



2025



FINAL PROGRAMME

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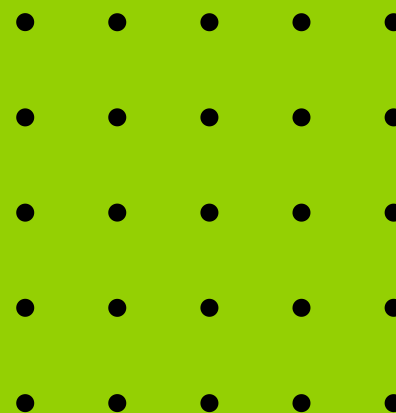
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Plant breeding
innovations are
unlocking the future
of food security and
biodiversity protection.



Welcome Message

It is our great pleasure to welcome you to ISBR 2025 - our 17th ISBR Symposium in the beautiful town of Ghent.

The Symposium features a diverse lineup of outstanding keynote and plenary speakers, complemented by multiple in-depth parallel sessions and workshops, as well as Pecha Kucha and poster sessions. You will experience a broad program that explores many aspects of the development and use of biotechnologies for sustainable development, ranging from the latest scientific discoveries in plant, animal and microbial research through to communicating with the public and addressing global regulatory challenges. We aim to provide new insights, raise awareness of challenges related to the adoption of new technologies and propose solutions on how to best advance the application of bio-innovation. The involvement of experts from different stakeholder groups including academia, government bodies, technology developers and users, as well as risk assessors and regulators, is key to this endeavour and again features at this symposium.

Many people have been involved in organizing the symposium and developing the program. I would like to thank all of them for their hard work and our numerous sponsors for their generous support of our activities. Most importantly, I would like to thank you as registrants for your participation. In addition to the structured scientific program, I hope you will also find time to engage informally, learn from each other's experiences, and catch up with old friends or make new ones.

Let's all work together to make the 17th ISBR Symposium another memorable success!



Joerg Romeis
President ISBR



Jennifer Anderson
Program Committee Chair



Marc Heijde
Local Organizing Committee Chair

Thank you to our sponsors, exhibitors and supporters of ISBR

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innovation

CropLife Europe is committed to expanding the farmer's toolbox with cutting-edge agricultural innovations from biopesticides, digital and precision farming to plant biotechnology traits and conventional pesticides. Together they support sustainable and productive farming.

Despite the availability of advanced technologies, excessive regulatory hurdles are preventing farmers from accessing the latest solutions they need to thrive.

To ensure European agriculture remains competitive and resilient, we must streamline regulatory processes that currently hinder innovation from reaching the field.

To this end, we call for:



A SCIENCE-BASED AND PREDICTABLE FRAMEWORK

Rules must be proportionate, science- and risk-based, grounded in the latest scientific consensus and designed to be future-proof. Outdated, overlapping or redundant requirements should be removed where they add no safety value.



EFFICIENT AND TRANSPARENT PROCESSES

Clear legal timelines and adherence as well as responsibilities and consistent enforcement of existing rules are needed for farmers, innovators and regulators to know what to expect.



TIMELY ACCESS FOR FARMERS

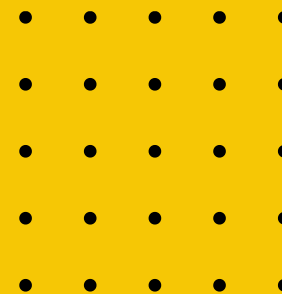
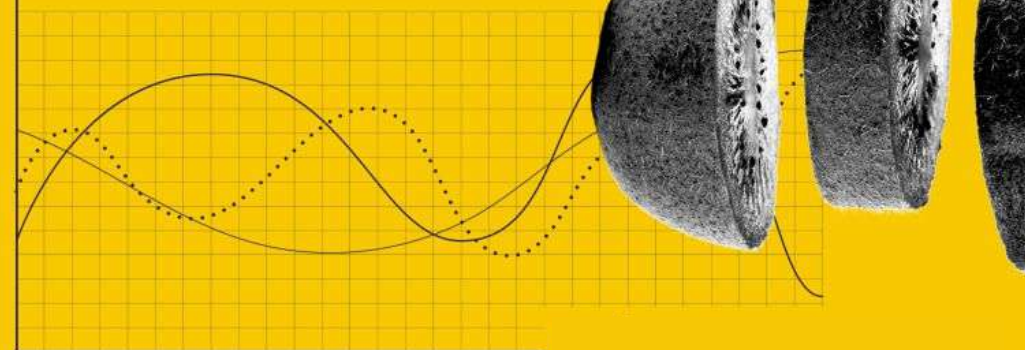
Approval processes should enable timely access to innovative tools so farmers can stay competitive and continue to produce in accordance with the EU's goals.

CropLife Europe represents sustainable crop protection solutions: innovative and science-based, our solutions keep crops healthy and contribute to providing Europeans with the safe, affordable, healthy, and sustainable food supply.

croplifeeurope.eu

Farmers are rising to the
climate challenge.

Agricultural innovation
is on their side.



Programme at a Glance

Time	SUNDAY, 2 Nov 2025	MONDAY, 3 Nov 2025	TUESDAY, 4 Nov 2025	WEDNESDAY, 5 Nov 2025	THURSDAY, 6 Nov 2025
Pre-Morning		REGISTRATION			
Morning sessions		WELCOME & OPENING ADDRESS			
		Plenary session I: Advancing Public Understanding and Support for Bio-Innovation	Plenary session II: Exploring Scientific Advancements, Opportunities, and Challenges in Bio-innovation	Plenary session III: Governance, Policy, and Regulatory Frameworks: Exploring the global landscape and impact on bio-innovation	Plenary session IV: Enhancing the potential of bio-innovation for a sustainable future
		MORNING COFFEE BREAK			
		Plenary session I (cont.)	Plenary session II (cont.)	Plenary session III (cont.)	Plenary session IV (cont.)
Afternoon sessions	REGISTRATION	LUNCH			** Closing session **
		Parallel Mon 1: Plant Breeding Innovation: Enabling applications and regulatory frameworks (Chair: Raymond Dobert)	Workshop 1: Government perspective on implementation of genome edited plant regulatory policies: Challenges and solutions (Organized by Jean-Paul Judson)	Parallel Wed 1: Safety considerations for agricultural microbial products derived from new genomic techniques (NGTs) (Chair: Andrew Roberts, Natasha Dixon)	Join us for a visit at the VIB & BASF facilities or the VIB field trial location! VIB and BASF are offering you an exclusive opportunity to visit some of their facilities on Thursday, Nov 6, 2025. These two tour options are designed to give you a first hand look at how plant biotech research is performed in containment facilities and on the field.
		Parallel Mon 2: Coordinating capacity building efforts in biosafety in plant biotechnology for the global south (Chair: Marc Heijde)	Workshop 2: Ethics and evolution workshop: considerations for human intervention; (Organized by Detlef Bartsch, René Custers, Peter Thygesen)	Parallel Wed 2: Strategies for Modernizing Biotechnology Regulatory Frameworks (Chair: Bill Doley)	
		Parallel Mon 3: Data Transportability of Confined Field Testing: Current status of discussions and future prospects (Chair: Shuichi Nakai)	Workshop 3: Examples of Regulatory Modernization for GM Crops; (Organized by Abby Simmons)	Parallel Wed 3: Innovation and modernization on the safety assessment of newly expressed proteins in Genetically Modified (GM) Crops (Chair: Tao Geng)	
		Parallel Mon 4: Global Status of Animal Biotechnology Regulations (Chair: Alison Van Eenennaam)	Workshop 4: AI-Driven innovations: Potential for risk analysis in biosafety research (Organized by Pieter Windels)	Parallel Wed 4: Hands-on experience with Crop Composition Database: A tool used in food and feed safety assessment (Chair: Bhavneet Bajaj)	
		Parallel Mon 5: Communicating Complexities and Enhancing Public Support for Bio-Innovation (Chair: David Hudson)		Parallel Wed 5: Scientific Advancements, Challenges, and Regulatory Considerations - Genome Editing (Chair: Fan-Li Chou)	
		REGISTRATION			

Time	SUNDAY, 02 Nov 2025	MONDAY, 3 Nov 2025	TUESDAY, 04 Nov 2025	WEDNESDAY, 05 Nov 2025	THURSDAY, 6 Nov 2025
Afternoon sessions	REGISTRATION	AFTERNOON COFFEE BREAK			Join us for a visit at the VIB & BASF facilities or the VIB field trial location! VIB and BASF are offering you an exclusive opportunity to visit some of their facilities on Thursday, Nov 6, 2025. These two tour options are designed to give you a first hand look at how plant biotech research is performed in containment facilities and on the field.
		Parallel Mon 6: Safe(r) Innovation Approaches – Non-regulatory approaches fostering safety in innovation (Chair: Andrew Roberts, Marco Gielkens)	Workshop 1: Continued	Parallel Wed 6: Public- Private- Producer perspectives on gene editing innovation (Chair: Stuart Smyth)	
		Parallel Mon 7: Trends, perspectives and recent developments on streamlining the regulatory assessment of GM stacked trait products (Chair: Miguel Vega-Sanchez)	Workshop 2: Continued	Parallel Wed 7: Developments in Gene Drive – Advances in risk assessment, regulatory frameworks and field trial design (Chair: Andrew Roberts)	
		Parallel Mon 8: Harnessing bio-Innovation: addressing regulation to tackle global challenges (Chair: Marcos Pupin)	Workshop 3: Continued	Parallel Wed 8: Design considerations for non-target risk assessment studies – lessons learned from insect resistant GE crops and challenges for new traits and technologies (Chair: Michael Meissle, Christopher Brown)	
		Parallel Mon 9: Advancing community engagement in gene drive research: Bridging perspectives and practices (Chair: Claudia Emerson)	Workshop 4: Continued	Parallel Wed 9: Communicating the science of GMOs and emerging biotechnology tools (Chair: Willy Tonui, Rosalia Omungo)	
		Parallel Mon 10: Scientific Advancements, Challenges, and Regulatory Considerations - Genetically Modified Crops (Chair: Patrick Rüdelsheim)		Parallel Wed 10: Exploring New Methods, New Technologies, and Scientific Advancements in Bio-Innovation (Chair: Mitscheli Sanches da Rocha)	
Evening	WELCOME RECEPTION	Pecha Kucha 1	Poster session 2	Symposium dinner	
		Poster session 1	ISBR Members' Meeting		

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Bayer**



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Detailed Programme

Sunday | November 2, 2025

18:00-20:00

Welcome Reception (Sunday, 2nd Nov 2025)
Venue: Ghent ICC, 1st floor
Dress code: Informal

Light snacks, limited drinks, and a cash bar will be available. We encourage you to register early and join this networking opportunity.

Embracing conscious consumers

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Monday | November 3, 2025

08:00	Registration				
09:00-09:45	Opening session Jan & Hubert Van Eyckroom				
09:00	Welcome address: Joerg Romeis, ISBR President				
09:15	Opening address: Marc Van Montagu				
09:45-13:00	Plenary 1: Advancing Public Understanding and Support for Bio-Innovation (Chair: Fan-Li Chou) Jan & Hubert Van Eyckroom				
09:45	Opening remarks: Fan-Li Chou				
09:50	Keynote 1: Julie Borlaug - From Facts to Dialogue: Building Support for Biosciences Through Effective Communication				
10:35	Plenary 1.1: German Vighi - Enhancing Public Trust and Support for Bio-Innovation: Insights from Research and Initiatives				
11:05-11:30	MORNING COFFEE BREAK				
11:30	Plenary 1.2: Manabu Takahara - Initiatives for Science Communication in Japan to Foster Public Understanding of Agricultural Genome Editing				
12:00	Plenary 1.3: Reynante Ordonio - Accelerating Philippine Modern Biotechnology: A Focus on Innovation				
12:30	Plenary 1.4: Zachary Adelman - Public perception of gene drive research in terms of temporary vs permanent potential harms				
13:00	Introduce the ABSTC-ISBR Scholarship awardees (ABSTC & Joerg Romeis)				
13:10-14:00	LUNCH				
	Jan & Hubert Van Eyckroom	Guislainroom 1	Baekeland 2	Baekeland 3	Baekeland 1
14:00-15:30	Parallel Mon 1: Plant Breeding Innovation: Enabling applications and regulatory frameworks	Parallel Mon 2: Coordinating capacity building efforts in biosafety in plant biotechnology for the global south	Parallel Mon 3: Data Transportability of Confined Field Testing: Current status of discussions and future prospects	Parallel Mon 4: Global Status of Animal Biotechnology Regulations	Parallel Mon 5: Communicating Complexities and Enhancing Public Support for Bio-Innovation
14:00	Raymond Dobert Introduction	Marc Heijde Introduction	Shuichi Nakai Introduction	Alison Van Eenennaam Introduction	David Hudson Introduction
14:05	Genetic Diversity in Plant Breeding in the Context of Breeding Methods and Time-scales, Rod Snowdon	Evolution of Biotechnology and Biosafety Regulatory Frameworks in East Africa, Anne Muia	Data Transportability in Argentina: Regulatory Evolution and Implementation in the Environmental Risk Assessment of GM, Andrés Frankow	Global Animal Biotechnology Regulatory Paradigms, Daniel Kovich	The European Biosafety Association: Fostering Bio-Innovation in a Member-Focused Manner, Pat Casey

Monday | Continued

	Jan & Hubert Van Eyckroom	Guislainroom 1	Baekeland 2	Baekeland 3	Baekeland 1
14:20	BREEDIT: A Multiplex Genome Editing Strategy to Improve Complex Quantitative Trait, Hilde Nelissen	Coordinating Capacity Building Efforts in Biosafety in Plant Biotechnology for the Global South: AUDA-NEPAD's Role in Strategic Repositioning of Africa, Samuel Timpo	Data Transportability: Insights from Paraguay, Danilo Fernández Ríos	Regulatory landscape for NGTs in farm animals: Status in Europe, Ana Granados Chapatte	Strategic Pathways for Biotechnology and Biosafety in the Philippines: Integrating Innovation and Governance for a Sustainable Bioeconomy, Leocris Batucan
14:35	Harnessing Natural Chromosomal Changes to Unlock Plant's Genetic Potential, Maria Fedorova	Michigan State University's Capacity Building Efforts in Agricultural Biotechnology and Biosafety in the Global South, Karim Maredia	Data Portability for Confined Field Testing in Brazil, Luiz F. Protasio Pereira	Update on the Animal Biotechnology Regulatory Considerations in Asia-Oceania, Rhodora Aldemita	Certified Pipelines and Rules-as-Code Frameworks: Leveraging Safe-by-Design Principles and Automation to Streamline Regulatory Decisions without Compromising Safety, Tom Ruts
14:50	Argentina Regulatory Paradigm for Gene Editing: Experience Supporting New Technologies, Facundo Simeone	Advancing Cartagena Protocol Implementation through Coordinated Capacity Building, Felix Moronta-Barrios	Role of Data Transportability (DT) in Regulating Agricultural Biotechnology in Africa: Current Experiences and Future Directions, Jerry Nboyine	Regulatory Pathways for Animal Biotechnologies in Africa: Trends and Implications, Margaret Karembu	Science-Based Policies and the Global Impact of Transgenic Crops: The Case of Latin America through Biotech-Latam, Maria Luz Zapiola
15:05	Future-Proofing Policies for Plant Breeding Innovations, Khaoula Belhaj Fragniere	Twenty Years of Biosafety Capacity Development and Coordination: Some Thoughts on Next Steps, John Komen	Data Transportability of GM Crops in Japan: The Case of GM Soybeans, Kazuyuki Hiratsuka	Regulatory Status of the Animal Biotech in the Americas, Pedro Rocha	Future-proofing Gene Technology Innovations: A Market Choice Framework for Global Supply Chains, David Hudson
15:20	Raymond Dobert Discussion	Marc Heijde Discussion	Shuichi Nakai Discussion	Alison Van Eenennaam Discussion	David Hudson Discussion
15:30-16:00	AFTERNOON COFFEE BREAK				
	Baekeland 1	Jan & Hubert Van Eyckroom	Baekeland 2	Guislainroom 1	Baekeland 3
16:00-17:30	Parallel Mon 6: Safe(r) Innovation Approaches – Non-regulatory approaches fostering safety in innovation	Parallel Mon 7: Trends, perspectives and recent developments on streamlining the regulatory assessment of GM stacked trait products	Parallel Mon 8: Harnessing bio-Innovation: addressing regulation to tackle global challenges	Parallel Mon 9: Advancing community engagement in gene drive research: Bridging perspectives and practices	Parallel Mon 10: Scientific Advancements, Challenges, and Regulatory Considerations - Genetically Modified Crops

	Baekeland 1	Jan & Hubert Van Eyckroom	Baekeland 2	Guislainroom 1	Baekeland 3
16:00	A.Roberts, M.Gielkens Introduction	M. Vega-Sanchez Introduction	Marcos Pupin Introduction	Claudia Emerson Introduction	Patrick Rüdelsheim Introduction
16:05	Moving Towards a Safe(r) Innovation Approach in the Context of Modern Biotechnology - Activities and Discussions within OECD, Marco Gielkens	Conventional Breeding and What This May Tell Us on the Safety of GM Stacks, René Custers	Harnessing Bio-innovation for sustainable fuel production, Delphine Skopinski	Gene Drive Research: Engaging Communities from an Ethical Perspective, Claudia Emerson	Proportionate and Case-by-Case Risk Assessment of GMO Products: Challenging a One-Size-Fits-All Approach, June Yao
16:20	Evolution of Safe-by-Design Principles to Advance New GM Insect Protection Technologies to the Marketplace, Debbie Mahadeo	Global Overview of GM Stack Regulations: Challenges and Opportunities, Yoonhui Sung	Argentine Advances in the Process of Simplify and Digitalize GM Microorganisms Risk Assessment and Registration, Facundo Simeone	Practical Application of a Relationship-based Model to Engagement for Gene Drive Vector Control Programs, Ana Kormos	From Law to Lab (and Beyond): Variations in Applying the GMO Definition Across the EU, Patrick Rüdelsheim
16:35	SIA in Practice – Developing Gene Drive, Zach Adelman	TBD, Shai Joseph	Sustainable Weed Control Strategy with Genetically Modified, Glyphosate-Tolerant Eucalyptus, Maria Paula Galan	Community Agreement for Genetically Modified Mosquitoes: Lessons learned for a future gene drive model., Alexandre Quach	One Global Risk Assessment for Genetically Modified Crops, Gary Rudgers
16:50	Embedding Safety from the Start: Non-Regulatory Approaches to Safe(r) Innovation in Microbial Biotechnology, Leah Buchman	Japan Category Approach to Stacked Trait Products, Hiroaki Kodama	Agricultural Bio-Innovations Fundamental for Climate Change Mitigation, Stuart Smyth	Building Trust for Effective Dialogue, Lucy Mullenkei	Reframing History of Safe Exposure (HoSE) in Environmental Risk Assessment of Novel Traits, Joy Honegger
17:05	Safer Innovation Approaches - iGEM, Christopher Isaac	CTNBio's Risk Assessment Approach to Stacked Events for Food, or Feed or for Processing, Alexandre Nepomuceno	GMO Legislation: A Key Driver of Innovation in Brazil, Ana Claudia Peluso	How Can Stakeholder Perceptions of Synthetic Biology Inform Community Engagement?, Lucy Carter	Advances in Developing and Deploying Genetically Engineered TELA® Maize in Africa, Sylvester Oikeh
17:20	A.Roberts, M.Gielkens Discussion	M. Vega-Sanchez Discussion	Marcos Pupin Discussion	Claudia Emerson Discussion	Patrick Rüdelsheim Discussion

Pecha Kucha (Chair: Andrew Roberts) Jan & Hubert Van Eyckroom		
17:30-18:05	Intro (10 min)	
17:30	Nida Ansari	Artificial Intelligence for Protein 3D Structural Analyses and Applications on Allergenicity Risk Assessment
17:40	Mr Oluwafemi Ayobola Falade	Leveraging Gene-Edited BMP2 Sheep Models for Biomedical Innovation: Advancing Understanding of Heritable Pulmonary Arterial Hypertension
17:45	Rina Matsuoka	Quantification of the Digestive Resistance of Plant Proteins
17:50	Ms Haruka Morimoto	Omics Analyses of Null Segregants Obtained from the RdDM Transgenic Plants
17:55	Ms Kausalya Sakthivel	Genome Editing in Rice using CRISPR/Cas9 for the Development of Thermo-sensitive Genic Male Sterile Lines
18:00	Poster session 1	
18:05-19:00	DAY ENDS	
19:00		

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and **scale** for farmers.



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07:00	Student Breakfast			
08:00	Registration			
09:00-13:00	Plenary session II: Exploring Scientific Advancements, Opportunities, and Challenges in Bio-innovation (Chair: Mitscheli Sanches da Rocha) Jan & Hubert Van Eyckroom			
09:00	Opening remarks: Mitscheli Sanches da Rocha			
09:15	Keynote 2: Steven Runo - Can Genome Editing Drive Food Security in Africa?			
10:00	Plenary 2.1: Cathie Martin - Healthy plants; healthy people - fortifying vitamins and phytonutrients in tomato			
10:30	Plenary 2.2: Jean-Yves Paul - QCAV-4, a Cavendish banana with Fusarium wilt tropical race 4 resistance approved for commercial cultivation and consumption in Australia			
11:00-11:30	MORNING COFFEE BREAK			
11:30	Plenary 2.3: Jane Fife - Advancing Agricultural Biologicals: The Next Chapter in Crop Protection and Plant Health			
12:00	Plenary 2.4: Clint Nesbitt - Perspectives on animal biotechnology: Gene edited PRRS-resistant pigs			
12:30	Plenary 2.5: Reinhilde Schoonjans - "Regulatory risk assessment and food innovation in Europe"			
13:00-14:00	LUNCH			
	Jan & Hubert Van Eyckroom	Baekeland 1	Baekeland 2	Baekeland 3
14:00-15:30	Workshop 1: Government perspective on implementation of genome edited plant regulatory policies: Challenges and solutions	Workshop 2: Ethics and evolution workshop: considerations for human intervention	Workshop 3: Examples of Regulatory Modernization for GM Crops	Workshop 4: AI-Driven innovations: Potential for risk analysis in biosafety research
	Organized by Khaoula Belhaj-Fragnière; John McMurdy	Organized by Detlef Bartsch, René Custers	Organized by Abby Simmons	Organized by Pieter Windels
15:30-16:00	AFTERNOON COFFEE BREAK			
	Jan & Hubert Van Eyckroom	Baekeland 1	Baekeland 2	Baekeland 3
16:00-17:00	Workshop 1: Continued	Workshop 2: Continued	Workshop 3: Continued	Workshop 4: Continued
17:00-18:00	Poster session 2 (60 min)			
18:00-19:00	ISBR Members meeting Jan & Hubert Van Eyckroom			
19:00	DAY ENDS			

Workshop Descriptions

Workshop 1: The successful global deployment of plant breeding innovation hinges on the effective implementation of regulatory policies, and the ability of researchers and developers to navigate them. In the last decade, an increasing number of countries are adopting and implementing innovation enabling regulatory frameworks pertaining to plant breeding innovation, such as genome editing. This session will showcase government regulatory implementation experiences, highlighting challenges and sharing best practices. Discussions will explore opportunities for science-based and future-proofing regulatory policies and implementation through international collaboration and industry-government dialogue. By minimizing divergence in regulatory decision making and aligning implementation, the development and adoption of solutions enabled through genome editing can be accelerated and trade can be facilitated. Facilitator: Jean-Paul Judson, Nowmore Organized by Khaoula Belhaj-Fragnière, International Seed Federation; John McMurdy,CropLife International

Workshop 2:Our abilities to intervene in the genetic material of organisms have gradually grown and have gained additional momentum with the introduction of technologies such as CRISPR and now also artificial intelligence. This enables us to develop organisms with certain characteristics more precisely. Until now, GMOs have almost all been introduced into heavily managed environments such as agricultural cropland. These GMOs have not been introduced with the intention to have effects outside agricultural fields, on the contrary. And the risk assessments for those GMOs were heavily focused on preventing undesired effects outside agricultural fields. But now with the advent of these newtechniques, organisms may be proposed and developed with the goal to introduce themto have intended effects on the natural environment, including potentially on biodiversity and evolution. Currently, most focus is mitigating diseases that are transmitted by for instance insects. Other proposals are aimed at benefits for the environment e.g. protecting endangered species and environmental remediation. But such interventions might have lasting effects on the environment and could in some cases lead to the establishment of engineered organisms in the environment. These developments raise intricate questions concerning ethics and sustainability. Biodiversity is declining and the amounts of natural habitats are decreasing. The workshop aims to address this question: Given the crisis for biodiversity, should we be engineering organisms for the natural environment and what is ethical and what is sustainable in this context? Key issues and further questions are: What is “Evolution”? Humans playing God? Humans and Nature – anthropocentric or nature focus Societal values and biodiversity conservation Concepts of “Evolutionary integrity” Intrinsic value (“Eigenvalue”) of Nature What is “Environmental damage” in relation to evolution? The workshop is separated into three introductory talks and will include an interactive “world café” with all participants. For a more comprehensive outline please click here ! Organizers: Detlef Bartsch, Federal Office for Consumer Protectio

Workshop 3: For nearly 30 years genetically modified (GM) crops have provided benefits to farmers, consumers, and the environment, without harm to humans, animals or the environment. Despite this excellent record of safety, the level of regulatory scrutiny has routinely increased, and farmers in many countries are unable to access GM crops due to long regulatory approval timelines and; commercialization delays. Modernized regulatory approaches that are risk-proportionate, consider the history of familiarity and safe use of agriculture biotechnology, as part of established plant breeding, are necessary so that agricultural innovations are available to those who would benefit the most. In support of regulatory policies that are predictable, science-based, and risk proportionate, CropLife International has developed recommendations focused on a core set of studies for GM Crops, leveraging problem formulation and determining plausible pathways to harm, to determine whether additional supplementary studies may be warranted to inform on the food, feed and environmental risk assessment. Several countries have adopted or are considering following a more streamlined approach for GM crop risk assessment. This workshop will highlight examples of regulatory streamlining from multiple countries in Latin America, as well as the United States. Regulators from select Latin American countries as well as the United States will share their experiences regulating GM crops, highlighting best practices in the region. Following brief presentations, the regulators will discuss a series of brief case studies that address what data is needed to make a conclusion on safety. The audience will also participate in the discussion of the case studies via a question-and-answer session. Participants will leave the workshop with a better understanding of using problem formulation to determine which data truly provides value to the risk assessment of GM crops. Organizers: Abby Simmons, CropLife International; Gabi Levitus, ArgenBio

Workshop 4: The workshop has the objective to investigate, together with participants and invited speakers, the potential applications of artificial intelligence (AI) in biosafety research and will include sessions focusing on the use of AI for risk assessment, risk management, and risk communication. The workshop will review and discuss real-world examples of AI in action today, assess feasibility for biosafety related risk analysis and provide insights into future developments. Attendees will gain insights from current examples and future possibilities, tailored to both technology developers and governmental regulators. The workshop is designed to have an explorative and engaging character, combining thought-provoking presentations with interactive activities. To begin, the presentations will serve to set the stage by providing participants with foundational knowledge and real-world examples of how AI is currently being applied in biosafety research. These presentations aim to stimulate fresh thinking and inspire participants by showcasing innovative use cases. Following this, the workshop will transition into interactive sessions where participants will take an active role in shaping the discussion. These sessions are intended to foster creative thinking by encouraging attendees to share their ideas, voice concerns, and propose potential solutions. Moreover, the workshop’s structure is carefully designed to emphasize the critical importance of collaboration and open dialogue between all stakeholders, including researchers, regulators, and technology developers. By providing a platform for meaningful exchange, we aim to highlight how collective efforts can support the integration of these transformative tools into existing frameworks. This collaborative approach ensures that diverse perspectives are considered, helping to build trust and consensus on how to use AI’s potential while addressing potential uncertainties. The workshop acts a roadmap for continued dialogue and innovation. Facilitator & Session Organisers: Pieter Windels, BASF

Transparency at Bayer Crop Science



Foster open, science-based dialogue.

Bayer has been a prominent player in the agriculture industry to enable access to safety studies for crop protection (CP) active ingredients and genetically modified (GM) crops. We continue to expand our transparency program.

Example components include:

- /// Access to full safety study reports for CP and GM crops, including scientific background information and educational materials.
- /// Learn the basics and discover the benefits of plant breeding.
- /// Virtual platform "OpenLabs 360°" to see how Bayer scientists conduct product safety testing.



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Welcome to a behind-the-scenes look at Bayer Crop Science. No need to wear safety glasses for this self-guided tour (unless you want to, of course). Here you will learn how our scientists ensure genetically modified crop products are safe to eat and safe for the environment. Happy exploring!



Communicating the Science of GMOs and Emerging Biotechnology Tools

Wednesday, 5 November | 16:00-17:30 | Baekleand 3

This session will convene scientists, researchers, developers, and science journalists to review experiences, explore barriers in science communication, and share skills to overcome them. Speakers will describe examples of progress made to contextualize GMO acceptance in Africa. They will share communication tools and techniques that build competence in communicating to a variety of stakeholders about research, field trials, and the use of GMOs and other emerging technologies on the African continent. This side event aims to broaden scientists' communication repertoire and increase media and communicators' appreciation of scientific concepts to facilitate balanced communication of critical biotechnology topics allowing decision makers, publics, local communities access to these complex science topics.

MODERATOR



Dr. Willy Kiprotich Tonui, EBS

Chairman and Executive Director, Environmental Health Safety (EHS Consultancy Ltd)

SPEAKERS



Andrew Kiggundu
Biotechnology Consultant

"Case studies for communication about GMOs in Africa: Describing new technology"



Givemore Munhenga
Medical Scientist, National Institute for Communicable Diseases

"Case study of culturally relevant methods to communicate science: Maskandi Experience in South Africa"



Philbert Nyinondi
Communications Specialist

"Role of the media in communicating complex Science, Technology, and Innovation in Africa"



Gloria Ogbaki
Communications Specialist, National Biosafety Management Agency

"Communication related to regulatory decision making of GMOs"



Rosalia Omungo
CEO, Kenya Editors' Guild

"The Science Communication Forum Africa: Science journalists and scientists working together"

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08:00 Registration

09:00-13:00 **Plenary session III: Governance and Regulatory Frameworks: Understanding the global landscape**
(Chairs : Jennifer Anderson and Suma Chakravarth) Jan & Hubert Van Eyckroom

09:00 **Opening remarks:** Jennifer Anderson

09:15 **Keynote 3: Rodomiro Ortiz** - Governance, Policy, and Regulatory Frameworks: Exploring the Global Landscape and Impact on Bio-innovation – The Case of New Breeding Techniques

10:30 **Plenary 3.1: Samuel Timpo** - Africa and Zero Hunger Agenda: Genome Editing Policy Landscape, Challenges and Opportunities

10:30 **Plenary 3.2 Irène Sacristan-Sanchez** - EU Regulatory Approaches to GM Crops and New Genomic Techniques

11:00-11:30 **MORNING COFFEE BREAK**

11:30 **Plenary 3.3: Alison Van Eenennaam** - Global Status of Animal Biotechnology

12:00 **Plenary 3.4: Luiz Filipe Protasio Pereira** - Brazil's Biosafety Framework: From Regulatory Gaps to Adaptive Governance in Bio-innovation

12:30 **Plenary 3.5: Lourdes Taylo** - Enabling Policies and Regulatory Framework for the Research, Development, and Commercialization of Biotech Crops in the Philippines: The Case of Bt Eggplant

13:00-14:00 **LUNCH**

	Baekeland 3	Baekeland 1	Baekeland 2	Guislainroom 1	Jan & Hubert Van Eyckroom
14:00-15:30	Parallel Wed 1: Safety considerations for agricultural microbial products derived from new genomic techniques (NGTs)	Parallel Wed 2: Strategies for Modernizing Biotechnology Regulatory Frameworks	Parallel Wed 3: Innovation and modernization on the safety assessment of newly expressed proteins in Genetically Modified (GM) Crops.	Parallel Wed 4: Hands-on experience with Crop Composition Database: A tool used in food and feed safety assessment	Parallel Wed 5: Scientific Advancements, Challenges, and Regulatory Considerations - Genome Editing
14:00	A.Roberts, N.Dixon Introduction	Bill Doley Introduction	Tao Geng Introduction	Bhavneet Bajaj Introduction	Fan-Li Chou Introduction
14:05	Engineering Microbes to Boost Plant Immunity and Fight Plant Disease, Cynthia Gleason	Modernizing Biotechnology Regulation: Toward Trait-Based, Risk-Proportionate Frameworks, Bill Doley	Core and Supplemental Studies to Assess the Safety of Newly Expressed Proteins (NEP) in GM Crops, Elizabeth Lipscomb	Compositional Variability in Food, Feed, and Fiber Crops: What Have We Learned from the Crop Composition Database? Nancy Gillikin	Harnessing Insect Genome Editing for a Sustainable Future: Progress Towards the Development of Agricultural and Forestry Pest Control in South Africa, G. Ditttrich-Schröder

	Baekeland 3	Baekeland 1	Baekeland 2	Guislainroom 1	Jan & Hubert Van Eyckroom
14:20	Genome Editing Regulation of Microorganisms in Brazil, Galadino Andrade	Proportionate implementation of the EU's regulatory framework for GMOs, Jonny Hazell	Exploring the Use of in vitro Models for Safety Assessment of Newly Expressed Proteins in GM Crops, Matias Attene Ramos	Development of Analytical Methodologies for Measuring Compositional Components in Agriculturally Important Crops, Ann Scaife	Applying Alternative Regulatory Paradigms to Enable Genome Editing at Scale for Germplasm Improvement, Lieselot Bertho
14:35	Increasing Interest in Environmental Fate Aspects of Gene Edited Microbial-based Agricultural Products, Lisa Ortego	Science-Based Regulation of Gene-Edited Herbicide-Tolerant Crops: Ensuring Consistency, Innovation, and Sustainability, Lucas Lieber	Novel Strategies for Predicting Allergenicity, Clare Mills	Interactive training with Crop Composition Database. **personal laptops preferred for hands-on learning. The database is also compatible with smartphones **	A Platform for Genome Editing and Functional Genomics in Common Bean Using Hairy Root Composites, Mary Esther Toili
14:50	The Ever-Evolving World of Microbes: The Current State of Microbial Taxonomy, Genome Evolutionary Dynamics, and the Impact on Future Microbials Risk Assessment, Katie Karberg	Regulating the Future of Biotechnology: Preparing for Complexity and Innovation, Justin Overcash	Artificial Intelligence for Protein 3D Structural Analyses and Applications on Allergenicity Risk Assessment, Abhiman Saraswathi		Integrating Artificial Intelligence (AI) with Genome Editing for Crop Improvement: Potential Applications and Regulatory Implications, Felicity Keiper
15:05	Biological Products, New Paradigms for the Sustainability of Crop Productions, Patrick du Jardin		Using Allergen Reference Doses to Inform Risk-Based Labeling Decisions: An Overview of the FAO/WHO Expert Consultation on Risk Assessment of Food Allergens, Joseph Baumert		Transgene-Free, Low-Risk, and Over-Regulated? The ALS Case for Rationalizing NGT1 Criteria, Marina Pais
15:20	A.Roberts, N.Dixon Discussion	Bill Doley Discussion	Tao Geng Discussion	Bhavneet Bajaj Discussion	Fan-Li Chou Discussion
15:30-16:00	AFTERNOON COFFEE BREAK				

	Jan & Hubert Van Eyckroom	Guislainroom 1	Baekeland 2	Baekeland 3	Baekeland 1
16:00-17:30	Parallel Wed 6: Public- Private- Producer perspectives on gene editing innovation	Parallel Wed 7: Developments in Gene Drive – Advances in risk assessment, regulatory frameworks and field trial design	Parallel Wed 8: Design considerations for non-target risk assessment studies – lessons learned from insect resistant GE crops and challenges for new traits and technologies	Parallel Wed 9: Communicating the science of GMOs and emerging biotechnology tools	Parallel Wed 10: Exploring New Methods, New Technologies, and Scientific Advancements in Bio-Innovation
16:00	Stuart Smyth Introduction	Andrew Roberts Introduction	M.Meissle, C.Brown Introduction	Willy Tonui Introduction	M. Sanches da Rocha Introduction
16:05	Implications of EU Regulation of GE Crops, Justus Wesseler	Core and Supplemental Studies to Assess the Safety of Newly Expressed Proteins (NEP) in GM Crops, Werner Schenkel	Study Design Considerations of Early Tier Non-target Risk Assessment Studies, Jennifer Anderson	Case Studies for Communication About GMOs in Africa - Describing New Technology and Changing the Narrative, Andrew Kiggundu	Regulatory-Ready Genetic Tools for Mosquito Suppression: A Precursor to Gene Drive Trials, Nikolay Kandul
	Gene Editing in Australasia: Aligning Public, Private, and Producer Perspectives, Carl Ramage	Preparatory Work for the Development of Risk Assessment Guidance for Gene Drive Modified Insects, Boet Glandorf	Study Design Considerations for Non-target Arthropod Field Studies Conducted to Support Risk Assessment of Insect-protected Genetically Modified Crops, Christopher Brown	Case Study of Culturally Relevant Methods to Communicate Science - Experience of Art Based Communication Strategies in South Africa, Givemore Munhenga	From Genomics to the Field: Clubroot-Resistant Cultivars and Microbial Biocontrols, Edel Perez Lopez
16:35	The EU Plant Breeding Industries' View on NGTs, Petra Jorasch	Advances in Field Trial Design of Gene Drive Technologies and Implications for Risk Assessments, John Connolly	Distinguishing Bt Protein-effects from Plant Matrix Effects in Non-target Studies, Michael Meissle	The Role of the Media in Communicating Complex Science, Technology and Innovation in Africa, Philbert S. Nyinondi	Suitability and Advantages of using Ants as Test Organisms in Ecotoxicity, Mathias Otto
16:50	Harnessing Gene Editing for Bacterial Wilt-Resistant Bananas: Bridging Science, Policy, and Production, Leena Tripathi	Gene Drive Regulation: A Closer Look at International Frameworks, Zaira Lanna	Leveraging Experience with Regulating GE Traits to Support Contemporary Non-target Evaluations, Amanda Pierce	Communication Related to Regulatory Decision-Making of GMOs, Agbonma Gloria Ogbaki	Development of Bt-Expressing Transgenic Coffee Plants through Somatic Embryogenesis: A Biotechnological Strategy against Coffee Berry Borer, Eliana Valencia Lozano

	Jan & Hubert Van Eyckroom	Guislainroom 1	Baekeland 2	Baekeland 3	Baekeland 1
17:05	Public-Private- Producer Perspectives on Gene Editing Innovation, Dan Jenkins	Environmental Risk Assessments with Socio-Economic Considerations, Delphine Thizy	A Bioinformatics Framework for Ecological Risk Assessment of RNAi-based Biopesticides, Emma De Neef	The Science Communication Forum Africa - Science Journalists and Scientists Working Together, Rosalia Omungo	Biocentis: Developing Genetic Control for Insect Pest and Vector Species, Andrew Hammond
17:20	Stuart Smyth Discussion	Andrew Roberts Discussion	M.Meissle, C.Brown Discussion	Willy Tonui Discussion	M. Sanches da Rocha Discussion
17:30-19:00	FREE TIME				
19:00-22:00	Symposium Dinner (Wednesday, 5th Nov 2025) – Fully booked Venue: Ghent Marriott Hotel Address: Korenlei 10, 9000 Ghent– Belgium A symposium dinner ticket is required (TICKETS ARE SOLD OUT). Enjoy a 3-course meal with limited drinks provided (cash bar available). Please note that no transport is provided — the Marriott is a 15-minute walk from the ICC.				
22:00	DAY ENDS				



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Thursday | November 6, 2025

08:00 Registration

09:00-13:00 **Plenary session IV: Enhancing the potential of bio-innovation for a sustainable future**
(Chairs : Heidi Mitchell and Jennifer Anderson) Jan & Hubert Van Eyckroom

09:00 **Opening remarks: Jennifer Anderson**

09:15 **Keynote 4: Renée Anderson** - Integrating Bio-Innovation for On-Farm Sustainability

10:00 **Plenary 4.1: Justus Wesseler** - The contribution of bioeconomy value chains to improving sustainability

10:30 **Plenary 4.2: Simon Lillico** - Gene editing livestock

11:00-11:30 **MORNING COFFEE BREAK**

11:30 **Plenary 4.3: Richard Kino** - The Genetic Technology (Precision Breeding) Act 2023, England

12:00 **Plenary 4.4: Erik Andreasson** - Potato Field trials in Sweden with changed expression of resistance and susceptibility genes

12:30 **Plenary 4.5: Panel Discussion (moderated by Carl Ramage)**

13:00 **Announce photo competition winners and poster presenter (Hennie Groenewald)**

13:00-13:30 **Closing session** Hennie Groenewald, ISBR President

13:30 **SYMPOSIUM ENDS**

Optional Tours

FULLY BOOKED

Join us for a visit at the VIB & BASF facilities or the VIB field trial location! VIB and BASF are offering you an exclusive opportunity to visit some of their facilities on Thursday, Nov 6, 2025.

These two tour options are designed to give you a first hand look at how plant biotech research is performed in containment facilities and on the field.

Delegates confirmed for the optional tours may collect lunch packs from the registration area. The coach will depart from ICC at 13:30 sharp. Please do not be late and bring identification for security access.

Tour Options:

- TOUR 1: Lab/Greenhouse Facility Tour: Discover the state-of-the-art laboratories @VIB and greenhouse facilities @BASF.
 - This tour includes a 5-10 minute walk between two buildings.
 - Maximum capacity: 30 participants
- TOUR 2: Field Tour: Learn about the field trials with transgenic and genome edited plants with our field tour.
 - Please note that this tour is subject to weather conditions, so be sure to bring weather proof clothing and footwear.
 - Maximum capacity: 25 participants

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