



EFB2021 Preliminary Programme (subject to change) all times in CET

Day	Event		Speaker	Title
10.05.2021	Welcome by EFB President			
10:00-10:05				
10.05.2021	Bioengineering and Bioprocessing	Introduction	Tim Overton	
10:05-12:05		Keynote lecture	Chase Beisel	<i>The bottomless well? New CRISPR discovery brings novel technologies</i>
		Keynote lecture	Stefanie Frank	
		Keynote lecture	Birgitta Ebert	<i>High titer methyl ketone production with tailored Pseudomonas taiwanensis VLB120</i>
		Short talk	Johan Rockberg	<i>Producing proteins difficult to express – omics lessons from cho and hek293</i>
		Short talk	Yamini Satyawali	<i>Membrane assisted process intensification for enzymatic production of esters, oligosaccharides and chiral amines</i>
		Short talk	Christiane Sonntag	<i>A Universal Biosensor Design Enables Fine-Tuning of Crucial Sensor Parameters</i>
		Flash poster presentations	Philipp Baumann, Bjorn Bean, Patricia Borges, Mikel Dolz Ruiz, Lorena Donzella, Luis Ferraz, Carolina Ferro Rodrigues, Rebecca Hollenbach, Pooja Jayaprakash, Marlene Lopes, Taku Mizutani, Lukas Muehlbauer, Corinna Rebnegger, Ashish Sharma, Diogo Silva, Dinesh Kumar Sriramulu, Luca Zuliani	
		Q&A	Tim Overton, Chase Beisel, Stefanie Frank, Birgitta Ebert, Johan Rockberg, Yamini Satyawali, Christiane Sonntag	
BREAK				
10.05.2021	Plenary lecture	Introduction	Götz Hensel	
13:00-13:45			Trish Malarkey	<i>Feeding the Future</i>
		Q&A	Trish Malarkey, Götz Hensel	
BREAK				



Day	Event		Speaker	Title
10.05.2021	Sustainable Food Production - Farm to Fork Strategy	Introduction	Sebastian Wendeborn	
14:15-16:05		Keynote lecture	Tassos Haniotis	<i>Farm to fork strategy</i>
		Keynote lecture	Dirk Inzé	<i>Fast track genome editing of crops for sustainability and climate</i>
		Keynote lecture	Brian Lutz	<i>Digital agriculture: data sciences to secure tomorrow's food production (related to biotechnology)</i>
		Keynote lecture	Thomas Laurent	<i>Sustainable crop protection through biotechnology solutions. Are peptides the future of crop protection?</i>
		Message from Platinum Sponsor		
		Flash poster presentations	Carlos Eduardo Aucique Perez, Weronika Babińska, Jonathan Cardenas, Sanja Čavar Zeljković, Simona Crognale, Nuria De Diego, Nicola Frison, Nikola Gyurchev, Nikolai Huwa, Nikola Kořínková, Michaela Králová, Pavel Mazura, Dieu Thu Nguyen, Izabela Perkowska, Kinga Maria Pilarska, Lukáš Spíchal, Ana Torrejón Cabello	
	Q&A session		Tassos Haniotis, Dirk Inzé, Brian Lutz, Thomas Laurent, Sebastian Wendeborn, Esteban Alcalde	

END OF DAY 1

11.05.2021	Bioeconomy Journal	Introduction	Stephen Euston	
10:00-11:50		Keynote lecture	Jim Philp	<i>Bioeconomy for all the World</i>
		Keynote lecture	Lynn Sherrer Ian O'Hara, Tomasz Twardowski Manfred Kircher Jeff Cole	<i>Aims and scope of the Journal Types of article to be considered for publication The European bioeconomy Why papers are rejected for publication – and how to increase the chance of acceptance</i>



Day	Event		Speaker	Title
		Meet the editors and Q&A	Alfredo Aguilar, Tomasz Twardowski, Ian O'Hara, Stephen Euston, Jeff Cole, Manfred Kircher, Lynn Sherrer, Jim Philp, Lucia Gardossi	
BREAK				
11.05.2021 13:00-13:45	Plenary lecture	Introduction	Jeff Cole	<i>The Bioeconomy</i>
		Q&A	Christian Patermann Christian Patermann, Ian O'Hara, Tomasz Twardowski, Stephen Euston	
BREAK				
11.05.2021 14:15-16:05	Environmental Biotechnology „Contribution to a circular bioeconomy“	Introduction	Manfred Kircher	
		Keynote lecture	Mikolaj Owsianak	<i>Sustainability: quantifying sustainability performance of biotechnologies</i>
		Keynote lecture	Liselotte Schebek, Vanessa Zeller	<i>Feedstock: the role of residues, waste and CO2</i>
		Keynote lecture	Patrick KH Lee	<i>School of Energy and Environment, City University of Hong Kong</i>
		Keynote lecture	Sebastià Puig	<i>Emerging technologies: a view in the future</i>
		Flash poster presentations	Ivo Šafařík, Dina Ahmed, Catarina Amorim, Gabriela Angeles-De Paz, Raffaella Di Lorenzo, Conceição Egas, Salvatore Fusco, Ola Gomaa, Natalia Hernández-Herreros, Elisabeth Lettau, Tomáš Malina, Angela Marchetti, Manuel Eduardo Martínez-López, Satenik Mirzoyan, Irina Moreira, David Panáček, Kristýna Pospíšková, Marta Maria Rossi, Gabriela Simões, Tom Sleutels, Argyro Tsipa, Francesco Valentino, Liana Vanyan	
		Q&A	Manfred Kircher, Mikolaj Owsianak, Liselotte Schebek, Vanessa Zeller, Patrick KH Lee, Sebastià Puig	
END OF DAY 2				
12.05.2021 10:00-12:00	Biomaterials and Plastics	Introduction to the event	Georg Guebitz	
		Keynote lecture	Wolfgang Zimmermann	<i>Enzymatic modification of PET</i>
		Keynote lecture	Auxi Prieto	<i>Domesticating bacteria for tailored PHA production</i>



Day	Event	Speaker	Title
	Keynote lecture	Lucia Gardossi	<i>Ecodesign and synthesis of new bio-based polymers for effective circularity</i>
	Keynote lecture	Tim Börner	<i>Challenges of sustainable food packaging</i>
	Invited lecture	Yannic Ackermann, Florence Bordes, Maria Jose Cardenas Espinosa, Lorenzo Cristiani, Jan Filip, Christian Finger, Kasun Godigamuwa, Björn Gutschmann, Tuyajargal Iimaa, Klemens Kremser, Laura Lorini, Maria Tsampika Manoli, Sebastian Mayr, Florian Miserez, Martin Nagl, Lionel Nguemna Tayou, Shabnam Nisha, Andrea Ochsner, Luzius Pestalozzi, Rebecca Pogni, Felice Quartinello, Virginia Rivero-Buceta, Joanna Sadler	
	Flash poster presentations		
	Q&A		Georg Guebitz, Wolfgang Zimmermann, Auxi Prieto, Lucia Gardossi, Tim Börner

BREAK

12.05.2021	Plenary lecture	Introduction	Florian Krammer	<i>Health</i>
13:00-13:45		Q&A	Florian Krammer	

BREAK

12.05.2021	Medical and Biopharmaceutical	Introduction		
14:15-16:10		Keynote lecture	Damien Woods	<i>21 Molecular algorithms using reprogrammable DNA self-assembly</i>
		Keynote lecture	Nicole Borth	<i>Production of biotherapeutics in the age of -omics</i>
		Keynote lecture	Adil Mardinoglu	<i>Artificial Intelligence-based drug development for COVID-19</i>
		Keynote lecture	João Mano	<i>Bioengineering of human tissues using soft (and low quantity) biomaterials</i>
		Short talk	Ana Roque	<i>Affinity based particles for protein crystallization and purification</i>
		Short talk	Paloma Juarez Ortega	<i>Production of recombinant endolysins in E. coli against Xylella fastidiosa.</i>



Day	Event	Speaker	Title
	Short talk	Chiara Lonigro	<i>Yeast-based single chain antibody platform for rapid response to pandemic outbreaks</i>
	Flash poster presentations	Jan Belza, Joaquin Espi, Goot Heah Khor, Magdalena Malm, Huseyin Okan Soykam, Dominik Terefinko, Chris Wright	
	Q&A	Damien Woods, Nicole Borth, Adil Mardinoglu, João Mano, Ana Roque, Paloma Juarez Ortega, Chiara Lonigro	

END OF DAY 3

13.05.2021 10:00- 11:55	AFOB-EFB Biocatalysis: cascade reactions	Introduction to the event	Harry Atomi	
		Keynote lecture	Zhi Li	
		Keynote lecture	Nick Turner	<i>Designing New Biocatalytic Routes to Target Molecules</i>
		Short talk	Lars Lauterbach	<i>Electro-driven synthesis of substituted N-heterocycles through an artificial enzymatic cascade</i>
		Short talk	Youngho Jang	<i>Implementation of metabolic pathway of glycolysis for optical resolution of chiral amines</i>
		Platinum Sponsor Flash poster presentations	Stefano Bertacchi, Oliver Birrenbach, Ivana Čevič, José Coloma, Kengo Deguchi, Edoardo Dell'armi, Neus Gacias Amengual, Ulf Hanefeld, Kristin Hölting, Felix Kaspar, Jun-Sung Kim, María Claudia Montiel Morte, Valentina Pirillo, Margarida Ruivo, Sharad Sarak, Susana Velasco-Lozano, Sudarma Dita Wijayanti	
		Q&A	Harry Atomi, Zhi Li, Nick Turner, Lars Lauterbach, Youngho Jang, Dietmar Haltrich	

BREAK

13.05.2021 13:00- 13:45	Plenary lecture	Jarrod E. Leland, Calum Russell, Lise Christina Deleuran	<i>An efficient biopesticide to fully replace chemical pesticides</i>
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Day	Event		Speaker	Title
		Q&A	Calum Russel, Lise Christina Deleuran	
END OF DAY 4				
14.05.2021	Biocatalysis: biohybrid processes	Introduction		
10:00-11:50		Keynote lecture	Claudia Schmidt-Dannert	<i>Functional protein-based biomaterials for biocatalysis and beyond</i>
		Keynote lecture	Takeshi Sugai	<i>Advantages of lipase-catalyzed transformation in organic synthesis</i>
		Short talk	Laura Rotilio	<i>Structural and Biochemical characterization on a novel Unspecific Peroxygenase</i>
		Short talk	Eva Garcia Ruiz	<i>Engineering hydrolases for plastic waste biotransformation</i>
		Flash poster presentations	<i>Message from Platinum Sponsor</i> Carmen Becerra, Vânia Brissos, Debamitra Chakravorty, Mario De Simone, Tomás Frazão, Peter-Leon Hagedoorn, Veronika Kazimírová, Taresh Khobragade, Jesús Laborda Mansilla, Nicolas Maguire, Serena Rinaldo, Elena Rosini, Stefan Schwarz, André Taborda, Ludovika Jessica Virginia	
		Q&A	Claudia Schmidt-Dannert, Takeshi Sugai, Laura Rotilio, Eva Garcia Ruiz	
BREAK				
14.05.2021	Plenary lecture	Introduction	Ulrich Schwaneberg	
13:00-13:45		Q&A	Takashi Hayashi	
BREAK				
14.05.2021	Mastering heterogeneity in microbial biotechnology	Introduction		
14:15-16:05		Keynote lecture	Eriko Takano	
		Invited lecture	Diana Z. Sousa	<i>Availability of the molecular switch XylR controls phenotypic heterogeneity and lag duration during Escherichia coli adaptation from glucose to xylose</i>
		Short talk	Brice Enjalbert	



Day	Event	Speaker	Title
	Short talk	Eric Vanarsdale	<i>Electrochemical restructuring of Escherichia coli consortia for L-tyrosine production</i>
	Short talk	Brigitte Gasser	<i>Preventing morphological cell heterogeneity in the yeast Pichia pastoris (syn Komagataella phaffii): involvement of the FLO gene family</i>
	Flash poster presentations	Alice Banks, Angela Coral Medina, Carla De Carvalho, Pavel Dvorak, Albert Fina Romero, Heghine Gevorgyan, Denis Jallet, Oscar Kruppa, Letizia Maestroni, Luca Mastella, Jolanta Mierzejewska, Malihe Mirzaee, Sarang Sunil Nath, Arne Oestreich, Constantinos Patinios, Toni Rendulic, Robert Stella, Apilaasha Tharmasothirajan, Cláudia Vicente, Elisa Vignali	
	Q&A	Eriko Takano, Diana Z. Sousa, Brice Enjalbert, Eric Vanarsdale, Brigitte Gasser	

Accompanying event

EuropaBio “Evolving partnerships to accelerate innovation towards commercialisation”

- Introduction to the session by **Carsten Hjort** (Novozymes, EFB) and **Agnes Borg** (EuropaBio)
- Developing research into commercial applications
- Case studies & best practices for innovation
- EU Institutional support for R&I synergies