



AARHUS UNIVERSITET

## Dairy Science and Technology Summer School

June 13 – June 17, 2022

Aarhus, Denmark

### Instructors

Prof. Thom Huppertz, FrieslandCampina & Wageningen University and Research, The Netherlands

Dr. Henrik Siegumfeldt, University of Copenhagen, Denmark

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### Course Description

The *Dairy Science and Technology Summer School* is a unique training opportunity for early career researchers in the field of dairy from both academia and industry. Fundamental knowledge on key aspects in dairy (i.e., microbiology, processing, sustainability, health, and digestion) will be provided in interactive workshops held by leading experts in the field, and the development of a range of high-level transferrable skills will be addressed to support the future career aspirations of the participants. In particular, a masterclass on active team-based learning will set the basis for a “controversy workshop”, where participants will work in small groups on a controversial issue facing Dairy Science in the coming years, which will develop their transferrable skills of communication, negotiation, problem-solving and collaboration. Furthermore, a stakeholder analysis workshop will help the participants to think critically and strategically about the stakeholders for the research by examining techniques to identify and characterize all stakeholders for a given research ecosystem.

In addition to the classroom teaching, the training will also include participation in an online symposium, where the course participants will be able to advance their knowledge on recent innovations and developments in the dairy sector, which will be presented by leading experts from academia and industry as well as selected early career researchers. Interaction with the speakers will be enabled by a Q&A function in the electronic conference platform.

## Learning Objectives

After completing the course, the participants will be able to

- Reflect on current practices in the dairy sector, identify knowledge gaps and develop new research strategies
- Design novel approaches for teaching technical subject matters, which include the use of controversy workshops or impact statements
- Lead debates in relation to controversial topics in their scientific fields, and negotiate possible solutions
- Facilitate public understanding of scientific topics and defend their research ideas
- Assess, categorize and communicate with relevant stakeholders for their research

## Learning Resources

Participants will receive electronic course material for independent studying prior to the course. The course consists of 21 h of interactive workshops, where participants will actively train their knowledge on key aspects of dairy science and technology as well as relevant transferable skills. Additionally, participation in an online symposium will introduce the participants to state-of-the-art reports and future perspectives presented by leading experts and early career researchers from the dairy community.

## Assessment and grading

The course participants can pass or fail the course. For successful completion of the course and receiving ECTS, it is mandatory to attend all events outlined in the course schedule. Additionally, the following three assignments have to be submitted:

Assessment	Assignment due
A presentation of the outcome from the group work in the controversy workshop <ul style="list-style-type: none"><li>• This assignment will assess the knowledge acquired in the masterclass on team-based learning and assess the results of the group work from the controversy workshop</li></ul>	Group presentation on June 17
A three minute presentation of their research topic targeted to a non-scientific audience <ul style="list-style-type: none"><li>• This assignment will connect the knowledge acquired in both the scientific workshops and the training of the transferrable skills</li></ul>	Individual presentation on June 17
A completed template analyzing the relevant stakeholders for the participants' research topics and evaluating communication strategies to show the potential outcome of their research to non-scientific audiences <ul style="list-style-type: none"><li>• This assignment will connect knowledge acquired in the workshops on communication strategies and stakeholder analysis.</li></ul>	Hand in via Brightspace until June 30

## Course Schedule

The detailed course schedule can be found at <https://food.au.dk/summer-school-program>

The below table gives an overview on the approximate hours that will be spent during the course

<b>Activity</b>	<b>Format</b>	<b>Duration (hours)</b>
Preparatory work before attending the course (reading and familiarizing with the course material)	Self-directed learning	20
Attending the summer school workshops (including the masterclass on team-based learning, the stakeholder analysis workshop, and the guided tour through Arla Innovation center)	Face-to-face workshops, active learning	21
Attending the online sessions of the <i>Dairy Science and Technology Symposium</i>	Online learning	10
Preparation of assignments during the summer school (3 min presentation, outputs from controversy workshop)	Self-directed learning, group learning, problem-based learning	9
Preparation of final assignment after the summer school (stakeholder analysis)	Self-directed learning, problem based learning	15
<b>Total</b>		<b>75</b>