

# Synergia People & Faces

## January 2026



Next Food  
Collective



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# Wageningen University / Agricultural Biosystems Engineering group (previously Farm Technology)



- Biosystems Engineering
- Enhance the potential of technology in agri-food systems to fulfil the needs of mankind in a sustainable way
- Research (PhD's) and education (BSc & MSc Biosystems Engineering)
- knowledge, methods and tools for the operation, control and design of agricultural systems



## Peter Groot Koerkamp

- Professor / scientific program leader
- Professional passion: develop new concepts
- Personal passion: biking (race & ATB), DIY



## Monique Mul

- Postdoc
- Professional passion: Enabling sustainable agriculture
- Personal passion: insects, gun dog training, sailing, hiking

**Robert van de Ven**

- Promovendus
- Professional passion: Agricultural robotics
- Personal passion: Biking, craft beer, camping, nature, reading

**Maedeh Sadeghi**

- Promovendus
- Professional passion: Control Engineering
- Personal passion: Dancing

**Sjoerd Boersma**

- Senior researcher
- Professional passion: Control Engineering
- Personal passion: Basketball

**Simon van Mourik**

- Assistant professor
- Professional passion: Modelling and control
- Personal passion: Mountain biking

**Gert Kootstra**

- Associate professor
- Professional passion: Machine vision and robotics
- Personal passion: Mountain bike, ultimate frisbee and guitar playing

**Rick van Essen**

- PhD candidate
- Professional passion: Agricultural robotics
- Personal passion: Mountain bike, hiking, wild camping, travelling

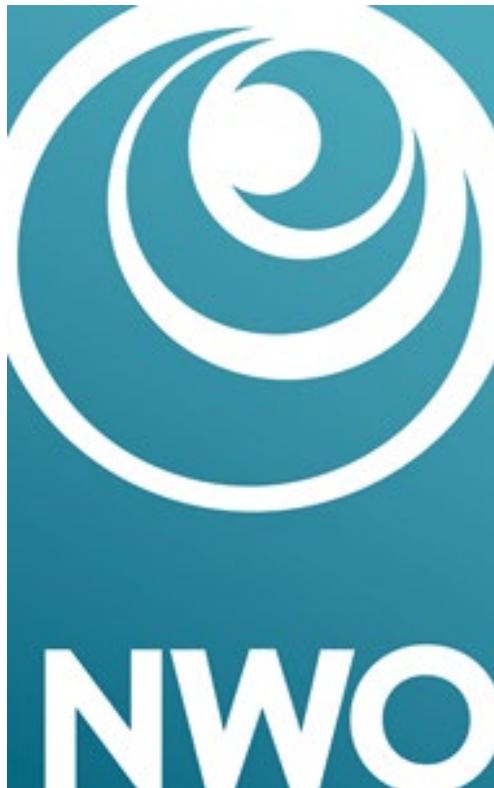
**Marjolein Derkx**

- Assistant professor
- Professional passion: Design
- Personal passion: ....

**Eldert van Henten**

- Professor Biosystems Engineering
- Professional passion: Agricultural robotics
- Personal passion: radio technology, singing, gardening ...

## Dutch Research Counsil (NWO)



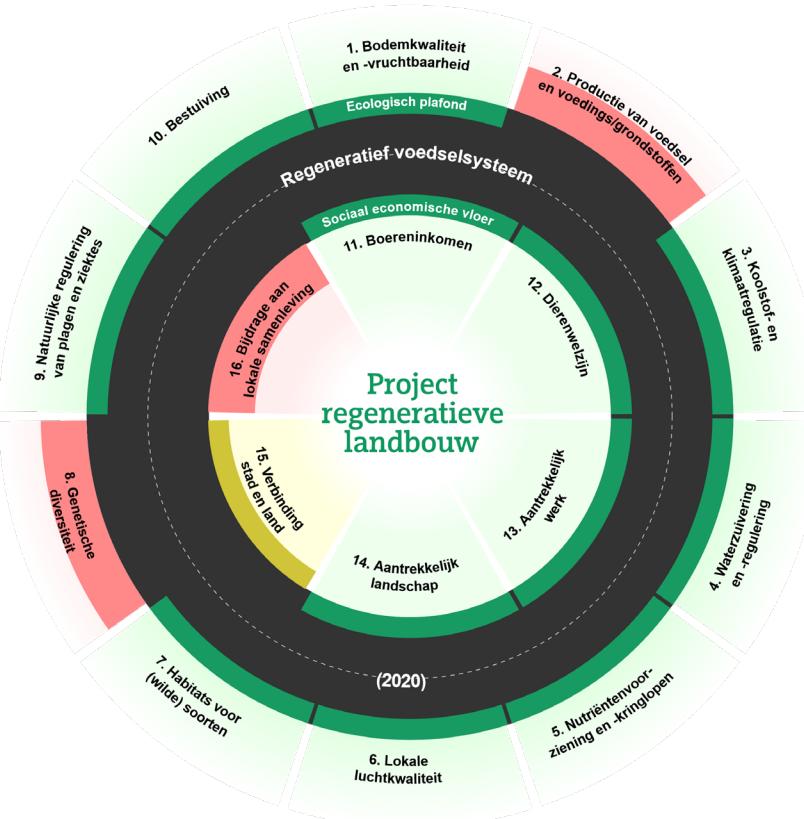
- Science funding organisation
- Advance world-class scientific research, that has scientific and societal impact
- Facilitate excellent, curiosity-driven disciplinary, interdisciplinary and multidisciplinary research
- Connect researchers from various disciplines and across the entire knowledge chain and bring researchers and societal partners together



**Bea Pauw**

- Programme officer
- Professional passion: Facilitate research programs in the field of agriculture, horticulture and food.
- Personal passion: Sports

# Next Food Collective



- Foundation with 24 years of experience in orchestrating interdisciplinary research programs
  - Public private partnerships; pre-/non- competitive
  - Origin in Food & Nutrition: 'healthy nutrition', 'food structuring', 'gut microbiome'
- Active on sustainable food & agriculture since 2016:
  - Sustainable, healthy, affordable, reliable and preferable diets (SHARP)
  - Regenerative agriculture
  - Synergia/T4E
  - ReGeNL



## **Wouter-Jan Schouten**

- Theme director sustainable agriculture
- Professional passion: driving systemic change for a sustainable future
- Personal passion: singing



## **Aafke van den Boom**

- Theme coordinator sustainable agriculture
- Professional passion: to manage interdisciplinary programs which deliver impact
- Personal passion: Gardening & movies

# WU Center for Crop Systems Analysis



- Scaling up basic, physiological processes from sub-plant level to crop level in man-managed systems.
- Obtain fundamental insight in the functioning of crop- and associated ecosystems in relation to the environments in which these systems are embedded.
- Field and greenhouse experiments.
- Modeling plant physiological and ecological systems.

**Niels Anten**

- Full professor
- Professional passion: Community ecology, evolutionary game theory, sustainable agriculture
- Personal passion: Running, history, salsa music

**Bob Douma**

- Assistant Professor
- Professional passion: Plant-Disease interaction, Statistical Models
- Personal passion: Refurbish/upholster old chairs, wild plants

**Zohralyn Homulle**

- PhD
- Professional passion: Creating sustainable agricultural systems
- Personal passion: Gardening and baking

**David Kottelenberg**

- PhD candidate
- Professional passion: Agroecological modeling, statistical modeling
- Personal passion: Playing piano, running, music.

## WU / Animal nutrition & breeding & genetics



- Dairy cattle genetics and nutrition
- Research and education
- Knowledge on the role and sustainable use of genetic variation in dairy cattle (ABG)
- Understanding of nutritional processes and the effects of dietary compounds on health, welfare, production and emissions of dairy cattle (ANU)

**Henk Bovenhuis**

- Personal professor
- Professional passion: Genetic background of milk composition
- Personal passion: Cycling

**Eugénie Guennoc**

- PhD candidate
- Professional passion: Animal genetics
- Personal passion: Hiking, gardening, handcrafts

**Jan Dijkstra**

- Associate professor
- Professional passion: Sustainable dairy cattle nutrition
- Personal passion: Hiking; local politics

**Margreet Edens**

- PhD candidate
- Professional passion: Animal nutrition, dairy cows
- Personal passion: Cycling, farm work

## WU / Horticulture and product physiology



- Physiology, growth, development, and quality of crops grown in greenhouses and vertical farms
- Crop monitoring, crop modelling, and experimentation





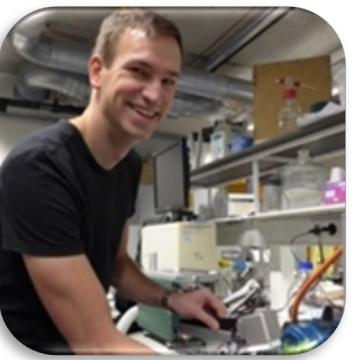
**Leo Marcelis**

- Professor
- Horticulture, crop physiology



**Ep Heuvelink**

- Associate professor
- Crop physiology and modelling
- Supervisor Task 1.1



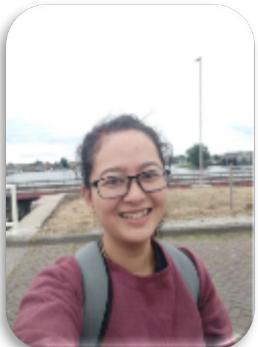
**Elias Kaiser**

- Assistant professor
- Plant phenotyping, photosynthesis, physiology
- Supervisor Task 1.2



**Silvère Vialet-Chabrand**

- Assistant professor
- Autonomous greenhouses, plant monitoring, photosynthesis, stomata
- Supervisor Task 1.2

**Samikshya Shrestha**

- PhD candidate
- Professional passion: Acclimation of plant processes in chrysanthemum
- Personal passion: .....

**Julia Winkeler**

- PhD candidate
- Professional passion: ....
- Personal passion: ...

## WU / Marketing & consumer behavior



- Using real life situations in agricultural production to inform social science theory development
- Applies top level theories to contribute to real life agricultural issues
- Understanding consumer responses to sustainable innovations

**Arnout Fischer**

- Associate professor consumer behaviour / Synergia WP5 coordinator
- Professional passion: Consumer response to new technology
- Personal passion: Reading and walking around

**Marion Leo**

- PostDoc
- Professional passion:  
...
- Personal passion:  
...

# TU Delft / Delft Center for Systems and Control



- DCSC works on fundamental aspects of dynamical systems and control as well as on advancing innovative and high-tech applications
- Research (PhDs) and education (BSc Mechanical Engineering and MSc Systems & Control)
- Knowledge, methods, and tools for dynamical systems modelling, analysis, optimization, learning, and control in large-scale systems
- Giulia Giordano is now at University of Trento, Italy

**Tamas Keviczky**

- Professor / WP3 and task leader
- Professional passion: Find new insights and solutions via systems and control theory and make an impact in practice
- Personal passion: Nature/water and music

**Ioannis Panagopoulos**

- PhD candidate
- Professional passion: Control theory applications on Climate Control
- Personal passion: 3D printing and machining

**Giulia Giordano**

- Asst. Professor / task leader
- Professional passion: Understand nature through the lens of system theory
- Personal passion: Literature and music

**Maarten de Jong**

- PhD candidate
- Professional passion: To study the mechanisms of life
- Personal passion: Music listening and performing

## University of Twente / Faculty BMS – Science, technology & policy studies



- **Department of Science, Technology and Policy Studies (STePS):**
- We assess sociotechnical change, studying the past and **anticipating the future.**
- We stir constructive debate and identify productive steering options for governments, academic institutions, civil society, user organizations, and firms – in Europe and in emerging economies.
- We work towards better governance of science, technology and innovation, addressing major societal challenges such as **agricultural sustainability.**
- <https://www.utwente.nl/en/bms/steps/>

**Kornelia Konrad**

- Assoc. Prof. Anticipation & Assessment of Emerging Technologies
- Professional passion: Socio-technical futures
- Personal passion: Gardening, reading

**Lenn Gorissen**

- PhD-candidate
- Professional passion: socio-techno-ecological futures
- Personal passion: Art photography, classical literature

# University of Twente/Human Media Interaction Group

UNIVERSITY OF TWENTE.



- **Who are we:** A multidisciplinary group in which **computer science** meets **social science** to investigate and design and evaluate novel forms of **human-computer interaction**.
- **What do we do:** Human interaction with intelligent agents, social robotics, machine analysis of human (social) behaviour, human-agent multi-modal dialogues.
- **In Synergia:** provide general usability guidelines for the user's interaction with the robots and the (processed) data they produce. We will also connect the robots to mass media outlets.

**Vanessa Evers**

- Full professor
- Professional passion: socially intelligent robots
- Personal passion: horses

**Tessa Beinema**

- Post-doc
- Professional passion: ..
- Personal passion: .....

**Bob Schadenberg**

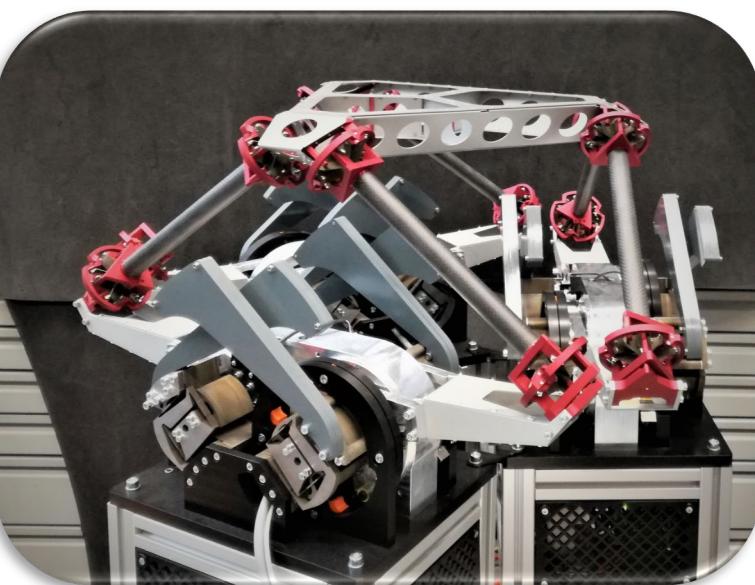
- Post-doc
- Professional passion: understanding and developing explainable human-robot interaction
- Personal passion: avid hiker

**Daniel Davison**

- Interaction Lab Manager
- Professional passion: making a meaningful impact through social intelligent technology
- Personal passion: family life, making & tinkering, outdoor sports activities

# University of Twente / Faculty of ET **UNIVERSITY OF TWENTE.**

## Applied mechanics



- Mechatronic mechanisms (e.g. grippers)
- Precision mechanisms for predictability
- Precision motion and force control

**Dannis Brouwer**

- Professor
- Professional passion: Design Principles for Precision Engineering
- Personal passion: Biking / vintage RC cars

**Jan de Jong**

- Assistant Prof
- Professional passion: Mechanisms / Balancing / Grippers
- Personal passion: Biking

**Wouter Hakvoort**

- Associate Prof
- Professional passion: Precision Motion Control
- Personal passion: Biking

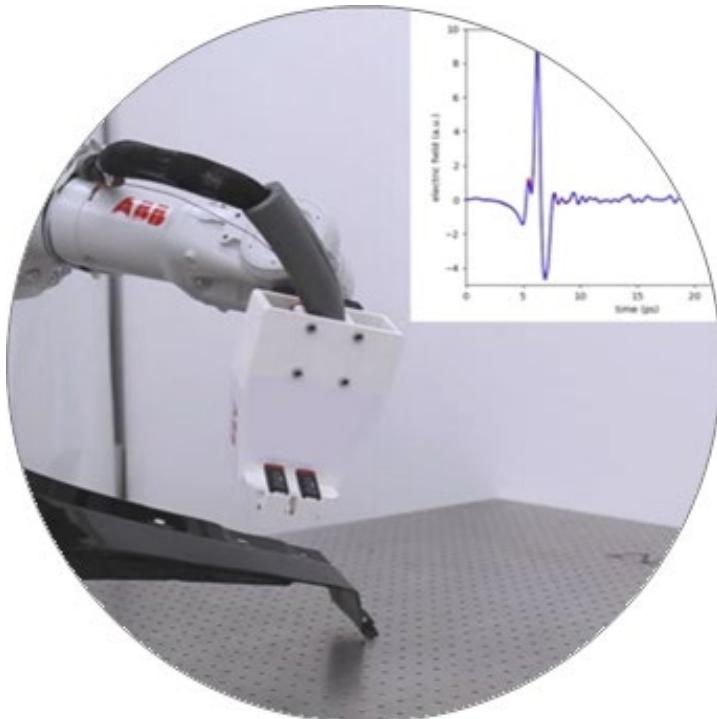
**Filip Šunjić**

- PhD candidate
- Professional passion: ...
- Personal passion: ...

**Marissa Jonker**

- PhD candidate
- Professional passion: Computer vision based robotics
- Personal passion: Painting

# TU Eindhoven / Electrical Engineering



- Terahertz science and technology (electronics and photonics)
- Optical sensing technologies for societal benefits
- Development of novel signal processing algorithms
- Application to medical, industrial, agrifood sectors

**Marion Matters**

- Full professor
- Electronic THz science and technology

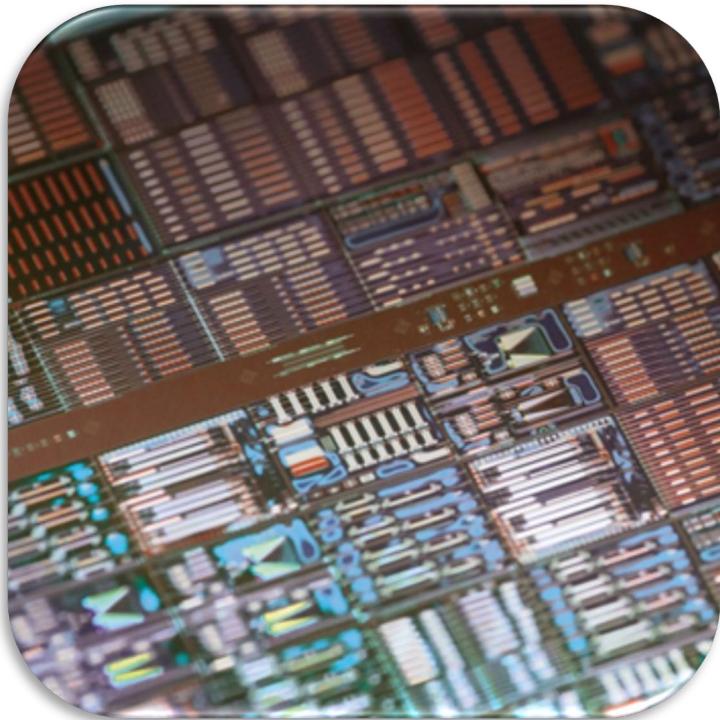
**Piyush Kaul**

- Assistant professor
- Professional passion: high-frequency IC design
- Personal passion: sports, video games, reading

**Maryem Tanveer**

- PhD candidate
- Professional passion: ...
- Personal passion: ...

# Eindhoven University of Technology / Dept. semiconductor nanophotonics / photonic int.



- Provide major contributions to photonic integration and the associated applications with a particular focus on indium phosphide technology;
- Coordinating the JePPIX multi-project wafer services and Pilot Line: <https://www.jeppix.eu/>;
- Expertise in design of (tunable) lasers, optical phased arrays, filters and detector arrays, to be used in:
- Lidar, metrology, THz and IR imaging and spectroscopy for the agro-food field.

**Andrea Fiore**

- Professor
- Professional passion  
...
- Personal passion  
...

**Don van Elst**

- PhD candidate
- Professional passion: photonics
- Personal passion: cooking

**Tasfia Kabir**

- PhD candidate
- Professional passion: photonic integration
- Personal passion: music, books and travelling

**Martijn Heck**

- Professor
- Professional passion: photonic integration

# Eindhoven University of Technology / Dept. Industrial Design



- Investigate the everyday interactions between individual people and the highly interconnected technology that surrounds them.
- Measure, model and design for the user experience when individuals interact with social-technological networks in
- Designing data-intensive products and systems
- Data-enabled research methods from wearable interfaces to digital twins



**Mathias Funk**

- Associate Professor
- Professional passion: Design tools and methods for designing with data
- Personal passion: Ask me again after COVID-19



**Yuvaa Borra**

- EngD candidate
- Professional passion: Landscape Modelling
- Personal passion: Calligraphy

# Eindhoven University of Technology / Dept. Mechanical Engineering/ Control systems



- Mission: develop new methods and tools in the areas of Systems Theory, Control Engineering and Mechatronics and to apply them in a wide variety of industrial areas.
- The research focuses on understanding the fundamental system properties that determine the performance of mechanical engineering systems and exploiting this knowledge to design the high-tech systems of the future.
- Large group > 50 PhD active every year.
- Areas: performance driven control and systems design, and develops robust and data-driven control theory, hybrid and networked systems theory, optimisation techniques and mechanical design principles aimed at high-performance motion systems, robotics, vehicle powertrains and the control of plasma fusion as application areas.

**René vd Molengraft**

- Associate professor
- Professional passion: Robotics, head of TechUnited (soccer robots)
- Personal passion: Drums-Music

**Maurice Heemels**

- Full professor
- Professional passion: Control systems, Cyber-Physical Systems
- Personal passion: Hiking

**Duarte Antunes**

- Assistant professor
- Professional passion: Control systems
- Personal passion: Soccer

**Wouter Kuipers**

- Project manager
- Professional passion: Control of greenhouses
- Personal passion: Soccer robots



**Ruben Beumer**

- PhD candidate
- Professional passion: Robotics
- Personal passion: Soccer



**Menno van Zutphen**

- PhD candidate
- Professional passion: Control Systems and Stochastic Systems
- Personal passion: Running and reading

# Eindhoven University of Technology / Innovation technology entrepreneurship & marketing



- Eindhoven University of Technology particularly well known for its joint research with industry
- The Innovation, Technology Entrepreneurship and Marketing (ITEM) group focuses on understanding and improving new business and product development processes within firms, organizations, and institutions in a high-tech context.

**Ed Nijssen**

- Full professor of technology marketing
- Professional passion: innovation studies, servitization, sales management, entrepreneurial marketing, path modelling, survey research
- Personal passion: jogging, golf, cooking, wine, travel

**Neomie Raassens**

- Associate professor of servitization and innovation outsourcing
- Professional passion: Servitization, outsourcing, food waste, B2B relationships
- Personal passion: Soccer, cycling, (board) games

**Shantanu Mullick**

- Assistant professor of marketing
- Professional passion: Food waste, sustainability
- Personal passion: Reading, traveling, trekking

**Patricia Roost**

- PhD student
- Professional passion: Networks, ecosystems, organizational learning
- Personal passion: Arts and crafts, craft beer, audiobooks, travel

# Radboud University / Molecular Laser Physics



- Gas sensing
- Optical techniques (e.g. laser-based spectroscopy)
- Analytical instrumentation for biomarker discovery and validation
- Applications in Life Sciences (breath analysis, environmental monitoring, plant biology, fruit storage, etc.)



**Simona Cristescu**

- Assoc. Prof./Group leader
- Professional passion: biomarkers discovery
- Personal passion: travel

**Amir Khodabakhsh**

- Postdoc
- Professional passion: lasers
- Personal passion: books

**Joris Meurs**

- Researcher
- Professional passion: Mass spectrometry
- Personal passion: Basketball

**Yueyu Lin**

- PhD candidate
- Professional passion: lasers
- Personal passion: Photography

# Wageningen Livestock Research (WLR)



- WLR is a contract research organisation for fundamental, innovative research and practical solutions for sustainable and profitable livestock farming.
- In Synergia & AGROS, we focus on the dairy use case, aiming to optimally manage the individual cow in a herd to improve her resource use efficiency and lower her environmental footprint
- Underlying tasks:
  - Design and exploration of future dairy farming housing systems
  - Further development of individual cow sensor technology on semi-practical scale
  - Showcasing prototypes in an integrated setting
  - Validating developed decision support tools





**Yvette de Haas**

- Project leader Precision Phenotyping
- Professional passion: Enabling recording new traits on individual animals in groups
- Personal passion: Board games, horse riding



**Nico Ogink**

- Team member
- Professional passion: Reliable and applicable research
- Personal passion: Family, books, music, sports



**Claudia Kamphuis**

- Project leader Big Data
- Professional passion: Connect data science/IT/domain to improve animal health
- Personal passion: Riding R6, true-crime, tramping



**Bram Bos**

- Integration WP6-8
- Professional passion: Redesign, Systems thinking
- Personal passion: Singing, daughter, walking, sustainable monument

## Wageningen Research / Field crops



- WUR Field Crops is working on the sustainable transition of open cultivation in response to major social issues both nationally and internationally.
- We do this in cooperation and dialogue with the agricultural entrepreneurs, the chains, governments and social groups.
- We develop and test innovations that farmers and horticulturalists can apply today or tomorrow to run their business successfully.
- We connect fundamental knowledge with practical experience and make use of our networks, trial farms and storage facilities.
- Picture: the autonomous Robotti active on the Farm of the Future in Lelystad

**Corne Lugtenburg**

- Researcher
- Professional passion:  
...
- Personal passion:  
...

**Herman Schoorlemmer**

- Research manager
- Professional passion:  
Cocreation with active users and stakeholders
- Personal passion:  
Theater and hiking

**Corne Kempenaar**

- Sr scientist precision
- Professional passion:  
ag./smart farming./data-driven agriculture
- Personal passion:  
Sports, movies, travelling

**Boelie Elzen**

- Researcher / use cases postdoc supervision
- Professional passion:  
Creating bridges between academic & applied research
- Personal passion:  
Writing (novels), hiking

# Wageningen Research – Business unit Greenhouse Horticulture



- Mission: initiate and stimulate innovations for and together with greenhouse horticultural sector
- Two locations: Wageningen and Bleiswijk
- Strategic and applied research
- Lead partner in AGROS “Towards an autonomous greenhouse”
- Expertise in plant physiology, cropping systems, greenhouse climate control, vision and sensing, robotics
- Greenhouse climate and crop models (2D and 3D)



**Anja Dieleman**



**Ilias Tsafaras**

- Team leader “Crop physiology”
- Professional passion: Improving cultivation systems
- Personal passion: Gardening and hiking
- Researcher Greenhouse Technology
- Professional Passion: greenhouse climate modelling
- Personal Passion: soccer

# One Planet Research Center & IMEC



- OnePlanet Research Center initiates fundamental and applied research, groundbreaking innovations and smart product applications
- Imec is committed to sustainable developments for current and future generations. As the chip lab of the world, we can and want to inspire and involve the entire microchip value chain. Together we aim to develop technologies that contribute to a more sustainable future by focusing on the positive impact of future chip technologies. Our mission is to create disruptive innovations that make a positive and lasting impact on society.



## Liesbeth Luijendijk

- Director AgroFood (until mid 2025)
- Professional passion: Creating a better world with digital technology
- Personal passion: Cycling, hiking, bird watching



## Renske Landeweert

- Program manager
- Professional passion: Sense to sustain in agriculture
- Personal passion: Walking, tending my garden



## Marcel Zevenbergen

- Program manager
- Professional passion: Disrupting the status-quo with new technology
- Personal passion: Mountainbiking, going to the gym, movies



## Peter Offermans

- Principal Researcher Emerging Sensing Technologies
- Professional passion: Matching applications and technology
- Personal passion: Swimming

**Mark Zentile**

- Optical Sensing Researcher
- Professional passion: Synergies of technologies
- Personal passion: Cooking, baking, brewing

**Lei Zhang**

- Emerging Sensing Researcher
- Professional passion: Innovation
- Personal passion: Photography, cycling and traveling

**Bas Boom**

- Computer Vision Expert
- Professional passion: Applying Deep Learning technology
- Personal passion: Gym, Movies, Podcast and Meetup



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## Funded by



TKI Agri&Food

## Knowledge partners



UNIVERSITY  
OF TWENTE.

## Private sector partners



Connecterra



GenNovation



Stichting  
Kennis in je Kas



AGROINTELLI



Agrarisch Collectief  
Krimpenerwaard  
Agrarische Coöperatie Natuurbepa

