BRCsnapshots

Research supported by the NIHR Biomedical Research Centre at Guy's and St Thomas' and King's College London explained.

NHS
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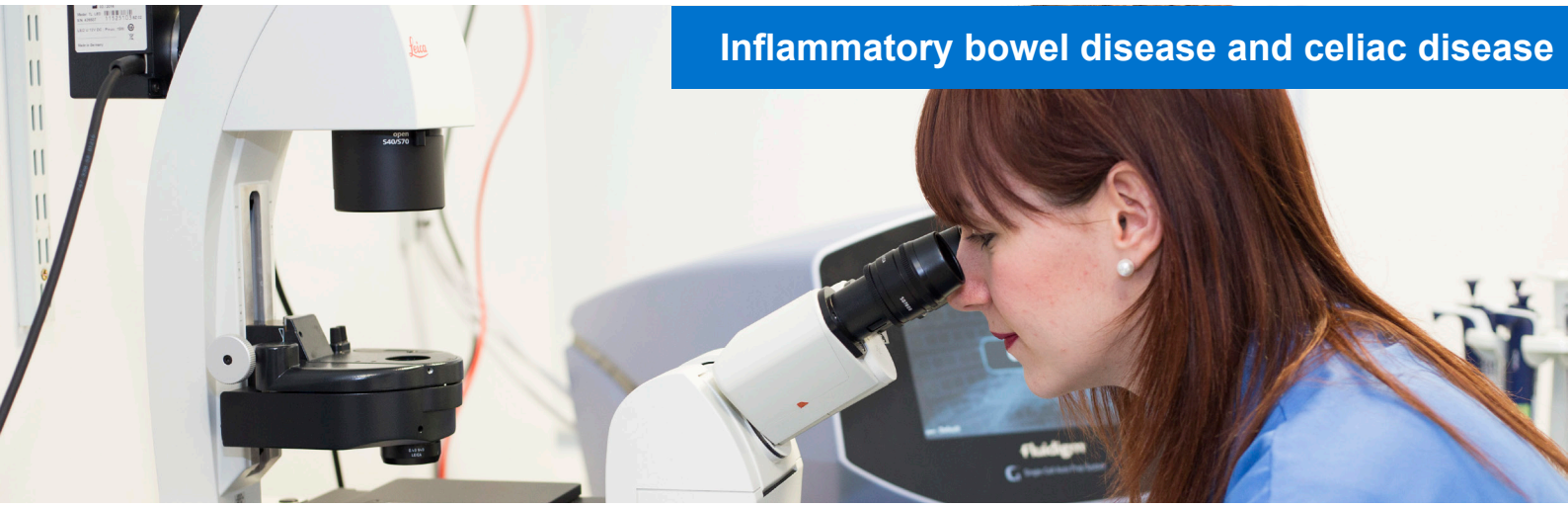

Inflammatory bowel disease and celiac disease

What we know

Crohn's disease and ulcerative colitis are the two main forms of Inflammatory bowel disease (IBD) and involve inflammation of the gut. Celiac disease also causes inflammation of the small intestine which in turn can lead to the person being unable to absorb nutrients.

IBD and Celiac disease are both examples of autoimmune conditions which means that a persons' immune system mistakenly attacks the body's healthy tissues and cells.

Autoimmune conditions affect hundreds of thousands of people in the UK and are often life-changing.

We still know very little about why autoimmunity develops. Existing treatments rarely provide a cure, and largely aim to manage the person's symptoms and restore their immune system to a healthy level of functioning.

More than 80 autoimmune diseases have been identified.

240, 000

The number of people in the UK are affected by Inflammatory bowel disease.

1 in 100 people suffer from celiac disease, although only 10-15% of those who have it are diagnosed.

What we did

Researchers at King's College London and University College London have been building on existing research and have discovered that an immune molecule named T-bet has a key role in the development of IBD and celiac disease.

They have also found that IBD often develops when this molecule behaves abnormally.

This is a crucial development in our current understanding, as it will hopefully allow us to develop treatments to target the genetic bases of these diseases directly.

How this will change care

"Our research outlines a specific focus for the development of new treatments for IBD and celiac disease which have such a profound effect on sufferers. While there is still a great deal of work to be done before this work results in new treatments for patients, it is a significant breakthrough."

Professor Graham Lord, co-senior author on the study and Director of the NIHR BRC at Guy's and St Thomas' and King's College London.

About the Study

The study was supported by the NIHR Biomedical Research Centre at Guy's and St Thomas' and King's College London

This research snapshot has been put together in collaboration with our Public and Patient Involvement (PPI) Advisory Group.

Further Information

This study was supported by grants awarded by the NIHR BRC at Guy's and St Thomas' NHS Foundation Trust and King's College London, Wellcome Trust, the Medical Research Council (MRC) and the Biotechnology and Biological Sciences Research Council (BBSRC).
Journal article: Journal Article: https://journals.plos.org/plosgenetics/article?id=10.1371/journal.pgen.1006587

To find out more about how you can work with us to improve healthcare through research contact brcppi@gstt.nhs.uk

About Us

Our NIHR Biomedical Research Centre is a partnership between Guy's and St Thomas' NHS Foundation Trust and King's College London.

We develop and deliver new medicines and diagnostics to patients, drive research and innovation into the NHS, and provide national systems leadership for maximum impact to our patients.

www.guysandstthomasbrc.nihr.ac.uk

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