

BioTech Research & Innovation Hack 2017

AGENDA

5-6 December 2017, conference room "Auditorium"

The International Auditorium, International Trade Union House,
Boulevard du Roi Albert II, No. 5 / 2 , B-1210 Brussels

08:00  **Registration / Coffee**

| | | |
|---|--|--|
| 08:30-8:40 | Welcome | |
| 08:40-09:00 | MirrorBio: Establishment of a fully synthetic, mirror-image biological system | Jörg HOHEISEL, <i>German Cancer Research Center, DE</i> |
| 09:00-09:20 | SysVirDrug: Translating systems virology data into broad-spectrum antiviral drugs | Lars KADERALI, <i>University of Greifswald, DE</i> |
| 9:20-9:40 | NeBrasCa: Next Generation Immunosuppressants: Brasilicardin synthesized by <i>Nocardia</i> spp | Harald GROSS, <i>University of Tuebingen, DE</i> |
| 9:40-10:00 | IMOMESIC: Integrating Modelling of Metabolism and Signalling towards an Application in Liver Cancer | Ursula KLINGMÜLLER, <i>German Cancer Research Center, DE</i> |
| 10:00 – 10:30  Coffee break | | |
| 10:30-11:30 | Speed networking | all |
| 11:30-11:50 | Sun2Chem: Engineering the chloroplast of microalgae as a chassis for the direct production of solar fuels and chemicals | Thomas HAPPE, <i>Ruhr University Bochum, DE</i> |
| 11:50-12:10 | CHEMBEET: Biofuels and green chemicals from sugar beet through direct processing | Hans van KLINK, <i>Dutch Sustainable Development BV, NL</i> |
| 12:10-12:30 | SynPath: Synthetic biochemical pathways for efficient production of novel biofuels | Lars Mathias BLANK, <i>RWTH- Aachen University, DE</i> |
| 12:30-13:40  Lunch break | | |
| 13:40-14:00 | FILAZYME: Novel approaches to develop filamentous microorganisms for enzyme production | Erik VIJGENBOOM, <i>Institute of Biology Leiden University, NL</i> |
| 14:00-14:20 | INTENSIFY: Intensification of the synthetic biology design cycle | Sven PANKE, <i>ETH Zurich, CH</i> |
| 14:20-14:40 | LIGBIO: A Synthetic Biology approach for bacterial bioconversion of lignin into renewable chemicals | Timothy BUGG, <i>University of Warwick</i> |
| 14:40-15:00 | OXYPOL: Optimized laccase systems for high-value bioplastics production from biomass | Alexander WENTZEL, <i>Stiftelsen SINTEF, NO</i> |
| 15:00 – 15:30  Coffee break | | |
| 15:00-16:30 | Poster session | 25 posters from 6. JC ERA-IB-2, 2. JC ERASysApp and 2. JC ERASynBio projects |
| 16:30-16:50 | DYNAMICS: Analysis and optimization of industrial microorganisms under dynamic process conditions | Aljoscha WAHL, <i>Delft University of Technology</i> |
| 16:50-17:10 | Bio Molecular Origami: establishing foundations in structural synthetic biology to engineer biomolecules for new routes to nanoscale objects and biomaterials | Roman JERALA, <i>National Institute of Chemistry, SI</i> |
| 17:10-17:30 | EcoYeast: Mastering the economics of adaptation through constraint-based modeling in yeast | Bas TEUSINK, <i>VU University Amsterdam, NL</i> |
| 17:30-17:50 | MetaCat: A metagenomic collection of novel and highly efficient biocatalysts for industrial biotechnology | Wolfgang STREIT, <i>University Hamburg, DE</i> |
| 17:50 | End of day 1 | |

18:00-20:00 **Joint Diner**

08:00

Registration / Coffee

| | | |
|-------------|---|---|
| 08:30-08:50 | SysMilk: Designer microbial communities for fermented milk products: A Systems Biology Approach | Kiran Raosaheb PATIL, <i>European Molecular Biology Laboratory, De</i> |
| 08:50-09:10 | PROCAR: the exploitation of Xanthophyllomyces dendrorhous as a sustainable platform for the PROduction of high-value CARotenoids | Paul FRASER, <i>Royal Holloway University of London, UK</i> |
| 09:10-09:30 | IESY: Induced Evolution of Synthetic Yeast genomes | Joel BADER, <i>Johns Hopkins School of Medicine, USA</i> |
| 09:30-09:50 | WineSys: GMO free systems optimization of wine yeast for wine production by massive scale directed evolution | Eivind ALMAAS, <i>Norwegian University of Science & Technology, NO</i> |
| 09:50-10:10 | RETROBIO: A twofold retrosynthetic implementation of a novel biochemical pathway | Sven PANKE, <i>ETH Zurich, CH</i> |

10:10-10:40

Coffee break

| | | |
|-------------|---|--|
| 10:40-11:00 | SysMetEx: Systems Biology of acidophile biofilms for efficient metal extraction | Ansgar Poetsch, <i>Ruhr University Bochum, DE</i> |
| 11:00-11:20 | Cropclock: Increasing crops biomass by uncovering the circadian clock network using dynamical models | Jorge GONCALVES, <i>University of Luxembourg, LU</i> |
| 11:20-11:40 | CtoC farming: Cradle to cattle farming | Reinerus CORNELISSEN, <i>Cornelissen Consulting Services B.V., NL</i> |
| 11:40-12:00 | SynGlycTis: Synthetic Glycobiology - new strategies to build and functionalise proto-cells and proto-tissues | Bruce TURNBULL, <i>ETH Zurich, CH</i> |
| 12:00-12:20 | ChitoTex: Development and production of new insect chitosan and chitosan based functional coatings for yarns and textile fabrics | Susanne ZIBEK, <i>Fraunhofer IGB, DE</i> |

12:20-13:20

Lunch break

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|--------------------|---|--|
| 13:20-14:20 | Panel discussion <i>Biotech for competitive and sustainable Industrial Innovation</i> | |
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|-------------|---|--|
| 14:20-14:40 | FAIRDOM: Next generation of data and model management services in Europe | Wolfgang Müller or Carole Goble (<i>tbd</i>) |
| 14:40-15:00 | MetApp: Systems biology of bacterial methylotrophy for biotechnological products from methanol | Trygve BRAUTASET, <i>SINTEF Materials and Chemistry, NO</i> |
| 15:00-15:20 | CO₂CHEM: Biological conversion of CO ₂ to the platform chemical 3-hydroxypropanoic acid | Peter DÜRRE, <i>University of Ulm, DE</i> |
| 15:20-15:40 | ICOCAD: Development of an Innovative Concept for Carbon Dioxide Utilization as Side Stream of Integrated Bio-refinery Concepts | Gunther KOLB <i>Fraunhofer ICT-IMM, DE</i> |

15:40-16:10

Coffee break

| | | |
|--------------------|--|------------|
| 16:10-18:00 | Interactive session <i>(Networking, pitching & match making)</i> | all |
| 18:00 | End of Day 2 | |

Poster session
(15:00-16:00, 05.12.2017)
Group A

| Nr. | Time | Title | Speaker |
|-----------|-------------|--|---|
| A1 | 15:00-15:10 | ASTINPROD: Enhancing production of the antitumor compound astin by a novel fungal endophyte of <i>Aster tataricus</i> | Jutta LUDWIG-MÜLLER, <i>TU Dresden, DE</i> |
| A2 | 15:10-15:20 | SYSTERACT: Systematic Rebuilding of Actinomycetes for Natural Product Formation | Alexander WENTZEL, <i>SINTEF Materials and Chemistry, NO</i> |
| A3 | 15:20-15:30 | LEANPROT: Systems biology platform for the creation of lean-proteome <i>Escherichia coli</i> strains | Raivo VILU, <i>Competence Center of Food and Fermentation Technologies, EE</i> |
| A4 | 15:30-15:40 | MiniCell: A model-driven approach to minimal cell engineering for medical therapy | Luis SERRANO, <i>Centre de Regulació Genòmica, ES</i> |
| A5 | 15:40-15:50 | FunBioPlas: Novel synthetic biocomposites for biomedical devices | Raul MACHADO, <i>University of Minho, PT</i> |

Group B

| Nr. | Time | Title | Speaker |
|-----------|-------------|---|---|
| B1 | 15:00-15:10 | SurfGlyco: Enhanced fermentative and biocatalytic conversion strategies of renewables to tailor-made glycolipid biosurfactants | Steffen RUPP, <i>Fraunhofer IGB, DE</i> |
| B2 | 15:10-15:20 | YeastTempTation: Tailoring thermotolerant yeasts for more sustainable, eco-efficient and competitive industrial fermentations | Jose Manuel GUILLAMON, <i>CSIC, Institute of Agrochemistry and Food Technology, ES</i> |
| B3 | 15:20-15:30 | TTRaFFIC: Toxicity and Transport for Fungal production of Industrial Compounds | Nick WIERCKX, <i>RWTH Aachen University, DE</i> |
| B4 | 15:30-15:40 | ROBUSTYEAST: Optimizing metabolic regulation in yeast production strains for dynamic conditions | Steffen WALDHERR, <i>Otto-von-Guericke University Magdeburg, DE</i> |
| B5 | 15:40-15:50 | CrossCat: Symbiosis of bio- & chemo-catalysts for the sustainable conversion of hemicelluloses | Thomas BLEY, <i>TU Dresden, DE</i> |

Group C

| Nr. | Time | Title | Speaker |
|-----------|-------------|--|---|
| C1 | 15:00-15:10 | ECFexpress: An orthogonal, organism-independent expression platform based on extracytoplasmic function (ECF) sigma factors | Thorsten MASCHER, <i>TU Dresden, DE</i> |
| C2 | 15:10-15:20 | TNAepisome: Design and Synthesis of a Bio-orthogonal Genetic System Based on Threose Nucleic acids In Vivo | John CHAPUT, <i>Arizona State University, USA</i> |
| C3 | 15:20-15:30 | UNACS: A Unified Nucleic Acid Computation System for Organisms | Friedrich SIMMEL, <i>TU München, DE</i> |
| C4 | 15:30-15:40 | invivoXNA: Orthogonal biosystems based on phosphonate XNAs | Vitor PINHEIRO, <i>University College London, UK</i> |
| C5 | 15:40-15:50 | MODULIGHTOR: Synthetic photoswitchable modulators to harness endogenous proteins in vivo: remote control of pentameric ligand-gated ion channels with light | Pau GOROSTIZA, <i>Institute for Bioengineering of Catalonia (IBEC), ES</i> |

Group D

| Nr. | Time | Title | Speaker |
|-----|-------------|---|---|
| D1 | 15:00-15:10 | 2GEnzymes: Enzymes for 2G Sugars | Tino ELTER, <i>Fraunhofer CBP, DE</i> |
| D2 | 15:10-15:20 | XyloCut: Shortcut to the carbon efficient microbial production of chemical building blocks from D-xylose | Lisa Wasserstrom, <i>Lund University, SE</i> |
| D3 | 15:20-15:30 | No-P: Enzymatic sugar coupling | Ulf HANEFELD, <i>Technische Universiteit Delft, NL</i> |
| D4 | 15:30-15:40 | Z-Fuels: A novel bacterial system with integrated micro-bubble distillation for the production of acetaldehyde | Graeme HITCHEN, <i>Perlemax Limited, UK</i> |
| D5 | 15:40-15:50 | BioProMo: Biotechnological Production of Monoterpenoids | Jens SCHRADER, <i>DECHEMA-Forschungsinstitut, DE</i> |

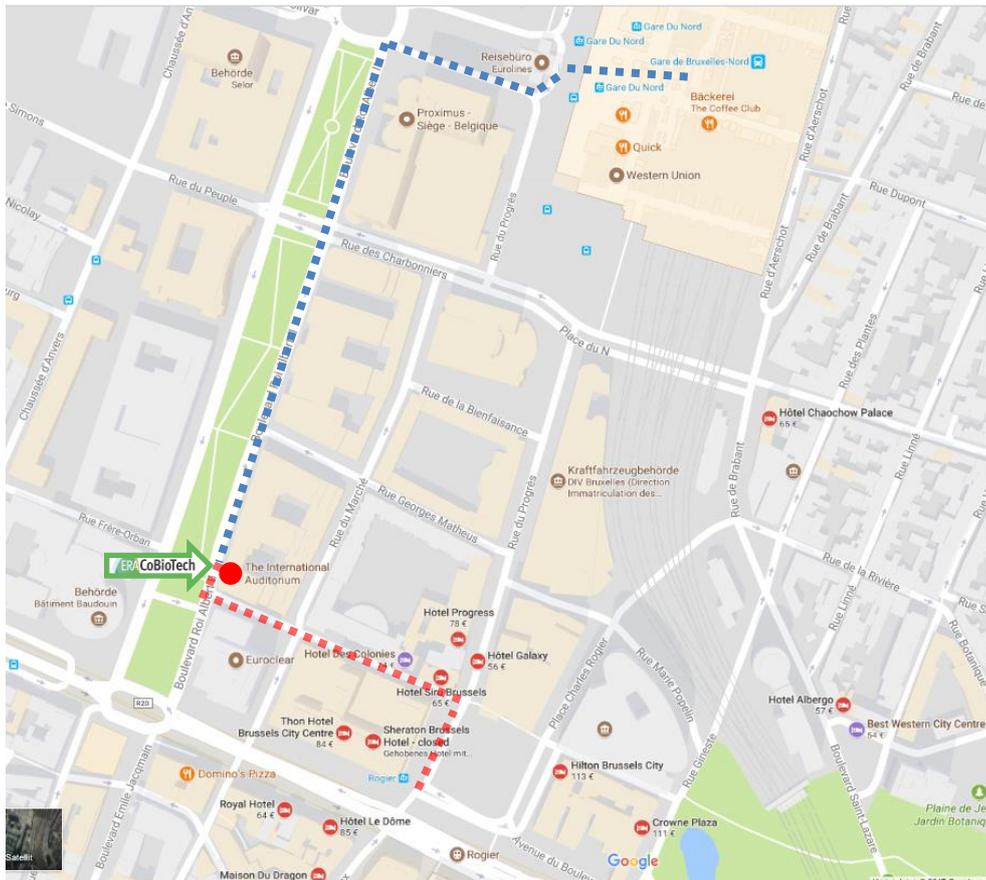
Group E

| Nr. | Time | Title | Speaker |
|-----|-------------|---|---|
| E1 | 15:00-15:10 | FAPA: Fumaric Acid for Polymer Applicants | Ulf PRÜSSE, <i>Thünen-Institute of Agricultural Technology, DE</i> |
| E2 | 15:10-15:20 | Convert-Si: Conversion of phytogetic silica reach food industry by-products into value-added products | Florin OANCEA, <i>National Research and Development Institute for Chemistry and Petrochemistry, RO</i> |
| E3 | 15:20-15:30 | FunChi: Fungal Chitosans from Fermentation Mycelia for Plant Biostimulants | Bruno M.MOERSCHBACHER, <i>WWU Münster University, DE</i> |
| E4 | 15:30-15:40 | SMARTPLANTS: Control of Engineered Metabolism by Flowering and Temperature Triggered Plant Regulatory Networks | Alain TISSIER, <i>Leibniz-Institute of Plant Biochemistry, DE</i> |
| E5 | 15:40-15:50 | RootBook: Systems analysis of peptide-mediated cell-cell communication in the plant root by in situ sequencing | Manfred CLAASSEN, <i>ETH Zurich, CH</i> |

How to reach the BioTech Research & Innovation Hack 2017 venue:

**The International Auditorium, International Trade Union House,
Boulevard du Roi Albert II, No. 5 / 2 , B-1210 Brussels**

Conference hall: Auditorium



- The International Auditorium
- - - - - 300 m (4 Min. walk) from Metro station Rogier
- - - - - 500 m (6 Min. walk) from Gare de Bruxelles-Nord

Hotels near the venue

Hotel Des Colonies

*Rue des Croisades 6,
1210 Saint-Josse-ten-Noode, Belgien*

Reservations Offices

E-mail: res2@hotel-des-colonies.com

Tel.: +32 2 205 16 00

<http://www.hotel-des-colonies.com/>

Hotel Siru

*Rue des Croisades 2,
1210 Bruxelles, Belgien*

Reservations

Email: Res@hotelsiru.com

Tel.: +32 2 203 33 03

hotelsiru.com

Hotel Progress

*Rue du Progrès 9,
1210 Saint-Josse-ten-Noode, Belgien*

Reservations Offices

Email: res2@progresshotel.be

Tel.: +32 2 205 17 00

<http://www.progresshotel.be/>

Thon Hotel Brussels City Centre

*Avenue du Boulevard 17,
1210 Brussels*

Reservations

Email: brusselcitycentre@thonhotels.be

Tel.: +32 2 205 15 11

<https://www.thonhotels.com>

Hilton Brussels City

*Place Charles Rogier 20,
1210 Bruxelles, Belgien*

Reservations

Email: res.brusselcity@hilton.com

Tel.: +32 2 203 31 25

hilton.com

Hôtel Le Dôme

*Boulevard du Jardin Botanique 9,
1000 Bruxelles*

Reservations

Email: dome@skypro.be

Tel.: +32 2 218 06 80

<http://www.hotel-le-dome.be/>