| **Tuesday, 16 November 2021** | |
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| **Session One** | |
| **09:40** | **Chair's Opening Remarks**<br>*Peter Culmer Associate Professor in Surgical Technologies, University of Leeds Alan Cottenden, Emeritus Professor of Incontinence Technology, University College London* |
| **09:50** | **Keynote: Research priorities for incontinence technology: findings from the 7th International Consultation on Incontinence**<br>*Mandy Fader, Professor of Continence Technology, University of Southampton*<br>Every five years or so around 200 experts from across the world join forces to capture in one (rather large) volume current evidence-based wisdom on how best to diagnose, treat and manage urinary and faecal incontinence, and the findings of the 7th consultation will be freshly available by the time of the conference. Mandy Fader is part of the team responsible for the chapter on Managing incontinence using products and, in this talk, she will share her team's findings, focusing in particular on the user needs and research priorities they have identified. |
| **10:10** | Question and Answer Session |
| **10:15** | **Keynote: Lessons from Stomacare**<br>*Richard Darwood, Research and Development Manager, Welland Medical*<br>Stoma care products are often considered quite distinct from those for managing incontinence, not least because many research and development projects focus on one or the other but not both. However, the two fields have much in common: for example, both are concerned with aesthetics, skincare and managing odour. What might we who work with incontinence learn from our colleagues ploughing a parallel furrow in stoma care? Richard Darwood – who has spent 20 years working in that parallel furrow – has kindly agreed to share his insights. He will look at the general back drop to adhesives used in ostomy, how materials have been developed to solve specific issues, and how that strategy has changed over the years. |
| **10:35** | Question and Answer Session |
| **10:40** | **Poster and Flash Presentation Session:**<br><br>1. The challenge to think differently about what we do |

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| | 2. Recovery from Stress Incontinence is Accelerated by Stem Cell Secretome Treatment<br><br>3. QiVi: A safe, non-invasive alternative to IUC<br><br>4. A Comprehensive Approach to Faecal Incontinence Management<br><br>5. Evaluating the implications of pH buffering capacity of two incontinence products on moisture-insulted skin<br><br>6. Reducing contamination rates in urine collection for precontinent children<br><br>7. URApp: a smartphone app to aid bladder training in young people<br><br>8. Long-term urinary catheter use: catheter user experiences and perspectives of catheter practices and design |
| **11:20** | Break |
| **11:45** | **Product User Panel**<br>A panel of product users will share their experiences of managing bladder and bowel incontinence using a range of products. They will share their stories, challenges, and priorities in product design and usability. This session is an opportunity for delegates to ask questions to really understand what people need from products, where they fall short and how they can be improved. This year, an online format offers a unique opportunity to broaden this discussion by including end users from outside of the UK. |
| **12:45** | End of Session One |
| | **Modelling urinary tract (dys)function** |
| **13:30** | **Wave propagation investigations in an in-vitro model of the male urethra**<br>*Lukas Bereuter, Senior Engineer, Urogenital Engineering Group, ARTORG Center, University of Bern* |
| **13:40** | **Three-dimensional computational simulations of urinary flow in the stented ureter**<br>*Dario Carugo, Lecturer in Pharmaceutical Nanotechnology and Nanofabrication, UCL School of Pharmacy* |

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| | *(Department of Pharmaceutics), University College London* |
| **13:50** | **Questioning assumptions in modelling bladder contractility**<br>*Andrew Gammie, Clinical Engineer, Bristol Urological Institute* |
| **14:00** | Question and Answer Session |
| | **Incontinence and Skin Health** |
| **14:10** | **Why wet feels wet? An overview of the biophysical and neurophysiological bases of human skin wetness sensing**<br>*Davide Filingeri, Associate Professor, Skin Health Research Group, University of Southampton* |
| **14:20** | **Results of a questionnaire to investigate incontinence and incontinence-associated dermatitis in a community-based population**<br>*Rachel Morecroft, PhD Student, University of Sheffield* |
| **14:30** | **Friction between human skin and incontinence pads in the presence of barrier protection products**<br>*Matt Carre, Reader in Mechanical Engineering, University of Sheffield* |
| **14:40** | **Utility of skin impedance in monitoring incontinence associated dermatitis**<br>*Emily Owen, PhD Student, University of Bath* |
| **14:50** | Question and Answer Session |
| **15:00** | Break |
| | **Urinary indwelling and intermittent catheter developments** |
| **15:25** | **Examining urease inhibitors as a therapeutic treatment against urinary catheter blockage**<br>*Rachel Heylen, Postgraduate Research Student, University of Bath* |
| **15:35** | **Development of an infection responsive coating to control of encrustation of urinary catheters**<br>*Anthony Slate, Research Associate, University of Bath* |
| **15:45** | **Evaluation of the effect of low frequency ultrasound on urinary catheter biofilms**<br>*Bridget Clancy and Sandra Wilks, University of Southampton* |
| **15:55** | **Using advanced imaging techniques to better understand catheter-associated biofilms**<br>*Sandra Wilks, Lecturer, Director of Programmes Health, University of Southampton* |
| **16:05** | **The multicath trial** |

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| | *Margaret Macaulay, Research Nurse, University of Southampton* |
| **16:15** | Question and Answer Session |
| **16:25** | Chair's Closing Remarks |
| **16:30** | **Workshops** |
| **17:20** | End of Day One |

| **Wednesday, 17 November 2021** | |
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| **Session One** | |
| **07:45** | **Chair's Opening Remarks** |
| **07:55** | **Incontinence technology in low resource settings** |
| **09:25** | Break |
| **09:50** | **Keynote: Non-invasive bladder drainage for women: needs and challenges**<br>*Angie Rantell, Lead Nurse Urogynaecology/Nurse Cystoscopist, King's College Hospital, London*<br>The clinical and patent literature records numerous attempts to design devices that will deliver effective non-invasive bladder drainage for women. However, few have made it to market; none has achieved widespread success; and the need persists. In this talk, Dr Angie Rantell will describes the needs, critique recent attempts to meet them, and highlight the key issues to be addressed by anyone hoping to do better. |
| **10:10** | Question and Answer Session |
| **10:15** | **Keynote: Incontinence and regenerative medicine, present and future**<br>*Richard Day, Director of the Centre for Precision Healthcare and UCL Applied Biomedical Engineering Group, UCL Division of Medicine, University College London*<br>Everyone with incontinence – urinary or faecal – would rather be cured than provided with the means for managing it, however well-designed and effective the products. And regenerative medicine – which has long held the hope of providing cure for some people with some kinds of incontinence – is beginning to show serious promise. In this talk Richard Day will draw on recent findings from his and others' labs to explain what is currently possible and what might be coming soon. |
| **10:35** | Question and Answer Session |
| | **Pumped Devices** |

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| **10:40** | **Development of a toilet-incorporated medical electric bed and a male urine collector for managing elderly incontinent persons**<br>*Sangsoo Park, Professor, Biomedical Engineering, Eulji University* |
| **10:50** | Question and Answer Session |
| **10:55** | Poster Booths/Break |
| | **Apps for Incontinence** |
| **11:45** | **Keynote:**<br>*Lauren Harkins, Senior Programme Lead - DTAC and Digital Health, NHSX* |
| **12:05** | Question and Answer Session |
| **12:10** | **Development of "CONfidence" – the continence promotion, self-help app**<br>*Nikki Cotterill, Associate Professor in Continence Care, University of West of England* |
| **12:20** | **The use of apps to support and improve adherence**<br>*Myra Robson, Senior Physiotherapist, Squeezy App* |
| **12:30** | **Let's Go! Co-designing a smartwatch application to help children and families self-manage paediatric incontinence**<br>*Gemma Wheeler, Design Researcher, Lab4Living, Sheffield Hallam University* |
| **12:40** | **A new level of incontinence care with smart technology**<br>*Jens Hellmond, Ontex* |
| **12:50** | Question and Answer Session |
| **13:00** | Break |
| **13:40** | Poster Prize announcement |
| | **Understanding User Needs** |
| **13:45** | **Incontinence and Mental Wellbeing**<br>*Chris Chatterton* |
| **13:55** | **Dementia and incontinence: A survey of carer experiences and needs**<br>*Cathy Murphy, Senior Research Fellow, School of Health Sciences, University of Southampton* |
| **14:05** | **The cost of nocturnal enuresis to families and the healthcare system**<br>*Monica Armengol, Researcher, University of Oxford* |
| **14:15** | **Incontinence in Humanitarian Settings – Responding to a Challenging Issue in Challenging Contexts**<br>*Michelle Farrington, Public Health Promotion and Community Engagement Lead, Oxfam* |
| **14:25** | Question and Answer Session |

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| **14:35** | **Keynote: Socially Assistive Robots: Making a Positive Impact on Healthy Aging**<br>*Goldie Nejat, Professor, Mechanical Engineering, University of Toronto*<br>Robots are playing important roles in our society especially in a post-pandemic world, aiding people in everyday life at work and at home. In this talk, we explore the field of socially assistive robots and how our team is developing these robots to meet the urgent and immediate needs of our ageing population. These intelligent assistive robots can improve quality of life and promote independence (aging-in-place) of older adults, including those living with dementia. Our robots Brian, Casper, Tangy, Blueberry, Salt and Pepper, and Luke and Leia can provide cognitive and social interventions, help with activities of daily living, and facilitate group activities. The robots are emotional intelligent and learn to personalise their interactions and behaviours to the needs of their users. Robot in the wild user studies that have been conducted with older adults in care settings will be discussed to highlight how these robots can effectively be integrated into everyday life…and in the future how such robots can help manage incontinence. |
| **14:55** | Question and Answer Session |
| **15:00** | **Keynote: Who, What, Wear: A Closer Look at Clothes and Wearables**<br>*Lucy Dunne, Professor, Department of Design, Housing, and Apparel in the College of Design, University of Minnesota*<br>We all wear clothes, but how much do you know about how they work? The physics and physiology of clothing systems are complex and interesting, and are the foundation of how wearable technologies function. From the earliest fabric technologies to advanced e-textiles and computing devices, on-body technologies mediate the body's functions as well as the immediate environment. In this lecture, Dr. Lucy Dunne, co-Director of the University of Minnesota's Wearable Technology Lab will discuss the development of incontinence-related technology from thermal management systems to advanced sensing systems, as well as the ways in which these technologies are developed for wearability and comfort. |
| **15:20** | Question and Answer Session |
| **15:25** | Break |

| | **Devices and technology to address incontinence challenges** |
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| **15:50** | **Point-of-care technology for the simultaneous measurement of three bacteria causing urinary tract infections**<br>*Richard Luxton, Director of IBST, University of West of England* |
| **16:00** | **A Research Intervention in the Un/Sustainable Futures of the Adult Incontinence Pad**<br>*Tiina Vaittinen, Postdoctoral Research Fellow, Tampere University* |
| **16:10** | **Automated AUP – a novel method to characterize Superabsorbent Polymers**<br>*Thomas Daniel, Vice President, BASF SE* |
| **16:20** | **Towards Long-Term Bladder Monitoring with Single-Channel Detrusor Pressure Estimation**<br>*Farhath Zareen, Graduate Research Assistant, University of South Florida* |
| **16:30** | Question and Answer Session |
| **16:40** | Chair's Closing Remarks |
| **16:45** | End of Conference |