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News release

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Crohn's disease research set to benefit from £1.8m funding boost

An international philanthropic trust has awarded significant funding to aid scientists' understanding of the currently incurable condition known as Crohn's disease.

The £1.8 million award to the University of Edinburgh will help improve how experts monitor and determine outcomes for the inflammatory bowel disease (IBD) that affects some 120,000 people in the UK.

The disease leads to painful inflammation and ulcers forming on the lining of the gut, with many patients having to undergo multiple operations during their lifetime.

Funding comes from The Leona M. and Harry B. Helmsley Charitable Trust – a US-based charity committed to improving lives.

Helmsley's Crohn's Disease Program aims to find a cure for the disease and to enhance patients' quality of life.

The Helmsley Charitable Trust typically does not accept unsolicited applications and instead identifies research worldwide of exceptionally high standard. This is one of the first projects in Scotland to be funded by Helmsley.

Research will be focused on finding out more about mitochondria – tiny parts of our cells that are key to providing our bodies with energy. Mitochondria are believed to have evolved from bacteria around 2-3 billion years ago.

In IBD, mitochondria have been found to give off 'danger signals' that immune cells confuse with bacteria, leading them to trigger an unintended and harmful inflammatory responses.

The project aims to find out if these danger signals could be used to develop a simple, non-invasive test, using blood or stool, which can show if the inflamed bowel wall has healed after treatment. Currently, the only way to determine healing is by using invasive colonoscopy.

Researchers will investigate if this simple non-invasive test could allow doctors and patients to forecast how patients' are progressing, which could speed the search for new therapies. It could also help doctors spot different forms of Crohn's and develop personalised treatments.

Ranked among the top universities in the world

Dr Gwo-Tzer Ho, of the University of Edinburgh's Centre for Inflammation Research, who is leading the study, said: "I am honoured to receive this award, which is a reflection on the team's efforts to understand the role of mitochondria in IBD. We are very hopeful that our work will lead to better tools to predict how the disease affects patients, which could ultimately lead to improvements in their treatment and quality of life."

Dr Garabet Yeretssian, Director of the Helmsley Charitable Trust's Crohn's Disease Program said: "Addressing the unmet medical needs of people with Crohn's disease is at the centre of our Program's mission. The team at Edinburgh has a tremendous opportunity to create simple diagnostic tools necessary to transform the standard of care for Crohn's disease patients."

For further information, please contact:

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