

Virtual 2023 Awareness Event Lyme Disease and Tick-Borne Diseases

May 1st-31st, 2023

Join us for our live presentations on Lyme disease and tick-borne disease topics scheduled throughout the month.

Please send your name and email to Clydrn@gmail.com and a ZOOM meeting link will be provided to allow you to view all presentations scheduled throughout the month. Thank you.



CANADIAN LYME DISEASE
RESEARCH NETWORK

Welcome...thank you for attending this year's event!

Planning Committee

Lisa Dias

Athina Hall

Veronica Harris-McAllister

Ruth Peters

Molly Praest

Terrie Wainwright

May is Lyme Disease Awareness Month... Go GREEN for Lyme!

Help take a bite out of Lyme disease. Show your support for Lyme disease by wearing green in May.

Take part in our challenge: wear green, take a photo and share it with us to help spread awareness of Lyme disease. You can even send in photos or drawings that express Lyme Disease Awareness Month...be creative. All photos and drawings submitted will automatically be entered into a draw for 1 of 4 \$25 Starbucks gift cards. Draw will occur on May 31st, 2023. Please send your photos to clydrn@gmail.com along with your name and email.

WEEK 1 AGENDA

Monday, May 1st

1:00 pm-2:00 pm (EST)

Presentation

Lyme Carditis: 2023 Update on Clinical Management
- Dr. Rachel Wamboldt

Tuesday, May 2nd

1:00 pm-2:00 pm (EST)

Presentation

Detecting Lyme Disease Sooner: Using Proteomics to Identify Early Biomarkers - Chang Xing Jian

Wednesday, May 3rd

12:00 pm-1:00 pm (EST)

Presentation

Neck Instability and Lyme disease: the potential connection - Karen Orth

Thursday, May 4th

12:00 pm-1:00 pm (EST)

Presentation

*Spirochete load in the host and tick is critical for transmission of *Borrelia burgdorferi* sensu lato* - Dr. Maarten Voordouw

WEEK 2 AGENDA

Monday, May 8th

1:00 pm-2:00 pm (EST)

Presentation

Lyme disease emergence with climate change – what will be the economic burden for Canada? – presented by Dr. Nick Ogden on behalf of the research team (Ogden N.H., Dumas, A., Rafferty, E., Gachon, P.)

Tuesday, May 9th

1:00 pm-2:00 pm (EST)

Presentation

Five years of eTick data: highlights and outlook – presented by Dr. Jade Savage on behalf of the research team (Jérémie Bouffard (Bishop's University), Dr. Étienne Clabaut (Université de Sherbrooke), and Dr. Jade Savage (Bishop's University))

Wednesday, May 10th

1:00 pm-2:00 pm (EST)

Presentation

Why Lyme Patients use Naturopathic Medicine - Dr. Carissa Doherty

Thursday, May 11th

12:00 pm-1:00 pm (EST)

Presentation

Potential Connection of Borrelia Infection and Breast Cancer - Dr. Eva Sapi

Friday, May 12th

12:00 pm-1:00 pm (EST)

Presentation

The ecology and epidemiology of Lyme disease in Western North America - Dr. Susan Cork

WEEK 3 AGENDA

Monday, May 15th

1:00 pm-2:00 pm (EST)

Presentation

Trends in tick surveillance and tick-borne diseases in BC - Hannah Caird, Dr. Erin Fraser, Stefan Iwasawa & Quinn Stewart

Tuesday, May 16th

12:00 pm-1:00 pm (EST)

Presentation

Long term antibiotics for Lyme disease with persistent symptoms - a pilot project with 468 patients - Dr. Amir Khadir

Wednesday, May 17th

1:00 pm-2:00 pm (EST)

Presentation

Clinical Presentation and Outcomes of Children Treated for Lyme Arthritis: Experience from a Large Pediatric Cohort in Nova Scotia, Canada - Jenna Nauss (Medical Student)

Thursday, May 18th

12:00 pm-1:00 pm (EST)

Presentation

Not TICKing the right boxes - My experience with Lyme and Co-Infections - Dena Palamedes

WEEK 4 AGENDA

Tuesday, May 23rd

1:00 pm-2:00 pm (EST)

Presentation

Hacking Lyme Disease: Action Steps for Recovery -
Dr. Marty Ross

Thursday, May 25th

12:00 pm-1:00 pm (EST)

Presentation

How are Canadians adapting to the emergence of ticks and tick-borne diseases? - Natasha Bowser (PhD Student)

EVENT WRAP-UP

Monday, May 29th

12:00 pm-1:00 pm (EST)

Presentation

What's New in Tick-Borne Diseases in Nova Scotia -
Dr. Todd Hatchette

Tuesday, May 30th

12:00 pm-1:00 pm (EST)

Presentation

A scoping review of modern Lyme Disease prediction methodologies - Danny Szaroz (PhD Student)

Wednesday, May 31st

1:00 pm-2:00 pm (EST)

Presentation + Draw

BC Veterinarian and Vet Tech Survey on Ticks, Tick-Borne Diseases & Passive Surveillance - Steph Cooper (Master's Student)

*Draw for 1 of 4 \$25 gift cards.
Winners will be announced.*

A background image showing a hand gently touching tall grass in a field during a golden sunset. The sun is low on the horizon, creating a warm, glowing light. A solid green horizontal bar is at the top of the image.

Presenters

Dr. Natasha Bowser



Natasha graduated as a veterinarian from the Royal Veterinary College, UK, in 2010. She then practiced veterinary medicine in the UK and Canada for eight years before deciding to pursue her interest in public health. Having completed a Master's degree in One Health, Natasha is now a PhD candidate in the veterinary sciences (epidemiology option) program at the Université de Montréal, working under the supervision of Dr. Cécile Aenishaenslin and Dr. Catherine Bouchard. Her work utilises a mixed methods approach to evaluate how Canadians are adapting to ticks and tick-borne diseases, and quantitative methods to explore the use of citizen science data as a potential indicator for regional Lyme disease risk.

Heather Caird



Hannah Caird is an Epidemiologist at the British Columbia Centre for Disease Control (BCCDC), where she works on the Enteric, Zoonotic and Vectorborne (EZVB) team. She completed her MPH with a concentration in Population Health at Simon Fraser University in 2020, and joined the BCCDC as a Data Analyst in November 2020 before transitioning to an Epidemiologist role in August 2021.

Steph Cooper



Steph Cooper graduated from Simon Fraser University (SFU) in BC in 2019 where she received her BSc in Biological Sciences. She is now completing her MSc at SFU in the Faculty of Health Science where she is assessing the knowledge, attitudes and practices of BC veterinarians and vet tech's regarding ticks, TBDs and passive surveillance systems. Steph is an eTick ID technician for the BC platform and also does tick drag sampling in the lower mainland for the CLyDRN as part of the Canadian Lyme Sentinel Network project. She is from a small town outside of Vancouver and is passionate about parasitology. In her spare time, she loves playing soccer and football.

Dr. Susan Cork



Dr. Susan Cork is a professor in Ecosystem and Public Health at the University of Calgary, Faculty of Veterinary Medicine. She joined the faculty in 2008 as founding Head of the Department of Ecosystem and Public Health. Prior to arriving in Canada, she spent five years with the New Zealand Ministry of Agriculture & Forestry where she held a number of policy and management positions. She completed her Veterinary degree (Massey University, New Zealand) in 1987 and subsequently worked for the Society for the Prevention of Cruelty to Animals (SPCA) in Fiji and in private veterinary practice in the United Kingdom (UK) before returning to New Zealand to complete a PhD in the Department of Veterinary Pathology & Public Health. In 1995, she accepted the position of veterinary laboratory manager in Eastern Bhutan as part of a European Union funded project to strengthen veterinary services in Asia. In 2003, after 6 years in the UK working in government and academia, she returned to New Zealand to join Government Service and obtained a Diploma in Public Policy from the School of Government, Victoria University, Wellington. Since then, she has travelled widely in Asia and across the Americas and has returned to Bhutan a number of times. Her research interests are in global health, wildlife health, vector borne diseases and climate change.

Dr. Carissa Doherty



Dr. Carissa Doherty has been a Naturopathic Doctor for 20 years and completed her premedical studies at the University of Guelph obtaining a Specialized Honours degree in Bio-Medical Toxicology. In 2016, Dr. Doherty completed the ILADs training and spent the year studying Lyme and co-infections. She was invited to speak at Lyme out Loud with Dr. Horowitz, Dr. Christian Perronne, and Dr. Garth Erlich. Then she hosted a Lyme conference in 2019 with Dr. Armin Schwarzbach and Dr. Kalpana Patel in 2020. From 2019-2023, Dr. Carissa Doherty with her sister Dr. Sonya Doherty, have done training conferences international as far as Beijing, China.

Dr. Erin Fraser



Dr. Erin Fraser is a public health veterinarian at the BC Centre for Disease Control (BCCDC) and a clinical assistant professor in the School of Population and Public Health at the University of British Columbia. She is a graduate of the University of Guelph and has over 20 years of experience as an epidemiologist, public health veterinarian, researcher and executive director. She co-founded Veterinarians without Borders - Canada and was the organization's first executive director. She has worked across Canada and internationally with interdisciplinary, multicultural teams to develop programs and projects that address public and animal health issues from zoonotic and vector-borne disease surveillance, prevention, detection and control to wildlife health, food security and factors that affect livelihoods. Her current work at the BCCDC focuses on surveillance of zoonotic diseases and foodborne pathogens, antimicrobial resistance in companion animals and climate change and tick-borne diseases.

Dr. Todd Hatchette



Dr. Todd Hatchette is currently the Chief of Service for the Division of Microbiology, QEII Health Science Center and the Director of the Virology and Immunology. He is a Professor in the Department of Pathology with a cross-appointments in the Departments of Immunology and Microbiology and Medicine where he is a consultant in Infectious Diseases. Dr. Hatchette oversees the laboratory that does Lyme disease serologic testing for Nova Scotia and Prince Edward Island which is the first laboratory in Canada to use the modified two-tier testing algorithm. He has given CME lectures to various health care professional and serves as an advisor on a number of committees related to zoonotic infections. He is a member of the of the Infectious Disease Expert Working Group in Nova Scotia, was the provincial co-chair of the Lyme Disease Diagnostic Working Group of the Canadian Public Health Laboratory Network and was President of AMMI Canada from 2018-2020.

Stefan Iwasawa



Stefan Iwasawa is the Project Coordinator for the Ticks and Climate Change 3 West project at the BC Centre for Disease Control (BCCDC) and the Centre for Coastal Health (CCH). Over the past 15 years he's worked in the field of veterinary epidemiology to identify and understand the interactions of human, animal and environmental health.

Dr. Amir Khadir



Dr. Amir Khadir is a specialist in Infectious Diseases and Medical Microbiology practicing in Hôpital Pierre-LeGardeur, a community hospital in the Montreal metropolitan area, where he has been practicing since 1997. He has also served as a parliamentarian in the Quebec national assembly between 2008 and 2018. Dr. Khadir has implemented in 2019 the first Clinic dedicated to the treatment of vector borne diseases operating within the public sector facilities of the Quebec health system. More than 500 patients have been evaluated at the “Centre des maladies à transmission vectorielle” which offers specialized care for patients with persistent symptoms attributed to Lyme disease (chronic Lyme, PTLDS or otherwise defined chronic complications of Lyme disease). Dr. Khadir spearheaded a petition in 2017 that brought the Health Commission of the National Assembly to recommend the implementation of a Lyme disease action plan by the Quebec health ministry. The mandate was given to INESSS (Institut national d’excellence en santé et services sociaux) to produce reports and recommendations on Lyme disease, where Dr. Khadir acted as an external reviewer. He also took part in the advocacy work by patient groups that brought the Quebec government to follow up on INESSS recommendations and announce in May 2022 the creation of a network of 5 referral centers and 10 satellite clinics, called RQMCC, to improve diagnostic and therapeutic management of patients with chronic multisystem syndromes such as persistent Lyme disease, whether the disease is serologically confirmed or diagnosed on clinically grounds only. Dr. Khadir is member of the national steering committee of RQMCC, which has a budget of near \$21M over 3 years.

Jenna Nauss



Jenna is a second-year medical student at Dalhousie University. Jenna grew up on the South Shore of Nova Scotia where Lyme disease is very prevalent, making research in Lyme Disease a passion of hers. Her current research involves exploring Pediatric Lyme Arthritis.

Dr. Nick Ogden



Dr. Nick Ogden is a UK-trained veterinarian with a doctorate in vector-borne disease ecology and post-doctoral training in disease modelling. He is a senior research scientist and Director of Public Health Risk Sciences division within the National Microbiology Laboratory of Public Health Agency of Canada (PHAC), normally focusing on assessing disease risk by study of the ecology, epidemiology and genetic diversity of vectors and zoonotic and vector-borne micro-organisms. A key component of his work is assessing impacts of climate change on zoonoses and vector-borne diseases and developing tools for public health adaptation. Most recently, he has led PHAC's COVID-19 modelling and emerging science teams.

Karen Orth



Karen lives with her family in Vancouver, BC and has been the homemaker for the family since 1994. Her educational background is in science which came in handy when their youngest child, Jess, became ill in 2016 at the age of 14. Along with her husband, Howard Eaton, and Jess (when she was able) they spent the next 6 years researching and brainstorming Jess's declining condition. This involved plenty of googling, reading scientific medical journal articles and many appointments involving a variety of healthcare professionals.

Dena Palamedes



In 2022 the Public Health Agency of Canada (PHAC) released the results of their Program Evaluation of the Federal Framework on Lyme Disease and Action Plan Activities 2016-17 to 2020-21. It included the conclusions that many of PHAC's traditional partners in the scientific community and other federal, provincial, and territorial partners reported generally positive impacts of PHAC's activities across the three pillars while identifying opportunities to expand and improve work in the future; and conversely, patient advocates saw an urgent unmet need in the areas of surveillance, diagnosis and treatment for Lyme disease, particularly for individuals who do not fit the case definition; a need which they feel is not adequately addressed by the scope of the Framework itself. Our Patient Partners participate in the CLyDRN to help inform that unmet need.

Dena Palamedes, a CLyDRN Patient Partner, retired as Chief Audit and Evaluation Executive from Canada Border Services Agency in 2016, after over thirty-six years working in various federal departments. Dena's experiences include internal audit and program evaluation; organizational change management in civil aviation; reporting to Parliament of federal hiring practices; the recruitment and development of the federal government's internal audit community; policy development and professional internal audit advice to federal departments; and financial services. She is active in the Institute of Internal Auditors, teaches and consults part-time. Dena has a Bachelor of Social Science (Economics) from The University of Western Ontario and is a CPA, CMA, CIA, CFE, CCSA and CRMA.

Dr. Marty Ross



Dr. Marty Ross is a passionate Lyme disease educator and clinical expert. He helps Lyme sufferers and their physicians see what really works based on his review of the science and extensive real-world experience. Dr. Ross is licensed to practice medicine in Washington State where he has treated thousands of Lyme disease patients in his Seattle practice using the best of natural and prescription medicines. Dr. Ross is the publisher of numerous resources for those living with Lyme disease. These include: *Hacking Lyme Disease: An Action Guide to Wellness* published in January, 2023; the website *Treat Lyme by Marty Ross MD*; *The Ross Lyme Support Protocol*; and a free weekly Lyme Q&A webinar called *Conversations with Marty Ross MD*. Dr. Ross is a graduate of Indiana University School of Medicine and Georgetown University Family Medicine Residency. He is a member of the International Lyme and Associated Disease Society (ILADS), The Institute for Functional Medicine and The American Academy of Anti-Aging Medicine.

Dr. Eva Sapi



Dr. Sapi received her Ph.D. degree in Genetics from the University of Eotvos Lorand (Budapest, Hungary). She is a Professor at the University of New Haven (Connecticut) where she teaches undergraduate and graduate-level biology courses and carries out Lyme disease research with her students. To date, over 100 undergraduate/graduate students have received training in Lyme disease and breast cancer-related research. Her studies investigated the different forms of *Borrelia burgdorferi* to better understand how *Borrelia* can hide from the immune system as well as from antimicrobial therapies. Her recent studies examine the pathogen-host relationship between *Borrelia* and mammalian cells, especially with normal mammary epithelial and breast cancer cells.

Dr. Jade Savage



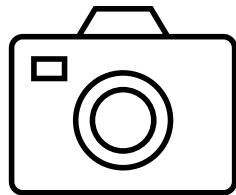
Dr. Jade Savage is a full professor at Bishop's University where she has been teaching and conducting research in the field of entomology since 2004. An important part of her research program is dedicated to the development and dissemination of arthropod identification tools accessible to non-experts, especially for groups of medical or agricultural relevance. She is the instigator of eTick.ca, a citizen-science tick monitoring tool and information dissemination platform in Canada.

Quinn Stewart



Quinn Stewart is an Epidemiologist on the Enteric, Zoonotic and Vector-Borne Diseases team at the British Columbia Centre for Disease Control (BCCDC). She has a BSc in Biology and Human Geography and a Master of Public Health (MPH) from the University of British Columbia.

Danny Szaroz



Danny is currently pursuing a PhD at the Université de Montréal, in Epidemiology. He is under the supervision of Dr. Kate Zinszer and Dr. Manisha Kulkarni. He is also working on the prospective case-control study based on the COHORT study and part of CLyDRN's pillar 2 strategy. His interests are in predictive methodologies and causal inference.

Dr. Maarten Voordouw



Dr. Maarten Voordouw's research interests include the ecology of Lyme disease and other tick-borne infections. Dr. Voordouw did his BSc and PhD in biology at the University of Victoria in Victoria, Canada. His first postdoc was on the ecological immunology of malaria mosquitoes in England. His second postdoc was on the ecology of Lyme disease at the University of Pennsylvania in Philadelphia, USA where he was introduced to the world of ticks and tick-borne diseases. From 2011 to 2018, he was an assistant professor at the University of Neuchâtel in Neuchâtel, Switzerland where his research was focussed on the ecology of European Lyme disease bacteria including *Borrelia afzelii* and *Borrelia garinii*. In 2018, he started his professorship at the Department of Veterinary Microbiology, Western College of Veterinary Medicine, University of Saskatchewan. His research is currently focussed on three themes: (1) variation in pathogen life history traits among strains of *Borrelia burgdorferi*, (2) co-infections and interactions between strains, and (3) ability of maternal antibodies to protect offspring from infection.

Dr. Rachel Wamboldt



Dr. Rachel Wamboldt is a cardiology fellow from Queen's University. She completed her medical training at Norwich Medical School in the United Kingdom followed by her internal medicine residency at Queen's University. Her interests include clinical cardiology, Lyme carditis and women's cardiovascular wellness.

Chang Xing Jian



Chang received his BSc from Dalhousie University, double majoring in Biochemistry & Molecular Biology and Microbiology & Immunology. He then completed his MSc in the Department of Biochemistry & Molecular Biology under the supervision of Dr. Vanya Ewart, working on antifreeze proteins. Chang is currently working on a proteomics project to discover early biomarkers of Lyme disease and an assay development project to detect muscle atrophy as a technician under the supervision of Dr. John Frampton.

Future Lyme Disease Events

October 24-25, 2023	TickNet Canada-National Tick-borne Disease Symposium (Toronto, ON)
October 25, 2023	CLyDRN AGM (Toronto, ON)
May 2024	Lyme Disease and Tick-borne Diseases Awareness Month Events

Keep in Touch...

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