

8:30	REGISTRATIONS OPEN		
9:00	WELCOME: Professors Maria Kavallaris, Cyrille Boyer & Kris Kilian		
9:15	OPENING: Professor Hugh Durrant-Whyte, NSW Chief Scientist & Engineer		
9:30	PLENARY: Kazunori Kataoka - Kawasaki Institute of Industrial Promotion <i>Engineered Nanosystems and Nanocojugates with Smart Functionalities for Targeted Therapy of Intractable Diseases</i> CHAIR: Justin Gooding ROOM: Water@Pier One		
10:10	MORNING TEA		
SESSION Chair Room	Drug Delivery Weibo Cai Water@Pier One	BIONANO INTERACTIONS David Nisbet Dawes Point 1&2	SENSORS & IMAGING Kristofer Thurecht Dawes Point 3&4
10:40 Keynote	Liangfang Zhang - University of California San Diego - Cellular Nanoparticles for Drug and Gene Delivery	Xing-Jie Liang - Chinese Academy of Sciences - Nanostructures with Unique Biomedical Characterizations in vitro and in vivo	Jeff W.M. Bulte - Johns Hopkins University - In Vivo Cellular Imaging using Magnetic Nanoparticles: From MRI Contrast Agents to MPI Tracers
11:10 Invited	Chun Xu - University of Queensland - Designer Porous Nanomaterials for Drug and Gene Delivery	Jess Frith - Monash University - Hydrogel Delivery of microRNA: Nanoparticle Complexes to Modify Cell Fate and Improve Tissue Repair	Hyung-Jun Im - Seoul National University - Nanomedicine: Bioimaging and Spatial Transcriptomics
11:30 Invited	Jodi Saunus - University of Queensland -	Jonathan Choi - Chinese University of Hong Kong - Scavenger Receptor-targeted Plaque Delivery of microRNA-coated Nanoparticles for Alleviating Atherosclerosis	Peter Harvey - University of Nottingham - Imaging the Brain with Paramagnetic Nanoparticles
11:50 Invited	Kara Vine-Perrow - University of Wollongong - Using Image-guided Focused Ultrasound to Enhance Delivery of Antisense Oligonucleotides to the Murine Brain	Megan Lord - UNSW Sydney - Understanding Bio-nano Interactions at the Blood Vessel Wall	Nicholas Fletcher - University of Queensland - Development of Polymeric Nanomedicine Targeted Alpha Therapeutics
12:10	LUNCH		
1:10	PLENARY: Kristi Anseth - University of Colorado Boulder <i>Materials to Study Biology in 4D: Photoresponsive Hydrogels to Study and Direct the Growth of Intestinal Organoids</i> CHAIR: Tom Davis ROOM: Water@Pier One		
SESSION Chair Room	DRUG DELIVERY Liangfang Zhang Water@Pier One	BIOACTIVE MATERIALS Richard Tilley Dawes Point 1&2	TISSUE ENGINEERING & ORGANOID TECHNOLOGY Khoon Lim Dawes Point 3&4
1:55 Keynote	Michelle S. Bradbury - Weill Cornell Medical College of Cornell University - Advances and Challenges in the Development and Translation of Molecularly Engineered Nanomaterials for Clinical Applications	Killugudi Swaminatha Iyer - University of Western Australia -	Tim Woodfield - University of Otago - Harnessing Cell-instructive Hydrogels and Spheroid Bioassembly Technologies for Biofabrication of Functional Tissues
2:25 Invited	Changkai Fu - University of Queensland - Cationic Polymers for mRNA Delivery	Benjamin Thierry - University of South Australia - Teaching Old Dogs New Tricks: Modulating the Biological Functions of Intestinal Cells with Fluid Shear Stress	Giselle Yeo - University of Sydney - Modulation of Stem Cell Responses for Biomedical Applications
2:45 Invited	Gigi N. C. Chiu - National University of Singapore - Development of a Nanoliposomal Formulation for Alpha-mangostin in Overcoming Cisplatin-induced Nephrotoxicity	John Quinn - Monash University -	David Nisbet - University of Melbourne - Changing Fate: Reprogramming Inflammatory Cells to Induced Neurons
3:05	AFTERNOON TEA		
SESSION Chair Room	DRUG DELIVERY Sophia Gu Water@Pier One	BIOACTIVE MATERIALS Peter Wich Dawes Point 1&2	DRUG DELIVERY Chun Xu Dawes Point 3&4
3:40 Invited	Debabrata (Dev) Mukhopadhyay - Mayo Clinic - Targeted Drug Delivery using Nano-carriers: Ongoing Strategies and Challenges	Anna Wang - UNSW Sydney - Fluorescence-free Quantification of Vesicle Loading and Microviscosity	Dai Hayward - Micropore Technologies - Towards Distributed Manufacture of Nanomedicines
4:00 Oral	Sarah Shigdar - Deakin University - Building a Platform Technology for Targeted Drug Delivery to Cancer Metastases	Andrew Care - University of Technology Sydney - Bioengineering Protein Nanocages for Applied Nanomedicine: From Fast Prototyping to in vitro and in vivo Delivery	Teruyuki Komatsu - Chuo University - Haemoglobin-Based O ₂ Carriers Designed for Use as a Red Blood Cell Substitute
4:20 Oral	Paul Joyce - University of South Australia - Designing Polymeric-lipid Nanoparticles for Improving the Pharmacokinetics, Biodistribution and Efficacy of a Novel 14-3-3 Protein Inhibitor	Jonathan Yeow - UNSW Sydney - Microliter Scale Synthesis of Enzyme-encapsulated Polymersomes as Artificial Organelles for Cellular Modulation	Daniel Gonzalez Carter - Institute for Bioengineering of Catalonia (IBEC) - Generating Artificial Targets to Deliver Therapies Specifically to the Brain
4:40 Oral	Aria Ahmed-Cox - Children's Cancer Institute - Visualising Nanoparticle Delivery in 3D Blood-Brain Barrier and Brain Tumour Organoids	Federico Mazur - UNSW Sydney - Metallic Implants for Nitric Oxide Generation	Helen Forgham - University of Queensland - Fluorinated Polymer-Iron Oxide Probes - Uniting siRNA therapeutics to Treat and MRI to Measure Response in Medulloblastoma
5:00	WELCOME DRINKS & SNACKS		

8:30	REGISTRATIONS OPEN		
9:00	<p><i>PLENARY: John A. Rogers - Northwestern University</i> <i>Transient Bioelectronic Medicines</i> <i>CHAIR: Kris Kilian ROOM: Water @Pier One</i></p>		
SESSION Chair Room	<p>DRUG DELIVERY Sophia Gu Water@Pier One</p>	<p>BIONANO INTERACTIONS Andrew Whittaker Dawes Point 1&2</p>	<p>SENSORS & IMAGING Kristofer Thurecht Dawes Point 3&4</p>
9:45 Keynote	Clive Prestidge - University of South Australia - Antimicrobial Nanomedicine informing Cancer Nanomedicine and vice versa	Megan O'mara - University of Queensland -	Lacey R McNally - University of Oklahoma - Clinically Relevant Aspects of Nanotherapies
10:15 Invited	Jiwei Cui - Shandong University - Circumvention of Biological Barriers for Improved Therapeutic Delivery	Ivan Kempson - University of South Australia -	Jesse Jokerst - University of California, San Diego - New Tools for Imaging and Sensing Proteases
10:35	MORNING TEA		
SESSION Chair Room	<p>DRUG DELIVERY Jing Mu Water@Pier One</p>	<p>BIONANO INTERACTIONS Ivan Kempson Dawes Point 1&2</p>	<p>DRUG DELIVERY & IMMUNOTHERAPY Hyung-Jun Im Dawes Point 3&4</p>
11:10 Invited	Francesca Cavalieri - RMIT University - An Engineered Nanosugar Enables Rapid and Sustained Glucose-Responsive Insulin Delivery in Diabetic Mice	Binyang Shi - Macquarie University - New Strategies for Brain Disease Drug Development from New Target Discovery to Blood-Brain Barrier Penetrative Nanomedicine	Quanyin Hu - University of Wisconsin - Madison - Engineering Cells for Cancer Immunotherapy
11:30 Invited	Wei Tang - National University of Singapore - Phototheranostics to Modulate Tumor Hypoxia and Overcome Treatment Resistance	Tushar Kumeria - UNSW Sydney - Biomodulating Porous Nanocarriers for Oral Drug Delivery	Bei Li - University of Macau - Tumor-draining Lymph Node Lingers between Protumor and Antitumor Immunity
11:50 Invited	Wei Deng - University of Technology Sydney - Radiation-activated Photodynamic Therapy for Rectal Cancer Treatment	Hao Song - University of Queensland - Nature-Inspired Spiky Particles Probed at the Nano-Bio-Interfaces for Drug Delivery	Orazio Vittorio - Children's Cancer Institute -
12:10 Invited/ Oral	(Oral) Rui Sang - UNSW Sydney - X-ray Triggerable Photodynamic Therapy for Colorectal Cancer Treatment based on Lipid-polymer Hybrid Nanoplatform	Ann-Na Cho - Macquarie University - Bioengineered Human Brain; in vitro Model for Personalized Neurodegenerative Disease and Drug Screening	(Oral) Jie Tang - University of Queensland - Nanoadjuvants: From Nanocarriers to Immunomodulators
12:30	Lunch		
1:30	<p><i>PLENARY: Maria Jesus Vicent - Principe Felipe Research Center Foundation</i> <i>Versatile Polypeptide-based Nanoconjugates for Multimodal Therapeutic Applications</i> <i>CHAIR: Maria Kavallaris ROOM: Water@Pier One</i></p>		
SESSION Chair Room	<p>CLINICAL CHALLENGES Maria Kavallaris Water@Pier One</p>	<p>INDUSTRY SESSION Rona Chandrawati Dawes Point 1&2</p>	<p>SENSORS & IMAGING Jesse Jokerst Dawes Point 3&4</p>
2:15 Invited	(2:15-2:45) Anthony (Tony) Kelleher - Kirby Institute -	Stephen Mahler - Agros - Plasma Fractionation by HaemaFrac® Technology	Nathan C. Gianneschi - Northwestern University - Proteomimetic Polymers for Expanding the Druggable Proteome
2:35 Invited	(2:45-3:15) Ju Lee Oei - Royal Hospital for Women - Nanomedicine for the Nanoinfant	Sarika Namjoshi - Vaxxas Pty Ltd - Vaxxas Overview	Wenlong Cheng - Monash University - Remote Diagnostics of Cells, Tissues and Organoids
2:55 Invited		Ron Chatelier - Biosensor Consultant - Research, Development, Manufacture and Product Launch of Whole Blood Glucose and Coagulation Sensors	Jennifer N. Cha - University of Colorado Boulder - Photocrosslinkable Affibodies for Therapy and Cell Engineering
3:15	AFTERNOON TEA		
3:50	ACS Journals POSTER PRESENTATION COMPETITION - Water@Pier One <i>Chair: Dr Peter Wich</i>		
5:00 - 6:00	POSTER SESSION - Water@Pier One		
6:00	ACS JOURNALS POSTER PRIZE AWARDS ANNOUNCEMENT & PRESENTATION - Water@Pier One		
6:15 - 8:30	CONFERENCE DINNER - Marquee @Pier One		

8:30	REGISTRATIONS OPEN		
9:00	<p><i>PLENARY: Daniel G. Anderson - Massachusetts Institute of Technology</i> <i>Nucleic Acid Delivery Systems for RNA Therapy and Genome Editing</i> <i>CHAIR: Cyrille Boyer ROOM: Water@Pier One</i></p>		
SESSION Chair Room	<p>DRUG DELIVERY Wei Tang Water@Pier One</p>	<p>TISSUE ENGINEERING & ORGANOID TECHNOLOGY Jelena Rnjak-Kovacina Dawes Point 1&2</p>	<p>BIOACTIVE MATERIALS Benjamin Thierry Dawes Point 3&4</p>

9:45	Haiyan Xie - Peking University - Extracellular Vesicle-based Drug Delivery for Synergistic Therapy	Andrea O'Connor - University of Melbourne - Magnetically-driven Cellular Assembly and Stimulation for Soft Tissue Engineering	Krishanu Saha - University of Wisconsin-Madison - Nonviral Nanoparticles to Deliver CRISPR for in vivo Genome Editing
10:15	Weibo Cai - University of Wisconsin - Madison - Open-shell Nanosensitizers for Glutathione-Responsive Cancer Sonodynamic Therapy	David Greening - Baker Heart and Diabetes Institute - Innovating Extracellular Vesicles for Cardiac Repair	Charlotte Conn - RMIT University - Controlling the Interactions between Lipid Nanoparticles and Bacteria for the Delivery of Antimicrobials
10:35	MORNING TEA		
SESSION	DRUG DELIVERY	TISSUE ENGINEERING & ORGANOID TECHNOLOGY	BIONANO INTERACTIONS
Chair Room	Quanyin Hu Water@Pier One	Giselle Yeo Dawes Point 1&2	Tushar Kumeria Dawes Point 3&4
11:10	Jing Mu - Peking University Shenzhen Hospital - Tailoring Nanomaterials for Targeted Delivery	Jingjing You - University of Sydney - Bioengineering Human Corneal Endothelium using Printable Collagen IV	Jelena Rnjak-Kovacina - UNSW Sydney - Novel Biofabrication Approaches and Biomimetic Materials Enabled by Di-tyrosine Crosslinking of Silk Fibroin
11:30	Chengchen Zhang - UNSW Sydney - Gallium Nanodroplets as Anti-inflammatory Reagents for Biomedical and Pharmaceutical Applications	Sara Romanazzo - UNSW Sydney - Tailoring iPSC Germ Layer Differentiation with Extracellular Microenvironment Mechanical and Topographical Cues	Si-Han Wu - Taipei Medical University - Beauty and the Beast of PEGylation in Nanomedicine: Insights into Nano-Bio Interfaces
11:50	Rachana - Jaypee Institute of Information Technology - Development of Artificial Surfactant for Alveolar Delivery: Nanotherapeutics for ARDS	Bram Soliman - UNSW Sydney - Diffusion-based Microfluidics for Fabrication of Hydrogels with Well-defined Physical Features	Arunpandian Balaji - University of Queensland - Controlling the Biological Fate of Synthetic Nanoworms by Modulating the Persistence Length
12:10	Zahra Khabir - Macquarie University - Transdermal Delivery of Bioactive Molecules and Drugs	Chantal Kopecky - UNSW Sydney - Bioengineered Tumour Models to Study Cancer Plasticity and Metastasis Driven by Epigenetic Regulators in Melanoma	Claire Rennie - University of Technology Sydney - In vivo Fate of Systemically Administered Encapsulin Protein Nanocages and Implications for their Use in Targeted Drug Delivery
12:30	LUNCH		
SESSION	DRUG DELIVERY	BIOACTIVE MATERIALS	SENSORS & IMAGING
Chair Room	Bei Li Water@Pier One	Anna Wang Dawes Point 1&2	Fabio Lisi Dawes Point 3&4
1:30	Li Li - University of Queensland - Engineering Functional Nanocomposites for Oral Vaccine Delivery	Sylvia Ganda - UNSW Sydney - Leveraging Biomaterials to Understand Melanoma Progression and Aggressiveness	Yi Li - UNSW Sydney - Circular DNA Nanostructure Facilitates Autocatalysis by Restricted Cas12a Activation
1:50	Seyong Chung - Yonsei University - Nanotheranostics to Capture the Early Therapeutic Window of Atherosclerosis	Eric Du - UNSW Sydney - A 3D Bioprintable Hydrogel with Tuneable Stiffness for Exploring Cells Encapsulated in Matrices of Differing Stiffnesses	Yanfang Wu - UNSW Sydney - Nanopore Blockade Sensors for Ultrasensitive Protein Detection in Complex Biological Samples
2:10	Santhni Subramaniam - University of South Australia - Improving Intracellular Delivery of Antibiotics Against Pulmonary Infections using Liquid Crystalline Lipid Nanoparticles	Luca Altevogt - UNSW Sydney - Development of an Enzyme-Bioink for the 3D Printing of Functional Materials	Ying Yang - UNSW Sydney - Electrochemical Controlled Fluorophore Blinking for Enhanced Super-resolution Optical Fluctuation Imaging
2:30	Kaiqi Long - University of Hong Kong - Long-wavelength Light-triggered Drug Delivery by Upconversion-like Photolysis	Zihao Li - UNSW Sydney - Force-mediated Dynamic Chemistry in Hydrogels to Control Cell Adhesion	Hong Thien Kim Duong - UNSW Sydney - Small Zinc Doped Iron Oxide Nanoparticles for Magnetic Particle Imaging
2:50	AFTERNOON TEA		
SESSION	DRUG DELIVERY	TISSUE ENGINEERING & ORGANOID TECHNOLOGY	SENSORS & IMAGING
Chair Room	Weibo Cai Water@Pier One	Kang Liang Dawes Point 1&2	Nicholas Fletcher Dawes Point 3&4
3:20	Weixi Wu - University of Queensland - Biomimetic Strategies in Engineering Nanoparticles for Gene Delivery	Maria Ai Kristine Tolentino - UNSW Sydney - ECM Stiffness Affects the Ability of Cancer-killing Cells to Search and Kill Target Cells	Camilla Gazzana - University of Technology Sydney - Exploiting the Interaction between Live E. coli and Citrate Au Nanoparticles to Form a Label-free Diagnostic Test for Bacterial Contamination
3:40	Pengwen Chen - The University of Tokyo - Intratumoral pH-Activated Nanocytokine Boosts Immunotherapy to Eradicate Cold Tumors	Philipp Graber - Children's Cancer Institute - 3D Bioprinting of Personalized Brain Cancer Organoids with Hydrogel-Based Scaffolds	James Wood - University of Sydney - A First-in-Class Dual-Chelator Theranostic Agent Designed For Use With Imaging Therapy Pairs of Different Elements
4:00	Sisi Liang - University of South Australia - A Versatile pH-responsive Hyaluronic Acid-based Multiple Drug Delivery System for Cancer Treatment	Rakib Sheikh - UNSW Sydney - 3D Bioprinting of Enzyme-Containing Hydrogels	Fahimeh Farokhinejad - University of Queensland - Bioengineered Yeast Nanofragments Integrated into SERS-microfluidics for Ultrasensitive Dengue Detection in Mosquitoes
4:30	CLOSING CEREMONY & ORAL PRIZES ANNOUNCEMENT - Water@Pier One		
5:00	FAREWELL DRINKS & PIZZA		