

	Horizons in STEM Higher Education Aston University Day 1 Wednesday 25th June 2025		
9:00 - 9:30	Registration MBA Lounge		
9:30 - 9:45	Welcome and Introduction Professor Osama Khan Deputy Vice-Chancellor (Academic) Aston University G11		
9:45 - 10:15	Plenary 1 Hosts of the First Horizons in STEM Conference G11 <i>Chair: Joanne Gough</i>		
Time to move between rooms			
	Pedagogic Research G11 <i>Chair: Nadia Lascar</i>	Climate Education Susan Cadbury <i>Chair: Shobana Dissanayeke</i>	Assessment and Feedback Adrian Cadbury <i>Chair: Erin Anderson</i>
10:25 - 10:45	Exploring self-efficacy in introductory level STEM modules <i>Sam Johnson</i> The Open University	Aerosols in School: An Arts-led Active Learning Project Exploring Aerosol Science with a Community Concerned About Air Quality <i>Vivienne Kuh and Rachael Miles</i> University of Bristol	Modernising Railway Education: A Literature Review on Curriculum Evaluation Models and Technologically Driven Frameworks <i>Prachiti Shinde, Marin Marinov and Reem Hadeed</i> Aston University
10:45 - 11:05	Investigating the Barriers faced by Biomedical Science Undergraduate Students in Completing a Placement Year <i>Kathryn Dudley and Amreen Bashir</i> Wolverhampton University and Aston University	Bridging immunology and sustainability: an interactive and scalable workshop <i>Bronwen Burton and Sophie Rutschmann</i> University of Bristol and Imperial College London	Empowering student agency in assessment and feedback in Biological Sciences <i>Rose Murray, Rebecca Pike and Reinart Jensema</i> University of Bristol
11:05 - 11:25	Break for coffee MBA Lounge		
11:25 - 12:25	Poster/Networking Session Med School Clinical Suite		
12:25 - 13:10	Lunch MBA Lounge		

	Pedagogic Research G11 Chair: Alan Goddard	Active Learning Susan Cadbury Chair: Emily Harper	Laboratory, Field and Practical Work Adrian Cadbury Chair: Alice Robson
13:10 - 13:30	<p>Exploring the experience of academic staff following the introduction of reflective portfolios into biosciences Higher Education curriculums in UK universities</p> <p><i>Emily Bell, Sarah Gretton, Cressida Lyon, Rebecca Thomas, Ruth Deighton, Gemma Chaloner, Nigel Page and Alison Cullinane</i></p> <p>University of Bristol, University of Leicester, University of Bath, Royal Holloway University of London, University of Edinburgh, University of Liverpool and University of Kingston</p>	<p>Group work in a capstone design project - students' perceived preparedness, expectations and reflections</p> <p><i>Vitor Magueijo, Abdul Sharif, Ashleigh Fletcher, Gregor Colville, Katarzyna Sypek, Mark Haw, Mark Heslop, Miguel Jorge and Sorcha Daly</i></p> <p>University of Strathclyde</p>	<p>Integrating video to increase lab confidence and promote skill development</p> <p><i>Anna Kirkham</i></p> <p>University of Central Lancashire</p>
13:30 - 13:50	<p>Enhancing skills development in Sciences' students</p> <p><i>Elena Paci and Kobe Distin</i></p> <p>Bath Spa University</p>	<p>Digital escape rooms enhance physiology data analysis skills and student experience</p> <p><i>Nicky Morgan, Marriam Yaqoob and Matthew Jones</i></p> <p>University of Salford</p>	<p>Card games as effective tools to enhance bioscience laboratory health and safety education</p> <p><i>Holly Matthews, Rumana Rafiq, Daniya Abedalreza, Fatin Yahya and Matthew Jones</i></p> <p>University of Salford</p>
13:50 - 14:10	<p>Delivery and evaluation of a sepsis-focused interprofessional learning workshop between Biomedical Science and Nursing undergraduate students</p> <p><i>Ross Pallett and Charlotte Bates</i></p> <p>Aston University</p>	<p>Sleep duration associated with feelings but not with test scores</p> <p><i>Kosha Mehta</i></p> <p>King's College London</p>	<p>Smart Labs, Smarter Learning: AI-Powered Student Support in Remote Experiments</p> <p><i>Dhouha Kbaier and Andrew Mason</i></p> <p>The Open University</p>
14:10 - 14:30	<p>"Kind of students... kind of staff" - Navigating roles: A thematic exploration of PhD demonstrators' experiences, identity, and career implications</p> <p><i>Nikki Dean Marshall, Tatiana Obretetskaya, Gemma Fox, Caitlin Cook, Catrin McAdams and Lee Parkin</i></p> <p>University of Nottingham</p>	<p>How to better support students in learning programming: A study to improve understanding on what students need in a post-COVID era</p> <p><i>Shun Ha Sylvia Wong, Richard Lee and Chloe M. Barnes</i></p> <p>Aston University</p>	<p>Beyond the Lab Manual: A Tailored, Group-Based Approach to Mastering the Scientific Method</p> <p><i>Stephanie Hodeib, Wayne Mitchell, and Sophie Rutschmann</i></p> <p>Imperial College London</p>

14:30 - 14:50	Break for coffee MBA Lounge		
	Digitally Focused Pedagogy G11 <i>Chair: Charlotte Law</i>	Student Partnerships Susan Cadbury <i>Chair: Becky Thomas</i>	LearnSci 2024 Teaching Innovation Awards winners Adrian Cadbury <i>Chair: Leanne Williams</i>
14:50 - 15:10	The Future of Work: Preparing Students for Jobs That Don't Exist Yet <i>Sam Penrice</i> BPP University	Enhancing assessment and feedback literacy through staff-student partnerships and high-impact formative activities <i>Fleur Corbett, Audrey Zhang, Emma Hance, Charlotte Patient and Katie Fisher</i> University College London	2024 Teaching Innovation Awards winners <i>Dr Juliet Stoltenkamp</i> University of the Western Cape, South Africa <i>Dr Alexandra Moores and Dr Emma Hargreaves</i> University of Kent
15:10 - 15:30	Critical Reflections on the Lived Realities of Automated Marking in the Assessment of Student Coursework <i>Simon Lock</i> University of Bristol	Making Diversity 'Count': Empowering students through co-creation of inclusive STEM curricula <i>Ava Belafonte and Dr Rehan Shah</i> Queen Mary University of London	
15:30 – 15:50	Beyond Translation: Integrating AI to Support International Students in Computational Skills <i>Farrah Zainol and Ediho Lokanga</i> University of Bristol and OnCampus Aston	Bridging the Digital Skills Gap: Curriculum Design for CoAgency in the curriculum <i>Antony Lees and Sam Penrice</i> BPP University	
Time to move between rooms			
16:00 - 17:00	Workshop Med School Workshop on criteria and evidence for senior academic promotions for teaching-focused STEM academics <i>Neil Williams, Sarah Gretton, Diane Butler and Trevor Collins</i> Kingston University, University of Leicester, The Open University	Workshop Med School Enhancing Online Teaching: Learning Tools for Engagement and Collaboration <i>Elizabeth Oladapo, Nazmul Hussain and Tominiyi Olupitan</i> University of Nottingham	Workshop Med School Engaging Biosciences Students Through Gamified Problem-Solving: A Virtual Excel Escape Room for Teaching Descriptive Statistics <i>Emily Harper</i> Aston University
18:00 – 23:30	Conference dinner at Millennium Point		

	Horizons in STEM Higher Education Aston University Day 2 Thursday 26th June 2025		
9:00 - 9:30	Registration MBA Lounge		
9:30 - 10:00	Plenary 2 Dr Farhana Gokhool, University of Bedfordshire G11 Chair: Sue Pawley		
Time to move between rooms			
	Student Support G11 Chair: Amy Patten	Equality, Diversity and Inclusion Susan Cadbury Chair: Karan Rana	DigitalEd Talks Adrian Cadbury Chair: Marty Callahan
10:10 - 10:30	Enhancing success in first-year biochemistry through student reflection and study plans Christopher Love Griffith University	Evaluating the Tier 1 Oliver McGowan Mandatory Training (OMMT) in learning disabilities and autism across health-related courses at Aston University Amreen Bashir, Mary Drozd and Jayne Murphy Aston University	Addressing HigherEd Challenges with Technology Marty Callahan DigitalED
10:30 - 10:50	Safeguarding the future of chemistry: Why students are turning away and how we can inspire the next generation Amina Aminu, Frances Docherty and Vicki Dale University of Glasgow	Outnumbered but not necessarily outgunned: The effects of classroom gender imbalance on student outcomes Alex Wilshaw Liverpool John Moores University	
10:50 - 11:10	How can we help our students prepare for their exams? Rebecca Barnes, Erren Cardoza, Janet Cronshaw, Polly Gravells, Will Hentley, Rebbekah Menday and Kris Vallance University of Sheffield	Influence of student characteristics on accessing work placement opportunities Andrew Mizumori Hirst and Beth Medley University of York	
11:10 - 11:30	Break for coffee MBA Lounge		
11:30 - 12:30	Poster/Networking Session Med School Clinical Suite		
12:30 - 13:15	Lunch MBA Lounge		
13:15 - 14:15	Workshop Med School Equality and inequality in science; a workshop encouraging decolonial thinking for biomedical sciences educators Lara Lalemi, Bronwen Burton and Alice Robson University of Bristol	Workshop Med School Extending Reality for STEM Education: Embedding and sustaining the use of XR and simulation in everyday teaching Trevor Collins, Daniel Mitelpunkt and James Smith The Open University and Imperial College London	Workshop Med School Interactive Learning for Emergency Shelters and Temporary Settlement Planning: A Hands-On Approach Using 3D Models and LEGO Komal Raj Aryal and Yi-Chung Liu Aston University

Time to move between rooms			
	Student Support G11 Chair: Claire Stocker	Equality, Diversity and Inclusion Susan Cadbury Chair: Poonam Patil	Employability Adrian Cadbury Chair: Sue Pawley
14:25 - 14:45	Statistics Anxiety in Dissertation Students: A Hidden Curriculum Challenge <i>Heather Callaghan</i> Oxford Brookes University	Decolonising the Biomedical Science Curriculum: Challenges, Reflections, and Opportunities for Transformation <i>Dylan Jones</i> Bangor University	Student Startups: A Problem- Based Learning Strategy to Launch Career-Ready Scientists <i>David Palomas and Buse Sonmez</i> University College London
14:45 - 15:05	Matching Guru: Finding Suitable Mentor/Mentee Pairings for Peer Mentoring Schemes <i>Polina Bovykina and Shun Ha Sylvia Wong</i> Aston University	Stories of how Students use Resources and Strategies to Overcome their Academic Struggles <i>Erin Brady</i> University of Bristol	Lessons Learned in Designing a Flexible and Applied Degree Apprenticeship Curriculum <i>Ria Symonds</i> University of Nottingham
15:05 - 15:25	Progression from remote learning to postgraduate research: what are the barriers? <i>Alice Fraser-McDonald, Sally Jordan, David Sharp and Teresa Sides</i> The Open University	Increasing STEM subject, study and job interest in 14-15-year-olds via an International Women's Day event <i>Mel Lacey, Rachel Schwartz- Narbonne, Lauren Thompson and Yasmin Faraza</i> Sheffield Hallam University	Bridging Academia and Industry: A Foundation Year Research Collaboration <i>Emma Gaunt and Sarah Rayment</i> Nottingham Trent University
15:25 - 15:55	Break for coffee Vote for prizes MBA Lounge		
15:55 - 16:25	Final plenary Professor Suzanne Fergus, University of Hertfordshire G11 Chair: Neil Williams		
16:25 - 16:55	Prize presentation (Joanne Gough) Invitation to publish in New Directions (Sarah Gretton) Horizons in STEM network update (Neil Williams) Horizons in STEM 2026 announcement – (Rebecca Thomas) G11		



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