

**Speaker: Dr. Tom Bennett**  
Associate Professor of Plant Signalling  
Development, University of Leeds, Faculty of  
Biological Sciences, Leeds, UK



**Title: Knowing when to stop: understanding how plants integrate environmental and internal information to optimise their growth and reproductive effort**

**Time: Tuesday, September 10, 2024, 2 pm**

**Place: IPK Lecture Hall and via Zoom (Hybrid Meeting)**

<https://ipk-gatersleben->

[de.zoom.us/j/66035365726?pwd=9ZKegH1FILMniHDNC7PcadHDhLMGPb.1](https://ipk-gatersleben-de.zoom.us/j/66035365726?pwd=9ZKegH1FILMniHDNC7PcadHDhLMGPb.1)

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**Abstract:**

In order to maximise their reproductive effort, plants must grow to an optimum size in relation to their physical, chemical and biological environment. Similarly, during flowering, plants must produce the optimum number of inflorescences and flowers to maximise seed set, without compromising the quality of the resulting seed. In order to make the correct 'decisions' regarding their growth, plants integrate diverse sets of environmental information to regulate both the length of the growing period, and the number of structures that they form during that period. They also use feedback from previously produced organs to help measure their current size and reproductive performance. Here, I will discuss my lab's research into understanding the mechanisms by which plants are able to detect and respond to the environment in order to coordinate their growth and to determine when to stop growing.

**Short CV**

- Associate Professor in Plant Signalling and Development (*October 2020-present*)  
School of Biology, University of Leeds
- University Academic Fellow (*October 2016-September 2020*)  
School of Biology, University of Leeds
- Post-doctoral researcher; Sainsbury Laboratory (*June 2012-September 2016*)  
“*Auxin transport, canalization and shoot branching*”  
Supervisor: Prof. Ottoline Leyser
- Post-doctoral researcher; University of Cambridge (*June 2010-May 2012*)  
“*Hormonal control of development in Physcomitrella patens*”  
Supervisor: Dr. Jill Harrison
- Post-doctoral researcher; University of Utrecht, Netherlands (*April 2007- May 2010*)  
“*Control of root cap development in Arabidopsis thaliana*”  
Supervisor: Prof. Ben Scheres
- PhD; University of York (*September 2006*)  
“*The regulation of shoot branching in Arabidopsis thaliana*”  
Supervisor: Prof. Ottoline Leyser
- BSc. Biology (Hons), 1<sup>st</sup> Class; University of Leeds (*June 2002*)

**Professional Qualifications**

- Fellowship of the Higher Education Academy (FHEA) (*October 2018*)

Website: <https://biologicalsciences.leeds.ac.uk/school-of-biology/staff/26/dr-tom-bennett>