

## £1.5M crop research centre opens at University of Warwick

A facility using gene-editing technology to improve quality, resilience and sustainability of vegetable crops has opened at the University of Warwick.

The Elizabeth Creak Horticultural Technology Centre (ECHTC), which also contains The Jim Brewster Laboratory, is a UK£1.5 million facility which will use cutting edge techniques such as gene-editing to improve vegetable crops. Addressing issues relating to disease resistance, crop yield, adaptability to climate change and nutritional value in horticultural plants, the research will help with the key global challenges of climate change and feeding the world's growing population.

The new Centre, funded by philanthropic donations from the Elizabeth Creak Charitable Trust and the estate of Jim Brewster, who was a research scientist at the former National Vegetable Research Station in Wellesbourne, adds to Warwick's world leading expertise in crops and plant breeding.

The ECHTC is part of a suite of facilities for research and technology in horticulture at the University of Warwick. Warwick already has responsibility for conserving genetic

diversity of vegetable crops through world-leading collections of carrot, lettuce and onion seed, and joint responsibility for brassica collections hosted by the UK Vegetable Gene Bank (UKVGB) at the University's Wellesbourne Campus. The creation of the ECHTC will help further plant scientists' understanding of a range of questions about plant growth and continue to harness the rich resources of the UKVGB.

The Centre will also train future research scientists in vegetable tissue culture and gene editing techniques, with Jim Brewster Scholarships awarded to PhD students working in the area of crop science.

Murray Grant, the Elizabeth Creak Chair in Food Security at the University of Warwick, comments, "With food one of the top issues on a global agenda, and in the year that the Genetic Technology Bill is going through the UK Parliament and opening up our ability to use gene editing technology, we have a pressing need to grow and harness skills and expertise to help us improve food systems, adapt to changing environments and help solve growing global problems.

"Researchers at the Elizabeth Creak Horticultural Technology Centre will be applying precision genetic editing approaches to key UK horticulture crops to improve disease resistance, enhance nutritional value and increase resilience to climate change. Aside from increased yields, there are significant environmental benefits to be gained by growing crops with reduced needs for pesticides and water."

Miriam Gifford, Head of the School of Life Sciences at the University of Warwick, adds, "We are delighted that these generous gifts have been used to establish a new research centre and student scholarships here at Warwick. The impact of the Elizabeth Creak Horticultural Technology Centre will be far reaching. It will accelerate the translation of mankind's understanding of plant productivity and responses to stress into resilient and more sustainable crop varieties. The Jim Brewster Scholarships will provide a PhD student with a much-needed annual top up award that will help fund expenses such as travel to conferences."

Paul May, a trustee for the Elizabeth Creak Charitable Trust and Elizabeth Creak's nephew, says, 'Innovations in farming and horticulture were so important to Elizabeth, who was Warwickshire's first female High Sheriff and ran a 2000 acre dairy farm in the county. I'm proud the centre established in her name will continue her legacy and address the important global challenge of food security.'