



14TH WIEF GLOBAL DISCOURSE ON

CELLULAR AGRICULTURE:







The World Resources Institute estimates that global demand for beef and meat could increase by 88% between 2010 and 2050, driven by a growing middle class and world population, which is expected to reach 10 billion by 2050. Due of raising concerns on human health, food security, environment as well as ethics, there is now an urgent need for methods of producing more environmentally friendly, nutritious, and considerate animal welfare.

One such method is the use of cellular agriculture. It is the production of animal-sourced foods from cell culture using a combination of biotechnology, tissue engineering, molecular biology and synthetic biology to create and design new methods of producing proteins, fats and tissues that would otherwise come from traditional agriculture.

It has been reported that the global cellular agriculture market size was valued at USD 133.4 billion in 2021 and projected to reach USD 515.24 billion by 2030.

Presently companies and market players around the world are exploring a wide range of ways where cellular agriculture can be used to create a more sustainable food system. These include the production of beef, fish, milk, collagen, gelatin, chocolate, coffee and many more.

The discussion will highlight:

Recent and anticipated future developments in the industry

Issues on sustainability, affordability and safety concerns Is cellular agriculture actually a feasible solution for society?



Market opportunities for start-ups, SMEs and other stakeholders Investments required to achieve economies of scale

Programme

Time

3:00_{PM}

14TH WIEF GLOBAL DISCOURSE ON CELLULAR AGRICULTURE: THE FUTURE OF FOOD

SPEAKERS

- Dr Dalal AlGhawas
 Founder and CEO, SWAPAC, State of Kuwait
- Dr Mohammad Naqib Hamdan
 Senior Lecturer, Academy of Islamic Civilisation,
 Universiti Teknologi Malaysia, Malaysia
- **Dr Yuki Hanyu**Founder and CEO, IntegriCulture Inc., Japan

MODERATOR

 Prof Dato' Dr Nor Shahidah
 Medical Director, 23 Century International Life Science Centre Sdn Bhd, Malaysia

3:45PM

Question and Answer Session

Role Players



Dr Dalal AlGhawas

Founder and CEO, SWAPAC, State of Kuwait

Dr Dalal AlGhawas is the Founder & CEO of SWAPAC, an agrifood consultancy focused on food security and bridging the commercial and cultural worlds in the GCC and Asia Pacific.

She is a specialist in future food technologies. SWAPAC invests in research, commercialization, capital and partnership to support high growth startups, and specialises in food safety, biotechnology, diagnostics, clinical research and public health.

She established the first food technology accelerator in Hong Kong and world's first alternative protein accelerator. She has worked with more than 100 global technology startups. She primary focus is on plant-based protein alternatives, cellular-agriculture, sustainability, med-tech and software.

Dr Dalal is an international thought leader in the food technology space.

Dr Dalal received her PhD in Food Science and Food Biotechnology from the Asian University of Hong Kong with publications in top tier peer reviewed journals, startup manuals and industry reports.



Dr Mohammad Naqib Hamdan

Senior Lecturer, Academy of Islamic Civilisation, Universiti Teknologi Malaysia, Malaysia

Dr Mohammad Naqib Hamdan is a senior lecturer at the Academy of Islamic Civilisation, Universiti Teknologi Malaysia.

His main focus lies in bridging the gap between Islamic research and the advancements in science and technology particularly in respect of food industries and medical field. He is also exploring the Islamic perspective of Artificial Intelligence and its implications on Muslims.

He started his research on cultured meat from Islamic perspective in response to the introduction of the first cultured meat burger by Professor Mark Post of Maastricht University. In 2019, he was invited by Professor Mark Post to the University to present his insights on the Islamic perspective of cultured meat.

Dr Mohammad Naqib has published many articles related to the scientific and technological advancements from Islamic perspective.

Dr Mohammad Naqib received bachelor's degree in Syariah from al-Azhar University, Egypt, and a master's degree and a PhD from Universiti Malaya in Kuala Lumpur.



Dr Yuki Hanyu

Founder and CEO, IntegriCulture Inc., Japan

Dr Yuki Hanyu is the Founder and CEO of IntegriCulture Inc. of Japan, a cellular agriculture platform company developing cell-based meat and the technologies needed to produce it efficiently at scale. The company develops a B2B infrastructure that enables large and small entities of the food, cosmetics and materials sectors for cellular agriculture, by providing them necessary hardwares, cells, cell-cultured serum, food-grade basal medium and other related services.

He is also the Founder of the "Shojinmeat Project", the world's citizen-science non-profit organization dedicated to advancing an open-source, inclusive future for cellular agriculture in Japan.

Dr Yuki Hanyu received his Ph.D from Oxford University on 2010.



Prof Dato' Dr Nor Shahidah (Moderator)

Medical Director, 23 Century International Life Science Centre Sdn Bhd, Malaysia

After serving in University Malaya Medical Centre, Dato' Dr Nor Shahidah left in 1994 to set up Specialty Laboratories USA's test lab in Malaysia.

She was a Technical Advisory Board Member for the Drugs for Neglected Diseases Initiative in Geneva and represented Ministry of Health Malaysia at WHO and European Commission.

She is a Fellow of Academy of Medicine of Malaysia and was Past President of Asia Pacific Travel Health Society. She was involved in international trials for the treatment of chronic hepatitis B & C.

She has addressed conferences on Anti-Aging, Aesthetic Medical Practice and Infectious Diseases, and published her work in medical journals.

Dato' Dr Nor Shahidah obtained her MBBS from University of Malaya and a Master's degree from London School of Tropical Medicine and Hygiene, UK. She was a recipient of the British Commissioner's Research Award for her work in dengue vaccines. She is a Member of the Royal College of Pathologist and was later awarded a Fellowship.

An Initiative By

WIEF EDUCATION TRUST (WET)

WIEF Education Trust (WET) was launched during the 2nd WIEF in Islamabad in 2006, on the premise that education is the most important pillar in any society and that the fate as well as future of a community lies in the quality and availability of education for its people. WET aims to garner support and resources from the Muslim World to provide education opportunities to the people.

Since then, WET has carried out the unique WIEF Global Discourse Series that addresses topical issues relating to business and economics, as well as scientific and technological advancement crucial to the development in the Muslim World.

This programme has gained increasing popularity with the public and private sectors as well as academia. It attracts local and international award winners as well as high calibre speakers to the discourse.

Over 1,390 participants attended WET programmes from 35 countries.

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35 COUNTRIES



1,390 PARTICIPANTS



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