



Heads of University Biosciences

HUBS Annual Meeting

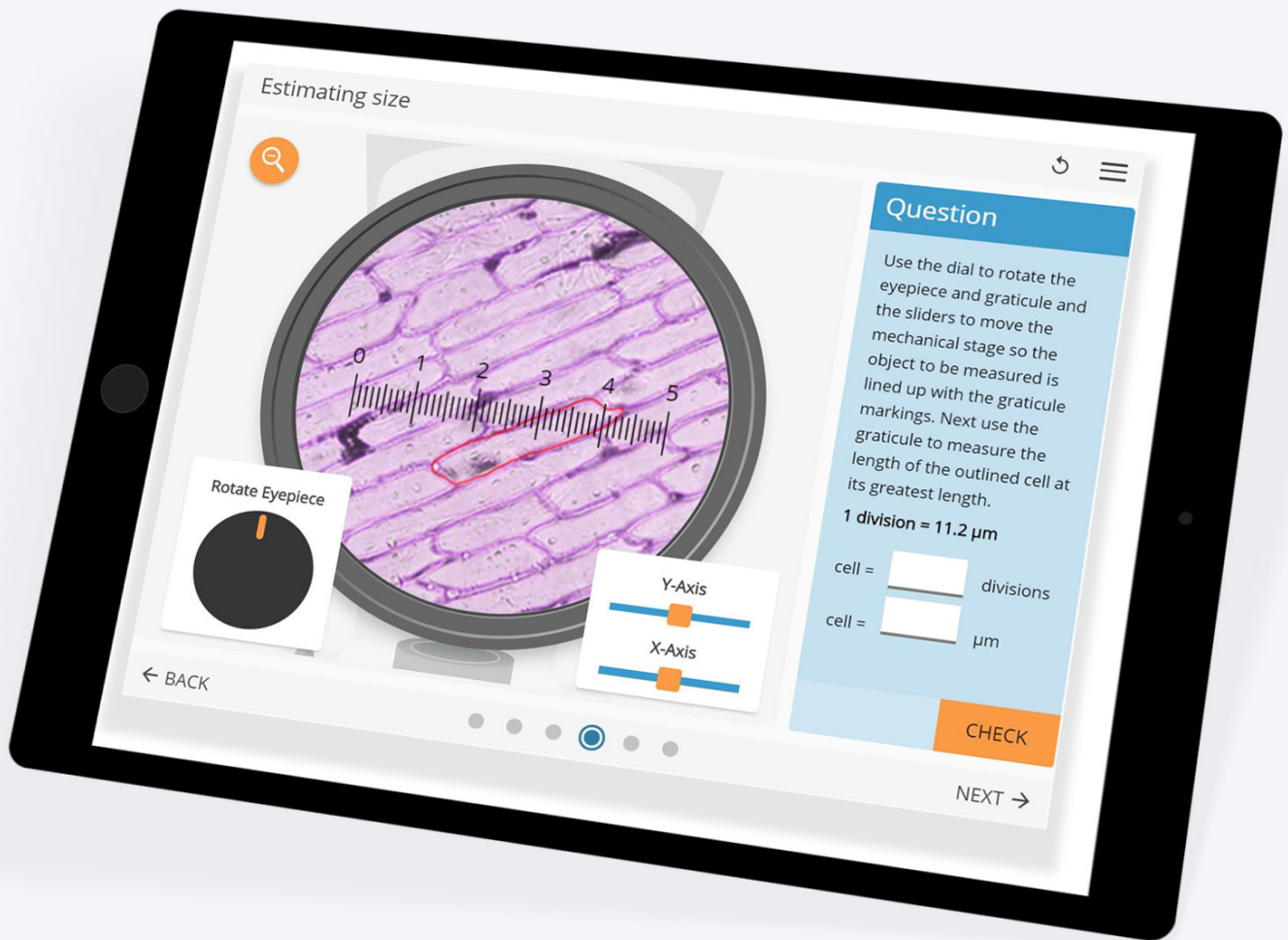
30 April – 1 May 2019

**Wellcome Genome Campus,
Hinxton**

Organisers: Dr Sandra Kirk, Professor Janey Henderson,
Professor Paul Lynch



#HUBSConference2019



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Introduction

A warm welcome to the inaugural HUBS Annual Meeting 2019 - thank you for joining us. The conference will feature the following sessions:

Day 1: Research and Policy

- Session 1. The national and Wellcome Campus research picture
- Session 2. The changing policy landscape

Day 2: Teaching and Learning

- Session 3. Higher Education Bioscience Teacher of the Year finalists
- Session 4. Authentic assessment in the biosciences
- Session 5. Alternative assessment in the biosciences

Accommodation

If you are staying overnight on the 30 April, check-in is from 14.00 and check-out is before 10.00 on 1 May. All rooms are located in Mulberry Court, a 2 minute walk from the main conference centre. Breakfast is included in the room booking and will be served in Hinxton Hall restaurant from 7.30 – 9.30.

Taxis

It is a good idea to pre-book a taxi when travelling to and from the Campus to an airport or train station. Taxis can be booked from the Wellcome Genome Campus Conference Centre reception desk. Recommended taxi companies:

- Abel Cars – 01799 513313
- Walden Cabs – 01799 500500
- Caz Cars – 01223 513693
- Mid Anglia – 01223 836000
- Panther Taxis – 01223 715715
- Crocus Cars – 01799 525511
- Sawston Cabco – 01223 517008

WIFI access and social media



Free WIFI is available throughout the venue through the 'ConferenceGuest' network. If you are having difficulties, please ask a member of Conference Centre staff at reception.



Follow the HUBS twitter account **@BiosciHeads** and use our hashtag **#HUBSConference2019** to join the conversation

Catering

Refreshments and lunches will be served in the Wellcome Genome Campus Conference Centre exhibition area. If you are attending the conference on both days, the conference dinner will be served in the nearby Hinxton Hall restaurant, opposite the main Conference Centre building.

Tours

Tours of the Wellcome Genome Campus will be taking place on 1 May. There will be two tours taking place, one at 13.30 (Tour A) and another at 14.15 (Tour B). Each tour will last for 45 minutes, and will start and end at the Conference Centre reception. All attendees will have the opportunity to take a 45 minute break when not on the tour.

Photography

The Royal Society of Biology may be taking photographs at this event to use on our main communication channels. During registration, you will be asked if you consent to giving the RSB permission to use photographs taken in RSB publications (this may include the website, social media sites, blogs and magazine).

Sponsors

Special thanks to our sponsors, who helped make this event possible:

Official sponsor



Catering sponsor



Conference supporters



Exhibition prize draw

Visit our all our sponsors at their stands in the main exhibition area and have your chance of winning a prize. All attendees will receive a prize draw flyer in their conference pack. A fully stamped or signed flyer will enable you to enter the prize draw. Once complete you will need to place in the ballot box on the registration desk. The ballot will close at 13.30 on 1 May and the winner of the prize draw will be drawn at random by the Chair of HUBS in the closing session of the conference. The winner must be present at the time of the draw.

Please note Thermo Fisher Scientific will be attending Day 1 of the conference only

1. About the Heads of University Biosciences (HUBS)

The Heads of University Biosciences (HUBS) membership comprises 80 higher education institutions in the UK, represented by biological and life science heads of departments and subject leads. HUBS provides a forum for discussing national issues on the provision of research and teaching in the biosciences, and as a source of informed comment on the consultations that affect HE institutions delivering in the biological and life sciences.

HUBS is a Special Interest Group of the Royal Society of Biology. www.rsb.org.uk/HUBS

HUBS Member Institutions

Abertay University	Heriot-Watt University	University of Sheffield
Aberystwyth University	University of Hertfordshire	Sheffield Hallam University
Anglia Ruskin University	University of Hull	University of Southampton
Aston University	Institute of Zoology	Staffordshire University
University of Aberdeen	Keele University	University of Suffolk
University of Bath	University of Kent	University of St Andrews
University of Bedfordshire	King's College London	University of Surrey
Birmingham City University	Kingston University	University of Sussex
Brunel University London	Lancaster University	Swansea University
University of Birmingham	Leeds Beckett University	Teesside University
University of Bolton	University of Leicester	Ulster University
University of Bradford	University of Lincoln	University of Warwick
University of Brighton	University of Liverpool	University of Westminster
Cardiff Metropolitan University	Liverpool John Moores University	University of the West of England
Cardiff University	University of Manchester	University of West Scotland
University of Central Lancashire	Manchester Metropolitan University	University of Wolverhampton
University of Chester	University of Manchester	University of Worcester
University of Cumbria	Middlesex University	University of York
University College London (UCL)	Newcastle University	York St John
Coventry University	Northumbria University	
University of Derby	Nottingham Trent University	
University of Dundee	Open University	
University of Durham	Oxford Brookes University	
University of East Anglia	University of Plymouth	
University of East London	University of Portsmouth	
University of Edinburgh	Queen's University Belfast	
Edinburgh Napier University	Queen Mary, University of London	
University of Essex	University of Reading	
University of Exeter	Royal Holloway	
University of Glasgow	Royal Veterinary College	
Glasgow Caledonian	University of Salford	
University of Greenwich		

2. HUBS Executive Committee

Chair

Dr Sandra Kirk FRSB

Secretary

Professor Janey Henderson CBIol CSciTeach FRSB

Treasurer

Professor Paul Lynch

Members

Professor Jonathan Green MRSB

Professor Hilary MacQueen FRSB

Dr Angela Priestman

Professor Julian Park

Professor Stephen Price FRSB

Professor Simon Guild FRSB

Dr Steve Bevan FRSB

Dr Debbie Bevitt FRSB*

Dr Helen Packer*

Professor Alastair Goldman FRSB*

Secretariat

Eleanor Kirby-Green MRSB

Observers

Lauren McLeod AMRSB

Laura Bellingan FRSB

Professor Gerry McKenna FRSB (HUCBMS representative)

Dr Graham Wright MRSB (ECLF representative)

*to be elected at the Spring 2019 AGM

3. Attendee List

Attendee	Post Nominals	Role	Organisation
Professor Yvonne Barnett	CSci FRSB	Deputy Chair REF 2021 Sub Panel	Research England
Jacob Barrett			Primerdesign
Dr Celia Bell	FRSB	Head of Department of Natural Sciences	Middlesex University
Professor Steve Bevan	FRSB	Head of School of Life Sciences	University of Lincoln
Dr Debbie Bevitt	FRSB	Reader in Biomedical Education	Newcastle University
Professor Ewan Birney		Director	European Bioinformatics Institute
Andrew Birnie		Application Specialist	Primerdesign
Dr Pamela Black		Education Lead	Wellcome Advanced Courses and Scientific Conferences
Dr Kikki Bodman-Smith		Lecturer in Immunology	University of Surrey
Dr Vikki Burns		Reader in Science Education	University of Birmingham
Dr Becky Butler		Associate Head of School	Coventry University
Charlotte Carroll		Project Manager (Higher Education)	Gatsby Plant Science Education Programme
David Carter		Business Development Manager	Charles River
Dr Bradley Cobb		Senior Lecturer	Royal Veterinary College
Jessica Cole		Head of Policy	Russell Group of Universities
Emily Coyte		Digital Content Creator	Learning Science
Dr Helene Doerflinger		Public Engagement Manager	Wellcome Trust/Cancer Research UK Gurdon Institute
Phil Edge		Technical Manager	SciQuip Ltd
Madalina Enache		Category Manager	Cole-Parmer
Dr Pauline Fitzgerald	FRSB	Head of Subject	Leeds Beckett University
Ann Green		Head of School Life Sciences	Coventry University
Dr Elaine Green		Associate Head of School	Coventry University
Professor Jonathan Green	FRSB	Deputy Pro-Vice-Chancellor (Education)	University of Birmingham
Phil Green		Sales Manager	Thermo Fisher Scientific
Professor Simon Guild	FRSB	Head of the School of Life Sciences	University of Glasgow
Professor Sarah Guthrie		Head of School of Life Sciences	University of Sussex
Dr Neville Hall	FRSB	Director of Programmes for Biomedical and Healthcare Sciences	Middlesex University
Dr Amanda Harvey	MRSB	Division Lead (Biosciences)	Brunel University
Matt Harwood	AMRSB	Education Policy Intern	Royal Society of Biology
Professor Janey Henderson	CBiol CSciTeach FRSB	Executive Secretary	Heads of University Biosciences (HUBS)

Dr Colin Hewitt	FRSB	Head of School of Biological Sciences	University of Leicester
Dr Sally Hicks	FRSB	Principal Lecturer in Biomedical Sciences	Cardiff Metropolitan University
Catherine Holmes		Marketing and Communications Manager	Wellcome Advanced Courses and Scientific Conferences
Martin Hornshaw		Director, Scientific Collaborations	Thermo Fisher Scientific
Dr Darren Hughes		Scientific Programme Manager	Wellcome Advanced Courses and Scientific Conferences
Jennifer Jacobs		Associate Professor	Middlesex University
Dr Sue Jones		Subject Director for Biomedical Science	York St John University
Dr Mark Jones		Founder	OneHE
Eleanor Kirby-Green	MRSB	Education Policy Officer	Royal Society of Biology
Dr Sandra Kirk	FRSB	Deputy Dean (Learning & Teaching)	Nottingham Trent University
Dr Mairi Knight		Head of School of Biological and Marine Sciences	University of Plymouth
Professor Susan Laird		Head of Department of Biosciences and Chemistry	Sheffield Hallam University
Dr Charlotte Lawson	FRSB	Course Director	Royal Veterinary College
Dr David Lewis		Senior Lecturer in Pharmacology & Bioethics	University of Leeds
Professor Paul Lynch		Head of Environmental Sustainability Research Centre	University of Derby
Professor Niall MacFarlane		Professor in Physiology and Sports Science	University of Glasgow
Andrew MacKenzie		Head of Policy and Communications	The Physiological Society
Professor Hilary MacQueen	CSciTeach FRSB	Professor in Health Sciences	The Open University
Darren Malcolm		Director of Higher Ed Assessment Technology	McGraw Hill Education
Dr Georgina Manning	FRSB	Head of Biology, Chemistry & Forensic Science	University of Wolverhampton
Dr Alan Marchant		Director of Programmes	University of Southampton
Dr David Martin	FRSB	Senior Lecturer in Bioinformatics	University of Dundee
Professor Stephen McClean		Associate Head of School of Biomedical Sciences	Ulster University
Professor Gerry McKenna	CBiol FRSB	President Emeritus and Executive Secretary	Heads of University Centres of Biomedical Sciences (HUCBMS)
Lauren McLeod	AMRSB	Head of Education Policy	Royal Society of Biology
Dr Gavin McStay		Senior Lecturer	Staffordshire University
Professor Luciane V. Mello	FRSB	Professor in Bioscience Education	University of Liverpool
Dr Darren Mernagh	FRSB	Head of School of Biological Sciences	University of Portsmouth
Dr Clare Miller		Senior Lecturer	University of Lincoln
Stan Mitchell		Consultant	Learning Science

Dusanka Nikolic		Education Developer	Wellcome Advanced Courses and Scientific Conferences
Ellie Oakley	MRSB	Events Officer	Royal Society of Biology
Professor Kevin O'Dell	FRSB	Professor of Behavioural Genetics	University of Glasgow
Dr Helen Packer		Head of Department	Oxford Brookes University
Professor Sheila Pankhurst		Dean of School - Environment & Life Sciences	University of Salford
Professor Julian Park		Head of School, Agriculture, Policy and Development	University of Reading
Professor Anna Philpott		Head of the School of Biological Sciences	University of Cambridge
Dr Adrian Pierotti	FRSB	Senior Lecturer	Glasgow Caledonian University
Professor Michelle Pinard		Director of Teaching, School of Biological Sciences	University of Aberdeen
Professor Stephen Price	FRSB	Professor of Developmental Neurobiology	University College London (UCL)
Dr Angela Priestman	FRSB	Head of Department of Biological Sciences	Staffordshire University
Toni Riley		Technical Support	SciQuip Ltd
Sam Roseveare		Policy Manager	Universities UK
David Selbie		UK & Ireland Sales Manager	McGraw Hill Education
Professor Alison Sinclair	FRSB	Director of Teaching and Learning and Professor of Molecular Virology	University of Sussex
Professor Tom Smith		Professor of Microbiology	Sheffield Hallam University
Dr David Smith		Reader in Biochemistry	Sheffield Hallam University
Dr Alison Snape	MRSB	Head of Teaching Department of Biochemistry	King's College London
Alexandra Spencer	MRSB	Membership Development Officer	Royal Society of Biology
Dr Rachel Stubbington	MRSB	Senior Lecturer in Ecology and Environmental Sciences	Nottingham Trent University
David Sweeney		Executive Chair	Research England
Samantha Taft		Deputy Product Manager	Charles River
Professor Dame Jean Thomas	FRS FMedSci Hon FRSB	Professor Emeritus of Macromolecular Biochemistry	University of Cambridge
Dr Jennifer Topping		Assistant Professor	Durham University
Dr Tom Vincent		Head of Energy and Industrial Strategy	Government Office for Science
Dr Patrick Walsh		Director of Teaching	University of Edinburgh
Steve Ward		Technical Sales Specialist	Cole-Parmer
Dr Julia Wilson		Associate Director	Wellcome Sanger Institute
Dr Graham Wright	MRSB	Lecturer	Edinburgh Napier University
Vainora Zukaite		Associate Business Development Manager	Charles River

4. Programme

Day 1. Research and Policy	
09:00-10:00	Registration and refreshments
10:00-10:10	Dr Sandra Kirk (Chair of Heads of University Biosciences) Welcome
Session 1. The national and Wellcome Campus research picture (Chair Prof Stephen Price) Session co-organiser Dr Sandra Kirk	
10:10-10:40	Professor Yvonne Barnett (Deputy Chair of REF 2021 Sub Panel, Research England) The next Research Excellence Framework
10:40-11:10	David Sweeney (Research England) UKRI and OfS joint working
11:10-11:30	Refreshment break
11:30-12:00	Dr Julia Wilson (Wellcome Sanger Institute) Introduction to the Wellcome Sanger Institute
12:00-12:30	Professor Ewan Birney (European Bioinformatics Institute) Introduction to EMBL-EBI
12:30-13:30	'Science Nibbles' sponsored by McGraw Hill Education Networking lunch and poster viewing with staff from the Wellcome Genome Campus
Session 2. The changing policy landscape (Chair Prof Julian Park) Session co-organiser Prof Janey Henderson	
13:30-14:00	Sam Roseveare (Universities UK) Priorities and issues facing UK universities
14:00-14:30	Dr Tom Vincent (Government Office for Science) The Industrial Strategy and future of UK research
14:30-15:00	Refreshment break
15:00-15:30	Jessica Cole (Russell Group of Universities) What Brexit means for UK research
15:30-16:00	Dr Mark Jones (OneHE) Global challenges facing HE educators and the work of OneHE
16:00-16:15	Dr Sally Hicks (RSB Accreditation Committee) Royal Society of Biology accreditation update
16:15-16:45	HUBS AGM
16:45-17:30	Break
17.30-19.00	Wine reception and meet the sponsors
19:00	Dinner
20:00	Professor Dame Jean Thomas (University of Cambridge) Dinner speech

Day 2. Teaching and Learning	
08:30-08:45	Dr Sandra Kirk (Chair of Heads of University Biosciences) Arrival and welcome
Session 3. HE Bioscience Teacher of the Year (Chair Dr Sandra Kirk)	
08:45-09:00	Hélène Doerflinger (Wellcome / CRUK Gurdon Institute) Engaging and inspiring under-represented audiences in the biological sciences
09:00-10:15	Finalist case studies
10:15-10:30	HE Bioscience Teacher of the Year awarded
10:30-10:45	Biochemical Society Teaching Excellence Award
10:45-11:10	Refreshment break
Session 4. Authentic assessment in the biosciences (Chair Prof Jon Green)	
11:10-11:40	Dr Vikki Burns (University of Birmingham) Authentic assessment: concepts and examples
11:40-12:05	Professor Niall MacFarlane (University of Glasgow) Authentic assessment of internships as an alternative to traditional wet lab Honours projects
12:05-12:30	Dr Dave Lewis (University of Leeds) Capstone experiences: a need for more "authentic" assessments
12:30-13:00	Discussion session
13:00-13:30	Lunch
13:30-15:00	Tours of the Wellcome Sanger Institute
Session 5. Alternative assessment in the biosciences (Chair Prof Simon Guild)	
15:00-15:10	Professor Jon Green (University of Birmingham) Challenges in alternative assessment
15:10-15:45	Roundtable discussion session
15:45	Dr Sandra Kirk (Chair of Heads of University Biosciences) Round up and close

5. Higher Education Bioscience Teacher of the Year Award



About the Award

The Higher Education (HE) Bioscience Teacher of the Year Award seeks to identify the UK's leading bioscience HE teachers and recognises the invaluable role they play. The competition is open to all employed bioscience teachers in the UK HE system and individuals can be nominated either by self, peer or management nomination using a quick nomination form.

The scheme rewards lecturers who:

- Display individual excellence through the design and development of approaches to teaching that have proven successful in promoting bioscience student learning and achievement
- Undertake scholarly and professional developmental activities that actively influence and enhance the learning of their students
- Support colleagues and influence bioscience student learning beyond their own department and institution
- Exhibit innovation in relation to teaching that has proven to improve teaching practices and enhance student learning

HE Bioscience Teacher of the Year Finalists 2019

Congratulations to the three finalists of this year's Award. The overall winner of the Award will be announced for the first time at the conference.

The 2019 Finalists are as follows:

Dr David Martin (University of Dundee)

Professor Kevin O'Dell (University of Glasgow)

Dr David Smith (Sheffield Hallam University)

6. Speaker biographies and talk abstracts

We would like to take the opportunity to say a huge thank you to all our speakers for their valuable contribution to the conference.

Professor Yvonne Barnett (Nottingham Trent University)



Yvonne was awarded a BSc first class in biomedical sciences and a PhD in biochemistry and genetics from the University of Ulster. She is a fellow of the Royal Society of Biology, and the Institute of Biomedical Science. She is currently a consultant in higher education, and is deputy chair of the national Research Excellence Framework A03 sub-panel for Allied Health Professions, Dentistry, Nursing and Pharmacy. She was senior pro vice-chancellor (research) at Nottingham Trent University 2016-2018, and prior to that was pro vice-chancellor for research and founding head of the Colleges of Science and Technology and Arts and Science, from 2004. She has active research interests in causes and mechanisms of cancer and ageing and has authored in excess of 100 peer-reviewed original research papers, attracted several million pounds of funding support for research from a range of funding agencies and has long-standing collaborations with Centres of Excellence worldwide. Yvonne was founding director of the national University Alliance Doctoral Training Alliance in Applied Biosciences for Health, a director of Biocity Group Limited, is a trustee and council member of the Royal Society of Biology, President Emeritus and executive committee member of the Heads of University Centres for Biomedical Sciences and is a director of Medilink East Midlands.

David Sweeney (Research England)



After gaining first class honours in statistics at the University of Aberdeen, David worked at two BBSRC research institutes, as a consultant statistician before developing mathematical models of plant growth. His work on the computational aspects of this led into broader applications of IT in education and research, and he was director of information services at Royal Holloway, University of London, before moving into university leadership as vice-principal (communications, enterprise and research) in 2004. In this role he was responsible for research strategy and for developing Royal Holloway's research-led commercial and consultancy activities. He joined HEFCE in 2008 as director (research, innovation and skills) and led the development and implementation of the first Research Excellence Framework including the new impact agenda element. He was responsible for research policy and funding, knowledge exchange and university/business relations. In May 2017 he was appointed the first executive chair of Research England, a new council established as part of UK Research and Innovation, alongside the seven disciplinary Research Councils and the UK Innovation Agency. Research England is biggest research funder in the UK with responsibility for university block-grant funding for research and knowledge exchange. In UKRI he has particular responsibilities for place (regional funding), commercialisation and open science. David has been invited to visit many

countries to advise on research assessment and funding, particularly with respect to research impact. He is also co-chair of the Implementation Task Force for Plan S, the international initiative on full and immediate open access to research publications.

Dr Julia Wilson (Wellcome Trust Sanger Institute)



Julia builds and supports the relationships that are needed to support the strategic vision of the Sanger Institute. These activities range from interactions with the academic scientific community, commercial partners, funders and other key stakeholders. She increases awareness of the Sanger Institute's research, explores new collaborations and areas of research, and strengthens and builds on existing links to accelerate and expand the impact and reach of Sanger Institute science. She works to

translate the outcomes of research and position the Sanger Institute as a source of translational opportunities. In addition she raises awareness of the importance and impact of genomics research with government and policy makers and facilitates the translation of genomics research into clinical practice. Previously Julia was assistant director of research at Breakthrough Breast Cancer and science programme manager at the World Cancer Research Fund. As a scientist she was a post-doc at the Karolinska Institute in Sweden and then worked as a cancer researcher for a number of years at Cancer Research UK and Queen Mary University of London.

Ewan Birney (EMBL-EBI)



Ewan Birney is director of EMBL-EBI with Dr Rolf Apweiler, and runs a small research group. He is also EMBL-EBI's joint head of research, alongside Dr Nick Goldman. Ewan completed his PhD at the Wellcome Sanger Institute with Richard Durbin. In 2000, he became head of nucleotide data at EMBL-EBI and in 2012 he took on the role of associate director at the institute. He became director of EMBL-EBI in 2015. Ewan led the analysis of the Human Genome gene set, mouse and chicken genomes and the ENCODE project, focusing on non-coding elements of the human

genome. Ewan's main areas of research include functional genomics, DNA algorithms, statistical methods to analyse genomic information (in particular information associated with individual differences in humans and Medaka fish) and use of images for chromatin structure. Ewan is a non-executive director of genomics England, and a consultant and advisor to a number of companies, including Oxford Nanopore Technologies, Dovetail Genomics and GSK. Ewan was elected an EMBO member in 2012, a fellow of the Royal Society in 2014 and a fellow of the Academy of Medical Sciences in 2015. He has received a number of awards including the 2003 Francis Crick Award from the Royal Society, the 2005 Overton Prize from the International Society for Computational Biology and the 2005 Benjamin Franklin Award for contributions in open source bioinformatics.

Sam Roseveare (Universities UK)



Sam Roseveare leads Universities UK's policy work on research and innovation and sector agencies and infrastructure. During his time at Universities UK he has developed and supported policy work on regulation, health and professional education. Previously, he led on a project to support the comparability of degree standards in the UK. Before joining UUK, Sam was a strategic planning officer at Imperial College London. Previously, he was President of Durham Students' Union, leading the organisation between 2010 and 2011 and serving on the University Council. Sam holds a MSc in quantitative research methods from the UCL Institute of Education, and a BA in archaeology and anthropology from the University of Durham.

Dr Tom Vincent (Government Office for Science)



Dr Tom Vincent is head of energy and industrial strategy at the Government Office for Science (GOS). His role is to support and bring scientific rigour to the government's industrial strategy, including the commitment to reach 2.4% UK GDP spend on R&D by 2027. His current priorities focus on innovation themes including energy, cancer diagnosis and mobility, utilising systems thinking methodologies. Prior to joining GOS, he was a member of the independent Biometrics and Forensics Ethics Group, providing ethical advice to the Home Office on forensics policy and operational utilisation by law enforcement agencies. Tom obtained a PhD in molecular biology from the John Innes Centre, where his research focused on the genetic regulation of plant immunity responses

Jess Cole (Russell Group of Universities)



Jess Cole is head of policy at the Russell Group where she is primarily responsible for international and research and policy. The main focus of her current work includes the impact of Brexit on universities, UK visa and immigration policy and the Industrial Strategy. Jess joined the Russell Group from the European Parliament in 2013, where she was previously a policy adviser on EU research and energy policy. Jess has a degree in modern and medieval languages from the University of Cambridge. The Russell Group represents 24 leading UK universities which are committed to maintaining the very best research, an outstanding teaching and learning experience and unrivalled links with business and the public sector.

Dr Mark Jones (OneHE)



Dr Mark Jones is co-founder of OneHE, a global network for educators with a passion for learning and teaching (www.onehe.org). Mark began his career teaching history at the University of York before joining the University of Hull to work with the BBC on a major digital curriculum initiative. This led to a series of leadership roles in public, private and voluntary sector organisations that sought to use new technology to transform public service delivery. In 2014, Mark returned to higher education as chief operating officer of the UK's Higher Education Academy (HEA), a charity that worked with universities to promote excellence in teaching, leading its transition from grant-funding. Now at OneHE, Mark works daily with educators across the world, helping them to connect, collaborate and share their practice for mutual benefit.

Professor Dame Jean Thomas (University of Cambridge)



Jean Thomas is professor emeritus of macromolecular biochemistry, University of Cambridge, immediate past master of St Catharine's College, Cambridge, and Chancellor of Swansea University. She graduated with a BSc and PhD in chemistry from Swansea University, held a Beit Memorial Fellowship at the MRC Laboratory of Molecular Biology, Cambridge, and then moved to the university department of biochemistry where she was a lecturer, reader, and professor. Her research has been on the structure, function and dynamics of chromatin and chromatin-binding proteins. Jean has served as biological secretary/vice-president of the Royal Society, a governor of the Wellcome Trust, President of the Biochemical Society and of the Royal Society of Biology, and trustee of the British Museum; and as a member of SERC, EPSRC and other bodies. She is currently a trustee of the Wolfson Foundation. She is a fellow of the Royal Society, the Academy of Medical Sciences, and the Learned Society of Wales (Frances Hoggan Medal, 2016) and a member of EMBO and the Academia Europaea. She holds honorary doctorates/fellowships from a number of universities and colleges, and is an honorary bencher of middle Temple. In 1993 she became a CBE for services to science, and in 2005 a DBE.

Hélène Doerflinger (Wellcome / CRUK Gurdon Institute)



Hélène Doerflinger, PhD, is the public engagement manager at the Wellcome Trust/Cancer Research UK Gurdon Institute in Cambridge. This institute is a world-leading centre for fundamental research into the biology of development and how normal growth and maintenance go wrong in diseases such as cancer. She is responsible for the development of the public engagement vision and strategy and all aspects of the programme including fundraising,

project management, content and event delivery and evaluation. She is also a research associate working on cell polarity and is the academic champion of the school of biology at the Public Engagement Advisory group for the University of Cambridge that provides strategic academic oversight of public engagement at the university.

Dr David Martin (University of Dundee)
HE Bioscience Teacher of the Year Finalist



Dr David Martin's first degree was in chemistry with biochemistry at Kings College London, where David first became interested in the molecular structure and function of proteins. After a PhD exploring the structure/function relationships of coagulation proteins at the MRC Clinical Sciences Centre he won an EMBO Long Term fellowship at the University of Oslo where he transitioned from protein chemistry to a bioinformatics post-doc, then ran the Norwegian EMBnet node. He returned to the UK as a research assistant in Dundee in 2001. After contributing to a diverse array of projects including the malaria, sleeping sickness and potato genomes, he was appointed lecturer and has been teaching full time since 2014, being appointed senior lecturer in 2018. He has a diverse range of interests including bat population genetics and building educational gadgets. His teaching has won institutional awards for his innovative student centered approach to data analysis skills and bioinformatics.

Professor Kevin O'Dell (University of Glasgow)
HE Bioscience Teacher of the Year Finalist



Professor Kevin O'Dell is professor of behavioural genetics at the University of Glasgow. His research interests are in genes and behaviour, specifically asking questions about 'how do fruit flies know what sex they are?' Since 2003 he has co-ordinated the third year of the University of Glasgow's four-year undergraduate genetics degree programme, progressively evolving the course to a more interactive style of teaching. In particular Kevin has developed a storytelling approach to the problem solving, data analysis and experimental design components of the course, helping him win a University of Glasgow Teaching Excellence Award in 2007 and a Student Representative Council Teaching Award in 2012. The motivation for this approach came from collaborating with Time-Tastical Productions on the Wellcome Trust funded comedy science show *Zombie Science*, which has been seen by over 80,000 people. In March 2017 he published what might be the world's first storytelling science textbook '*Genetics? No Problem!*'

Dr David Smith (Sheffield Hallam University)
HE Bioscience Teacher of the Year Finalist



Dr David Smith has been teaching biochemistry at Sheffield Hallam University since 2010 at both undergraduate and postgraduate levels. He is a national teaching fellow, senior fellow of the Higher Education Academy and has been awarded the Sheffield Hallam University student-nominated Inspirational Teaching Award three times. David aims to inspire and engage all students by teaching with both enthusiasm and passion for his subject. His approach builds enquiring minds within the students and gives them the confidence to ask questions. David's case study details pedagogical that explores the environmental and social interactions occurring within lecture theatres. The outputs of this research have informed changes in practice around peer-to-peer communications and use of anonymous open text response systems as a learning tool. David shares these practices widely through papers, conferences and talks and has enabled others to use and apply these methods.

Dr David Lewis (University of Leeds)



Dave Lewis is a senior lecturer in pharmacology and scientific ethics in the school of biomedical sciences, University of Leeds. Dave chairs both the British Pharmacological Society's (BPS) animal welfare and in-vivo pharmacology committee and the International Union of Basic and Clinical Pharmacology's Integrative and Organ Systems Pharmacology initiative, the latter developing and delivering, in partnership with colleagues in the host nation, short courses and train-the trainer workshops in research animal sciences in the developing world. With the BPS, he has been developing curricula for undergraduate education in research animal sciences. He is also the creator of ETRIS (www.etriskit.leeds.ac.uk), a repository of open educational resources in the discipline. An HEA national teaching fellow, his NTF project is evaluating, in partnership with colleagues from 23 UK bioscience faculties, student and staff expectations for final year undergraduate research projects, their outcomes, and impact on student career choices and employability. He is leading a similar study, funded by the Leeds Institute of Teaching.

Professor Niall McFarlane (University of Glasgow)



Niall MacFarlane is professor in physiology and sports science at the University of Glasgow. He was part of a joint physiological and Pharmacological Society working group that established funding and support for investigating biological processes in vivo (leading to national funding for centres of excellence in integrative mammalian biology and associated summer schools). Professor MacFarlane uses innovative curriculum design and novel assessment processes to enhance the student experience and graduate employability.

7. Upcoming HUBS activities

HUBS teaching and learning workshop series 2018/19:

13 June 2019 | University of Edinburgh

Building resilience in and out of the curriculum

1 July 2019 | University of Bradford

Overcoming barriers in chemistry teaching within the biosciences (HUBS/HUCBMS workshop)

New to teaching biosciences in higher education workshop

10 January 2020 | University College London

This workshop will be for newcomers to university teaching in the biosciences, and is designed to cater for the specific needs of bioscience colleagues who have reached a career stage in which they are called on to provide lectures and other university teaching.

HUBS Annual Conference 2020

20-21 April 2020 | Francis Crick Institute, London

This two-day conference will feature sessions on research, higher education policy and teaching and learning in the biosciences.

