing a research laboratory at the Montreal Neurological Institute of McGill University.

Tim's lab is currently working to identify molecular mechanisms that will support the regeneration of myelin and the recovery of function that has been lost in individuals with MS. He is optimistic that a cure for MS will be identified within his lifetime, and briefly explains that, "Loss of myelin underlies neurodegeneration in MS. Remyelination supports axon integrity and neuronal survival, but becomes very limited, particularly in progressive MS. The oligodendrocyte precursor cells that normally mature into oligodendrocytes that make myelin are abundant in the adult brain, but for an unknown reason are prevented from remyelinating in MS. If we identify the molecular signals that allow these cells to do what they were born to do, they have the capacity to remyelinate, regenerate myelin that has been lost, and this may very well solve MS."



Tim admits that he began studying myelin specifically, due to a chance encounter with Dr. Alan Peterson in the hallway of the Montreal Neurological Institute. "We showed him some recent data that puzzled us. He told us we were looking at oligodendrocytes and literally said, 'you really should study that.'"

Throughout Tim's career, some other mentors have also provided encouragement and guidance. Among them, he names Ron J. Racine, and Eric R. Kandel. He also expresses gratitude for the long-term, "very productive" collaboration he's enjoyed with Dr. Jack Antel and his laboratory at the Neuro.

Long before he began studying myelin, Tim worked as a paper boy, delivering newspapers for the Globe and Mail. As a teenager, he enjoyed stints as a lifeguard and worked in restaurants in a multitude of positions ranging from busboy to short order cook (which consequently led him to develop a love-hate relationship with restaurant work). For three years, Tim played in a band that performed in clubs in and around Toronto. (After graduating from university, Tim promised himself he would never work in restaurants again. Jokingly, he says he has managed to keep that promise "so far".) "Arguably," Tim says, his first "real job" was when he became a professor at McGill.

As a professor, Tim believes, "the best students are the ones you learn the most from." In his role as mentor, Tim's SPRINT team was comprised of three students

"The best students are the ones you learn the most from."

from very different backgrounds, including academic areas in which he had very little expertise. "I learned a lot from each of them," he says, adding that the experience was remarkable.

When asked about his mentorship style, Professor Kennedy confesses to his admiration for Kermit the Frog. "I've always been deeply inspired by how Kermit the Frog ran the Muppet Theatre," he muses.

Sharing some words of advice for SPRINTers (which he readily admits to having learned from Kermit the Frog), Professor Kennedy recites some gems, including:

- Support your team!
- It's nice to be important. But it's important to be nice.
- Every journey begins with a single hop.

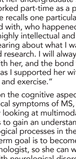
He humbly concludes with the admission, "I can't improve on that."

When not researching, teaching or mentoring, Professor Kennedy says he is kept "busy" and "out of trouble" by his family — and in particular, his 3 daughters.

COLLEEN LACEY

Colleen Lacey is originally from Calgary, Alberta. She earned a BSc in psychology and an MSc in clinical psychology from the University of Victoria in British Columbia where she is currently a PhD candidate in clinical psychology, specializing in neuropsychology.

Colleen's initial interest in MS developed during a summer stint as a research assistant, administering cognitive assessments to individuals with MS. "I truly enjoyed working with this population," she says. From hearing about each person's unique experience with MS, Colleen says she grew curious about the different cognitive and mental health symptoms that could impede a person's enjoyment of life. This experience inspired Colleen to develop her skills as a clinician and researcher, so she could better support and enhance MS symptom management.



Throughout her undergraduate studies, Colleen worked part-time as a personal care worker. She recalls one particular individual she worked with, who happened to have MS. "She was highly intellectual and always enjoyed hearing about what I was learning in classes and research. I will always cherish working with her, and the bond we created over time, as I supported her with tasks of daily living and exercise."

Focusing on the cognitive aspects, and psychological symptoms of MS, Colleen is currently looking at multimodal MRI techniques to gain an understanding of neurobiological processes in the brain. Her long-term goal is to become a clinical neuropsychologist, so she can work with patients with neurological disorders. "The more I become immersed in MS research and clinical care, the more I see a strong need for more clinical psychologists in MS health care," Colleen says.

Some "very brilliant and inspiring" mentors and researchers who have inspired Colleen, include her research supervisor, Dr. Jodie Gawryluk, Dr. Chantel Mayo, and her SPRINT mentor, Dr. Afolasade Fakolade. The latter recently sparked Colleen's interest in rehabilitation interventions in MS care.

Colleen's first job was as a server in a country club. "My first job taught me that I enjoyed working with people, and working in a team-based environment." This experience also led Colleen to the realization that although she enjoyed helping people, she really longed to do so from a position rooted in the sciences.

As such, Colleen says she naturally gravitated toward healthcare-related jobs. She recalls entertaining the ideas of working as either an

"I am privileged to live in a place that is rich in beautiful outdoor spaces, on the traditional lands of the Lekwungen."

occupational therapist or naturopathic doctor. Eventually, Colleen realized she held an even stronger passion for psychology.

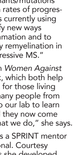
Now, Colleen's goal is to be a clinical neuropsychologist. "I would like to conduct neuro-psychological assessments and implement intervention for the long-term management of cognitive and behavioural symptoms for people with MS. I would also like to work in close proximity to research labs to help patients gain access to research participation, and inform important research questions derived from observations in clinical practice."

For Colleen, SPRINT was a great opportunity to build the skills and experience necessary to work with researchers from different training backgrounds and perspectives. "The other SPRINTers were really inspiring to me. Hearing their expertise in their own research areas inspired me to learn more about topics I had not previously known about, or understood. It also motivated me to become more knowledgeable and effective at communicating my own research area of MS," she says.

In her spare time, Colleen spends as much time outdoors as possible. "I am privileged to live in a place that is rich in beautiful outdoor spaces, on the traditional lands of the Lekwungen. Here I spend time at the beach, paddle boarding on the ocean, and hiking along our rainforest trails as a way to maintain my own physical and mental health. I also enjoy playing guitar and cooking for friends and family."

JACQUELINE QUANDT

SPRINT Mentor, **Dr. Jacqueline Quandt** was born in Edmonton, Alberta and earned her BSc, and PhD at the University of British Columbia (UBC) before completing her post-doctoral fellowship at the National Institutes of Health in Bethesda, Maryland.



Dr. Quandt currently lives in Vancouver, British Columbia, where she is an assistant professor in the Department of Pathology & Laboratory Medicine at the Djavad Mowafaghian Centre for Brain Health at UBC.

The main focus of Dr. Quandt's work lies in trying to understand which primary immune and neurodegenerative processes are occurring in both the earliest and later stages of MS.

Some of Dr. Quandt's recent lines of investigation have included the development of relevant preclinical models of MS that hold the same genetic variants/mutations found in families with high rates of progressive, aggressive MS. She is currently using a mouse model "to identify new ways to suppress harmful inflammation and to enhance repair, particularly remyelination in otherwise particularly aggressive MS."

Jacqueline is involved with *Women Against MS*, and her local MS walk, which both help raise funds and awareness for those living with MS. "I have invited many people from the local MS community to our lab to learn more about our work, and they now come regularly to hear about what we do," she says.

Dr. Quandt's experience as a SPRINT mentor this year, proved inspirational. Courtesy of SPRINT, Jacqueline says she developed a better understanding of the process of systematic/scoping reviews. Consequently, she is now creating a course on this very topic for biomedical researchers with the assistance of the same librarian who trained her SPRINT team.

"I have invited many people from the local MS community to our lab to learn more about our work, and they now come regularly to hear about what we do."

Dr. Quandt says SPRINT also helped her gain a better understanding of how to align teams in their understanding of statistics as they relate to foundational versus clinical research. "The two can be quite different if it's not what you are used to doing, or reading about," she says.

When discussing the topic of mentorships, Jacqueline recalls her own PhD supervisor, Dr. Katerina Dorovini-Zis, a neuropathologist and full professor/researcher at UBC, as being one of the hardest working and most clinician scientists she's ever known. "She taught me to question everything, work hard, and trust in what you believe. She always treated everyone around her with the greatest of respect, and pursued science with the highest level of integrity."

Regarding her own mentorship style, Dr. Quandt admits she "has always been a bit more hands on, than off." She says, "I came to realize that I needed to be better at identifying aspects of a project that could progress more organically and those that needed a closer eye at key steps."

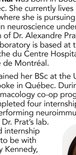
Dr. Quandt's advice for SPRINTers is to connect often "and effectively, with a clear goal of your project from the get-go. Research takes time, and being as focused and on task as possible from the outset will go a long way. I used to think I had a whole lot of time to conduct the experiments and answer the questions I wanted to. Now, I feel a greater pressure than ever to tackle the few things I always believed held the greatest promise – it's more like now or never. That means spending less time trying to figure things out on my own, and engaging the brilliant and brightest across the board, to achieve research aims."

KATHERINE SAWICKA

Edmonton born **Dr. Katherine Sawicka** received her MD from the University of Saskatchewan's College of Medicine. These days she's living in Toronto where she's enrolled in a PhD program at the University of Toronto's Institute of Health Policy, Management, and Evaluation (IHPME), and researching at the SickKids Research Institute, Child Health Evaluative Sciences.

For her PhD, Katherine is using qualitative and quantitative methods to explore the concept of self-management in adolescents and young adults with MS. "There is a gap in understanding the needs of adolescents and young adults with MS during transition. I hope the results of our work will inform future interventions and clinical care programs targeted to the needs of adolescents and young adults with MS," she says.

During their second month of medical school, a schoolmate of Katherine's experienced her first attack of MS. "Witnessing her journey was a formative experience for me. It highlighted the resilience that individuals with MS possess — and the impact research can make. From this experience I was inspired to contribute to the field of MS as a doctor and researcher," Katherine explains. Further to her current research, Katherine says she is proud to share that her PhD work includes two young people with MS as co-investigators.



Katherine feels fortunate to have worked with many exceptional clinicians and scientists who have demonstrated how impactful, meaningful and "fun" a career in MS research could be. Among those who inspired her, she names Dr. Lawn Oh, Dr. Ann Yeh, Dr. Ruth Ann Marrie and Dr. Marcia Finlayson. According to Katherine, these women "modelled the creativity, leadership, and perseverance needed to be successful in this career." She adds that Dr. Brian Feldman has also been supportive of her aspirations to be a clinician scientist in the field of MS.

Katherine strives "to be a part of the next generation of leaders and role models with a special interest in mentoring women and youth toward science."

She reveals that her own scientific career actually began in childhood, after she dusted off an "underappreciated" microscope that had previously belonged to her older sister. Katherine attributes her curiosity about "the biology of the world around" her, to having spent hours making wet mount slides with an onion skin.

When she was a few years older, Katherine was hired to work as a tennis instructor. In that role she learned about leadership and team work — both of which she says have been integral to her medical and research career.

Katherine's participation in SPRINT further enabled her to work and learn within an interdisciplinary team. "I cannot emphasize enough how meaningful the relationships I formed with the SPRINTers and Mentor were.

"I cannot emphasize enough how meaningful the relationships I formed with the SPRINTers and Mentor were."

Between the four of us we had an amazing support system and really learned from one another. I truly believe we will be career-long collaborators/colleagues and friends."

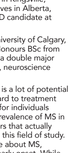
When asked if participating in SPRINT has influenced her intent to pursue MS research for the long term, she responds with a resounding "Absolutely! What an amazing network of people involved in MS research. I can't wait to collaborate in the future with people from both SPRINT and Summer School."

When not collaborating on research projects, Katherine enjoys playing tennis, cooking, and doing improv. "As I began to grow my skills as an improvisor, I also began to see how these skills were applicable in clinical and research learning environments. Improv allows me to practice communication, find confidence in myself and in my ability to build stronger more supportive relationships in research and as a doctor."

FIONA TEA

Fiona Tea received her BSc, with a major in immunology and neuroscience, and an Honours degree in pathology from the University of Sydney, in Australia – the country from which she originally hails.

Fiona's PhD in medicine was obtained through her work at the Kids Research Institute, Westmead Clinical School, at the University of Sydney. Fiona's postdoctoral studies were conducted in Professor Prat's lab, in Montreal — specifically, on the Canadian Prospective Cohort (CanProCo) study, and single-cell sequencing. She explains that the CanProCo study is a major national collaboration of neurologists, immunologists, radiologists, and biologists across Canada established with the intent of understanding the progression of MS – and identifying novel biomarkers



Outside of academia, Fiona's first and only job was as a door-to door salesperson. In retrospect, she says that job helped her develop a thick skin. Not only did it teach her how to handle rejection, but it taught her how to speak to people she didn't necessarily want to speak to — and who, likewise, didn't care to communicate with her. Reflecting upon how that experience now informs her current work, she muses that it "more or less encapsulates academia."

When discussing her career trajectory, Fiona says she envisioned "a million versions" of herself when she was younger. She lists "architect, engineer, teacher, psychologist" before adding, "I never had the thought of being a scientist, though." Despite this admission, Fiona says she has always been deeply fascinated by the brain, and has always loved, and been intrigued by neuroscience and the "complex beauty" of the immune system.

When sharing her opinion about MS as a field of research, Fiona says it is a field in which "a lot is unknown, but ready to be discovered. It is also a field that is rapidly evolving, so I am in for the ride," she says.

Fiona remarks on how rapidly this particular field of research is evolving. "Even across my PhD I have seen a massive shift in the way we assess and acquire data, and also how collaborative research has become."

"My research background is heavily biomarker-focused. My current project focuses on understanding MS disease progression at the immune and transcriptomic level. The aim from understanding progression is to discover novel biomarkers of disease evolution that would aid in treatment management of patients," she explains.

"The SPRINT program has definitely reignited my love for MS research, so I hope to continue on this path for the time being."

Dr. Fabienne Brilot was an influential mentor during Fiona's Honours and PhD studies. Fiona says, "She inspired me to pursue my research path and academia, and has been a great mentor throughout the years." Fiona also mentions that her SPRINT mentor, "Dr. Afolasade Fakolade has been a great mentor, and her work ethic and drive has definitely inspired me."

Expanding on her experience with SPRINT, Fiona says she has enjoyed, "working on a project completely outside my normal subfield in MS." Additionally, courtesy of her involvement with SPRINT, Fiona says she has made "great friends and partnerships across different disciplines during the year."

Fiona says her new-found perspective on MS research, which now includes, "a more patient-focused approach," has motivated her to explore different parts of MS research which she says she hopes to apply in the future.

On the topic of her own future, Fiona says she simply wants to find a job she loves.

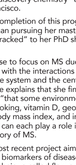
"The SPRINT program has definitely reignited my love for MS research, so I hope to continue on this path for the time being."

When not pursuing her academic goals, Fiona's "perfect re-energising routine," involves enjoying home-cooked dinners with close friends. She also loves travelling, and attending cultural events.

KARINE THAI

Karine Thai was born in Boucherville, Québec. She currently lives in Montréal, where she is pursuing a doctorate in neuroscience under the supervision of Dr. Alexandre Prat, whose research laboratory is based at the Centre de Recherche du Centre Hospitalier de l'Université de Montréal.

Karine obtained her BSc at the Université de Sherbrooke in Québec. During her time in the pharmacology co-op program, Karine completed four internships. The first involved performing neuroimmunology research in Dr. Prat's lab. Her second internship happened to be with Dr. Timothy Kennedy, (one of this year's SPRINT mentors), and involved neuroscience, cellular and molecular biology research at the Montreal Neurological Institute. Karine's third internship was at the Centre George-François-Leclerc in Dijon, France under the supervision of Dr. Bertrand Collin, and focused on preclinical imaging. Her fourth and final internship was in industry, and involved "discovery chemistry" at Genentech, in San Francisco.



After the completion of this program, Karine began pursuing her master's degree, and "fast-tracked" to her PhD shortly thereafter.

Karine chose to focus on MS due to her fascination with the interactions between the immune system and the central nervous system. She explains that she finds it very intriguing, "that some environmental factors such as smoking, vitamin D, geographical regions, body mass index, and infection to viruses" can each play a role in the onset and trajectory of MS.

Karine's most recent project aims to identify new blood biomarkers of disease severity. "I use a technique called flow cytometry, which allows me to detect different molecules present on white blood cells," she explains. The goal of this is research is to identify patterns that are predictive of the course of MS, (including: frequency of relapses, new lesions at magnetic resonance imaging, or disability progression). Karine believes that being able to predict the severity of MS by using such a blood test, may help guide treatment decisions.

When she was younger, Karine wanted to be a veterinarian. Although she now has two cats that she "trains to do tricks", her aspirations of becoming a vet changed when she began studying chemistry, physics, and biology. "I became very interested in scientific questions and knew that I wanted to pursue a career in research," she says.

"It was truly amazing to be able to share our passion for MS research together and discuss new ideas, but also to form new friendships."

When asked about her SPRINT experience, Karine says, "It was a unique opportunity to interact with people that I wouldn't have come across otherwise. Our project focused on the role of exercise in MS, and I became very fascinated by the actual mechanisms linking exercise to improvements in MS symptoms. The most inspiring part of the program for me, was the interaction with people living with MS... I became more aware of the needs of individuals with MS into her future research.

Grateful to have participated, Karine adds that SPRINT helped her realize the importance of being able to "communicate ideas effectively" with others who do not necessarily share the same background and/or expertise. Karine also appreciated the opportunity to meet peers from across Canada. "It was truly amazing to be able to share our passion for MS research together and discuss new ideas, but also to form new friendships."

Regarding her long-term goals, Karine says, "I would like to be a researcher, and ideally stay in the field of MS, or at least neuro-immunology."

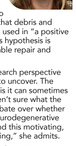
As someone who enjoys being active, Karine often goes running and/or to the gym in the morning. She also enjoys biking to the lab during the summer months.

EMILY WUERCH

Emily Wuerch was born in Kingsville, Ontario but currently lives in Alberta, where she is a joint MD-PhD candidate at the University of Calgary.

Prior to enrolling in the University of Calgary, Emily graduated with an Honours BSc from McMaster University, with a double major in biology and psychology, neuroscience and behavioural.

Emily firmly believes there is a lot of potential for improvement with regard to treatment options and quality of life for individuals living with MS. The high prevalence of MS in Canada is one of the factors that actually motivated Emily to pursue this field of study. "As I started learning more about MS, I became intrigued by its early onset. While most neurodegenerative disorders affect people later in life, MS onset typically occurs between twenty and forty years of age," she explains.



Emily's latest project focuses on phagocytosis and lipid recycling in the central nervous system. "After a demyelinating attack, myelin debris present at the lesion site is inhibitory to repair," she says. As such, her goal is to enhance the clearance of that debris and allow it to be recycled and used in "a positive way" by other cells. Emily's hypothesis is that this will ultimately enable repair and remyelination.

"MS is exciting from a research perspective because there is still a lot to uncover. The other side of that though, is it can sometimes feel overwhelming. We aren't sure what the cause of MS is, there is debate over whether MS has autoimmune or neurodegenerative origins, etc. Most days I find this motivating, but it can also be challenging," she admits.

Emily's long-term goal is to become a clinician-scientist. She believes this would enable her to engage in research that could then be translated into the clinic, with the ultimate aim of improving the treatment of patients.

Prior to embarking upon an academic career in the sciences, Emily worked as a server and hostess in a restaurant. "This definitely taught me more skills than I realized at the time, and it impacted the way I work today. For example, I developed the ability to effectively manage my time, work under pressure, and multitask. As a teenager, I used to become a lawyer. This changed towards the end of high school when I developed a passion for science."

When asked about her SPRINT experience, Emily says she was truly inspired by the collaborative aspect. SPRINT "facilitated trainees and mentors from across Canada to work together with a common goal of advancing MS research, which I think is very encouraging... I learned a lot about rapid and systematic reviews, which I had never worked on before this project. This included learning about the creation of a search strategy, how to conduct title and abstract screens, and

"I also think that MS Canada fosters a very productive and exciting research environment, and it is clear that they really invest in their trainees."

how to go about data abstraction. Through the abstraction process, I also gained knowledge on the types of statistics typically used in clinical studies."

Emily affirms that she is even more motivated to pursue MS research now that she has formed connections with other trainees with whom she hopes to work in the future.

"I also think that MS Canada fosters a very productive and exciting research environment, and it is clear that they really invest in their trainees. As I advance in my career, I would want my future potential trainees to have these same experiences that I did," she says.

Since moving to Calgary for her studies, Emily has discovered her new found love for the mountains and now goes on hikes during her inspare time. When not involved in her research, her other hobbies include reading and trying out new vegetarian recipes.

2023-2024 endMS SPRINTers

Rochelle Benoit	MEMORIAL UNIVERSITY OF NEWFOUNDLAND
Katherine Cardwell	UNIVERSITY OF OTTAWA
Mona Hejazi	MEMORIAL UNIVERSITY OF NEWFOUNDLAND
Dr. Leah Hohman	UNIVERSITY OF BRITISH COLUMBIA
Megan Krysak	CENTRE DE RECHERCHE DU CENTRE HOSPITALIER DE L'UNIVERSITÉ DE MONTRÉAL
Ateyeh Soroush	UNIVERSITY OF CALGARY
Risavarshni Thevakumaran	MCGILL UNIVERSITY
Darrin Wijeyaratnam	UNIVERSITY OF OTTAWA
Kaihim Wong	UNIVERSITY OF MANITOBA

2023-2024 endMS SPRINT Mentors

Dr. Kaarina Kowalec	UNIVERSITY OF MANITOBA
Dr. Hedwich Kuipers	UNIVERSITY OF CALGARY
Dr. Jordan Warford	NOVA SCOTIA HEALTH

2023 endMS Education and Training Committee Membership

Dr. Christina Wolfson (CHAIR)	DIRECTOR, ENDMS NATIONAL TRAINING PROGRAM MCGILL UNIVERSITY
Dr. Nathalie Arbour	CO-DIRECTOR, ENDMS NATIONAL TRAINING PROGRAM CHAIR OF THE PEER REVIEW COMMITTEE UNIVERSITÉ DE MONTRÉAL
Dr. Marcia Finlayson	CO-DIRECTOR, ENDMS NATIONAL TRAINING PROGRAM CHAIR OF THE SPRINT COMMITTEE, QUEEN'S UNIVERSITY
Jessica Allanach	SPRINT ALUMNI, UNIVERSITY OF BRITISH COLUMBIA
Dr. Charity Evans	UNIVERSITY OF SASKATCHEWAN
Dr. Nader Ghasemlou	QUEEN'S UNIVERSITY
Dr. Jacqueline Quandt	UNIVERSITY OF BRITISH COLUMBIA
Dr. George S. Robertson	DALHOUSIE UNIVERSITY
Dr. Lisa Walker	UNIVERSITY OF OTTAWA
Anik Schoenfeldt	PROGRAM MANAGER, ENDMS NATIONAL TRAINING PROGRAM, RESEARCH INSTITUTE - MCGILL UNIVERSITY HEALTH CENTRE

2023 endMS Summer School Hosts

Dr. Manu Rangachari	2023 ENDMS SUMMER SCHOOL CO-HOST, CENTRE DE RECHERCHE DU CHU DE QUÉBEC - UNIVERSITÉ LAVAL
Dr. Luc Vallières	2023 ENDMS SUMMER SCHOOL CO-HOST, CENTRE DE RECHERCHE DU CHU DE QUÉBEC - UNIVERSITÉ LAVAL

2024 endMS Summer School Hosts

Dr. Chase Figley	2024 ENDMS SUMMER SCHOOL CO-HOST, UNIVERSITY OF MANITOBA
Dr. Soheila Karimi	2024 ENDMS SUMMER SCHOOL CO-HOST, UNIVERSITY OF MANITOBA

MESSAGE FROM THE 2024 ENDMS SUMMER SCHOOL HOSTS

The University of Manitoba and Manitoba Multiple Sclerosis Research Centre (MMSRC) are very excited to host the 2024 endMS Summer School in Winnipeg, from June 10-13, 2024.

Members of the MMSRC have close ties to both the Rady Faculty of Health Sciences at the University of Manitoba and the MS Clinic within Health Sciences Centre – Winnipeg (Manitoba's largest hospital), and include a range of basic scientists, translational scientists, and clinician scientists. Therefore, the theme for this year's Summer School will be *MS Pathogenesis, Prognosis, and Repair.*

This will draw upon the broad range of expertise among MMSRC research groups, including pathogenesis and disease mechanisms (Dr. Soheila Karimi), advanced genomics and bioinformatics (Drs. Kaarina Kowalec and Galen Wright), diet and the microbiome (Dr. Heather Armstrong), structural and functional neuroimaging biomarkers (Drs. Chase Figley and Jennifer Kornelsen), diagnosis and management of cognition, anxiety, and depression (Dr. Ronak Patel), treatment of MS and exacerbating comorbidities (Dr. Ruth Ann Marrie), and therapeutic approaches for white matter repair and regeneration (Dr. Soheila Karimi).

Work is already underway to assemble an exciting program that will include various plenary sessions on the latest advances in MS research and clinical care, academic writing and grant funding seminars, career development sessions (focusing on opportunities and pathways both within and beyond traditional academic/university appointments), and various small group workshops. Time will also be devoted for each of this year's SPRINT teams to present their yearlong group projects, for participants to interact with and learn from people living with MS, and to meet and network with peers who will be coming from across Canada to learn together and share our collective passion for advancing MS research.

We can't wait to welcome everyone to Winnipeg in June for next year's endMS Summer School!

endMS Summer School Quebec City 2023

"I ABSOLUTELY LOVED meeting other early-career researchers in the same research field, getting to foster relationships with them, and learning from them. It was also a privilege to hear the very honest and vulnerable thoughts and experiences of individuals with MS. As a basic scientist, hearing their remarks provides a clarity and motivation to continue on with research in this field."

- 2023 endMS Summer School participant

"ENDMS SUMMER SCHOOL did a fantastic job of reminding me why I am doing research in the field of MS. Being able to communicate with individuals personally living with or affected by MS opened my eyes to the real world importance of the work I do behind the bench."

- 2023 endMS Summer School participant

"THIS WAS A GREAT OPPORTUNITY for trainees in MS research. A great way to explore other universities and research labs in Canada."

- 2023 endMS Summer School participant

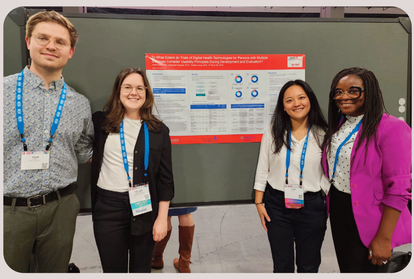
"LARGE CONFERENCES aren't always conducive to networking and I think this made me feel like I was a part of a supportive group of trainees, researchers, clinicians, and individuals affected by MS. I loved that the topics were relevant to my particular area of research, but also that I ran into new concepts to adopt that I had not considered before."

- 2023 endMS Summer School participant

"THIS PROGRAM exceeded my expectations. I really enjoyed meeting other trainees, individuals affected by MS, clinicians, and scientists in the field. It is incredible how much I learned every day at the Summer Schools and throughout the SPRINT project."

"THE PROGRAM FACILITATED collaboration between researchers, clinicians, and other stakeholders in the MS field. I believe that collaborative projects allow individuals to work together, exchange knowledge, share resources, and benefit from diverse perspectives. Engaging in collaborative research can enhance professional networks, build relationships, and I hope it creates opportunities for my career advancement."

"I WOULD CERTAINLY recommend this program. It provides instant and meaningful connections with other early-career scientists and clinicians in our field. I am genuinely excited to continue working with the folks I have met through this program. Both the folks I met at the Summer Schools and my current SPRINT team."



"IT CERTAINLY HELPED ME to develop a deeper understanding of MS (clinically and scientifically), to gain experience in collaborating with other experts, and to foster relationships with incredible researchers from across the country. Furthermore, meeting faculty from other universities has sparked relationships and discussions about post-doctoral opportunities."

SPRINT ALUMNI UPDATES 2023

■ **Dr. Nima Alaie** successfully defended his PhD dissertation on July 20th, 2023 on *Metabolic treatments in murine models of multiple sclerosis.*

■ **Stephanie Blandford** was awarded the Governor General's Academic Gold Medal at the Spring 2023 Convocation at Memorial University. The Gold Medal is presented to the graduate student who achieves the highest academic standing in his/her Graduate degree program.

■ **Dr. Karissa Bott** (nee Canning) welcomed a beautiful baby girl on January 21st, 2022. She is currently working as a clinical research associate at IQVIA, providing service on behalf of Roche. Dr. Bott is working on a variety of therapeutic studies focusing on Metastatic Breast Cancer and Myelin Oligodendrocyte Glycoprotein Antibody-associated Disease (MOGAD).

■ **Dr. Arthur R. de A. Chaves:** Following the completion of his PhD with Dr. Michelle Ploughman, Arthur relocated to Ottawa for his postdoctoral training. Collaborating with Dr. Lara Pilutti (University of Ottawa) and Dr. Sara Tremblay (University of Ottawa and The Royal's Institute for Mental Health Research), he engages in split-site post-doctoral training. His involvement includes assisting Dr. Pilutti's projects on exercise strategies for individuals with higher disability spectrum in MS, and contributing to Dr. Sara Tremblay's Lab in projects involving Brain Stimulation and Neuroimaging for Major Depressive Disorder. Arthur is currently pursuing a faculty appointment.

■ **Dr. Miguel De Avila** continues to work with Apotex Inc. as a sourcing specialist. Miguel is leading sourcing activities for active pharmaceutical ingredients, and excipients offered by suppliers based in Europe and North America. He also coordinates discussions with suppliers to ensure that drug applications timelines are met and that communication with health agencies is timely during the file review process leading up to the approval for generic medicines.

■ **Dr. Hilda de Jong** is working as a senior research manager at the PHARMO Institute, Utrecht, the Netherlands since August 2020. The PHARMO Institute is an independent research organization that is dedicated to the study of epidemiology, drug utilization, drug safety and health outcomes.

■ **Dr. Elisea De Somma** completed her PhD at York University and is now practicing as a registered psychologist in Calgary, Alberta. She provides clinical supervision to graduate students in the clinical psychology program at the University of Calgary, and works as a medical psychologist at Alberta Children's Hospital.

■ **Dr. Rajiv Jain** is continuing his post-doctoral fellowship with Dr. V. Wee Yong at the University of Calgary. He is currently funded by an endMS post-doctoral fellowship. The focus of Rajiv's postdoctoral work is to look at how B cells interact with central nervous system elements to promote MS pathology.

■ **Emily Kamma** is continuing her PhD studies in Dr. Jacqueline Quandt's lab at the University of British Columbia. Her project focuses on characterizing the clinical and immunopathological alterations that drive risk and disease progression in a new mouse model of progressive multiple sclerosis.

■ **Dr. Kaarina Kowalec** continues in her positions as assistant professor at the University of Manitoba and as an affiliated researcher at the Karolinska Institute (Sweden). She is also working on understanding MS and its comorbidities using genetics. Kaarina began her first term as a SPRINT mentor this past June.

■ **Dr. Cole Libner** is continuing his medical training at the University of Saskatchewan where he received a Consortium of MS Center's Medical Student Research Scholarship for his project titled *"Novel small molecule therapy to inhibit neurodegeneration in an in vivo model of MS".*

■ **Dr. Chantel Mayo** is an assistant professor in the Department of Clinical Health Psychology, Max Rady College of Medicine at University of Manitoba. She is also a registered psychologist in Manitoba with practice in clinical, rehabilitation, and neuropsychology.

■ **Dr. Miceline Mésidor** will start a new position as assistant professor in epidemiology at the Institut national de la recherche scientifique INRS - Armand-Frappier Health and Biotechnology Centre in January 2024.

■ **Dr. Huah Shin Ng** is currently a practitioner fellow at Flinders University, Adelaide, Australia and her research focuses on the (pharmaco)-epidemiology of chronic diseases including MS and cancer.

■ **Dr. Julia O'Mahony** started a position as an independent scientist at the Mellen Center for Multiple Sclerosis at the Cleveland Clinic in July 2023 after finishing her postdoctoral fellowship with Dr. Ruth Ann Marrie.

■ **Dr. Evelyn Peelen** is working as senior manager translational pharmacology at the clinical-stage biopharmaceutical company, Immunic AG, in Munich, Germany

■ **Dr. Julie Petrin** is now in her second year at MS Canada working as manager, impact and evaluation. She continues to volunteer her time to advancing MS research wherever she can, (which she says is an easy task due to the connections she has made over the years). Julie will also be getting that Ottawa MS bike ride in!

■ **Dr. Jean-François Richard** is working at Hoffmann-La Roche Ltd Canada as a medical affairs partner. Having relocated to the Ophthalmology franchise at Roche for the past two years, he is happy about this change as it has allowed him to (partially) get back into the neuroscience space through neuro-ophthalmology and vision health sciences.

■ **Zitong Wang** has successfully passed his PhD candidacy exam and is now advancing in his doctoral studies while serving as a graduate research assistant in the research laboratory led by Drs. Yanbo Zhang and Xin-Min Li. Zitong's current research is centered on exploring the advantageous impacts and the underlying mechanisms of low-field magnetic stimulation and psychedelic substances in addressing white-matter lesions in animal models of depression and multiple sclerosis.

■ **Dr. Bettina Zierfuss** was awarded an endMS/FRQS postdoctoral fellowship and is continuing her research with Dr. Alexandre Prat at the Centre de Recherche du CHUM, Université de Montréal. The focus of Bettina's post-doctoral fellowship is to assess the role of a molecule on inflammatory leukocyte trafficking across the blood-brain barrier in the context of MS pathology. Bettina was also selected by the neuroscience outreach initiative Neurolingo to give a TED talk about her research to a lay audience. Together with her SPRINT team, Dr. Wee Yong, Zitong Wang and Alexandra Jackson, she recently published a review article in the journal Multiple Sclerosis and Related Disorders, with the title *Iron in multiple sclerosis – Neuropathology, immunology, and real-world considerations.*

For Summer School and SPRINT application and program guidelines, please visit our website at:
https://mscanada.ca/education-and-networking-programs
If you are interested in becoming a SPRINT mentor or would like more information on the program, please contact:

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or
Dr. Christina Wolfson, Program Director
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The endMS National Training Program (NTP) is an initiative to accelerate discovery in the field of multiple sclerosis (MS) which aims to enhance knowledge and skills relevant to MS research, foster opportunities to conduct MS research in Canada, and increase intent among trainees to pursue a long term, established and productive research career in MS. The NTP has two main components: the endMS Summer School and the endMS Scholar Program for Researchers IN Training (SPRINT).

The Training Program is led by Program Director, Dr. Christina Wolfson and Co-Directors, Dr. Nathalie Arbour and Dr. Marcia Finlayson. The NTP is funded by a directed grant from MS Canada.

MS Canada

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