

Programme Brochure

Online Summer School

From Farm to Fork: Trends and Technologies

August 16-27, 2021



Course leader and program manager

Dr. Liu Zhen, zhen.liu@wur.nl, +31-(0)317 489190

Theme coordinator:

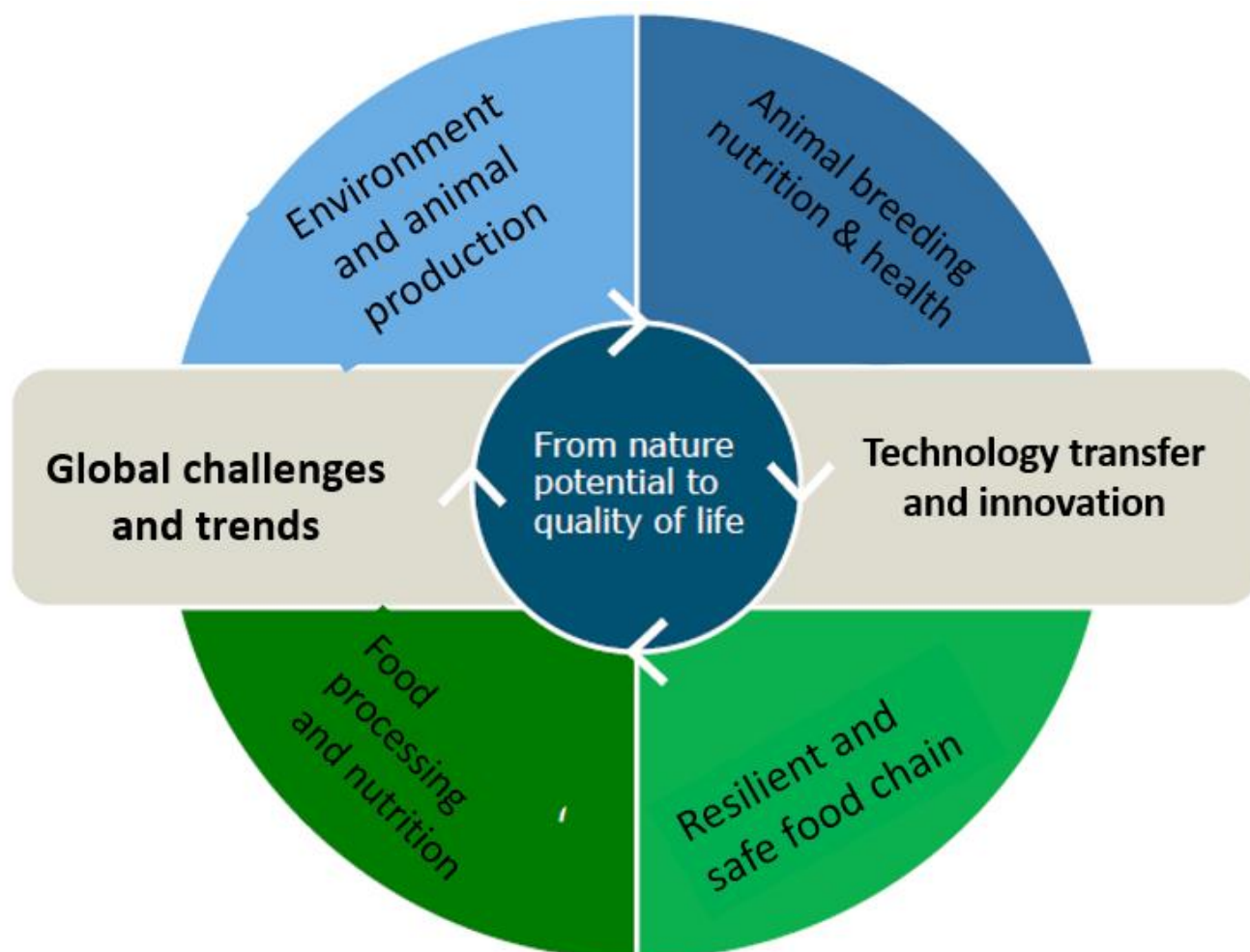
Innovation management and Food: Dr. Zhen Liu

Animal production and social perspective: Dr. Wenjuan Mu

Animal production system: Ir. Yue Wang and Ir. Chen Zheng

Platform: Brightspace, WUR online learning platform
Duration: 2 weeks, 20 hours in total
Intro start: 12 August, 2021
Start date: 16 August, 2021
End date: 28 August, 2021
Time zone: Amsterdam time zone CEST
Organisation: Wageningen Academy | Wageningen University & Research

Program Design:



2021 Online Summer School Detail Program

From Farm to Fork: New Trends and Technologies



(August 16-27, 2021)



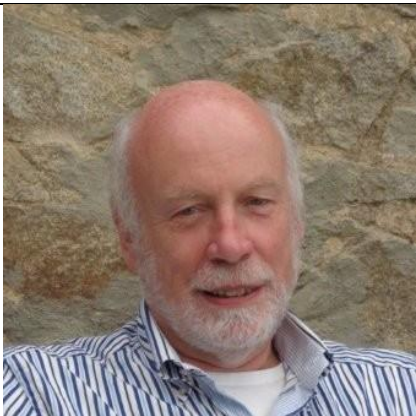
August 12 Thursday	Summer school pre introduction	Speaker	Group/Organization
9:00-10:00	Intro start: get familiar of brightspace and virtual class of WUR	Zhen Liu	Wageningen Academy
Aug 16 Monday	Summer school introduction	Speaker	Group/Organization
8:30-9:00	Welcome and Meet theme coordinators	all coordinator	WUR
9:00-9:30	Introduction of Wageningen University and Research	Zhen Liu	Wageningen Academy
9:30-9:35	Short break		
9:35-10:00	Introduce of group Assignments and plenary reflection on the assignments	Zhen Liu	Wageningen Academy
10:00-10:30	Virtual Excursion to Dairy Farm	Zhen Liu	Dairy campus
Aug 17 Tuesday	Global food challenges, transitions and visions	Speaker	Group/Organization
pre-recorded video	Food transition 2030	Frans Kampers	Corporate Value Creation
pre-recorded video	Oneplanet program	Liesbeth Luijendijk	OnePlanet Research Center
9:00-10:00	A healthy and circular food system: learn from the vision in the NL in 2050	Evelien de Olde (keynote)	Animal Production Systems Group
Aug 18 Wednesday	Environment and animal production	Speaker	Group/Organization
8:30-9:00	Global warming & animal production	Corina van Middelaar	Animal Production Systems Group
9:00-10:00	The impact of animal production on water quality	Maryna Stokral	Water Systems and Global Change Group
10:00-10:30	Circularity in animal sector: Dutch principle and Chinese practice	Yue Wang	Animal Production Systems Group
Aug 19 Thursday	Animal health, behavior and welfare	Speaker	Group/Organization
8:30-9:00	Multi-species (human-animal) disease transmission	You Chang	Quantitative Veterinary Epidemiology
9:00-9:30	Predict animal disease by their behaviors	Densheng Sun	Farm Technology Group
9:30-10:00	Big data application in Animal health	Marisaka van der Voort	Business Economics Group
10:00-10:30	Housing environment and stress effects on pigs' welfare	Lu Luo	Adaptation Physiology Group
Aug 20 Friday	Animal Breeding and Nutrition	Speaker	Group/Organization
9:00-9:30	Feeding young poultry: a new nutritional concept	Rene Kwakkel	Anima Nutrition group
9:30-10:00	pig production	Walter Gerrits	Anima Nutrition group
10:00-10:30	An introduction to quantitative genetics and breeding programs	Pascal Duenk	Animal Breeding and Genomics



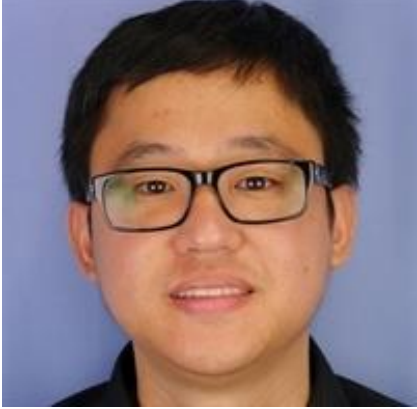
Aug 23 Monday	Insight on specialized animal sector	Speaker	Group
8:30-9:30	The effects of breeding, feeding, farm management on milk quality control	Tiny van Boekel	Food Quality and Design
9:30-10:00	fisheries ecology	Riel, Anne-Jo van	Animal Production Systems Group
10:00-10:30	Insects for peace and circular economy	Katherine Barragan	Laboratory of Entomology
Aug 24 Tuesday	Interdisciplinary development in food science	Speaker	Group
8:30-9:30	Reusing food surplus and side streams from agri-food industries	Yujun Wei	Environmental technology
8:30-9:00	consumer acceptance on the new food technologies (e.g. GMO, cultured meat)	Paul Nales	Marketing and consumer behaviour Group
9:30-10:00	Role of food safety in food supply chain	Yvette Hoffmans	Wageningen Food Safety Research
10:00-10:30	cost-effective food safety monitoring in food supply chains	Zhengcong Wang	Business Economics Group
Aug 25 Wednesday	Food Processing	Speaker	Group
pre-recorded video	Feeding the World and Keeping our Planet Cool by Proven Food Losses and Waste Reduction Strategies	Heike Axmann	Wageningen Food & Biobased Research
9:00-9:30	Food loss and waste within food value chain: an in-depth overview	Xuezhen Guo	Wageningen Food & Biobased Research
9:30-10:00	Valorising waste stream from oil-rich seeds	Wanqing Jia	Food Process Engineering
10:00-10:30	Extrusion-based 3D food printing and its applications	Lu Zhang	Food Process Engineering
Aug 26 Thursday	Food and nutrition	Speaker	Group
pre-recorded video	Personalised Nutrition and Health	Martine van der Mast	Wageningen Food & Biobased Research
8:30-9:30	Sustainable, Healthy, Affordable, Reliable and Preferable Diets in China	Zhiyao Chang	ADG joint PhD
9:00-9:30	Nutrition and health: a molecular immunity perspective	Coen Govers	Cell Biology and Immunology
9:30-10:00	The role of milk and dairy products in the human diet	Thom	Food Quality and Design
10:00-10:30	Introduction of Student Challenges in WUR (Rethink Protein)	Rio Pals	Education & Student Affairs
10:30-11:00	Q&A session week 2	all coordinators	
Aug 27 Friday	Group presentation	Speaker	Group
8:30-8:40	Introduce the final group presentation	Zhen Liu	Wageningen Academy
8:40-9:45	8 groups, each group has 5 minutes presentation +3 minutes Q&A	all participants	
9:45-10:00	final closing and Q&A	all coordinators	




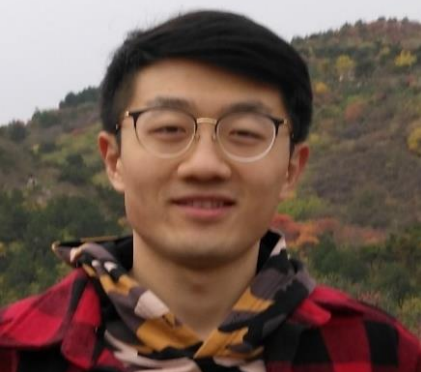
Biographies of the lecturers




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	<p>Dr. Zhen Liu</p> <p>Zhen Liu received a doctoral degree on innovation management from Wageningen University in 2013.</p> <p>Since 2012, she has been worked as business developer of Food and Biobased Research of Wageningen University and Research, with a drive for research, innovation and entrepreneurship and aim at becoming the bridge between China and EU in the field of food and agricultural business.</p> <p>Since 2013, she has worked as program manager of Wageningen Academy, which is the port to provide life learning programs for professionals and students. She developed various executive programs for leading agrifood entrepreneurs such as Yili, Nongfu, Stanley, Pagoda, and also technology training programs from young professionals.</p>
	<p>Dr. Wenjuan Mu</p>
	<p>Ir. Yue Wang</p>
	<p>Ir. Chen Zheng</p>
	<p>Dr. Frans Kampers</p> <p>After completing his PhD in physics in Eindhoven, the Netherlands Frans Kampers in 1989 joined what is now Wageningen University & Research. After management functions in instrumentation and measurement technology and information strategy he co-ordinated the bionanotechnology research in Wageningen, which focuses on applications of nanotechnology in food and nutrition. He was president of the International Society of Food Applications of Nanoscale Sciences (ISFANS) and is a member of the Executive Board of NanoNextNL, the Dutch research programme on nanotechnology. He coordinated the Belgium/Netherlands region in the proposal for a Knowledge and Innovation Community (KIC) for the European food sector, set up the cross-over research programme “High Tech to Feed the World”. He is the main author of the strategy document “Food Transitions 2030” on how the agro-food system must transition and can become future proof . He was the architect of the Groeifondsproposal FoodSwitch.</p>

	<p>Liesbeth Luijendijk</p> <p>Liesbeth Luijendijk is Director AgroFood & Environment in the managementteam of OnePlanet Research Center, on behalf of Wageningen University & Research. She has a master degree in Business Informatics and broad and long industry experience in the application and management of digital technology in a diversity of industrial domains. In Wageningen University & Research she was a Business Development Manager specialised in the domain of Personalised Nutrition and Food Informatics.</p>
	<p>Evelien de Olde</p>
	<p>Corina van Middelaar</p>
	<p>Maryna Stokol</p>
	<p>You Chang</p>
	<p>Densheng Sun</p>
	<p>Marisaka van der Voort</p>
	<p>Lu Luo</p>
	<p>Rene Kwakkel</p>
	<p>Walter Gerrits</p>
	<p>Pascal Duenk</p>
	<p>Prof. Tiny van Boekel</p> <p>Dairy Science & Technology, Food Quality and Design Group Wageningen University and Research</p>
	<p>Anne-Jo van Riel</p>
	<p>Katherine Barragan</p>

	<p>Yujun Wei</p> <p>Yujun Wei received her MSc degree in Food Technology at Wageningen University (2019). After that, she joined Agricultural Green Development (AGD) Program. She currently works as a PhD student in the Environmental Technology group (ETE). Her research focuses on the development of food surplus and by-product valorization strategies to improve the sustainability performance of current food system.</p>
	<p>Paul Nales</p>
	<p>Yvette Hoffmans</p>
	<p>Zhengcong Wang</p>
	<p>Heike Axmann</p> <p>Heike works as a senior researcher, international project leader and expertise leader at the Supply Chain Development group at Wageningen Food and Biobased Research, one of the applied research institutes from Wageningen University and Research. There, Heike is leading among others the Climate Change, Agriculture and Food Security project, the Task Force Against Food Loss and Waste in India, and the Postharvest Network. Over the last 20 years Heike Axmann developed and implemented sustainable food and agriculture strategies for private- and public organizations around the world. She has worked in various international supply chain positions "where sustainability meets economy". She was responsible for starting up new routes, such as reducing food loss and waste and food loss and waste induced greenhouse gas emissions in international food supply chains, (re)designing agro-food supply systems, linking (small)producers to European high-end markets, and setting up standards and systems to increase sustainability and transparency in international value chains. Heike holds an MSc degree in agriculture, natural environment and tropical land use from the Wageningen University.</p>
	<p>Dr. Xuezhen Guo</p> <p>Xuezhen Guo is a PhD graduate from Wageningen University and currently works as a food supply chain scientist in Wageningen food and bio-based Research. He has more than 12-year industrial and research experience in the field of fresh food supply chain management, food logistics, food e-commerce, food waste monitoring and valorization, food footprint quantification, circular food systems.</p> <p>Xuezhen provides consultant service to the governments, NGOs and companies (e.g. EU committee, Dutch governments, Gates foundations, FAO, Mars Incorporated, Vion Food Group).</p>
	<p>Wanqing Jia</p>

	<p>Dr. Lu Zhang</p> <p>Lu obtained both her BSc and MSc degree in Chemical Engineering at Xiamen University in China. From 2014 to 2018, she conducted her PhD research on Bioactive ingredients during mini-bread baking at WUR, in collaboration with Soochow University in China. Since April 2020, she is appointed an assistant professor at Food Process Engineering group. She conducts research in the area of 3D food printing, food waste valorisation and data science.</p>
	<p>Martine van der Mast</p> <p>Martine van der Mast has over 20 years of international experience at the business side of the Infant and Clinical market and understanding the Research and Development needs of customers, combined with my scientific background in nutrition, she combines science with the needs and desires of the players in the food and health market to help them accelerate excellence in their business</p>
	<p>Dr. Nicole de Wit</p> <p>For many years, Nicole de Wit was active in molecular science, studying the metabolic effects of food along the intestinal tract. Nowadays, she focuses more on human food intervention studies, in clinical controlled settings as well as real-life settings. Personalised Nutrition fits the latter, in which we want to stimulate people to adapt to a more healthy life style.</p>
	<p>Zhiyao Chang</p> <p>After completing his Master study in Food Processing and Safety in China Agricultural University, Zhiyao Chang joined Agricultural Green Development (AGD) Program in 2020 as a PhD student, both in Division of Human Nutrition and Health (WUR) and College of Food Science and Nutritional Engineering (CAU). His research is aiming to development the Sustainable, Healthy, Affordable, Reliable and Preferable (SHARP) diets in China.</p>

	<p>Dr. Coen Govers</p> <p>Coen Govers received his PhD (2013) in the field of tumour immunology at the department of medical oncology, Erasmus MC-Cancer institute. After this, he took on a position as research scientist at Wageningen Food & Biobased Research where he studied food- or nutraceutical-mediated modulation of the intestinal immune barrier. Together with several PhD students he developed <i>in vitro</i> immune models representing the sentinel cells of the immune barrier. These models have been investigated for their responses to prebiotics, probiotics, chitin/chitosan, and PUFAs, also as part of a KWF and TKI grant he coordinated. As of 2021, Coen started a position as assistant professor at the department of cellular biology & immunology at Wageningen University where he will focus on immune-competent organotypic model systems.</p>
	<p>Prof. Thom Huppertz</p> <p>Professor Dairy Science & Technology of Wageningen University and Research Principle Scientist Food Structure of FrieslandCampina</p>
	<p>Rio Pals</p>