

# NEWSLETTER

AUGUST 2025



## UPCOMING CPSC ACTIVITIES

### CPSC - DARA EVENT

CPSC is organizing an information session with Philip Hallenborg, director of the Danish Advanced Research Academy (DARA), to present details on upcoming PhD grant opportunities and application requirements.

Launched in December 2024 and supported by a DKK 500 million grant from the Novo Nordisk Foundation, DARA aims to strengthen PhD education through interdisciplinary research, international collaboration, and a strong academic environment. Led by SDU's Faculty of Science, DARA will serve as a national platform for research excellence and talent development. An official inauguration was held on 24th June at the Department of Biology.

Come and learn more about DARA and upcoming calls!!

**Date:** Tuesday 23rd September 2025

**Time:** 12:00 – 13:00 (incl. lunch)

**Venue:** CPSC auditorium



### CPSC LECTURES - AUTUMN 2025

**Friday 3<sup>rd</sup> October:**

**Chris Bowler**, Director of Research at the CNRS and Director of the Plant and Algal Genomics Laboratory at IBENS in Paris, will talk about the role of diatoms and other phytoplankton in marine ecosystems.

**Friday 7<sup>th</sup> November:**

**Siobhan Brady**, Professor at UC Davis College of Biological Sciences will give a presentation on the regulation of gene expression in plant roots.

**Friday 12<sup>th</sup> December:**

**Eilon Shani**, Professor at Tel Aviv University, will share insights on overcoming functional redundancy to uncover transport mechanisms.





# INFRASTRUCTURE WORKSHOP

We are thrilled to announce that the next CPSC infrastructure workshop will include presentations of:

*Multi-elemental imaging of particles at the nanoscale using Laser Ablation Inductively Coupled Plasma Time Of Flight Mass Spectrometry (LA-ICP-TOF-MS)*  
by **Søren Husted**

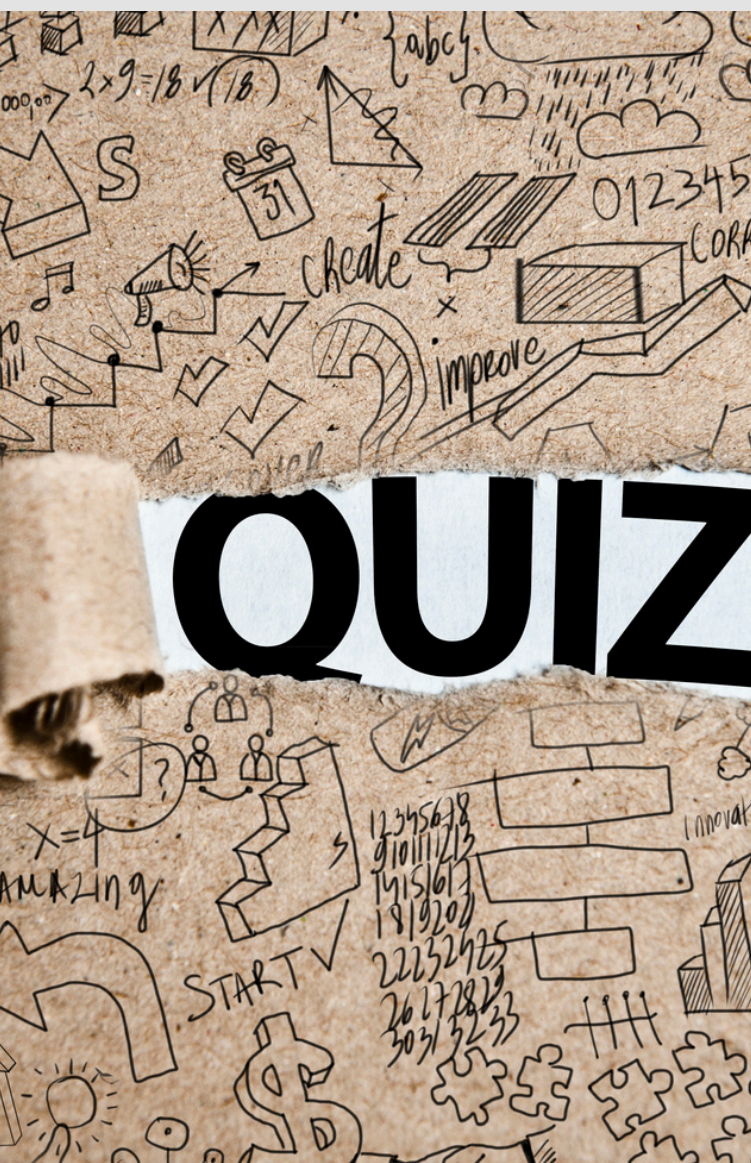
*Multimodal & Modular Microscopy - M3*  
by **Guillermo Moreno Pescador**

*Root phenotyping facilities (Root towers, deep root lab, RadiMax, RootAccess)*  
by **Kristian Thorup-Kristensen**

**Date: Wednesday 12nd November 2025**

**Time: 11:00 – 13:00**

**Venue: CPSC auditorium**



## PUB QUIZ

Think you or your research group have what it takes to claim the title of trivia champions?

Come prove it at our upcoming Pub Quiz — bragging rights (and a prize!) are on the line.

Here's what you need to know:

- Event kicks off at 16:00
- Free pizza served from 16:30
- Quiz begins at 17:30

A-vej will also be selling drinks at student-friendly prices (beer and soda).

Spots are limited, so don't forget to register! If you want to attend but do not have a group, you can write us and we can pair people up.

To sign up, send your team name and the names of up to 4 members to:

[pap@plen.ku.dk](mailto:pap@plen.ku.dk)

**Date: Thursday 13<sup>th</sup> November**

**Time: 16:00**

**Venue: A-Vej (Dyrlægevej 7)**



# PAST CPSC ACTIVITIES

## Science Day (Forskningens Døgn)

In April 2025, the CPSC proudly took part in this year's Forskningens Døgn, Denmark's annual week-long science festival. Our activity, titled "Gustent eller gourmet? – fra affald til festmåltid", was designed for secondary school students and explored innovative ways to reduce food waste. Through engaging presentations and discussions, we highlighted how incorporating sidestreams into food production can contribute to a more sustainable and environmentally friendly future.

## CPSC-LandCRAFT workshop

In May researchers across CPSC and Land-CRAFT had the opportunity to meet for a two day workshop with the aim to foster future collaborations advancing sustainable land and soil management by combining field experiments, remote sensing, and modeling to understand key processes like greenhouse gas emissions, nutrient cycling, and biodiversity impacts. Future joint efforts will focus on improving monitoring tools, exploring root-microbiome-soil interactions, and integrating long-term data across scales to support more resilient and climate-smart agricultural systems.

## CPSC lectures - spring 2025

**Lars Østergaard**, Sherardian Professor of Botany at University of Oxford, presented on how fundamental research into plant growth and development can be exploited to improve the performance of legume crops and move towards more sustainable agricultural practices under the title: *Fruit development and evolution driven by a hormonal and genetic pas de deux*.

**Shiqiang Gao**, Dr. at the University of Wuerzburg, talked about Rhodopsin-based optogenetics: from neuroscience to plant research., with a focus on how the rhodopsin-based plant optogenetic tools have been developed to manipulate  $H^+$ , anions,  $Ca^{2+}$ , and  $K^+$  dynamics, and how these are used to dissect plant ion signaling with higher precision and explore their potential applications in real-world agricultural settings.

**Eske Willerslev**, Professor at the University of Copenhagen, presented a newly started large-scale project called Ancient Environmental Genomics Initiative for Sustainability (AEGIS). The vision behind AEGIS is to build a more sustainable and secure food production system while also preserving biodiversity in cropping systems under climate change.

**Christine H. Foyer**, Professor at the University of Birmingham, talked about oxidative signalling in plants and why reactive oxygen species (ROS) are important signalling molecules in plants that play a crucial role in plant growth, development and stress responses.

**Ana I. Cano-Delgado**, Professor at CRAG, Barcelona, focused on how brassinosteroids regulate plant growth and stress responses. Recent findings show that vascular receptors BRL1 and BRL3 enhance drought tolerance without affecting growth. In *Sorghum bicolor*, BRI1 mutations improve drought resistance by altering phenylpropanoid metabolism, supported by new transformation tools enabling targeted hormone signaling in cereals.

