unine
Université de Neuchâtel
Institut de biologie

DSLS*
University of Neuchâtel
Institute of biology

IBIOL
Seminar Series

24 September 2025

12:15-13:30 PM

ROOM F200

Come for cool science, stay for cookies and coffee !

Cindy Chen

Illuminating Light-Signal Controlled Shoot Branching in Plants

Plant architecture is shaped by the number, position, and angle of branches and leaves. Neighbor-imposed shade triggers shade avoidance, reducing branching. We aim to understand how light—particularly shade signals—regulates branching in Arabidopsis thaliana, shedding light on the sites of perception, molecular pathways, and key genetic regulators involved.

TALK n°1

Camille Cornet

Unravelling the Genomic Instability of Butterflies

Butterflies are fascinating, not only for their beauty but also because some of them have very dynamic genomes, with many fusions and fissions of chromosomes. In our group, we are trying to understand why bursts of fusions and fissions evolve in some butterflies but not in others. We find evidence that genomic causes of instability include repetitive genomic sequences, 3D genome structure, and gene losses, with potentially massive evolutionary consequences.

TALK n°2

Margarida Sampaio

Effector evolution in fungal pathogens

Plant-pathogen interactions are dynamic battles, which can be mediated by pathogen effectors (avirulence factors, Avr) and host resistance (R) genes. To evade recognition, effectors must evolve rapidly. Using large fungal genome sequencing datasets, we investigate how effectors diversify and adapt to overcome host resistance.

TALK n°3