manitoba neuroscience network

Chronic Wasting Disease: The human dimension of emerging prions

SEMINAR & VISITING SPEAKER SERIES

DATE
Friday, February 26, 2021
9:00AM

ZOOM LINK
https://us02web.zoom.us/j/83948652686?pwd=OFlURDh4dUZtbHh6K3JwaWdjTUcxQT09

MEETING ID
839 4865 2686

PASSCODE
547062

SPEAKER
Stephanie Booth, D.Phil.

Senior Scientist, National Microbiology Laboratory, Division of Zoonotic Diseases and Special Pathogens, Assistant Professor, University of Manitoba, Department of Medical Microbiology and Infectious Diseases

BIO

Dr. Booth completed her D.Phil. degree and postdoctoral training in Virology and Biochemistry at the University of Oxford, prior to relocation to Canada in 1997. She joined the Public Health Agency of Canada's National Microbiology Laboratory in Winnipeg, Manitoba in 1999, and the Department of Medical Microbiology and Infectious Diseases at the University of Manitoba shortly after. In addition to providing laboratory support for CJD diagnosis and surveillance in Canada, the NML houses Canada's only level 4 lab, and is a key player in response to outbreaks of infectious diseases around the world. Dr. Booth's research focuses on prion diseases of humans including thedevelopment of innovative molecular techniques for CJD surveillance and diagnosis. These studies include identifying biomarkers for early diagnosis, the development of animal and novel cell culture models of human prion diseases, and the use genomics to determine the molecular mechanisms by which prions kill brain cells.

RESEARCH

Chronic Wasting Disease (CWD) is a fatal brain disease caused by prions that affects deer, elk, reindeer and moose. It is reaching epidemic proportions in parts of North America resulting in increasing human exposure. The risk of the spread of CWD to humans and the characteristics of any resulting disease remain unknown. Human prion diseases exhibit a spectrum of clinical symptoms and pathology. This variability is linked to variation in the 3-dimensional shapes of prions, however, the molecular diversity of human prions across the whole spectrum of human prion diseases is not fully known. The research presented will be an overview of the a number of new assays, cell and animal models being developed to study human prion strains. Ultimately, these will be used to enhance surveillance of human prion diseases in Canada and establish assays that could be used in for the identification of CWD infection in humans.

OBJECTIVES

1. Provide an overview of Chronic Wasting Disease in Canada

2. Provide an overview of human prion diseases in Canada and their Surveillance

3. Describe progress in the development of novel Surveillance tools and models for the characterization of human prion diseases

For more information:

T: 204-235-3939
E: info@manitobaneuroscience.ca

Health Sciences Centre Winnipeg
Hôpital St-Boniface Hospital Recherche • Research
University of Manitoba