

16th European Congress on Biotechnology – Detailed Agenda

Key

| | | | |
|------------------------|------------------|------------------------|------------------------|
| Plenary Session | Symposium | Highlight Event | Keynote Speaker |
|------------------------|------------------|------------------------|------------------------|

| Sunday 13 July | | | |
|----------------------|--|--|---|
| 10:00 – 14:30 | Workshop: Industrial biotechnology from fundamentals to practice. | | 10:30 – 12:40 Workshop: YEBN communications workshop |
| | Organised by the Austrian Centre for Industrial Biotechnology (ACIB) | | Supported by the Scottish Universities Life Science Alliance (SULSA) |
| 14:50 – 16:45 | | | Workshop: Biomolecular technology of proteins |
| | | | Organised by BioToP - The international PhD programme on protein biotechnology at BOKU Vienna |
| 17:00 – 19:00 | | | Opening Ceremony |
| | | | Opening lecture: How to get biotechnology to work for us <i>Prof. Anne Glover, Chief Scientific Adviser to European Commission</i> |
| | | | Plenary lecture: Synthetic Biology for Synthetic Chemistry <i>Prof. Jay Keasling, University of California, Berkeley</i> |
| 19:00 – 20:30 | WELCOME RECEPTION (CROMDALE HALL, LEVEL -2) | | |

Monday 14 July

| | | | | | |
|----------------------|--|--|--|--|---|
| 09:00 – 10:00 | | | | | Biochemical Engineering Journal Young Investigator Award lecture |
| | | | | | A glimpse into the future of mammalian cell culture process development: innovative approaches to impact time to clinic, product quality, and cost of process development and commercial manufacturing <i>Chetan Goudar, Amgen USA</i> |
| 10:00 – 10:30 | REFRESHMENTS AND EXHIBITION (CROMDALE HALL, LEVEL -2) | | | | |
| 10:30 – 12:30 | Symposium 1: Stem cell applications and gene therapies: where are we? | Symposium 2: Plants for the production of high value chemicals | Symposium 3: Glycobiotechnology | Symposium 4: Robust biocatalysts for the production of novel bio-based products | |
| 10:30 | Keynote: Engineering synthetic stem cell niches <i>Matthias Lutolf (Lausanne, CH)</i> | Keynote: Cultured cambial meristematic cells as a source of plant natural products <i>Gary Loake (Edinburgh, UK)</i> | Keynote: Glycoarrays as tools in glycobiotechnology <i>Sabine Flitsch (Manchester, UK)</i> | Keynote: Molecular design of transglucosidases for polysaccharide and oligosaccharide synthesis <i>Pierre Monsan (Toulouse, FR)</i> | |
| 11:00 | A quick potency assay for osteogenic and chondrogenic differentiation of adipose derived stem cells <i>Eleni Oberbauer (Vienna, AT)</i> | Molecular marker-assisted selection and pyramiding effect of major QTLs for cotton fiber strength <i>Youlu Yuan (Beijing, CN)</i> | Risk assessment of feed additives of microbial origin in the European Union <i>Jaime Aguilera (EC Brussels, BE)</i> | Structural studies on transaminase enzymes and applications in biocatalysis <i>J Littlechild (Exeter, UK)</i> | |
| 11:15 | Repeated systemic administration of human adipose-derived stem cells attenuate diabetic nephropathy in the rats <i>Xue-Yuan Bai (Beijing, CN)</i> | The CO ₂ microalgae biorefinery: high value products and biofuels using halophilic microalgae in the "D-Factory" <i>Patricia Harvey (London, UK)</i> | <i>Pichia pastoris</i> GlycoDelete: the way out when N-glycans are a burden <i>Bram Laukens (Gent, BE)</i> | Current developments on the engineering of <i>Escherichia coli</i> biofilms for enzymatic biosynthesis of halotryptophans <i>Isaac Vizcaino-Caston (Birmingham, UK)</i> | |
| 11:30 | Producing and harvesting culture-derived platelets with functional activity from blood stem cells <i>William Miller (Northwestern U., USA)</i> | Exploiting nature's chemists: high value bioactive compounds from algae <i>Christine Edwards (Robert Gordon University, Aberdeen, UK)</i> | Enzymatic remodelling of chitin for agrochemical applications <i>Rémi Chambon (CNRS Paris, FR)</i> | Structural and biochemical characterization of two novel enzymes with promiscuous ene-reductase activity <i>Tea Pavkov-Keller (Graz, AT)</i> | |
| 11:45 | Adipose derived stem cells respond to <i>in vitro</i> extracorporeal shockwave treatment with increased stemness and multipotency <i>Christina Schuh (Vienna, AT)</i> | Use of synthetic biology in creating high-value metal nanoparticles from phytoremediated waste <i>Matthew Edmundson (Edinburgh, UK)</i> | Polysaccharides production by autotrophic cultures of microalgae <i>Antonio Marzocchella (Naples, IT)</i> | Lessons on directed evolution of hydrolases and glucose oxidase <i>Ulrich Schwaneberg (Aachen, DE)</i> | |
| 12:00 | Engineering bacteria for the discovery of potential therapeutic compounds against protein misfolding diseases <i>Georgios Skretas (Athens, GR)</i> | Gene isolation and its identification of salinity stress on <i>G.hirsutum L.</i> <i>Wuwei Ye (CAAS, CN)</i> | Synthesis of potential prebiotics using <i>Pseudomonas syringae</i> DC3000 levansucrase Lsc3 <i>Triinu Visnapuu (Tartu, EE)</i> | Immobilization of carbonic anhydrase for biomimetic CO ₂ capture in slurry absorber <i>Sara Peirce (Naples, IT)</i> | |

| | | | | |
|----------------------|--|--|---|---|
| 12:15 | Computational prediction of associations between psoriasis, rheumatoid arthritis and osteoarthritis <i>Tuba Sevimglu (Marmara, TR)</i> | Characterization of thermostable peroxidase from <i>Aegle marmelos</i> and its immobilization <i>Brijesh Pandey (Lucknow, IN)</i> | 7-Hydroxydehydronuciferine induces human melanoma A375.S2 autophagy and apoptosis and inhibits metastasis in vitro and in vivo <i>Hui Min Wang (Kaohsiung, CN)</i> | Engineering of pyranose 2-oxidase for modified oxygen reactivity <i>Dagmar Brugger (BOKU, Vienna, AT)</i> |
| 12:30 – 13:30 | LUNCH AND EXHIBITION (CROMDALE HALL, LEVEL -2) | | | |
| 13:15 – 15:00 | POSTER SESSION - ODD NUMBERS (STRATHBLANE HALL AND KILSYTH, LEVEL 0) | | 13:30 – 14:30 Highlight event: Governance, risk and responsible innovation | 13:15 -14:45 Highlight event: Publications workshop: How to get your science published |
| 15:00 – 16:00 | Symposium 5: Synthetic biology | Symposium 6: Assimilation of CO₂, CO and CH₄ into biobased products | Symposium 7: Applications of metabolic modelling | Symposium 8: Industrial biotechnology of natural and synthetic polymers |
| 15:00 | Keynote: Design and production of new-to-nature antimicrobials by synthetic biology <i>Oscar Kuipers (Groningen, NL)</i> | Keynote: Microbial fixation of CO ₂ in water bodies and in drylands to combat climate change, soil loss and desertification <i>Roberto de Philippis (Florence, IT)</i> | Keynote: Making use of metabolic models – <i>In-silico</i> driven design and engineering of industrial microorganisms <i>Christoph Wittmann (Braunschweig, DE)</i> | Keynote: Green polymer processing with enzymes <i>Georg Gübitz (Graz, AT)</i> |
| 15:30 | Synthetic transcription factors allow regulon wide control and shifting the Nitrogen/Carbon balance in bacteria <i>Jorg Schumacher (Imperial, London, UK)</i> | Microalgal biofuels from native biological resource of Pearl River Delta <i>Maurycy Daroch (Peking, CN)</i> | Design of optimally constructed metabolic networks of minimal functionality <i>David Ruckerbauer (ACIB Vienna, AT)</i> | Open mixed cultures for bioethanol production from lignocellulosic materials <i>Davide Dionisi (Aberdeen, UK)</i> |
| 15:45 | Cofactor uptake in 1,2-propanediol metabolising microcompartments <i>Matthias Mayer (Kent, UK)</i> | Exploring the potential of microalgae for bioenergy production <i>Frank Baganz (UC London, UK)</i> | What is the relationship between intracellular and extracellular metabolites? The theory of “metabolic overflow” put into test <i>Silas Villas-Boas (Auckland, NZ)</i> | Strategies for enzymic functionalization of synthetic polymers <i>Enrique Herrero Acero (ACIB, Vienna, AT)</i> |
| 16:00 – 16:30 | REFRESHMENTS AND EXHIBITION (CROMDALE HALL, LEVEL -2) | | | |
| 16:30 – 17:30 | Symposium 5 (cont'd) | Symposium 6 (cont'd) | Symposium 7 (cont'd) | Symposium 8 (cont'd) |
| 16:30 | Use of transporter plug-ins in building effective microbial cell factories for chemical and fuel production <i>Christopher Grant (UC London, UK)</i> | Development of luminescent photobioreactors for improved microalgae cultivation <i>Seyedeh Fatemeh Mohsenpour (Heriot-Watt Edinburgh, UK)</i> | Towards genome-scale metabolic pathway analysis: metabolome integration allows efficient enumeration of elementary flux modes in metabolic networks <i>Jürgen Zanghellini (ACIB Vienna, AT)</i> | Influence of nutritional and physicochemical variables in PHB production from raw glycerol by a wild <i>Bacillus megaterium</i> strain <i>Carolina Guzman Luna (Rio Grande do Sol, BR)</i> |
| 16:45 | Novel tuneable gene expression systems based on orthogonal riboswitches <i>Neil Dixon (Manchester, UK)</i> | Identification of new auxiliary enzymes for the hydrolysis of lignocellulose <i>Oriana Salazar (Santiago, CL)</i> | Genome scale metabolic modeling of recombinant protein producing yeasts: Prediction of process parameters and metabolic engineering targets for efficient production <i>Diethard Mattanovich (BOKU Vienna, AT)</i> | Value-added carotenoid production in the pennate diatom <i>Phaeodactylum tricorutum</i> with light emitting diode based photobioreactors <i>Weiqi Fu (UC San Diego, USA)</i> |

| | | | | |
|---------------|---|---|---|---|
| 17:00 | Signal transduction engineering: a powerful platform technology for enhancing secondary metabolite production <i>Jian-Jiang Zhong (Shanghai, CN)</i> | Engineering biofuel producing microbes for efficient hemicellulose utilisation using synthetic biology <i>Gavin Thomas (York, UK)</i> | Use of a novel combinatorial genetics platform to rapidly clone, express and select target biocatalytic activities for multigenic metabolic pathway optimization <i>Ian Fotheringham (Ingenza, Midlothian, UK)</i> | Antibacterial and antifungal activity of charcoal materials and microwave radiation <i>Hee Jin Yang (Myongji, KR)</i> |
| 17:15 | Development of two continuous genome engineering strategies for efficient microbial evolution <i>Zhen Cai (Chinese Academy of Sciences, CN)</i> | Economic assessment of microbial lipids for biodiesel production: competitiveness with microalgae and agricultural plant oils <i>Ho Nam Chang (KAIST, Daejeon, KR)</i> | Methanol – a potential carbon source for <i>Corynebacterium glutamicum</i> <i>Sabrina Witthoff (Jülich, DE)</i> | Polyhydroxyalkanoates production by aerobic mixed microbial cultures using crude glycerol <i>Paulo Costa Lemos (Lisbon, PT)</i> |
| 17:45 – 19:45 | 17.30 – 19.00 POSTER RECEPTION – EVEN NUMBERS (STRATHBLANE HALL AND KILSYTH, LEVEL 0) | | | Highlight event: Bioeconomy |
| | | | | Keynote: Building a European Bioeconomy <i>Eveline Lecoq, (European Commission)</i> Keynote: Addressing global policy challenges through technology: an OECD perspective <i>Jacqueline Allan (OECD, France)</i> Keynote: Asia Bioeconomy and Biobusiness: current scenario and future prospects, <i>Satyahari Dey (IIT, Kharagpur, IN)</i> |

Tuesday 15 July

| | | | | |
|----------------------|--|---|--|--|
| 09:00 – 10:00 | | | | Plenary lecture: Prosthetic gene networks for biomedical applications |
| | <i>Prof. Martin Fussenegger, Department of Biosystems Science and Engineering, ETH Zürich</i> | | | |
| 10:00 – 10:30 | REFRESHMENTS AND EXHIBITION REFRESHMENTS AND EXHIBITION (CROMDALE HALL, LEVEL -2) | | | |
| 10:30 – 12:30 | Symposium 9: Biomarkers and diagnostic tools | Symposium 10: Biowaste biorefinery for a more sustainable bioeconomy | Symposium 11: Nanotechnology: new biological applications | Symposium 12: Stress responses in microbial bioprocessing |
| 10:30 | Keynote: Designing nanomaterials for ultrasensitive biosensing <i>Molly Stevens (Imperial London, UK)</i> | Keynote: Biowaste biorefinery for a more sustainable and biobased food industry <i>Fabio Fava (Bologna, IT)</i> | Keynote: Design, structure and assembly of superparamagnetic core-shell nanoparticles <i>Erik Reimhult (BOKU, Vienna, AT)</i> | Keynote: Mechanisms of protein folding and quality control in bacteria <i>Bernd Bukau (Heidelberg, DE)</i> |
| 11:00 | Antibodies by design <i>Peter Tessier (Rensselaer Polytechnic Inst., USA)</i> | Development of an advanced biorefinery concept based on valorization of pulp and paper industry waste streams <i>Apostolis Koutinas (Athens, GR)</i> | Production and characterization of HIV-1 virus-like particles using transient gene expression in mammalian cells. <i>Sonia Gutiérrez-Granados (UAB, ES)</i> | Engineering customised cell signalling circuits and their biotechnological applications <i>Baojun Wang (Edinburgh, UK)</i> |
| 11:15 | Engineering cofactor specificity of methyltransferases <i>Martin Tengg (Graz, AT)</i> | Biotechnological conversion of spent coffee grounds into polyhydroxyalkanoates <i>Stanislav Obruca (Brno, CZ)</i> | Bacterial microcompartments moving into the world of biotechnology <i>Stefanie Frank (Kent, UK)</i> | Stochastic activation of the GlpR-controlled glp gene cluster in <i>Pseudomonas putida</i> KT2440 results in a bistable growth pattern on glycerol <i>Pablo Ivan Nikel (CNB-CSIC, Madrid, ES)</i> |
| 11:30 | Synthetic bioreporters for detection of environmental pollutants <i>Jan Roelof van der Meer (Lausanne, CH)</i> | Extraction of the protein fraction of dry distillers grains with solubles, implementing biocatalytic and chemical methods <i>Maria Villegas Torres (UC London, UK)</i> | Protein supramolecular engineering – applications in biotechnology <i>Patrick Shahgaldian (MuttENZ, CH)</i> | The adaptation of the intestinal sulphate reducing bacterium, <i>Desulfovibrio desulfuricans</i> , to nitrosative stress induced by nitric oxide <i>Matthew Faulkner (Birmingham, UK)</i> |
| 11:45 | A homogeneous quenching resonance energy transfer assay for H-Ras activation cycle monitoring and inhibitor screening <i>Kari Kopra (Turku, FI)</i> | Succinic acid production from raw materials by <i>Actinobacillus succinogenes</i> <i>Christophe Roca (Lisbon, PT)</i> | Biological production of stable copper nanoparticles <i>Nikolaos Pantidos (Edinburgh, UK)</i> | Origins of <i>Escherichia coli</i> growth rate and cell shape changes at high external osmolality <i>Teuta Pilizota (Edinburgh, UK)</i> |
| 12:00 | Association of apolipoprotein E gene polymorphism with serum lipid levels <i>Sehrish Fatima (Karachi, PK)</i> | Enhanced welan gum production using cane molasses as substrate by <i>Alcaligenes</i> sp. ATCC31555 | Insight into the physiological role of a compartmentalised ferritin like protein in <i>Rhodospirillum rubrum</i> | Engineering global regulator cAMP receptor protein (CRP) of <i>E. coli</i> for improved biobutanol tolerance |

| | | | | |
|----------------------|--|---|---|---|
| | | <i>Jufang Wang (Guangzhou, CN)</i> | <i>Jon Marles-Wright (Edinburgh, UK)</i> | <i>Rongrong Jiang (Nanyng TU, SG)</i> |
| 12:15 | Comparative large scale microRNA expression profiles of cynomolgus monkeys, rat and human reveal miR-182 associated with T2D <i>Hongli Du (Guangzhou, CN)</i> | Investigating the biomass modifying and degrading enzymatic toolbox of <i>Aspergillus japonicus var aculeatus</i> FEC 156 with quantitative proteomics and new generation sequencing tools <i>George Anasontzis (Chalmers, Göteborg, SE)</i> | Catalytic properties improvements of <i>Alcaligenes faecalis</i> nitrilase by self-assembly induced aggregation <i>Shuang Li (Guangzhou, CN)</i> | Heat shock at higher cell densities improves the translocation of measles virus hemagglutinin into the yeast endoplasmic reticulum <i>Rimantas Slibinskas (Vilnius, LT)</i> |
| 12:30 | Probiotics fermented soymilk treatment decreases blood lipid, and ameliorates high-fat diet-induced liver injury in mice <i>Yuhua Wang (Jilin, CN)</i> | | | |
| 12:30 – 15:00 | LUNCH AND EXHIBITION (CROMDALE HALL, LEVEL -2) | | | |
| | POSTER PRESENTATIONS – EVEN NUMBERS (STRATHBLANE HALL AND KILSYTH, LEVEL 0) | 13:15– 14:45 Highlight event: advances in omic technologies | 13:30 - 14:30 Highlight event: careers workshop How to manage your career post-qualification | 13:15 – 14:30 Sponsored symposium |
| | | Integrating omics to study human biology and disease <i>Mathias Uhlen</i> | | Recent developments in scaling down and using single use probes for measuring the live cell concentration by dielectric spectroscopy <i>Pardip Sandhar (Aber Ins. UK)</i> Scale-down study of oscillations in oxygen and substrate supply for <i>Corynebacterium glutamicum</i> <i>Marco Oldiges (Jülich, DE)</i> Automated development of recombinant bioprocesses – from vision to mission <i>Florian Glauche, TU-Berlin, D</i> Scale up of chito-oligomer production via bacterial fermentation <i>Hendrik Waegeman (Bio Base Europe)</i> |
| 15:00 – 16:00 | Symposium 13: Biomedical research | Symposium 14: Plant genetic engineering | Symposium 15: Recombinant protein production | Symposium 16: Bioprocessing |
| 15:00 | Keynote: Bacteria fabricate 3D scaffolds for organ regeneration | Keynote: Genetic engineering of secondary metabolism for plant | Keynote: Getting a grip on complexes: tools and technologies for multiprotein | Keynote: Bacterial enzymes for lignin degradation: production of aromatic |

| | | | | |
|----------------------|---|---|--|--|
| | <i>Paul Gatenholm (Chalmers, Göteborg, SE)</i> | protection <i>John Pickett (Rothampstead, UK)</i> | complex research <i>Dr Imre Berger (Grenoble, FR)</i> | chemicals from lignocellulose <i>Tim Bugg (Bath, UK)</i> |
| 15:30 | Enzyme immobilized polymeric biomaterials <i>Mukesh Doble (Madras, IN)</i> | Transcriptome and small RNA sequencing analysis of a new dwarf mutant in <i>Gossypium hirsutum</i> L <i>Xiongming Du (Huazhong, CN)</i> | Making life better for <i>Escherichia coli</i> cells that produce toxic membrane proteins <i>Dimitra Gialama (Athens, GR)</i> | Keynote: Quantitative single cell analysis of isolated microbes in controlled microenvironments <i>Andreas Schmid (Dortmund, DE)</i> |
| 15:45 | Osteoblast cell proliferation on magnesium-substituted hydroxyapatite coatings <i>Kursat Kazmanli (Istanbul, TR)</i> | Understanding the interactions between plant biotic and abiotic stress through characterization of microRNA effectors in jute (<i>Corchorus</i> spp.)- <i>Macrophomina phaseolina</i> interaction system <i>Lalit Kharbikar (Barrackpore, IN)</i> | Population heterogeneity in <i>Pseudomonas putida</i> analyzed on the single cell level using proteomics and digital PCR <i>Michael Jahn (Dortmund, DE)</i> | |
| 16:00 – 16:30 | REFRESHMENTS AND EXHIBITION (CROMDALE HALL, LEVEL -2) | | | |
| 16:30 – 17:30 | Symposium 13 (cont'd) | Symposium 14 (cont'd) | Symposium 15 (cont'd) | Symposium 16 (cont'd) |
| 16:30 | Bone regeneration through facile binding of bone graft substitute particles using mussel adhesive protein <i>Hyung Joon Cha (Gyeongsangbuk-do, KR)</i> | Can plant still be a major and cost-effective source for the supply of artemisinin, the most potent anti-malaria drug? <i>Kexuan Tang (Shanghai, CN)</i> | Synthesis of antibacterial bacteriophage proteins in microalgae <i>Laura Stoffels (UC London, UK)</i> | Continuous precipitation of recombinant antibodies from CHO cell culture supernatant by calcium-phosphate flocculation and cold ethanol precipitation <i>Nikolaus Hammerschmidt (ACIB Vienna, AT)</i> |
| 16:45 | The stabilisation of red blood cells in a powdered form <i>Krishnaa Mahubani (Cambridge, UK)</i> | Comparative evaluation of bacterial diversity from GM and non-GM maize rhizosphere <i>Naseer Ahmad (COMSATS, Islamabad, PK)</i> | Integrative '-omic' approach to explore molecular mechanism of miRNA engineered Chinese hamster ovary cell. <i>Vaibhav Jadhav (BOKU Vienna, AT)</i> | Modelling of mixing and microbial growth in bubble column bioreactors using computational fluid dynamics <i>Dale McClure (Sydney, AU)</i> |
| 17:00 | Stable aqueous solutions of keratin polypeptides: their properties in solution and at interfaces <i>Fang Pan (Manchester, UK)</i> | Recombinant protein expression in the chloroplast of the green microalga <i>Chlamydomonas reinhardtii</i> : a case study using a novel green fluorescent protein as a reporter <i>Stephanie Braun Galleani (UC London, UK)</i> | Investigating the physiological effect of increased heterologous gene dosage in <i>Pichia pastoris</i> using transcriptomics <i>Elena Camara (UAB, ES)</i> | Disposable hollow fibre bioreactors for high cell density virus production in continuous mode <i>Felipe Tapia (Magdeburg, DE)</i> |
| 17:15 | Trehalolipid biosurfactants from <i>Rhodococcus ruber</i> with anti-adhesive and immunomodulatory activities <i>Maria Kuyukina (Perm State U., Moscow, RU)</i> | Engineering barley for increased drought resistance <i>Ivo Frébort (Olomouc, CZ)</i> | Enhanced membrane protein expression by engineering increased intracellular membrane production <i>Katrien Claes (VIB Gent, BE)</i> | Bioprocess strategies for production of xylanase on agro-residual products with <i>Aureobasidium pullulans</i> <i>Sirma Yegin (Ege Univ., Izmir, TK)</i> |

| | | | | |
|----------------------|--|---|---|--|
| 17:45 – 19:15 | 18:00 – 19:30 Highlight Event: Living in a post-antibiotic era: the challenge of disease resistance This event is open to the public | Highlight Event: Future collaborations of AFOB-EFB and MOU signing ceremony | 17:30 – 19:00 POSTER RECEPTION – ODD NUMBERS (STRATHBLANE HALL AND KILSYTH, LEVEL O) | Symposium 21: Biodegradation and biomediation |
| 17:45 | (See page X for details) | Open meeting organised by the Asian Federation of Biotechnology (See page X for details) | | Bioremediation for resource recovery <i>Louise Horsfall (Edinburgh, UK)</i> |
| 18:00 | | | | Arsenic bioremediation potential of novel bacterial strains isolated from As contaminated groundwater of West Bengal, India <i>Pinaki Sar (Kharagpur, IN)</i> |
| 18:15 | | | | Reduction of hexavalent chromium using combination of nanoscale zero-valent iron and biological treatment in-situ <i>Tomáš Cajthaml (Prague, CS)</i> |
| 18:30 | | | | Isolation of PAH dwelling <i>Penicillium</i> for application in bioremediation processes <i>Elisabet Aranda (CSIC Barcelona, ES)</i> |
| 18:45 | | | | Potential of ectomycorrhizal fungus <i>Pisolithus tinctorius</i> to tolerate and to degrade trifluoroacetate into fluorofom <i>Paula Castro (Porto, PT)</i> |
| 19:00 | | | | Is sulfonamide bacteriostatic biodegradation a new bacterial resistance mechanism? Benjamin Ricken (MuttENZ, CH) |
| 19:30 – 23:00 | GALA DINNER (JOHN HOPE GATEWAY, ROYAL BOTANIC GARDEN EDINBURGH) (See page X for details) | | | |

Wednesday 15 July

| 09:00 – 11:00 | Symposium 17: Development of new vaccines and antimicrobials | Symposium 18: Exploitation of metagenomics for environmental and biocatalytic applications | Symposium 19: Evolutionary strategies for cell factory development | Symposium 20: Systems biocatalysis |
|---------------|---|---|---|--|
| 09:00 | Keynote: Insect cell technology as a vaccine producing platform <i>Paula Alves (ITQB, PT)</i> | Keynote: Metagenomics: mining for novel catalysts <i>Elizabeta Bonch-Osmolovskaya (Moscow, RU)</i> | Keynote: Evolutionary and reverse metabolic engineering of <i>Saccharomyces cerevisiae</i> <i>Jack Pronk (TU-Delft, NL)</i> | Keynote: Combination of the two "worlds": chemo- and biocatalysis towards multi-step one-pot processes <i>Harald Gröger (Bielefeld, DE)</i> |
| 09:30 | Engineering of factor H binding protein, a key vaccine antigen for the prevention of meningococcal disease <i>Hayley Lavender (Oxford, UK)</i> | Metagenomics unveils bacterial and fungal communities response to mycoremediation of polychlorinated biphenyl-contaminated soil <i>Tatiana Stella (Prague, CZ)</i> | Adaptive evolution of <i>Saccharomyces cerevisiae</i> to early stage of an alcoholic fermentation <i>Ana Mangado (ICVV/CSIC, ES)</i> | Keynote: Engineering artificial metabolisms <i>in vitro</i> <i>Wolf-Dieter Fessner (Darmstadt, DE)</i> |
| 09:45 | Antimicrobial properties of sophorolipids produced by <i>Candida bombicola</i> ATCC 22214 against Gram positive and Gram negative bacteria. <i>Mayri Alejandra Diaz De Rienzo (Manchester, UK)</i> | Mining alginate lyases in sediment metagenomes from four geographically distant cold coastal environments <i>Hebe Dionisi (CENPAT-CONICET, Buenos Aires, AR)</i> | Genome dynamics of the human embryonic kidney 293 (HEK293) lineage in response to cell biology manipulations <i>Morgane Boone (VIB Gent, BE)</i> | |
| 10:00 | Tailoring <i>Streptomyces</i> : producing novel minor groove binder antibiotics <i>Emilio Cortes Sanchez (Strathclyde, UK)</i> | Designed sensor cells for direct detection of microbial colonies with target enzyme activities on solid plates <i>Haseong Kim (KRIBB, Daejeon, KR)</i> | Versatile and stable vectors for efficient gene expression in <i>Ralstonia eutropha</i> H16 <i>Petra Koefinger (TU-Graz, AT)</i> | |
| 10:15 | Progesterone biosynthesis by combined action of adrenal steroidogenic and mycobacterial enzymes in fast growing mycobacteria <i>Nicolai Strizhov (Moscow, RU)</i> | Metagenomic analysis of microbial community in petroleum refinery waste using next generation sequencing and assessment of bioremediation potential <i>Sufia Kazy (Durgapur, IN)</i> | Novel human kidney epithelial cell line in pharmaceutical biotechnology <i>Lukas Fliedl (ACIB Vienna, AT)</i> | Expanding the diversity of diketopiperazines biosynthesized by cyclodipeptide synthases <i>Isabelle Jacques (SIMORPO, Fontenay-aux-Roses, FR)</i> |
| 10:30 | DNA vaccine expressing ubiquitin-conjugated multi-fragments antigens protects BALB/c mice against <i>Toxoplasma gondii</i> infection <i>Hua Cong (Shandong, CN)</i> | Bioconversion of lignocellulosic hydrolysates: strategies to overcome the inhibitory effects at high gravity processes <i>Charilaos Xiros (Chalmers, Göteborg, SE)</i> | <i>De novo</i> production of geranic acid with <i>Pseudomonas putida</i> <i>Jens Schrader (DECHEMA RI, Frankfurt, DE)</i> | Improving the performance of coupled racemase/acylase systems: new structural insights and novel tools for high-throughput screening. <i>Guiomar Sanchez Carron (Edinburgh, UK)</i> |
| 10:45 | Cyanobacteria <i>Nostoc</i> sp. SI-SN from hypersaline lake produces C-Phycocyanin with potent antioxidant and DNA protection activity. <i>Saadia Ijaz (Multan, PK)</i> | | High-throughput nL-reactor screening for antimicrobial peptides <i>Steven Schmitt (ETH Zürich, CH)</i> | Artificial enzyme cascade to the polymer building block ω -amino caproic acid <i>Wolfgang Kroutil (Graz, AT)</i> |
| 11:00 | Proteome-wide analysis of the functional roles of bacilysin biosynthesis in <i>Bacillus subtilis</i> | | | Uncovering the broader roles of redox partner proteins for cytochrome P450 enzymes <i>Shengying Li (Quindao, CN)</i> |

| | | | |
|----------------------|--|--|--|
| | <i>Gulay Ozcengiz (METU, Ankara, TR)</i> | | |
| 11:00 – 11:30 | REFRESHMENTS AND EXHIBITION (CROMDALE HALL, LEVEL -2) | | |
| 11:30 – 12:30 | | | Plenary lecture: Bio-based production of chemicals, fuels and materials by metabolically engineered microorganisms <i>Prof. Sang Yup Lee, Korea Advanced Institute of Science and Technology</i> |
| 12:30 – 13:00 | | | Closing ceremony and awards presentations |