

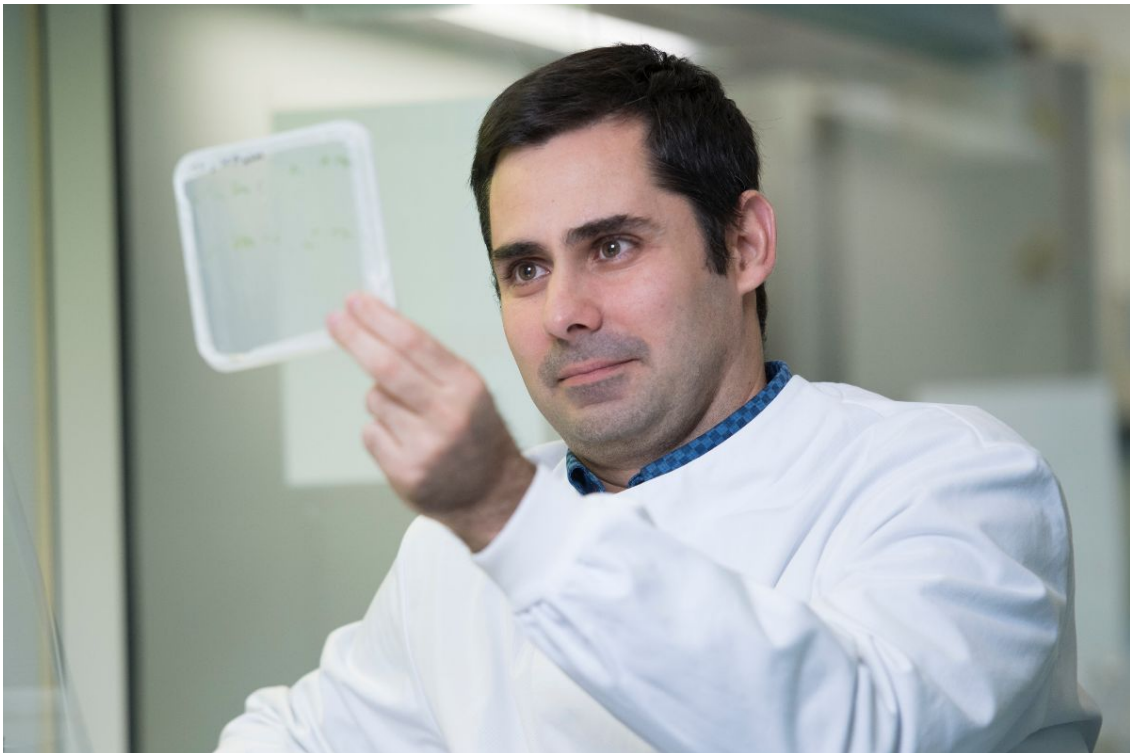


University of  
**Nottingham**  
Future Food

## Future Food Beacon newsletter

November 2020

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In our October newsletter, we celebrated Gabriel Castrillo's success in having a **paper published in nature** (see also **blog**). This month, we have the unbelievable luxury of being able to announce that he has led a team, including no fewer than 8 Beacon researchers, to a landmark **paper in Science**. The 7 other Beacon researchers who co-

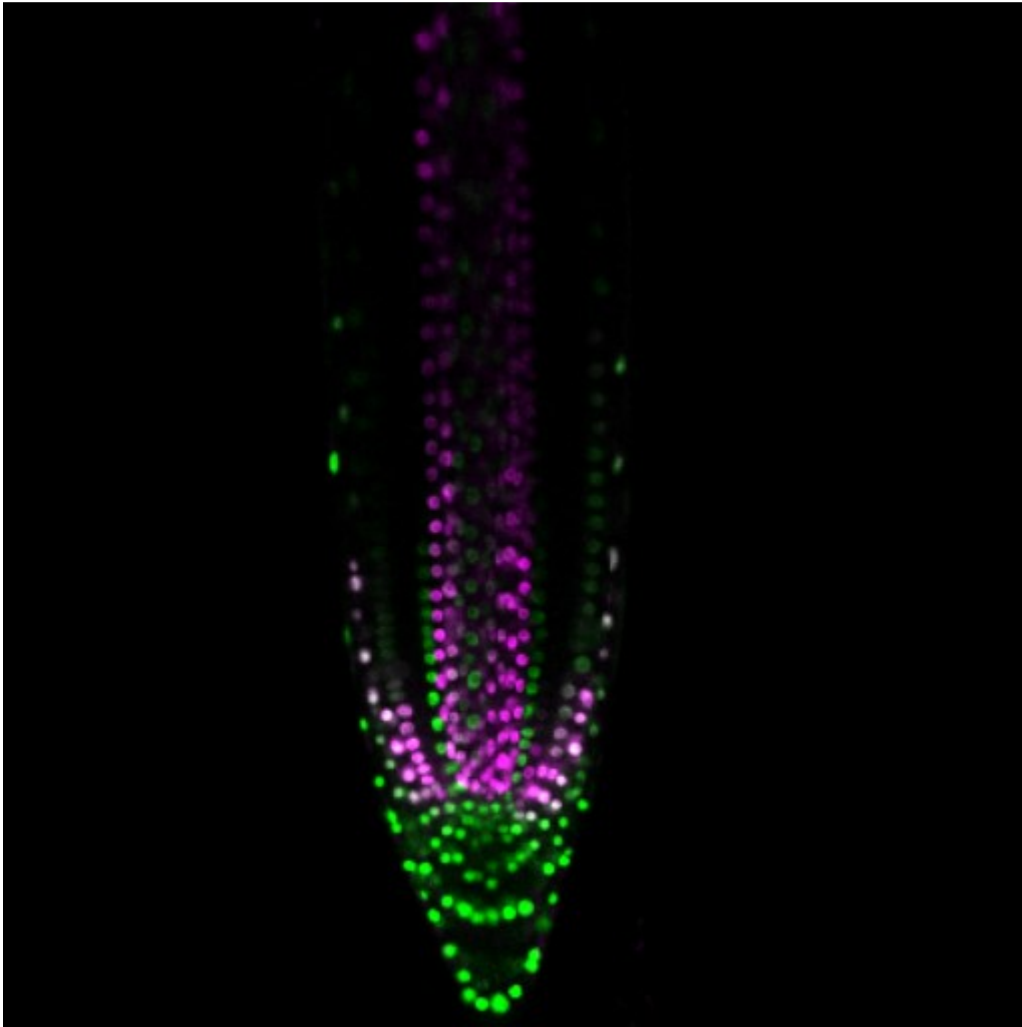
authored the paper are Guilhem Reyt, Paulina Flis, Valeria Custudio, David Gopaulchan, Niokhor Bakhoun, Tristan Dew and David Salt. The Beacon is proud of them all! See [press release](#) for concise summary.

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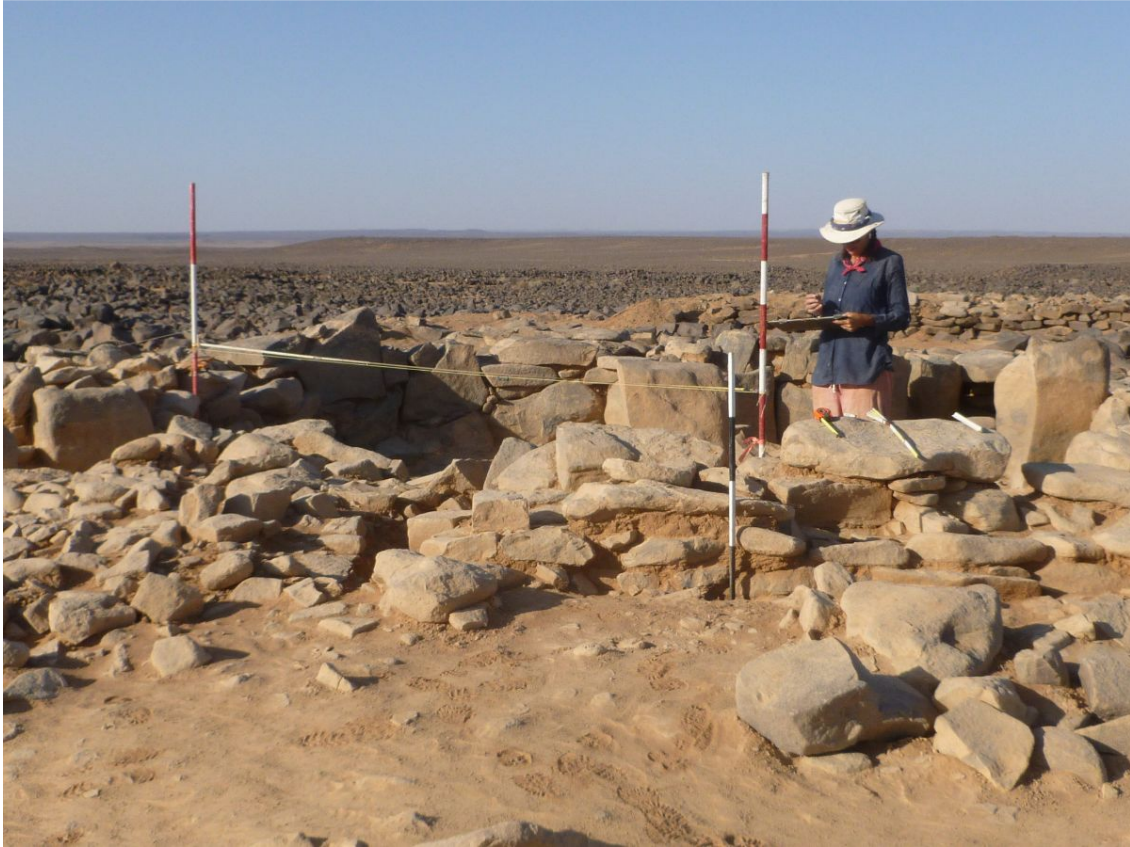
The launch of the [InSTAnZa project](#) was heralded in a UoN [press release](#) this month. This [collaborative international project](#), led in the UK by [Murray Lark](#), studies and interprets historical soil surveys in Zambia and assesses their use for modern agriculture. Work is already underway and insights from the project are eagerly awaited!

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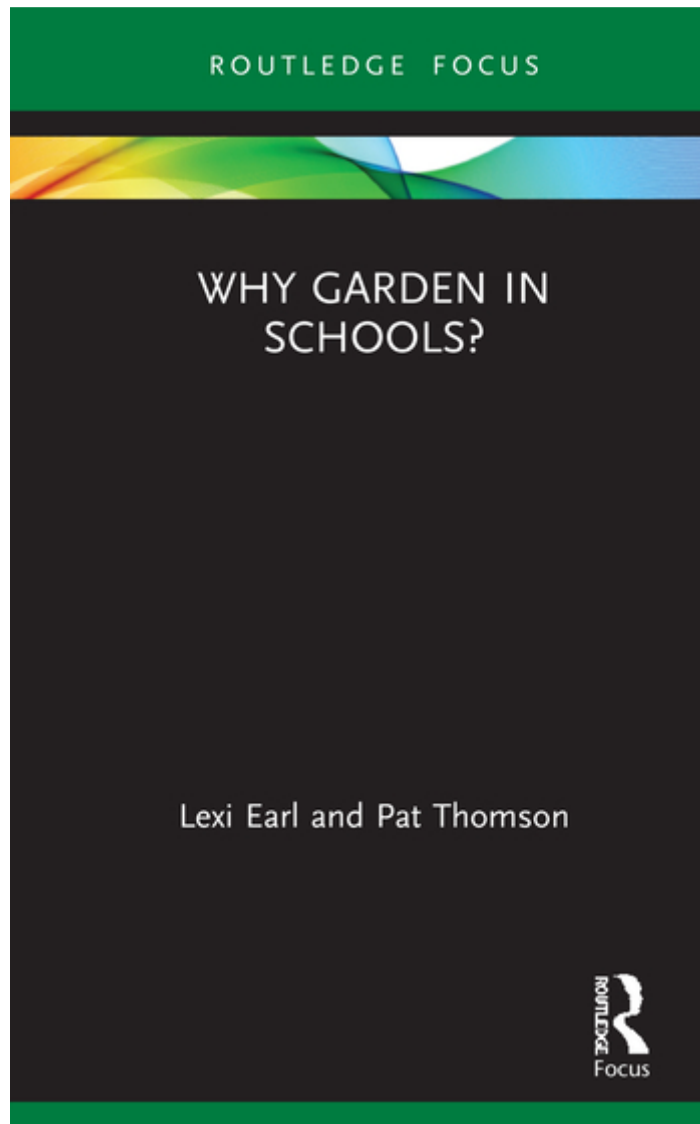
The good news continued to roll in, with the publication of a major new **paper in nature** by **Anthony Bishopp** on the role of auxin within plants. He and his co-authors have a fruitful research team spanning France, the UK and the USA. We marked this significant achievement with a short **blog summarising their research**

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Regular readers will know that we have just concluded our **series of 10 blogs** describing the diverse research of the Palaeobenchmarking Resilient Agricultural Systems (PalaeoRAS) project. Take a look, there's bound to be angle you hadn't considered before!

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We couldn't allow this newsletter to slide past without plugging this excellent new book by the Beacon's very own Lexi Earl! A cursory look around Twitter reveals several burgeoning campaigns around gardening in schools so this book is completely pertinent. Why not **pre-order a copy now** and enjoy over Christmas?

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**FINAL CALL! International Agriculture DTP PhD  
studentships**





The third round of the University of Nottingham - Rothamsted Research studentship programme closes on 31 December 2020 - [Apply now!](#)

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## Future Food News

Two important pieces of information for anybody working with food-producing SMEs:

1. Researchers at the Institute for Advanced Manufacturing at UoN have created a **free online training platform for SMEs around Digital Manufacturing** ([www.digit-t.eu](http://www.digit-t.eu)). They are running a walkthrough of the platform at 13.00-14.00 **on Thursday 26 November**. There is no geographical limitation on the business, and larger organisations are welcome to attend too: <https://www.eventbrite.co.uk/e/digit-t-digital-manufacturing-training-course-tickets-128735616695>.
2. The University of Nottingham's **Food Innovation Centre** Food is offering free technical and scientific advice to food and drink SMEs in Nottinghamshire and Derbyshire. If you know a company that would benefit, pass on the good news!

Our Yearbook of collected blogs for 2019-2020 will appear on our website soon, watch this space!

In addition to the major new publications featured above, this month also saw new papers from:

- Sina Fischer - (see next month's feature but listed below!) in the *Journal of Experimental Biology*
- Andy Salter and the Future Proteins Platform team in the *Annual Review of Animal Biosciences*

Our local collaborators, social supermarket Foodprint, are celebrating their 3rd birthday from 19.00-20.30 on 1 December 2020 **on Zoom**, not in the supermarket itself sadly..

Whilst not a Beacon publication, the inaugural ***Mapping the UK Food System – A Report for the UKRI Transforming UK Food Systems Programme*** from the Global Food Security programme is an important new publication

Feedback's October 2020 Policy Brief **When there's now waste, there's a way (to net zero) - a call for policy for food waste prevention** is suggested reading

*"If just two per cent of the Ocean were to be sustainably farmed, the world could easily be fed..."* is the striking claim leading **on UN News** this month!

Knowledge Transfer Network (KTN) KTN and Institute of Food Science and Technology (IFST) are running **a survey** collating all external facing information, activities and resources that exist across the food and drink sector. It closes on 27 November 2020.

The Food Climate Research Network's (FCRN) newsletter, Fodder, is always full of relevant content. Why not **sign up here**?

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## Upcoming talks, seminars and conferences

**IIED Webinar on Food Systems of the Poor** - 14.00-15.00 on 25 November 2020

**The Human Population Monster: historical perspectives on crop disease and its relation to population** - 16.00 on 25 November 2020

**The Diasporic Plate: Food in the Contemporary Diasporic World in Times of Crisis** series of online events 27 November - 11 December 2020

Future Food Beacon webinar featuring Bert de Reybel '*Vascular transcription factors guide plant epidermal responses to limiting phosphate conditions*' - 13:00 - 14:00 on 30 November 2020 (N.B. this event is restricted to UoN Staff only, with apologies)

The Food and Drink Federation host **numerous webinars** and are holding a virtual convention on 1-2 December 2020 covering:

- '*Sustainability: Plastic and Packaging Update*' - 13.00 on 1 December 2020 <https://bit.ly/2GbvB0O>
- '*The Food and Drink Manufacturing Sector: Immediate Needs for an Automated and Digitised Future?*' 09.00-15.00 on 2 December 2020 <https://bit.ly/2JhmKfb>

**Digital Transformation of the Agricultural Value Chain** online international conference - 2-3 December 2020

PhenomUK/CHAP Workshop – **The Applications of Pre-symptomatic Disease Detection in Crops** - 09.30-13.00 on 3 December 2020

**SUSTAIN annual conference 2020** - 14.00-16.30 on 9 December 2020

**Westminster Food & Nutrition Forum** - a number of intriguing seminars running from November through to February 2021

University of Nottingham Sutton Bonington AMR (Anti-Microbial Resistance) Webinar Series 2020 - every Wednesday at 11am until 16th December, contact **Ryan Cook**

**Black Botanists** - this ground-breaking online lecture series continues deep into 2021!

**Nottingham Festival of Science and Curiosity (FOSAC)** - apply now to take part in February 2021!

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## New publications from Future Food

**Insects: a potential source of protein and other nutrients for feed and food** Hawkey et al (2020)

**A network of transcriptional repressors modulates auxin responses** Truskina et al (2020)

**Coordination between microbiota and root endodermis supports plant mineral nutrient homeostasis** Salas-Gonzalez et al (2020)



**Targeted expression of the arsenate reductase HAC1 identifies cell type specificity of arsenic metabolism and transport in plant roots** Fischer et al (2020)

**A single bacterial genus maintains root growth in a complex biome** Finkel et al (2020)

**Increasing zinc concentration in maize grown under contrasting soil types in Malawi through agronomic biofortification: Trial protocol for a field experiment to detect small effect sizes** Botoman et al (2020)

**Formation and diversification of a paradigm biosynthetic gene cluster in plants** Liu et al (2020)

**Cultivating elders for the UK processing industry** - a Nuffield Scholar report by Alice Jones, sponsored by Thatchers Cider (2020)

**Wood hemicelluloses exert distinct biomechanical contributions to cellulose fibrillar networks** Berglund et al (2020)

**Structural Insights into the Mechanism of Heat-Set Gel Formation of Polyisocyanopeptide Polymers** Gavrilov et al (2020)

**Tales from the countryside: Unpacking “passing the environmental buck” as hypocritical practice in the food supply chain** Glover et al (2020)

**Poetry on Eating Disorders in Men** (book chapter) Bartel (2020)

**Food biotechnology** Foster et al (2020)

**Effect of phosphorus supply on root traits of two *Brassica oleracea* L. genotypes** Pongrac et al (2020)

**A nociresponsive specific area of human somatosensory cortex within BA3a: BA3c?** Sanchez Panchuelo et al (2020)

**Uclacyanin proteins are required for lignified nanodomain formation within Casparian strips** Reyt et al (2020)

**The Effect of Dissolved Gases on the Short-Range Attractive Force between Hydrophobic Surfaces in the Absence of Nanobubble Bridging** Azadi et al (2020)

**Rapid temperature responses of photosystem II efficiency forecast genotypic variation in rice vegetative heat tolerance** Ferguson et al (2020)

**Low-Cost Automated Vectors and Modular Environmental Sensors for Plant Phenotyping** Atkinson et al (2020)

**Arctic rolls and gender roles - Female and male eating disorders in Karen Duve's *Regenroman* and other texts** Bartel (2020)

**Barley sodium content is regulated by natural variants of the Na<sup>+</sup> transporter HvHKT1;5** Houston et al. (2020).

**Low cost automated vectors and modular environmental sensors for plant phenotyping** Bagley et al. (2020).

**Perspectives from CO+RE: How COVID-19 changed our food systems and food security paradigms** Bakalis et al. (2020).

**To tell us your news, share conference registrations or  
abstract opportunities, as well as any food-related reading  
please email:**

**Andrew Edwards** (Ed), Acting Communications Officer for the Future Food Beacon



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