Challenges in Plant Sciences – PSC Colloquium

Lecturers: Johan Six (ETHZ); Johanna Jacobi (ETHZ); Sebastian Dötterl (ETHZ); Janneke Hille Ris Lambers (ETHZ); Kirsten Bomblies (ETHZ); Stefanie Lutz (UZH, Agroscope); Cyril Zipfel (UZH); Sabine Rumpf (Unibas); Jelena Rajkov (Unibas, moderator) and more TBA (all PSC members)

Dates & Venue: Monday, 28. October 2024, 13:15–17:00. Room: ETH center TBA
Monday, 02 December 2024, full day (approx. 9:15–16:00). Room: ML H37.1 ETH Zurich

Credit Points: 2 ECTS

Prior Knowledge: PhD level, Master's level

Number of Participants: Participation is limited to 40 students, with priority given to students of the PhD program in Plant Sciences.

Registration: https://ethz.ch/staffnet/en/service/courses-continuing-education.html → Select Plant Sciences. University of Basel students should also register via the Unibas course directory: https://vorlesungsverzeichnis.unibas.ch/en/home.

**Schedule-link:** https://www.plantsciences.uzh.ch/en/teaching/masters/colloquium.html

Course Content

The colloquium "Challenges in Plant Sciences" is a core class of the Zurich-Basel Plant Science Center's PhD program and the MSc module. The colloquium introduces participants to the broad spectrum of plant sciences within the network. The topics encompass integrated knowledge of current plant research, ranging from the molecular level to the ecosystem level, and from basic to applied science while making use of the synergies between the different research groups within the PSC. The course offers the opportunity to approach interdisciplinary topics as challenges in plant sciences.

During the first course day, each involved PSC lecturer gives a short talk as a general introduction to their research field highlighting current challenges and provides a publication on a new method in the field. After the first day, the students work in groups to design an experiment on the chosen topic following the scientific method. They receive feedback from the tutor during the preparation phase. On the second day, the students present how they would approach the chosen challenge in the field, including the hypothesis, method, and interpretation of the hypothetically generated data. Students gain knowledge on topics beyond their own research area while gaining a better understanding of the scientific method and practicing presentation and discussion skills.

Course Objectives

- Introduce PhD and Master students to the broad field of plant sciences
- Promote active participation and independent student work
- Practice the scientific method and experimental design
- Enhance creative thinking, presentation and discussion skills
- Increase interactions among students and teachers
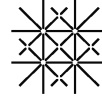
- Promote an interdisciplinary and integrative teaching program

Course structure and timetable

1. Students register with PSC and choose a topic (through nuudel, TBA).
2. During the first colloquium day, selected PSC lecturers hold short talks on their research field. Afterwards, student groups meet with their lecturer to plan the student teamwork: preparing the talk for the second course day.
3. Between the first and the second colloquium day: Each student group prepares a colloquium presentation. They receive feedback from the lecturer during the preparation phase.
4. During the second course day, each student group gives a talk (check the exact schedule on the PSC website). Each student receives feedback on their performance.

Individual assessment: The course will be graded as "pass/fail" based on attendance and active participation during day 1 and day 2 (2 ECTS = 8 days of work (60 learning hours) consisting of 1.5 days block course and 6.5 days of independent work on the group assignment).