

COELIAC UK'S VIRTUAL RESEARCH CONFERENCE 2021

Coeliac disease; beyond 2020, what lies ahead?







INTRODUCTION

Covid-19 has had a huge impact on diagnosis and management of coeliac disease and raised many questions around health and wellbeing for people with the condition. In 2020 we saw the introduction of a nobiopsy diagnosis pathway for adults and dietetic clinics had to rapidly transition to a digital format. This conference provides the opportunity for reflection and to consider what the future holds for diagnosis and management of coeliac disease.

If you are a healthcare professional, visit coeliac.org.uk/rc2021hcp to watch the talks and complete CPD questions to receive a certificate for your records.

AGENDA

Why coeliac disease, and why me? Could bacteria be a trigger for coeliac disease? **Prof Frits Koning**

Infection, mortality and severity of Covid-19 in coeliac disease Prof Jonas Ludvigsson

Cognition and coeliac disease: all in the mind? Dr Iain Croall

The Scottish Coeliac Disease Pathway, what has changed due to Covid-19?

Roslyn Yuill RD

No biopsy diagnosis in adult coeliac disease Dr Helen Gillett

A GP's perspective: Coeliac disease – so many patients, so little time... Dr Geraint Preest

What is the optimum strategy for identifying adults and children with coeliac disease? An evidence synthesis approach Dr Penny Whiting, Athena Sheppard & Dr Howard Thom

Dietetic outcomes in coeliac disease

Dr Yvonne Jeanes RD, Nick Trott RD & Cristian Costas Batlle RD

Hyposplenism and coeliac disease

Associate Prof Jason Tye-Din

Viruses as a trigger for coeliac disease

Dr Valentina Discepolo

This event has been kindly sponsored by Dr Schär and Thermo Fisher Scientific







PROF FRITS KONING

Professor of Immunology, Leiden University Medical Centre, the Netherlands

BIOGRAPHY

Prof Koning works at the Leiden University Medical Centre in the Netherlands. He was the director of the Dutch Coeliac Disease Consortium, from 2004 to 2014. In this consortium immunologists, medical doctors, geneticists and food experts have joined forces to understand the complex interactions leading to coeliac disease.

He is an immunologist with a particular interest in immune mediated disorders. These diseases are caused by uncontrolled responses of our immune system. Instead of defending us against pathogens, the immune system can also respond to autoantigens, like in Type 1 diabetes or rheumatoid arthritis, or harmless food proteins like in coeliac disease.

WHY COELIAC DISEASE, AND WHY ME? COULD BACTERIA BE A TRIGGER FOR COELIAC DISEASE?

Prof Koning's research group has studied how people with coeliac disease respond to gluten. More recently, the group are trying to understand what triggers coeliac disease in about one percent of the population while others in the population can eat as much gluten as they like without developing the condition.

Importantly, if we understand what triggers coeliac disease, we may be able to prevent it in the future. This will be the main focus of this presentation.





PROF JONAS LUDVIGSSON Karolinska Institutet and Paediatrician at Örebro University Hospital, Sweden

BIOGRAPHY

Prof Ludvigsson is one of the world's leading experts in gastrointestinal epidemiology and former chair of the Swedish Society of Epidemiology (2011-14). He is a professor of Clinical Epidemiology at Karolinska Institutet, Sweden, but also holds positions as Adjunct Professor in Medicine, at Columbia University (US), and Honorary Professor at Nottingham University (UK).

Prof Ludvigsson was the lead author of the latest British Society of Gastroenterology guidelines on diagnosis and management of adult coeliac disease, published in the journal Gut in 2014. He also initiated the so called Oslo classification of coeliac disease. He has so far published more than 200 papers about coeliac disease.

COELIAC DISEASE, MORTALITY AND SEVERITY OF COVID-19 INFECTION

In this talk, Prof Ludvigsson will first give an overview of mortality in general in patients with coeliac disease, and then focus on Covid-19 infection and outcomes in people with coeliac disease.





DR IAIN CROALL

Cognitive Neuroscientist, Sheffield Institute of Gluten Related Disorders (SIGReD), Sheffield, UK

BIOGRAPHY

Dr Iain Croall is a research fellow who joined the Sheffield Institute of Gluten Related Disorders (SIGReD) in 2017. He completed his PhD at Newcastle University in 2015, and has previously worked as a postdoc at the University of Cambridge.

Iain specialises in working at the intersection between cognition and the underlying physiology of the brain. His PhD thesis characterised and linked the physical and cognitive effects of traumatic brain injury, while his previous postdoc experience examined different blood pressure treatment regimens in a randomised clinical trial of patients with vascular dementia. This experience has helped him develop an expertise in using "advanced" MR imaging techniques to characterise brain harms and study how these affect patient outcome.

He joined SIGReD as a dedicated neuroscientist to study how the brain is affected across all types of gluten sensitivity, from patients with "typical" coeliac disease, to patients with primarily-neurological conditions like gluten ataxia. Iain has brought across the same MRI methods from his previous work to aid this research, which has led to a number of "firsts" such as one study mapping real-time changes in brain blood flow in response to eating gluten, or another using a highly "sensitive" imaging technique to demonstrate problems in the brain's white matter in coeliac disease patients. He is currently overseeing a project examining the potential role of gluten as a modifiable risk factor for dementia in a subgroup of the general population.

COGNITION AND COELIAC DISEASE: ALL IN THE MIND?

There is debate over the presence and prevalence of neurological symptoms in people with coeliac disease. Dr Croall and colleagues carried out research to investigate the prevalence of neuropsychological dysfunction in people with coeliac disease included in the National UK Biobank. UK Biobank contains independently collected experimental medical data from 500,000 adults in the United Kingdom.

This presentation focuses on the results of this research which supports the concept that coeliac disease is associated with neurologic and psychological features.





ROSLYN YUILL RD

Advanced Dietetic Practitioner & Coeliac Disease Project Lead, Lothian Dietetic Service, Scotland

BIOGRAPHY

Roslyn Yuill studied at Queen Margaret University obtaining a degree in Nutrition and Dietetics and has worked in gastroenterology for over 20 years, providing a service to patients with coeliac disease throughout this time.

Previously, Roslyn worked at the Derbyshire Royal Infirmary before moving to NHS Lothian. She has worked in a variety of posts including adult cystic fibrosis, presenting work nationally and internationally, oncology and complex care with intestinal failure.

Since 2018, she has been seconded to the Test for Change dietitian coeliac disease post to test the new Scottish Coeliac Disease Care Pathway as part of the Scottish Government Modernising Patient Pathway Programme. One of the aims of this project was to shift the balance of care from a medically led, acute based service to a dietetic led, community service. Due to the success of this project work, permanent funding has been achieved to establish a new dietetic GI community team with Roslyn being the lead of this service. Recently Roslyn has taken up the position of chair for the Scottish GI Network Coeliac Disease sub group.

THE SCOTTISH COELIAC DISEASE PATHWAY, WHAT HAS CHANGED DUE TO COVID-19?

In this talk, Roslyn from NHS Lothian provides an overview of the Scottish Coeliac Disease Pathway, one of four health boards that developed and tested the new pathway as part of the Scottish Government's Modernising Patient Pathways Programme.

The Scottish pathway is a dietetic led model of care, which aims to deliver early diagnosis and to support people to better self-manage this long term condition. The pathway shifts care from acute gastroenterology consultants to a dietetic led community based service. When dietetic intervention is complete, patients are discharged under the Gluten Free Food Service for an annual health check via their community pharmacy.

Roslyn shares some key outcomes from the pathway, the challenges brought about by Covid-19 and how the pathway has been adapted in response to the pandemic.





DR HELEN GILLETT

Consultant Gastroenterologist, St John's Hospital, Livingston

NO BIOPSY DIAGNOSIS IN ADULT COELIAC DISEASE

Helen's presentation will concentrate on the Lothian pathway, innovations that she and her colleagues have put in place, their experience of the new pathway and will present pitfalls and practical solutions to producing a more efficient and patient friendly service.

BIOGRAPHY

Dr Helen Gillett is a Consultant Gastroenterologist at St John's Hospital, Livingston and was appointed in 2005. She has been the medical lead for the adult coeliac service within NHS Lothian since 2020 and is a member of Coeliac UK's Health Advisory Network (HAN).

She graduated in 1990 from the University of Newcastle Upon Tyne and moved to Edinburgh in 1993 when she worked with Anne Ferguson on her MD and developed her interest in coeliac disease. As part of her MD, she set up the Lothian Endomysial antibody service in 1994 and subsequently made Edinburgh an early adopter of the tissue transglutaminase assay in 1997 and was a co-author on the original Schuppan paper.

Further research with Hugh Freeman in Vancouver from 1997-1999 followed. In 1999 she jointly (with her husband Peter) won the inaugural JA Campbell award as the Young Investigator of the Year from the Canadian Celiac Association for work on two coeliac screening projects in children (Type I diabetes and Turner syndrome) and set up British Columbia's first TTG assay at University of British Columbia.

In 2020 she was part of a Scottish-wide review of the potential adult no-biopsy strategy as a spin off from the Scottish Government's Coeliac Test of Change project, within the Modern Patient Programme. The Lothian data helped cement the British Society of Gastroenterology's Covid-19 UK pragmatic guidance published in June 2020.





DR GERAINT PREEST

General Practitioner, Pencoed and Llanharan Medical Centres, South Wales

BIOGRAPHY

For the past 20 years, Geraint has been a full time GP Principal at Pencoed and Llanharan Medical Centres in South Wales and Primary Care Lead for BMJ OnExamination - the British Medical Journal's flagship online revision resource for Doctors sitting postgraduate exams. Geraint has been a pioneer in the use of the Internet to inform patients and educate Doctors, having developed one of the very first GP practice and training websites in the country (and winning a national award in the process). He has worked with national and international organisations to develop online learning, needs assessments and testing for primary care clinicians at all stages of their career in the UK, Middle East and Southern Hemisphere.

Geraint was, until recently, an external examiner for MSc and Diploma courses allied to medicine at the University of South Wales.

Geraint is a member of Coeliac UK's Health Advisory Council and a Fellow of the Royal College of General Practitioners.

He is married with four grown up children, one of whom has coeliac disease. Geraint is a lifelong keen cyclist and an appalling, but enthusiastic, guitar player.

COELIAC DISEASE: A GPs PERSPECTIVE – SO MANY PATIENTS, SO LITTLE TIME...

General practice in 2021 is busier than ever. Finding and managing patients with coeliac disease is a challenge in the primary care setting, particularly when our knowledge of so many different conditions is quickly evolving.

In this brief talk for GPs, Geraint starts with a short historical perspective from 1920 and brings this up to date with a video of patients' experiences. He utilises feedback from Doctors and patients via social media, along with his own experience of medical education - and as a father of a daughter with coeliac disease - to bring together a few key points to help GPs diagnose and manage patients who may have coeliac disease.





DR PENNY WHITING
Associate Professor of Clinical
Epidemiology, University of
Bristol, Bristol, UK

BIOGRAPHY

Dr Penny Whiting is Associate professor at the University of Bristol where she leads the MSc in Epidemiology. She has a BA (Hons) in Human Sciences from the University of Oxford, an MSc in Communicable Disease Epidemiology from the London School of Hygiene and Tropical Medicine, and a PhD in Epidemiology from the University of Amsterdam.

Penny has 20 years' experience in the conduct of systematic reviews across a broad range of topics including intervention, prognostic and diagnostic test accuracy studies.

Penny has also conducted methodological research related to systematic reviews covering all aspects of the review process. She has a particular interest in diagnosis and sources of bias in test accuracy studies. She has expertise in quality assessment, having lead the development of three risk of bias tools and having contributed to the development of a further three tools. Penny also has experience of leading projects based on routine data, including Clinical Practice Research Datalink and of prediction modelling studies through her involvement in the development of the PROBAST tool.

Her son was diagnosed with coeliac disease in 2018 and the unanswered questions posed during the diagnostic workup prompted her research interest in coeliac disease.



ATHENA SHEPPARD
PhD student, University of Leicester, UK

BIOGRAPHY

Athena is a second year PhD student at the University of Leicester. Athena is a medical statistician with an interest in diagnostic test evaluation and evidence synthesis.





DR HOWARD THOM
Lecturer in Health Economics, University of
Bristol, UK

BIOGRAPHY

Howard Thom has over ten years' experience developing health economic models. These have been across a wide range of disease areas, including heart disease, mental health, physiotherapy, oncology, and rheumatology. He has worked on screening models for atrial fibrillation, vertebral fractures, and prostate cancer.

WHAT IS THE OPTIMUM STRATEGY FOR IDENTIFYING ADULTS AND CHILDREN WITH COELIAC DISEASE? AN EVIDENCE SYNTHESIS APPROACH

Around 1 in 100 people in the UK have coeliac disease, although many are not diagnosed. Untreated patients have an increased risk of anaemia, osteoporosis, cancer, or infertility and the only treatment available is a gluten free diet.

Diagnosing coeliac disease can be difficult. Some patients may be asymptomatic, while others have non-specific symptoms such as indigestion or bloating. It's thought only 30 per cent of people with coeliac disease are actually diagnosed.

National guidelines recommend that adults and children "at high risk" of coeliac disease should be offered testing. However, with such a broad range of symptoms reported for coeliac disease, it is not always clear which symptoms such prompt testing. More evidence is also needed to help decide whether a biopsy to confirm the diagnosis is necessary.

Penny, Athena and Howard introduce their research which aims to identify the optimum strategy for identifying adults and children with coeliac disease.





CRISTIAN COSTAS BATLLE RD Specialist Gastroenterology Dietitian, Bradford Royal Infirmary, UK



NICK TROTT RD Specialist Gastroenterology Dietitian, Royal Hallamshire Hospital, Sheffield, UK

BIOGRAPHY

Cristian Costas Batlle qualified as a Registered Dietitian after completing a Postgraduate Diploma in Dietetics at Leeds Beckett University in 2015. He previously completed a Bachelor of Science Honours Degree in Applied Sport Science at the University of Edinburgh.

Cristian has worked in a variety of clinical areas with inpatients and outpatients in the NHS, including Surgery, Hepatology, irritable bowel syndrome (IBS) and inflammatory bowel disease (IBD).

Currently he works as a gastroenterology dietitian predominantly running the dietetic led coeliac service at Bradford Teaching Hospitals NHS Foundation Trust.

His particular areas of interest are coeliac disease, IBS and IBD.

Cristian is also the PR and Communications officer for the British Dietetic Association Gastroenterology Specialist Group.

In 2020 Cristian was awarded with national GUTS UK and Dr Falk dietitian recognition award for improving patient care in gastroenterology through the dietetic led coeliac service he has developed in Bradford.

BIOGRAPHY

Nick Trott studied at the University of Wales Institute, Cardiff where he obtained an Honours degree in Nutrition and Dietetics. In 2017 he completed a Postgraduate Master's degree in Clinical Research.

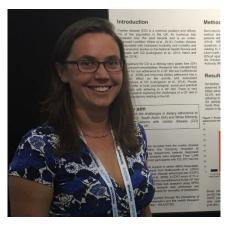
Nick has worked in a variety of clinical areas within the NHS including Critical Care, Oncology and Haematology. Currently Nick works as a Gastroenterology Dietitian, covering the specialist coeliac disease clinic at the Royal Hallamshire Hospital, Sheffield.

His areas of particular clinical interest include coeliac disease, gluten ataxia, non-coeliac wheat sensitivity and the low FODMAPs approach to functional bowel disorders.

Nick is a member of Coeliac UK's Health Advisory Network as well as a Board member of the International Society for the Study of Celiac Disease (ISSCD).

In 2016 Nick was presented with the Complete Nutrition Coeliac Professional of the year award.





DR YVONNE JEANES RD

Principal Lecturer Clinical Nutrition, University of Roehampton, UK

BIOGRAPHY

Yvonne Jeanes studied Nutrition and Dietetics at the University of Surrey and in 2004 completed her PhD in Nutritional Biochemistry. Currently she is Head of Postgraduate Taught provision for the Department of Life Sciences at the University of Roehampton, and teaches on the MSc Clinical Nutrition programme. Yvonne has supervised over 70 MSc and MRes projects.

Since 2014, her research has focused on the nutritional adequacy, and practicalities, of living gluten free. Her study which linked the receipt of gluten free foods on prescription and dietary adherence informed the UK Government consultation on gluten free prescribing. Yvonne was a member of the British Dietetic Association (BDA) working group responding to the consultation and subsequently authored the BDA policy on gluten free prescribing.

Yvonne is the Research and Policy lead for the BDA gastroenterology specialist group, the joint clinical lead for coeliac disease, along with Nick Trott and is a member of the Coeliac UK's Health Advisory Network. Yvonne and Dr Humayun Muhammed were awarded the DSI International Nutrition Award in 2016, which led to their recent publication: Telephone clinic improves gluten free dietary adherence in adults with coeliac disease: sustained at 6 months.

COELIAC DISEASE AND DIETETIC OUTCOMES

National guidelines recognise the important role of dietitians within education on the gluten free diet and coeliac disease management. However, there is a need to add to the evidence base as to how dietitians can most effectively contribute within coeliac disease management. This has led to a drive to collect standardised outcomes within dietetic practice to demonstrate the value of dietitians in coeliac disease care and to improve consistency of care for patients.

As part of the talk, Nick will provide an introduction to the topic, Cristian provides a summary of his work in Bradford developing a dietetic led service and Yvonne provides an overview of their work to date and the literature currently available on this topic.





ASSOCIATE PROF JASON TYE-DIN

Head of the Coeliac Research Lab, Walter and Eliza Hall Institute of Medical Research (WEHI), Assoc Professor, University of Melbourne, Gastroenterology Consultant, Royal Melbourne Hospital, Australia

BIOGRAPHY

Associate Professor Jason Tye-Din is an adult gastroenterologist who heads the Coeliac Research Lab in the Immunology Division of the Walter and Eliza Hall Institute, Melbourne, Australia.

His research focuses on examining the basis for gluten immunity to improve the diagnosis, treatment and management of people with coeliac disease. In addition to research he runs a dedicated coeliac disease clinic at the Royal Melbourne Hospital and chairs the Medical Advisory Committee of Coeliac Australia, working closely with them to promote evidence based practice and medical and public awareness of coeliac disease.

HYPOSPLENISM AND COELIAC DISEASE

Jason will talk about an often neglected organ, the spleen, in the context of coeliac disease and review current knowledge about coeliac related hyposplenism and what it means for patient care and future research.





DR VALENTINA DISCEPOLO

Assistant Professor Department of Translational Medical Sciences, University of Naples Federico II, Naples, Italy

BIOGRAPHY

Dr Discepolo is a pediatrician and a physician scientist with a major interest in gastrointestinal and immune mediated disorders, in particular coeliac disease which she has investigated in an academic setting from both a clinical and a pathogenetic perspective.

After spending three years at the University of Chicago, Celiac Disease Center, under the mentorship of Bana Jabri, Dr Discepolo was recently appointed with a junior faculty position at the Department of Translational Medical Sciences, University of Naples Federico II, Italy. In this role, Dr Discepolo focuses on investigating the role of viral infection in the development and progression of coeliac disease, for which she has been awarded a grant from the European Society for Paediatric Gastroenterology, Hepatology and Nutrition (EPSGHAN) in 2020.

Dr Discepolo, has an interest in trying to identify common triggers for autoimmune diseases including type one diabetes and rheumatologic diseases. Dr Discepolo has won several prizes and is the author of over 30 scientific publications including high impact journals such as Nature and Science, and 4 book chapters. In addition to her research experience, Dr Discepolo has a passion for science communication and educational and public health oriented projects.

VIRUSES AS A TRIGGER FOR COELIAC DISEASE

Certain genes are needed for a person to develop coeliac disease. However these genes are found in around 40% of the general population and not everyone who is genetically susceptible goes on to develop coeliac disease. A number of environmental factors have been explored as potential triggers of coeliac disease such as breastfeeding, introduction of gluten, use of antibiotics and viral infections. Importantly, identification of the triggers for coeliac disease could help to develop preventative strategies in the future. This talk will focus on the evidence of viral infections as a trigger for coeliac disease.

