

## Association for European Life Science Universities (ICA) Rectors and Deans Forum 2021

# The Role of Life Science Universities in Transitioning to Climate Neutrality and Open Science

to be held on Thursday 21 and Friday 22 October 2021 at the Faculty of Bioscience Engineering, KU Leuven, Belgium

https://www.ica-europe.info/forum-focus-home

#### The goal of the ICA's Rectors and Deans Forums

This annual ICA Forum for Rectors, Deans and senior management of agricultural and life science universities in Europe aims to provide these university decision makers from ICA's member universities with the opportunity to meet, to discuss current issues in the agricultural and life sciences and to exchange views on issues with relevant stakeholders in industry, government and NGOs.

#### A Forum Focus 2021

Addressing the EU's climate objectives, ensuring food security and the economic sustainability of the actors in the farm to fork food system.

<u>The EU Commission's proposal</u> is to cut greenhouse gas emissions (GHG) by at least 55% compared to 1990 level by 2030 sets Europe on a responsible path to becoming <u>climate neutral by 2050</u> - no net emissions of greenhouse gases.. Agriculture accounts for 12% of the GHG emissions in Europe, and of that 70% is related to the animal sector. The food system as whole divides emissions into those from food production, food processing and marketing, and food consumption almost equally.

The European Green Deal, launched in December 2019, is the prevailing growth strategy of the EU conceived to help cut emissions while creating jobs. Its application to farming and food systems is detailed in the Bioeocnomy strategy, Farm to Fork Strategy, and the Biodiversity Strategy. Ambitious sustainability goals for agriculture are proposed. The Farm to Fork Strategy, aims by 2030 at reducing the use of chemical pesticides and antimicrobials by 50%, nutrient losses by at least 50% with a 20% reduction in fertiliser use, restoring ecosystems and biodiversity, developing deforestation-free value chain, reaching 25% of land areas devoted to organic farming.

With the focus at the Forum on climate neutrality a number of issues addressed in the EU Green Deal and the Farm to Fork Strategy— those relating to biodiversity, animal welfare, and some aspects of the protection of the environment — will not be addressed explicitly. In addition, the impact of rising temperatures and changing weather patterns on maintaining the water supply to crops and grassland is of concern in relation to the EU's climate objectives whilst ensuring food security. Thus, agriculture and food systems are deeply involved in both adaptation to climate change and its mitigation.

#### **Open Science**

The Open Science is the overarching theme which encompasses open access to scientific publications, open data, open education and sometimes citizen science. Open access to scientific publication and research data has been making progress over the past twenty years. The recent <u>EUA report</u> suggests that open access to scientific publications and research data has evolved from a "nice to have" to a "must have". The EUA survey showed there is a gap between the recognition given to the strategic importance to open science and its implementation on the ground.

There is a need for senior managers at universities to improve the understanding of the benefits, challenges, costs and hurdles in implementing access to open science at all levels in their university. The widely implemented opportunity to the shared access of scientific publications and research data across the research community between and from life science universities will greatly contribute to the ambitions of the EU Farm to Fork Strategy by 2030 and the achievement of climate neutrality in Europe by 2050.

#### B Aims of the Forum

The Forum will explore the challenge of developing food systems which will result in the reduction in GHG emissions from agriculture through delivering more food from crops, less food from animals with a consequent reduction in globally required land area for food production and an increase in land for re-afforestation for greater carbon sequestration.

The implementation of such food systems depends not only on the science and technology but also on maintaining the economic viability of the industries and promoting social change in the consumption of sustainable diets.

What are the opportunities and benefits for substituting spatially extended and linear food systems with local circular food systems, whilst at the same time ensuring food security in Europe? A circular food system produces healthy food using natural, regenerative, soil-supporting growing practices. Any by-products or waste can create additional new food, fabrics or bioenergy inputs

In support of the aim of developing innovative food systems through research and innovation the Forum will also explore strategies for the effective implementation of open access to scientific publications and data in our universities.

In all Sessions the keynotes will highlight the opportunities for life science universities to engage with the challenges and issues raised. The discussion will highlight the opportunity for ICA to engage in Brussels and with our stakeholders for the benefit of ICA's members in contributing to the achievement of the EU Farm to Fork Strategy by 2030 and climate neutrality in Europe by 2050.

#### D Expected outcomes

The delegates will take back to their universities their reflections on

- their university's policy on research addressing the multiple dimensions of the bioeconomy to deliver outcomes to support the achievement of the EU Farm to Fork Strategy by 2030 and the need to reach climate neutrality by 2050
- the scope of their current degree programmes to address the multiple challenges of a sustainable bioeconomy
- their current strategic approach and implementation of open science in their institution

#### **E** Target Audience

The forum is primarily aimed at Rectors, Presidents, Deans and Senior Management in agricultural and life science Universities. In addition, academic/faculty staff and degree programme coordinators are encouraged to participate.

#### F Forum Format

Each Session of the Forum theme will be addressed by keynote speakers followed by small round table breakout groups to discuss the issues raised, with a concluding report from the breakout groups of the issues raised in the final plenary session.

#### **G** Outline Programme

#### **WEDNESDAY 20 October**

Location: Irish College Leuven, Janseniusstraat 1, Leuven

| 16.15 | Coffee - Registration   |
|-------|---|
| 17.00 | ICA General Assembly  |
| 19.00 | Forum Welcome Reception – walking dinner following the ICA General Assembly |

#### **THURSDAY 21 October**

Location: Faculty Club, KU Leuven, Groot Begijnhof 14, 3000 Leuven

### Session 1 & 2: Scoping the challenge and opportunities for change in European food systems

| 09.00 | Welcome to the Forum   |
|-------|--|
| 9.10  | Introduction to Session 1  |
|       | Chair: Jos Van Orshoven, Dean Bioscience Engineering, KU Leuven  |
| 9.15  | Keynote 1 Characterisation of the GHG emissions in food systems - agriculture, the food value and logistics chain, and in food consumption.  Pete Smith, Institute of Biological and Environmental Sciences, School of Biological Sciences, University of Aberdeen, UK |
| 9.45  | Keynote 2 Stimulating consumers to make dietary choices to eat sustainably in the diverse landscape of European culinary cultures Liesbet Vranken, Department of Earth and Environmental Sciences, KU Leuven, BE   |
| 10.15 | Keynote 3 Resourceful with food contributing to climate neutrality: reduction of food waste and energy saving in the food value chain Toine Timmermans, Wageningen Food & Biobased Research, Wageningen University and Research, NL                                    |
| 10.45 | Coffee   |
| 11.15 | Keynote 4 The potential for carbon sequestration in the soil and by re-afforestation of land released from animal production  Jean-Francois Soussana, National Research Institute for Agriculture, Food and Environment, FR  |
| 11.45 | Discussion   |

| 12.30 | Lunch  |
|-------|--|
| 13.30 | Introduction to Session 2  Chair: Alex Evans, Former Dean of Agricultural Science & Head of UCD School of Agriculture and Food Science, University College Dublin.   |
| 13.45 | Keynote 5 EU vision and policies toward climate neutrality for the land sector and the role of the CAP policy in ensuring the viability of farmer's income and food security Nicola Di Virgilo, Directorate-General for Agriculture and Rural Development, EU Commission, Brussels, BE |
| 14.15 | Keynote 6 Helping farmers mitigate climate change - the multiple roles of agricultural inputs in managing the carbon footprint from production to application Petra Laux, Head of Business Sustainability, Syngenta Crop Protection, Basel, Switzerland                                |
| 14.45 | Coffee   |
| 15.15 | Breakout discussions groups  |
| 16.15 | Plenary Report back  |
| 16.45 | Panel: Four short interventions from ICA members from different regions of Europe (10 mins each).  How my university will engage with society through education, research and outreach   |
|       | to encourage the desired transition to climate neutrality.   |
| 17.30 | CLosure  |
| 19.00 | <b>Reception offered by the City of Leuven</b> and Welcome by Alderman David Dessers (Alderman for Agriculture, Climate and Sustainability) at Leuven Town Hall  |
| 20.00 | Forum Dinner at Restaurant Tafelrond, Grote Markt 5, Leuven  |

#### **FRIDAY 22 October**

Location: Faculty Club, KU Leuven, Groot Begijnhof 14, 3000 Leuven

#### Session 3. Open Science and implications for Life Science Universities

Theme: Open Science is the overarching title, under which is Open Access, Open data, Open Education and sometimes also Citizen Science

| 9.00 | Introduction to Session 3   |
|------|---|
|      | Chair: Arthur Mol, Rector Magnificus Wageningen University and Research (WUR)   |
| 9.10 | Keynote 1 The grand challenge to deliver the European Open Science Cloud Karel Luyben, Rector Magnificus Emeritus at the Delft University of Technology |

| 9.50  | Keynote 2 Open Science to deliver on the grand challenges Kostas Glinos, Head of Unit for Open Science at European Commission  |
|-------|--|
| 10.30 | Coffee   |
| 11.00 | Keynote 3 The experience of my university in addressing the introduction of an Open Science strategy and its implementation.  Anna Lundhagen, Pro Vice-Chancellor for Collaboration and Environmental Monitoring and Assessment, Swedish University of Agricultural Sciences (SLU) |
| 11.40 | Breakout discussions   |
| 12.30 | Plenary Report back  |
| 13.00 | Closure and Lunch  |

#### H Conference Venue:

Faculty Club, KU Leuven, Groot Begijnhof 14, 3000 Leuven

#### I Registration

Please register online for the ICA Forum at <a href="https://www.ica-europe.info/registration-forum">https://www.ica-europe.info/registration-forum</a>

The Registration fee for ICA Members is 500 € for the first registration from a university, the fee for additional registrations from the same university is  $450 \, \text{€}$ . For non-ICA members the registration fee is  $650 \, \text{€}$  and  $600 \, \text{€}$  respectively. If a registered non-member's institution becomes a member of ICA in 2021 the membership subscription for 2022 will be reduced by  $150 \, \text{€}$ .

The deadline for registration is 24 September. Registration cannot be cancelled free of charge after 10 October.

The Registration fee includes:

All meals from the start of the Forum with the Reception on the evening of Wednesday 20 October until and including lunch on the Friday.

Registration is managed by the ICA Secretariat. The ICA Secretariat will send you an invoice once the Secretariat has received your registration form.

#### J Book your Hotel

Rooms have been reserved at several hotels. See the Forum website <a href="https://www.ica-europe.info/book-your-hotel">https://www.ica-europe.info/book-your-hotel</a> for details of how to book and the deadline for booking.

#### **K** Forum Organising Committee

Jos Van Orshoven, ICA Board & Dean Bioscience Engineering, KU Leuven, Simon Heath, ICA Secretary General, and Arthur Mol, ICA President & Rector Magnificus Wageningen University and Research (WUR)