



INNOVATION
& BUSINESS

24 – 26 March 2024
Venue: Old Fishmarket
Ghent ▪ Belgium

PROGRAM OVERVIEW

Update March 22, 2024

‘Drivers of crop innovation: latest trends in the interplay of technological innovations, market developments, business opportunities and societal demands’

Conference day 1 - Sunday March 24, 2024

13:30 Welcome guests for social event

14:00 Start social event: visit Ghent Botanical Garden

A green science gem in the middle of the city

Over the past 220 years, the Botanical Garden has become a unique and valuable place for research, inspiration and tranquillity. It was founded in 1797 and has been in its current location since 1902. The Ghent Botanical Garden and GUM (Ghent University Museum) are joining forces at a unique location, near Gent Sint-Pieters railway station and the Citadel Park since 2020. GUM & Botanical Garden will become part of the future Museum Square, along with art museums S.M.A.K. and MSK Gent.

During this tour, you can wander away from the paths. This may be the first time you really get to know the Botanical Garden! We will amaze you with trees and plants of all sizes and ages, beautiful and strange pollination stories and striking scents. A tour of the Botanical Garden will open up the whole world: you will travel from one continent to another, from the Japanese cherry tree to the Umbellaria californica.

We will depart by boat from The Old Fish Market towards the Botanical Garden at exactly 2pm.
So be on time!

16:00 Registration desk open

17:00-17:05 Welcome by chair **An Michiels**, Director AgKnowledge Partnering (Belgium)
and **Jan Meiling**, Director NAKTuinbouw (NL)

17:05-17:15 Opening

17:15-19:00 Continue Plenary program***'From a innovation perspective'***

Presentation by **Prof. Richard Harrison**, Managing Director, Plant Science Group at Wageningen University and Research (NL)

'What does it take for a company to implement AI into business?'

Presentation by **Jürgen Müller**, Head of Generative AI - Global Digital Services at BASF SE (DE)

BASF began its journey to an AI-powered future more than ten years ago by exploring the possibilities and benefits of machine learning models. This journey got a boost with Generative AI. What does it take for a company to develop, organize and implement AI and how could it contribute to efficiency and innovation in crop development?

'What does the future of funding look like within the ag sector and what climate-smart and innovative technologies are investors focusing on'.

Presentation by **Tijl Hoefnagels**, Venture Partner Rubio Impact Ventures (NL)

19:00-20:00 Conference buffet**20:00-20:45 Closing keynote lecture*****'VIB Innovations and Societal impact'***

Presentation by **Christine Durinx**, Managing Director VIB (BE)

Christine will talk about VIB and the initiatives that aim to boost the plant biotech ecosystem such as biotope ^{by VIB}, the agro-incubator and the statutory seat of EMPHASIS, as well as the work that contributes to the acceptance of AgBio innovations.

20.45-21:30 Dessert and coffee/tea buffet

08:30 Registration desk open

09:00-09:45 Plenary program

Keynote opening lecture

by **Henry Gordon-Smith**, Founder and CEO of Agritecture (US)

Henry Gordon-Smith is the Founder and CEO of Agritecture, the world's leading urban agriculture blog, consultancy, and farm planning SaaS. With over 12 years of experience in the field, he is a trusted advisor to corporations, investors, and new farmers on vertical farming feasibility, design, marketing, and due diligence. He is also a strategic advisor to several AgTech startups, such as Smallhold, and Foodshed.io, and a board member of Indoor Ag-Con, EFUA, and previously Teens for Food Justice. As a global keynote speaker, published opinions writer, and TEDx presenter, Henry shares his insights and vision on urban agriculture, water issues, and emerging technologies with diverse audiences across five continents.

09:45-10:30 Break

10:30-12:30 PARALLEL SESSIONS PART 1

1A. Precision breeding and -agriculture

Hosted by



Chair: **Jürgen Decloedt**, International Business Development at VITO Remote Sensing

Precision breeding and -agriculture techniques give us to meet sustainability goals with greater efficiency and accuracy of desirable outcomes in R&D and during the production of food crops. The advances in these new technologies like genome engineering and phenotyping will be addressed together with the challenges of implementation into practice.

Presentations:

- **Dr. Shizue Matsubara**, Researcher Forschungszentrum Jülich; ; CEPLAS - Cluster of Excellence on Plant Sciences (DE)
- **Dries Raymaekers**, Senior R&D professional VITO Remote Sensing (BE)
- **Dr. Sebastian Schultheiss**, Managing Director Computomics GmbH (DE)
- **Cédric Canovas**, VP of Data Science & Plant Science at Source.ag (NL)

10:30-12:30 **PARALLEL SESSIONS PART 1****1B. Emerging seed technologies and -production**

Chair: **Niels Kruize**, CEO MolGen

The growing demands for improved seeds of food, vegetables, flowers and other horticultural crops are driving the global seed industry. The scope of seed quality, on the other hand, will grow beyond the basic parameters to the ability to perform better under adverse growing conditions, supplement the nutrient deficiency in the soil, and withstand pests during seed germination and early growth stages. In this session novel approaches in seed enhancement, hybrid seed production and the use of biologicals will be discussed.

Presentations:

- **Patricija Gran**, PhD Researcher at Wageningen University & Research (NL)
- **Dr. Rik op den Camp**, Program Scientist at KeyGene (NL)
- **Benjamin Laga**, CEO and Founder Protealis (BE)
- **Dr. Ir. Jaap Vromans**, Manager Research Limgroup (NL)

12.30-13:30 **Lunch, networking and exhibition**13:30-15:30 **PARALLEL SESSIONS PART 2**

Chair: **An Michiels**, Director AgKnowledge Partnering (Belgium)

2A. Public-Private Partnerships

This session will focus on the role of public-private partnerships (PPP) in improving global food security, including translation of research to the Southern Hemisphere (e.g. Africa). How are programs like CropXR and PlantXR, Next Generation Crops and AgOne accelerating the development of resilient food crops? How are these partnerships build?

Chair: **An Michiels**, Director AgKnowledge Partnering (BE)

Presentations by:

- **Prof. dr. Guido Van den Ackerveken**, Scientific Director CropXR, Professor at Utrecht University (NL)
- **John 'Trey' Key**, Director, Business Development at Bill & Melinda Gates Agricultural Innovations (US)
- **Jonathan Jones**, Professor and Senior Scientist at The Sainsbury Laboratory (UK)
- **Ying Shao**, Co-Founder and CEO Plantik Biosciences (FR)

13:30-15:30 PARALLEL SESSIONS PART 2

2B. A plant based future

Hosted by



Chair: **Alec Hayes**, Head of Partnership and Innovation KeyGene USA

How is the industry shaping a plant based future? Find out what emerging companies and technologies are part of this future for the plant based production of proteins and ingredients. How to build new value chains with new partnerships for innovation, and impact for society.

Presentations by:

- **Prof. Dr. H.J. Dirk Bosch**, Head Section Applied Metabolic Systems at Wageningen University and Research (NL)
- **Dr. Marina Guillet**, CEO at Samabriva (FR)
- **Dr. Weslee Glenn**, Vice President of Innovation at Ayana Bio (US)
- **Guillaume Wégria**, CEO Fytekko (BE)

15:30-16:15 Break

16:15-18:00 Plenary Pitch program

The pitch program is supported by [biotope](#) ^{by VIB}, [CEPLAS](#) and [StartLife](#).

Early stage companies will get the possibility to pitch their innovative technology, -service or -product to an international audience from the international agri-food industry.

Pitching companies - Curated by StartLife, the leading agrifoodtech accelerator in Europe:

- 3PaTec (Germany)
- B-COS (Belgium)
- Biographica (United Kingdom)
- Cdotbio (Belgium)
- GreenGene (Korea)
- Institute of Biochemistry and Biotechnology, Martin Luther University Halle-Wittenberg, Section Microbial Biotechnology Charles Tanford Protein Center - Group of Prof. Behrens (Germany)
- NoSelf (Netherlands)
- Plense Technologies (Netherlands)
- Puxano (Belgium)
- Rainbow Crops (Belgium)
- S&dB (Netherlands)

18:00-18:45 Reception

19:00-22:00 Conference dinner

[Opera Gent](#) dates back to 1840 and is located in the historic centre of the city of Ghent. With its rich decorations, stately staircases and glittering chandeliers, it is a unique setting where we will enjoy a culinary delightful dinner.

Opera Gent
Schouwburgstraat 3
9000 Ghent - Belgium
(Visitor entrance via peristylum)

[Google Maps](#)

08:30 Registration desk open

09:00-09:45 Plenary program – keynote lectures

'Integral technology development: the future of crop improvement'by **Nathalie van Orsouw**, Vice President Technology Development KeyGene N.V. (NL)

KeyGene is a global research company and aims for the development and application of breakthrough technologies to improve a wide variety of crops. By operating in a KeyNovation ecosystem, in which our innovation-minded scientists engage with academic groups and technology providers, KeyGene develops innovations that have direct application in plant breeding.

This new era of crop breeding will be dominated by the integration of DNA & RNA technologies with metabolomics, proteomics, cell & tissue technologies and induction of new genetic variation, directed by data science for matchless decision-making in plant breeding through omics and phenomics data.

Examples will be presented, including innovations that enable ultra-high quality genome sequencing and assembly for understanding and using genetic variation, innovations based on NGTs to enable inducing new variation, and innovations that directly improve the breeding efficiency. Special emphasis will be paid to KeyGene's 2S1® graft hybrid development technology to combine the complex traits of two plant types to create amazing new possibilities for crop improvement.

Presentation by **Irene Sacristán Sánchez**, Head of Unit Biotechnology Directorate-General for Health and Food Safety European Commission

Recently the proposal on New Genomic Technologies (NGT) was adopted by the European Parliament. A crucial milestone in the process of developing new crops in the EU with the help of modern techniques, such as CRISPR-Cas. Irene will talk about these regulatory and strategic developments and what the implications are for innovations, intellectual property and the European breeding sector.

09:45-10:30 Break

10:30-12:30 PARALLEL SESSIONS PART 3

3A. Innovation and entrepreneurship

Hosted by



Chair: **Tom Greene**, Sr. Director External Innovation Investment at Corteva Agriscience (US)

Impact-driven innovation plays a critical role in accelerating the transition to sustainable food systems where start-ups play a very important role in shaping the innovation landscape in AgriFood. How are young entrepreneurs translating scientific inventions to applications and grow their business in a challenging and changing environment. What is the role of corporate venturing in supporting young companies and how are these larger companies maintain their innovation fitness.

Presentations:

- **Tom Greene**, Sr. Director External Innovation Investment at Corteva Agriscience (US)
- **Dr. Stefan Schwarz**, Head of Scouting & Licensing at KWS SAAT SE & Co. KGaA (DE)
- **Dr. Sumanta Talukdar**, Founder & CEO Gardin (UK)
- **Dr. Bruno Steinkraus**, Founder Soilytix GmbH (DE)
- **Laura Thissen**, Director at StartLife (NL) – panel member

3B. New DNA technologies and applications

Hosted by

Chair: **Luc Mathis**, CEO Meiogenix (France)

A biotechnology-driven perspective on crop development. What are the molecular strategies on designing reliance crops like plant genome and Artificial Intelligence driven protein engineering technologies. The session will also provide a platform for discussions on the potential challenges and opportunities that these technologies can bring to sustainable agriculture.

Presentations by:

- **Dr. Edgar Demesa-Arevalo**, Researcher at CEPLAS - Cluster of Excellence on Plant Sciences (DE)
- **Laurens Pauwels PhD**, Group leader - Expert Technologist at Crop Genome Engineering Facility (VIB-UGent Center for Plant Systems Biology) (BE)
- **Luc Mathis**, CEO Meiogenix (FR)
- **Elise de Reus**, Co-Founder at Cradle (NL)

12:30-13:30 Lunch, networking and exhibition**13:30-15:30 PARALLEL SESSIONS PART 4****4A. Reshaping the Ag value chain – the protein transition case**

Hosted by

**CEPLAS**

Cluster of Excellence on Plant Sciences

Chair: **Prof. Dr. Guido Grossmann**, Professor - Cell and Interaction Biology at CEPLAS (DE)

How is the industry reshaping itself to build a sustainable global Agri food system. Which innovations are needed and which partnerships are crucial for accelerating this change. In this session the interplay of technological innovations, business opportunities, investors will be addressed from a protein transition perspective.

Presentations by:

- **Dr. Jeffrey Rosichan**, Founder and Managing Director Tri-Ag Consulting LLC (US)
- **Anker Sørensen**, Vice President New Business at KeyGene (NL)
- **Prof. Sofie Goormachtig**, Group Leader Rhizosphere at VIB center of Plant Systems Biology (BE)
- **Jaap Strengers**, Managing Partner at Future Food Fund (NL)

4B. Adapting to evolving legislation and regulations

Hosted by **De Clercq&partners**
INTELLECTUAL
PROPERTY

Chair: **Thea van der Wijk**, Vice President Intellectual Property and Head of Legal Affairs at KeyGene (NL)

The agri industry is subject to a myriad of regulations across the globe, which play a crucial role in shaping its operations practices and Research and development. These regulations aim to ensure food safety, protect the environment, promote sustainable practices, and safeguard consumer interests.

In this session the current legal and regulatory landscape surrounding new technologies e.g. artificial intelligence tools and gene editing will be discussed. Together with the impact of these regulations on innovations in the plant breeding industry.

Presentations:

- **Lisa Zannoni**, Senior Regulatory Advisor at Norfolk Healthy Produce (US)
- **Tate Tischner**, Partner | Registered Patent Attorney at Troutman Pepper (US)
- **Dr. ir. Caroline Hennin**, European & Belgian Patent Attorney at De Clercq & Partners (BE)
- **Dr. Maarten Stuiver**, Head of Research Technology, Head of Disease Control BASF Innovation Center (BE)

13:30-15:30 VIB Agro-Incubator tour

The VIB Agro-Incubator is located just outside of Ghent and houses the Integrated Phenotyping for Sustainable Agriculture platform (IPSA), one of Europe's largest publicly available plant phenotyping facilities with a maximum capacity of over 16.000 plants. The tour will showcase the platform's automation and robotics, precision spraying cabinet and high-content imaging system. The Agro-Incubator also offers access to its additional greenhouses, fully equipped labs and co-working space, which can be used either on a project basis or for long-term rental. For more information, visit the Agro-Incubator website (<https://agro-incubator.sites.vib.be/en>).

Registration required to join the tour. Maximum number of places available.

15:30-16:15 Break**16:15-17:00 Closing conference program****‘Creating impact in biotech innovation’**

Impactful biotech startups are an essential part of the equation when exploring and marketing innovative solutions in the agrifood space. However, next to 'universal' startup challenges, these biotech successes of the future have specific needs: labs, greenhouses, IP & regulatory support, and significantly more money to get to a sustainable business. Hear from different perspectives how to really move the needle in this space.

With presentations by

- **Anouk Schoors**, Investment Director at The Nest Family Office (BE)
- **Annick Verween**, head of biotope ^{by VIB}
- Biotope portfolio companies

17:00-17:15 Closing ceremony and announcement**17:15-18:30 Closing conference reception**

Note: the organisation keeps the right to make changes to the programme at any time.