

Science and Research Summit 2019

Putting Pharmacy and Science at the forefront of healthcare

8 February, County Hall, London

It is with great pleasure that we welcome you to the Royal Pharmaceutical Society (RPS) Science and Research Summit 2019: Putting Pharmacy and Science at the forefront of healthcare.

The philosophy behind the Summit is to bring science and practice together in a conference that underlines the fundamental synergy between research, education, science and professional development. Our internationally recognised speakers, including keynote speaker Dame Sally Davies - Chief Medical Officer for England - have been selected to inspire and challenge; our session leaders are experts and influencers pushing the boundaries of innovation in the pharmaceutical sciences right across industry, academia and practice. Correspondingly, we have chosen themes of paramount importance to our profession which will resonate with many people.

The event itself offers a rare opportunity for participants to learn about innovations in drug development and delivery, including the requirements for translating research into practice. Hosted the day before the implementation of the Falsified Medicines Directive (FMD) on 9th February, the Summit invites participants to join in a thought leadership discussion on one of the most important issues affecting the sector and the UK as a whole and that is, of course, Brexit. We are proud to present a panel of key opinion leaders who will provide fascinating and thought-provoking insight into the debate.

In recognition of our shared commitment to communicating evidence from pharmacy and the pharmaceutical sciences, we are delighted to oversee the parallel publication of supplements in the Journal of Pharmacy and Pharmacology and the International Journal of Pharmacy Practice. In these supplemental issues you will find abstracts for oral and poster presentations which traverse the spectrum of medicines development and use, from discovery to health services research, education and policy.

The RPS Science and Research Summit underpins our commitment to continuing to develop and disseminate the evidence base for pharmacy and the role of pharmacists in leading research, education and innovation. We anticipate the event will deliver an informative and enjoyable day, presenting a unique opportunity to network and debate cutting-edge research from across the sector.

Gino Martini

Chief Scientist, Royal Pharmaceutical Society

Christine Bond

Editor-in-Chief, The International Journal of Pharmacy Practice

Programme

09.30	Registration and coffee		
10.00	Welcome from the Royal Pharmaceutical Society <ul style="list-style-type: none">▪ Professor Gino Martini, <i>Chief Scientist</i>▪ Professor Ash Soni OBE, <i>President</i>▪ Paul Bennett, <i>CEO</i>		
10.15	Keynote 1 Professor Dame Sally Davies , <i>Chief Medical Officer for England</i> The UK AMR Strategy: 2019 and beyond		
10.45	Break: Refreshments and poster viewing		
11.00	Parallel Sessions		
	<table border="1"><tr><td>1 Antimicrobial resistance Professor Christine Bond (Chair) <i>Emeritus Professor, University of Aberdeen</i> Philip Howard (Chair) <i>President, British Society for Antimicrobial Chemotherapy</i> Professor Alison Holmes <i>Director, Health Protection Research Unit, National Institute for Health Research</i> Professor Chris Dowson <i>Professor of Microbiology, University of Warwick</i> Dr Diane Ashiru-Oredope <i>Pharmacist Lead for Antimicrobial Resistance and Stewardship, Public Health England</i> Dr Ryan Hamilton <i>Specialist Pharmacist in Antimicrobials, University Hospitals of Leicester NHS Trust</i></td><td>2 Healthy ageing and management of long-term conditions Jatinder Harchowal (Chair) <i>Chief Pharmacist, The Royal Marsden Hospital</i> Cath O'Brien <i>Director, Welsh Blood Service</i> Neil Watson <i>Clinical Director of Pharmacy and Medicines Optimisation, Newcastle upon Tyne Hospitals NHS Foundation Trust</i> Dr Mahendra Patel <i>Alumni Fellow (FHEA), National Institute for Health and Care Excellence</i> Emma Foreman <i>Consultant Pharmacist for Cancer, Royal Marsden NHS Foundation Trust</i></td></tr></table>	1 Antimicrobial resistance Professor Christine Bond (Chair) <i>Emeritus Professor, University of Aberdeen</i> Philip Howard (Chair) <i>President, British Society for Antimicrobial Chemotherapy</i> Professor Alison Holmes <i>Director, Health Protection Research Unit, National Institute for Health Research</i> Professor Chris Dowson <i>Professor of Microbiology, University of Warwick</i> Dr Diane Ashiru-Oredope <i>Pharmacist Lead for Antimicrobial Resistance and Stewardship, Public Health England</i> Dr Ryan Hamilton <i>Specialist Pharmacist in Antimicrobials, University Hospitals of Leicester NHS Trust</i>	2 Healthy ageing and management of long-term conditions Jatinder Harchowal (Chair) <i>Chief Pharmacist, The Royal Marsden Hospital</i> Cath O'Brien <i>Director, Welsh Blood Service</i> Neil Watson <i>Clinical Director of Pharmacy and Medicines Optimisation, Newcastle upon Tyne Hospitals NHS Foundation Trust</i> Dr Mahendra Patel <i>Alumni Fellow (FHEA), National Institute for Health and Care Excellence</i> Emma Foreman <i>Consultant Pharmacist for Cancer, Royal Marsden NHS Foundation Trust</i>
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12.00	Panel Session: The future of life sciences and healthcare in the UK		
	Professor Trevor Jones CBE (Chair) <i>Visiting Professor, King's College London</i> Professor Dame Sue Hill , <i>Chief Scientific Officer for England</i> Professor Chas Bountra , <i>Pro-Vice Chancellor for Innovation, University of Oxford</i> Will Hutton , <i>Hertford College Principal, University of Oxford</i> Professor Sir Michael Rawlins , <i>Chair, Medicines and Healthcare products Regulatory Agency</i> Sir Andrew Dillon , <i>Chief Executive, National Institute for Health and Care Excellence</i> Jo Pisani , <i>Partner, PwC Life Sciences</i>		

13.00	Lunch	
	Poster exhibition	Workshop Getting into the pharmaceutical industry
14.00	Parallel Sessions	
	<p>3 Counterfeit medicine, illegal substances and Falsified Medicines Directive (FMD)</p> <p>Professor Gino Martini (Chair) <i>Chief Scientist, Royal Pharmaceutical Society</i></p> <p>Dr Bernard Naughton <i>Research and Clinical Pharmacist, Oxford University Hospitals NHS Foundation Trust</i></p> <p>Cheryl Way <i>Pharmacy and Medicines Management Lead, NHS Wales Informatics Service</i></p> <p>Mike Isles <i>Executive Director, The Alliance of Safe Online Pharmacies (ASOP) EU</i></p>	<p>4 Artificial intelligence and connected health</p> <p>Dr Claire Thompson (Chair) <i>CEO, Agility Health Tech</i></p> <p>Mohammed Hussain <i>Senior Clinical Lead, NHS Digital</i></p> <p>Dr Andy Blackwell <i>Chief Scientific Officer, IESO Digital Health</i></p> <p>Matthew Bonam <i>Director, Intelligent Pharmaceuticals, AstraZeneca</i></p>
15.00	Break Refreshments and poster viewing	
15.15	Parallel Sessions	
	<p>5 Illicit drugs, alcohol and mental health</p> <p>Professor Kim Wolff MBE (Chair) <i>Professor of Addiction Science, Institute of Pharmaceutical Science, King's College London</i></p> <p>Professor David Taylor (Chair) <i>Professor of Psychopharmacology, Institute of Pharmaceutical Science, King's College London</i></p> <p>Professor Tony Moffat <i>Emeritus Professor, University College London</i></p> <p>Dr Jane Marshall <i>Consultant Psychiatrist, Mental Health and Addiction Services, South London and Maudsley NHS Foundation Trust</i></p> <p>Dr Amira Guirguis <i>Senior Lecturer in Pharmaceutical Chemistry, University of Hertfordshire</i></p>	<p>6 Oral abstract presentations</p> <p>Dr Colin Cable (Chair) <i>Assistant Chief Scientist, Royal Pharmaceutical Society</i></p> <p>Victoria Evans (Chair) <i>Science and Research Associate, Royal Pharmaceutical Society</i></p> <p>Cathy Geeson, <i>Luton and Dunstable University Hospital NHS Foundation Trust</i></p> <p>Dr Ankie Hazen, <i>University Medical Centre Utrecht</i></p> <p>Dr Matthew Boyd, <i>University of Nottingham</i></p> <p>Brian Hazelrigg, <i>Purdue University</i></p>
16.15	<p>Keynote 2</p> <p>Professor Molly Stevens - <i>Professor of Biomedical Materials and Regenerative Medicine, Institute of Biomedical Engineering, Imperial College London</i> Designing materials to heal the body and detect diseases early</p>	
16.45	Evaluation and presentation prizes	
17.00	Close	

Keynote speakers

Professor Dame Sally C Davies, NHS England



Dame Sally was appointed Chief Medical Officer (CMO) for England and Chief Medical Advisor to the UK Government in March 2011, having held the post on an interim basis since June 2010. Dame Sally is an independent advisor to the UK Government on medical matters, with particular responsibilities regarding Public Health. From 2004-2016, Dame Sally was the Chief Scientific Adviser (CSA) for the Department of Health (DH), where she was actively involved in NHS R&D from its establishment and founded the National Institute for Health Research (NIHR). In 2013, she became a Non-Executive Director of Genomics England Ltd, wholly owned and funded by DH, to sequence 100,000 whole genomes from NHS patients by 2017. Dame Sally is also a non-executive member of the UK Research and Innovation Board, which she sits on in a personal capacity due to her civil servant status.

Dame Sally was a member of the World Health Organization (WHO) Executive Board 2014-2016 and has led delegations to WHO summits and forums since 2004. She advises many governments and organisations on health and policy and holds positions on a number of Boards.

Advocating globally on AMR, Dame Sally has spoken at numerous events, including World Health Assembly side-events, the G8 Science Ministers' meeting in 2015, the Global Health Security Initiative in 2015 and the UN General Assembly side-event in 2016. She was Chair of the 2013 AMR forum at the World Innovation Summit for Health (WISH) and is currently Chair of the WHO Strategic and Technical Advisory Group on AMR. Most recently, Dame Sally has been appointed a co-convenor of the UN Interagency Coordination Group on AMR, set up in response to the AMR declaration made at UNGA 2016.

Dame Sally received her DBE in 2009. She was elected Fellow of the Royal Society in 2014 and a member of the National Academy of Medicine, USA, in 2015.

Professor Molly Stevens, Imperial College London



Molly M. Stevens is currently Professor of Biomedical Materials and Regenerative Medicine, and Research Director for Biomedical Material Sciences in the Department of Materials, Department of Bioengineering and the Institute of Biomedical Engineering at Imperial College London. She received her PhD from The University of Nottingham in 2000, working within the School of Pharmaceutical Sciences. Molly conducted her postdoctoral research within the Department of Chemical Engineering at MIT in the labs of Prof Robert Langer, where she co-developed innovative techniques for the regenerative of bone and other tissues. She joined Imperial College in 2004 and was promoted as Professor in 2008. Research in the Stevens Programme focusses on designing and developing innovative bio-inspired materials for applications in regenerative medicine, tissue engineering and biosensing.

Molly Stevens' research has been recognised by over 20 major awards, including the 2016 Clemson Award for Basic Research from the Society for Biomaterials, the EU40 Prize for best material scientist under the age of 40, a listing in The Times as one of the top 10 scientists under 40 and the European Life Sciences 2014 Research Group of the Year Award, amongst many others. She was recently elected to the Fellowship of the Royal Academy for Engineering and delivered the Clifford Paterson Lecture for the Royal Society in 2012. She has previously served on the Board of Reviewing Editor for Science and is Associate Editor of ACS Nano. Further information on the Stevens Group can be found at <http://www.stevensgroup.org>.

Session themes

In collaboration with the Joint Pharmaceutical Analysis Group (JPAG) and the Academy of Pharmaceutical Sciences (APS), we have chosen themes of key importance to pharmacy and the wider healthcare profession. These include:

- Antimicrobial Resistance
- Healthy Ageing and Management of Long-term Conditions
- Counterfeit Medicine, Illegal Substances and the Falsified Medicines Directive (FMD)
- Artificial Intelligence and Connected Health
- Illicit Drugs, Alcohol and Mental Health

In addition, we are proud to present a panel of key opinion leaders who will provide fascinating and thought-provoking insight into some of the most important issues affecting the healthcare sector.

Panel discussion: The future of life sciences and healthcare in the UK

- Professor Trevor Jones CBE - Visiting Professor, King's College London (Chair)
- Professor Dame Sue Hill - Chief Scientific Officer for England
- Professor Chas Bountra - Pro-Vice Chancellor for Innovation, University of Oxford
- Professor Sir Michael Rawlins - Chair, Medicines and Healthcare products Regulatory Agency
- Sir Andrew Dillon - Chief Executive, National Institute for Health and Care Excellence
- Will Hutton - Hertford College Principal, University of Oxford
- Jo Pisani, Partner, PwC Life Sciences

Oral and poster presentations

In recognition of our shared commitment to communicating evidence from pharmacy and the pharmaceutical sciences, we are delighted to oversee the parallel publication of supplements in the Journal of Pharmacy and Pharmacology and the International Journal of Pharmacy Practice. In these supplemental issues you will find abstracts for oral and poster presentations which traverse the spectrum of medicines development and use, from discovery to health services research, education and policy.

Programme sessions

Parallel session 1: Antimicrobial resistance

Session chairs:

Professor Christine Bond, Emeritus Professor, *University of Aberdeen*;

Phillip Howard, President, *British Society for Antimicrobial Chemotherapy*

Speakers:

- **Clinical Implications of Antimicrobial Resistance**

Professor Alison Holmes, Director, *Health Protection Research Unit, National Institute for Health Research*

- **Discovery pipeline and economic issues surrounding antibiotic discovery**

Professor Chris Dowson, Professor of Microbiology, *University of Warwick*

- **Antimicrobial stewardship and self-care advice in pharmacies (AMSAP) study: impact of implementing TARGET 'Treating your infection' leaflets in community pharmacies**

Dr Diane Ashiru-Oredope, Pharmacist Lead for Antimicrobial Resistance and Stewardship, *Public Health England*

- **Engaging the next generation**

Dr Ryan Hamilton, Specialist Pharmacist in Antimicrobials, *University Hospitals of Leicester NHS Trust*

Parallel session 2: Healthy ageing and management of long-term conditions

Session chair: Jatinder Harchowal, Chief Pharmacist, *Royal Marsden NHS Foundation Trust*

Speakers:

- **The role of pharmacy in the successful delivery of Advanced Therapy Medicinal Products (ATMPs)**

Cath O'Brien, Director, Welsh Blood Service

Neil Watson, Clinical Director of Pharmacy and Medicines Optimisation, Newcastle Upon Tyne Hospital Foundation Trust

- **Understanding diabetes in the South Asian diaspora**

Dr Mahendra Patel, Alumni Fellow (FHEA), National Institute for Health and Care Excellence

- **Use of targeted therapies in cancer**

Emma Foreman, Consultant Pharmacist for Cancer, Royal Marsden NHS Foundation Trust

Panel session: The Future of Life Sciences and Healthcare in the UK

There is considerable uncertainty about the process of Brexit and what impact it will have on the future of life sciences and healthcare in the UK. Delegates are invited to engage in discussions with our panel of key influencers and policymakers, who will provide thought-provoking insight into the debate.

Session chair: Professor Trevor Jones CBE, Visiting Professor, *King's College London*

Panel:

- Professor Dame Sue Hill, Chief Scientific Officer for England
- Professor Chas Bountra, Pro-Vice Chancellor for Innovation, *University of Oxford*
- Will Hutton, Hertford College Principal, *University of Oxford*
- Professor Sir Michael Rawlins, Chair, *Medicines and Healthcare Products Regulatory Agency*
- Sir Andrew Dillon, Chief Executive, *National Institute for Health and Care Excellence*
- Jo Pisani, Partner, *PWC Life Sciences*

Parallel session 3: Counterfeit medicine, illegal substances and the Falsified Medicines Directive (FMD)

Session chair: Professor Gino Martini, Chief Scientist, *Royal Pharmaceutical Society*

Speakers:

- **Challenges to FMD Implementation**
Dr Bernard Naughton, Research and Clinical Pharmacist, *Oxford University Hospitals NHS Foundation Trust*, and *Saïd Business School, University of Oxford*
- **Implementing FMD: a Welsh perspective**
Cheryl Way, Pharmacy and Medicines Management Lead, *NHS Wales Informatics Service*
- **Dangers of Internet pharmacy and fake medicine**
Mike Isles, Executive Director, *the Alliance of Safe Online Pharmacies (ASOP), EU*

Parallel session 4: Artificial intelligence and connected health

Session chair: Dr Claire Thompson, CEO, *Agility Health Tech*

Speakers:

- **The promise and perils of technology in health care**
Mohammed Hussain, Senior Clinical Lead, *NHS Digital*
- **The role of technology in standardising mental healthcare and accelerating research**
Dr Andy Blackwell, Chief Scientific Officer, *Ieso Digital Health*
- **Digital therapeutics: The next frontier of personalised medicine**
Matthew Bonam, Director, *Intelligent Pharmaceuticals, AstraZeneca*

Parallel session 5: Illicit drugs, alcohol, and mental health

Session chairs:

Professor Kim Wolff MBE, Professor of Analytical, Forensic & Addiction Sciences, Director of Forensics and Head of the Drug Control Centre, *King's College London*

Professor David Taylor, Professor of Psychopharmacology, *Institute of Pharmaceutical Science, King's College London*

Speakers:

- **Counterfeit medicines and illicit drugs: an overview**

Professor Tony Moffat, Emeritus Professor, *University College London*

- **Title TBC**

Dr Jane Marshall, Consultant Psychiatrist, Mental Health and Addiction Services, *South London and Maudsley NHS Foundation Trust*

- **Forensic methodologies for the in-field detection of psychoactive substances: A proof-of-Concept**

Dr Amira Guirguis, Senior Lecturer in Pharmaceutical Chemistry, Psychopharmacology, Drug misuse and Novel Psychoactive substances, *University of Hertfordshire*

Parallel session 6: Oral abstract presentations

Session chairs:

Dr Colin Cable, Assistant Chief Scientist, *Royal Pharmaceutical Society*

Victoria Evans, Science and Research Associate, *Royal Pharmaceutical Society*

- Oral 1

- **Development of the Medicines Optimisation Assessment Tool (MOAT)**

Cathy Geeson, *Luton and Dunstable University Hospital NHS Foundation Trust, UK*

- Oral 2

- **Effects of general practice pharmacists on medication-related hospitalisations: preliminary results**

Dr Ankie Hazen, *University Medical Centre Utrecht, Netherlands*

- Oral 3

- **Evaluation of the NHS England Phase 1 Pilot: Clinical Pharmacists in General Practice**

Dr Matthew Boyd, *University of Nottingham, UK*

- Oral 4

- **Determining pharmacists' ability to detect atrial fibrillation by utilising mobile single-lead electrocardiogram systems (Alivecor/Kardia) in "Know Your Pulse" awareness campaigns**

Brian Hazelrigg, *Purdue University, Indiana, USA*