

SYMPOSIUM

'THE EVOLUTION OF FOOD: TOWARDS ANIMAL-FREE AND SUSTAINABLE TECHNOLOGY'

25.04.2022

MUSEUM OF NATURAL SCIENCES - BRUSSELS



**EUROGROUP
FOR
ANIMALS**





**MICHEL
VANDENBOSCH**

On behalf of GAIA it is my pleasure to welcome you to today's symposium on the evolution towards animal-free and sustainable food technologies. Together with Eurogroup for Animals GAIA offers the opportunity of an interdisciplinary dialogue between international experts on these novel food technologies. These technologies will pave the way to a slaughter-free society and lead us to a new era. Cellular meat will gradually replace conventional meat production.

Mankind will progressively come to adopt plant-based eating habits. In the best interest of humans and animals alike. The question is no longer if but how soon and to what extent this future scenario will become reality.

More than ever before in the history of humanity, a systemic change is vital to secure a livable future for our fellow human beings as well as for the other Earthlings.

Such a systemic change is what the Intergovernmental Panel on Climate Change (IPCC) is calling for in its third report, launched earlier this month. The IPCC recognises the significant benefits of a shift to plant-based diets for both human and animal welfare. The IPCC also acknowledges the positive impact of cellular agriculture.

A major shift to cellular aka cultivated meat and plant-based diets will drastically reduce the suffering and mass killings of farm animals that are currently taking place on an industrial scale worldwide. It will also lead to substantial decreases in greenhouse gas emissions from food production. It will enable us to produce food in a much more sustainable, ethically and socially sound and responsible way. These novel food technologies are potential game changers. Work in progress but we aren't there yet. And we're running out of time. That may be so, but optimism is a moral duty, isn't it?

Having said that, I am very thankfull to dr. Jane Goodall for having kindly accepted to virtually share her undoubtedly inspiring thoughts on today's subject.

May this symposium provide you with lots of inspirational and challenging food for thought. And hope for the future...

Michel Vandenbosch
President of GAIA





REINEKE HAMELEERS

I am delighted to welcome you to Europe's first-ever symposium on cultivated meat.

As the recent crises reminded us, the need to transform how we eat and produce is more urgent than ever.

The current food system is far from humane and sustainable: intensive livestock farming is inflicting immense animal suffering and incompatible with their basic welfare needs.

On top of that, the system is utterly inefficient and harmful to the planet. We're feeding animals to feed people, instead of using arable land to produce plant-based food for humans.

Consequently, the shift towards plant-based food and the exciting development of animal-free and sustainable food technologies is paramount. Cellular agriculture will create new possibilities to not only relieve the suffering of billions of animals but also mitigate climate change and produce food in more sustainable and sufficient ways.

It speaks volumes that the European Commission already identified the development of new meat alternatives as an important pathway to achieving the Commission's Food 2030 initiative to deliver a sustainable European food system.

The scientific support for a profound food system transformation is mounting. The latest IPCC report on climate change mitigation, launched this month, recognises that food technologies such as cultivated meat can bring substantial reductions in greenhouse gas emissions from food production and lower the land, water and nutrient footprints while at the same time address animal welfare concerns.

Indeed, we need to accelerate the transition to end animal suffering and to ensure a liveable future for humans. Together with GAIA, I am thrilled to co-host this symposium and explore how cellular agriculture can become the new normal. Cellular agriculture is an important piece in the puzzle of the urgently needed food system transformation.

Reineke Hameleers
CEO, Eurogroup for Animals

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PROGRAM

25.04.2022

11:00

REGISTRATION & LUNCH

12:30

WELCOME

Michel Vandenbosch, President GAIA
Reineke Hameleers, CEO Eurogroup for Animals

12:45

KEYNOTE BY DR. JANE GOODALL

13:10

INTRO TO CULTURED MEAT AND STATE OF THE TECHNOLOGY

Robert E. Jones, Head of public affairs at Mosa and president of
Cellular Agriculture Europe

13:35

WHAT ARE THE ENVIRONMENTAL AND SOCIAL BENEFITS/CHALLENGES?

Pelle Sinke (CE Delft)
Prof. Carla Forte Maiolino Molento (University of Paraná)

14:20

PLANT-BASED MEATS IN CHINA: A CROSS-SECTIONAL STUDY OF ATTITUDES, BEHAVIOURS, AND PERSONAS

Jah Ying Chung (Hong Kong, China)

14:35

COFFEE BREAK

14:55

PRECISION FERMENTATION IS THE THIRD PILLAR OF ALTERNATIVE PROTEIN IN CHINA, NEXT TO CULTURED MEAT AND PLANT-BASED MEAT REPLACERS

Elsa Lauwers, CSO Paleo

THE EVOLUTION OF FOOD: TOWARDS ANIMAL-FREE AND SUSTAINABLE TECHNOLOGY

15:20

CELLAG IS FARMING CELLS

Ira van Eelen Co-founder & CEO of KindEarth.Tech
CellBased Foodtech Board Member | Founder of ToothCamp
NextNatureNetwork Fellow

15:40

WHAT DO CONSUMERS WANT?

Chris Bryant, PhD. Director, Bryant Research Ltd

15:55

PANEL DISCUSSION: WHAT DO OUR CUSTOMERS WANT?

- Chris Bryant
- Elsa Lauwers (Paleo)
- Inge Ooms (Imperial Meat Products – Aoste)
- Hélène Miller (Aleph Farms)
- Frederic Vermeiren (Colruyt)

16:35

HOW DO WE SELL IT?

Gwenn Nevelsteen, CEO and Founder Untitled Workers Club

16:50

CONCLUSIONS

Philip Lymbery, CEO of Compassion in World Farming

17:00

COCKTAIL

18:30

MUSEUM VISIT

18:30

WALKING DINNER

BIOGRAPHY SPEAKERS



**PELLE
SINKE**

Pelle Sinke is an LCA specialist at CE Delft environmental consultancy. He has been extensively working with companies and researchers in the cultivated meat field to conduct environmental assessments. With increasing amounts of primary data from this fast-developing field, these assessments represent a new stage in understanding life cycle impacts of cultivated meat.



**JANE
GOODALL**

Jane Goodall, DBE is an ethologist and environmentalist, founder of the Jane Goodall Institute and a United Nations Messenger of Peace. Today there are 30 Jane Goodall Institutes, including the Jane Goodall Institute Belgium that support JGI's core programmes. Dr. Goodall travels the world, in person or virtually, speaking about the threats facing chimpanzees and other animals, environmental crises, and her reasons for hope. Dr. Goodall has received countless awards and honorary degrees for her ground-breaking work. She was recently appointed advocate for COP26 and is a UN Messenger of Peace and Dame Commander of the British Empire.

Dr. Goodall speaks about the cultivated protein story in the movie 'Meat The Future'

Goodall said: "*I'm excited about the documentary because it is solution-focused. The film proposes a way forward, to reduce methane, to reduce water and land use, to lessen the suffering of animals, and to prevent future viral outbreaks.*"



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**ROBERT
E. JONES**

Robert E. Jones is Head of Public Affairs for Mosa Meat, the Dutch food technology startup that pioneered the first cell-cultured beef in the world. His role at the company is to work with stakeholders that impact regulatory and public policy decisions that impact the introduction of cultivated meat. Additionally, he has the great honor of serving as the inaugural President of Cellular Agriculture Europe, the continent's first trade association for cellular agriculture companies. Based in Brussels, it will represent 14 startups across Europe and Israel that will seek Novel Foods approval for cellular agriculture products.



**CARLA
FORTE MAIOLINO
MOLENTO**

Carla Forte Maiolino Molento is a professor in Animal Science and Veterinary Medicine Program at the Federal University of Paraná in Brazil. She focusses on the substitution of the use of animals for human purposes, more specifically the farming of animals for the production of protein for human consumption. Together with her colleagues she conducted a study on the expected social impact of cultivated and plant-based meats in Brazil, United States and Europe.

MUSEUM HIGHLIGHTS

The Royal Belgian Institute of Natural Sciences is much more than a museum. It is a world-class research institute with more than 250 scientists and scientific collaborators that manages world-class natural sciences collections. The Museum of Natural Sciences has several permanent exhibitions and a current temporary exhibition about the T-rex.

DINOSAUR GALLERY

With a surface area of over 3000 m² and dozens of specimens, the Dinosaur Gallery is the largest room in Europe entirely devoted to dinosaurs, their discovery, lives and evolution.

GALLERY OF HUMANKIND

From Sahelanthropus to *Homo sapiens*, from embryo to adult: explore the human evolution and body in this gallery. Fossils, 3D reconstructions, interactive tools and simulations will take you down the branching paths of 7 million years of evolution.

LIVING PLANET

The Earth is swarming with life. Living Planet represents more than 850 specimens displayed on 2,000m², 3D models you can touch, visual media, audio interviews and interactive, recreational, and educational animations.

GALLERY OF EVOLUTION

Follow the adventure of life on earth, from the very first forms of primitive life, up to human beings. You will travel through billions of years of the Earth's history, stopping off at six key moments in the evolution of life on earth.

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BIODIVERCITY

The city is not just walls and concrete. It is often unexpectedly full of animal life and vegetation! Everywhere in BiodiverCITY, there are specimens, photos, films, and interactive installations that explain what biodiversity in the city entails.

MOSASAUR HALL

At the time when the tyrannosaurs ruled the continents, gigantic predatory lizards roamed the seas, also known as the mosasaurs. Here, you can admire a 12.5-metre-long Belgian specimen, understand the mechanics of how they swam, and much more.

250 YEARS OF NATURAL SCIENCES

This room contains the fantastic results of memorable scientific expeditions, unusual excavations, moving events and remarkable specimens that trace the evolution of the museum.

MINERAL HALL

Here you can admire some of the finest pieces of the geological collection. It includes tens of thousands of twin crystals, 500 cut stones, nearly 140 meteorites, wonderful fluorescent minerals and even a very rare sample of lunar rock.

The Museum galleries only display a fraction of the wealth of this Institute: they have an estimated 38 million specimens in their vaults. That makes them one of the ten most important natural history collections in the world, as well as the largest in Europe after Paris and London.

BIOGRAPHY SPEAKERS



**IRA
VAN EELEN**

Ira Van Eelen is proud to be able to work on two passions. Cultured meat as legacy from her father and preventive oral healthcare as gift to her son. Ira's father, Willem van Eelen, was one of pioneers of the creation and production of cultured meat. Ira is the chairman of the 'Invitromeat Foundation' founded by her father in 2002, member of JUST's advisory board, Senior consultant of Cellular Agricultural Society CAS, CEO and co-founder of KindEarth.Tech, co-founder of RESPECTfarms and writer of the closing words to the Dutch, French and German translation of Paul Shapiro's book "Clean Meat".



**JAH YING
CHUNG**

Yah Ying Chung is a social and market researcher. Her recent work focuses on the animal welfare and alternative protein industry in Asia, including consumer studies on attitudes towards plant-based products and farmed animal welfare in China, as well as landscape analyses of animal advocacy across Asia. She is currently studying the intersection of farmed animal welfare and organizational decision-making at the University of Sydney, aiming to apply academic research and entrepreneurial experience to develop effective tools for animal advocacy in Asia.

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**ELSA
LAUWERS**

Elsa Lauwers is Chief Scientific Officer at Paleo. She leads R&D efforts to develop high functionality ingredients for fish and meat replacers, using precision fermentation. As a molecular biologist, Elsa has 15 years of experience using yeast genetics to understand the biology of proteins and lipids. Prior to joining Paleo, she also served as Senior Research Manager at the life science research institute VIB.



**CHRIS
BRYANT**

Chris Bryant is a social scientist, obtained a PhD and is an expert on alternative protein markets and marketing. He has published several papers on consumer acceptance of cultivated meat, plant-based meat, and fermentation-derived animal product alternatives. Through his company, Bryant Research Ltd, he works with alternative protein companies and non-profits, including Ivy Farm Technologies, Aleph Farms, Wild Type, and the Good Food Institute.

BIOGRAPHY SPEAKERS



**GWENN
NEVELSTEEN**

Gwenn Nevelsteen has been a strategic partner since 2012 of Untitled Workers Club, an agency that helps build brands. As a brand, it is a challenge to connect with increasingly diverse target groups in an authentic way. Untitled Workers Club helps brands with this challenge in a variety of sectors, ranging from food, fashion and retail to culture and the service sector. Untitled Workers Club has been assisting GAIA with its communication campaigns since 2016. In addition to her position at Untitled Workers Club, Gwenn has built quite a few brands of her own: the racing bike brand Jaegher, the fashion brand Cycloclub Marcel, cycling clothing Rytm and the Art Securit Token platform Rubey.



**PHILIP
LYMBERY**

Philip Lymbery is Global CEO of Compassion in World Farming, visiting Professor at University of Winchester, president of Compassion in World Farming International, founding board member of the World Federation for Animals and UN 2021 Food Systems Summit Champion.

Philip is an ornithologist, dedicated animal advocate and award-winning author. His critically acclaimed books, 'Farmageddon: The true cost of cheap meat' and 'Dead Zone: Where the wild things were' were the first mainstream books to show factory farming as a major driver of wildlife declines and at the heart of what needs to change to stave off the climate, nature and pandemic emergencies now facing humanity.

BIOGRAPHY PARTICIPANTS PANEL



**HELENE
MILLER**

**ALEPH FARMS
& CAE**

Helene Miller is the Head of European Affairs at Aleph Farms and Vice-President of Cellular Agriculture Europe. Prior to Aleph Farms, Helene has worked as a French lawyer and a consultant for about 10 years for major law firms in the regulatory Life Sciences area. Helene is a graduate of the Private Law Master 2 (University La Sorbonne, Paris 1, France) and Bioethics and Health Law Master 2 (University Paris-Est Créteil, Paris 12, France).



**ELSA
LAUWERS**

PALEO

For bio see page 11



**CHRIS
BRYANT**

For bio see page 11

BIOGRAPHY PARTICIPANTS PANEL



**INGE
OOMS**

**IMPERIAL MEAT
PRODUCTS & AOSTE**

Inge Ooms is Marketing Director and in charge of Innovation in the Benelux for the different brands like Aoste, Marcassou, Stegeman, Imperial. She is also in the lead of a multi-disciplinary Alternative Protein team within the company. Before joining the food business, Inge Ooms has worked in Marketing and Sales functions in the pharmaceutical and personal care business in local and international functions. "Always prepared to do better" is not only the brand claim of Aoste, but represents very well the purpose she has set herself. Her personal drive in her current role is to bring change from within, to leverage the positives from the past to create a better future. She is here today because she is very much aware that there is still a lot to do and to learn. So we always need to keep our mind open, learn from mistakes, improve and reach out. Because we can only transform together and build on each other's strengths , knowledge and experience.



**FREDERIC
VERMEIREN
COLRUYT**

Frederic Vermeiren has a background in Bioscience Engineering at the University of Ghent and started his carrier at Colruyt Group in 2010 in the department of Energy, Environment & Advanced technologies. Frederic was involved in the development of the Environmental Footprint Guidelines for the Retail Sector (OEF, PEF, EU Single Markets for Green Products) and initiated several smart farming pilots like indoor vertical farming for Bio-Planet and integrated aquaculture projects in the Belgian North Sea. In 2017, together with Colruyt Group and other pioneering companies Frederic raised the Blue Cluster, were he is an expert member of the Board. Since 2019, Frederic is head of the R&D Innovation Food department of Colruyt Group leading innovations with focus on the Future of Food, Sustainable & Healthy Diets (e.g. Alternative Proteins), Smart Packaging, Circular Food Use and Convenience. Frederic is involved in several collaborations with start-ups and Venture Capital Fund to accelerate the transition to a more Sustainable Food System.

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