

Monday - 14 October 2019		Tuesday - 15 October 2019		Wednesday - 16 October 2019	
		8:30 - 9:00 Registration, Tea & Coffee & Trade Display		8:15 - 8:45 Registration, Tea & Coffee & Trade Display	
9:30 - 10:30 Registration, Trade Display & Morning Tea		9:00 - 10:40 Session IV: Making SynBio Accessible Sponsor: Macquarie BDDRC Chair: TBA		8:45 - 10:35 Session VIII: Biocatalysis & Biomolecular Engineering Sponsor: AIBN (University of Queensland) Chair: TBA	
10:30 - 11:00 Opening Ceremony		9:00 - 9:30 Emily Leproust <i>Twist Bioscience</i> Rewriting DNA Synthesis		8:45 - 9:05 Charlotte Williams <i>CSIRO</i> Cofactor Biocatalysis: Enzymatic fusion proteins with tethered cofactors as Molecular Machines	
10:30 - 10:40 Claudia Vickers/Oliver Rackham Opening Comments / Housekeeping		9:30 - 9:50 Maciej Holowko <i>CSIRO</i> The SynBio Technological Shift		9:05 - 9:25 Kirill Alexandrov <i>Queensland Uni. of Technology</i> Connecting biology and electronics with artificial protein switches	
10:40 - 10:50 Shannon Ruska <i>Tribal Experiences</i> Welcome to Country		9:50 - 10:10 Jaden Hastings <i>x0.lab Initiative</i> DIYSynBio : Leveraging Community Biotech to Advance SynBio in Australia		9:25 - 9:45 Colin Jackson <i>The Australian National University</i> Improved protein engineering through better understanding of protein evolution	
10:50 - 11:00 Paul Bertsch <i>Queensland Government</i> Queensland Chief Scientist		10:10 - 10:25 Jestin George <i>University of Technology Sydney</i> Synthetic biology in biosign		9:45 - 10:05 Emily Parker <i>Victoria University of Wellington</i> Reconstructing pathways for indole diterpene production	
11:00 - 12:40 Session I: Bioproducts & Biomaterials Sponsor: Queensland Government Chair: TBA		10:25 - 10:40 Aditi Mankad <i>CSIRO</i> Does the head overrule the heart in the prediction of support for synbio technologies?		10:05 - 10:20 Li Chen Cheah <i>The University of Queensland</i> Artificial Cell Compartments for Yeast Metabolic Engineering	
11:00 - 11:30 Claudia Schmidt-Dannert <i>University of Minnesota</i> Engineering self-assembling protein-based nanomaterials		10:40 - 11:10 Morning Tea & Trade Display		10:20 - 10:35 Yu Heng Lau <i>The University of Sydney</i> Exploring pore mutagenesis for controlling substrate diffusion into encapsulin nanocompartments	
11:30 - 11:50 Oliver Rackham <i>The University of Western Australia</i> Artificial protein scaffolds for manipulating nucleic acids		11:10 - 12:35 Session V: Pathways & Products Sponsor: Bioplatforms Australia Chair: TBA		10:35 - 11:05 Morning Tea & Trade Display	
11:50 - 12:10 Rob Willows <i>Macquarie University</i> Synthetic Biology For Optimising Biohydrogen Production In Bacteria		11:10 - 11:15 Dr Natalie Curach <i>Bioplatforms Australia</i> Sponsor		11:05 - 12:15 Session IX: IGEM & Australian SynBio Challenge Sponsor: CSIRO Chair: TBA	
12:10 - 12:25 Nils Averisch <i>Stanford University/NASA</i> Development of microbial production platforms for high-performance polymers for Space and Earth applications		11:15 - 11:45 David Ackerley <i>Victoria University of Wellington</i> Generating novel bioactive products by re-engineering non-ribosomal peptide synthetase assembly lines		11:05 - 12:05 IGEM Teams * University of Canterbury * Victoria University of Wellington * Macquarie University * University of New South Wales * Melbourne University * Sydney University	
12:25 - 12:40 Michele Fabris <i>University of Technology Sydney</i> The marine diatom <i>Phaeodactylum tricornutum</i> as a novel synbio chassis for terpenes production		11:45 - 12:05 Anwar Sunna <i>Macquarie University</i> Assembly of biocatalytic modules for production of platform chemicals		12:05 - 12:15 Australian SynBio Challenge Australian SynBio Challenge	
12:40 - 13:40 Lunch / ECR Open Circle Discussion / Trade Display Sponsored by AAS		12:25 - 13:35 Lunch, Networking & Trade Display		12:15 - 13:15 Lunch, Networking & Trade Display	
13:40 - 15:25 Session II: Health & Medical Sponsor: GE Healthcare Chair: TBA		13:35 - 15:20 Session VI: Environment & Agriculture Sponsor: Labcyte Chair: TBA		13:15 - 14:45 Session X: Commercialisation Sponsor: Australian Academy of Science Chair: Tony Hunter	
13:40 - 13:45 David Mabon <i>GE Healthcare</i> Sponsor		13:35 - 13:40 John Lesnick <i>Labcyte</i> Sponsor		13:15 - 13:45 Dan Widmaier <i>Bolt Threads</i> From Lab to Runway - Bolt Threads' Journey in biomaterials	
13:45 - 14:15 Chueh Loo Poh <i>National University of Singapore</i> Model Driven Programming of Biological Systems		13:40 - 14:10 Louise Horsfall <i>University of Edinburgh</i> Engineering non-model organisms for resource recovery		13:45 - 14:45 Panel Discussion: Kick-Starting the Australian Bio-Economy with Synthetic Biology Facilitator: * Mr Tony Hunter, Futurist for Food Panel Members: * Dr Kym Barker, Patheon * Dr Nanditha Subramanian, Codexis * Dr James Brown, Bondi Bioworks * Prof. Kirill Alexandrov, Molecular Warehouse * Mr Matt Gardner, California Technology Council	
14:15 - 14:35 Ryan Lister <i>The University of Western Australia</i> Challenges and frontiers in (epi)genome engineering		14:10 - 14:30 Ian Small <i>The University of Western Australia</i> Synthetic RNA editing and RNA processing factors			
14:35 - 14:55 Joanne Macdonald <i>University of Sunshine Coast</i> Towards the vision of autonomous biosensing using DNA computing		14:30 - 14:50 Patrick Buerger <i>CSIRO</i> Interventions to increase the thermal tolerance of corals on the Great Barrier Reef			
14:55 - 15:10 Lixin Zhang <i>East China Uni. of Science & Tech.</i> Learning from Microbial Intelligence for Directional Evolution		14:50 - 15:05 Benjamin Pouvreau <i>CSIRO</i> Versatile High Throughput Plant Genetic Screening			
15:10 - 15:25 Subir Sarker <i>Latrobe University</i> A novel targeted delivery platform for the biomedically important cargo using world's smallest viral nanocage		15:05 - 15:20 Kostlene Mara <i>CSIRO</i> Development of Genome wide Knock Out (GeCKO) platform capabilities for Mosquito borne viruses			
15:25 - 15:55 Afternoon Tea & Trade Display		15:20 - 15:50 Afternoon Tea & Trade Display		14:45 - 15:15 Afternoon Tea & Trade Display	
15:55 - 17:10 Session III: Social SynBio Sponsor: CSIRO Chair: TBA		15:50 - 17:05 Session VII: Tools Sponsor: Synthetic Biology Australasia Chair: TBA		15:15 - 16:45 Session XI: Tools II Sponsor: New England Biolabs Chair: TBA	
15:55 - 16:00 Claudia Vickers <i>CSIRO</i> Sponsor		15:50 - 15:55 Oliver Rackham <i>SBA</i> Sponsor		15:15 - 15:20 Dr Selva Ramasubramanian <i>New England Biolabs</i> Sponsor	
16:00 - 16:20 Ionat Zurr <i>The University of Western Australia</i> What's art got to do with SynBio?		15:55 - 16:15 Colin Scott <i>CSIRO</i> Transplantation of an unusual low potential flavin-like cofactor into a model bacterium		15:20 - 15:40 Keith Shearwin <i>The University of Adelaide</i> The loop-o-meter: an in vivo assay for DNA looping	
16:20 - 16:40 Josh Wodak <i>University of New South Wales</i> Nature by Design: Synthetic Biology faces the Anthropocene		16:15 - 16:35 Madeline Mitchell <i>CSIRO</i> Modifying cotton cell walls and enhancing plant-based natural fibres		15:40 - 16:00 Paul Jashke <i>Macquarie University</i> Remodelling the genetic code: defining new start codons in E. coli	
16:40 - 16:55 Lucy Carter <i>CSIRO</i> Playing God and tampering with nature: Popular labels for real risks		16:35 - 16:50 Thomas Booth <i>The University of Western Australia</i> Evolution and Reconstitution Non-Ribosomal Peptide Synthesis		16:00 - 16:15 Nick Coleman <i>The University of Sydney</i> An open source superfolder green fluorescent protein: Free-Use GFP (fuGFP)	
16:55 - 17:10 Wendy Russell <i>The Australian National University</i> Responsibility in Practice. A new tool to map the social contours of research and innovation landscapes.		16:50 - 17:05 Elliot Gerrard <i>Monash University</i> Light-Activated Chimeric GPCRs: Next generation optogenetic tools		16:15 - 16:30 Fatwa Adikusuma <i>The University of Adelaide</i> Unexpected genome editing outcomes from DNA cleavage induced by CRISPR-Cas9	
17:10 - 17:30 Break		17:05 - 17:30 Conference Photo + Break		16:30 - 16:35 Claudia Vickers Closing remarks	
17:30 - 18:30 EMCR Networking Session (Canapes & drinks provided) Sponsored by AAS		17:30 - 18:30 SBA AGM Chair: Oliver Rackham			
18:30 - 19:30 Poster Session I (Canapes and drinks provided) Sponsor: AAS		18:30 - 19:30 Poster Session II (Canapes & drinks provided) Sponsor: Bolt Threads			
		19:30 - 21:30 SBA Conference Dinner (Cocktail Reception Style) Dress: conference attire			