



Current Challenges in Plant Breeding: Natural versus Induced Genetic Variation for Plant Breeding

4th annual seminar of the SGPW-SSA Working Group on Plant Breeding

Tuesday, January 28, 2020

ETH Zurich, LEE E101, Leonhardstrasse 21, 8092 Zurich

On behalf of the SGPW-SSA Working Group on Plant Breeding, we kindly invite you to attend the fourth working group seminar on „Natural versus Induced Genetic Variation for Plant Breeding“.

Efficient generation and identification of genetic variation as well as its effective use are at the basis of every successful breeding program. But are the currently used genetic resources sufficient to mitigate future challenges? How can we effectively tap on the genetic diversity found in „crop wild relatives“ or preserved in genebanks? Is there a need to further create genetic diversity and if yes, is CRISPR/Cas really the only useful tool to achieve this?

This seminar addresses these questions. It is also part of the ETH lecture „Current Challenges in Plant Breeding“, where we aim to bring together MSc and doctoral students with national and international experts in plant breeding to discuss current activities, latest achievements and future perspectives. Therefore, the students will give their view on „Natural Genetic Variation“, „Transposable Elements“, „TILLING“ and „Genome Editing“.

In addition, we have assembled a selection of very interesting keynote presentations by eminent speakers such as Simon Krattinger (KAUST, Saudi Arabia), Etienne Bucher (Agroscope, Switzerland), Ilka Braumann (Carlsberg A/S, Denmark) and Simon Bull (ETH Zurich, Switzerland).

Please register before 15.01.2020 under <http://bit.ly/ccpb2020>.

We are looking forward to an interesting seminar.

Best regards,

Bruno Studer

Program

09:00 - 09:15	Arrival and registration
09:15 - 09:30	Welcome and introduction Bruno Studer, ETH Zurich
09:30 - 09:50	The role of plant genetic resources for plant breeding (students, tutor Andreas Hund)
09:50 - 10:10	Novelty from within – transposable elements and plant breeding (students, tutor Dario Copetti)
10:10 - 10:30	Improving plants by inducing and identifying variation with TILLING (students, tutor Chloé Manzanares)
10:30 - 10:50	Can genome editing help reduce pesticide use? (students, tutor Simon Bull)
10:50 - 11:20	Coffee break
11:20 - 12:05	Genomic innovation to harness genetic diversity in cereal crops Simon Krattinger, KAUST, Saudi Arabia
12:05 - 12:50	Mobilized transposable elements as a tool for crop breeding? Etienne Bucher, Agroscope, Switzerland
12:50 - 14:30	Lunch in the ETH Mensa
14:30 - 15:15	Induced variation – an industrial perspective Ilka Braumann, Carlsberg A/S, Denmark
15:15 - 16:00	Genome editing: Blurring the boundaries in crop improvement Simon Bull, ETH Zurich, Switzerland
16:00	Conclusion of the seminar, reception

Registration

Please register before 15.01.2020 under <http://bit.ly/ccpb2020>. Registration fee: 40.00 CHF (including coffee break, lunch voucher and reception), to be paid at the registration desk.

Kindly supported by