



Organized by

**Zurich-Basel Plant Science Center
World Food System Center
Energy Science Center**

September 13–17
Wislikofen, Switzerland

Summer SCHOOL 2021 RESPONSE



*Responsible Research, Innovation
and Transformation in*

Food, Plant and Energy Sciences



This summer school receives funding from the European Union's Horizon 2020 research and innovation program under the Marie Skłodowska-Curie grant agreement No 847585– RESPONSE.

Responsible Research, Innovation and Transformation in Food, Plant and Energy Sciences

Food and energy are the great challenges for modern societies, both producing enough for the growing world population as well as producing and distributing them environmentally friendly, fair and equitable. Their footprint on land, biodiversity, ecosystems, water, soil and their impact on climate is enormous.

Establishing food and energy systems that support the Sustainable Development Goals (SDGs) is of uttermost importance to stay within the planetary boundaries. Societal transformation through innovation and research are key elements in the discussion how the global community could overcome its complex problems, related to environmental, social and economic constraints in a resource-limited world. Innovation conflicts arise when transformation is mainly technological driven and is not taking up the environmental, ethical, legal and social issues of society. In response scientists are asked to take a role in science-in-society dialogue and especially if their research is related to fulfilling the SDGs.

We need knowledge, innovation and solutions that are adapted to societal needs and are co-produced between different stakeholders including scientists. In this process, public and stakeholder engagement is key – welcoming actors from civil society as partners to express their values and interests in scientific, technological and innovation choices. As a result, we have to re-think the scientific research process, opening spaces for the public at the beginning of a research project. The aim is to generate through participation, deliberation and mutual learning a transformation of complex systems for a sustainable and equitable future.

In this summer school, we will implement the Responsible Research and Innovation framework to exemplary case studies addressing sustainable food systems, sustainable transition pathways in the energy sector; and sustainable land use decisions.

Participants in teams work on case studies, they define the problem in the societal context, develop prototypes following value-based and human centered design approaches to the problem or develop a social practice theory and change hypothesis for setting their prototypes into practise.

Theoretical inputs to understand the concepts and methodologies, workshops on several methodologies and tools, exemplary insights in good practices and working with case studies will help the participants to understand and apply the responsible research and innovation process.

Invited speakers will make presentations on the topic of their research, give insight into their research field, conduct interactive workshops and take part in plenary discussions. They will act as mentors in the case studies group work. The outcome of the group work will be available in the proceedings.

Learning Objectives

By the end of the summer school, participants will:

- Understand the Responsible Research and Innovation (RRI) framework and its application in research.
- Design their own responsible research and innovation process including public engagement and participation formats.
- Know how to carry out ethical inquiry and a value-based design processes.
- Be able to apply design thinking.
- Can implement formats of social and transformative learning in their research processes.

Organization of Student Work

Before summer school

- For PhD students not enrolled in the Response Doctoral Program: Application should include description of motivation, background and description of own research project.
- Preparatory reading: Students will need to read the assigned literature before the summer school.
- All summer school participants are expected to present a poster of their research at the beginning of the summer school.

During summer school

- Sessions are composed as lectures, best cases examples, discussions, workshops and case study work.
- Group work will be done on case studies, individual working time on this group work is expected to be about 10h.
- Presentation and integration: at the end of each afternoon to the sounding board.
- Case study presentation on day 5 is 30 min per group.

After summer school

- Groups hand in a finalized version of their case study for inclusion in the proceedings. Information on this is provided during the summer school.

Group enrollment

- Enrollment to the case studies and group work at OLAT learning platform. Link will be provided after registration.

Speakers and Case Study Supervisors

Michael Augsburger, Spark Works & ETH Zurich

Walter-de-Boef, Wageningen University

Philipp Bosshard, YASAI, Zurich

Mascha Gugganig, Technical University Munich

Fritz Kleinschroth, ETH Zurich

Verena Lütischg, About Tomorrow Consulting, Zurich

Marco Mazzotti, ETH Zurich

Sonja Meller, DigitSoil

Melanie Paschke, Plant Science Center, ETH Zurich, University Zurich and Basel

Christian Schaffner, Energy Science Center, ETH Zurich

Alessandra Schmidt, FabLab Barcelona

Gerhard Schmitt, ETH Zurich

Martjin Sonneveld, World Food System Center, ETH Zurich

Daan Schurbiers, De Proeffabriek, The Netherlands

Anais Sägesser, Stride – the UNSCHOOL, Zurich

Nina Wang, University of Zurich

Program available at:

www.plantsciences.uzh.ch/teaching/summerschool.html

General Information**Date**

13–17 September, 2021

Location

Propstei Wislikofen

Propsteiweg

5463 Wislikofen

Tel. +41 (0)56 201 40 20

info@propstei.ch

www.propstei.ch

Accommodation

We are staying at the former Monastery in Wislikofen. The hotel provides meals of well-balanced nutrition, and wherever possible using produce from the region. Breakfast is buffet continental style. The Propstei Wislikofen is a place with special charisma. Among other things, it is known for its historic ambience, tasteful rooms and excellent cuisine. There are lots of hiking tracks within the area of the hotel.

Credits

2 ECTS

Application

Registration until July 28, 2021 website:

www.plantsciences.uzh.ch/teaching/summerschool.html

Photos title page: FORETS – Pilot farm in Yangambi - DRC by Axel Fassio, CIFOR – Flickr. Solar panels by James Moran – Pexels.

Eligibility

Priority will be given to students enrolled in one of the following PSC PhD programs:

- First priority will be given to the fellows of the RESPONSE Doctoral Programme (DP) «RESPONSE – to society and policy needs through plant, food and energy sciences».
- Second priority will be given to PhD students enrolled in the *PhD Program Science and Policy* or the *PhD Program Plant Sciences*.

Other MSc students, PhD students and Postdocs at University of Zurich, ETH Zurich or University of Basel as well as students from other national or international universities are welcome if places are available.

Fee

PhD students in the RESPONSE Doctoral Programme (DP), the *PhD Program Science and Policy* or the *PhD Program Plant Sciences*: no fee.

PhD Students registered at the Life Science Zurich Graduate School (LSZGS): CHF 150.

All other participants (incl. national and international Master students, PhD students and Postdocs): CHF 300.

The fee covers board, lodging and activities during the summer school study week. Travel expenses are not included.

Students are expected to arrive at the venue on Monday morning, September 13, 2021. For cancellation less than four weeks before the summer school a late cancellation fee of CHF 150 applies.

Organiser

This summer school is organised by the Zurich-Basel Plant Science Center, World Food System Center and Energy Science Center as part of the RESPONSE Doctoral Programme (DP) «RESPONSE – to society and policy needs through plant, food and energy sciences».



**University of
Zurich**^{UZH}

ETH zürich



**University
of Basel**