

ANSTO User Meeting 2021

Wednesday 24 November 2021

Biomedicine, Life science & Food Science (11:00-12:50)

time	[id] title	presenter
11:00	[87] The Death Kiss: understanding how the zombie protein, MLKL, is triggered to kill cells by necroptosis	Dr MURPHY, James
11:20	[25] Structures of biliary micelles during solubilisation of lipids mimicking the digestion products of human and bovine milk	Dr CLULOW, Andrew
11:35	[216] Hepatic lipid composition in dietary models of high iron NAFLD investigated with Synchrotron Infrared and X-Ray Fluorescence microscopy	Mr KIDMAN, Clinton Dr MAMOTTE, Cyril
11:50	[79] Investigating the Therapeutic Benefit of Spermidine in a Pre-Clinical Model of Muscular Dystrophy	SCHADDEE VAN DOOREN, Lauryn
12:05	[123] Structural insights into the ferroxidase and iron sequestration mechanisms of ferritin from <i>Caenorhabditis elegans</i>	MALCOLM, Tess
12:20	[173] Spectroscopic Analysis of Age-Related Changes in the Brain Lateral Ventricles During Ageing	Ms HOLLINGS, Ashley
12:35	[10] Imaging Breast Microcalcifications Using Dark-Field Signal in Propagation-Based Phase-Contrast Tomography	AMIN ZADEH, Alaleh

Biomedicine, Life science & Food Science (14:00-15:00)

time	[id] title	presenter
14:00	[93] Neutron Reflectometry Unravels Allergen-Lung Surfactant Monolayer Interactions in the Development of Pollen-Induced Thunderstorm Asthma	Mr SIDDIQUE, Arslan
14:15	[59] Investigating the role of Zn in glucose regulation using X-ray Fluorescence Microscopy and X-ray absorption near-edge structure spectroscopy	Dr ELLISON, Gaewyn
14:30	[174] Gd-TPP-DOTA reduces cell viability in cancer cells via synchrotron radiotherapy	Dr MIDDLETON, Ryan
14:45	[5] Structural, Biochemical and Functional characterization of <i>Salmonella</i> BcfH: an unusual Dsb-like fimbrial protein	SUBEDI, Pramod

Thursday 25 November 2021

Biomedicine, Life science & Food Science (10:45-12:20)

time	[id] title	presenter
10:45	[42] Membrane permeabilisation is mediated by distinct epitopes in mouse and human orthologs of the necroptosis effector, MLKL	HORNE, Chris
11:00	[130] Disulfide bond formation between T-cell receptor and peptide antigen lowers the threshold of T cell activation	Dr SZETO, Christopher
11:15	[58] A Comparison of Different Approaches to Image Quality Assessment in Phase-Contrast Mammography	REYNOLDS, Jesse
11:30	[176] Human MLKL is maintained by RIPK3 in an inactive conformation prior to disengagement and cell death by necroptosis	Mr MENG, Yanxiang
11:45	[163] The silver bullet: using silver doped lanthanum manganite to selectively target deadly brain cancer	Mr KHOCHAICHE, Abass
12:00	[205] Determining the role of protein aggregation in COVID-19	REYNOLDS, Nicholas

Biomedicine, Life science & Food Science (13:30-14:20)

time	[id] title	presenter
13:30	[60] Jaws caught on the IMBL	Dr HAUSERMANN, Daniel

Friday 26 November 2021

Biomedicine, Life science & Food Science (10:45-12:20)

time	[id] title	presenter
10:45	[211] Synchrotron CT dosimetry at the IMBL for low wiggler magnetic field strength and spatial modulation with bow tie filters	Dr MIDGLEY, Stewart
11:00	[177] Magnetically-guided particle delivery to airway surfaces for cystic fibrosis gene therapy: Synchrotron-based visualisation and optimisation for improved in vivo lentiviral gene transfer	DONNELLEY, Martin
11:15	[74] Biochemical Interaction of Few Layer Black Phosphorus with Microbial Cells Using Synchrotron macro- ATR-FTIR	SHAW, Zoe
11:30	[37] Using X-ray crystallography to understand bushfire-induced seed germination	DAVIES, Sabrina
11:45	[154] Regional lung volume measures in small animal models from single projection X-ray images	O'CONNELL, Dylan
12:00	[201] Sub cellular scale mapping of deuterated compounds by nanoSIMS	Dr BOUGOURE, jeremy

Biomedicine, Life science & Food Science (13:30-14:50)

time	[id] title	presenter
13:30	[47] Studying Polysaccharides in Solution with SAXS and Molecular Dynamics	Prof. WILLIAMS, Martin (Bill)
13:50	[128] SPACE RADIATION AND INDIVIDUAL RADIOSENSITIVITY- ANSTO CAS & HUMAN HEALTH IN AIR BEAM EXPERIMENTS	Dr FERLAZZO, Melanie Lydia
14:05	[179] Antimicrobial and Anti-Inflammatory Gallium Implanted 'Trojan Horse' Surfaces for Implantable Devices	DIVAKARLA, Shiva Kamini
14:20	[48] Structural insights into the unique modes of relaxin-binding and tethered-agonist mediated activation of RXFP1 and RXFP2	Dr SETHI, Ashish
14:35	[170] Synchrotron infrared characterisation of SARS-CoV-2 virions for a new COVID-19 saliva test	Prof. WOOD, Bayden

Biomedicine, Life science & Food Science (15:20-17:05)