BNA2015
FESTIVAL OF
NEUROSCIENCE

50 YEARS OF THE BNA
1965-2015

BNA2015

Festival of Neuroscience

Edinburgh International Conference Centre
12-15 April 2015

Programme

British Neuroscience Association
bna.org.uk

Supported by
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British Neuroscience Association

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The BNA wishes to thank the following for their assistance with the abstract review process.

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The BNA wishes to thank the following for their assistance judging the posters displayed at the Festival.

Richard Apps (University of Bristol)
Derk-Jan Dijk (University of Surrey)
Russell Foster (University of Oxford)
Gary Gilmour (Lilly UK, Windlesham)
Jenni Harvey (University of Dundee)
Kate Jeffery (University College London)
Anne King (University of Leeds)
Alan Palmer (MS Therapeutics)

ORGANISING TEAM

The BNA wishes to thank the following for their energy and enthusiasm in putting this meeting together.

Narender Ramnani (Chair of Programme Committee)
Karen Schlaegel (Project Manager)
Cecilia Golborne (BNA Office)
Louise Tratt (BNA Office)
Duncan Banks (Press Office)
Ian Varndell
Uta Boeger-Brown and her team at BioMedEx
Amy Bull and her team at the EICC

Message from the BNA President

Professor Russell G. Foster CBE DSc FSB FMedSci FRS
Head, Nuffield Laboratory of Ophthalmology
Director, Sleep and Circadian Neuroscience Institute
Fellow, Brasenose College
University of Oxford

Dear Speakers and Delegates

Welcome to the BNA2015: Festival of Neuroscience!

I hope your Festival experience will be both exciting and rewarding. Registration for the meeting has exceeded all expectations, driven by the outstanding programme compiled by Professor Narender Ramnani and his Programme Committee. There will be over 250 speakers; and two Nobel Prize winners will join us at the Festival. Professor Susumu Tonegawa will deliver a plenary lecture, and Professor John O'Keefe, a former President of the BNA, will present the BNA 50th Anniversary Lecture. We have well-over 700 abstracts in three separate poster sessions. In addition there will be many special events, so please check for updates. I would like to thank the terrific support we have had from our partner societies and generous sponsors. Finally I extend my gratitude to Dr Ian Varndell for the many activities he has undertaken to make the Festival possible.

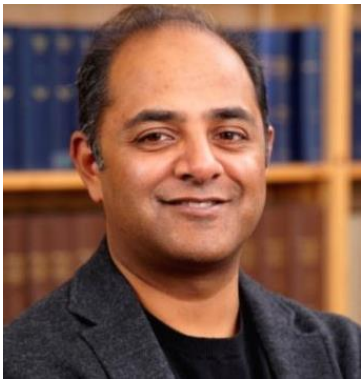
Very significantly 2015 is also the year we celebrate our first 50 years as a society. The consensus is that we started life in 1965, originally as the London Black Horse Group and then as the Brain Research Association (BRA). Convivial meetings by our founders were held in the Black Horse pub in Rathbone Place, off Oxford Street, London, which I am informed, continues to provide a good place for a pint! Like today, the activities of the BRA promoted neuroscience across the UK, conferences and workshops were organised, members of the BRA acted as an effective lobby group, and education about brain science was developed and promoted at every level. An important area, then as now, and stimulated by Professor Steven Rose, was the ethical and social implications of the emerging new field of brain science. In 1996, the BRA was renamed the British Neuroscience Association, reflecting the use of the term "neuroscience" in the language of both scientific and popular cultures, and anticipating the designation of the 21st century as "the century of neuroscience". To our founders – we thank and salute you!

In our Golden Jubilee year, and building upon the success of the 2013 Festival of Neuroscience at the Barbican in London, I am immensely proud that the BNA will have our second Festival of Neuroscience in Edinburgh. I welcome you once again with my warmest best wishes.

Russell Foster
BNA President

Message from the Programme Committee Chair

Dr Narender Ramnani
Professor of Neuroscience,
Department of Psychology,
Royal Holloway, University of London



Dear Delegates,

This is to wish you a very warm welcome to BNA2015: Festival of Neuroscience in the beautiful city of Edinburgh! I'm very honoured to have had the opportunity of organising the scientific programme for the meeting, especially at the time that the BNA celebrates its 50th anniversary.

The scientific programme includes a stellar group of scientists who will give plenary, public and special lectures. In excess of 250 UK and international speakers will contribute lectures to almost 60 symposia and special events, and about 700 posters will be included in three poster sessions.

I'm very pleased that the meeting has attracted considerable interest throughout the planning period. The Programme Committee reviewed over 100 high quality symposium and workshop proposals, and their guidance was indispensable when deciding which symposia to accept. The Abstract Review Group reviewed about 750 abstracts, and I'm grateful to them for their attention to detail. Thanks also go to Dr. Jane Haley of Edinburgh Neuroscience and the Local Organising Committee for their important role.

The high number of early registrations meant that we reached our maximum capacity about a month ahead of the meeting. We are especially grateful to the large number of international registrants not only from other parts of Europe, but also from locations as far afield as North America, India, China, Japan, Korea and Australasia.

The financial viability of BNA meetings depends on our sponsors and exhibitors. We hope that you have an opportunity of visiting their stands at the Exhibition. The BNA is indebted to them for their support, and extends a special note of thanks to The Wellcome Trust for its generosity.

It has been a pleasure to work with a proactive and talented team who have worked tirelessly behind the scenes for the last two years: Cecilia Golborne and Louise Tratt (BNA Office), Arvind Shah (Escotti.com, IT support), Uta Boeger-Brown and her team at BioMedEx (PCO), and Karen Schlaegel (Project Manager). My thanks also go to Dr Duncan Banks, Ms Elaine Snell and Dr Ian Varndell for their help in bringing this Festival together,

Yours sincerely,

Prof. Narender Ramnani
Programme Chair, BNA2015

Partner Listing

BNA2015 PARTNER SOCIETIES

The BNA is extremely grateful for the enthusiastic support and financial contributions from the following societies:

Alzheimer's Research UK
http://www.alzheimersresearchuk.org/

Association of British Neurologists
http://www.theabn.org/

Biochemical Society
http://www.biochemistry.org/

British Association for Psychopharmacology
http://www.bap.org.uk/

British Neuropathological Society
http://www.bns.org.uk/

British Pharmacological Society
http://www.bps.ac.uk/view/index.html

British Sleep Society
https://www.sleepsociety.org.uk/

British Society for Immunology
https://www.immunology.org/

British Society for Neuroendocrinology
http://www.neuroendo.org.uk/

European Dana Alliance for the Brain
http://www.dana.org/about/edab/

International Neuroethics Society
http://www.neuroethicssociety.org/

MQ: Transforming Mental Health
http://www.joinmq.org/

Neuroscience Ireland
http://neuroscienceireland.com/

Rett Syndrome Association Scotland
http://rettsyndromescotland.co.uk/

Sleep & Circadian Neuroscience Institute
http://www.eye.ox.ac.uk/research/sleep-circadian-neuroscience-institute

Sleepio
https://www.sleepio.com/

Society for Endocrinology
http://www.endocrinology.org/

The British Psychological Society
http://www.bps.org.uk/

UK Adult ADHD Network
http://www.ukaan.org/

University of Edinburgh's Centre for Neuroregeneration
http://www.cnr.ed.ac.uk/

Festival Sponsor Listing

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MQ Transforming mental health

gsk do more feel better live longer

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BJP British Journal of Pharmacology

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NC3Rs National Centre for the Replacement Refinement & Reduction of Animals in Research

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General Support

General Information

Meeting Venue

Edinburgh International and Conference Centre
The Exchange
Edinburgh EH3 8EE
Tel: +44 (0)131 300 3000

Click here for travel directions

Click here for Edinburgh City Centre map

Click here for the Venue Guide

Registration

Registration will take place in the Atrium (Level 0) of the EICC.

Please go to the registration desk on arrival to collect your name badge and your conference pack. For security reasons it is essential that you wear your badge at all times while attending the meeting. Attendees will not be allowed access to any lecture theatre or the exhibition area without a name badge. Lost or mislaid badges should be reported immediately to the registration desk. Please note that replacement badges may not be available immediately.

Registration Opening Times:

Saturday 11th April:	14.00 – 18.00
Sunday 12th April:	07.45 – 19.00
Monday 13th April:	07.45 – 18.00
Tuesday 14th April:	07.45 – 18.15
Wednesday 15th April:	07.45 – 16.30

Meeting Rooms

The plenary lectures will take place in the Pentland Suite (Level 3).

The symposia and special events will take place in various rooms in the EICC. Details can be found in the programme materials available online (please see below).

Several sessions during the Festival are likely to be very busy and it is possible that some delegates may not be able to gain access to these sessions. The organisers have tried to accommodate sessions according to stated or perceived popularity however rooms cannot be switched at the last moment so the organisers apologise in advance if some delegates cannot attend their first choice sessions. Room stewards will be present to ensure all seats are occupied.

Final Programme, Abstracts Book and Itinerary Planner

The final e-programme and abstracts e-book will be available on the conference website (www.bna2015.org/key-dates). Please use the itinerary planner to search through abstracts and plan your time at the meeting.

Last minute changes to the programme will be made available on signage at the venue, on the meeting website and on Twitter (#2015neurofest)

Exhibition

The exhibition is located in the Lennox Suite (Level -2) and will be open to delegates during the following times:

Sunday 12th April:	10.45 – 20.00
Monday 13th April:	08.30 – 20.00
Tuesday 14th April:	08.30 – 17.30

Delegates are encouraged to attend the exhibition as **BNA2015: Festival of Neuroscience** would not be possible without the generous support given by our sponsors and exhibitors.*

*The sponsors and exhibitors have had no involvement in the organisation, content or speaker selection relating to the **BNA 2015: Festival of Neuroscience**.

BrainQuest

Delegates are invited to take part in the BrainQuest, an interactive game. You will find the BrainQuest form in your delegate folder.

Poster Presentations

Poster presentations will take place in the Exhibition Hall (Lennox Suite). The poster numbers can be found in the abstract e-book.

Citations

The BNA Abstracts have an ISSN number (ISSN 1345-8301 2015) and can be cited in scientific literature.

Access – Information for disabled visitors

The EICC is a modern purpose-built venue and is fully accessible for people with disabilities.

Parking – dedicated accessible parking spaces are available in the Sheraton Grand Hotel car park which neighbours the EICC – www.sheratonedinburgh.co.uk/car-park. In addition there is street parking on Morrison Street near the EICC's main entrance and in surrounding streets, which is free and without time limit for Blue Badge holders.

Onsite Assistance

The BNA Festival Organisers have arranged for an event team and a team of volunteers to help you onsite. The members of the registration team, identifiable by their orange and black dress code, will be able to help you with enquiries. The volunteers, identifiable by a sash, will be able to help you with finding your way around the venue.

Cloakroom

The cloakroom is located on Level -1 of the EICC. The cloakroom is free of charge and items can be left at your own risk.

Catering

Complimentary mid-morning and mid-afternoon refreshments will be served in the exhibition area (Lennox Suite, level -2) at the advertised times.

Additional refreshments can be purchased from the Champagne Bar located opposite the escalators on level -2.

Lunch / additional refreshments can be purchased from several points within the Lennox Suite (level -2).

Internet Access

Complimentary Wi-Fi access is available.
Username: **Delegate**; Password: **Exchange**

Notice Boards

Notice boards will be located near the registration desk (Atrium, level 0). Attendees are invited to post job vacancies and relevant notices on this board.

Certificates of attendance/CPD certificates

Certificates of attendance will be emailed out after the BNA2015 Festival of Neuroscience. Please email the BNA office on office@bna.org.uk should you wish to receive a certificate of attendance for the meeting.

Continuing Professional Development (CPD)

- ***The BNA2015: Festival of Neuroscience has been approved by the Federation of the Royal Colleges of Physicians of the United Kingdom for 24 category 1 (external) CPD credits.***
- ***Approved by the Society of Biology for purposes of CPD, this event may be counted as 378 CPD credits.***

Participants wishing to receive CPD certificates need to sign an attendance sheet at the registration desk. Please note that if you do not sign the attendance sheets at the meeting, we will be unable to issue CPD certificates after the meeting. Certificates will be issued via email.

Filming and Recording

Please note that photographs and video recordings taken at this meeting may be used on the BNA website, social networking sites, and in other publications. If you do not wish to have your image used for this purpose, please speak to a member of the registration staff at the registration desk or email the BNA office.
Unauthorised photography and audio/video recording during scientific sessions is not permitted.

Press

Delegates are reminded that members of the press will be present at the Festival.

Social Programme

Sunday 12 April 2015 - Welcome Reception from 19.00 – 20.00

Please join us for drinks and nibbles at the Welcome Reception which will be held in the exhibition hall at the EICC. This will be a great opportunity to meet up with friends and colleagues, network, talk to our exhibitors and celebrate the start of this year's Festival of Neuroscience. Attendance is complimentary for all registered delegates and no registration is necessary. We look forward to seeing you and do come to the BNA stand to say hello to our team. We would like to thank Imanova for supporting this event.

Monday 13 April – Student Social from 20.00

A traditional Scottish welcome with a neuroscience twist! Edinburgh welcomes BNA students to an evening of dance and fun with a traditional Scottish ceilidh at the Teviot Row House Debating Hall – the oldest purpose-built student union building in the world (a simple 20 minute walk from the EICC). It all kicks off at 20.00h with a welcome drink and some energetic dancing (with all the steps explained!), before a break for a finger-buffet at 21.30h and then dancing until late. Please note this event is by ticket only and is fully subscribed.

Shops

There are a number of convenience stores located in the streets around the EICC, such as Nicolson Street and Lothian Road. Princess Street and George Street, two of Edinburgh's premier shopping streets, are approximately 10 to 15 minutes' walk away.

Useful telephone numbers:

Airports

Edinburgh International Airport: +44 (0) 844 448 8833
Glasgow International Airport: +44 (0) 844 481 5555

Taxis

City Cabs: +44 (0) 131 228 1211
Central Taxis: +44 (0) 131 229 2468
Taxis can be booked by calling either of the above numbers.

Public Transport

National Express Coaches: +44 (0) 8717 818181
National Rail Enquiries: +44 (0) 8457 48 49 507

Parking

There are many car parks in close walking distance to the EICC:

National Car Parks (NCP) in central Edinburgh
Sheraton Hotel Car Park located 150 metres from the EICC, with limited accessible parking spaces
Semple Street Car Park located 300 metres from EICC

Posters

Theme	Sunday 12th April	Monday 13th April	Tuesday 14th April
A: Development	P1-A-001 to P1-A-020	P2-A-001 to P2-A-020	P3-A-001 to P3-A-021
B: Molecular, Cellular and Synaptic Mechanisms	P1-B-001 to P1-B-043	P2-B-001 to P2-B-043	P3-B-001 to P3-B-043
C: Sensory and Motor Systems	P1-C-001 to P1-C-031	P2-C-001 to P2-C-031	P3-C-001 to P3-C-030
D: Learning, Memory and Cognition	P1-D-001 to P1-D-062	P2-D-001 to P2-D-061	P3-D-001 to P3-D-060
E: Sleep, Circadian and Neuroendocrine Mechanisms		P2-E-001 to P2-E-017	P3-E-001 to P3-E-017
F: Nervous System Disorders	P1-F-001 to P1-F-058	P2-F-001 to P2-F-058	P3-F-001 to P3-F-058
G: Methods and Techniques	P1-G-001 to P1-G-015	P2-G-001 to P2-G-014	P3-G-001 to P3-G-014
H: Autonomic Nervous System	P1-H-001 to P1-H-006		

Delegates can view posters in the Lennox Suite at the following times:

- Sunday 12 April 2015: 10.45 – 19.30
- Monday 13 April 2015: 10.30 – 17.45
- Tuesday 14 April 2015: 10.30 – 17.15

Posters will be presented by authors at the following times:

Sunday 12 April 2015:

- Odd poster numbers: 14.30 – 15.15
- Even poster number: 15.15 - 16.00

Monday 13 April 2015:

- Odd poster numbers: 13.15 – 14.00
- Even poster numbers: 14.00 – 14.45

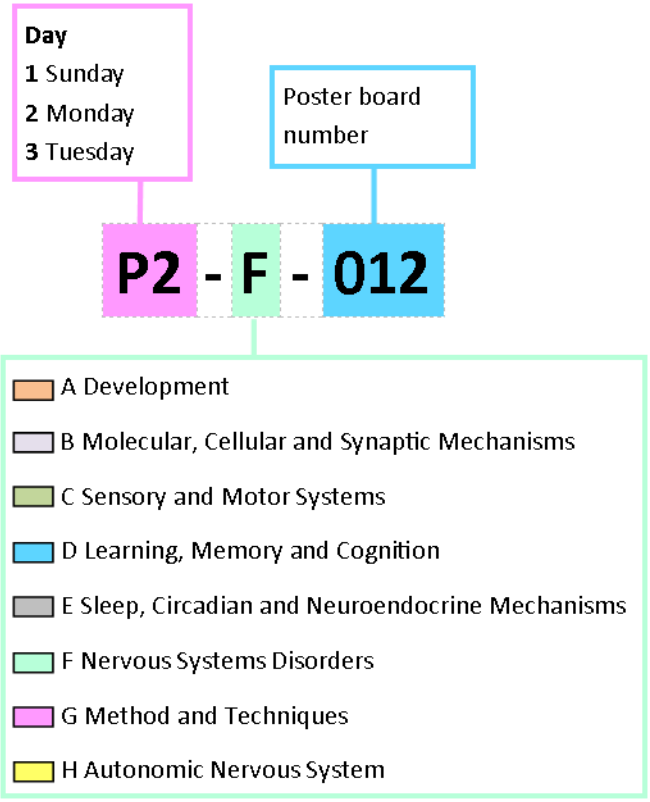
Tuesday 14 April 2015:

- Odd poster numbers: 13.15 – 14.00
- Even poster numbers: 14.00 – 14.45

Please note, posters need to be displayed at the following times:

Sunday 12 April 2015	Up by 10.45	Down by 19.30
Monday 13 April 2015	Up by 10.30	Down by 17.45
Tuesday 14 April 2015	Up by 10.30	Down by 17.15

Poster reference explanation



Plenary and Public Speakers

Plenary speakers

Susumu Tonegawa

Picower Professor of Biology and Neuroscience
Massachusetts Institute of Technology

'Memory engram cells have come of age'

Chaired by: Russell Foster
(University of Oxford)

Please click here for more information.

Sponsored by **Hoffman-La Roche**

Susumu Tonegawa received his Ph.D. from UCSD. He then undertook postdoctoral work at the Salk Institute in San Diego, before working at the Basel Institute for Immunology in Basel, Switzerland, where he performed his landmark immunology experiments. Tonegawa won the Nobel Prize for Physiology or Medicine in 1987 for "his discovery of the genetic principle for generation of antibody diversity". He has since continued to make important contributions but in an entirely different field: neuroscience. Using advanced techniques of gene manipulation, Tonegawa is now unraveling the molecular, cellular and neural circuit mechanisms that underlie learning and memory. His studies have broad implications for psychiatric and neurologic diseases. Tonegawa is currently the Picower Professor of Biology and Neuroscience at the Massachusetts Institute of Technology (MIT) and the Director of the RIKEN-MIT Center for Neural Circuit Genetics at MIT, as well as the Director of RIKEN Brain Science Institute. He is also an investigator at the Howard Hughes Medical Institute.

Professor Tonegawa's lecture will be on Sunday 12 April 2015, 9.45 in the Pentland Auditorium.

Kay Davies

Professor of Anatomy
University of Oxford

'Role of oxidative stress in neurodegeneration'

Chaired by: Peter Brophy
(University of Edinburgh)

Please click here for more information.

Sponsored by Johnson & Johnson Innovation

Kay Davies is the Dr Lee's Professor of Anatomy in the Department of Physiology, Anatomy and Genetics and Director of the MRC Functional Genomics Unit at the University of Oxford. Her research interests lie in the molecular analysis and development of treatment for human genetic disease, particularly, Duchenne muscular dystrophy (DMD) and the application of genomics for the analysis of neurological disorders and gene-environment interactions. She has published more than 400 papers and won numerous awards for her work. She is a founding fellow of the UK Academy of Medical Sciences and was elected a Fellow of the Royal Society in 2003. She has been a Governor of the Wellcome Trust since 2008 and became Deputy Chairman in October, 2013. She was made Dame Commander of the British Empire for services to science in 2008.

Professor Davies' lecture will be on Monday 13 April 2015, 11.15 in the Pentland Auditorium.

Giacomo Rizzolatti

Director of the Parma Brain Center for Social and Motor Cognition
Università di Parma

'Understanding others: A neural mechanism'

Chaired by: Trevor Robbins (University of Cambridge)

Please click here for more information.

Professor Rizzolatti received his degree in medicine from the University of Padua, Italy, where he specialized in neurology. After postdoctoral work at the University of Pisa's Institute of Physiology, Dr Rizzolatti joined the University of Parma where he became Full Professor of Human Physiology in 1975. He was then made Director of the University of Parma's Department of Neuroscience. He is currently Director of the Parma Brain Center for Social and Motor Cognition, Italian Institute of Technology (IIT). His honours include membership of the American Academy of Arts and Sciences, Accademia Nazionale dei Lincei, Académie Française des Sciences, and the National Academy of Sciences, USA. He is a past President of both the European Brain and Behaviour Society and the Italian Neuroscience Society. Most recently, he was awarded the 2014 Brain Prize by the Grete Lundbeck European Brain Research Foundation, jointly with Professors Trevor Robbins and Stanislas Dehaen.

Professor Rizzolatti's lecture will be on Monday 13 April 2015, 18.15 in the Pentland Auditorium.

Lorraine Tyler

Professor of Cognitive Neuroscience
University of Cambridge

'From perception to conception: the evolution of meaning along the ventral stream'

Chaired by: Dorothy Miell (University of Edinburgh)

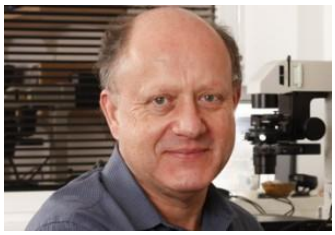
Please click here for more information.

Professor Tyler gained her PhD from the University of Chicago in the Department of Behavioural Sciences. She worked at the Max Plank Institute for Psycholinguistics in Nijmegen (The Netherlands) before moving to the Department of Psychology at the University of Cambridge and from there to Birkbeck College University of London. She returned to Cambridge in 1998. Lorraine Tyler is Professor of Cognitive Neuroscience at the University of Cambridge. She heads the Centre for Speech, Language and the Brain and the Cambridge Centre for Ageing and Neuroscience (CamCan).

Professor Tyler's lecture will be on Tuesday 14 April 2015, 11.15 in the Pentland Auditorium.

Thomas Jessell

Claire Tow Professor in the Department of Neuroscience
Columbia University



Please click here for more information.

'Strategies and circuits for motor control'

Chaired by: Narender Ramnani
(Royal Holloway, University of London)

Dr. Thomas M Jessell is a Howard Hughes Medical Institute investigator and the Claire Tow Professor in the Department of Neuroscience at Columbia University. For his work, he has received honours including the Gruber Prize, the Gairdner International Award, the Kavli Prize in Neuroscience, and many more. He is a co-editor of the well-known textbook 'Principles of Neural Science'. Dr. Jessell is a Fellow of the Royal Society of London and is a member of the Institute of Medicine and is a Foreign Associate of the U.S. National Academy of Sciences.

Professor Jessell's lecture will be on Tuesday 14 April 2015, 17.15 in the Pentland Auditorium.

Annette Dolphin

Professor of Pharmacology
University College London

Please click here for more information.

'Neuronal voltage-gated calcium channels: from channel trafficking to therapy for neuropathic pain'

Chaired by: John Isaac
(Wellcome Trust)

Professor Dolphin studied Biochemistry at Oxford University, and completed her PhD at the Institute of Psychiatry in London, where she first became interested in neuropharmacology. She then undertook postdoctoral studies in Paris, Yale, and the National Institute for Medical Research at Mill Hill (London), and is currently Professor of Pharmacology in the Department of Neuroscience, Physiology and Pharmacology at UCL.

Professor Dolphin's lecture will be on Wednesday 15 April 2015, 11.00 in the Pentland Auditorium.

Richard Morris

Director of the Centre for Cognitive and Neural Systems
The University of Edinburgh

'The making, keeping and losing of memory'

Chaired by: John Aggleton
(Cardiff University)

Please click here for more information.

Sponsored by **Lundbeck**

Professor Richard Morris obtained his MA in Natural Sciences at University of Cambridge and his D.Phil. at Sussex University. Following a Lectureship at the University of St Andrews in 1977, he moved to Edinburgh in 1986. Professor Morris is presently Director of the Centre for Cognitive and Neural Systems (CCNS) and Caro Almela Professor of Neurobiology in Alicante, Spain. He has served on various Scientific Advisory Boards (including the Board of Reviewing Editors of Science), as President of both the British Neuroscience Association (1994-96) and Federation of European Neuroscience Societies (2006-08), and was seconded as Head of Neuroscience and Mental Health at the Wellcome Trust (2007-10). Professor Morris was elected Fellow of the Royal Society (1997) and awarded the honour of CBE in 2007. He was recently awarded a 2014 Royal Medal by the Royal Society of Edinburgh.

Professor Morris' lecture will be on Wednesday 15 April 2015, 16.40 in the Pentland Auditorium.

Public Lectures

David J Nutt

Imperial College London

'Why Scotland should lead the neuroscientific enlightenment?'

Chaired by: Ben Thomson

Please click here for more information.

Professor Nutt was trained at Guy's Hospital, London, and became a Wellcome Senior Fellow in psychiatry at the University of Oxford. He was Chief of the Section of Clinical Science in the National Institute of Alcohol Abuse and Alcoholism in NIH, Bethesda, USA, and subsequently set up the Psychopharmacology Unit in Bristol University. He is currently the Edmond J Safra Professor of Neuropsychopharmacology at Imperial College London. Professor Nutt has served in a number of leadership roles. He is currently Chair of DrugScience and President of the European Brain Council. He has been President of the BNA, the European College of Neuropsychopharmacology, and British Association of Psychopharmacology. In addition he is a Fellow of the Royal Colleges of Physicians and of Psychiatrists and a Fellow of the Academy of Medical Sciences and a member of the International Centre for Science in Drug Policy. He has edited the Journal of Psychopharmacology for over two decades and acts as psychiatry drugs advisor to the British National Formulary.

He was the clinical scientific lead on the 2004/5 UK Government Foresight initiative "Brain science, addiction and drugs" that provided a 25-year vision for this area of science and public policy and in 2006 he was Director of Bristol Neuroscience. He has been member and Chair of the Advisory Committee on the Misuse of Drugs (ACMD – 1998-2009). Other previous national contributions include serving as the medical expert on the Independent Inquiry into the Misuse of Drugs Act (2000 Runciman report), and membership of the Committee on Safety of Medicines, the Committee on NHS drugs and the Ministry of Defence Science Advisory Board.

Professor Nutt's lecture will be on Sunday 12 April 2015, 20.00 in the Pentland Auditorium.

The lecture is organised in association with the **Edinburgh International Science Festival** and the EICC's **InnovationNation** programme.

Adrian Owen

University of Western Ontario, Canada

'The search for consciousness: Detecting awareness in the vegetative state.'

Chaired by: Lord Robert Winston

Please click here for more information.

Before assuming his Canada Excellence Research Chair at The University of Western Ontario, Adrian Owen was a senior scientist and assistant director of the Medical Research Council's Cognition and Brain Sciences Unit in Cambridge. His work there, and at the Wolfson Brain Imaging Centre at the University of Cambridge, used functional neuroimaging to explore attention, memory and control in brain-injured and healthy volunteers.

Adrian Owen received his PhD in neuroscience from the Institute of Psychiatry, King's College London, England, and his BSc in Psychology from University College London. Following his PhD he moved to the Cognitive Neuroscience Unit at the Montreal Neurological Institute, McGill University. He was awarded The Pinsent Darwin Scholarship by the University of Cambridge in 1996 and returned to the UK to work at the newly opened Wolfson Brain Imaging Centre, Cambridge. In 1997 he moved to the Medical Research Council's Cognition and Brain Sciences Unit (CBU), Cambridge (formally the Applied Psychology Unit) to set up the neuroimaging programme there and to pursue his research in cognitive neuroscience. He was made Assistant Director of the MRC CBU in 2005. In 2011 Dr Owen took up a position as Canada Excellence Research Chair in Cognitive Neuroscience and Imaging at The University of Western Ontario (UWO).

Dr Owen's lecture will be on Tuesday 14 April 2015, 19.00 in the Pentland Auditorium.

The lecture is organised in association with the **Edinburgh International Science Festival** and the EICC's **InnovationNation** programme.

Sunday 12th April 2015

09:30 - 09:45

WELCOME: OPENING REMARKS

Venue: Pentland

Russell Foster (BNA President)
John Williams (Wellcome Trust)

PLENARY LECTURE

09:45 - 10:45

Susumu Tonegawa (Massachusetts Institute of Technology)
Nobel Laureate for Physiology or Medicine 1987

Venue: Pentland

'Memory engram cells have come of age'
Chaired by: Russell Foster (University of Oxford)

Sponsored by **Hoffman-La Roche**

10:45 - 11:30

REFRESHMENTS AND TRADE EXHIBITION VIEWING **Venue: Lennox Suite**

SYMPOSIA

11:30 - 13:30

1. Theme F: Nervous System Disorders **Venue: Pentland**

The role of synapses in neurodegenerative diseases

Convenor: Tara Spires-Jones (University of Edinburgh)
Chaired by: Tom Gillingwater (University of Edinburgh)

1.01 **Interplay between Amyloid-beta and Tau in degenerating neurons**
Tom Wishart
University of Edinburgh

1.02 **Deficits in synaptic transmission in models of Parkinson's disease**
Richard Wade-Martins
University of Oxford

1.03 **The role of amyloid beta and apolipoprotein E in synapse loss in Alzheimer's disease**
Tara Spires-Jones
University of Edinburgh

1.04 **Synaptic dysfunction and nerve terminal degeneration**
Rafael Fernández-Chacón
Hosp.Univ. Virgen del Rocío/CSIC/Universidad de Sevilla

This Symposium is sponsored by **Alzheimer's Research UK**

11:30 - 13:30

2. Theme F: Nervous System Disorders **Venue: Sidlaw**

The immune system and the brain

Convenor: Sandra Amor (VU University Medical Center)
Chaired by: Sandra Amor (VU University Medical Center) and Bruno Gran (University of Nottingham, School of Medicine)

2.01 **The Pathophysiology of Multiple Sclerosis**
David Hafler
Yale University

2.02 **The dual role of alpha B-crystallin in neuroprotection and neurodegeneration**
Johannes van Noort
Delta Crystallon BV

2.03 **Inflammatory pathways in multiple sclerosis T cells**
Anne Astier
University of Edinburgh

2.04 **The choroid plexus: Immune gateway to the CNS**
John Curnow
University of Birmingham

This Symposium is sponsored by **British Society for Immunology**

11:30 - 13:30

3. Theme F: Nervous System Disorders **Venue: Fintry**

The utility of biomarkers in CNS drug development

Convenor: Alan Palmer (Cerebroscience)
Chaired by: Alan Palmer (Cerebroscience)

3.01 **Bringing risk forward with in vivo oxygen amperometry - a preclinical surrogate of BOLD fMRI**
Jennifer Li
Eli Lilly & Co Ltd

3.02 **The utility of pharmacologic fMRI in CNS drug development**
Steven Williams
King's College London

3.03 **The use of MRI in patient selection and stratification in clinical trials for multiple sclerosis**
Richard Nicholas
Imperial College

3.04 **The use of PET imaging to reduce the risk of failure in CNS drug development**
Roger Gunn
Imanova

11:30 - 13:30

4. Theme B: Molecular, Cellular and Synaptic Mechanisms **Venue: Lowther**

Brain Cannabinoid System: A New Therapeutic Frontier in Brain Repair

Convenor: Francisco Molina-Holgado (University of Roehampton)
Chaired by: Francisco Molina-Holgado (University of Roehampton)

4.01 **Crosstalk between endocannabinoid signalling and the immune system in brain repair**
Francisco Molina-Holgado
University of Roehampton

4.02 **Cannabinoids and neuropathology**
Ken Mackie
Indiana University

4.03 **The diacylglycerol lipases; roles in and beyond endocannabinoid signalling**
Patrick Doherty
King's College London

4.04 **Endocannabinoid modulation of toll-like receptors (TLR)-induced neuroinflammation**
Michelle Roche
National University of Ireland Galway

This Symposium is sponsored by the **British Pharmacological Society**

BPS BRITISH PHARMACOLOGICAL SOCIETY
Today's science, tomorrow's medicines

11:30 - 13:30

5. Theme G: Methods and Techniques **Venue: Menteith**

Intravital optical imaging: conventional to super-resolution

Convenor: Peter Brophy (University of Edinburgh)
Chaired by: Peter Brophy (University of Edinburgh)

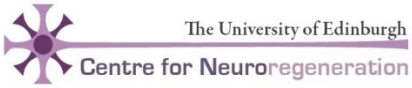
5.01 **Protein trafficking to the node of Ranvier**
Peter Brophy
University of Edinburgh

5.02 ***In vivo* imaging of axon dismantling**
Thomas Misgeld
Technische Universität Munich

5.03 **Intracellular trafficking visualised at super-resolution**
Melike Lakadamyali
The Institute of Photonic Sciences, Barcelona

5.04 **Myelination in the zebrafish**
David Lyons
University of Edinburgh

This Symposium is sponsored by **Edinburgh University's Centre for Neuroregeneration**



11:30 - 13:30

6. Theme D: Learning, Memory and Cognition **Venue: Lammermuir 1**

The social life of voices

Convenor: Carolyn McGettigan
Chaired by: Carolyn McGettigan

6.01 **It ain't what you say: the neural processing of social and emotional cues during vocal communication**
Carolyn McGettigan
Royal Holloway, University of London

6.02 **Human Brain Oscillations entrain to the rhythm of speech**
Joachim Gross
University of Glasgow

6.03 **Echoes of the spoken past: How the brain "hears" nonverbal context during spoken language comprehension**
Jeremy Skipper
University College London

6.04 **Face to Face, Brain to Brain: Exploring the Mechanisms of Dyadic Social Interactions**
Uri Hasson
Princeton University

11:30 - 13:30

7. Theme B: Molecular, Cellular and Synaptic Mechanisms **Venue: Lammermuir 2**

Fats are fitting for brain disease, but how do they work?

Convenor: Robin Williams (Royal Holloway)
Chaired by: Robin Williams (Royal Holloway) and Matthew Walker (UCL Institute of Neurology)

7.01 **Diet-induced ketosis in regulating brain function**
Jong Rho
University of Calgary Faculty of Medicine

7.02 **A direct mechanism of medium chain fatty acids in regulating neurotransmission**
Robin Williams
Royal Holloway University of London

7.03 **Energy metabolism and medium chain dietary fatty acids**
Simon Heales
Great Ormond Street Children's Hospital

7.04 **The epigenetics of ketogenic diet therapy - opportunities for epilepsy prevention**
Detlev Boison
Legacy Research Institute

This Symposium is sponsored by **Vitaflow International Limited**

13:30 - 14:30

LUNCH **Venue: Lennox Suite**

13:45 - 14:30

ASCUS Art & Science – an introduction to 'Artists are Present' **Venue: Lammermuir 2**

14:30 - 16:00

POSTER SESSION 1 AND TRADE EXHIBITION **Venue: Lennox Suite**

P1-A-001 to P1-A-020
P1-B-001 to P1-B-043
P1-C-001 to P1-C-031
P1-D-001 to P1-D-062
P1-F-001 to P1-F-058
P1-G-001 to P1-F-015
P1-H-001 to P1-H-006

SYMPOSIA

16:00 - 18:00

8. Theme B: Molecular, Cellular and Synaptic Mechanisms **Venue: Sidlaw**

Learning from LTP

Convenor: Graham Collingridge (University of Bristol)
Chaired by: Tim Bliss (NIMR)

8.01 **Synaptic mechanisms relevant to learning and memory**
Arturas Volianskis
University of Bristol

8.02 **Presynaptic mechanisms of synaptic plasticity**
Nigel Emptage
University of Oxford

8.03 **Left-right asymmetry in hippocampus-dependent learning**
Olivia Shipton
University of Cambridge

8.04 **Hippocampal-Neocortical network interactions: Plasticity and implications**
Andrea Moreno
University of Edinburgh

16:00 - 18:00

9. Theme F: Nervous System Disorders **Venue: Fintry**

Brain repair: from fish to human

Convenor: Siddharthan Chandran (University of Edinburgh)
Chaired by: Siddharthan Chandran (University of Edinburgh)

9.01 **Modelling CNS degeneration and regeneration in fish**
Catherina Becker
University of Edinburgh

9.02 **Neuroimaging signatures of ALS/MND**
Peter Bede
Trinity College Dublin

9.03 **Stem cell based therapies for ALS/MND**
Clive Svendsen
Cedars-Sinai, Los Angeles

9.04 **Cell and gene based therapy for retinal degeneration**
Robin Ali
Institute of Opthalmology, UCL

This Symposium is sponsored by **Association of British Neurologists**

ASSOCIATION OF BRITISH NEUROLOGISTS

16:00 - 18:00

10. Theme F: Nervous System Disorders **Venue: Lowther**

Gene therapy for CNS disorders

Convenor: Stuart Cobb (University of Glasgow)
Chaired by: Stuart Cobb (University of Glasgow) and Steven Gray (University of North Carolina)

10.01 **Gene therapy in developmental/intellectual disability disorder - Rett Syndrome**
Stuart Cobb
University of Glasgow

10.02 **CNS gene therapy in neuropathy - from basic science to clinical trials**
Steven Gray
University of North Carolina

10.03 **Gene therapy in neurodegenerative disorders**
Mimoun Azzouz
University of Sheffield

10.04 **Gene therapy in epilepsy**
Stephanie Schorge
University College London

10.05 **Genome / mRNA editing and mutation correction in CNS disorders**
Mark Bailey
University of Glasgow

This Symposium is sponsored by **Rett Syndrome Association Scotland & Rett UK**

16:00 - 18:00

11. Theme D: Learning, Memory and Cognition **Venue: Lammermuir 1**

Dynamics of brain responses to faces

Convenor: Nicholas Furl (Royal Holloway, University of London)
Chaired by: Nicholas Furl (Royal Holloway, University of London)

11.01 **Network dynamics in response to moving faces**
Nicholas Furl
Royal Holloway, University of London

11.02 **Functional connectivity in the face processing network**
Lucia Garrido
Brunel University

11.03 **The timing of dynamic facial expression processing measured using magnetoencephalography**
Philippe Schyns
University of Glasgow

11.04 **Computational models of dynamic face representation**
Alan Johnston
University College London

SPECIAL EVENT

16:00 - 18:00

S1. Theme S: Special Event **Venue: Pentland**

The Human Brain Project: relevance to UK neuroscience

Chaired by: Seth Grant (Edinburgh University)

S1.01 **The Medical Informatics contribution to the Human Brain Project**
Richard Frackowiak
Centre Hospitalier Universitaire Vaudois

S1.02 **Neuroinformatics and Brain Simulation in the Human Brain Project**
Sean Hill
École Polytechnique Fédérale de Lausanne

S1.03 **Building brains: neuromorphic computing in the HBP**
Steve Furber
University of Manchester

S1.04 **Mapping brain and behavioural architecture in mice and humans**
Seth Grant
Edinburgh University

SPECIAL EVENT

16:00 - 19:00

S2. Theme S: Special Event **Venue: Lammermuir 2**

Challenges and progress from the first calls of the EU Innovative Medicines Initiative

Convenor: Gary Gilmour (Eli Lilly & Co. Ltd.)
Chaired by: Gary Gilmour (Eli Lilly & Co. Ltd.)

S2.01 **The Innovative Medicines Initiative: facilitating industrial and academic partnership**
Sophie Dix
Eli Lilly & Co. Ltd.

S2.02 **What has NEWMEDS taught us about translational science for schizophrenia and depression?**
Trevor Robbins
University of Cambridge

S2.03 **MRI and qEEG markers in Alzheimer's disease: Can they be back-translated to mouse models?**
Claudio Babiloni
University of Rome 'La Sapienza'

S2.04 **The IMI Europain collaboration: Building the chain of evidence for translational research in drug development for pain.**
Märta Segerdahl
H.Lundbeck A/S.

SPECIAL EVENT

16:00 - 19:00

S3. Theme S: Special Event **Venue: Menteith**

Fat and stressed out, always late, but still in love: a workshop in neuroendocrinology

Convenor: Giles Yeo (University of Cambridge)
Chaired by: Julian Mercer (University of Aberdeen)

S3.01 **Introduction to the field of neuroendocrinology**
Julian Mercer
University of Aberdeen

S3.02 **The hormonal control of food intake**
Tony Coll
Institute of Metabolic Science, University of Cambridge

S3.03 **Stressed out: Consequences of stress across the lifespan on mood and cognition**
Megan Holmes
University of Edinburgh

S3.04 **Always late: The neuroscience behind body clocks and sleep regulation**
Maria Canal
University of Manchester

S3.05 **Still in Love: Intranasal oxytocin and vasopressin - do they really have a direct effect on the brain?**
Mike Ludwig
University of Edinburgh

This Special Event is sponsored by the **British Society for Neuroendocrinology**

18:00 - 19:30

S4. Theme S: Special Event **Venue: Lowther**

Open Access: Panel Debate

Convenors: Philip Campbell (Nature) and Narender Ramnani (Royal Holloway University of London)
Chaired by: Philip Campbell (Editor-in-Chief, Nature, UK)

S4.01 Dimitri Kullmann
Editor, Brain, UK

S4.02 Michael Osuch
Publishing Director for Neuroscience and Psychology, Elsevier, UK

S4.03 Stavroula Kousta
Senior Editor, PLOS Biology, UK

S4.04 Mark Patterson
Executive Director, eLife Sciences Publications Ltd., Cambridge, UK

PUBLIC LECTURE

20:00 - 21:15

David J Nutt (Imperial College London) **Venue: Pentland**

'Why Scotland should lead the neuroscientific enlightenment?'

Chaired by: Ben Thomson

In association with **Edinburgh International Science Festival** and the EICC's **InnovationNation** programme.

Monday 13th April 2015

SYMPOSIA

08:30 - 10:30

12. Theme A: Development **Venue: Pentland**

The cell biology of neurogenesis

Convenor: Kate Storey (University of Dundee)
Chaired by: Kate Storey (University of Dundee)

12.01 **Ultradian gene expression oscillations control neural progenitor maintenance and the timing of differentiation**
Nancy Papalopulu
University of Manchester

12.02 **The role of centrosomal proteins during zebrafish neurogenesis**
Paula Alexandre
University College London

12.03 **Cutting to the chase: an ESCRT module is required for neuron pruning**
Darren Williams
King's College London

12.04 **Cell biological mechanisms regulating neuronal differentiation**
Kate Storey
University of Dundee

08:30 - 10:30

13. Theme B: Molecular, Cellular and Synaptic Mechanisms **Venue: Sidlaw**

Synaptopathy: the new field of synaptic medicine

Convenor: Seth Grant (Edinburgh University)
Chaired by: Seth Grant (Edinburgh University)

13.01 **Convergence of disease onto complexes in the postsynaptic proteome**
Seth Grant
Edinburgh University

13.02 **The role of synaptic dysfunction in striatum**
Jean-Antoine Girault
Institut du Fer-à-Moulin, Paris

13.03 **Convergence of hippocampal pathophysiology in *Syngap*$^{+/-}$ and *Fmr1*$^{-/y}$ mice**
Peter Kind
University of Edinburgh

13.04 **Synaptic pathology in neurodegenerative diseases**
Giovanna Mallucci
University of Cambridge

08:30 - 10:30

14. Theme C: Sensory and Motor Systems **Venue: Lowther**

Closing the loop: brain-computer interfaces and neurofeedback

Convenor: Andrew Jackson (Newcastle University)
Chaired by: Andrew Jackson (Newcastle University)

14.01 **Applications of closed-loop brain computer interfaces**
Eberhard Fetz
University of Washington

14.02 **Operant conditioning of low-frequency local field potentials**
Andrew Jackson
Newcastle University

14.03 **Brain Training in Huntington's Disease: Enhancing neural plasticity using real-time fMRI neurofeedback training**
Marina Papoutsi
University College London

14.04 **Brain-Computer Interfaces for severe motor paralysis**
Andrea Kuebler
University of Wuerzberg

08:30 - 10:30

15. Theme E: Sleep, Circadian and Neuroendocrine Mechanisms **Venue: Menteith**

Sleep, circadian rhythms and the neuroendocrine system

Convenor: Jon Johnston (University of Surrey)
Chaired by: Jon Johnston (University of Surrey)

15.01 **Timed feeding, neuroendocrinology and the human circadian system**
Jon Johnston
University of Surrey

15.02 **Chronobiology and sleep in relation to body weight regulation**
Margriet Westerterp
Maastricht University

15.03 **Interactions between the circadian system and orexigenic neurones**
Hugh Piggins
University of Manchester

15.04 **Sleep, circadian rhythms and insulin sensitivity**
Rachel Leproult
Université Libre de Bruxelles

This Symposium is sponsored by the **Society for Endocrinology**

08:30 - 10:30

16. Theme D: Learning, Memory and Cognition **Venue: Lammermuir 1**

Reconsolidation, extinction, and the space in between

Convenor: Amy Milton (University of Cambridge)
Chaired by: Amy Milton (University of Cambridge)

16.01 **Reconsolidation and extinction: common and distinct triggers**
Charlotte Flavell
University of Birmingham

16.02 **Molecular and behavioural properties of the transition between reconsolidation and extinction**
Emiliano Merlo
University of Cambridge

16.03 **Reconsolidation-extinction boundaries in fear memory attenuation**
Marie Monfils
University of Texas

16.04 **Targeting fear memory: a window of opportunity**
Merel Kindt
University of Amsterdam

08:30 - 10:30

17. Theme D: Learning, Memory and Cognition **Venue: Lammermuir 2**

Knowing where you are: circuit mechanisms for estimating location

Convenor: Matt Nolan (University of Edinburgh)
Chaired by: Matt Nolan (University of Edinburgh)

17.01 **How the geometry of the environment affects grid cell symmetry**
Julija Krupic
University College London

17.02 **Synaptic and dendritic mechanisms of grid cell firing**
Christoph Schmidt-Hieber
University College London

17.03 **Identifying the Ionic Algorithms for Calculating Spatial Maps**
Lisa Giocomo
Stanford University

17.04 **Circuit mechanisms for path integration**
Matt Nolan
University of Edinburgh

08:30 - 10:30

S5. Theme S: Special Event **Venue: Fintry**

Drugs, addiction and freewill: Do addicted individuals have free will?

Convenor: Karen Graham (International Neuroethics Society)
Chaired by: Barbara Sahakian (University of Cambridge School of Clinical Medicine)

S5.01 **Compulsivity and habit development in cocaine users**
Trevor Robbins
University of Cambridge

S5.02 **Genetics of substance abuse**
Gunter Schumann
King's College

S5.03 **Substances of abuse, treatments, policy and law**
David Nutt
Imperial College

S5.04 **Neuroethical aspects of addiction focusing on free will**
Julian Savulescu
University of Oxford

This Special Event is sponsored by the **European Dana Alliance and the International Neuroethics Society**

THE EUROPEAN DANA ALLIANCE FOR THE BRAIN

International Neuroethics Society
www.neuroethicssociety.org

10:30 – 11:15		
REFRESHMENTS AND TRADE EXHIBITION VIEWING	**Venue:**	**Lennox Suite**
10:30 - 11:15		
Speed Dating for Careers in Science – Session 1	**Venue:**	**Platform 5 Cafe**

PLENARY LECTURE

11.15 - 12:15

Kay E Davies (University of Oxford) **Venue: Pentland**

'Role of oxidative stress in neurodegeneration'
Chaired by: Peter Brophy (University of Edinburgh)

Sponsored by **Johnson & Johnson Innovation**

12:15 - 13:15		
LUNCH	**Venue:**	**Lennox Suite**
12:15 - 13:15		
CEILIDH WORKSHOP	**Venue:**	**Menteith**

13:15 - 14:45

POSTER SESSION 2 AND TRADE EXHIBITION **Venue: Lennox Suite**

P2-A-001 to P2-A-020
P2-B-001 to P2-B-043
P2-C-001 to P2-C-031
P2-D-001 to P2-D-061
P2-E-001 to P2-E-017
P2-F-001 to P2-F-058
P2-G-001 to P2-G-014

SYMPOSIA

14:45 - 16:45

18. Theme F: Nervous System Disorders **Venue: Pentland**

Human stem cell models of neurodegenerative disease

Convenor: Rick Livesey (University of Cambridge)
Chaired by: Christopher Shaw (King's College London)

18.01 **Modelling alpha-synuclein disease mechanisms with neurons derived from human pluripotent stem cells**
Tilo Kunath
University of Edinburgh

18.02 **Human stem cell models of motor neuron disease**
Chris Shaw
Kings College London

18.03 **Stem cell models of frontotemporal dementia**
Selina Wray
University College London

18.04 **Mechanistic studies of Alzheimer's disease initiation and progression in stem cell models**
Lewis Evans
University of Cambridge

This Symposium is sponsored by **Astrazeneca**

14:45 - 16:45

19. Theme D: Learning, Memory and Cognition **Venue: Sidlaw**

Psychedelic neuroscience: can understanding brain mechanisms guide new treatments?

Convenor: David Nutt (Imperial College London)
Chaired by: David Nutt (Imperial College London)

19.01 **Ketamine studies on human brain function**
Mitul Mehta
King's College

19.02 **Comparative effects of psychedelics and MDMA on human brain function**
Robin Carhart-Harris
Imperial College London

19.03 **Electrophysiology of psychedelics and ketamine in rat brain**
Flavie Kersante
Bristol University

19.04 **The psychology and therapeutic potential of psychedelics, MDMA and ketamine**
Val Curran
University College London

This Symposium is sponsored by **British Association for Psychopharmacology**

14:45 - 16:45

20. Theme D: Learning, Memory and Cognition **Venue: Lowther**

Mind wandering, ADHD and the brain

Convenor: Sue Curtis (Institute of Psychiatry)
Chaired by: Philip Asherson (Institute of Psychiatry)

20.01 **The mental phenomena of mind wandering and its relationship to ADHD and the brain**
Philip Asherson
Institute of Psychiatry

20.02 **What can electrophysiology tell us about the DMN, and its relationship with the wandering mind?**
Elizabeth Liddle
University of Nottingham

20.03 **The altered brain in ADHD and effects of medication**
Katya Rubia
King's College London

20.04 **Evidence for the neural and psychological heterogeneity of the wandering mind**
Jonathan Smallwood
University of York

This Symposium is sponsored by the **UK Adult ADHD Network**

14:45 - 16:45

21. Theme B: Molecular, Cellular and Synaptic Mechanisms **Venue: Lammermuir 1**

Holding it together: membrane interactions underlying the health and well-being of neuronal cell biology

Convenor: Vincent O'Connor (University of Southampton)
Chaired by: Paul Skehel (The University of Edinbrugh)

21.01 **Cerebellar ataxia: beta III spectrin scaffold of interactions disconnected**
Mandy Jackson
The University of Edinburgh

21.02 **More than one ligand: differential actions of BDNF on neuronal morphology**
Katrin Deinhardt
University of Southampton

21.03 **Translational control of gene expression in neuropsychiatric diseases**
Christos Gkogkas
University of Edinburgh

21.04 **The missing link between motoneuron excitability and ER stress in fALS**
Smita Saxena
University of Bern

14:45 - 16:45

22. Theme F: Nervous System Disorders **Venue: Lammermuir 2**

The pedunculopontine nucleus - a new target for deep brain stimulation in Parkinson's disease

Convenor: John Stein (University of Oxford)
Chaired by: John Stein (University of Oxford)

22.01 **Connections of the PPN**
Paul Bolam
University of Oxford

22.02 **Primate studies on the PPN and translation to PD patients**
Tipu Aziz
J Radcliffe Hospital, Oxford

22.03 **PPN stimulation for freezing and falling patients**
Peter Silburn
University of Queensland

22.04 **PPN pathology and the effects of PPN DBS on akinesia**
Elena Moro
University of Grenoble

SPECIAL EVENT

14:45 - 17:45

S6. Theme S: Special Event **Venue: Fintry**

Neuroimaging analysis methods

Convenor: Gerard Ridgway (Oxford and UCL)
Chaired by: Gerard Ridgway (Oxford and UCL)

S6.01 **Mining HCP data with FSL and Workbench**
Saad Jbabdi
University of Oxford

S6.02 **MSM: A new tool for multimodal surface-based registration**
Emma Robinson
University of Oxford

S6.03 **Signal and noise in FMRI connectivity analyses**
Eugene Duff
University of Oxford

S6.04 **SPM and FSL - Why and how you might use both together**
Gerard Ridgway
University of Oxford and UCL

S6.05 **Dynamic Casual Modelling (DCM) and FMRI**
Peter Zeidman
University College London

S6.06 **Detecting cortical and sub-cortical activity and MEG and EEG**
Sofie Meyer
University College London

S6.07 **DCM for MEG and EEG**
Bernadette van Wijk
University College London

This Special Event is sponsored by **Siemens**

SIEMENS

SPECIAL EVENT

14:45 - 16:45

S7. Theme S: Special Event **Venue: Menteith**

Effective grantsmanship and funding opportunities

S7.01 **Funding Opportunities and Priority Areas - Wellcome Trust**
John Isaac
Wellcome Trust, Head of Neuroscience and Mental Health

S7.02 **Funding Opportunities and Priority Areas - BBSRC**
Jef Grainger
BBSRC, Head of Sector for Bioscience for Health

S7.03 **Funding Opportunities and Priority Areas - MRC**
Kathryn Adcock
MRC, Head of Neuroscience and Mental Heath

16:45 - 17:45

REFRESHMENTS AND TRADE EXHIBITION VIEWING **Venue: Lennox Suite**

16:45 - 17:45

Speed Dating for Careers in Science – Session 2 **Venue: Platform 5 Cafe**

PLENARY LECTURE

18:15 - 19:15

Giacomo Rizzolatti (Università di Parma) **Venue: Pentland**

'Understanding others: A neural mechanism'
Chaired by: Trevor Robbins (University of Cambridge)

20:00 - LATE

STUDENT SOCIAL EVENT (offsite and by ticket only) **Venue: Teviot Row Debating Hall**

Tuesday 14th April 2015

SYMPOSIA

08:30 - 10:30

23. Theme D: Learning, Memory and Cognition **Venue: Pentland**

Frontal lobe mechanisms of behavioural change

Convenor: Matthew Rushworth (University of Oxford)
Chaired by: Matthew Rushworth (University of Oxford)

23.01 **Adjusting accordingly: prefrontal areas updating valuations for objects and actions**
Betsy Murray
National Institute of Mental Health, Bethesda

23.02 **Neuromodulation of human frontostriatal function**
Roshan Cools
Radboud University Nijmegen

23.03 **Bridging microscopic and macroscopic measures of value learning and choice**
Laurence Hunt
University College London

23.04 **Frontal cortical interactions during behavioural change and learning**
Matthew Rushworth
University of Oxford

08:30 - 10:30

24. Theme F: Nervous System Disorders **Venue: Sidlaw**

Normal ageing: Alzheimer's disease risk factor number one

Convenor: Michael Coleman (The Babraham Institute, Cambridge)
Chaired by: Stephen Wharton (Sheffield Institute for Translational Neuroscience)

24.01 **Astrocyte pathology and oxidative damage in brain ageing: insights from population neuropathology studies**
Stephen Wharton
Sheffield Institute for Translational Neuroscience

24.02 **Neuroinflammation in ageing and Alzheimer's disease**
Delphine Boche
University of Southampton

24.03 **Axonal ageing and pathology**
Michael Coleman
The Babraham Institute, Cambridge

24.04 **Studying anatomical and molecular correlates of cognitive ageing in the Lothian Birth Cohort - extending deep-phenotyping to the level of the synapse**
Tara Spires-Jones
University of Edinburgh

08:30 - 10:30

25. Theme B: Molecular, Cellular and Synaptic Mechanisms **Venue: Fintry**

Modelling human disease in a dish: implications for understanding neurodegeneration and for development of novel therapies

Convenor: Maeve Caldwell (Bristol Medical School)
Chaired by: Maeve Caldwell (Bristol Medical School)

25.01 **Generation of disease relevant neuron subtypes from human Pluripotent Stem Cells for understanding neurological diseases**
Meng Li
Cardiff University

25.02 **Differentiation of human pluripotent stem cells to study Alzheimer's disease and related dementias**
Maeve Caldwell
University of Bristol

25.03 **Differentiation of clinical grade human pluripotent stem cells into midbrain dopaminergic neurons**
Tilo Kunath
University of Edinburgh

25.04 **Generation of authentic dopamine neurons for use in cell therapy for Parkinsons disease**
Malin Parmar
Lund University

This Symposium is sponsored by the **Biochemical Society**

08:30 - 10:30

26. Theme D: Learning, Memory and Cognition **Venue: Lowther**

Sex differences in synaptic plasticity and memory

Convenor: Karl Peter Giese (King's College London)
Chaired by: Karl Peter Giese (King's College London)

26.01 **Differences in the role of nitric oxide in synaptic plasticity in males and females**
Kevin Fox
Cardiff University

26.02 **Sex differences in gene transcription during memory consolidation**
Keiko Mizuno
King's College London

26.03 **Targeting fear memory *via* beta-adrenergic receptors differs in male and female mice**
Judith ter Horst
University of Amsterdam

26.04 **Sex differences in the behaviour of mouse models of Alzheimer's Disease**
Richard Brown
Dalhousie University, Canada

08:30 - 10:30

27. Theme F: Nervous System Disorders **Venue: Menteith**

Cannabinoids in psychiatric neuroscience: medicine or menace?

Convenor: Val Curran (University College London)
Chaired by: Val Curran (University College London)

27.01 **Advances in basic & translational cannabinoid neuroscience**
Jose Crippa
Universidade de São Paulo

27.02 **Cannabinoids, endocannabinoids and psychosis**
Celia Morgan
University of Exeter

27.03 **Cannabis and addiction: cause, cure or both?**
Tom Freeman
University College London

27.04 **Pharmacological imaging of cannabinoids in human cognitive functions**
Matthijs Bossong
Rudolf Magnus Institute of Neuroscience, Utrecht

08:30 - 10:30

28. Theme A: Development **Venue: Lammermuir 1**

What can cognitive neuroscience tell us about development

Convenor: Lisa Morrison Coulthard (British Psychological Society)
Chaired by: Catherine Sebastian (Royal Holloway, University of London,)

28.01 **Cognitive neuroscience approaches to adolescent emotion regulation**
Catherine Sebastian
Royal Holloway, University of London,

28.02 **Unique challenges to adolescent self-regulation: Lessons from the brain**
Leah Somerville
Harvard University

28.03 **Understanding the brain mechanisms that underpin performance in childhood using magnetoencephalography**
Duncan Astle
MRC Cognition and Brain Sciences Unit, Cambridge

28.04 **Scores 'in the normal range' can be deceptive: neural and cognitive underpinnings to behaviours in autism spectrum disorder and Williams syndrome**
Annette Karmiloff-Smith
Birkbeck, University of London,

This Symposium is sponsored by the **British Psychological Society**

The British Psychological Society

08:30 - 10:30

29. Theme C: Sensory and Motor Systems **Venue: Lammermuir 2**

Neuroimaging and quantitative sensory testing: a new approach to translational pain studies in humans

Convenor: Anne King (University of Leeds)
Chaired by: Anne King (University of Leeds)

29.01 **Altered function and connectivity in the spinal cord and brainstem of patients with neuropathic pain**
Jon Brooks
University of Bristol

29.02 **The use of CHEPS and EEG analyses to assess spinothalamic tract functional integrity in spinal cord injury**
Armin Curt
University of Zurich

29.03 **The quantification of changes in brain activity with altered physiological states such as anaesthesia and pain.**
Katie Warnaby
University of Oxford

29.04 **Neurophysiology and psychophysics of ascending nociception and descending pain modulation in humans: physics vs. cognition**
Rony-Reuven Nir
Technion - Israel Institute of Technology

This Symposium is sponsored by **Medoc Ltd**

10:30 - 11:15

REFRESHMENTS AND TRADE EXHIBITION VIEWING **Venue: Lennox Suite**

10:30 - 11:15

Speed Dating for Careers in Science – Session 3 **Venue: Platform 5 Cafe**

PLENARY LECTURE

11.15 - 12:15

Lorraine Tyler (University of Cambridge) **Venue: Pentland**

'From perception to conception: the evolution of meaning along the ventral stream'
Chaired by: Dorothy Miell (University of Edinburgh)

12:15 - 13:15

LUNCH **Venue: Lennox Suite**

12:15 - 13:15

BNA AGM **Venue: Pentland**

13:15 - 14:45

POSTER SESSION 3 AND TRADE EXHIBITION **Venue: Lennox Suite**

P3-A-001 to P3-A-021
P3-B-001 to P3-B-043
P3-C-001 to P3-C-030
P3-D-001 to P3-D-060
P3-E-001 to P3-E-017
P3-F-001 to P3-F-058
P3-G-001 to P3-G-014

SYMPOSIA

14:45 - 16:45

30. Theme B: Molecular, Cellular and Synaptic Mechanisms **Venue: Pentland**

Molecular mechanisms of neurodegeneration and regeneration

Convenor: Giovanna Mallucci (University of Cambridge)
Chaired by: Giovanna Mallucci (University of Cambridge)

30.01 **Synaptic regeneration in neurodegeneration**
Giovanna Mallucci
University of Cambridge

30.02 **APP metabolism regulates tau proteostasis in human cerebral cortex neurons**
Steven Moore
University of Cambridge

30.03 **RNA metabolism and ALS**
Pietro Fratta
University College London

30.04 **The regenerative medicine of multiple sclerosis**
Robin Franklin
Wellcome Trust-MRC Cambridge Stem Cell Institute

This Symposium is sponsored by the **Association of British Neurologists**

ASSOCIATION OF BRITISH NEUROLOGISTS

14:45 - 16:45

31. Theme B: Molecular, Cellular and Synaptic Mechanisms **Venue: Sidlaw**

Cholinergic neuromodulation in the CNS: from single cells to networks

Convenor: Mala Shah (University College London)
Chaired by: David Brown (University College London)

31.01 **Cholinergic interneurons: gatekeepers to striatal dopamine function?**
Stephanie Cragg
University of Oxford

31.02 **Cholinergic fiber activity-induced axonal ion channel plasticity**
Mala Shah
University College London

31.03 **Acetylcholine and the modulation of encoding and retrieval dynamics in cortical structures**
Michael Hasselmo
Boston University

31.04 **Cholinergic modulation of attentional signals in striate and extrastriate visual cortex**
Alexander Thiele
Newcastle University

14:45 - 16:45

32. Theme D: Learning, Memory and Cognition **Venue: Fintry**

Neural mechanisms underlying emotion regulation and dysregulation

Convenor: Angela Roberts (University of Cambridge)
Chaired by: Angela Roberts (University of Cambridge)

32.01 **Altered neural circuitry underlying the risk to develop Anxiety and Depression: Nonhuman primate translational studies**
Ned Kalin
University of Wisconsin-Madison

32.02 **The link between anxiety, motivation and energy metabolism in the nucleus accumbens**
Carmen Sandi
Ecole Polytechnique Federale de Lausanne

32.03 **Prefrontal/anterior cingulate cortex-amygdala connectivity in anxious humans**
Oliver Robinson
University College London

32.04 **Prefrontal regulation of negative emotion and its modulation by serotonin**
Angela Roberts
University of Cambridge

14:45 - 16:45

33. Theme F: Nervous System Disorders **Venue: Lowther**

Mechanisms of reward-seeking

Convenor: Andrew Lawrence (Florey Institute of Neuroscience & Mental Health, Australia)
Chaired by: David Belin (Cambridge University)

33.01 **Modelling the transition from impulsivity to compulsive drug-seeking**
Jeff Dalley
Cambridge University

33.02 **A common molecular mechanism for drug and natural reward-seeking**
Rainer Spanagel
Central Institute of Mental Health, Mannheim

33.03 **Ascending peptide systems & stress-induced reward-seeking**
Andrew Lawrence
Florey Institute of Neuroscience & Mental Health, Australia

33.04 **Social reward processing during adolescence**
Viviana Trezza
University Roma Tre

This Symposium is sponsored by the **British Journal of Pharmacology**

14:45 - 16:45

34. Theme G: Methods and Techniques **Venue: Menteith**

Beyond BOLD: advances in quantitative functional and metabolic imaging

Convenor: Mitul Mehta (Institute of Psychiatry, King's College London)
Chaired by: Fernando Zelaya (Institute of Psychiatry, King's College London)

34.01 **Recent advances in non-invasive mapping of glucose metabolism**
Xavier Golay
University College London

34.02 **Quantitative mapping of oxygen metabolism and oxygen extraction fraction by MRI**
Richard Wise
University of Cardiff

34.03 **Functional magnetic resonance spectroscopy**
Paul Mullins
Bangor University

34.04 **Improving spatial and temporal resolution in FMRI**
Karla Miller
University of Oxford

This Symposium is sponsored by **Siemens**

SIEMENS

14:45 - 16:45

35. Theme F: Nervous System Disorders **Venue: Lammermuir 1**

Metabolic and vascular contributors to dementia

Convenor: Bettina Platt (University of Aberdeen)
Chaired by: Bettina Platt (University of Aberdeen)

35.01 **High-fat diet, diabetes and cognitive decline in transgenic dementia models**
Bettina Platt
University of Aberdeen

35.02 **Metabolic consequences of increased beta-secretase activity in neurons**
Michael Ashford
University of Dundee

35.03 **Mitochondrial dysfunction in Alzheimer's disease**
Frank Gunn-Moore
University of St Andrews

35.04 **Neurovascular contributions to cognitive impairment and dementia**
Karen Horsburgh
University of Edinburgh

This Symposium is sponsored by **Alzheimer's Research UK**

14:45 - 16:45

36. Theme F: Nervous System Disorders **Venue: Lammermuir 2**

The neuroimmunology of stroke: inflammation, immunosuppression, infection and injury

Convenor: Barry McColl (Univesity of Edinburgh)
Chaired by: Barry McColl (Univesity of Edinburgh)

36.01 **Inflammation in stroke: promoting the good and inhibiting the bad**
Stuart Allan
University of Manchester

36.02 **Neutrophils in stroke**
Anna Planas
Institute for Biomedical Research, Barcelona

36.03 **Ischaemic stroke, B cells and susceptibility to infection**
Laura McCulloch
University of Edinburgh

36.04 **From ischaemic brain to lung infection and back**
Andreas Meisel
Charite University Medicine Berlin

16:45 - 17:15	
REFRESHMENTS AND TRADE EXHIBITION VIEWING	**Venue: Lennox Suite**
16:45 - 17:15	
Speed Dating for Careers in Science – Session 4	**Venue: Platform 5 Cafe**

PLENARY LECTURE

17:15 - 18:15

Thomas Jessell (Columbia University)

Venue: Pentland

'Strategies and circuits for motor control'
Chaired by: Narender Ramnani (Royal Holloway University of London)

PUBLIC LECTURE

19:00 - 20:15

Adrian Owen (University of Western Ontario, Canada)

Venue: Pentland

'The search for consciousness: Detecting awareness in the vegetative state.'
Chaired by: Lord Robert Winston.

In association with **Edinburgh International Science Festival** and the EICC's **InnovationNation** programme.

Wednesday 15th April 2015

SYMPOSIA

08:30 - 10:30

37. Theme D: Learning, Memory and Cognition **Venue: Pentland**

Memory consolidation: an interdisciplinary approach

Convenor: Lisa Morrison Coulthard (British Psychological Society)
Chaired by: Sergio Della Sala (University of Edinburgh)

37.01 **Effects of wakeful rest on early memory consolidation and forgetting**
Michaela Dewar
Heriot Watt University

37.02 **Accelerated long-term forgetting: a case for pathological consolidation?**
Adam Zeman
University of Exeter

37.03 **Hippocampal inhibitory networks in Alzheimer's disease pathology**
Iris Oren
University of Edinburgh

37.04 **Memory Consolidation by Replay**
Nikolai Axmacher
University of Bonn

37.05 **Acetylcholine and consolidation**
Michael Hasselmo
Boston University

This Symposium is sponsored by the **British Psychological Society**

The British Psychological Society

08:30 - 10:30

38. Theme B: Molecular, Cellular and Synaptic Mechanisms **Venue: Sidlaw**

Microglia and neuronal function

Convenor: Marina Lynch (Trinity College Dublin)
Chaired by: Marina Lynch (Trinity College Dublin)

38.01 **The impact of microglial phenotype on neuronal function**
Marina Lynch
Trinity College Dublin

38.02 **Innate immune responses in the brain following neuronal injury**
Stuart Allan
University of Manchester

38.03 **Systemic inflammation and neural function in health and disease**
Jessica Teeling
Southampton General Hospital

38.04 **New roles for proinflammatory cytokines in Alzheimer's Disease pathogenesis**
Kerry O'Bannion
University of Rochester Medical Center

08:30 - 10:30

39. Theme A: Development **Venue: Fintry**

Molecular mechanisms of neurodevelopment and links to later-life neurological disorders

Convenor: Kevin Mitchell (Trinity College Dublin)
Chaired by: Kevin Mitchell (Trinity College Dublin)

39.01 **Mouse models to elucidate the contribution of genes to neurodevelopmental defects and the emergence of pathophysiology.**
Kevin Mitchell
Trinity College Dublin

39.02 **The brain-gut-microbiome and its influence on neurodevelopment**
Gerald Clarke
University College Cork

39.03 **Investigating the role of endoplasmic reticulum proteins in motor neuron degeneration**
Niamh O'Sullivan
University College Dublin

39.04 **Cellular and molecular mechanisms controlling the development and maturation of neural networks**
Beatriz Rico
King's College London

This Symposium is sponsored by **Neuroscience Ireland**

08:30 - 10:30

40. Theme E: Sleep, Circadian and Neuroendocrine Mechanisms **Venue: Lowther**

Sleep, Brain State and Sensory Processing

Convenor: Vladyslav Vyazovskiy (University of Oxford)
Chaired by: Kenneth Harris (University College London)

40.01 **Cortical mechanisms of sleep regulation**
Vladyslav Vyazovskiy
University of Oxford

40.02 **Functional scaling of synaptic inputs during cortical rhythmic activity**
Maria Sanchez-Vives
University of Barcelona

40.03 **Neuromodulation of attentional signals in macaque frontal cortex**
Alexander Thiele
University of Newcastle

40.04 **Wakefulness, locomotion, and navigation: a view from visual cortex**
Kenneth Harris
University College London

This Symposium is sponsored by the **Sleep and Circadian Neuroscience institute**

08:30 - 10:30

41. Theme G: Methods and Techniques **Venue: Menteith**

Non-invasive brain stimulation: from neuroenhancement to neurorehabilitation

Convenor: John Rothwell (UCL Institute of Neurology)
Chaired by: John Rothwell (UCL Institute on Neurology)

41.01 **Computational neurostimulation**
Sven Bestmann
UCL Institute of Neurology

41.02 **Controlling brain rhythms with brain stimulation**
Gregor Thut
University of Glasgow

41.03 **Harnessing brain rhythms to control tremors**
John S. Brittain
John Radcliff University Hospital Oxford

41.04 **Improving rehabilitation of stroke patients with transcranial direct current stimulation**
Jacinta O'Shea
University of Oxford

This Symposium is sponsored by **Magstim**

08:30 - 10:30

42. Theme F: Nervous System Disorders **Venue: Lammermuir 1**

Complex genetics of neurodegeneration

Convenor: Julie Williams (Cardiff University)
Chaired by: Julie Williams (Cardiff University)

42.01 **Exome sequencing in neurodegenerative diseases - more than a family business**
Rita Guerreiro
UCL Institute of Neurology

42.02 **Genetics of Dementia with Lewy bodies**
Jose Bras
UCL Institute of Neurology

42.03 **The genetics and cell biology of FTD with a focus on C9orf72**
Stuart Pickering-Brown
University of Manchester

42.04 **Complex genetics of Alzheimer's disease neurodegeneration**
Rebecca Sims
Cardiff University School of Medicine

08:30 - 10:30

43. Theme G: Methods and Techniques **Venue: Lammermuir 2**

Enabling novel research in neuroscience through microfluidics

Convenor: Michele Zagnoni (University of Strathclyde)
Chaired by: Trevor Bushell (University of Strathclyde) and Michele Zagnoni (University of Strathclyde)

43.01 **Use of microfluidic devices to model and examine the molecular mechanisms of synaptic plasticity following injury in long projection excitatory neurons**
Anne Marion Taylor
University of North Carolina at Chapel Hill

43.02 **Interfacing of pre-patterned neuronal networks with electronic devices**
Andreas Offenhauser
Forschungszentrum Jülich GmbH

43.03 **Microfluidics and miniaturised electrophysiology for studying neuronal function in nematodes**
Lindy Holden-Dye
University of Southampton

43.04 **Investigating functional communication between neuronal networks using microfluidics**
Michele Zagnoni
University of Strathclyde

This Symposium is sponsored by **NC3Rs**

10:30 - 11:00

REFRESHMENTS **Venue: Lennox Suite**

PLENARY LECTURE

11:00 - 11:55

Annette Dolphin (University College London) **Venue: Pentland**

'Neuronal voltage-gated calcium channels: from channel trafficking to therapy for neuropathic pain'
Chaired by: John Isaac (Wellcome Trust)

11:55 - 12:30

LUNCH **Venue: Lennox Suite**

12:30 - 13:25

BNA 50th ANNIVERSARY LECTURE and 2015 WOLSTENCROFT MEMORIAL AWARD LECTURE **Venue: Pentland**

John O'Keefe (University College London), Nobel Laureate for Physiology or Medicine 2014

'The journey to the hippocampal cognitive map'

13:25 - 14:00

REFRESHMENTS **Venue: Lennox Suite**

SYMPOSIA

14:00 - 16:00

44. Theme B: Molecular, Cellular and Synaptic Mechanisms **Venue: Pentland**

Role of a novel type of synaptogenesis in memory formation

Convenor: Michael Stewart (The Open University)
Chaired by: Michael Stewart (The Open University)

44.01 **Nitric oxide as a mediator of synaptic crosstalk and synapse formation**
Iryna Nikonenko
University of Geneva

44.02 **Morphological alterations in spines and synapse following behavioural and pharmacological manipulations in young and old mice**
Mike Stewart
The Open University

44.03 **The mechanism of memory formation when functional plasticity is impaired**
Kasia Radwanska
Nencki Institute, Warsaw

44.04 **The impact of multiple innervated spine generation in hippocampal memory: molecular studies**
Peter Giese
Institute of Psychiatry, King's College London

14:00 - 16:00

45. Theme F: Nervous System Disorders **Venue: Sidlaw**

Teasing out the mechanisms of depression

Convenor: Cynthia Joyce (MQ: Transforming Mental health)
Chaired by: Catherine Harmer (Oxford University)

45.01 **Cognition, circuitry and depression**
Jon Roiser
University College London

45.02 **The search for biological and behavioural markers of depression**
Ian Goodyer
Cambridge University

45.03 **Imaging the social aspects of depression**
Rebecca Elliott
University of Manchester

45.04 **Trans-diagnostic considerations**
Daniel Smith
University of Glasgow

This Symposium is sponsored by **MQ**

14:00 - 16:00

46. Theme A: Development **Venue: Fintry**

Exploring axonal development and connectivity

Convenor: Sarah Guthrie (King's College London)
Chaired by: Andrew Furley (University of Sheffield)

46.01 **Mapping a sensory axonal projection and investigating its stability with Brainbow transgenic labels**
Jean Livet
Ecole de Neuroscience, Paris

46.02 **Spontaneous activity and integration of guidance cues in thalamocortical axon development**
Anton Filipchuck
CSIC & Universidad Miguel Hernández, Alicante

46.03 **Cadherins and spontaneous activity regulate the development of cranial motor neurons**
Sarah Guthrie
King's College London

46.04 **Role of chondrolectin in spinal motor axon guidance and spinal muscular atrophy**
Catherina Becker
University of Edinburgh

14:00 - 16:00

47. Theme E: Sleep, Circadian and Neuroendocrine Mechanisms **Venue: Lowther**

Long term consequences of poor sleep on the brain

Convenor: Mary Morrell (Imperial College London)
Chaired by: Mary Morrell (Imperial College London)

47.01 **Does sleep disruption predict neurodegeneration?**
Paul Reading
James Cook University Hospital, Middlesbrough

47.02 **The role of hypoxia in neurodegeneration associated with sleep apnoea**
Luigi Ferini-Strambi
Università Vita-Salute San Raffaele, Milan

47.03 **Should we be investigating neurodegeneration or ischaemic preconditioning in sleep apnoa?**
Ivana Rosenzweig
King's College London

47.04 **Biomarkers and clinical consequences of poor sleep**
Renata Riha
University of Edinburgh

This Symposium is sponsored by **British Sleep Society and Sleepio**

British Sleep Society
UK Multidisciplinary Sleep Professionals

Sleepio

14:00 - 16:00

48. Theme D: Learning, Memory and Cognition **Venue: Menteith**

Metacognition and self-awareness

Convenor: Stephen Fleming (University of Oxford)
Chaired by: Stephen Fleming (University of Oxford)

48.01 **Intentions and self-awareness: towards a model of metacognition**
Lucie Charles
CEA-Saclay Center, Paris

48.02 **Understanding the accuracy of self-knowledge: the contribution of human prefrontal cortex to metacognition**
Stephen Fleming
University of Oxford

48.03 **Metacognition of interoceptive states: How prediction of bodily condition underpins emotion and self**
Anil Seth
University of Sussex

48.04 **Metacognition: embedding the self in culture**
Chris Frith
University College London

14:00 - 16:00

49. Theme F: Nervous System Disorders **Venue: Lammermuir 1**

Thinking of multiple sclerosis neurodegenerative pathology in a regenerative way

Convenor: Anna Williams (University of Edinburgh)
Chaired by: Anna Williams (University of Edinburgh)

49.01 **What goes wrong in white matter in MS?**
Anna Williams
University of Edinburgh

49.02 **What goes wrong in grey matter in MS?**
Richard Reynolds
Imperial College London

49.03 **What goes wrong in axons in MS?**
Julia Edgar
University of Glasgow

49.04 **What can we learn from NMO - another CNS demyelinating disease?**
Christine Stadelmann-Nessler
Georg-August-Universität, Göttingen

This Symposium is sponsored by **British Neuropathological Society**

14:00 - 16:00

50. Theme D: Learning, Memory and Cognition **Venue: Lammermuir 2**

Action and cognition in the human cortico-cerebellar system

Convenor: Narender Ramnani (Royal Holloway, University of London)
Chaired by: Marco Catani (King's College London)

50.01 **Can tractography tell us something we don't know about human cerebellar connectivity?**
Marco Catani
King's College London

50.02 **Motor and non-motor territories of the human dentate nucleus: Mapping the topographical connectivity of the cerebellar cortex with *in-vivo* sub-millimeter diffusion imaging**
Chris Steele
Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig

50.03 **Mapping human cortico-cerebellar functional connectivity & its behavioral associations**
Rachael Seidler
University of Michigan, Ann Arbor

50.04 **The cerebellar cognitive affective syndrome (CCAS): clinical manifestations of dysmetria of thought**
Jeremy Schmahmann
Massachusetts General Hospital and Harvard Medical School, Boston

16:30 - 16:40

POSTER AWARDS **Venue: Pentland**

PLENARY LECTURE

16:40 - 17:40

Richard G M Morris (University of Edinburgh) **Venue: Pentland**

'The making, keeping and losing of memory'
Chaired by: John Aggleton (Cardiff University)

Sponsored by **Lundbeck UK**

17:40 -17:45

CLOSING REMARKS **Venue: Pentland**

John Aggleton (BNA President)

Speaker list

Speakers are listed in alphabetical order. Please refer to the programme for timings.

Adcock, Kathryn
MRC, Head of Neuroscience and Mental Heath, London, UK
'Funding Opportunities and Priority Areas - MRC'
Monday 13 April 2015, 14:45

Alexandre, Dr Paula
UCL, London, UK
'The role of centrosomal proteins during zebrafish neurogenesis'
Monday 13 April 2015, 08:30

Ali, Professor Robin
Institute of Opthalmology, UCL, London, UK
'Cell and gene based therapy for retinal degeneration'
Sunday 12 April 2015, 16:00

Allan, Professor Stuart
Faculty of Life Sciences, Manchester, UK
'Innate immune responses in the brain following neuronal injury'
Wednesday 15 April 2015, 08:30

Allan, Professor Stuart
University of Manchester, Manchester, UK
'Inflammation in stroke: promoting the good and inhibiting the bad'
Tuesday 14 April 2015, 14:45

Asherson, Professor Philip
Institute of Psychiatry, London, UK
'The mental phenomena of mind wandering and its relationship to ADHD and the brain'
Monday 13 April 2015, 14:45

Ashford, Professor Michael
University of Dundee, Dundee, UK
'Metabolic consequences of increased beta-secretase activity in neurons'
Tuesday 14 April 2015, 14:45

Astier, Dr Anne
University of Edinburgh, Edinburgh, UK
'Inflammatory pathways in multiple sclerosis T cells'
Sunday 12 April 2015, 11:30

Astle, Dr Duncan
MRC Cognition and Brain Sciences Unit,, Cambridge, UK
'Understanding the brain mechanisms that underpin performance in childhood using magnetoencephalography'
Tuesday 14 April 2015, 08:30

Axmacher, Dr Nikolai
University of Bonn, Bonn, Germany
'Memory Consolidation by Replay'
Wednesday 15 April 2015, 08:30

Aziz, Professor Tipu
J Radcliffe Hospital, Oxford, United Kingdom
'Primate studies on the PPN and translation to PD patients'
Monday 13 April 2015, 14:45

Azzouz, Professor Mimoun

University of Sheffield, Sheffield, United Kingdom
'Gene therapy in neurodegenerative disorders'
Sunday 12 April 2015, 16:00

Babiloni, Professor Claudio

University of Rome 'La Sapienza', Rome, Italy
'MRI and qEEG markers in Alzheimer's disease: can they be back-translated to mouse models?'
Sunday 12 April 2015, 16:00

Bailey, Dr Mark

University of Glasgow, Glasgow, UK
'Genome / mRNA editing and mutation correction in CNS disorders'
Sunday 12 April 2015, 16:00

Becker, Professor Catherina

University of Edinburgh, Edinburgh, UK
'Modelling CNS degeneration and regeneration in fish'
Sunday 12 April 2015, 16:00

Becker, Professor Catherina

University of Edinburgh, Edinburgh, UK
'Role of chondrolectin in spinal motor axon guidance and spinal muscular atrophy'
Wednesday 15 April 2015, 14:00

Bede, Dr Peter

Trinity College Dublin, Dublin, Ireland
'Neuroimaging signatures of ALS/MND'
Sunday 12 April 2015, 16:00

Bestmann, Dr Sven

UCL Institute of Neurology, London, UK
'Computational neurostimulation'
Wednesday 15 April 2015, 08:30

Boche, Dr Delphine

University of Southampton, Southampton, UK
'Neuroinflammation in ageing and Alzheimer's disease'
Tuesday 14 April 2015, 08:30

Boison, Dr Detlev

Legacy Research Institiute, Portland, USA
'The epigenetics of ketogenic diet therapy - opportunities for epilepsy prevention'
Sunday 12 April 2015, 11:30

Bolam, Professor Paul

University of Oxford, Oxford, UK
'Connections of the PPN'
Monday 13 April 2015, 14:45

Bossong, Dr Matthijs

Rudolf Magnus Institute of Neuroscience, Utrecht, The Netherlands
'Pharmacological imaging of cannabinoids in human cognitive functions'
Tuesday 14 April 2015, 08:30

Bras, Dr Jose

UCL Institute of Neurology, London, UK
'*Genetics of Dementia with Lewy Bodies'*
Wednesday 15 April 2015, 08.30

Brittain, Dr John S.

John Radcliff University Hospital Oxford, Oxford, UK
'Harnessing brain rhythms to control tremors'
Wednesday 15 April 2015, 08:30

Brooks, Dr Jon

University of Bristol, Bristol, UK
'Altered function and connectivity in the spinal cord and brainstem of patients with neuropathic pain'
Tuesday 14 April 2015, 08:30

Brophy, Professor Peter

University of Edinburgh, Edinburgh, UK
'Protein trafficking to the node of Ranvier'
Sunday 12 April 2015, 11:30

Brown, Professor Richard

Dalhousie University, Halifax, Canada
'Sex differences in the behaviour of mouse models of Alzheimer's Disease'
Tuesday 14 April 2015, 08:30

Caldwell, Dr Maeve

University of Bristol, Bristol, UK
'Differentiation of human pluripotent stem cells to study Alzheimer's disease and related dementias'
Tuesday 14 April 2015, 08:30

Canal, Dr Maria

University of Manchester, Manchester, UK
'Always late: The neuroscience behind body clocks and sleep regulation'
Sunday 12 April 2015, 16:00

Carhart-Harris, Dr Robin

Imperial College London, London, UK
'Comparative effects of psychedelics and MDMA on human brain function'
Monday 13 April 2015, 14:45

Catani, Dr Marco

King's College London, London, UK
'Can tractography tell us something we don't know about human cerebellar connectivity?'
Wednesday 15 April 2015, 14:00

Charles, Dr Lucie

CEA-Saclay Center, Paris, France
'Intentions and self-awareness: towards a model of metacognition'
Wednesday 15 April 2015, 14:00

Clarke, Dr Gerald

University College Cork, Cork, Ireland
'The brain-gut-microbiome and its influence on neurodevelopment'
Wednesday 15 April 2015, 08:30

Cobb, Dr Stuart

University of Glasgow, Glasgow, United Kingdom
'Gene therapy in developmental/intellectual disability disorder - Rett Syndrome'
Sunday 12 April 2015, 16:00

Coleman, Dr Michael

The Babraham Institute, Cambridge, UK
'Axonal ageing and pathology'
Tuesday 14 April 2015, 08:30

Coll, Dr Tony

Institute of Metabolic Science, University of Cambridge, Cambridge, UK
'The Hormonal Control of Food Intake'
Sunday 12 April 2015, 16:00

Cools, Professor Roshan

Radboud University Nijmegen, Nijmegen, The Netherlands
'Neuromodulation of human frontostriatal function'
Tuesday 14 April 2015, 08:30

Cragg, Dr Stephanie

University of Oxford, Oxford, UK
'Cholinergic interneurons: gatekeepers to striatal dopamine function?'
Tuesday 14 April 2015, 14:45

Crippa, Professor Jose

Universidade de São Paulo, São Paulo, Brazil
'Advances in basic & translational cannabinoid neuroscience'
Tuesday 14 April 2015, 08:30

Curnow, Dr John

University of Birmingham, Birmingham, UK
'The choroid plexus: Immune gateway to the CNS'
Sunday 12 April 2015, 11:30

Curran, Professor Val

University College London, London, UK
'The psychology and therapeutic potential of psychedelics, MDMA and ketamine'
Monday 13 April 2015, 14:45

Curt, Professor Armin

University of Zurich, Zurich, Switzerland
'The use of CHEPS and EEG analyses to assess spinothalamic tract functional integrity in spinal cord injury'
Tuesday 14 April 2015, 08:30

Dalley, Professor Jeff

Cambridge University, Cambridge, UK
'Modelling the transition from impulsivity to compulsive drug-seeking'
Tuesday 14 April 2015, 14:45

Davies, Professor Dame Kay

University of Oxford, Oxford, UK
'Role of oxidative stress in neurodegeneration'
Monday 13 April 2015, 11.15

Deinhardt, Dr Katrin

University of Southampton, Southampton, United Kingdom
'More than one ligand: differential actions of BDNF on neuronal morphology'
Monday 13 April 2015, 14:45

Dewar, Dr Michaela

Heriot Watt, Edinburgh, UK
'Effects of wakeful rest on early memory consolidation and forgetting'
Wednesday 15 April 2015, 08:30

Dix, Dr Sophie

Eli Lilly & Co. Ltd., Erl Wood, UK
'The Innovative Medicines Initiative: facilitating industrial and academic partnership'
Sunday 12 April 2015, 16:00

Doherty, Professor Patrick

King's College London, London, UK
'The diacylglycerol lipases; roles in and beyond endocannabinoid signalling'
Sunday 12 April 2015, 11:30

Dolphin, Professor Annette

University College London, London, UK
'Neuronal voltage-gated calcium channels: from channel trafficking to therapy for neuropathic pain'
Wednesday 15 April 2015, 11.00

Duff, Dr Eugene

University of Oxford, Oxford, UK
'Signal and noise in FMRI connectivity analyses'
Monday 13 April 2015, 14:45

Edgar, Dr Julia

University of Glasgow, Glasgow, UK
'What goes wrong in axons in MS?'
Wednesday 15 April 2015, 14:00

Elliott, Dr Rebecca

University of Manchester, Manchester, UK
'Imaging the social aspects of depression'
Wednesday 15 April 2015, 14:00

Emptage, Dr Nigel

University of Oxford, Oxford, UK
'Presynaptic mechanisms of synaptic plasticity'
Sunday 12 April 2015, 16:00

Evans, Dr Lewis

University of Cambridge, Cambridge, UK
'Mechanistic studies of Alzheimer's disease initiation and progression in stem cell models'
Monday 13 April 2015, 14:45

Ferini-Strambi, Professor Luigi

Università Vita-Salute San Raffaele, Milan, Italy
'The role of hypoxia in neurodegeneration associated with sleep apnoea'
Wednesday 15 April 2015, 14:00

Fernández-Chacón , Professor Rafael

Hosp.Univ. Virgen del Rocío/CSIC/Universidad de Sevilla, Seville, Spain
'Synaptic dysfunction and nerve terminal degeneration'
Sunday 12 April 2015, 11:30

Fetz, Professor Eberhard

University of Washington, Seattle, US
'Applications of closed-loop brain computer interfaces'
Monday 13 April 2015, 08:30

Filipchuck, Dr Anton

CSIC & Universidad Miguel Hernández, Alicante, Spain
'Spontaneous activity and integration of guidance cues in thalamocortical axon development'
Wednesday 15 April 2015, 14:00

Flavell, Dr Charlotte

University of Birmingham, Birmingham, UK
'Reconsolidation and extinction: common and distinct triggers'
Monday 13 April 2015, 08:30

Fleming, Dr Stephen

University of Oxford, Oxford, UK
'Understanding the accuracy of self-knowledge: the contribution of human prefrontal cortex to metacognition'
Wednesday 15 April 2015, 14:00

Fox, Professor Kevin

Cardiff University, Cardiff, UK
'Differences in the role of nitric oxide in synaptic plasticity in males and females'
Tuesday 14 April 2015, 08:30

Frackowiak, Professor Richard

Centre Hospitalier Universitaire Vaudois, Lausanne, Switzerland
'The Medical Informatics contribution to the Human Brain Project'
Sunday 12 April 2015, 16:00

Franklin, Professor Robin

Wellcome Trust-MRC Cambridge Stem Cell Institute, Cambridge, United Kingdom
'The regenerative medicine of multiple sclerosis'
Tuesday 14 April 2015, 14:45

Fratta, Dr Pietro

UCL, London, United Kingdom
'RNA metabolism and ALS'
Tuesday 14 April 2015, 14:45

Freeman, Dr Tom

UCL, London, UK
'Cannabis and addiction: cause, cure or both?'
Tuesday 14 April 2015, 08:30

Frith, Professor Chris

University College London, London, UK
'Metacognition: embedding the self in culture'
Wednesday 15 April 2015, 14:00

Furber, Professor Steve

University of Manchester, Manchester, UK
'Building bains: neuromorphic computing in the HBP'
Sunday 12 April 2015, 16:00

Furl, Dr Nicholas

Royal Holloway, University of London, Egham, United Kingdom
'Network dynamics in response to moving faces'
Sunday 12 April 2015, 16:00

Garrido, Dr Lucia

Brunel University, Uxbridge, United Kingdom
'Functional connectivity in the face processing network'
Sunday 12 April 2015, 16:00

Giese, Professor Peter

Institute of Psychiatry, King's College London, London, UK
'The impact of multiple innervated spine generation in hippocampal memory: molecular studies'
Wednesday 15 April 2015, 14:00

Giocomo, Dr Lisa

Stanford University, San Francisco, USA
'Identifying the Ionic Algorithms for Calculating Spatial Maps'
Monday 13 April 2015, 08:30

Girault, Professor Jean-Antoine

Institut du Fer-Ã-Moulin, Paris, France
'The role of synaptic dysfunction instriatum'
Monday 13 April 2015, 08:30

Gkogkas, Dr Christos

University of Edinburgh, Edinbrugh, United Kingdom
'Translational control of gene expression in neuropsychiatric diseases'
Monday 13 April 2015, 14:45

Golay, Professor Xavier

University College London, London, UK
'Recent advances in non-invasive mapping of glucose metabolism'
Tuesday 14 April 2015, 14:45

Goodyer, Professor Ian

Cambridge University, Cambridge, UK
'The search for biological and behavioural markers of depression'
Wednesday 15 April 2015, 14:00

Grainger, Jef

BBSRC, Head of Sector for Bioscience for Health, Swindon, UK
'Funding Opportunities and Priority Areas - BBSRC'
Monday 13 April 2015, 14:45

Grant, Professor Seth

Edinburgh University, Edinbrugh, UK
'Convergence of disease onto complexes in the postsynaptic proteome'
Monday 13 April 2015, 08:30

Grant, Professor Seth

Edinburgh University, Edinburgh, UK
'Mapping brain and behavioural architecture in mice and humans'
Sunday 12 April 2015, 16:00

Gray, Dr Steven

University of North Carolina, Chapel Hill, USA
'CNS gene therapy in neuropathy - from basic science to clinical trials'
Sunday 12 April 2015, 16:00

Gross, Professor Joachim

University of Glasgow, Glasgow, United Kingdom
'Human Brain Oscillations entrain to the rhythm of speech'
Sunday 12 April 2015, 11:30

Guerreiro, Dr Rita

University College London Institute of Neurology, London, UK
'Exome sequencing in neurodegenerative diseases - more than a family business'
Wednesday 15 April 2015, 08:30

Gunn, Professor Roger

Imanova, London, UK
'The use of PET imaging to reduce the risk of failure in CNS drug development'
Sunday 12 April 2015, 11:30

Gunn-Moore, Professor Frank

University of St Andrews, St Andrews, UK
'Mitochondrial dysfunction in Alzheimer's disease'
Tuesday 14 April 2015, 14:45

Guthrie, Professor Sarah

King's College London, London, UK
'Cadherins and spontaneous activity regulate the development of cranial motor neurons'
Wednesday 15 April 2015, 14:00

Hafler, Professor David

Yale University, New Haven, USA
'The Pathophysiology of Multiple Sclerosis'
Sunday 12 April 2015, 11:30

Harris, Professor Kenneth

University College London, London, United Kingdom
'Wakefulness, locomotion, and navigation: a view from visual cortex'
Wednesday 15 April 2015, 08:30

Hasselmo, Professor Michael

Boston University, Boston, USA
'Acetylcholine and the modulation of encoding and retrieval dynamics in cortical structures'
Tuesday 14 April 2015, 14:45

Hasselmo, Professor Michael

University of Boston, Boston, USA
'Acetylcholine and consolidation'
Wednesday 15 April 2015, 08:30

Hasson, Dr Uri

Princeton, Princeton, USA
'Face to Face, Brain to Brain: Exploring the Mechanisms of Dyadic Social Interactions'
Sunday 12 April 2015, 11:30

Heales, Professor Simon

Great Ormond Street Children's Hospital, London, UK
'Energy metabolism and medium chain dietary fatty acids'
Sunday 12 April 2015, 11:30

Hill, Dr Sean

École Poly-tech-nique Fédérale de Lau-sanne, Lausanne, Switzerland
'Neuroinformatics and Brain Simulation in the Human Brain Project'
Sunday 12 April 2015, 16:00

Holden-Dye, Professor Lindy

University of Southampton, Southampton, UK
'Microfluidics and miniaturised electrophysiology for studying neuronal function in nematodes'
Wednesday 15 April 2015, 08:30

Holmes, Professor Megan

University of Edinburgh, Edinburgh, UK
'Stressed out: Consequences of stress across the lifespan on mood and cognition'
Sunday 12 April 2015, 16:00

Horsburgh, Professor Karen

University of Edinburgh, Edinburgh, UK
'Neurovascular contributions to cognitive impairment and dementia'
Tuesday 14 April 2015, 14:45

Hunt, Dr Laurence

University College London, London, United Kingdom
'Bridging microscopic and macroscopic measures of value learning and choice'
Tuesday 14 April 2015, 08:30

Isaac, John

Wellcome Trust, Head of Neuroscience and Mental Health, London, UK
'Funding Opportunities and Priority Areas - Wellcome Trust'
Monday 13 April 2015, 14:45

Jackson, Dr Mandy

The University of Edinbrugh, Edinburgh, United Kingdom
'Cerebellar ataxia: beta III spectrin scaffold of interactions disconnected'
Monday 13 April 2015, 14:45

Jackson, Dr Andrew

Newcastle University, Newcastle, UK
'Operant conditioning of low-frequency local field potentials'
Monday 13 April 2015, 08:30

Jbabdi, Dr Saad

University of Oxford, Oxford, UK
'Mining HCP data with FSL and Workbench'
Monday 13 April 2015, 14:45

Jessell, Professor Thomas

Columbia University, New York, USA
'Strategies and circuits for motor control'
Tuesday 14 April 2015, 17.15

Johnston, Dr Jon

University of Surrey, Surrey, UK
'Timed feeding, neuroendocrinology and the human circadian system'
Monday 13 April 2015, 08:30

Johnston, Dr Alan

University College London, London, United Kingdom
'Computational models of dynamic face representation'
Sunday 12 April 2015, 16:00

Kalin, Professor Ned

University of Wisconsin-Madison, Madison, USA
'Altered neural circuitry underlying the risk to develop Anxiety and Depression: Nonhuman primate translational studies'
Tuesday 14 April 2015, 14:45

Karmiloff-Smith, Professor Annette

Birkbeck, University of London,, London, UK
'Scores 'in the normal range' can be deceptive: neural and cognitive underpinnings to behaviours in autism spectrum disorder and Williams syndrome'
Tuesday 14 April 2015, 08:30

Kersante, Dr Flavie

Bristol University, Bristol, UK
'Electrophysiology of psychedelics and ketamine in rat brain'
Monday 13 April 2015, 14:45

Kind, Professor Peter

University of Edinburgh, Edinburgh
'Synaptic dysfunction in intellectual disabilities'
Monday 13 April 2015, 08:30

Kindt, Professor Merel

University of Amsterdam, Amsterdam, The Netherlands
'Targeting fear memory: a window of opportunity'
Monday 13 April 2015, 08:30

Kousta, Dr Stavroula

Senior Editor, PLOS Biology, UK
Sunday 12 April 2015, 18:00

Krupic, Dr Julija

UCL, London, UK
'How the geometry of the environment affects grid cell symmetry'
Monday 13 April 2015, 08:30

Kuebler, Professor Andrea

University of Wuerzberg, Wuerzberg, Germany
'Brain-Computer Interfaces for severe motor paralysis'
Monday 13 April 2015, 08:30

Kullmann, Professor Dimitri

Editor, Brain, UK
Sunday 12 April 2015, 18:00

Kunath, Dr Tilo

University of Edinburgh, Edinburgh, UK
'Modelling alpha-synuclein disease mechanisms with neurons derived from human pluripotent stem cells'
Monday 13 April 2015, 14:45

Kunath, Dr Tilo

University of Edinburgh, Edinburgh, UK
'Differentiation of Clinical grade human pluripotent stem cells into midbrain dopaminergic neurons.'
Tuesday 14 April 2015, 08:30

Lakadamyali, Dr Melike

The Institute of Photonic Sciences, Barcelona, Spain
'Intracellular trafficking visualised at super-resolution'
Sunday 12 April 2015, 11:30

Lawrence, Professor Andrew

Florey Institute of Neuroscience & Mental Health, Parkville, Australia
'Ascending peptide systems & stress-induced reward-seeking'
Tuesday 14 April 2015, 14:45

Leproult, Dr Rachel

Université Libre de Bruxelles, Brussels, Belgium
'Sleep, circadian rhythms and insulin sensitivity'
Monday 13 April 2015, 08:30

Li, Professor Meng

Cardiff University, Cardiff, UK
'Generation of disease relevant neuron subtypes from human Pluripotent Stem Cells for understanding neurological diseases'
Tuesday 14 April 2015, 08:30

Li, Dr Jennifer

Eli Lilly & Co Ltd, , UK
'Bringing risk forward with in vivo oxygen amperometry - a preclinical surrogate of BOLD fMRI'
Sunday 12 April 2015, 11:30

Liddle, Dr Elizabeth

University of Nottingham, Nottingham, United Kingdom
'What can electrophysiology tell us about the DMN, and its relationship with the wandering mind?'
Monday 13 April 2015, 14:45

Livet, Dr Jean

Ecole de Neuroscience, Paris, France
'Mapping a sensory axonal projection and investigating its stability with Brainbow transgenic labels'
Wednesday 15 April 2015, 14:00

Ludwig, Professor Mike

University of Edinburgh, Edinburgh, UK
'Still in Love: Intranasal oxytocin and vasopressin - do they really have a direct effect on the brain?'
Sunday 12 April 2015, 16:00

Lynch, Professor Marina

Trinity College, Dublin, Ireland
'The impact of microglial phenotype on neuronal function'
Wednesday 15 April 2015, 08:30

Lyons, Dr David

University of Edinburgh, Edinburgh, UK
'Myelination in the zebrafish'
Sunday 12 April 2015, 11:30

Mackie, Professor Ken

Indiana University, Bloomington, USA
'Cannabinoids and neuropathology'
Sunday 12 April 2015, 11:30

Mallucci, Professor Giovanna

University of Cambridge, Cambridge, UK
'Synaptic pathology in neurodegenerative diseases'
Monday 13 April 2015, 08:30

Mallucci, Professor Giovanna

University of Cambridge, Cambridge, UK
'Synaptic regeneration in neurodegeneration'
Tuesday 14 April 2015, 14:45

McCulloch, Dr Laura

University of Edinburgh, Edinburgh, UK
'Ischemic stroke, B cells and susceptibility to infection'
Tuesday 14 April 2015, 14:45

McGettigan, Dr Carolyn

Royal Holloway, University of London, Egham, United Kingdom
'It ain't what you say: the neural processing of social and emotional cues during vocal communication'
Sunday 12 April 2015, 11:30

Mehta, Dr Mitul

King's College, London, UK
'Ketamine studies on human brain function'
Monday 13 April 2015, 14:45

Meisel, Professor Andreas

Charite University Medicine Berlin, Berlin, Germany
'From ischaemic brain to lung infection and back'
Tuesday 14 April 2015, 14:45

Mercer, Professor Julian

University of Aberdeen, Aberdeen, UK
'Introduction to the field of neuroendocrinology'
Sunday 12 April 2015, 16:00

Merlo, Dr Emiliano

University of Cambridge, Cambridge, UK
'Molecular and behavioural properties of the transition between reconsolidation and extinction'
Monday 13 April 2015, 08:30

Meyer, Ms Sofie

University College London, London, UK
'Detecting cortical and sub-cortical activity and MEG and EEG'
Monday 13 April 2015, 14:45

Miller, Dr Karla

University of Oxford, Oxford, UK
'Improving spatial and temporal resolution in FMRI'
Tuesday 14 April 2015, 14:45

Misgeld, Professor Thomas

Technische Universität, Munich, Germany
'In vivo imaging of axon dismantling'
Sunday 12 April 2015, 11:30

Mitchell, Professor Kevin

Trinity College Dublin, Dublin, Ireland
'Mouse models to elucidate the contribution of genes to neurodevelopmental defects and the emergence of pathophysiology.'
Wednesday 15 April 2015, 08:30

Mizuno, Dr Keiko

King's College London, London, UK
'Sex differences in gene transcription during memory consolidation'
Tuesday 14 April 2015, 08:30

Molina-Holgado, Dr Francisco

University of Roehampton, London, UK
'Crosstalk between endocannabinoid signalling and the immune system in brain repair'
Sunday 12 April 2015, 11:30

Monfils, Dr Marie

University of Texas, Austin, USA
'Reconsolidation-extinction boundaries in fear memory attenuation'
Monday 13 April 2015, 08:30

Moore, Dr Steven

University of Cambridge, Cambridge, United Kingdom
'APP metabolism regulates tau proteostasis in human cerebral cortex neurons'
Tuesday 14 April 2015, 14:45

Moreno, Ms Andrea

University of Edinburgh, Endinburgh, UK
'Hippocampal-Neocortical network interactions: Plasticity and implications'
Sunday 12 April 2015, 16:00

Morgan, Dr Celia

University of Exeter, Exeter, UK
'Cannabinoids, endocannabinoids and psychosis'
Tuesday 14 April 2015, 08:30

Moro, Professor Elena

University of Grenoble, Grenboble, France
'PPN pathology and the effects of PPN DBS on akinesia'
Monday 13 April 2015, 14:45

Morris, Professor Richard

The University of Edinburgh, Edinburgh, UK
'The making, keeping and losing of memory'
Wednesday 15 April 2015, 16.40

Mullins, Dr Paul

Bangor University, Bangor, UK
'Functional magnetic resonance spectroscopy'
Tuesday 14 April 2015, 14:45

Murray, Dr Betsy

National Institute of Mental Health, Bethesda, USA
'Adjusting accordingly: prefrontal areas updating valuations for objects and actions'
Tuesday 14 April 2015, 08:30

Nicholas, Dr Richard

Imperial College, London, UK
'The use of MRI in patient selection and stratification in clinical trials for multiple sclerosis'
Sunday 12 April 2015, 11:30

Nikonenko, Dr Iryna

University of Geneva, Geneva, Switzerland
'Nitric oxide as a mediator of synaptic crosstalk and synapse formation'
Wednesday 15 April 2015, 14:00

Nir, Dr Rony-Reuven

Technion - Israel Institute of Technology, Haifa, Israel
'Neurophysiology and psychophysics of ascending nociception and descending pain modulation in humans: physics vs. cognition'
Tuesday 14 April 2015, 08:30

Nolan, Dr Matt

University of Edinburgh, Edinburgh, United Kingdom
'Circuit mechanisms for path integration'
Monday 13 April 2015, 08:30

Nutt, Professor David

Imperial College, London, UK
'Substances of abuse, treatments, policy and law'
Monday 13 April 2015, 08:30

Nutt, Professor David

Imperial College London, London, UK
'Why Scotland should lead the neuroscientific enlightenment?'
Sunday 12th April 2015, 20:00

O'Bannion, Professor Kerry

University of Rochester Medical Center, Rochester NY, US
'New roles for proinflammatory cytokines in Alzheimer's Disease pathogenesis'
Wednesday 15 April 2015, 08:30

Offenhauser, Professor Andreas

Forschungszentrum Jülich GmbH, Jülich, Germany
'Interfacing of pre-patterned neuronal networks with electronic devices'
Wednesday 15 April 2015, 08:30

O'Keefe, Professor John

University College London, London, UK
'The Journey to the Hippocampal Cognitive Map'
Wednesday 15th April, 12:30

Oren, Dr Iris

University of Edinburgh, Edinburgh, UK
'Hippocampal inhibitory networks in Alzheimer's disease pathology'
Wednesday 15 April 2015, 08:30

O'Shea, Dr Jacinta

University of Oxford, Oxford, UK
'Improving rehabilitation of stroke patients with transcranial direct current stimulation'
Wednesday 15 April 2015, 08:30

Osuch, Mr Michael

Publishing Director for Neuroscience and Psychology, Elsevier, UK
Sunday 12 April 2015, 18:00

O'Sullivan, Dr Niamh

University College Dublin, Dublin, Ireland
'Investigating the role of endoplasmic reticulum proteins in motor neuron degeneration.'
Wednesday 15 April 2015, 08:30

Owen, Dr Adrian

Western University, Ontario, Canada
'The search for consciousness: Detecting awareness in the vegetative state.'
Tuesday 14th April 2015, 19:00

Papalopulu, Professor Nancy

University of Manchester, Manchester, UK
'Ultradian gene expression oscillations control neural progenitor maintenance and the timing of differentiation'
Monday 13 April 2015, 08:30

Papoutsi, Dr Marina

University College London, London, UK
'Brain Training in Huntington's Disease: Enhancing neural plasticity using real-time fMRI neurofeedback training'
Monday 13 April 2015, 08:30

Parmar, Dr Malin

Lund University, Lund, Sweden
'Generation of authentic dopamine neurons for use in cell therapy for Parkinsons disease'
Tuesday 14 April 2015, 08:30

Patterson, Dr Mark

Executive Director, eLife Sciences Publications Ltd., Cambridge, UK
Sunday 12 April 2015, 18:00

Pickering-Brown, Professor Stuart

University of Manchester, Manchester, UK
'The genetics and cell biology of FTD with a focus on C9orf72'
Wednesday 15 April 2015, 08:30

Piggins, Professor Hugh

University of Manchester, Manchester, UK
'Interactions between the circadian system and orexigenic neurones'
Monday 13 April 2015, 08:30

Planas, Professor Anna

Institute for Biomedical Research, Barcelona, Spain
'Neutrophils in stroke'
Tuesday 14 April 2015, 14:45

Platt, Professor Bettina

University of Aberdeen, Aberdeen, UK
'High-fat diet, diabetes and cognitive decline in transgenic dementia models'
Tuesday 14 April 2015, 14:45

Radwanska, Dr Kasia

Nencki Institute, Warsaw, Poland
'The mechanism of memory formation when functional plasticity is impaired.'
Wednesday 15 April 2015, 14:00

Reading, Dr Paul

James Cook University Hospital, Middlesbrough, UK
'Does sleep disruption predict neurodegeneration?'
Wednesday 15 April 2015, 14:00

Reynolds, Professor Richard

Imperial College, London, UK
'What goes wrong in grey matter in MS?'
Wednesday 15 April 2015, 14:00

Rho, Professor Jong

University of Calgary Faculty of Medicine, Calgary, USA
'Diet-induced ketosis in regulating brain function'
Sunday 12 April 2015, 11:30

Rico, Professor Beatriz

King's College London, London, England
'Cellular and molecular mechanisms controlling the development and maturation of neural networks'
Wednesday 15 April 2015, 08:30

Ridgway, Dr Gerard

University of Oxford and UCL, Oxford and London, UK
'SPM and FSL - Why and how you might use both together'
Monday 13 April 2015, 14:45

Riha, Dr Renata

University of Edinburgh, University of Edinburgh, Scotland
'Biomarkers and clinical consequences of poor sleep'
Wednesday 15 April 2015, 14:00

Rizzolatti, Professor Giacomo

Università di Parma, Parma, Italy
'Understanding others: A neural mechanism'
Monday 13 April 2015, 18.15

Robbins, Professor Trevor

University of Cambridge, Cambridge, UK
'Compulsivity and habit development in cocaine users'
Monday 13 April 2015, 08:30

Robbins, Professor Trevor

University of Cambridge, Cambridge, UK
'What has NEWMEDS taught us about translational science for schizophrenia and depression?'
Sunday 12 April 2015, 16:00

Roberts, Professor Angela

University of Cambridge, Cambridge, UK
'Prefrontal regulation of negative emotion and its modulation by serotonin'
Tuesday 14 April 2015, 14:45

Robinson, Dr Emma

University of Oxford, Oxford, UK
'MSM: A new tool for multimodal surface-based registration'
Monday 13 April 2015, 14:45

Robinson, Dr Oliver

University College London, London, UK
'Prefrontal/anterior cingulate cortex-amygdala connectivity in anxious humans'
Tuesday 14 April 2015, 14:45

Roche, Dr Michelle

National University of Ireland Galway, Galway, Ireland
'Endocannabinoid modulation of toll-like receptors (TLR)-induced neuroinflammation'
Sunday 12 April 2015, 11:30

Roiser, Dr Jon

UCL, London, UK
'Cognition, circuitry and depression'
Wednesday 15 April 2015, 14:00

Rosenzweig, Dr Ivana

King College, London, UK
'Should we be investigating neurodegeneration or ischaemic preconditioning in sleep apnoa?'
Wednesday 15 April 2015, 14:00

Rubia, Professor Katya

King's College London, London, Uk
'The altered brain in ADHD and effects of medication'
Monday 13 April 2015, 14:45

Rushworth, Professor Matthew

University of Oxford, Oxford, United Kingdom
'Frontal cortical interactions during behavioural change and learning'
Tuesday 14 April 2015, 08:30

Sanchez-Vives, Professor Maria

University of Barcelona, Barcelona, Spain
'Functional scaling of synaptic inputs during cortical rhythmic activity'
Wednesday 15 April 2015, 08:30

Sandi, Professor Carmen

Ecole Polytechnique Federale de Lausanne, Lausanne, Switzerland
'The link between anxiety, motivation and energy metabolism in the nucleus accumbens'
Tuesday 14 April 2015, 14:45

Savulescu, Professor Julian

University of Oxford, Oxford, UK
'Neuroethical aspects of addiction focusing on free will'
Monday 13 April 2015, 08:30

Saxena, Professor Smita

University of Bern, Bern, Switzerland
'The missing link between motoneuron excitability and ER stress in fALS'
Monday 13 April 2015, 14:45

Schmahmann, Professor Jeremy

Massachusetts General Hospital and Harvard Medical School, Boston, USA
'The cerebellar cognitive affective syndrome (CCAS): clinical manifestations of dysmetria of thought.'
Wednesday 15 April 2015, 14:00

Schmidt-Hieber, Dr Christoph

UCL, London, UK
'Synaptic and dendritic mechanisms of grid cell firing'
Monday 13 April 2015, 08:30

Schorge, Dr Stephanie

University College London, London, United Kingdom
'Gene therapy in epilepsy'
Sunday 12 April 2015, 16:00

Schumann, Professor Gunter

King's College, London,
'Genetics of substance abuse'
Monday 13 April 2015, 08:30

Schyns, Dr Philippe

University of Glasgow, Glasgow, United Kingdom
'The timing of dynamic facial expression processing measured using magnetoencephalography'
Sunday 12 April 2015, 16:00

Sebastian, Dr Catherine

Royal Holloway, University of London,, London, UK
'Cognitive neuroscience approaches to adolescent emotion regulation'
Tuesday 14 April 2015, 08:30

Segerdahl, Dr Märta

H.Lundbeck A/S., Copenhagen, Denmark
'The IMI Europain collaboration: Building the chain of evidence for translational research in drug development for pain.'
Sunday 12 April 2015, 16:00

Seidler, Professor Rachael

University of Michigan, Ann Arbor, USA
'Mapping Human Cortico-Cerebellar Functional Connectivity & Its Behavioral Associations'
Wednesday 15 April 2015, 14:00

Seth, Professor Anil

University of Sussex, Brighton, UK
'Metacognition of interoceptive states: How prediction of bodily condition underpins emotion and self'
Wednesday 15 April 2015, 14:00

Shah, Dr Mala

University College London, London, UK
'Cholinergic fiber activity-induced axonal ion channel plasticity'
Tuesday 14 April 2015, 14:45

Shaw, Professor Chris

Kings College London, London, UK
'Human stem cell models of motor neuron disease'
Monday 13 April 2015, 14:45

Shipton, Dr Olivia

University of Cambridge, Cambridge, UK
'Left-right asymmetry in hippocampus-dependent learning'
Sunday 12 April 2015, 16:00

Silburn, Professor Peter

University of Queensland, Brisbane, Australia
'PPN stimulation for freezing and falling patients'
Monday 13 April 2015, 14:45

Sims, Dr Rebecca

Cardiff University School of Medicine, Cardiff, UK
'Complex genetics of Alzheimer's disease neurodegeneration'
Wednesday 15 April 2015, 08:30

Skipper, Dr Jeremy

UCL, London, UK
'Echoes of the spoken past: How the brain'
Sunday 12 April 2015, 11:30

Smallwood, Dr Jonathan

University of York, York, United Kingdom
'Evidence for the neural and psychological heterogeneity of the wandering mind.'
Monday 13 April 2015, 14:45

Smith, Dr Daniel

University of Glasgow, Glasgow, Scotland
'Trans-diagnostic considerations'
Wednesday 15 April 2015, 14:00

Somerville, Dr Leah

Harvard University, Cambridge, MA, USA
'Unique challenges to adolescent self-regulation: Lessons from the brain'
Tuesday 14 April 2015, 08:30

Spanagel, Professor Rainer

Central Institute of Mental Health, Mannheim, Germany
'A common molecular mechanism for drug and natural reward-seeking'
Tuesday 14 April 2015, 14:45

Spires-Jones, Dr Tara

University of Edinburgh, Edinburgh, UK
'The role of amyloid beta and apolipoprotein E in synapse loss in Alzheimer's disease'
Sunday 12 April 2015, 11:30

Spires-Jones, Dr Tara

University of Edinburgh, Edinburgh, UK
'Studying anatomical and molecular correlates of cognitive ageing in the Lothian Birth Cohort - extending deep-phenotyping to the level of the synapse'
Tuesday 14 April 2015, 08:30

Stadelmann-Nessler, Professor Christine

Georg-August-Universität, Göttingen, Germany
'What can we learn from NMO - another CNS demyelinating disease?'
Wednesday 15 April 2015, 14:00

Steele, Dr Chris

Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany
'Motor and non-motor territories of the human dentate nucleus: Mapping the topographical connectivity of the cerebellar cortex with in-vivo sub-millimeter diffusion imaging'

Wednesday 15 April 2015, 14:00

Stewart, Professor Mike

The Open University, Milton Keynes, UK
'Morphological alterations in spines and synapse following behavioural and pharma-cological manipulations in young and old mice.'
Wednesday 15 April 2015, 14:00

Storey, Professor Kate

University of Dundee, Dundee, UK
'Cell biological mechanisms regulating neuronal differentiation'
Monday 13 April 2015, 08:30

Svendsen, Professor Clive

Cedars-Sinai, Los Angeles, USA
'Stem cell based therapies for ALS/MND'
Sunday 12 April 2015, 16:00

Taylor, Dr Anne Marion

University of North Carolina, Chapel Hill, USA
'Use of microfluidic devices to model and examine the molecular mechanisms of synaptic plasticity following injury in long projection excitatory neurons'
Wednesday 15 April 2015, 08:30

Teeling, Dr Jessica

Southampton General Hospital, Southampton, UK
'Systemic inflammation and neural function in health and disease'
Wednesday 15 April 2015, 08:30

ter Horst, Dr Judith

University of Amsterdam, Amsterdam, Netherlands
'Targeting fear memory via beta-adrenergic receptors differs in male and female mice.'
Tuesday 14 April 2015, 08:30

Thiele, Professor Alexander

University of Newcastle, Newcastle upon Tyne, United Kingdom
'Neuromodulation of attentional signals in macaque frontal cortex'
Wednesday 15 April 2015, 08:30

Thiele, Professor Alexander

Newcastle University, Newcastle, UK
'Cholinergic modulation of attentional signals in striate and extrastriate visual cortex'
Tuesday 14 April 2015, 14:45

Thut, Dr Gregor

University of Glasgow, Glasgow, UK
'Controlling brain rhythms with brain stimulation'
Wednesday 15 April 2015, 08:30

Tonegawa, Professor Susumu

Institute of Technology, Massachusetts, USA
'Memory engram cells have come of age'
Sunday 12 April 2015, 9.45

Trezza, Dr Viviana

University Roma Tre, Rome, Italy
'Social reward processing during adolescence'
Tuesday 14 April 2015, 14:45

Tyler, Professor Lorraine

University of Cambridge, Cambridge, UK
'From perception to conception: the evolution of meaning along the ventral stream'

Tuesday 14 April 2015, 11.15

van Noort, Dr Johannes

Delta Crystallon BV, Leiden, The Netherlands
'Reconciling innate and adaptive immune responses in the CNS'
Sunday 12 April 2015, 11:30

van Wijk, Dr Bernadette

University College London, London, UK
'DCM for MEG and EEG'
Monday 13 April 2015, 14:45

Volianskis, Dr Arturas

University of Bristol, Bristol, UK
'Synaptic mechanisms relevant to learning and memory'
Sunday 12 April 2015, 16:00

Vyazovskiy, Dr Vladyslav

University of Oxford, Oxford, United Kingdom
'Cortical mechanisms of sleep regulation'
Wednesday 15 April 2015, 08:30

Wade-Martins, Dr Richard

University of Oxford, Oxford, UK
'Deficits in synaptic transmission in models of Parkinson's disease'
Sunday 12 April 2015, 11:30

Warnaby, Dr Katie

University of Oxford, Oxford, UK
'The quantification of changes in brain activity with altered physiological states such as anaesthesia and pain.'
Tuesday 14 April 2015, 08:30

Westerterp, Professor Margriet

Maastricht University, Maastricht, Netherlands
'Chronobiology and sleep in relation to body weight regulation'
Monday 13 April 2015, 08:30

Wharton, Professor Stephen

Sheffield Institute for Translational Neuroscience, Sheffield, UK
'Astrocyte pathology and oxidative damage in brain ageing: insights from population neuropathology studies'
Tuesday 14 April 2015, 08:30

Williams, Dr Anna

University of Edinburgh, Edinburgh, UK
'What goes wrong in white matter in MS?'
Wednesday 15 April 2015, 14:00

Williams, Professor Robin

Royal Holloway University of London, Egham, UK
'A direct mechanism of medium chain fatty acids in regulating neurotransmission'
Sunday 12 April 2015, 11:30

Williams, Professor Steven

King's College London, London, UK
'The utility of pharmacologic fMRI in CNS drug development'
Sunday 12 April 2015, 11:30

Williams, Dr Darren

King's College London, London, UK
'Cutting to the chase: an ESCRT module is required for neuron pruning'

Monday 13 April 2015, 08:30

Wise, Professor Richard

University of Cardiff, Cardiff, UK
'Quantitative mapping of oxygen metabolism and oxygen extraction fraction by MRI'
Tuesday 14 April 2015, 14:45

Wray, Dr Selina

University College London, London, UK
'Stem cell models of frontotemporal dementia'
Monday 13 April 2015, 14:45

Zagnoni, Dr Michele

University of Strathclyde, Glasgow, UK
'Investigating functional communication between neuronal networks using microfluidics'
Wednesday 15 April 2015, 08:30

Zeidman, Dr Peter

University College London, London, UK
'Dynamic Casual Modelling (DCM) and FMRI'
Monday 13 April 2015, 14:45

Zeman, Professor Adam

University of Exeter, Exeter, UK
'Accelerated long-term forgetting: a case for pathological consolidation?'
Wednesday 15 April 2015, 08:30

Exhibitor listing (alphabetical)

Stand Number 52

ABCAM

Website: www.abcam.com
Twitter: https://twitter.com/abcam
LinkedIn: https://uk.linkedin.com/company/abcam
Facebook: https://www.facebook.com/Abcam
Google: https://plus.google.com/+abcam/posts

Abcam plc is a provider of protein research tools and services, with an unrivalled range of products and expert technical support, enabling scientists to analyse living cells at the molecular level and improving the understanding of health and disease.
Abcam is committed to providing scientists with an extensive choice of reagents and tools, with the most comprehensive, honest and up-to-date datasheets and customer reviews, fast delivery and helpful customer service & technical support. Our catalogur of products includes primary and secondary antibodies, proteins, peptides, lysates, agonists, antagonists, inhibitors, immunoassays and other kits.
To find out more, please visit www.abcam.com

Stand Number 10

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Google: https://plus.google.com/+Adinstruments-making-science-easier/posts

ADInstruments produce the world-renowned PowerLab system, when combined together with our LabChart or LabTutor software provide complete data acquisition, processing, recording, display and analysis solutions for both academic and research institutions across the world.
PowerLab has been a reliable product for an entire generation of scientists and educators, offering a flexible solution for almost all types of data acquisition. Typical applications include human and animal physiology, pharmacology, neurophysiology, biology, zoology, biochemistry, and biomedical engineering.
Drop by our booth (number 10) to allow us to demonstrate how we make science easier.

Stand Number 53

Alzheimer's Research UK

E-Mail: e.obrien@alzheimersresearchuk.org
Website: www.alzheimersresearchuk.org
Twitter: @ARUKNews
Facebook: Alzheimer's Research UK

Alzheimer's Research UK is Europe's leading dementia research charity. Our agile Research Strategy focuses on diagnosis, prevention and treatment; our range of grant schemes fund the breadth of biomedical dementia research. Through a variety of strategic initiatives, including the Dementia Consortium and our Global Clinical Trials Fund, we are committed to funding the translation of basic research through to effective new treatments. We strive to build dementia research capacity, investing in Research Fellowships and PhD Scholarships. Please visit the website for more information on how your work can help us power the fight to defeat dementia.

Stand Number 28

Axol Bioscience Ltd

E-Mail: support@axolbio.com
Website: http://www.axolbio.com
Twitter: https://twitter.com/axolbio
LinkedIn:
https://www.linkedin.com/company/3274902?trk=tyah&trkInfo=idx%3A2-2-7%2CtarId%3A1423570049564%2Ctas%3AAxol
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Axol is a fresh and exciting biotech company founded to fulfil the unmet demand for high quality iPS cell-derived and primary tissue derived, clinically relevant cells for use in biomedical research and discovery. We are applying cutting-edge technologies to generate high quality human cell culture systems. Axol has led the launch of their technology with a focus on providing both healthy and disease relevant human neural cells. We are providing researchers with an affordable, easily accessible, *in vitro* human system to complement their existing studies of cortical development, function and diseases.

Stand Number 8

Bachem

E-Mail: elza.lopes@bachem.com
Website: www.bachem.com

Bachem is a listed technology-based company focused on peptide chemistry. The company provides a full range of services to the pharma and biotech industries. It specializes in the development of innovative, efficient manufacturing processes and the reliable production of peptide-based active pharmaceutical ingredients. A comprehensive catalog of biochemicals and exclusive custom syntheses for research labs complete the service portfolio. Headquartered in Switzerland with subsidiaries in Europe and the US, the group has a global reach with more experience and know-how than any other company in the industry. Towards its customers, Bachem shows total commitment to quality, innovation and partnership.

Stand Number 27

Behavioural Neuroscience Core Facility, University of Dundee

E-Mail: BNCF@dundee.ac.uk / l.x.strachan@dundee.ac.uk
Website: http://medicine.dundee.ac.uk/behavioural-neuroscience-core-facility

The Behavioural Neuroscience Core Facility provides investigators with access to a comprehensive rodent behavioural testing service. The facility has the capacity to perform behavioural phenotyping of transgenic lines and also assess novel therapeutics using a wide variety of behavioural assays. We currently offer behavioural tests for cognition, attention/impulsivity, motor function, anxiety, addiction and nociception-related behaviours. We provide advice and expertise in experimental design, execution, data analysis and interpretation to ensure that each project is tailored to the specific research requirements of the investigator. The facility is available to both commercial and non-commercial/academic users.

Stand Number 21

Biochemical Society

E-Mail: marketing@biochemistry.org
Website: www.biochemistry.org
Twitter: http://www.twitter.com/biochemsoc LinkedIn: http://www.linkedin.com/company/the-biochemical-society
Facebook: https://www.facebook.com/biochemicalsociety

The Biochemical Society exists for the advancement of molecular and cellular bioscience, both as an academic discipline and to promote its impact on areas including biotechnology, agriculture and medicine. Portland Press is the wholly-owned trading subsidiary of the Biochemical Society and publishes a range of journals in the molecular biosciences including *Clinical Science* and *Biochemical Journal*. For more information about the Society or to join our growing network of over 7000 members, visit us at stand #21.

Stand Number 25a

Bio-techne

E-Mail: info@bio-techne.com
Website: www.bio-techne.com
Twitter: twitter.com/RnDSystems
LinkedIn: www.linkedin.com/company/r&d-systems
Facebook: www.facebook.com/RnDSystems

Bio-Techne is a new name bringing together several best-in-class brands that offer a wide selection of tools for neuroscience research:

- **R&D Systems** is the most referenced supplier of bioactive proteins. The range also includes an extensive collection of antibodies, ELISAs and reagents for neural stem cell research.
- **Novus Biologicals** offer a growing portfolio of over 200,000 high-quality antibodies.
- **Tocris Bioscience** is the leading supplier of novel and exclusive small molecules and peptides.
- **ProteinSimple** provide innovative tools to make protein analysis simpler, affordable and more quantitative.

Together we are Bio-Techne. Visit booth 8 to learn more!

Stand Number 4

Blackrock Microsystems Europe

E-Mail: Saman@blackrockmicro.eu
Website: www.blackrockmicro.eu

Our focus at Blackrock Microsystems is helping researchers achieve excellence in neuroscience, neural-engineering and neural-prosthetics. It is easier to say than it is to do. To fully realize these aims requires two things that are rare and difficult to replicate. First, technical support for a given project must be available from well before it begins to long after it concludes. Second, whole system performance and data reliability are critical, whether for an out-of-the-box solution or fully customized system, which means any set-up is only as good as its weakest link.

Stand Number 48

Brain Vision UK Ltd

Website: http://brainvision.co.uk/

Stand Number 55

British Neuroscience Association

E-Mail: office@bna.org.uk
Website: www.bna.org.uk
Twitter: @BritishNeuro
Facebook:
https://www.facebook.com/BritishNeuroscienceAssociation

The British Neuroscience Association is the largest UK organisation representing all aspects of neuroscience from ion channels to whole animal behaviour to neuroscience applications in the clinic. We aim to promote neuroscience research, advise on issues in neuroscience, engage with the public, media and education authorities about neuroscience, and represent UK neuroscience to Government, funding agencies and many other parties. BNA members receive a range of benefits including free and reduced registration to most events and undergraduates can join the BNA from just £12 per year. The BNA is the Voice of British Neuroscience today.

Stand Number 54

British Pharmacological Society

E-Mail: info@bps.ac.uk
Website: www.bps.ac.uk
Twitter: @britpharmsoc
LinkedIn: British Pharmacological Society
Facebook: britpharmsoc

The British Pharmacological Society is the primary UK learned society concerned with research into drugs and the way they work. Our members work in academia, industry, regulatory agencies and the health services, and many are medically qualified. The Society covers the whole spectrum of pharmacology, including laboratory, clinical, and toxicological aspects.
Clinical pharmacology is the medical speciality dedicated to promoting safe and effective use of medicines for patient benefit. Clinical pharmacologists work as consultants in the NHS and many hold prominent positions in UK Universities.

Stand Number 45

Cambridge Bioscience

E-Mail: support@bioscience.co.uk
Website: www.bioscience.co.uk

Cambridge Bioscience is a leading distributor of high quality life science products, services and instruments. With a neuroscience portfolio including highly sensitive and specific beta-amyloid ELISAs, extensively validated tau antibodies, simple but effective golgi staining kits, serum-free and xeno-free neural progenitor cell expansion media and high purity neuroscience related compounds, we aim to only offer our customers exceptional quality products accompanied by friendly technical support and customer service. Please visit our stand to find out more.
Cambridge Bioscience - A Great Choice For Life Science Research.

Stand Number 40

Cambridge Electronic Design Ltd

E-Mail: Simong@ced.co.uk
Website: www.ced.co.uk
Twitter: Spike2_Signal

CED design and produce data acquisition, analysis and experimental control systems for Windows using the powerful 1401 family of laboratory interfaces. CED specialist applications include intracellular and extracellular physiology, spike shape analysis, EEG, EMG, ECG, behavioural studies, evoked response, signal averaging, spectral analysis, patch and whole cell voltage clamp systems (including dynamic clamping), teaching systems and organ bath software. Systems can also be customised by CED or the user for specific applications.

Stand Number 41

Carl Zeiss Ltd Ltd

Website:
http://www.zeiss.co.uk/corporate/en_gb/home.html

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Stand Number 13

Cell Signaling Technology

E-Mail: info.uk@neb.com
Website: www.cellsignal.com
Twitter: https://twitter.com/cellsignal
LinkedIn:https://www.linkedin.com/company/cell-signaling-technology
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Cell Signaling TECHNOLOGY

Founded by scientists in 1999, Cell Signaling Technology (CST) is a private, family-owned company with over 400 employees worldwide. Active in the field of applied systems biology research, particularly relating to cancer, CST understands the importance of using antibodies with high levels of specificity and lot-to-lot consistency. It's why we produce all of our antibodies in house, and perform painstaking validations for multiple applications. The same CST scientists who produce our antibodies provide technical support for customers, helping them design experiments, troubleshoot, and achieve reliable results. We do this because that's what we'd want if we were in the lab. Because, actually, we are.

Stand Number 35

Cellular Dynamics International

Website: http://www.cellulardynamics.com/

Cellular Dynamics international

Stand Number 1

Clever Sys Inc

E-Mail: sales@cleversysinc.com
Website: www.cleversysinc.com

Clever Sys Inc., is a bioinformatics company specializing in software and hardware for automated behavioral testing. Our video based technology provides comprehensive tools for data acquisition and analysis. Clever Sys Inc., brings behavioral testing into the twenty-first century, enhancing video tracking with our patented next generation Behavior Recognition technology.

Stand Number 31

Delta Surgical Ltd

Website: http://www.deltasurgical.co.uk/

Stand Number 9

Digitimer Ltd

E-Mail: sales@digitimer.com
Website: www.digitimer.com
Twitter:www.twitter.com/DigitimerLtd
LinkedIn: www.**linkedin**.com/company/**digitimer**-ltd
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Digitimer manufactures and distributes scientific instrumentation for the research & clinical environments. We manufacture the popular NeuroLog System, which is a modular electrophysiological system, offering extracellular, intracellular and isolated amplification, signal conditioning, electrical stimulation and pulse generating functions. We also manufacture a wide range of mains and battery powered isolated electrical stimulators for every situation. Digitimer also represents a number of companies with complementary equipment, including: AutoMate Scientific (perfusion systems), Harvard/Medical Systems (drug delivery and incubation), HEKA (patch clamp), Narishige (pipette fabrication and manipulators), Scientific Systems Design (brain slice chambers), ThorLabs (anti-vibration tables) and Quest Scientific (Humbug Noise Eliminator).

Stand Number 2

Ectron Ltd (MagVenture)

E-Mail: enquiries@ectron.co.uk
Website: www.ectron.co.uk

MagPro® is a complete line of non-invasive magnetic stimulation systems designed for clinical examinations and for research in the areas of neurophysiology, neurology, cognitive neuroscience, rehabilitation and psychiatry.
The MagPro series addresses a wide range of clinical and research applications including Motor Evoked Potentials (MEP), Transcranial Magnetic Stimulation (TMS), repetitive Transcranial Magnetic Stimulation (rTMS) and Functional Magnetic Stimulation (FMS).
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Stand Number 29

Enzo Life Sciences

E-Mail: area@enzolifesciences.com
Website: www.enzolifesciences.com
LinkedIn: https://www.linkedin.com/company/enzo-life-sciences-inc-
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Enzo Life Sciences, Inc. is organized to lead in the development, production, marketing, and sales of innovative life science research reagents worldwide. With over 30 years' experience, we are a proven leader in labeling and detection technologies in both the research and diagnostic markets. The breadth of Enzo's expertise across research disciplines from proteostasis and cell analysis, to small molecule chemistry and assay development provides a unique collection of innovative reagents and assays to monitor neural signaling networks.

Stand Number 47

FENS – Federation of European Neuroscience Societies

E-Mail: office@fens.org
Website: www.fens.org
Twitter: https://twitter.com/FENSorg
LinkedIn: https://www.linkedin.com/groups/Federation-European-Neuroscience-Societies-FENS-4075866
Facebook: https://www.facebook.com/FENSForum

Founded in 1998 at the first Forum of European Neuroscience, the Federation of European Neuroscience Societies (FENS) is the main organisation for neuroscience in Europe. FENS currently represents 42 European national and mono-disciplinary neuroscience societies with close to 23,000 member scientists from 32 European countries.

FENS promotes neuroscience research to policy-makers, funding bodies and the general public, both regionally and internationally. Hence, FENS promotes excellence in neuroscience research and facilitates the exchange and networking between neuroscientists within the European Research Area and beyond.

Stand Number 26

General Medicine Group

E-Mail: register@generalmedicinegroup.co.uk
Website: www.generalmedicinegroup.co.uk/
LinkedIn: https://www.linkedin.com/company/general-medicine-group

General Medicine Group provides the best opportunities and competitive rates for doctors and physicians across the UK. Visit stand 26 for an opportunity to talk to our expert consultants about your career options.

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Stand Number 29A

Harvard Apparatus

E-Mail: enquiries@harvardapparatus.co.uk
Website: www.harvardapparatus.co.uk

Harvard Bioscience, Inc. is a global leader in the manufacturing and distribution of solutions to advance life science research. For over 100 years, we have served the changing needs of life scientists with our expanding portfolio; including products for surgical applications, infusion systems, microdialysis, behavioral research, isolated organ and tissue bath systems. These products are sold under the brand names of Harvard Apparatus, CMA Microdialysis, Coulbourn Instruments, Panlab, and Hugo Sachs Elektronik. In 2014, Harvard Bioscience acquired two companies enhancing the neuroscience offerings, Triangle BioSystems International and Multi-Channel Systems contribute products for in-vivo neural recording and stimulation to our portfolio.

Stand Number 20

Hello Bio

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Stand Number 30

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Labtech International has been supplying innovative instrumentation and consumables with high level support for over 20 years. Labtech has partnered with Logos Biosystems to offer UK scientists state of the art cell counting and imaging instrumentation. We are proud to unveil the new iRiS™ and X-CLARITY™ instruments at the Festival of Neuroscience. The iRiS™ is a cutting edge digital cell imaging system. X-CLARITY™ uses technology licensed from Stanford University and is the world's first commercial instrument for the electrophoretic tissue clearing technique known as CLARITY™, which has revolutionised 3D brain imaging and mapping.

Stand Number 17 & 18

Lafayette-Campden Neuroscience

E-Mail: uksales@campdeninstruments.com
Website: www.campdeninstruments.com

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Human Psychophysiology with Vienna Test System, Cogniplus, physiological recording and biofeedback and a range of skill acquisition instruments.

Stand Number 3

Laser 2000 UK Ltd

E-Mail: sales@laser2000.co.uk
Website: www.laser2000.co.uk

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We lead the way in innovation by supplying state-of-the-art solutions, utilising the latest photonics and optoelectronic technologies and working only with the best manufacturers in the market.

We know that selecting the right product for your application is critical. Our highly qualified staff can work closely with you to find the optimum combination of performance, features and cost.

Stand Number 44

Leica Microsystems

E-Mail: lisa.howard@leica-microsystems.com
Website: www.leica-microsystems.com
Twitter:www.twitter.com/LeicaMmicro
LinkedIn: www.linkedin.com/company/leica-microsystems
Facebook:www.facebook.com/LeicaMicrosystems

Leica Microsystems develops and manufactures microscopes and scientific instruments for the analysis of microstructures and nanostructures. Ever since the company started as a family business in the nineteenth century, its instruments have been widely recognized for their optical precision and innovative technology. It is one of the market leaders in compound and stereo microscopy, digital microscopy, confocal laser scanning microscopy with related imaging systems, electron microscopy sample preparation, and surgical microscopes. Leica Microsystems has seven major plants and product development sites around the world. The company is represented in over 100 countries, has sales and service organizations in 20 countries, and an international network of distribution partners. Its headquarters are located in Wetzlar, Germany.

Stand Number 37

LI-COR Biosciences

E-Mail: Olivia.bauer@licor.com
Website: http://licor.com/bio/europe/

LI-COR Biosciences offers imaging platforms, analysis software, and optimized IRDye® infrared dye reagents designed to help researchers in their quest for answers.
LI-COR provides the complete solution for quantitative Western blot imaging, and a variety of other applications including tissue sections with its Odyssey® Infrared Imaging Systems, Image Studio® analysis software and unique IRDye® Infrared Dye-based antibodies and reagents.
LI-COR recently introduced the C-DiGit® Blot Scanner for chemiluminescent Western blots as an affordable digital replacement for film.
Superior small animal imaging results are achieved using BrightSite™ IRDye® Optical Probes on the Pearl® Impulse Imaging system. More information at www.licor.com/bio.

Stand Number 6

Linton Instrumentation

E-Mail: mail@lintoninst.co.uk
Website: http://www.lintoninst.co.uk/
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Linton Instrumentation is an independently owned UK company specialising in the supply, maintenance and support of leading laboratory instrumentation for the life sciences.
We supply innovative products and solutions from market leading manufacturers including Biopac Systems Inc., Cedrus, CMA Microdialysis, Columbus Instruments, CWE, Instech Laboratories, KD Scientific, m-Dialysis, Philips (Actigraphy Products), Physitemp, Primetech (iPRECIO implantable drug delivery systems), Scisense, Access Technologies, Sutter, Transonic Systems and Ugo Basile, as well as our own branded products.
Visit our stand for live demonstrations of the latest products including Biopac's new BioNomadix Logger – record exceptional quality wireless physiological signals anywhere in the world.

Stand Number 56

Lonza Cologne GmbH

E-Mail: scientific.support.eu@lonza.com
Website: www.lonza.com
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Lonza provides the pharma market with the tools that life-science researchers use to develop and test therapeutics, beginning with basic research stages on to the final product release. Lonza's bioscience products and services range from cell culture and discovery technologies for research to quality control tests and software that ensures product quality. Lonza Bioscience Solutions serves research customers worldwide in pharmaceutical, biopharmaceutical, biotechnology and personal care companies. The company delivers physiologically relevant cell biology solutions and complete solutions for rapid microbiology.

Stand Number 7

Magstim Company Ltd

Website: www.magstim.com

Magstim provides the means for neuroscientists to work with the human brain in awake subjects by manufacturing and supplying state-of-the-art clinical and research instruments. Magstim and Neurosign products cover the fields of neurology, neurophysiology, psychiatry and cognitive neuroscience as well as ENT, orthopaedic and neurosurgery.

Magstim has been at the cutting edge of transcranial magnetic stimulation (TMS) from its conception as a valuable research tool, to its coming of age as a revolutionary treatment for nerve and brain disorders such as major depressive disorder (MDD).
As the maker of the one of the most widely used TMS stimulators in the world, we are trusted by more researchers than any other manufacturer. Magstim has developed strong partnerships with other leading medical and research companies, providing solutions for research and clinical applications, such as EEG and neuronavigation devices.

Magstim maintains a strong commitment to R&D and product improvement. Collaborating with researchers in British and European major centres of expertise (as well as those in North America and Japan) ensures that Magstim remains informed about clinical and medical advances, enabling the company to develop products at the forefront of technology.

For more information visit: www.magstim.com

Stand Number 19

Millar, Inc

Website: http://millar.com/

Neuroscientists use Millar's implantable telemetry system to monitor sympathetic nerve activity, EEG, EMG, cardiovascular pressure and brain tissue oxygen in free moving rats. The reusable implants are ideal for behavioral applications using mazes and treadmills and are well-suited for long-term neural/cardiovascular studies.
The fully implantable telemeters combine Millar's solid-state pressure sensors with wireless power technology. In-vivo recharging using digital data transmission allows for continuous high-fidelity pressure measurement and neural activity monitoring. With Millar telemetry, researchers can make decisions based on exact data using a reliable and complete physiological solution.

Stand Number 39

Miltenyi Biotec Ltd

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Miltenyi Biotec provides products and services that advance biomedical research and cellular therapy. Our innovative tools support research at every level, from basic research to translational research to clinical application. Our more than 25 years of expertise includes immunology, stem cell biology, neuroscience, and cancer. Miltenyi Biotec has more than 1,400 employees in 25 countries.

Stand Number 42

MR Solutions

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MR SOLUTIONS, leader in the development of preclinical imaging solutions provides the market with innovative imaging products..
MR Solutions offers MRI superconducting magnet technology with ground breaking 3T, 4.7T and 7T, cryogen free (dry magnet) scanners along with a portfolio of preclinical PET and SPECT modules allowing real-time (simultaneous) or sequential imaging with its MRI.
The PET & SPECT modules can also be used independently of the MR system for imaging flexibility.
The development of cryogen free technology with negligible stray field make these systems compact, easy to install and with no special construction investment.
MR SOLUTIONS can also provide a conversion kit (C2P) enabling small animal imaging on a Clinical MRI system for Preclinical research.

Stand Number 33

Neurotar Oy Ltd

E-Mail: katja.karlelina@neurotar.com
Website: www.neurotar.com
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Neurotar Oy Ltd develops research devices for scientists who wish to eliminate the biases of anesthetics on brain research in rodents. Mobile HomeCage makes it possible to perform high precision tests in awake, head-fixed but otherwise unrestrained rodents and combine these tests with behavioral read-outs. We use the Mobile HomeCage for service provision to pharmaceutical industry and we have optimized it for microscopic imaging and in vivo electrophysiology (patch clamp and multichannel recordings). Other applications include intrinsic optical imaging, microdialysis, optogenetics, and voltammetry. The company is privately owned and operates from Helsinki, Finland, since 2009.

Stand Number 12

Noldus Information Technology

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Noldus Information Technology: powerful software tools, fully integrated labs, and expert consultancy.

We have been making professional tools and instruments for animal behavior research for more than 25 years. These products enable the collection, integration, analysis, management, and presentation of behavioral and other data. Our product range for neuroscience research includes EthoVision XT video tracking, The Observer XT behavior annotation, CatWalk XT footprint and gait analysis, ErasmusLadder cerebellar phenotyping, PhenoTyper home cage testing, DanioScope zebrafish embryo and larvae measurements, and DanioVision zebrafish larvae activity monitoring. Our latest new addition is UltraVox XT for ultrasonic vocalization recording and analysis.

Stand Number 12

Tracksys Ltd

E-Mail: info@tracksys.co.uk
Website: www.tracksys.co.uk

Tracksys Ltd supply behavioural research solutions to Universities and Companies across a range of disciplines including Neuroscience, Pharmacology, and Psychology. Staffed by former researchers, we work with our users to supply exactly what is needed for their research – from full laboratories to small portable recording devices. Key products we supply include:

- EthoVision XT
- The Observer XT
- CatWalk XT
- PhenoTyper
- ErasmusLadder
- DanioVision

Complete experimental setups including mazes and recording systems.

Stand Number 11

Olympus

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Olympus is the leading manufacturer of opto-digital products for medicine, science and industry. Olympus provides a comprehensive range of products for markets as diverse as manufacturing to life science research. From microscopes used for routine clinical screening to super resolution systems, these optically brilliant systems redefine the boundaries of microscopy. Whether it is through greater ergonomics, true colour reproduction or pushing resolution beyond that defined by Abbe's diffraction limit Olympus brings clarity to your unanswered cellular and sub cellular questions.

Stand Number 14

PhenoSys GmbH

E-Mail: info@phenosys.com
Website: www.phenosys.com

PhenoSys offers cutting edge technology for behavioural biology including virtual reality mazes, touchscreen chambers, animal sorters, systems for activity measurements, and automated home cages. We use RFID-technology (transponder) to provide high throughput solutions for behavioural phenotyping, brain research, and the diagnostic characterisation of animal models for translational medicine.

Stand Number 36

Plexon

Website: http://www.plexon.com/

Stand Number 24

Prior Scientific

E-Mail: uksales@prior.com
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Twitter: @PriorScientific
LinkedIn: www.linkedin.com/company/prior-scientific

Prior Scientific designs and manufactures a wide range of scientific instrumentation, specializing in microscope automation and optical microscopy. This has been the core of our business since 1919. Our experience is unrivalled and our commitment to engineering excellence is reflected in the performance and quality of our broad product portfolio. Although we offer a range of standard products, Prior also offers OEM and customised solutions tailored to your individual requirements. Many of the world's leading scientific instrumentation companies already benefit from Priors' expertise.

Stand Number 15

Rogue Resolutions

E-Mail: info@rogue-resolutions.com
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Rogue Resolutions provides fully integrated equipment solutions for those working in neuroscience, designed to comprehensively meet your needs and objectives in research and the treatment of disease.
We specialize in the fields of:

- Neuronavigation
- Neuroimaging
- Neuromodulation
- Neurosensory

We offer a comprehensive and flexible range of products, solutions and services providing coherent system solutions for all your brain research needs.
In collaboration with our manufacturing partners, and in conjunction with our research customers, we are able to remain at the cutting edge of research and product development both in techniques and technologies.

Stand Number 25

Routledge, Taylor & Francis Group

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Routledge publish a growing and successful portfolio of journals and books in neuroscience and all its related fields, including social and cognitive neuroscience, language and cognition, cognitive psychology, neurosurgery and neurogenetics, and the history and ethics of neuroscience.

Stand Number 51

Sable Systems International

E-Mail: mail@sablesys.eu
Website: www.sablesys.com

Trusted as the world leader in metabolic measurement, Sable Systems International has a 27 year reputation for innovation, expertise and scientific insight. Sable's Promethion™ Line of metabolic and behavioral phenotyping solutions is the fastest route to accuracy for behavioral and energy expenditure studies, meeting ImPRess Calorimetry and IACUC standards. Automated, high-resolution measurement of MR, RER, food and water uptake, food access control and activity monitoring in compact systems designed for workflow efficiency. Educational outreach and training is customized. Only Sable Systems spans the entire model animal range, from microbes to *Drosophila,* rodent to human. Booth # 51.

Stand Number 38

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Stand Number 34

Siemens

E-Mail: info.healthcare.gb@siemens.com
Website: www.siemens.co.uk/healthcare

Siemens Healthcare is one of the world's largest suppliers to the healthcare industry and a trendsetter in medical imaging, laboratory diagnostics and medical information technology. Siemens offers its customers products and solutions for the entire range of patient care from a single source – from prevention and early detection to diagnosis, and on to treatment and aftercare. By optimising clinical workflows for the most common diseases, Siemens also makes healthcare faster, better and more cost-effective. For further information please visit: www.siemens.co.uk/healthcare

Stand Number 43

Society for Neuroscience

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LinkedIn: https://www.linkedin.com/company/society-for-neuroscience
Facebook: https://www.facebook.com/societyforneuroscience

The Society for Neuroscience (SfN) is a nonprofit membership organization of nearly 38,000 scientists and physicians from around the world whose passion it is to study the brain and nervous system. The Society publishes *The Journal of Neuroscience*, the most-cited journal in the field, as well as the new open-access journal *eNeuro*. Embodying an emerging scientific vision that offers a new experience for authors and readers, *eNeuro* publishes high-quality, broad-based, peer-reviewed research focused solely on the field of neuroscience. Stop by stand 43 to learn about becoming a member of SfN and sharing your research with the global scientific community.

Stand Number 23

Source BioScience

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The MIT Press publishes distinguished scholarly books and journals in neuroscience and related psychological and cognitive sciences.
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Book Proposals: please contact Robert Prior, Executive Editor, The MIT Press, prior@mit.edu

Stand Number 22

The Physiological Society

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The Physiological Society brings together over 3000 scientists from over 60 countries and promotes physiology with the public and parliament. Since its foundation in 1876, it has supported physiologists by organising world-class meetings and offering grants for research, collaboration and travel. The Society publishes the latest physiological developments in its three scientific journals.

Stand Number 57

The Wellcome Trust and MRC

Careers Stand

Stand Number 5

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Stand Number 46

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Pioneer in videotracking analysis system, the Company Viewpoint exists since 25 years.

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Stand Number 58

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Stand Number 16

World Precision Instruments

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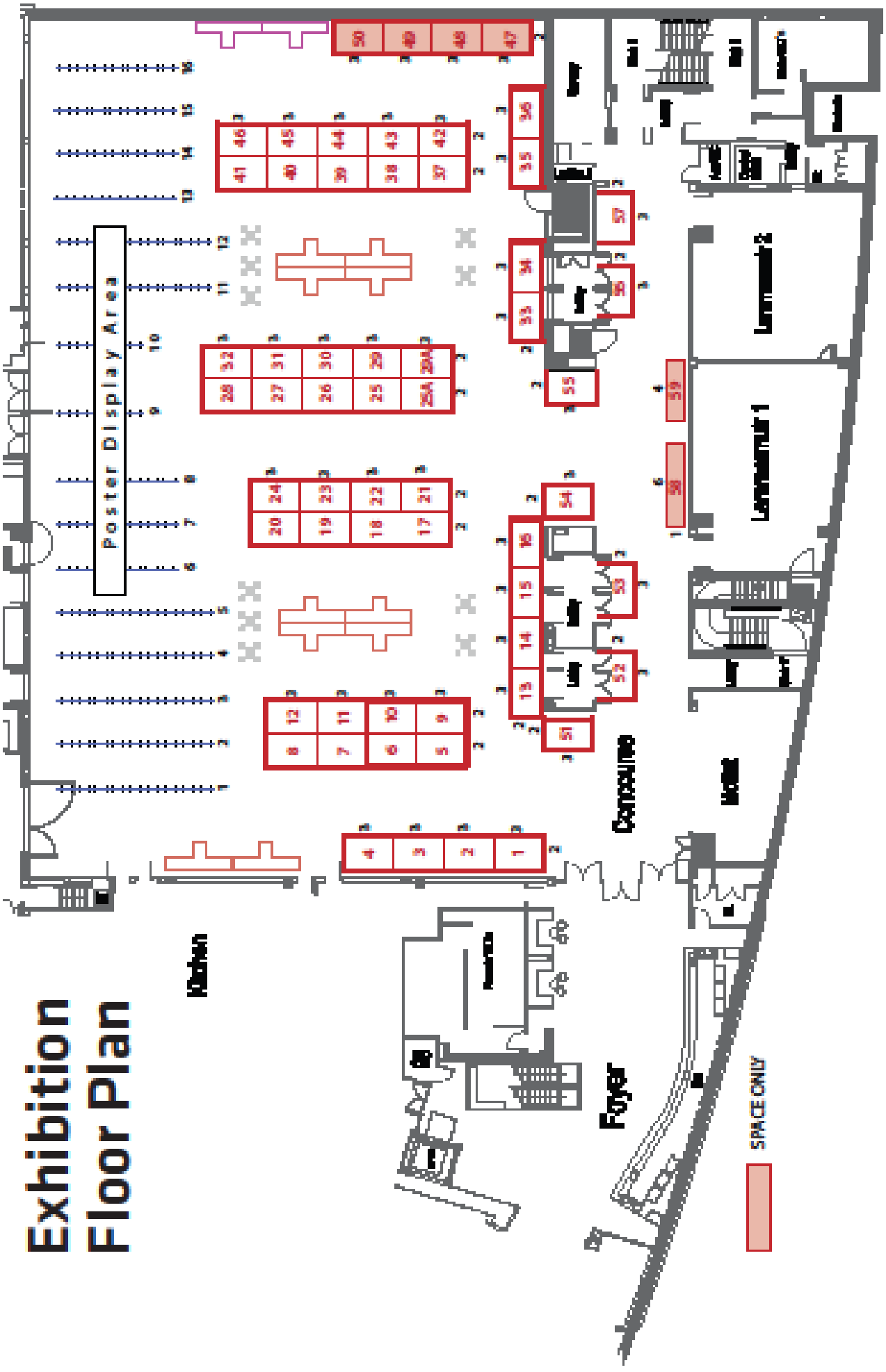
Exhibition Floor Plan

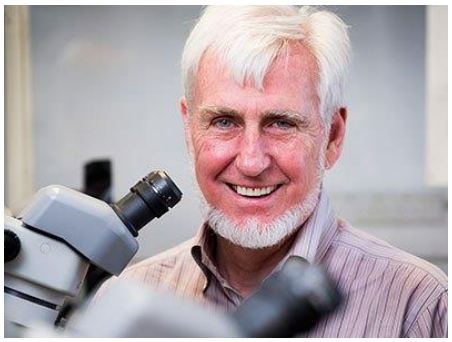


The Wolstencroft Memorial Award Lecture

John Wolstencroft was an international expert on the pharmacology of the brain. He carried out pioneering studies on chemical transmitters of brain neurone activity in 1960s. He held a personal chair in Physiology at the University of Birmingham. He was a founder member of the British Neuroscience Association and was its President from 1977-1980. John Wolstencroft's early unexpected death in 1983 led his colleagues and family to set up a fund in 1986 to support a lecture to be given by a scientist who has made an outstanding contribution to our understanding of the working of the brain. The lecture to be given biennially at the British Neuroscience Association's National meeting. The purpose of the lecture is to communicate the most exciting and important advances in brain science.

John Wolstencroft 1922-1983

The BNA is delighted that Professor John O'Keefe (pictured below) is the recipient of the 2015 Wolstencroft Memorial Award Lecture.



About the BNA

The British Neuroscience Association is the largest UK organisation representing all aspects of neuroscience from ion channels to whole animal behaviour to neuroscience applications in the clinic.

The aims of the BNA are to:

- promote neuroscience research
- organise lectures, symposia, meetings, events and reports
- advise on issues in neuroscience
- engage with the public and the media
- train neuroscientists and other neuroscience-related professionals
- represent UK neuroscience to Government, funding agencies, and science administration, regulation and standards organisations.

To achieve these aims, we:

- distribute information via the *BNA Bulletin* and the *BNA e-bulletin*
- host a **national meeting** every 2 years, publish the proceedings of that meeting and distribute them to the scientific community.
- organise a number of focused one-day **symposia** at UK universities each year
- contribute to **training courses** for young neuroscientists
- award **bursaries** to students and young postdoctoral workers to enable them to attend BNA, Federation of European Neuroscience Societies (FENS) and other affiliated society meetings
- award graduate and undergraduate **prizes**, and special awards to senior neuroscientists and to lay people who have contributed significantly to neuroscience research.
- negotiate special discount prices of relevant books and journals, and offer free online access to the *European Journal of Neuroscience*.
- organise **public lectures** and events
- talk to the **media** about neuroscience research and related issues
- represent UK neuroscience and participating in national and international **science policy** matters

Join the BNA

The BNA is a growing learned society with around 1800 members. These are some of the benefits you will receive by becoming a member of the BNA:
FREE registration for most BNA events.

- Reduced registration fees for many other events.
- Student prizes and bursaries for BNA and FENS meetings.
- Reduced registration fees and FENS sponsored abstract forms for the Society for Neuroscience annual meeting.
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