

LAB EXCELLENCE

BEST PRACTICE DESIGN, OPERATION AND MANAGEMENT

UNIVERSITY OF BRISTOL

18 SEPTEMBER 2018



- Keynotes from the Met Office and 2 universities (Bristol, Irvine), 40+ sessions and tours (see details on p. 3-4), 250+ attendees and 25+ exhibitors, with low rates for HE staff.
- Many sessions on the University of Bristol's activities, including the planned Temple Quarter initiative and its flagship Quantum Technologies Innovation Centre; the Life Science Building; lab energy and environment programmes; equipment sharing; lab procurement, and technical manager development and knowledge sharing.
- A stream on innovation- and collaboration-focused science spaces, including Unit DX in Bristol and the University of Plymouth's conversion of the former AZ Laboratory at Brixham.
- Operations - chemical management, storage and risk assessment; cold storage; equipment reuse and sharing; F-gases; full costing of lab activities and equipment; greenhouses and plant growth, lighting; safety and more.
- Rethinking ventilation - air handling and diffusion, extract, fume cupboards and supply. (There will also be a one day training course on the topic at Bristol on September 17.)
- Buildings - Met Office Data and Collaboration Centre; what is the world's best lab? designing for well-being; designing for collaboration and innovation; reconfigurable services; how science facilities add student value; and more.
- Energy/Environment - Bristol's Green Lab initiatives; energy-efficient equipment; Environmental Product Declarations; waste and water minimisation; and more.
- Tours of the Life Science and Chemistry Buildings; Greenhouse & Growth Facilities; Unit DX.



The University's recent Life Science Building has a full height atrium between two wings and external air ducting. Its design facilitates interaction between researchers, staff, students and visitors, and has helped boost applications for Biological Sciences courses by 40%.

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 UNIT DX
Science Incubator | Bristol

Booking and more details via www.effectivelab.org.uk/bristol

WHO SHOULD ATTEND?

Everyone connected to laboratories to:

Learn details of many new and refurbished laboratory developments in all disciplines.

Experience the unique 'buzz' of an S-Lab Conference, with:

- Content on all aspects of laboratory design, operation and management;
- Great opportunities to network with both peers and other laboratory experts, from universities, commercial and public research labs, suppliers and others.

Visit 25+ exhibitor and sponsor stands.

Maintain their continuing professional development (CPD) - certificates supplied.

Laboratory operations, procurement and support staff for:

Enhanced knowledge of innovation and good practice re a wide variety of lab equipment and processes, including cold storage; equipment reuse and sharing; F-gases; greenhouses and plant growth, lighting; and procurement.

Estates and facilities staff, and building professionals to:

Receive updates on the latest developments re certification, regulations and standards for laboratory buildings and services.

Gain insights into making laboratory space adaptable through flexible furniture and services, modular lay outs and other means.

Hear about and view best practice design and project management for science facilities in both life and physical sciences.

Better understand the basics of laboratory ventilation, and how to improve efficiency and effectiveness through new technologies.

Champions of science VFM to:

Learn how smart design and operation can benefit research and teaching quality, and financial and environmental sustainability.

Hear about the latest laboratory benchmarking exercises and findings.

Energy/Environmental champions to:

Learn how innovative approaches to ventilation and equipment can reduce energy consumption and environmental impacts.

Get updates on the latest energy-and water-efficient equipment.

Academic managers, technical and other staff involved in planning new or refurbished laboratory projects for:

Opportunities to hear about innovative developments in all disciplines that could have lessons for your projects.

Laboratory technical and HR staff to:

Obtain job and career-relevant updates on a wide variety of topics.

Hear about Bristol's technical career actions.

UKSPA members and others interested in spaces for innovation to:

Learn from case studies at Bristol and Plymouth Universities and elsewhere.

S-Lab 2019 Conference



This will be held in collaboration with the UK Science Parks Association (UKSPA) at the University of Birmingham on April 2-3 2019.

Booking and more details via www.effectivelab.org.uk/bristol

BREAKOUT SESSIONS A-D SUMMARY

| | A. Reception Room | B. Room 3.31 | C. Room 3.32 | D. Room 1.11 |
|---------------|---|---|--|---|
| 11.25 - 12.05 | <p>A1 The Quantum Technologies Innovation Centre at the Heart of the University of Bristol's Temple Quarter - Keynote Follow-on Session</p> <p><i>Mustafia Rampuri</i></p> | <p>B1 A Systematic Laboratory Improvement Programme Creates Energy, Financial and Science Benefits at the University of California, Irvine - Keynote Follow-on Session</p> <p><i>Wendell Brase, University of California, Irvine</i></p> | <p>C1 Optimising Laboratory Air Flows for Improved Comfort, Energy Efficiency and Performance</p> <p><i>Paul White, Strulik</i></p> | <p>D1 Big Data for Big Weather: The New Met Office Data Centre - Keynote Follow-On</p> <p><i>Ralph James and Helen Wells, Met Office</i></p> |
| 12.20 - 13.00 | <p>A2 The University of Bristol Life Science Building</p> <p><i>Professor Gary Foster and colleagues</i></p> | <p>B2 Laboratory Environmental Improvement at the University of Bristol - Overview and Changing Behaviour and Processes</p> <p><i>Anna Lewis and Martin Wiles</i></p> | <p>C2 Converting a Commercial Laboratory Into State-of-the-Art Innovation and Research Space: Plymouth University's Brixham Laboratory</p> <p><i>Frank Roberts</i></p> | <p>D2 Measured Containment Control: Safer Laboratories with Substantially Reduced Ventilation - a Progress Update</p> <p><i>Roy Allwood, Labway Services, and Richard Brown, Halton UK</i></p> |
| 14.00 - 14.40 | <p>A3 Working Well – The Impact of the Built Environment on People and Work</p> <p><i>June Koh, Strategy Plus, AECOM</i></p> | <p>B3 Laboratory Environmental Improvement at the University of Bristol - An Integrated Approach Pays Off in Bio-medical Sciences</p> <p><i>Anna Lewis</i></p> | <p>C3 How Adaptable Design Can Provide Enhanced Facilities for Modern Laboratories and Innovation Spaces</p> <p><i>Phil Hadfield, Romero UK/ Premier Laboratory Systems</i></p> | <p>D3 Understanding the Full Costs of Laboratory Activities – Why it Matters and How to Achieve It</p> <p><i>Stephen Butcher, Office for Students</i></p> |
| 14.50 - 15.30 | <p>A4 Designing for Innovation and Multi-Disciplinary Collaboration</p> <p><i>Keith Papa, BDP</i></p> | <p>B4 Environmental Product Declarations - The Next Stage for Laboratory Equipment?</p> <p><i>Douglas Leck, Director, SuperiorbyFAR</i></p> | <p>C4 Bristol's First Science Incubator, Unit DX, Provides High Quality Lab Space, Support and Equipment Access to Science SMEs</p> <p><i>Dr. Harry Destecroix, UnitDX</i></p> | <p>D4 How Do Laboratory Facilities Contribute to Student Value?</p> <p><i>Interactive discussion, led by Stephen Butcher, Office for Students</i></p> |
| 15.50 - 16.30 | <p>A5 World's Best Lab?</p> <p><i>Speakers from the Designers for Science Network</i></p> | <p>B5 Next Steps in Laboratory Environmental Improvement</p> <p><i>Panel Discussion with members of the LEAN Network</i></p> | <p>C5 Tour of Unit DX</p> <p><i>En Route to Bristol Temple Meads Station. See p.x for details</i></p> | <p>D5 No session will run at this time</p> |

BREAKOUT SESSIONS E-H SUMMARY

| | E. Room 3.30 | F. Room 3.23 | G. Room ? or Tours (From Registration Desk) | |
|--|--|--|--|--|
| <p>11.25 - 12.05</p> | <p>E1 Smart Freezers are Here - Exploring Freezer Design and How Connectivity Can Increase Sample Security <i>Michael Dudley, Thermo Fisher Scientific</i></p> | <p>F1 Joined-Up Laboratory Procurement <i>Josh Brown and Mark Holness, University of Bristol</i></p> | <p>G1 Safe Storage of Hazardous Substances and Flammable Liquids in Laboratories <i>Mark Whiteley, Asecos</i></p> | |
| <p>12.20 - 13.00</p> | <p>E2 Laboratory Challenges: Little Known Developments That Could Have a Big Impact <i>Several mini-case studies, by multiple presenters</i></p> | <p>F2 Equipment Sharing at the University of Bristol <i>Peter Dunton</i></p> | <p>G2 Lab Design Case Study Session: Topic tbc <i>Presenter tbc</i></p> | |
| <p>14.00 - 14.40</p> | <p>E3 Integration of Chemicals, Biologicals, Equipment/ Assets, Disposal, and Other Lab Management Functions into One System <i>Eoin Mulvey, Co-Founder, LabCup</i></p> | <p>F3 Dangerous Substances in Laboratories: Saving Money and Reducing Risk Through More Effective Specification (with Follow-On Session E5) <i>Roy Smith, DSC</i></p> | <p>G3 Specialised Tour of the Life Science Building with extended time viewing rooftop greenhouses <i>NB BEGINS AT 1350</i></p> | |
| <p>14.50 - 15.30</p> | <p>E4 A Synergistic Design Approach to Safely Reduce Lab Energy Use by Up To 75% with No Extra Cost <i>Gordon Sharp, Aircuity</i></p> | <p>F4 Supporting and Developing Laboratory Managers at the University of Bristol (with Follow-on Session F5) <i>Stephen Gaze</i></p> | <p>G4 General Tour of the Life Science Building</p> | |
| <p>15.50 - 16.30</p> | <p>E5 Dangerous Substances in Laboratories: Practical Demonstrations of Common Hazards (Can be Attended Independently of F3) <i>Roy Smith, DSC</i></p> | <p>F5 Supporting and Developing Laboratory Managers (Follow-on from F4) <i>Interactive discussion led by Stephen Gaze</i></p> | <p>G5 General Tour of the Life Science Building Specialised Tour of the Life Science Building with extended visit to plant growth suites Specialised Tour of the Chemistry Building, with emphasis on building services and energy efficiency <i>Tours may finish after 16.30</i></p> | |