

S/No	Name of Organiser	Title	Description	Time	Venue
2	Sarawuth Wantha,	Understanding cell structure and mechanisms through image analysis	<p>Images can aid in understanding cell structure and mechanisms. However, analyzing data from various imaging systems and modalities that use different file formats can be a daunting task. Each experimental setup presents a unique challenge, and multi-scale dynamic processes require the tracking of objects of various sizes, from diffraction-limited particles to entire cells, identifying and quantifying sub-cellular structures that support intracellular processes can seem overwhelming. Thermo Scientific Amira Software is a powerful toolbox that enables cell biologists to visualize, process, and analyze complex biological data in 3D. With its advanced image processing, visualization, and analysis tools, Amira software can help users gain insights into the structure and function of cells and tissues that would be impossible to see with 2D images alone.</p> <p>During this workshop, you will learn how to:</p> <ul style="list-style-type: none"> * Accelerate subcellular detection and segmentation from imaging data using a range of readily available tools, including 3D Deep Learning model training. * Analyze multichannel images by performing fast and effective cleaning, segmentation, volume colocalization and neighbor cell proximity. * Extract complex information in 3D and further streamline interactive segmentation pipelines * Get faster information from image data with Deep Learning Denoising tool and build recipes more quickly and easily * Process even larger datasets with the Digital Volume Correlation module * Quickly convert, visualize and accurately process large (~100GB) multi-channel and time series and enhance simulation pipeline. 	Day 1: 11:00 - 12:30	Room 8
5	Emma Glass	An Introduction to Standards in Healthcare	<p>Join the British Standards Institution, the national standards body for the UK, for an interactive workshop all about the importance of standards in the health technology innovation lifecycle. As an agreed way of doing something, built through consensus, standards impact on almost all aspects of our lives. By defining good practice, they help people, business and the economy. Furthermore, in a heavily regulated space such as healthcare, standards can be used to demonstrate compliance with regulations.</p> <p>This session first provides an overview of the various types of standards, then focuses in on several commonly used standards in healthcare (ISO 14971, ISO 24971 and BS 62366). The aim of the session is to provide an introductory taster to standards, giving you with the knowledge and tools you need for future innovation and how standards and regulations fit together.</p>	Day 1: 13:15 - 14:45	Room 8
7	Gwendolen Reilly	Equality Diversity and Inclusion Workshop	<p>This workshop will introduce the Equality Diversity and Inclusion (EDI) working group of the BioMedEng Association and present some EDI issues and initiatives from our partner universities. The four presentations will open up to opportunity for dialogue about what barriers to inclusion our members face and how we might try to address these as a community, including issues faced in both research and teaching. There will be four 10-15 minute presentations followed by an approximately 40 minute open forum for members to discuss ideas they would like the EDI working group to take forward.</p> <p>Speakers:</p> <ul style="list-style-type: none"> * Introduction to the BioMedEng working group: Gwendolen Reilly, University of Sheffield * Research Funding Barrier for Ethnic Minority Academics in the UK: Perspective and Prospect: Adesola Ademiloye, University of Swansea * Can a workshop improve undergraduate bioengineering students' understanding of inclusive engineering? Michael Trikić, University of Sheffield * Embedding EDI in Local Research Cultures: Stefaan Verbruggen, Queen Mary University of London * Equity in STEM - a spotlight on local ED&I initiatives in teaching and research: Aliah Shaheen, Brunel University London 	Day 1: 16:00 - 17:30	Room 8
4	Peter Dorrington	Virtual Reality (VR) - Play and Learn!	<p>This session will provide hands-on experience of Virtual Reality (VR) for delegates, showcasing a number of applications developed by the team at Swansea University or our MSc students. It will be an opportunity for delegates to immerse themselves in all things virtual and understand how VR can be used for health applications or immersive teaching approaches. The session will be 'hands-on' and you will wear different VR headsets, use VR controllers, and experience haptic vests and gloves to fully experience how immersive technologies are benefiting our teaching at Swansea and future research.</p>	Day 1: 16:00 - 17:30 Day 2: 14:45 - 17:00	Level 3 Concourse
6	Wahbi El-Bouri/Steve Cross	ECR Training: Get Your Research Out of The Lab	<p>This workshop aims to provide ECRs with an opportunity to develop their communication and engagement abilities. The session will be delivered by Steve Cross. Steve Cross is a science communicator and trainer whose life goal is to make experts fun and interesting. He's a Wellcome Engagement Fellow, CEO of two companies and was Head of Public Engagement at UCL for seven years. He's mentored hundreds of researchers like you to share their knowledge and ideas publicly, and today will tell you how to get involved in events, videos, podcasts, radio, festivals and everything else. Come along to pick up one tip to make your talks better or to take the first step towards being the next Hannah Fry. Your call.</p>	Day 1: 18:00 - 19:00	Room 9
1	Pearl Read, Jonathan Howard	Rehabilitation engineering in the NHS: a user-centred approach to delivering patient specific solutions	<p>This workshop will discuss the rehabilitation engineering approach to working collaboratively with end-users, families and healthcare professionals, to deliver engineering solutions to real world challenges within a healthcare setting. We will highlight this collaborative approach in relation to customised wheelchair seating, pressure ulcer care and developing personalised aids of daily living. The workshop will include opportunities for interactions with technology that aids in the decision making and care provided to clients. Finally the workshop will present opportunities for advancement in the field.</p>	Day 2: 08:30 - 9:45	Room 8
3	Mark White	Revolutionising Research Methods: ChatGPT and the New Era of Digital Assistants	<p>Imagine having a team of expert digital assistants, each contributing their own specialized knowledge, enabling you to accomplish things you could not ordinarily do yourself. That is the promise of Large Language Models (LLMs), and this workshop is your practical guide to unlocking it. Try hands-on demonstrations in real-world research scenarios. Learn how to craft better prompts and gain insights into the limitations and strengths of models like ChatGPT, Claude and Bard. Bring your laptops for interactive exercises. Whether you're a newcomer or familiar with LLMs, this workshop aims to develop your skills to get more from these digital assistants.</p>	Day 2: 13:00 - 14:30	Room 8