
Programme

Saturday 17th September

- 08.30 Registration opens
- 09.30 **Welcome and introduction**
Stella Huyshe-Shires, Lyme Disease Action
- 09.45 **How NICE develops guidelines**
Dr Norma O'Flynn, National Guideline Centre
- 10.30 **Investigating Borrelia distribution in Dorset**
Dr Jeremy Rowe and the Thomas Hardy School team
- 11.10 Coffee break
- 11.30 **The issue of persistence?**
Dr Sandra Pearson, LDA
- 12.00 **The challenges of diagnosing and curing Lyme disease**
Dr Monica Embers, Tulane National Primate Research Center, USA
- 13.00 Lunch
- 14:15 **Bacteriophages in diagnosis and treatment of Lyme disease**
Dr Jinyu Shan, University of Leicester
- 15.00 **Exeter 10,000**
Dr Gillian Baker, Exeter Clinical Research Facility
- 15.20 **Riding on the back of Exeter 10,000**
Stella Huyshe-Shires, LDA
- 15.40 Tea break
- 16.10 **Incidence and antibiotic treatment of erythema migrans**
Dr Knut Eirik Eliassen, University of Oslo
- 16.50 **Panel discussion**
Speakers and delegates
- 17.30 Conference closes

Speakers

Norma O'Flynn

How NICE develops guidelines

Dr Norma O'Flynn is Chief Operating Officer at the National Guideline Centre (NGC) which develops guidelines for NICE. The NGC has been commissioned by NICE to develop the Lyme disease guideline. Norma has been involved in guideline development for NICE since 2007. She has contributed to a wide variety of NICE guidelines including Medicines Adherence, Lipid modification, Stable Angina, Patient Experience in Adult NHS services, and Sepsis.

Prior to guideline development Norma completed a PhD in General Practice and worked in academic primary care in Kings College London and Imperial College London. She is a qualified medical doctor and continues to work as a general practitioner in London.

Thomas Hardye School

Investigating Borrelia distribution in Dorset

In the Spring of 2015 Simon Lewis, biology teacher at the Thomas Hardye School in Dorset, made a successful bid to lead a Royal Society Partnership Grant in conjunction with Dr Jeremy Rowe, head of biology. The school has since been working with the University of Exeter on a 2 year project "Investigating the Biology of Borrelia Spirochaetes in Dorset".

Thirty 6th form students have been involved in the project, all learning about ticks and Borrelia and sharing their knowledge with younger students and the wider community. The three who are presenting to us are Holly Townsend, Joselyn Savill and Adele Mair.

Monica Embers

The challenges of diagnosing and curing Lyme disease

Dr Monica Embers is Assistant Professor, Division of Bacteriology and Parasitology at Tulane National Primate Research Center, Louisiana, USA. She obtained her PhD in the Department of Microbiology and Immunology at the Pennsylvania State University College of Medicine, where she studied immune responses to Papillomaviruses. She made the transition to the study of bacterial pathogenesis when performing her postdoctoral research on the Lyme disease spirochaete at the Tulane National Primate Research Center.

Her research program regarding *Borrelia burgdorferi* and Lyme disease is designed around two major foci: (1) antibiotic efficacy against Lyme disease; and (2) immunodiagnosis for *B. burgdorferi* infection and cure. The first research goal is to examine, using xenodiagnosis, the efficacy of antibiotic treatment during disseminated *B. burgdorferi* infection in the nonhuman primate model of Lyme disease. The second goal is to develop a quantitative multi-antigen test that expands detection limits and helps to distinguish persistent infection from clinical cure. By transmitting Lyme disease to non human primates by tick, and studying the natural course of infection, her group hopes to facilitate a better understanding of the clinical quandaries of human Lyme disease, including effective diagnosis and treatment.

Jinyu Shan

Bacteriophages in diagnosis and treatment of Lyme Disease

Dr Jinyu Shan obtained his first and Master degrees from China. He and his wife, Dr Ying Jia, came to the UK in 2003, and both studied PhDs at the University of Warwick. Since 2008, he has been working as a Post-Doctoral Researcher at Professor Martha Clokie's laboratory based at University of Leicester. His wife worked in Bio-companies as Research Scientist. His areas of expertise include identification, characterisation and pre-clinical development of bacteriophages infecting human pathogens. He is also exploring the impact of phages on human bodies.

His wife Dr Ying Jia is currently working on the phage-based Lyme disease diagnostics towards a commercial application. They spend most of their leisure time with their two kids, and their family rabbit.

Gillian Baker

Exeter 10,000

Dr Gillian Baker is Operations & Finance Manager at the National Institute for Health Research (NIHR) Exeter Clinical Research Facility (CRF). She started her career as a research technician/clinical trials assistant at SmithKline Beecham R&D. She then completed a degree and PhD in Molecular Ecology at the University of Sussex. Her post-doctoral career took her from Indonesia to South Africa and back to the UK.

She has been involved in medical school operational management since 2005 and has been in her current role at Exeter since 2008. Gillian is responsible for overall operational & financial management of the CRF and is the medical school's Director of Buildings for the Research Innovation Learning and Development Building.

She is passionate about patient and public involvement and plays a lead role in developing the CRF's relationship with research volunteers and lay representatives. Gillian is also the holder of the Human Tissue Licence at the Royal Devon & Exeter Hospital and provides oversight of research tissue banking.

Knut Eirik Eliassen

Incidence and antibiotic treatment of erythema migrans

Dr Knut Eirik Eliassen is a GP in Norway. As secretary for the Norwegian guidelines for antibiotic use in primary care in 2008, he discovered that little was known about Lyme borreliosis in primary care. The last five years he has been working on a PhD thesis on incidence, symptom load and treatment, especially that of erythema migrans. Today he will present his data on incidence and antibiotic treatment of erythema migrans in Norwegian general practice.

He is married to Christina, a paediatric psychiatrist. They have two children, aged 6 and 9. All four are passionate skiers, when not in school or at work.