



Information for Attendees

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Event Overview

IBMD's vision is to be a world leader in transforming advances in photonics and material sciences into interruptive biomedical technologies. Before the pandemic, we successfully organised 3 IBMD research week series with the first one opened by Steven Chu (Nobel laureate and the 12th US Secretary of Energy) in 2018.

The IBMD 2023 Research Week incorporates six international conference and topic-specific symposiums, as we invite top-tier research leaders who work in multidisciplinary and cross disciplinary fields, with an emphasis on translating the advances in photonics and materials science into bio/medical technologies.

Moreover, the **2023 IBMD Research Week** takes advantage of its timing (held during the award-winning VIVID Sydney Festival) and will include 5 social events over 8 consecutive days. Our aim is to deliver an event combining stimulating scientific discussion and exchange as well as unforgettable cultural experience.

Please take a minute to read this booklet and take full advantage of all the exciting talks and activities on offer during the IBMD Research Week.

Event Attendee Social Media Groups

WhatsApp



wechat



Event information

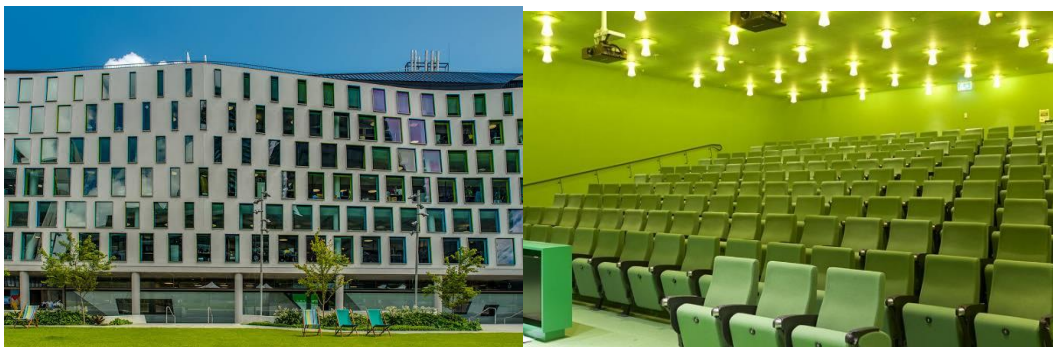
2-3 June

[UTS Building 8](#) – Level 2 – Auditorium (CB08.02.005): Dr Chau Chak Wing Building, UTS (14 Ultimo Road, Ultimo)



5-9 June

[UTS Building 7](#) – Level 2 – Green Theatre (CB07.02.025): Vicki Sara Building, UTS (67 Thomas Street, Broadway)



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Event Wi-Fi

2-3 June 2023: Building 8	5-9 June 2023: Building 7
WIFI: UTS Guest Access Code: IBMDCsoe	WIFI: UTS Guest Access Code: IBMD2023

Key Contacts for Each Day

Day/ Activity	Venue	Contact Person	Tel
2 June: Computational Imaging Conference	CB08.02.005	Qi Wen Kristin Fan	+61 (0) 416800186 +61 (0) 400478365
2 June: Combined CITA Conference Dinner & IBMD RW Welcome Dinner at Darling Harbour*			
3 June: Computational Imaging Conference	CB08.04.10	Qi Wen Kristin Fan	+61 (0) 416800186 +61 (0) 400478365
3 June: Smart Molecules Symposium – Parallel Session 1	CB08.03.005	Guochen Bao, Shihui Wen	+61 (0) 421496660
3 June: Smart Molecules Symposium – Parallel Session 2	CB08.02.02	Guochen Bao, Shihui Wen	+61 (0) 426775866
4 June: Hunter Valley Wine Tours*			
5 June: Symposium for Light: Science & Applications	The Green Theatre CB07.02.025	Jiayan Liao, Libing Fu	+61 (0) 432703558 +61 (0) 424366155
5 June: SkyFeast Dinner at Sydney Tower*			
6 June: Summit for Wearable Sensors & Devices	The Green Theatre CB07.02.025	Gungun Lin, Jawairia Khan	+61 (0) 452486660 +61 (0) 414049457
7 June: Afternoon Poster Presentation Session	CB07. 03.010B 010G	Martin Sadra	+61 (0) 431963783
7 June: Vivid Sydney Tours*			
8 June: Symposium for Super-Resolution Imaging and Quantum Biotechnology	The Green Theatre CB07.02.025	Leo Zhang	+61 (0) 432018294
9 June: Emerging Leaders in Biomedical Materials & Devices	The Green Theatre CB07.02.025	Ying Zhu Peter Su Lana McClements	+61 (0) 423907697 +61 (0) 402027353 +61 (0) 431827017
9 June: Farewell Dinner at the Rocks*			

* More details of Social Events on pages 14-16.

Key contact: Kristin Fan, M + 61 (0) 400478365.

Alternatively join our WhatsApp or Wechat group for instant updates / replies from the IBMD team.

Day Programs: Session Times & Topics

2 June: Computational Imaging Conference

Venue: Building 8, Level 2, Room 005 (CB08.02.005)

Time	Speaker/Affiliation	Title
9:00-9:10	Welcome Speech by Liangcai Cao, CSOE	
Welcome Speech by Prof Dayong Jin, FTSE, Australia Laureate Fellow, Director, IBMD, UTS		
9:10 – 9:45	Ann Roberts (University of Melbourne, Australia)	Meta-optics for all-optical real-time image processing
09:45-10:20	Andrew Kingston (Australian National University, Australia)	Classical ghost imaging with x-rays and neutrons
10:20-10:35	Morning Tea (Open Area, Lv 2, Building 8)	
10:35-11:10	Chao Zuo (Nanjing University of Science and Technology, China)	Computational phase imaging for label-free 3D microscopy
11:10-11:45	Robert McLaughlin (University of Adelaide, Australia)	Miniaturized imaging probes: Bringing optics deep inside the body
11:45-12:50	Lunch (Open Area, Lv 2, Building 8)	
13:00-13:30	Poster Session	
Session 1: Functional enhancement technologies of computational imaging Chair: Fan Wang (Beihang University)		
13:30-13:50	Zixin Huang (Macquarie University, Australia)	Sub-wavelength quantum imaging for astronomy
13:50-14:10	Liangcai Cao (Tsinghua University, China)	Lensless imaging based on compressive sensing and deep learning
14:10-14:30	Ryoichi HORISAKI (The University of Tokyo, Japan)	Computational imaging with randomness
14:30-14:50	Xueli Chen, Nan Wang (Xidian University, China)	Projection tomography based computational Raman imaging
14:50-15:00	Zhanquan Tian (Tsinghua University)	Lensless Edge Enhanced Imaging System Based on Zone Plate Coding Mask
15:00-15:10	Shuqi Mu (Peking University, China)	Multislice Computational Model for Birefringent Scattering
15:10-15:20	Afternoon tea	
Session 2: Computational microscopic imaging Chair: Nan Wang (Xidian University, China)		
15:20-15:40	Shuang Liu (Shanghai Institute of Optics and Fine Mechanics, the Chinese Academy of Sciences, China)	Micro-vibration mode imaging based on coincidence imaging
15:40-16:00	Fan Wang (Beihang University, China)	Super-resolved photonic force microscope for ultrasensitive force sensing in water
16:00-16:20	Zehao He (Tsinghua University, China)	Coded aperture-based compressive data page for optical data storage
16:20-16:30	Weisong Zhao (Harbin Institute of Technology, China)	Live-cell and high-throughput super-resolution imaging made easy
16:30-16:50	Haoyu Li (Harbin Institute of Technology, China)	Mathematically surpassing microscope hardware limits to enable ultrafast 60 nm resolution in live cells
7-9pm	Welcome Dinner at Blackbird Café, Cockle Bay Wharf, Darling Harbour	

3 June: Computational Imaging Conference

Venue: CB08.04.010

Session 3: Computational three-dimensional imaging and measurements Chair: Tong Ling (Nanyang Technological University)		
Time	Speaker (Affiliation)	Title
08:30-09:00	Takanori Nomura (Wakayama University, Japan)	Phase-modulated digital holography: a parallel phase-shifting and single-pixel imaging (Keynote)
09:00-09:30	Qican Zhang (Sichuan University, China)	Dynamic 3D shape measurement based on grating projection and phase calculation (Keynote)
09:30-09:50	Shijie Feng (Nanjing University of Science and Technology, China)	High-speed real-time structured light 3D imaging using deep learning
09:50-10:10	Zhoujie Wu (Sichuan University, China)	3D shape, deformation and strain measurement on complex structure using DIC-assisted fringe projection profilometry
10:10-10:30	Junfei Shen (Sichuan University, China)	Learned NIR&VISCAM: multi-spectral fusion for large depth-of-field computational imaging
10:30-10:40	Jiaji Li (Nanjing University of Science and Technology, China)	Transport of intensity diffraction tomography with non-interferometric synthetic aperture for three-dimensional label-free microscopy
10:40-10:50	Yan Hu (Nanjing University of Science and Technology, China)	Structured Light 3D Imaging and Systems with Small Field of View
10:50-11:00	Morning Tea (Open Area, Lv 2, Building 8)	
Session 4: Key technologies of computational biomedical imaging Chair: Shijie Feng (Nanjing University of Science and Technology)		
11:00-11:20	Tong Ling (Nanyang Technological University, Singapore)	Harnessing Electromotility and High-Speed Interferometry for Next-Generation Functional Neuroimaging
11:20-11:30	Shiqi Feng (Tongji University, China)	A Superposition Fabry-Perot Filter array-based Diffractive Computational Hyperspectral Imaging
11:30-12:50	Lunch (Open Area, Lv 2, Building 8)	
pm	Topic Reports	Venue: 010 Building 8, Level 4
Session 5: Related issues of computational scattering imaging Chair: Zhoujie Wu (Sichuan University)		
13:00-13:30	Hiromasa Oku (Gunma University, Japan)	Simultaneous imaging of arbitrary focus and gaze-direction based on nanoseconds exposure timing control (Keynote)
13:30-13:50	Zhongtao Cheng ((Sichuan University, China)	High-gain and high-speed wavefront shaping through scattering media
13:50-14:00	Xin Yu (Sichuan University, China)	Gamma rectification solutions based on probability density function
Session 6: Computational display technology Chair: Junfei Shen (Sichuan University)		
14:00-14:20	Zong Qin (Sun Yat-Sen University, China)	Beyond twofold bandwidth of integral imaging photography and display enabled by intrinsic incoherent synthetic apertures
14:20-14:40	Scott Tyo (Monash University, Australia)	Adaptive Channelled Polarimeters
14:40-14:50	Jian Zhang (Tongji Uni., China)	Focusing on Imaging Quality Limits of Diffractive Achromatic Lenses
14:50-15:00	Yue Wang (Peking Uni., China)	Isotropic Reflective Ultrathin Light-Sheet Microscopy
15:00-15:30	Afternoon Tea break	
15:30-17:30	Expert Panel discussion on “scientific paper writing Panel: Pep Pàmies (Nat. Biomed. Eng.); Juyoung Yoon (EWHA); Xiaogang Liu (National University of Singapore); Jiajia Zhou (UTS) Chair: Irina Kabakova (UTS) (Venue:005 Building 8, Level 2)	

3 June: Smart Molecules Symposium - Parallel Session 1

Venue: Building 8, Level 2, Room 005 (CB08.02.005)

Time	Speaker/Affiliation	Title
9:00-9:10	Welcome Speech by Prof Vicki Chen, Provost and Senior Vice-President	
Session 1: Smart molecules and materials (Chair: Juyong Yoon)		
Time	Speaker (Affiliation)	Title
9:10 – 9:45	Plenary: Justin Chalker (Flinders University)	New Frontiers in Polymers Made from Sulfur
9:45 – 10:15	Keynote: Kang Liang (University of New South Wales)	Unlocking the Power of Biocatalysis with Reticular Chemistry
10:15 – 10:45	Keynote: Yuling Wang (Macquarie University)	A New Optical Tool for Liquid Biopsy Analysis Towards Cancer Diagnosis
10:45 – 11:00	Morning Tea	
11:00 – 11:20	Invited: Teng Ben (Zhejiang Normal University)	Crystalline Porous Organic Salts and Their Host-Guest Chemistry
11:20 – 11:40	Invited: Jiangong Ma (Nankai University)	Smart Molecular Sensing on Electroactive Metal-Organic Frameworks
11:40 – 12:00	Invited: Jingchao Li (Donghua University)	Activatable Semiconducting Polymer Nanoparticles for Cancer Immunotherapy
12:00 – 13:20	Lunch	
Session 2: Functional biomedical materials and devices (Chair: Lingdong Sun)		
13:20 – 13:55	Plenary: Plenary: Juyong Yoon (EWhA)	Recent Progress on Fluorescent Imaging Probes and Phototherapy
13:55 – 14:25	Keynote: Yung Doug Suh (Ulsan National Institute of Science & Technology)	TERS, NERS, and ANP
14:25 – 14:55	Keynote: Quan Yuan (Hunan University)	Design of Aptamer-based Molecular for Bioanalysis and Biomedical Application
14:55 – 15:15	Invited: Jie Tan (Hunan University)	Functional Nucleic Acids for Dynamic Detection of Protein Activity
15:15– 15:30	Afternoon Tea	
15:30 – 16:00	Keynote: Pep Pàmies (Nat. Biomed. Eng.)	Accelerating the impact of translational biomedical materials and devices
Session 3: Expert Panel discussion on “Scientific Paper Writing”		
16:00-17:30	Expert Panel discussion on “scientific paper writing” Panel: Pep Pàmies (Nat. Biomed. Eng.); Juyong Yoon (EWhA), Baohua Jia (RMIT University), and Xiangyang Shi (Donghua University) Chair: Irina Kabakova (UTS)	

3 June: Smart Molecules Symposium - Parallel Session 2 (AM Only)

Venue: CB08.02.002

Time	Speaker/Affiliation	Title
9:00-9:10	Welcome Speech by Vicki Chen, Provost and Senior Vice-President (Room 08.02.005)	
Session 1: Smart molecules and materials		
Time	Speaker (Affiliation)	Title
Session 1-1 Chair: Juntao Gao		
9:15 – 9:45	Keynote: Xiangyang Shi (Donghua University)	Dendrimer-Based Nanomedicine Design to Boost Cancer Immunotherapy
9:45 – 10:15	Keynote: Lingdong Sun (Peking University)	Opportunities and Challenges of Lanthanide Nanoparticles for Bioimaging
10:15 – 10:45	Keynote: Markus Muellner (The University of Sydney)	Polymerization-Induced Self-Assembly and Cellulose Nanocrystals for the Fabrication of Nanostructured Carbon-Coated Anatase
10:45 – 11:00	Morning Tea	
Session 1-2 Chair: Xiangyang Shi		
11:00 – 11:30	Keynote: Juntao Gao (Tsinghua University)	Image based multi-omics
11:30 – 11:50	Invited: Deming Liu (Chinese Academy of Sciences)	Controlled synthesis of NaREF4 heterogeneous nanocrystals
11:50 – 12:10	Invited: Yuyang Gu (National University of Singapore)	Development of an interference-free lifetime nanothermometry based on lanthanide luminescence
12:10 – 13:20	Lunch and resume to PM session at CB08.02.005	

5 June: Symposium for Light: Science & Applications

Venue: UTS Green Theatre CB07.02.025

Time	Speaker/Affiliation	Title
9:00-9:10	Welcome Speech by Distinguished Prof Dayong Jin, Director, IBMD	
Session 1 (Chair: Prof Glenn Solomon, University of Adelaide)		
Time	Speaker (Affiliation)	Title
9:10 – 9:45	Hongjie Dai (Stanford University)	In vivo Biomedical Fluorescence Imaging in the NIR-II Window
9:45 – 10:20	David Parker (Hong Kong Baptist University)	The Design of Responsive Luminescent Lanthanide Probes
10:20 – 10:40	Morning Tea	
10:40 – 11:15	Baohua Jia (RMIT University)	Laser Nanoprinted Integrated Photonic Devices
11:15 – 11:40	James Hutchison (University of Melbourne)	(Bioinspired) Optical Cavities for Strong Light-Matter Interactions
11:40 – 12:05	Yuhai Zhang (University of Jinan)	Transparent Display for Luminescent Imaging Applications
12:05 – 13:30	Lunch	
Session 2 (Chair: Prof Baohua Jia, RMIT University)		
13:30 – 14:05	Heike Ebendorff-Heidepriem (University of Adelaide)	Expanding Optical Glass and Fibre Properties Through Functionalisation and Nanostructuring: Pathway to Novel Sensors and Light Sources
14:05 – 14:35	Arnold Lining Ju (University of Sydney)	Mechanobiology Inspired Anti-Thrombotic Strategies and Point-of-care Microtechnologies
14:35 – 14:55	Lan Fu (Australian National University)	Semiconductor Nanowire Arrays for Photonic Integration
14:55 – 15:20	Renren Deng (Zhejiang University)	Excitation Management at Interface of Organic Molecule-lanthanide Nanocrystal Hybrid Nanosystems
15:20 – 15:40	Afternoon Tea	
15:40 – 16:05	Glenn Solomon (University of Adelaide)	Inorganic Semiconductor Quantum Dots: A Bright Source of Single and Entangled Photons
16:05 – 16:30	Min Qiu (Westlake University)	Nano-optoelectronics Devices and Their Applications
16:30 – 17:05	Ilya Shadrivov (Australian National University)	Shaping Light with Tunable Metasurfaces
17:05 – 17:40	Benjamin J. Eggleton (University of Sydney)	New Frontiers in (Photonic) Smart Sensors for a Healthier, Safer and More Sustainable Future
6:45-8:15pm Conference Dinner hosted by Iain Watt, Deputy Vice-Chancellor and Vice-President (International) and attended by Prof Vicki Chen, Provost and Senior Vice-President, UTS (SkyFeast Buffet at Sydney Tower, entry via Level 4 Westfield Sydney, 108 Market Street, Sydney)		

6 June: Summit for Wearable Sensors & Devices

UTS Building 7 – Level 2 – Green Theatre CB07.02.025

Time	Speaker/Affiliation	Title
9:00-9:10	Welcome Speech by Prof James Wallman, Dean, Faculty of Science, UTS	
Session 1: Flexible Sensors and Devices (Chair: Anderson Shum)		
Time	Speaker (Affiliation)	Title
9:10 – 9:45	Plenary: Xiaogang Liu (National University of Singapore)	Pushing the Boundary of Optical Materials for Assistive Technology
9:45 – 10:15	Keynote: Antonio Tricoli (University of Sydney)	Engineering Integrated Multi-Scale Architectures for Wearable Biomolecular Sensors
10:15 – 10:35	Morning Tea	
10:35 – 11:05	Keynote: Chunhui Wang (University of New South Wales)	Soft Piezoresistive Strain Sensors based on Microcrack Design
11:05 – 11:35	Keynote: David Tsai (University of New South Wales)	Silicon Microelectronics for Large-scale Brain Machine Interfaces
11:35 – 12:10	Plenary: Meifang Zhu (Donghua University)	Hybrid Fibers for Skin-Friendly Wearable Devices
12:10 – 13: 15	Lunch Break	
Session 2: Emerging Wearable Technologies (Chair: David Tsai)		
13:15 – 13:45	Keynote: Guangming Tao (Huazhong University of Science & Technology)	Functional Fibers Towards Intelligent Space
13:45 – 14:15	Keynote: Anderson Shum (University of Hong Kong)	Towards flexible microfluidics
14:15 – 14:45	Keynote: Mohit Shivdasani (University of New South Wales)	Emerging implantable bionic technologies: from blindness to chronic pain
14:45 – 15:15	Keynote: Shuguang Yang (Donghua University)	Polymer complexation for adaptive fibers
15:15 – 15: 30	Afternoon Tea	
Session 3: Expert Panel Discussion: Roadmap toward translation for wearable sensors and devices (Moderator: Antonio Tricoli, University of Sydney)		
15:30 – 16: 30	Professor Meifang Zhu (Panellist, TWAS Fellow, Faculty Dean at Donghua University)	
	Suzanne Williams (Panellist, Cofounder and Principal of Mobius Medical Pty Ltd)	
	Duncan Macinnis (Panellist, Director of Stakeholder Engagement, MTP Connect)	
Concluding Remarks		

7 June: Poster Presentation Session

UTS CB07.03.010B and 010G

Time	Speaker/Affiliation	Title
15:15-15:30	Poster set up	
Session: Poster Presentation (Chair: Luís Carlos)		
Time	Presenter/Affiliation	Title
15:30-17:30 All poster presenters should be alongside their poster during the poster viewing time.	Claire Richards (University of Technology Sydney)	Development of a 3D Trophoblast Model of Early Pregnancy Placental Tissue
	Dinara Afrose (University of Technology Sydney)	Uric acid is a promising biomarker and target of preeclampsia
	Pengfei Shuai (China University of Geosciences)	Controllable Crystal Form Transformation and Temperature Sensing Properties Studies of K3 Sc0.5Lu0.5F6: Ho ³⁺ , Yb ³⁺ with Cryolite Structure
	Abasalt Bahrami (University of California, UCLA)	Total Internal Reflection Fluorescence Microscopy to Study the Radical-pair Mechanism
	Ke Su (China University of Geosciences)	Multi-mode Optical Manometry Based on Li4SrCa (SiO4)2: Eu ²⁺ Phosphors
	Shiyu Wei (The Australian National University)	Self-powered Nanowire Array Gas Sensor for Environmental application
	Long Ngo (Macquarie University)	Development of microfluidic device for the detection of exosomes from breast cancer patient
	Anastasiia Tukova (Macquarie University)	Reaching stars: unique characteristics of gold nanostars for sensing and targeting applications
	Abasalt Bahrami (University of California, UCLA)	Effects of static magnetic fields on vascular structure and function are associated with redox processes
	Kamalpreet Kaur (University of Technology Sydney)	Catalytic Tango: Exploring the Dance of Cadmium and Magnesium Ions to Amplify DNAzyme Performance in Biosensors
	Zijun Yong (RMIT University, Melbourne)	Soft Self-powered Photoelectrochemical Photodetector based on Gold Nanowires
	Jueyi Xue (University of New South Wales)	Light-switchable COF Nanomotor for Aqueous Contaminants Removal
	Guochen Bao (University of Technology Sydney)	Enhancing Upconversion Emission by Moiety-Engineered NIR Dyes Sensitisation
	Guochen Bao (University of Technology Sydney)	Terbium-Europium Binuclear Complex as Molecular Thermometer
	Libing Fu (University of Technology Sydney)	SARS-CoV-2 RNA detection with multi-component nucleic acid enzyme (MNAzyme)-mediated catalysed hairpin assembly
	Shihui Wen (University of Technology Sydney)	Rapid Lateral Flow Strip Platform for Diagnosis of Preeclampsia
	Guoyin Chen (Donghua University)	Integrated Dynamic Wet Spinning of Core-sheath Hydrogel Fibers for Optical-to-brain/Tissue Communications
	Liping Zhu (Donghua University)	Role of Amino Groups in the Thermal Response System of Chitosan/ β -glycerophosphate
	Jiao Li (Tsinghua University)	Developing novel multiplex UCNP-FISH to detect early cancer
	Meiqian Xin (Tsinghua University)	Intelligent image based spatial transcriptomic platform—Tn5Scope
Ziwei Wu (University of Technology Sydney)	Ultrasensitive upconversion lateral flow assay for dairy protein detection	
Sanaa Abdullah Alzahrani (University of Technology Sydney)	Exploring the antibacterial power of nanoporous silver coatings	
Afternoon Tea		
Concluding Remarks		

8 June: Symposium for Super-Resolution Imaging & Quantum

Biotechnology

UTS Green Theatre CB07.02.025

Time	Speaker/Affiliation	Title
9:00-9:10	Welcome Speech by Deputy Dean, Philip Gale, Faculty of Science, UTS	
Session 1: Super-Resolution Imaging and Quantum Biotechnology (Chair: Leo Zhang, Peter Qian Su)		
Time	Speaker (Affiliation)	Title
9:10 – 9:40	Plenary: Paul Robinson (Purdue University)	Single Cell Cytometry from the 20th Century to the Quantum Domain
9:40 - 10:10	Plenary: Julie Biteen (University of Michigan)	Determining the nature of biomolecular condensates in bacteria
10:10 – 10:30	Morning Tea	
10:30 - 11:00	Plenary: Lei Jiang (Chinese Academy of Science)	Quantum-confined superfluid: Biological energy conversion, chemical reaction, and information transfer
11:00 – 11:30	Plenary: Liejin Guo (Xi'an Jiaotong University)	Multiphase Mass/Energy Conversion and Transport Mechanisms in Biological Systems and their Inspirations in the Construction of Energy Conversion Technologies
11:30– 12:00	Plenary: Luis Dias Carlos (University of Aveiro)	How hot are living cells under magnetic hyperthermia?
12:00– 13:00	Lunch	
13:00 - 13:30	Plenary: Boris Martinac (Victor Chang Cardiac Research Institute UNSW)	The role of the Piezo1 and TRPM4 ion channels in cardiac hypertrophy
13:30 – 14:00	Plenary: Jennifer Stow (University of Queensland)	Imaging Macrophage Surface Projections and Inflammatory Responses.
14:00 – 14:20	Keynote: Changlin Tian (University of Science & Technology of China)	Electron transfer analysis in enzymatic catalysis
14:20 – 14:40	Keynote: Seiichi Uchiyama (University of Tokyo)	Developments of fluorescent sensors based on an environment-sensitive benzofurazan fluorophore
14:40 – 15:00	Keynote: David Simpson (University of Melbourne)	Bio-sensing and imaging with diamond quantum probes
15:00 – 15:20	Keynote: Elizabeth Hinde (University of Melbourne)	TBC
15:20 – 15:40	Afternoon Tea	
15:40 – 16:00	Keynote: Liam Hall (University of Melbourne)	TBC
16:00 – 16:20	Keynote: Lianne Spengelink (University of Wollongong)	TBC
16:20 – 16:40	Keynote: Donna Whelan (La Trobe University)	Single-Molecule Super-Resolution Imaging of Deleterious DNA Damage
16:40 – 17:00	Keynote: Haoyu Li (Harbin Institute of Technology)	Next-generation Computational Optical Super Resolution Imaging Technologies
17:00 – 17:20	Invited: Abasalt Bahrami (University of California, Los Angeles)	Magnetic fields and cellular responses: Advancing Instrumentation for Improved Cure Strategies

9 June: Emerging Leaders in Biomedical Materials and Devices

Venue: The Green Theatre CB07.02.025

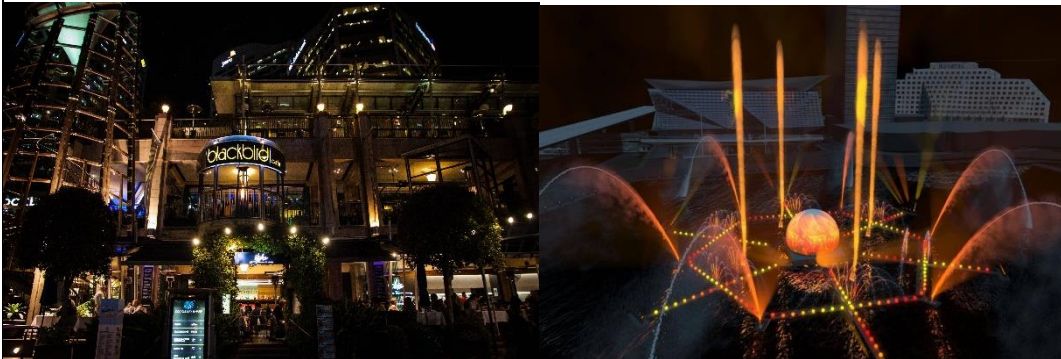
Time	Speaker/Affiliation	Title
9:00-9:10	Welcome Speech by Prof Steven Langford, Head of School, MaPS, FoS, UTS	
Session 1: Mid-Career Researchers (Chair: A/Prof Lana McClements, University of Technology Sydney)		
Time	Speaker (Affiliation)	Title
9:10 – 9:30	A/Prof Sophia Gu (UNSW Sydney)	Nanosheet-Enabled Catalytic Nanomedicine
9:30 – 9:50	Dr Run Zhang (The University of Queensland)	Responsive materials for optical bioassay and disease treatment
9:50 – 10:10	Dr Ming Li (Macquarie University)	Microfluidic solutions for single-cell and single-molecule assays
10:10 – 10:30	A/Prof Jelena Kovacina (UNSW Sydney)	Next generation biomimetic materials for cardiovascular applications
10:30-10:50	<i>Morning Tea</i>	
10:50 - 11:10	Dr Andrew Care (University of Technology Sydney)	"Unlocking the Cage": Bioengineering self-assembling protein nanocages into a versatile platform for applied bionanotechnology.
11:10 – 11:30	A/Prof Khoon Lim (The University of Sydney)	Programming physical cues in biomaterials to direct cell function
11:30 – 11:50	Dr Dorna Esrafilzadeh (UNSW Sydney)	Engineering conducting structures in biomedical devices
11:50- 12:10	Industry panel Q&A: Careers in biotech after PhD Prof Michael Wallach (Director, Centre for Innovative Medical Research, NSW, Australia) Dr Alex Volkerling (Sales Product Specialist, Inventia Life Sciences, NSW, Australia) Dr Yanling Lu [Head of CMC (Chemistry, Manufacturing and Controls) Minomic International Ltd; Glytherix Ltd, NSW Australia]	
12:10-13:00	<i>Lunch Break</i>	
Session 2: Early career researchers (Chair: Dr Ying Zhu, University of Technology Sydney)		
13:00 – 13:20	Dr Arutha Kulasinghe (The University of Queensland)	Spatial biology in the era of Immunotherapy and COVID-19
13:20 – 13:40	Dr Alain Wuethrich (The University of Queensland)	Liquid biopsy nanotechnologies to profile extracellular vesicles in lung cancer
13:40 – 14:00	Dr Ann Na Cho (Macquarie University)	Brain organoid-on-a-chip platform to spatiotemporally regulate the cell-to-organ level communication
14:00 – 14:20	Dr Ji Lu (The University of Queensland)	Understanding roles of emerging pollutants on the emergence and spread of antimicrobial resistance
14:20 – 14:40	Dr Jiawen Li (University of Adelaide)	3D micro-printing of miniaturised fibre-optic devices
14:40 – 15:00	Dr Shihui Wen (University of Technology Sydney)	Quantitative Point of Care Tests by Upconversion Nanoparticles
15:00-15:30	<i>Afternoon Tea</i>	
Session 3: PhD Student Lightening talks		
15:30 – 15:35	Pritam Bordhan (University of Technology Sydney)	Ultrasensitive lateral flow assay using up-conversion nanoparticles for the detection of PD-L1-positive small extracellular vesicles
15:35 – 15:40	Allan Sun (University of Sydney)	Blood flow disturbances and mechanotransduction propagate thromboinflammatory outcomes
15:40 – 15:45	Anastasiia Tukova (Macquarie University)	Reaching stars: unique characteristics of gold nanostars for sensing and targeting applications
15:45 – 15:50	Hien Tran (UNSW Sydney)	Insight into the dynamics of photocrosslinked silk hydrogels to regulate on-demand stiffening for biomedical applications
15:50 – 15:55	Xin Pan (China University of Geosciences)	Emerging Mechanoluminescent Materials in Advanced Flexible Electronics and Biological Photonics
15:55 – 16:00	Dorsa Morshedi Rad (University of Technology Sydney)	Developing microfluidic tools for intracellular delivery

16:00 – 16:05	Qingqing Fan (UNSW Sydney)	Colorimetric detection of a neurodegenerative biomarker using a metal-organic framework-based nanozyme
Session 4: Panel Discussion: Careers in Academia (MC: Pep Pàmies, Chief Editor, Nature Biomedical Engineering)		
16:10-17:00	Prof Hongjie Dai (Stanford University)	
	Prof David Parker (Hong Kong Baptist University)	
	Asst. Prof Seiichi Uchiyama (The University of Tokyo)	
	Prof Julie Biteen (University of Michigan)	
	Dist. Prof Juyoung Yoon (Ewha Womans University)	
A/Prof Elizabeth Hinde (University of Melbourne)		
Conclusion and Close		
Farewell dinner (Ventuno, 7/21 Hickson Road Walsh Bay, Sydney)		

Networking Activities

To encourage all participants to engage in formal discussions as well as casual networking throughout Research Week, we have curated six exciting social and cultural experiences centered around VIVID and Sydney, aiming to make the event a unique and unforgettable experience for all registered attendees.

2 June: CITA Conference Dinner & IBMD Research Week Welcome Dinner



6:45 - 9pm

Blackbird Café Darling Harbour
Wheat Road Balcony Level 1
Cockle Bay Wharf Darling Harbour, NSW 2000

Unwind and enjoy a casual three-course Modern Australian meal after a long day at the conference, all while relishing the best view of the VIVID Light Walk! (ELEMENTAL - Combining 80-meter water shooters, flames, projection, and pyrotechnics over Cockle Bay, this 10-minute water show is an essential stop on the VIVID Light Walk. Catch the spectacular installation every night between 6 PM and 11 PM during VIVID Sydney.)

4 June: Hunter Valley Wine Tours



9am - 6pm

9am Pick up at Mercure Sydney (818-820 George Street) and transfer to Hunter Valley
12-2pm Lunch at Peterson House (3-course set menu, incl. A glass of sparkling wine)
2:30-4pm Enjoy a wine tasting experience at Brokenwood Winery, featuring a tasting of seven wines from their variety and single vineyard selections, along with a winery tour that includes barrel tasting.
4pm Transfer back to Sydney
6pm Drop off at Mercure Hotel

5 June: Dinner at Sydney Tower



6:45-8:15pm

SkyFeast Buffet at Sydney Tower

Located between Pitt & Castlereagh Streets

entry via Level 4 Westfield Sydney, 108 Market Street (please arrive by 6:30pm)

Sydney 2000

Special Host: Iain Watt, Deputy Vice-Chancellor and Vice-President (International)

Embark on your own culinary tour of the world, indulging in over 30 international dishes, including seafood and desserts, as you enjoy a 360-degree revolving tour of Sydney from 82 floors below.

7 June: Vivid Sydney Cruise Dinner



6:30-9:30pm

VIVID Cruise on KARISMA II

Boarding at King Street Wharf 3 North

The Promenade, Lime Street, Sydney 2000

- Enjoy a 3-hour cruise along the iconic Sydney Harbour - the best way to experience the lights of VIVID Sydney.
- Professional wait staff and cruise director
- Good Range Hot & Cold Canape Menu (Chef's selection)
- One drink on arrival - open bar available for drinks purchases

9 June: Farewell Dinner at the Rocks



7-9:30pm
Ventuno
7/21 Hickson Road
Walsh Bay, Sydney 2000

Ventuno Pizzeria Birreria Enoteca is a contemporary Italian eatery situated on Sydney's Harbour in the historical Walsh Bay art precinct.

Transport information for international & interstate delegates

UTS is conveniently situated at the center of Sydney, less than 10km away from Sydney Airport. There are three easy ways to travel from the airport to UTS.

- **Uber**
- **Taxi**
- **Train** - T8 line (From Domestic Airport Station, Platform 1 to Central Station, Platform 21), then walking about 15 min. \$20.60 AUD.

Event Hotels

Mercure Sydney

- 818-820 George Street, Sydney NSW 2000, Australia, Tel: (+61) 029217 6797
- Near UTS and Central Station (3 mins walk from conference venue).

Novotel Sydney Central

- 169/179 Thomas St, Haymarket, NSW, 2000, Australia, Tel: (+61) 0292816888
- Near UTS, Powerhouse Museum and Chinatown (3 mins walk from conference venue via Ultimo Precinct pedestrian walkway).

Holiday Inn Darling Harbour

- 68 Harbour St. Haymarket, NSW, 2000, Australia, Tel: (+61) 0292910262
- Near UTS (10 mins walk from conference venue). Situated right between the bustling China Town and newly developed Darling Square precinct.

Code of Conduct for All Event Participants

IBMD is committed to its positive, ethical and inclusive culture, consistent with UTS values. By registering for and attending the IBMD Research Week 2023, participants agree to be abided by the [UTS Code of Conduct](#).

Disclaimer:

Great care has been given in producing this information booklet. However, we cannot guarantee that there are no errors or last-minute changes to the information provided.