




IBS
2016

17th International
Biotechnology
Symposium
and Exhibition
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IBS 2016, Draft Program

DRAFT: 20/10/2016

Monday 24 October 2016			
8.00am	Conference registration & exhibition opens		
	Room 203/204		
9.00 – 9.45am	Welcome to Country & IBS 2016 and AusBiotech 2016 Glenn Cross , CEO, AusBiotech Premier of Victoria, The Hon. Daniel Andrews MP Prof Francesco Nicotra , Vice-President of IUPAC Division III, University of Milano-Bicocca, Italy		
9.45 – 10.30am	100 years old ... and just getting started Paul Perreault , CEO and Managing Director, CSL Ltd CSL is Australia's most successful biotech and this year it will spend more than \$USD600 million on R&D. CEO Paul Perreault will discuss his decision to locate CSL's global R&D hub in Melbourne, his vision for a renaissance in Australian biotechnology and his view of the elements needed for business success.		
			
10.30 – 11.00am	Morning tea break and networking with exhibitors		
	Room 212	Room 216	Room 217
11.00am – 12.30pm	Breakout 1: The structure, function and digestion of food	Breakout 2: Biobased production	Breakout 3: Glycomics
	Chair: Dr Mick Blake , Director Biosecurity Centre of Excellence, Box Hill Institute	Chair: Prof Mary Garson , Professor of Chemistry, The University of Queensland	Chair: Prof Mark von Itzstein , Director, Institute for Glycomics, Griffith University
	Keynote: A/Prof Sally Gras , Director, ARC Dairy Innovation Hub <i>The microstructure and function of milk and dairy</i>	Keynote 1: Prof David James , Professor of Bio Process Engineering, Sheffield University UK	Prof Dr Rita Gerardy-Schahn , Director and Professor, Institute for Cellular Chemistry, Hannover Medical School, Germany

	<p><i>foods</i></p> <p>Prof Ben Boyd, Professor in Drug Delivery Sciences, Monash University <i>New insights into the structure of milk during digestion</i></p> <p>Simone Rochfort, Research Leader Molecular Phenomics, AgriBio Economic Development</p> <p>Dr Trevor Lockett, Group Leader, Personalised Health, CSIRO <i>Starch structure and its impact in digestion and nutrition</i></p>	<p>Dr Wayne Patrick, Senior Lecturer, University of Otago, New Zealand <i>Engineering superior DNA ligase enzymes for biomolecular applications</i></p> <p>A/Prof Johan Verbeek, Associate Professor, University of Waikato, New Zealand <i>New products for special needs, a new life for protein by-products</i></p>	<p><i>Ways and means to engineer glyco-enzymes for biotechnological applications</i></p> <p>Prof Richard Payne, Professor of Organic Chemistry and Chemical Biology and ARC Future Fellow, School of Chemistry, The University of Sydney <i>Glycopeptides and glycoproteins: Finding the sweet spot for biology and medicine</i></p> <p>Prof Richard Furneaux, Director, The Ferrier Research Institute, Victoria University of Wellington, New Zealand <i>Is there a chemical code for the diverse biological activities of heparan sulfate?</i></p>
12.30 – 1.30pm	Lunch break and networking with exhibitors		
1.30 – 3.00pm	Breakout 4: BioRefinery	Breakout 5: IP global update	Breakout 6: Nanobiotech
	<p>Chair: Prof Emile van Zyl, Senior Chair of Energy Research in Biofuels, Stellenbosch University, South Africa</p> <p>Keynote: Prof Akihiko Kondo, Professor, Kobe University, Japan <i>Development of microbial cell factories for consolidated bioprocessing by synthetic biology platform</i></p> <p>Prof Danilo Porro, Professor, University of Milano-Biocca, Italy <i>Molecular and process design for chemical productions in yeasts cell factories</i></p> <p>Prof Kristala Jones Prather, Associated Professor, Massachusetts Institute of Technology, USA <i>In search of a better enzyme: biocatalyst</i></p>	<p>Chair: Lorraine Chiroiu, Deputy CEO, AusBiotech</p> <p>Dr Lisa Haile, Partner & Co-Chair Global Life Sciences Sector, DLA Piper LLP, USA <i>Patent Eligibility including Natural Products and Diagnostics under section 101 in the US</i></p> <p>Tania Obranovich, Vice President Ip, Legal Affairs and Compliance, Clinical Genomics</p> <p>John Tessensohn, Board Member Shusaku. Yamamoto, Japan <i>Requirements, timing and strategies in patent term extension (PTE) practice in Japan</i></p> <p>Dr Charles Harding, Partner, D Young & Co, UK <i>Post grant developments in Europe</i></p>	<p>Chair: Prof Teruyuki Nagamune, Professor, The University of Tokyo, Japan</p> <p>Keynote 1: Prof Justin Gooding, Scientia Professor and Founding Co-director, The Australian Centre for NanoMedicine, UNSW <i>3D printing of cells</i></p> <p>Keynote 2: Prof Max Lu, Vice-Chancellor, University of Surrey UK <i>Layered Inorganic Nanoparticles for Controlled Delivery of Drug and RNAs</i></p> <p>Prof Gordon Wallace, Chief Investigator, University of Wollongong <i>3d Bioprinting. Can we emulate the hierarchical structures found in nature ?</i></p> <p>Prof Soong Ho Um, Associate Professor, Sungkyunkwan University, South Korea <i>A DNA Origami-based fluorescent system for</i></p>

	<i>screening to facilitate pathway engineering</i>		<i>rapid and selective diagnosis of cytosolic RNA cancer markers</i>
3.00 – 3.30pm	Afternoon tea break and networking with exhibitors		
3.30 – 5.00pm	Breakout 7: Plant molecular biology	Breakout 8: Bioremediation & waste remediation	Breakout 9: Vaccine development
	Chair: Prof Ian Godwin , Professor in Plant Molecular Genetics, The University of Queensland	Chair: Prof Gary Schenk , ARC Future Fellow and Reader, The University of Queensland	Chair: Prof Mark Kendall , Group Leader, Delivery of Drugs and Genes Group AIBN, The University of Queensland
	Keynote: Prof German Spangenberg , Executive Director, AgriBio Centre <i>Advances and prospects in forage systems biology and molecular breeding</i>	Keynote: Prof Linda Blackall , Professor of Biosciences and Academic Director of Research Training, Swinburne University of Technology <i>Treatment of urban solid waste by composting with a focus on pathogen removal from the final product</i> Keynote 2: Prof Gary Schenk , ARC Future Fellow and Reader, The University of Queensland <i>Environmental Biocatalysis: a promising strategy to translate basic science into a variety of applications</i>	Keynote: Prof Alan Cowman , Head, Division of Infection and Immunity, The Walter and Eliza Hall institute of Medical Research <i>Current state of vaccine development for malaria</i>
	Prof Ian Godwin , Professor in Plant Molecular Genetics, The University of Queensland <i>Transgenic cereals with enhanced end-use qualities</i> Prof Jimmy Botella , Professor of Plant Biotechnology University of Queensland <i>No equipment? No electricity? No problem! A simple, low-cost molecular/nanotechnology-based diagnostic system for crop, animal and human diseases.</i> Prof Tomas Macek , Professor of Biochemistry, University of Chemistry and Technology, Prague, Czech Republic <i>Transgenic plants tailored to overcome stressing</i>	A/Prof Mike Manefield , Associate Professor, School of Biotechnology and Biomolecular Sciences, UNSW <i>Bioremediation of organochlorines in Australia</i> Hana Stiborova , Research Assistant, UCT Prague, Czech Republic <i>Bioremediation of waste products from poultry industry</i>	A/Prof Michael Nissen , Director of Scientific Affairs & Public Health, GSK Vaccines, Singapore <i>Current status of Ebola virus vaccine development</i> Prof Paul Young , Professor of Virology and Head of School, The University of Queensland <i>Clamping sub-unit viral vaccines: constraining the conformation of recombinant viral fusion proteins in their pre-fusion form enhances vaccine potency</i> Prof Mark Kendall , Group Leader, Delivery of Drugs and Genes Group AIBN, The University of Queensland

	<i>conditions or improve phytoremediation</i>		<i>Engineering the improved reach of vaccines: from needles to rockets to Nanopatches</i>
5.00 – 6.30pm	Welcome reception IBS 2016 and AusBiotech 2016 <i>Supported by CSL</i> <i>Exhibition hall, Melbourne Room, Melbourne Convention Centre</i>		


Tuesday 25 October 2016	
7.00am	Conference registration opens
6.55 -7.45am	<p>South Wharf river promenade precinct walking tour Meet at Hilton hotel reception Free to attend - Please RSVP : events@ausbiotech.org</p> <p>Join us for a walking tour that highlights Melbournes discovery and exploration, waterfront history, initial settlement and Aboriginal history. The tour will include Melbourne maps, bushtucker samples, historic souvenir and a chocolate sample.</p>
7.30 – 8.30am	<p>How To make life changing products available to more people sooner. Presenter: Chad Fox - President of MasterControl Asia</p> <p>Join us and experience our version of MasterControl quality management. You will see firsthand the essence of our mission statement; To make life changing products available to more people sooner.</p> <p><i>Invitation Only</i></p>
8.30am	Exhibition hall opens
	Room 203/204
8.45 – 9.20am	<p><i>Biotechnology and innovation: risk and precaution: social license or not?</i> Prof Sir Peter Gluckman, Chief Science Advisor to the Prime Minister, Office of the Prime Minister, New Zealand</p>
9.20 – 9.55am	<p>Millis Oration Introduction: Dr Andrea Huggins, Vice President R&D Strategy, CSL</p> <p><i>The rise, fall and rebirth of an Australian public health icon</i> Prof Ian Gust AO, Professorial Fellow, University of Melbourne</p>



9.55 – 10.30am	Johnson & Johnson Innovation – JJDC: Bringing Smart Money to Your Business Dr Jeanne Bolger , Vice President Venture Investments, Johnson & Johnson Innovation			
10.30 – 11.00am	Morning tea break and networking with exhibitors			
	Room 212	Room 214	Room 216	Room 217
11.00am – 12.30pm	Breakout 10: Pharmaceutical, medical and molecular biology	Breakout 11: Algae	Breakout 12: Nano-biotechnology: from drug delivery to tissue regeneration	Breakout 13: Industrial and environmental biotechnology
	Chair: A/Prof Vito Ferro , Deputy Director, Biotechnology Program, The University of Queensland	Chair: Prof Volker Sieber , Chair, Chemistry of Biogenic Resources, Technical University of Munich, Germany	Chair: Prof Francesco Nicotra , Vice-President of IUPAC Division III, University of Milano-Bicocca, Italy	Chair: Dr Carol Hartley , Research Scientist & Biocatalysis Team Leader, CSIRO
	Keynote: Prof Stefan Oscarson , Professor In Chemical Biology, University College Dublin, Ireland <i>Development of a conjugate vaccine against Cryptococcus neoformans based on synthetic capsular polysaccharide structures</i>	Prof Peer Schenk , Professor, School of Agriculture and Food Sciences, University of Queensland <i>Microalgal biorefineries to cost-effectively produce food, feed and biofuel</i>	Keynote: Prof Gert Storm , Utrecht University, The Netherlands <i>Targeted nanomedicine to address challenges in the delivery of biotech drug products</i>	Prof Muftah El-Naas , Qafco Chair Professor, Qatar University, Qatar <i>Biotechnology in the oil and gas industry: Potentials for the treatment of processed water</i> Dr Boris Kolvenbach , Research Assistant, University Of Applied Sciences And Arts Northwestern Switzerland <i>Multifactorial investigation of sulfonamide antibiotics biodegradation in five wastewater treatment plants</i>
	Dr Fatemeh Dabbagh , Assistant Professor, Faculty Of Pharmacy And Pharmaceutical Sciences, Hormozgan University Of Medical Sciences, Iran <i>Human urate oxidase pseudogene engineering in an effort to develop humanized forms of uricase as an important biopharmaceutical</i> Dr Thu-Ha Nguyen , Senior post-doc, University of Natural Resources and Life Sciences, Vienna, Austria <i>Protein display on the cell surface</i>	Andrew Lawson , Managing Director, MBD Energy Ltd <i>High value algae based products</i> Mary Ibarra-Vidal , Master Student, University Of Calgary <i>Auxenochlorella Protothecoides as a source of lipids and antioxidants</i> Dr Brenton Hamdorf , Industry Engagement Manager, University of Technology Sydney <i>Advanced Algae: PHARMACEUTICAL APPLICATIONS</i>	Prof Teruyuki Nagamune , Professor, The University of Tokyo, Japan <i>Dynamic micro-patterning and sorting of mammalian cells on photo-cleavable PEG-lipid modified surface</i> Prof Laura Cipolla , Dept. Biotechnology and Biosciences, University of Milano-Bicocca, Italy <i>Nanostructured biomaterials for tissue regeneration: connecting carbohydrate and material chemistry</i> Prof Paolo Scrimin , Department of Chemical Sciences, University of	Mattana Tunchai , Hiroshima University, Japan <i>Identification and characterization of chemotactic transducers for a non-natural enantiomer of malate in Ralstonia solanacearum</i> Dr Haiqin Chen , Professor, Jiangnan University, China <i>Application of a delta-6 desaturase</i>



	<p><i>of Lactobacillus plantarum towards the development of whole-cell biocatalyst</i></p> <p>Dr Xudong Wang, Post Doctoral , Dalian University of Technology, China</p> <p><i>PEGylation kinetics of recombinant hirudin and its application for process optimization</i></p>		<p>Padova, Italy</p> <p><i>Targeting and intracellular delivery of functionalized gold nanoparticles: exploiting multivalency and surface properties</i></p>	<p><i>with α-linolenic acid preference on eicosapentaenoic acid production in Mortierella alpina</i></p>
12.30 – 1.30pm	Lunch break and networking with exhibitors			
	Room 212	Room 214	Room 216	Room 217
1.30 – 3.00pm	Breakout 14: Commercialisation of biotech from universities	Breakout 15: Bioprocessing in biomanufacturing	Breakout 16: Drug development	Breakout 17: Nano-biotechnology
	<p>Chair: A/Prof Vito Ferro, Deputy Director, Biotechnology Program, The University of Queensland</p>	<p>Co-Chairs: Prof Murray Moo-Young, Distinguished Professor Emeritus, University of Waterloo, Canada</p> <p>Prof Tomas Macek, Professor of Biochemistry, University of Chemistry and Technology, Prague, Czech Republic</p>	<p>Chair: Prof Ross Barnard, Director of Biotechnology Programs, The University of Queensland</p>	<p>Chair: Prof Francesco Nicotra, Vice-President of IUPAC Division III, University of Milano-Bicocca, Italy</p>
	<p>Keynote: Dr Noel Chambers, CEO, National Foundation for Medical Research and Innovation</p> <p><i>Getting rubber to hit the road: funding research for impact</i></p>	<p>Keynote: Prof Fengwu Bai, Distinguished Professor, Biochemical Engineering, Shanghai Jiao Tong University, China</p> <p><i>Bioreactor and bioprocess engineering strategies for the production of bulk commodities</i></p>	<p>Keynote: Prof Stefano Ciurli, Professor Department of Pharmacy and Biotechnology, University of Bologna, Italy</p> <p><i>Catalysis and inhibition mechanisms of urease, a nickel enzyme, made crystal clear: a prodrome to drug discovery and development</i></p>	<p>Dr Hang Ta, NHMRC Early Career Research Fellow, Australian Institute For Bioengineering And Nanotechnology, University Of Queensland</p> <p><i>Targeting imaging contrast and live cells in cardiovascular disease via a chemo-biotechnological approach</i></p>
	<p>Dr Kevin Cullen, Chief Executive Officer, UNSW Innovations</p> <p><i>Measuring Knowledge Exchange and Commercialisation</i></p>	<p>Thanasak Lomthong, Kasetsart University, Thailand</p> <p><i>Cloning, expression and characterization of poly(L-lactide)-degrading enzyme from Laceyella</i></p>	<p>Trent Munro, Scientific Director, Amgen, USA</p> <p><i>A glimpse into the future of mammalian cell culture process development: innovative approaches</i></p>	<p>Dr Sreejith Raveendran, Post Doctoral Research Fellow, Toyo University, Bio Nano Electronics Research Centre, Japan</p>

	<p>Dean Moss, Chief Executive Officer, UniQuest <i>Creating a pipeline of commercialisation deals in biotech: A University of Queensland perspective</i></p> <p>Anna Grocholsky, Director of Commercialisation and innovation, Macquarie University <i>Bench to bedside</i></p>	<p><i>sacchari LP175 in escherichia coli and application of the recombinant enzyme for hydrolysis of poly(L-lactide) polymer</i></p> <p>Ahmad Lajis, Universiti Putra, Malaysia <i>Comparative study of lipase-catalysed kojic acid esters synthesis in stirred-tank, fluidized and packed bed bioreactors</i></p>	<p><i>to impact time to clinic, product quality, and cost of process development and commercial manufacturing</i></p> <p>Prof Darren Kelly, CEO and Managing Director, Occurx <i>Developing novel therapeutics to prevent fibrosis of the retina</i></p> <p>Dr Evan Siegel, CEO, Ground Zero Pharmaceuticals, USA <i>Critical regulatory programs for rapidly advancing new biotechnology products into clinical trials and marketing applications</i></p>	<p><i>Dual targeted gold nanocages induce lysosome impaired diffusion and apoptosis in breast cancer cells</i></p> <p>Dr Peter Kingshott, Professor, Swinburne University <i>Modulation of human stem cell behaviour using binary colloidal crystal substrates</i></p> <p>Bhuvana Kamath Shanbhag, Phd Student, Monash University <i>Noncovalent self-assembly of enzymes into nanoparticles as advanced nanobiocatalysts</i></p>
3.00 – 3.30pm	Afternoon tea break and networking with exhibitors			
	Room 212	Room 214	Room 216	Room 217
3.30 – 5.00pm	Breakout 18: Pharmaceutical, medical and molecular	Breakout 19: Agricultural biotechnology	Breakout 20: Convergence biotechnology	Breakout 21: Industrial and environmental biotechnology
	Chair: Prof Gary Schenk , Professor of Biophysical Chemistry, The University of Queensland	Chair: Dr Mick Blake , Director Biosecurity Centre of Excellence, Box Hill Institute	Chair: Dr Tai Hyun Park , Professor, School of Chemical and Biological Engineering, Seoul National University, South Korea	Chair: Dr Luke Guddat , Associate Professor, University of Queensland
	Keynote: A/Prof Max Cryle , Group Leader, EMBL Australia <i>Understanding glycopeptide antibiotic biosynthesis as a pathway to new antimicrobial agents</i> <p>Prof Jenny Martin, Director of the Eskitis Institute for Drug Discovery, Griffith University - <i>Towards antibacterials without resistance</i></p>	Keynote: Gurvinder Kalra , Phd Student, Swinburne University Of Technology <i>Genetic diversity of Hin genes in barley and potential implications for grain texture variations</i> <p>Prof Jianrong Lin, Professor, South China Agricultural University, China <i>Advanced researches in miRNAs in diapausing embryos of bombyx mori</i></p> <p>Qianqian Xu, PhD Student, University Of Science And</p>	Keynote: Prof Eiichi Tamiya , Professor, Osaka University, Japan <i>Single cells and organs on chips for biomedical diagnosis and drug screening</i>	Keynote: Dr Luke Guddat , Associate Professor, University of Queensland <i>Evaluation and repurposing of herbicides into antimicrobial drug leads: An exploration of the branched chain amino acid biosynthesis pathway.</i> <p>Prof Chunzhao Liu, Institute of Process Engineering, Chinese Academy of Sciences, China <i>Functional Magnetic Nanoparticles</i></p>


	<p>Dr Kade Roberts, Senior Research Scientist, Monash University <i>Development of new polymyxin antibiotics with improved safety and efficacy</i></p> <p>Dr Mian-Chee Gor, Postdoctoral Research Fellow, RMIT University <i>Cloning and expression of a novel cyclic bacteriocin plantacyclin B21AG in the probiotic Lactobacillus plantarum WCFS1</i></p> <p>Dr George Kopsidas, Executive Director, Immunexus <i>Converting existing antibodies into functional IgG-based bispecific and trispecific formats via a quick and simple conversion using the Immunexin platform</i></p>	<p>Technology Beijing, China <i>Effects of dietary chlorella USTB-01 on growth performance and cecal microbiota in broilers</i></p>	<p>Prof Man Bock Gu, Department of Biotechnology, Korea University, Korea <i>Sandwich-type biosensors and in vitro diagnostic systems using a pair of aptamers and nanomaterials</i></p> <p>Prof Sung Ok Han, Department of Biotechnology, Korea University, Korea <i>Designer nano-scale protein complexes for C1/3/5/6 biorefinery</i></p> <p>A/Prof N. Alice Lee, Associate Professor, UNSW <i>Plasmonic Nanoparticle-Immunodiagnostic Systems for Food Quality and Safety Monitoring</i></p> <p>Dr Tai Hyun Park, Professor, School of Chemical and Biological Engineering, Seoul National University, South Korea <i>Olfactory and Taste Sensors: Integration of Biotechnology and Nanotechnology</i></p>	<p><i>for Protein Capture</i></p> <p>Prof Xiao-Wei Yu, Professor, Jiangnan University, China <i>Role of N-linked glycosylation in the secretion and enzymatic properties of Rhizopus chinensis lipase expressed in Pichia pastoris</i></p> <p>Dr Nur Asshifa Md Noh, Senior Lecturer, Universiti Sains Malaysia <i>Rhamnolipid production in Pseudomonas aeruginosa USM-AR2 fermentation using renewable insoluble substrates in a bioreactor integrated with an oil separation system</i></p>
7.00 – 10.30pm	<p>International BioFest conference dinner <i>Supported by Patheon</i> <i>Atlantic Peninsular, Shed 14, Central Pier, Docklands</i></p>			

Wednesday 26 October 2016	
8.30am	Conference registration & exhibition open
	Room 212
9.00 – 9.45am	<p>A new model for drug development in academic institutions</p> <p>Prof Dennis Liotta, Executive Director Emory Institute for Drug Development, Emory College, Atlanta USA</p>
9.45 – 10.30am	Interrogating and guiding the microbiome for macro-organism health and Productivity

	Dr James Tiedje , Director, Centre for Microbial Ecology, Michigan State University, USA			
10.30 – 11.00am	Morning Tea Break and networking with exhibitors			
	Room 212	Room 214	Room 216	Room 217
11.00am – 12.30pm	Breakout 22: Biocatalysis	Breakout 23: Biofuels and bioenergy	Breakout 24: Industrial bioactive discovery and development	Breakout 25: Interfacial chemistry for biomaterials and biotechnology
	Chair: Dr Colin Scott , Group Leader Environmental & Industrial Biotechnology, CSIRO	Chair: Prof Akihiko Kondo , Professor, Kobe University, Japan	Chair: Dr Jess Gledhill , Associate, FB Rice	Chair: A/Prof David Beattie , Chair: RACI Division of Interfaces, Colloids, and Nanomaterials
	Keynote: Prof Nicholas Turner , Professor, The University of Manchester, UK <i>Biocatalytic cascade reactions enabled by synthetic biology</i>	Keynote: Prof Emile van Zyl , Senior Chair of Energy Research in Biofuels, Stellenbosch University, South Africa <i>Developing CBP yeast for biomass conversion</i>	Keynote: Dr James Crawford , Chemistry Team Leader, Small Molecule Drug Discovery, Genentech, USA <i>Discovery of non-covalent BTK inhibitors for the treatment of rheumatoid arthritis and lupus</i>	Prof Vincent Ball , Professor, University of Strasbourg, France <i>Polydopamine films and nanomaterials: from bioinspiration to structural investigations and functional materials</i>
	Dr Colin Jackson , Leader - Chemical and Structural Biotechnology, Australian National University Dr Claudia Vickers , Associate Group Leader and Accelerate Fellow, Australian Institute for Bioengineering and Nanotechnology <i>Engineering microbial production of isoprenoid-based biofuels and biochemicals</i> Dr Carol Hartley , Research Scientist & Biocatalysis Team Leader, CSIRO <i>Nanomachine biocatalysts for biobased nanofactories</i>	Prof Gunnar Liden , Professor, Lund University, Sweden <i>High-solids processing of lignocellulosic biomass to sugars and ethanol</i> Juan Xia , Shanghai Jiao Tong University, China <i>The regulation of flocculation by c-di-GMP phosphoesterase genes in Zymomonas mobilis</i>	Dr Tina Lavranos , Senior Director – Cancer, Bionomics <i>Cancer stem cell resistance: A drug discovery and development challenge</i> Dr Paul Stupp , Director of Medicinal Chemistry, Cancer Therapeutics CRC <i>The discovery of potent and selective inhibitors of the arginine methyl transferase PRMT5</i>	Prof Sally McArthur , Director, Swinburne Innovation Precinct, Swinburne University Of Technology <i>Controlling biology at surfaces: exploring the effects of micro/nanostructure and chemistry on bacterial adhesion</i> Donna Menzies , OCE Postdoctoral Fellow, CSIRO <i>Prebiotic chemistry inspired coatings for biomedical and material science applications</i> A/Prof David Beattie , Chair: RACI Division of Interfaces, Colloids, and Nanomaterials <i>Novel Polyelectrolyte Multilayer Coatings for Applications in Wound Dressings</i>

12.30 – 1.30pm	Lunch Break and networking with exhibitors			
12.30 – 1.30pm	UK Department for International Trade lunch - Discover Opportunities in UK Life Sciences <i>Invitation only, express interest: events@ausbiotech.org</i> A panel of Life Sciences experts from the UK and Australia will explore the opportunities for business and research collaboration in the UK.		IDA – Ireland Business Lunch: Biomanufacturing strategies for the future <i>Invitation only, express interest: events@ausbiotech.org</i> Hear from Barry Heavey, Global Head of Life Sciences at IDA Ireland about the latest biomanufacturing advancements and opportunities for business, research and collaboration in Ireland.	
	Room 212	Room 214	Room 216	Room 217
1.30 – 3.00pm	Breakout 26: Biofuel & bioenergy production	Breakout 27: Industrial and environmental biotechnology	Breakout 28: Clean environmental sustainability and pollution abatement	Breakout 29: Drug discovery in academic institutions
	Chair: Prof Peer Schenk , Professor, School of Agriculture and Food Sciences, University of Queensland	Chair: Prof Mary Garson , Professor of Chemistry, The University of Queensland	Co-Chairs: Prof Murray Moo-Young , Distinguished Professor Emeritus, University of Waterloo, Canada Prof Tomas Macek , Professor of Biochemistry, University of Chemistry and Technology, Prague, Czech Republic	Chair: Mark Ashton , Executive Director, Intellectual Property Commercialisation, UniQuest
	Keynote: Prof Volker Sieber , Chair, Chemistry of Biogenic Resources, Technical University of Munich, Germany Biorefinery concepts and reactions for fuels and chemicals	Peng Huadong , Phd Student, Department Of Chemical Engineering, Monash University <i>Comparison of the performance of heterologously expressed plant and microalgae lipid accumulation genes on lipid content of yeast</i>	Keynote: Prof Murray Moo-Young , Distinguished Professor Emeritus, University of Waterloo, Canada <i>Clean environmental sustainability: the biomass agenda</i>	Keynote: Mark Ashton , Executive Director, Intellectual Property Commercialisation, UniQuest
	Dr Paul Bennett , Science Leader, Clean Technologies, Scion, New Zealand <i>Drivers for Biofuels?</i> Dr Bill Rowlands , Chief Scientist, Licella <i>Strides towards the commercial deployment of hydrothermal technology for the production of</i>	Dr Ahmad Ramli Mohd Yahya , Associate Professor, Universiti Sains, Malaysia <i>Natural antibiotics and biosurfactants from mangrove actinomycetes</i> Dr Guo-Chao Xu , Associate Professor, Jiangnan University, China	Prof Ondrej Uhlík , A/Prof, Group Leader, University of Chemistry and Technology, Prague, Czech Republic <i>Plants and fertilization impact differentially on bacterial communities and their functional potential in contaminated soils</i> Dr Chen-Guang Liu , A/Prof,	Dr Andrew Harvey , Senior Director QEDDI, UniQuest Prof Dennis Liotta , Executive Director Emory Institute for Drug Development, Emory College, Atlanta USA Dr Brian Moloney , Head of Business Development, WuXi Apptec, USA Prof Brian Cox , Sussex University,

	<p><i>renewable fuels and chemicals from biomass</i></p> <p>Dr Allan Green, Innovation Leader for Biobased Products, CSIRO Agriculture & Food <i>Leaf oils – game-changing technology creating scalable, low-cost, renewable fuel feedstocks</i></p>	<p><i>Crystal structure of tyrosine decarboxylase and identification of key residues involved in conformational swing and substrate binding</i></p> <p>Prof Hai Yan, Professor, University Of Science And Technology Beijing, China <i>Biodegradation of nodularin by sphingopyxis sp. USTB-05</i></p>	<p>Shanghai Jiao Tong University, China <i>Redox potential control for enhancement of Saccharomyces cerevisiae tolerance to inhibitors from lignocellulosic biomass</i></p>	<p>UK <i>Inventing drugs in academia</i></p>
3.00 – 3.30pm	Afternoon Tea Break and networking with exhibitors			
3.30 – 5.00pm	Breakout 30: Biofuels and bioenergy	Breakout 31: Marine biotechnology and aqua culture	Breakout 32: Chemistry to Biology – a new manufacturing possibility	Breakout 33: Pharmaceutical, medical and molecular
	<p>Chair: Prof Fengwu Bai, Distinguished Professor, Biochemical Engineering, Shanghai Jiao Tong University, China</p>	<p>Chair: Prof Wei Zhang, Director, Centre for Marine Bioproducts Development, Flinders University</p>	<p>Chair: A/Prof Ian O’Hara, Principal Research Scientist, Queensland University of Technology</p>	<p>Chair: A/Prof Vito Ferro, Deputy Director, Biotechnology Program, The University of Queensland</p>
	<p>Keynote: Dr Guo-Hua Miao, Director, DuPont, China <i>Biofuels Development: from discovery to commercialization</i></p>	<p>Keynote 1: Prof Tadashi Matsunaga, President Tokyo University of Agriculture and Technology, Japan <i>New technologies for bioenergy production using algae and other aquatic microorganisms</i></p> <p>Keynote 2: Prof Wei Zhang, Director, Centre for Marine Bioproducts Development, Flinders University <i>Australia national marine science plan: putting marine biotechnology and bioproducts into the economic agenda</i></p>	<p>Keynote: Prof Shi-Zhong Li, Executive director, US-Sino Joint Center for Biofuel Research, Tsinghua University, China</p>	<p>Keynote: Prof Nicolas Moitessier, Professor, McGill University, Canada <i>Computational methods for drug design and development – development and applications to enzyme inhibitors discovery as Alzheimer’s disease and cancer therapeutics</i></p>
	<p>Prof Yang Mu, Professor, University of Science and Technology of China, China <i>Biohydrogen production from</i></p>	<p>Dr Scott Smid, Deputy Head, Discipline of Pharmacology The University of Adelaide <i>Drug discovery and development targeting neuroprotection from</i></p>	<p>Dr Tom Williams, Research Fellow In Synthetic Biology, Macquarie University <i>Fine-tuning an organic acid</i></p>	<p>Dr Satoshi Yamaguchi, Lecturer, The University Of Tokyo, Japan <i>Photolytic protein aggregates for controlled release of active protein</i></p>

	<p><i>wastewater in microbial electrolysis cells</i></p> <p>Way Khor, PhD Student, Ghent University, Belgium</p> <p><i>Production of medium chain fatty acids from grass</i></p> <p>Dr Irnia Nurika, Senior Lecturer/Assoc.Prof, University of Brawijaya, Indonesia</p> <p><i>Evidence for the mechanisms involved in the degradation of lignocellulose in wheat straw by <i>Serpula lacryman</i>.</i></p>	<p><i>marine and aquatic organisms</i></p> <p>Rob Kinley, Technology Lead, CSIRO Agriculture</p> <p><i>Adaptation yields biotechnology: invasive seaweeds offer environmental optimism</i></p>	<p><i>biosensor for directed evolution of synthetic yeast cell factories</i></p> <p>A/Prof Robert Speight, Associate Professor, Microbial Biotechnology, Queensland University of Technology</p> <p><i>Developing bioprocesses using chemistry and biology at the interface of industry and academia</i></p>	<p>Dr Bong-Hyuk Choi, Research Assistant Professor, Postech, South Korea</p> <p><i>Mussel adhesive protein-based bone-specific multifunctional artificial extracellular matrix for bone tissue engineering</i></p> <p>Dr Haiyang Zhang, Postdoc Fellow, University of Science and Technology Beijing, China</p> <p><i>Evaluation of generalized born models for affinity prediction of cyclodextrin host-guest complexes</i></p> <p>Prof Dae-Hyuk Kweon, Professor, Sungkyunkwan University, South Korea</p> <p><i>Development of small molecule chemicals with Botulinum neurotoxin-like activities</i></p>
5.00 – 6.00pm	<p>International BioFest Networking Reception, networking for all three BioFest events.</p> <p>Canapes, drinks, live entertainment and networking</p> <p><i>Supported by the Department of Industry, Innovation and Science</i></p> <p><i>Showtime Events Centre, South Wharf Precinct</i></p>			 <p>Australian Government Department of Industry, Innovation and Science</p>

Thursday 27 October 2016	
8.30am	Conference registration opens
	Room 212
9.00 – 9.45am	<i>Self-assembled supramolecular nanosystems for targeting therapy of intractable diseases</i> Prof Kazunori Kataoka , Professor, Department of Materials Engineering and Bioengineering Graduate Schools of Engineering, University of Tokyo, Japan
9.45 – 10.30am	<i>Synthetic designer vaccines protect from bacterial infections</i> Prof Dr Peter Seeberger , Director, Max-Planck Institute of Colloids and Interfaces, Germany
10.30 – 11.00am	Morning Tea Break and networking
	Room 212
11.00 – 11.45am	<i>Biotech and the future of man</i> Prof Huanming Yang , President, BGI-Shenzhen, China
11.45am – 12.30pm	<i>Development of peptide and peptidomimetic therapeutic agents from a New Zealand perspective</i> Prof Margaret Brimble , Distinguished Professor, The University of Auckland, New Zealand
12.30 – 1.00pm	IBS 2016 Closing Reception Glenn Cross , CEO, AusBiotech Prof Margaret Brimble , Distinguished Professor, The University of Auckland, New Zealand Nicolas Moitessier , McGill University, Canada
1.00 – 2.00pm	IBS 2016 Closing lunch and drinks