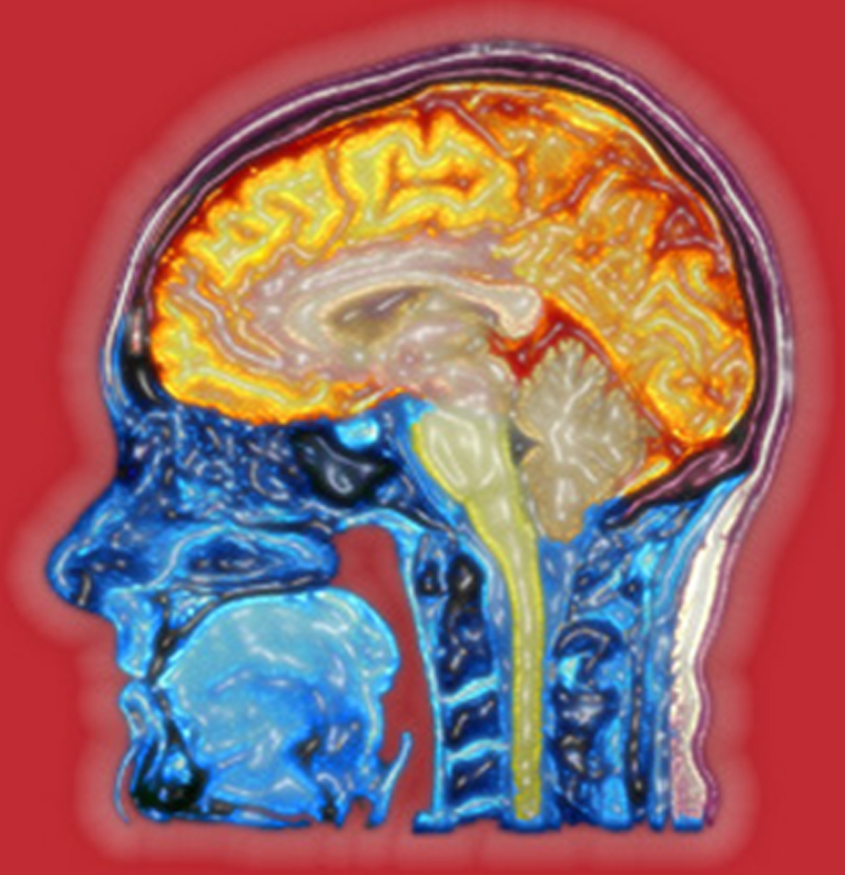
2013 BNA FESTIVAL OF NEUROSCIENCE

British Neuroscience Association

BNA2013:

Festival of Neuroscience

7th–10th April 2013 – The Barbican Centre, London UK



conference e-programme

Supported by wellcome trust

www.bna.org.uk

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British Neuroscience Association

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BNA2013 ABSTRACT REVIEW PANEL

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

John Aggleton (Cardiff University)
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BNA2013 PARTNER SOCIETIES

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

Association of British Neurologists
British Neuro-Oncology Society
British Neuropsychiatry Association
British Psychological Society
British Society for Immunology
European Dana Alliance for the Brain
International Neuroethics Society
Society for Endocrinology
UK Adult ADHD Network
British Association for Psychopharmacology
British Neuropathological Society
British Pharmacological Society
British Society for Developmental Biology
British Society for Neuroendocrinology
Experimental Psychology Society
Neuroscience Ireland
The Physiological Society

The Idea for BNA2013: Festival of Neuroscience

The concept of a meeting involving multiple neuroscience and neurological societies was initially put to the then Directors of the British Neuroscience Association (BNA) early in 2010 by Professor Trevor Robbins CBE FRS following discussions with various parties, including Dr John Williams (Wellcome Trust) and Dr Sarah Caddick (Gatsby Charitable Foundation). Later in 2010 the Scientific Advisory Board of the BNA – a collection of 30 senior academics and corporate scientists – enthusiastically endorsed the idea of holding a '*Festival of Neuroscience*' in the slot normally occupied by the BNA's biennial meeting in 2013, at a major venue in central London. A sub-committee of the BNA identified the Barbican Centre as a suitable location, capable of hosting 2000+ delegates in an iconic building, with good access and facilities, with the capacity to run multiple symposia in parallel, supported by a highly professional team based at the Centre.

The Strategic Need for a *Festival of Neuroscience*

Neuroscience research in its broadest sense is highly fragmented within the UK, with in excess of 140 learned societies and not-for-profit (NFP) groups having a significant interest in neuroscience, and this fact is well recognised. Over the years, the BNA – an organisation which has tried to unite and intercalate molecular and cellular neuroscience with its computational, systems, behavioural and cognitive branches – has attempted to build bridges with the clinical disciplines, to promote a translational approach at many of its meetings. This has been partially successful, but the ambition to hold a meeting with several partner societies representing a diverse range of scientific interests had not been attempted before.

The governments of developed and developing countries are waking up to the harsh truth that average population age is advancing, and the BNA has made representations at national level that a significant increase in funding is essential if the World is to cope with an increasing incidence of brain disorders. Indeed, a recent report by ECNP and EBC has suggested that 38% of the European population – some 168 million individuals – suffer from one or more nervous system disorders. Whilst the BNA will continue to represent the demand for the UK government to invest in neuroscience research in the coming years, it is clear that the UK neuroscience community needs to start to co-operate in a more cohesive way, and the *Festival of Neuroscience* is one visible way for that to happen. The BNA is very grateful to the societies who have partnered with us to create this meeting and to other learned bodies and professional organisations who have offered sponsorship.

It would be simpler to create purely a scientific programme for the '*Festival*', but it is imperative for the neuroscience community to engage with the public, and to inform them about the need to accelerate, not withdraw, neuroscience research funding. During 2011 discussions were held with the Wellcome Trust and the Barbican Centre Creative Arts Team with a view to including 'brain and mental health' events in the artistic programme for 2013. From these seeds, **WONDER: ART AND SCIENCE ON THE BRAIN** was developed, and our thanks go to all the people who have made this exciting venture happen.

Message from the BNA President

Professor David Nutt DM FRCP FRCPsych FSB FMedSci
Edmond J Safra Professor of Neuropsychopharmacology
Imperial College London

Dear Speakers and Delegates

Welcome to the BNA2013: Festival of Neuroscience!

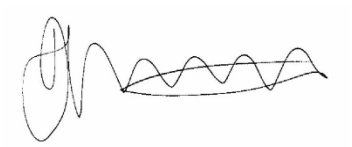
The Festival of Neuroscience will be a unique experience for us all with an outstanding line up of speakers presenting the latest developments in research into the brain and central nervous system, in parallel with public events and a trade exhibition. And all this is under one roof, here at the Barbican Centre, one of Europe's leading arts centres.

The BNA has 17 partners in the Festival, organisations with an interest in brain research. It has been supported by a large number of sponsors. We are enormously grateful to our sponsors and our partners.

The British Neuroscience Association www.bna.org.uk is the largest UK organisation representing all aspects of neuroscience from ion channels to behaviour to clinical application. The Festival is the ideal opportunity to reach professionals in many other areas: immunology, psychology, psychiatry and medical care, for example.

The **BNA2013: Festival of Neuroscience** marks a turning point for the BNA. Neuroscience in the UK is leading the way in understanding how the brain and nervous system function in health and disease, bringing better diagnosis and treatment of brain disorders. These are exciting times for us, but the challenges have never been greater.

David Nutt



BNA President

Message from the Programme Committee Co-Chair

Dr Narender Ramnani
Reader, Department of Psychology
Royal Holloway, University of London

Dear Participants

It is my pleasure to extend a very warm welcome to the **BNA2013: Festival of Neuroscience**, the 22nd

National Meeting of the British Neuroscience Association.

This is the first time the BNA has held its national meeting in London and we have engaged much larger sectors of the UK neuroscience research community than before. We have speakers and delegates from over 347 institutions across the UK, and from over 40 countries. The scientific programme is organised into eight broad research themes, and is twice the size of previous BNA national meetings. The Plenary lectures will be delivered by internationally leading scientists. Around 250 speakers will contribute to 56 scientific sessions. Over 750 abstracts will contribute to the three poster sessions. On behalf of the BNA I would like to thank them all for their participation.

The scientific programme has been put together with the invaluable help of several individuals and organisations. The Festival is in partnership with 17 other organisations and learned societies with related interests and they have also shaped the scientific content. The Programme Committee (see page 2) has provided guidance from the earliest stages, and the Abstract Review Group (see page 2) has worked with us to review all the poster abstracts. Our thanks go to them as well. Support from our sponsors and exhibitors makes this meeting possible. Please do visit their stands.

I also want to extend my personal thanks the Organising Committee (Ian Varndell, Elaine Snell and Louise Tratt). This meeting has only been possible because of their exceptional dedication, careful attention to detail, and their planning skills.

We hope you enjoy **BNA2013: Festival of Neuroscience**.

Narender Ramnani
Programme Committee Co-Chair and BNA Meetings Secretary

Partner Listing

The BNA extends its grateful thanks to the following professional bodies that have assisted with the creation of the **BNA2013 : Festival of Neuroscience**.

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

The Association of British Neurologists was founded in 1932. The aim of the Association of British Neurologists is to improve the health and well-being of people with neurological disorders by advancing the knowledge and practice of neurology in the British Isles.

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

The BAP was founded in 1974 with the aim of bringing together academics and health service and industry professionals involved in the study of psychopharmacology. The Association arranges scientific meetings, fosters research and teaching, encourages publication of research results and provides guidance and information to the public on psychopharmacology matters.

British Neuro-Oncology Society
http://www.bnos.org.uk/

British Neuro-Oncology Society

The British Neuro-oncology Society promotes excellence in basic science research, education, and clinical management of all tumours affecting the central nervous system in adults and children, to improve patient treatment and outcomes. BNOS draws its membership from neuroscientists, neurosurgeons, medical oncologists, radiotherapists, neuropathologists, neurologists, nurses and other healthcare professionals.

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

The BNS celebrated its 60th anniversary in 2010 and continues to provide a friendly and active forum for both clinical and experimental neuropathology. Our membership is not geographically restricted and we welcome members from all continents. Through our regular meetings, the Journal, and educational activities we are bringing people together to understand diseases of the nervous system.

British NeuroPsychiatry Association
http://www.bnpa.org.uk/

The British NeuroPsychiatry Association (www.bnpa.org.uk) is the leading UK body for academic and professional clinicians working at the interface of the clinical neurosciences and psychiatry. We aim to improve healthcare for people with neuropsychiatric disorders by increasing, integrating, and disseminating understanding of the relationships between brain function and human behaviour.

British Pharmacological Society
http://www.bps.ac.uk

The BPS has, at its heart, the development and promotion of pharmacology and of those who are training and working in the field. With over 3000 members from 60 countries around the world, we are a truly international organization.
We cover the whole spectrum of pharmacology, including laboratory, clinical, and toxicological aspects and support our members at work in academia, industry and the health service.

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

The British Psychological Society, incorporated by Royal Charter, is the learned and professional body for psychologists in the United Kingdom, with a total membership of just over 50,000. The Society provides and disseminates evidence-based expertise and advice, engages with policy and decision makers, and promotes the highest standards in learning and teaching, professional practice and research.

British Society for Developmental Biology
http://www.bsdb.org/

The UK society promoting developmental biology. The British Society for Developmental Biology (BSDB) is the only UK academic society that supports everyone with an interest in Developmental Biology and the related field such as Stem Cell biology, Regeneration and Evolution. We have more than 1,000 members, including researchers at all levels, lecturers and students.

British Society for Immunology
http://immunology.org/

The BSI is one of the oldest, largest, and most active, Immunology societies in the world and is the largest in Europe. Our members are based all over the world, with the majority working in Britain. The BSI's main objective is to promote and support excellence in research, scholarship and clinical practice in immunology for the benefit of human and animal health and welfare. The BSI seeks to help British Immunology accomplish the highest possible goals.

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

The British Society for Neuroendocrinology (BSN) is a scientific society that promotes research and learning into the interplay between the endocrine and nervous systems that control so many important body processes. The ultimate aim is to allow collaboration between basic and clinical research to provide therapies for the many neuroendocrine diseases and disorders.

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

The European Dana Alliance for the Brain (EDAB) is an organization of more than 250 eminent brain scientists, including five Nobel laureates, from 32 countries. Launched in 1997, and modeled on the US-based Dana Alliance for the Brain Initiatives, EDAB is committed to enhancing the public's understanding of why brain research is so important

Experimental Psychology Society
http://www.eps.ac.uk/

The EPS was founded in 1946, to facilitate research in experimental psychology, and scientific communication among experimental psychologists and those working in cognate fields. Based in the UK, it has members in Europe and elsewhere overseas. Information about the EPS and its history can be found http://www.eps.ac.uk/index.php/about. Application for membership may be found http://www.eps.ac.uk/index.php/info-for-non-members.

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

The International Neuroethics Society is an interdisciplinary group of scholars, scientists, clinicians and other professionals who share an interest in the social, legal, ethical and policy implications of advances in neuroscience.

Neuroscience Ireland
http://neuroscienceireland.com/

Neuroscience Ireland is Ireland's national neuroscience society. The aim of the society is to advance research and education in the neurosciences in Ireland, and to represent Irish neuroscience researchers both nationally and internationally through organization of meetings, workshops, advocacy events and provision of travel and other support to members.

The Physiological Society
http://www.physoc.org

The Physiological Society brings together over 3000 scientists from over 60 countries. Since its foundation in 1876, its Members have made significant contributions to our knowledge of biological systems and the treatment of disease. We promote physiology and support those working in the field by organising world-class scientific meetings, offering grants for research, collaboration and international travel, and by publishing the latest developments in its two leading scientific journals, The Journal of Physiology and Experimental Physiology and our newly established Open Access Journal, Physiological Reports; in collaboration with the American Physiological Society. The Society also runs events for the general public on how physiology relates to everyday life, and for students who may be considering physiology as a career.

Membership is available for all career stages, from undergraduate level to senior level scientists.

Society for Endocrinology

http://www.endocrinology.org/

The Society for Endocrinology is one of the world's leading charities dedicated to the promotion of better public health. We exist to advance the pace of scientific and clinical education, medical practice and research to shape the future of endocrinology. Our vision is to be a leading global authority on hormones.

UK Adult ADHD Network

http://www.ukaan.org/

The UK Adult ADHD Network (UKAAN) was established in March 2009 to provide support, education, research and training for mental health professionals working with adults with Attention Deficit Hyperactivity Disorder (ADHD). UKAAN was founded by a group of experienced mental health specialists who run clinical services for adults with ADHD within the National Health Service.

Festival Sponsor Listing

MAIN SPONSOR

Wellcome Trust
www.wellcome.ac.uk

Supported by wellcome trust

The Wellcome Trust is a global charitable foundation dedicated to achieving extraordinary improvements in human and animal health. It supports the brightest minds in biomedical research and the medical humanities. The Trust's breadth of support includes public engagement, education and the application of research to improve health. It is independent of both political and commercial interests.

The Wellcome Trust has partnered with BNA and Barbican to programme Wonder: Art and Science on the Brain, a series of events to light up the mind, taking place around BNA 2013: Festival of Neuroscience. www.barbican.org.uk/wonder<http://www.barbican.org.uk/wonder

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BRONZE SPONSORS

Neuron Experts
www.neuronexperts.com

neuron experts

Neuron Experts is a Contract Research Organization (CRO) specialized in the study of neuro-active compounds. The company uses its own tests based on primary neuronal cell cultures modeling neurodegenerative diseases.

Sigma Life Science
http://www.sigmaaldrich.com/life-science

SIGMA® Life Science

We're here to provide you with the inspiration and resources you need to make the critical connections to help you stay on the leading edge of neuroscience research. Our neuroscience products range from standard biochemical reagents to the latest , cutting edge research tools, backed by unrivalled scientific knowledge and the best possible service. See advert. page 18

Hitachi Medical Systems UK Ltd
http://www.hitachi-medical-systems.co.uk/

Hitachi Medical Systems is a world leading imaging company and the first choice supplier of fNIRS systems globally with over 100 installations and more than 10 years experience in neuroimaging. The Hitachi ETG-4000 Optical Topography System is a fully integrated unit incorporating intuitive and user-friendly measurement and analysis software for an all-in-one solution for functional brain imaging. The fNIRS imaging modality is excellent for observing brain activity in the cerebral cortex of both adults and infants and can be used as either an alternative or an accompaniment to other modalities including MRI, EEG, TMS and eye tracking systems. At Hitachi we pride ourselves in working closely with our customers to form intelligent and mutually-beneficial partnerships providing excellent commitment and service. For more information on our range of products or to discuss how we can work with you; please contact Dr Christien Phillips (T: 0844 800 4294; email: c.phillips@hitachi-medical-systems.com) or visit us at stand 57 in the exhibition area.
See advert. page 18

BBSRC
www.bbsrc.ac.uk

BBSRC invests in world-class bioscience research and training on behalf of the UK public. Our aim is to further scientific knowledge, to promote economic growth, wealth and job creation and to improve quality of life in the UK and beyond.
Funded by Government, and with an annual budget of around £500M (2012-2013), we support research and training in universities and strategically funded institutes. BBSRC research and the people we fund are helping society to meet major challenges, including food security, green energy and healthier, longer lives. Our investments underpin important UK economic sectors, such as farming, food, industrial biotechnology and pharmaceuticals.
For more information about BBSRC, our science and our impact see: www.bbsrc.ac.uk.
See advert. on page 18.

RWD Life Science Co,Ltd
http://www.rwdstco.com/

RWD Life Science Co., Ltd, since its establishment in 2002, it has been dedicated to being an international leading manufacturer for life science research.
Products and solutions:
Stereotaxic Instruments and Accessories
Anesthesia machine
Syringe Pumps
Microdialysis SystemCannula System
Surgical Instruments

FESTIVAL SPONSORS

Magstim
http://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 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.

Laserglow Technologies
www.laserglow.com

Laserglow Technologies (Toronto, Canada) provides a wide variety of solid-state laser devices and accessories, including laboratory and OEM lasers for the scientific and industrial community. Choose from over 60 wavelengths from 266-2200 nm, and a variety of options including low-noise, q-switched, SLM, fiber coupling, multi-wavelength output, and more.

Lilly
www.lilly.co.uk

Lilly UK provides research and development, manufacturing and commercial operations on behalf of Eli Lilly & Company a major US pharmaceutical manufacturer. As one of the top UK pharmaceutical companies, we are dedicated to creating and delivering innovative pharmaceutical health care solutions that enable people to live longer, healthier and more active lives.

Lilly's research priorities are aligned with significant UK health needs including diabetes, heart disease, mental health and cancer. We focus on developing personalised, tailored therapies, using the latest scientific advances.

Blackrock Microsystems
www.blackrockmicro.com

Founded by researchers, Blackrock Microsystems designs, builds, and manufactures quality driven, flexible, electrophysiology equipment to neurophysiology researchers. Built on the foundation of research innovation and application, our goal is to improve quality of human health by advancing researcher information of behavioral, neurodegenerative diseases and disorders, Brain Machine Interface (BMI), ophthalmology, and cardiology.

Medical Research Council
www. mrc.ac.uk

The Medical Research Council is a publicly-funded organisation that supports research across the spectrum of medical sciences. It receives funding from UK Government through the Department for Business, Innovation and Skills and works closely with other stakeholders to identify and respond to the UK's health needs. In 2010/11, the MRC spent £797.7 million on research.

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

The Biochemical Society exists to promote the advancement of the molecular biosciences and is the largest discipline-based learned society with over 6000 members. We achieve our mission through our publications, scientific meetings, educational activities, policy work, awards and grants. We will be showcasing ASN Neuro (www.asnneuro.org), a gold open access publication.

Anatomical Society
http://www.anatsoc.org.uk

The Anatomical Society (AS), founded in 1887, is a learned society with charitable status. Its aims are to promote, develop and advance research and education in all aspects of anatomical science. AS achieves these aims by organising scientific meetings; publishing the *Journal of Anatomy* and *Aging Cell*; making annual awards of PhD studentships, grants and prizes.

The majority of our Members are engaged in research and teaching in Higher Education. They work across a broad spectrum of subject areas within the anatomical sciences, including morphological aspects of cell biology, neuroscience, physical anthropology, palaeoanthropology, biomechanics, bioengineering, pathological and forensic anatomy, embryology, medical, dental and veterinary anatomy. The Anatomical Society is keen to recruit students, young researchers, teaching fellows and clinicians with an interest in anatomy.

Nature Reviews Neuroscience
http://www.nature.com/nrn/

Nature Reviews Neuroscience features reviews, opinion articles and the latest research news. The journal aims to cover the breadth and depth of modern neuroscience by providing an authoritative, accessible, topical and engaging first port of call for scientists who are interested in this field.

Imanova
http://www.imanova.co.uk/

Imanova is an innovative alliance between the UK's Medical Research Council and three world-class London Universities: Imperial College, Kings College and University College.
Established in April 2011 as an independent company, Imanova and its partners bring together a breadth and depth of knowledge and expertise that will drive research and innovation in imaging sciences. Imanova will have a real impact on human health and the understanding of disease.

Imanova now owns and manages the renowned Clinical Imaging Centre (CIC) located at Imperial College London's Hammersmith Hospital campus. This state of the art facility was developed by former owner GlaxoSmithKline, and has benefitted from £47million of investment in equipment and infrastructure since opening in 2007.

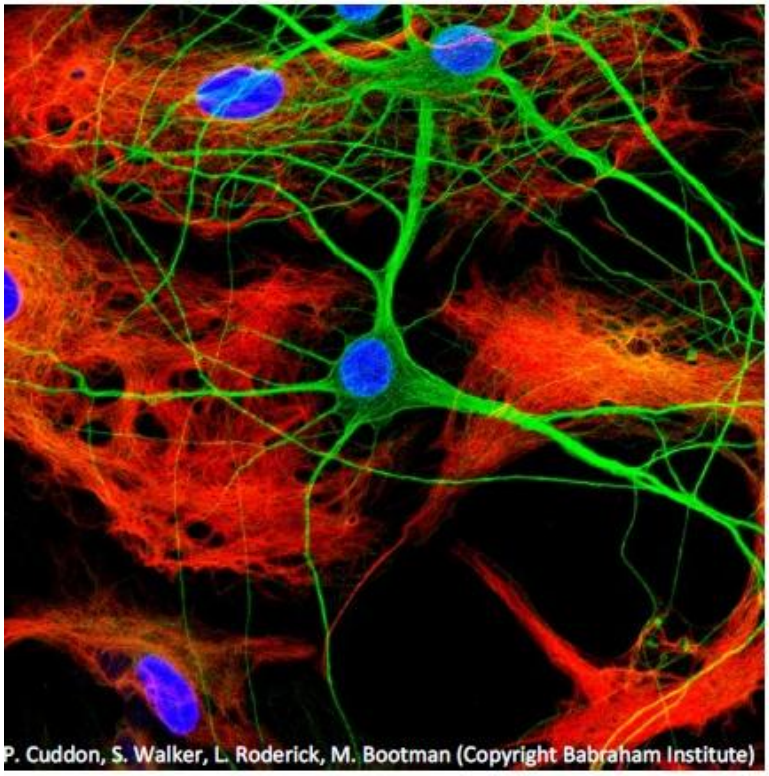
Lundbeck Foundation

http://www.lundbeckfoundation.com/

The Lundbeck Foundation is a commercial foundation that is striving to significantly improve people's health and lives by supporting research at the highest level within biomedicine and the natural sciences and with a connection to Denmark. Focus areas for funding are on research into neuroscience, psychiatry and allergology/immune modulation. The Foundation particularly aims to support younger researchers and the internationalization of research.

The Lundbeck Foundation's support of scientific activities takes place mainly through the financing of concrete scientific projects. It grants a number of stipends and fellowships and supports education in biomedical and natural sciences. Geographically, research in Denmark receives the highest priority, though it may be in connection with international collaborative research projects.

In 2010, the Lundbeck Foundation established the *Grete Lundbeck European Research Foundation* with the aim of rewarding outstanding European brain research and thereby strengthen Danish brain research. The Brain Prize of € 1 million was awarded to three Hungarian brain researchers in 2011, Professors Péter Somogyi, György Buzsáki and Tamás Freund. In 2012, it was awarded to Professors Karen Steel and Christine Petit, a British and French researcher, respectively, both working on the genetic and the molecular background for deafness.



General Information

Access – Information for disabled visitors
The Main entrance at Silk Street is ramped and lifts give access to all levels. All venues have seating for wheelchair users - please inform us of any access requirements on booking. There are three wheelchairs for visitors' use, subject to availability; these can be pre-booked by calling the Box Office on 020 7638 8891. Assistance dogs may be taken into the auditoria or left with a member of staff. Adapted WCs are provided on Levels minus 2, minus 1, G, 1, 2, 3 & 4.
Should you require additional assistance, please let registration know for us to action accordingly.

Additional Meetings
A number of additional meetings will take place during the Festival. If you are attending an additional meeting, your meeting organiser will be aware of the venue however, if you are unsure please ask a member of the event team who will be more than happy to assist you.

Attendee List
The attendee list will be emailed to you in advance. This will include the name, organisation and country of all participants pre-registered for the BNA2013:Festival of Neuroscience.

Car parking
Barbican car parks operate a pay-on-foot system.
Advanced bookings: Book online now (reduced booking fee on weekdays) or *via* the Box Office on 020 7638 8891.

After booking, you will be sent a parking voucher. This will arrive with your event tickets or held at the Box Office for collection. When you arrive at the Barbican car parks, take an entry ticket from the entrance column and park as normal. At some point during your visit, exchange your parking ticket for an exit voucher. You can obtain your exit voucher at the following points: Both car park kiosks, Cinema 1 foyer - Level minus 2, Box Office - Level minus 1, Advance Box Office - Level G, Silk Street Reception - Level G, Barbican Art Gallery - Level 3.

Paying on the day: Barbican car parks operate a pay-on-foot system. For card payments, instead of taking an entry ticket, simply insert your card into the barrier on entry and again on exit. Your card will automatically deduct the correct amount.
Opening Times: Open daily: 6am – midnight.
Restrictions: Car park height restriction: 6' 1" / 1.85m.
Accessible parking: Blue badge holders can obtain a free parking voucher by presenting their blue badge at the Box Office/ticket desks. Wider accessible bays can be found in Car Parks 3 and 5. These spaces can be booked by calling the Box Office on 0845 120 7500.

Catering
If you have purchased lunch you will be issued with a voucher for each relevant day. Lunch, along with teas and coffees, is served in Exhibition Hall 2 Sunday to Tuesday, and in the Foyer on level minus 1 on Wednesday.

Cloakrooms
A free cloakroom service is available immediately prior to the conference. The main cloakroom on the Stalls floor (Level -1) is open from first thing in the morning until 30 mins after the event.
For your comfort and safety, all large bags and packages are required to be deposited in our cloakrooms before taking your seat.

Conference hours
Sunday – 10:15 am to 8 pm
Monday – 08:30 am to 9 pm
Tuesday - 08:30 am to 9 pm
Wednesday – 08:30 am to 5:40 pm

Directions to the venue
The nearest tube stations are Barbican (Hammersmith & City, Circle and Metropolitan lines) Moorgate (Hammersmith & City, Circle, Metropolitan and Northern lines) and St Pauls (Central Line). The Barbican is signposted from each.

Bus Route 153 stops close to the Barbican in Chiswell Street. Starting from outside Liverpool Street Station, it runs to the Barbican, Angel and Finsbury Park. Other services running near the Barbican are as follows: 8, 11, 23, 26, 35, 42, 43, 47, 48, 55, 56, 76, 78, 100, 133, 141, 149, 172, 214, 242, 243, 271, 344 (7 days a week); 4, (Mon-Sat); 21, 25, 521 (Mon-Fri).

To help plan your journey to the venue we recommend you use the Transport for London website www.tfl.gov.uk.

Exhibition
The exhibition is located in Exhibition Hall 2 and will be open to delegates during the following times:

Sunday 7th April:	08:30 – 20:00
Monday 8th April:	08:00 – 18:00
Tuesday 9th April:	08:00 – 15:00

Filming and recording
Photography, filming and recording will be permitted in the official press conferences.
They will be permitted in a designated, general area of the conference centre, but are subject to authorisation from by the Press Office. They are strictly forbidden in other areas including the scientific sessions, unless prior permission has been obtained. Anyone found using mobile devices or cameras for filming and photography in these areas will be asked to leave the conference. Please contact the Press Office, in the Fountain Room, for further information.

Final Programme, Abstract Book and Itinerary Planner
The final e-programme and abstract e-book are available on the conference website and will be emailed to you in advance of The Festival.

Please use the itinerary planner www.bna2013.com/291592 to search through abstracts and plan your time at the meeting.

Citations
The BNA Abstracts have an ISSN number (ISSN 1345-8301 2013) and can be cited in the scientific literature.

Citation style for a poster abstract in the Abstracts e-Book:
British Neurosci. Assoc. Abstr., Vol 22, PX-X-000', 2013
(' PX-X-000' should be substituted for the poster reference)

Internet Access
Internet access will be available via Wi-fi throughout both the Barbican Centre and the Exhibition Hall.
In the Barbican Centre 'The Cloud' is available throughout and can be accessed following a very quick registration process.
In the Exhibition Hall a wireless network will be made available to delegates; the network name is BNAFestival2013, no password is required.

Luggage Storage and Cloakroom
A free cloakroom service is available immediately prior to the conference. The main cloakroom on the Stalls floor (Level minus 1) is open from first thing in the morning until 30 minutes after the event.
For your comfort and safety, all large bags and packages are required to be deposited in our cloakrooms before taking your seat.

Onsite Assistance
The BNA Festival Organisers have arranged for an event team to help you onsite. Identified by a sash they will be able to help you with your enquiries and finding your way around the venue.

Poster Presentations
Poster presentations will take place in Exhibition Hall 2 on both floors. The poster numbers can be checked in the abstract book. A different set of posters will be displayed on Sunday, Monday and Tuesday.
Poster presentations will take place around lunch-time on each day.

Public Festival
A public festival, organised by the Wellcome Trust and entitled **Wonder: Art and Science on the Brain** is running at the Barbican from 2nd March to 10th April, the last day of the Festival. For more information please visit http://www.barbican.org.uk/wonder.

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

Registration
All attendees should register on arrival to collect their badge and conference pack from the registration area. This is located on level minus 1 (Stalls) of the Barbican and will be open during the following hours.

Registration Opening Hours

Sunday 7th April:	08:00 – 19:00
Monday 8th April:	07:15 – 17:30
Tuesday 9th April:	08:00 – 18:00
Wednesday 10th April:	08:00 – 16:45

Attendees should note that they are requested to wear their badge throughout the meeting and will only be admitted to the lecture halls if they are wearing their badge. Lost or mislaid badges should be reported immediately to the registration desk. Please note replacement badges may not be available immediately.

Speakers must register in the Speaker preview room on arrival to collect their delegate badge and conference pack from the registration area.

Speaker preview room is located in the Lounge West Upper (to the right the cloakroom) on level minus 1 of the Barbican and will be open during the following hours.

Registration Opening Hours

Sunday 7th April:	08:00 – 19:00
Monday 8th April:	07:15 – 17:30
Tuesday 9th April:	08:00 – 18:00
Wednesday 10th April:	08:00 – 15:00

Security

Please help us by wearing your badge at all times and by not leaving unlabelled packages or luggage unattended. Delegates should note that they are responsible for their own belongings and that the conference organisers cannot accept any responsibility for lost items.

Special Requirements

Please ensure you have advised the Conference Office **in advance** of any requirements such as dietary needs, assisted access, signers, etc., in order that we can make provision for you. All meeting rooms have disabled access.

Venue

All meetings will be held at the Barbican, Silk Street, London, EC2Y 8DS. A map of the local area together with directions can be viewed here.

Programme at a Glance

SUNDAY 7th APRIL 2013

Room Name	Barbican Hall	Cinema 1	Garden Rm	Frobisher Auditorium 1	Frobisher Auditorium 2	Frobisher Room 1	Frobisher Room 4
Location	*-1*	*-2*	*3*	*4*	*4*	*4*	*4*
10:00 - 10:15	Welcome and introduction to **BNA2013: Festival of Neuroscience**						
10:15 - 11:10	Plenary 1: Understanding the genetics of deafness using mouse mutants ***Karen Steel*** *Chaired by David Nutt*						
11:10 - 11:30							
11:30 - 13:30	Symposium 1: Molecular pathology of neurodegenerative disease and aging and MRC Brain Bank	Symposium 2: Do glial cells regulate the balance between inhibition and excitation?	Symposium 3: Hormonal regulation of synaptic function in health and disease	Symposium 4: Epigenetics in neuroscience: Neuroepigenetics - from development to disease	Symposium 5: Treating depression with antidepressants: Where are we now and where are we going?	Symposium 6: The plasticity of the self	Symposium 7: Pain

BNA Session

SUNDAY 7th APRIL 2013

Room Name	Barbican Hall	Cinema 1	Garden Rm	Frobisher Aud. 1	Frobisher Aud. 2	Frobisher Rm. 1	Frobisher Rm. 4
Location	*-1*	*-2*	*3*	*4*	*4*	*4*	*4*
14:30 - 14:45				Session 11 Workshop 1: New Analysis Tools in Human Neuroimaging			
14:45 - 15:15							
15:15 - 17:15	Symposium 8: The multi-faceted NMDA receptor: From cradle to grave	Symposium 9: Early life stress and its long-term effects - experimental studies	Symposium 10: Visual Ecology		Symposium 12: Stroke and inflammation	Symposium 13: Pharmacology of sleep and its circadian organisation: From cells to behaviour	Symposium 14: Re-engineering and repairing the damaged spinal cord: Much more than 'walking again'
17:15 - 17:20							
17:20 - 17:30							
17:30 - 18:00	Plenary 2: Quantitative analysis of the dynamics of signalling and transcription in single cells and tissues ***Michael White*** *Chaired by Ashley Grossman*						
18:00 - 18:25		Screening: Friend without a face					
18:30 - 19:00	Marc Abrahams						
19:00 – 20:00							

BNA Session

Wonder: Art and Science on the Brain

MONDAY 8TH APRIL 2013

Room Name	Barbican Hall	Cinema 1	Garden Rm	Frobisher Aud. 1	Frobisher Aud. 2	Frobisher Rm. 1	Frobisher Rm. 4
Location	*-1*	*-2*	*3*	*4*	*4*	*4*	*4*
08:30 - 09:30	Plenary 3: Imaging pain, relief and altered states of consciousness in the human brain ***Irene Tracey*** *Chaired by Steve McMahon*						
09:30 - 10:15							
10:15 - 12:15	Symposium 15: LTP: Still exciting neuroscience after 40 years	Symposium 16: Development of the nervous system: From molecular pattern to circuit formation	Symposium 17: Auditory controls	Symposium 18: Impulsivity, compulsivity and habit formation	Symposium 19: Visual Processing of Dynamic Natural Scenes: A cross disciplinary perspective	Symposium 20: Huntington's Disease	Session 21 Workshop 2: Ultra-High Field MRI - State of the Art
12:15 - 12:30							
12:30 - 13:30		UKABIF					

BNA Session
Additional Meeting

MONDAY 8TH APRIL 2013

Room Name	Barbican Hall	Cinema 1	Garden Rm	Frobisher Aud. 1	Frobisher Aud. 2	Frobisher Rm. 1	Frobisher Rm. 4
Location	*-1*	*-2*	*3*	*4*	*4*	*4*	*4*
14:15 - 16:15	Symposium 22: Human-induced pluripotent stem cells for nervous system disease modelling and development of new therapeutics	Symposium 23: The neural basis of social behaviour	Symposium 24: Computational audition	Session 25 Workshop 3: Transcranial Stimulation of the Conscious Brain	Symposium 26: Somato-axonal computation of neurotransmitter release	Symposium 27: Epilepsy	Symposium 28: The development of self-regulation
16:15 - 17:00							
17:00 - 17:30	Plenary 4: CNS White Matter: The role of neurotrans-mitter signalling to oligodendrocytes and their precursors in health and disease ***David Attwell*** *Chaired by Jonathan Ashmore*						
17:30 - 18:00							
18:00 - 19:30							
19:30 - 21:00	Public Lecture *Ruby Wax*						

BNA Session

Wonder: Art and Science on the Brain

TUESDAY 9th APRIL 2013

Room Name	Barbican Hall	Cinema 1	Garden Rm	Frobisher Aud. 1	Frobisher Aud. 2	Frobisher Rm. 1	Frobisher Rm. 4
Location	*-1*	*-2*	*3*	*4*	*4*	*4*	*4*
08:30 - 09:30	Plenary 5: The Wolstencroft Lecture LTP: Forty Years on. ***Tim Bliss*** *Presentation by John Coote Chaired by Terje Lomo*						
09:30 - 10:00							
10:00 - 10:15				Session 32 Workshop 4: Filling the systems neuroscience gap in translational neuroscience			
10:15 - 12:15	Symposium 29: GABAergic neurotransmission in the human cerebral cortex: Same rules apply?	Symposium 30: Neuropsychiatry research in the 21st Century	Symposium 31: Beyond the diffusion tensor: Non-invasive insights into macro- and micro-structure of brain white matter		Symposium 33: Neuro-oncology: Cell signalling and therapeutic targets	Symposium 34: The Brain Machine Interface: a tool for patients and basic neuroscience	Symposium 35: The re-emergence of schemas in memory research
12:15 - 12:30							
12:30 - 12:45							

BNA Session

TUESDAY 9th APRIL 2013

Room Name	Barbican Hall	Cinema 1	Garden Rm	Frobisher Aud. 1	Frobisher Aud. 2	Frobisher Rm. 1	Frobisher Rm. 4
Location	*-1*	*-2*	*3*	*4*	*4*	*4*	*4*
15:00 - 17:00	Symposium 36: Pathways to Neurodegeneration: Deciphering early mechanisms for early intervention	Symposium 37: Choosing and Doing: The neuroscience of voluntary action	Symposium 38: The neuroscience of bipolar disorder: Inositol phosphates and phospho-inositides in pathology and treatment	Symposium 39: Stem cells as therapies for the neurosciences and tools for pharmacology and toxicology	Symposium 40: CNS and immune system interactions: Novel GPCR functions	Symposium 41: Cerebellar contributions to motor, cognitive and emotional behaviour	Symposium 42: How the brain controls appetite
17:00 - 18:30							
18:30 - 19:30	Public Lecture Stem cell therapy for Parkinson's Disease: Problems and prospects. ***Anders Björklund*** *Chaired by Humphrey Rang*						
19:30 - 21:00		I'm a Neuroscientist, get me out of here					

BNA Session

Wonder: Art and Science on the Brain

WEDNESDAY 10th APRIL 2013

Room Name	Barbican Hall	Cinema 1	Garden Rm	Frobisher Aud. 1	Frobisher Aud. 2	Frobisher Rm. 1	Frobisher Rm. 4
Location	*-1*	*-2*	*3*	*4*	*4*	*4*	*4*
08:30 - 09:30	Plenary 6: Subconsciousness and the brain ***Yves Agid*** *Chaired by Martin Rossor*						
09:30 - 09:45							
09:45 - 10:15					Session 47 Workshop 6: Opening up the 'Black Box' of neuroscience disease to deliver new medicines		
10:15 - 12:15	Symposium 43: Emerging therapeutic targets for neurodegeneration	Symposium 44: Heterogeneity of dopamine neurons: What do they do and how do they do it?	Symposium 45: Molecules and mechanisms of the insect brain	Symposium 46: Axonal injury and functional repair: basic mechanisms		Symposium 48: The contribution of inflammation to the pathogenesis of neurological disease	Session 49 Workshop 5: Drugs and Society: The neuroethics of enhancing or erasing memories
12:15 - 12:30							
12:30 - 12:45						School of Advanced Study "Coming to our Senses"	Understanding Animal Research
12:45 - 13:30		BNA AGM					

BNA Session
Additional Meeting

WEDNESDAY 10th APRIL 2013

Room Name	Barbican Hall	Cinema 1	Garden Rm	Frobisher Aud. 1	Frobisher Aud. 2	Frobisher Rm. 1	Frobisher Rm. 4
Location	*-1*	*-2*	*3*	*4*	*4*	*4*	*4*
14:00 - 16:00	Symposium 50: The prefrontal cortex and decision making	Symposium 51: The development of hippocampal circuits	Symposium 52: Timing in neuroendocrinology	Symposium 55: Improving cognitive functions in ageing	Symposium 54: From mice to men: Mechanisms of neuronal adaptation in the mammalian visual system	Symposium 53: Brain Tumours: a complex, challenging and under-recognised area of Neuroscience	Session 56 Workshop 7: Neuroscience and society: opportunities, challenges and policy
16:00 - 16:30							
16:30 - 16:45							
16:45 - 17:00	Plenary 7: Autism and cognitive development ***Uta Frith*** *Chaired by Colin Blakemore*						
17:00 - 17:40							

BNA Session

Additional programme information

Sunday 7th April 2013

Registration & Not-for-profit Exhibition	08:00 – 19:00 in Foyer (Level minus 1)
Exhibition	08:30 - 19:45 in Exhibition Hall 2
Poster viewing **Poster presentation**	08:30 – 19:45 in Exhibition Hall 2 13:30 – 15:00 in Exhibition Hall 2
Catering	08:30 – 10:00: Tea & Coffee in Exhibition Hall 2
	13:30 – 15:15: Lunch in Exhibition Hall 2
Press	08:00 – 18:30 in Fountain Room (Ground Level)
Speaker Preview	08:00 – 18:30 in Lounge West Upper (Level minus 1)
Reception	19:00 -20:00 in Exhibition Hall 2

Monday 8th April 2013

Registration & Not-for-profit Exhibition	07:15 – 17:30 in Foyer (Level minus 1)
Exhibition	08:00 – 18:30 in Exhibition Hall 2
Poster viewing **Poster presentation**	08:30 – 18:30 in Exhibition Hall 2 12:30 – 14:00 in Exhibition Hall 2
Catering	09:30 – 10:15: Tea & Coffee in Exhibition Hall 2
	12:15 – 14:15: Lunch in Exhibition Hall 2
	16:15 – 17:00: Tea & Coffee in Exhibition Hall 2
Press	08:00 – 17:30 in Fountain Room (Ground Level)
Speaker Preview	07:15 – 17:30 in Lounge West Upper (Level minus 1)
Box Office	18:00 – 19:30 in Foyer (Level minus 1)
Brainstorm	19:30 – 00:00 in Grand Union (offsite)

Tuesday 9th April 2013

Registration & Not-for-profit Exhibition	08:00 – 18:00 in Foyer (Level minus 1)
Exhibition	08:00 – 15:00 in Exhibition Hall 2
Poster viewing **Poster presentation**	08:00 – 15:00 in Exhibition Hall 2 12:30 – 14:00 in Exhibition Hall 2
Catering	09:30- 10:15: Tea & Coffee in Exhibition Hall 2
	12:15 – 15:00: Lunch in Exhibition Hall 2
Press	08:00 – 18:00 in Fountain Room (Ground Level)
Speaker Preview	08:00 – 18:00 in Lounge West Upper (Level minus 1)

Wednesday 10th April 2013

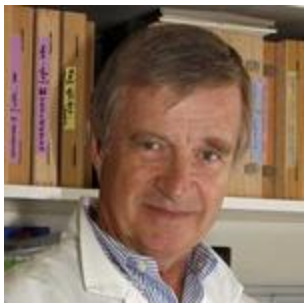
Registration	08:00 – 16:45 in Foyer (Level minus 1)
Catering	09:30- 10:15: Tea & Coffee in Foyer (Level minus 1)
	12:15 – 14:00: Lunch in Foyer (Level minus 1)
	16:00 – 16:45: Tea & Coffee in Foyer (Level minus 1)
Press	08:00 – 17:00 in Fountain Room (Ground Level)
Speaker Preview	08:00 – 14:00 in Lounge West Upper (Level minus 1)

Plenary and Public Speakers

Plenary speakers

Yves Agid
Honorary Professor of Neurology
Hôpital Pitié-Salpêtrière, Paris, France

"Subconsciousness and the brain"



Click here for research interests and information.

Sponsored by the Association of British Neurologists.

Yves Agid, neurologist and psychiatrist, has described the biochemical anatomical features associated with neurodegenerative disorders, in particular Parkinson's disease and Alzheimer's disease. His research team was the first to show apoptosis in the diseased human brain with electron microscopy. He has also developed studies of several movement disorders, such as dystonia, ticks, and obsessive compulsive disorder.

Professor Agid's lecture will be on Wednesday 10th April 2013 – 08.30h – Barbican Hall.

David Attwell FRS
Jodrell Professor of Physiology
University College London

"CNS White Matter: The role of neurotransmitter signalling to oligodendrocytes and their precursors in health and disease"

Click here for research interests and information.

Sponsored by The Physiological Society.

David Attwell studied physics first before going into neuroscience. His research centres around signalling between neurons and glial cells, how the brain's energy supply is controlled, and the computational power of the brain. His studies of brain energy supply have characterized a new locus for control of cerebral blood flow. Further studies are investigatingthe consequences of failure of the energy supply in conditions like stroke.

Professor Attwell's lecture will be on Monday 8th April 2013 – 17.00h – Barbican Hall.

Tim Bliss FRS
Formerly Head of Neurophysiology
NIMR London

*The Wolstencroft Lecture**

"LTP: Forty years on"

Click here for research interests and information.

Tim Bliss has been a key figure in neuroscience research into the processes underlying learning and memory. His studies in the late 1960's uncovered the phenomenon of synaptic long-term-potentiation (LTP). He is one of the most prominent and highly cited neuroscientists in the world. Although Tim formally retired in 2006 he continues as a visiting worker.

**The Wolstencroft Memorial 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 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 workings of the brain. The lecture is to be given biennially at the British Neuroscience National meeting. The purpose of the lecture is to communicate the most exciting and important advances in brain science.

Professor Bliss's lecture will be on Tuesday 9th April 2013 – 08.30h – Barbican Hall.

Uta Frith DBE FMedSci FRS
Emeritus Professor of Cognitive Development
University College London

"Autism, and cognitive development"

Click here for research interests and information.

Uta Frith is best known for her research on autism spectrum disorders. She was one of the initiators of the study of Asperger's Syndrome in the UK and her work on reading development, spelling and dyslexia has been highly influential. Throughout her career she has been developing a neuro-cognitive approach to developmental disorders, in particular, cognitive processes and their failure in autism and dyslexia.

Professor Frith's lecture will be on Wednesday 10th April 2013 – 17.00h – Barbican Hall.

Karen Steel FMedSci FRS

Professor
Wolfson CARD, King's College London

"Understanding the genetics of deafness using mouse mutants"

Click here for research interests and information.

Sponsored by the Lundbeckfonden.

Karen Steel studies the genetics of deafness, using the mouse as a model to identify the genes involved and to understand the molecular, cellular and physiological mechanisms involved. She was the first to demonstrate that lack of melanocytes in the stria vascularis of mice caused abnormal strial function leading to deafness. With Christine Petit (France) she was awarded the Brain Prize 2012 for helping explain causes of many forms of inherited deafness.

Professor Steel's lecture will be on Sunday 7th April 2013 – 10.15h – Barbican Hall.

Irene Tracey

Nuffield Professor of Anaesthetic Science
University of Oxford

"Imaging Pain, Relief and Altered States of Consciousness in the Human Brain"

Click here for research interests and information.

Irene Tracey is a leading expert on using neuroimaging to study pain processing in the human brain. Her team of scientists and clinicians has contributed significantly to a better understanding of nociceptive processing in the human central nervous system in the non-injured and injured state, as well as modulation of pain perception via pharmacological and psychological interventions.

Professor Tracey's lecture will be on Monday 8th April 2013 – 08.30h – Barbican Hall.

Michael White

Professor of Systems Biology
University of Manchester

"Quantitative analysis of the dynamics of signalling and transcription in single cells and tissues."

Click here for research interests and information.

Sponsored by the Society for Endocrinology.

Mike White began his career at Amersham International in molecular biology products and technologies for studies of gene function. Later at Imperial College London, he pioneered the use of the firefly luciferase gene as a reporter, particularly for non-invasive imaging in mammalian cells.
Professor White's lecture will be on Sunday 7th April 2013 – 17.30h – Barbican Hall.

Public speakers

Ruby Wax

Comedian, Actress

Join comedian, actress and converted neuroscientist Ruby Wax for a journey from the heights of fame to the depths of mental illness and back again. How has understanding her brain shaped Ruby's career, depression and life itself? From celebrity interviews and Absolutely Fabulous to the Royal Shakespeare Company and stand-up comedy, Ruby has led a life of success and fame.

She has also experienced depression and debilitating mental illness, a subject she treats with dark humour through her shows 'Losing It' and 'Out of her Mind'. As she has learned to cope with her mental illness, and with a growing number of degrees in brain sciences under her belt, Ruby's perception and understanding of her condition offers a fascinating insight into the way our mind and spirit works. But how much does understanding her own brain change this perception and what's actually going on in there? This is her tale.

Ruby Wax will be on stage in the Barbican Hall on Monday 8th April 2013 – 19.30h.
Please note this event is ticketed.

Anders Björklund

Professor of Histology
Lund University, Sweden

"Stem cell therapy for Parkinson's disease: Problems and prospects"

Click here for research interests and information.

Sponsored by the British Pharmacological Society.

Use of cell transplantation for the replacement of lost dopamine neurons in Parkinson´s disease holds great promise. In this talk Prof Bjorklund will summarize the experience gained from the clinical trials performed so far, and discuss recent progress in the generation of functional and safe midbrain dopamine neurons from stem cells, moving this technology closer to clinical use.
A pioneer of cell transplantation in the 1970s, Anders Bjorklund has focused his research on reparative and neuroprotective mechanisms in the CNS using cell replacement and gene transfer techniques. In recent years the group at the Wallenberg Neuroscience Center have developed an interest in the mechanisms underlying L-DOPA-induced dyskinesia, and the role of dopamine released as a "false transmitter" from serotonin terminals in the induction and triggering of this side effect of L-DOPA medication.

Professor Bjorklund's lecture will be on Tuesday 9th April 2013 – 18.00h – Barbican Hall.
This lecture is unticketed.

SUNDAY 7th APRIL 2013

WELCOME AND PLENARY LECTURE

10.00h - 11.15h Barbican Hall

David Nutt (Imperial College London; BNA President)

John Williams (Wellcome Trust)

PLENARY LECTURE

Karen Steel (Wolfson CARD, King's College London)

"Understanding the genetics of deafness using mouse mutants."

Chaired by: David Nutt (Imperial College London), President of the BNA

Sponsored by the **Lundbeck Foundation**.

SYMPOSIA

11.30h – 13.30h

1. Theme F: Nervous System Disorders ***Venue:*** **Barbican Hall**

Molecular pathology of neurodegenerative disease and ageing

Convenors: Seth Love (University of Bristol) and Federico Roncaroli (Imperial College London)

Chaired by: Seth Love (University of Bristol)

1.01 11.30h-12.00h
Molecular pathology of Motor Neuron Disease/Amyotrophic Lateral Sclerosis.
Paul Ince
University of Sheffield

1.02 12.00h-12.30h
The enigma of progression in Parkinson's Disease.
Tamas Revesz
University College London

1.03 12.30h-13.00h
Human prion diseases.
Mark Head
University of Edinburgh

1.04 13.00h-13.30h
Alzheimer's Disease: The prospects for a vaccine.
James Nicoll
Southampton General Hospital

1.05 13.30h-13.35h
MRC UK Brain Bank Network for Neuroscience Research.
James Ironside
University of Edinburgh

The Symposium is sponsored by the **British Neuropathological Society**.

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2. Theme B: Molecular, Cellular and Synaptic Mechanisms ***Venue:*** **Cinema 1**

Do glial cells regulate the balance between inhibition and excitation?

Convenors: Andrew Trevelyan (Newcastle University), Mike Spyer (University College London) and Nick Boross-Toby (The Physiological Society)

Chaired by: Andrew Trevelyan (Newcastle University)

2.01 11.30h-12.00h
The role of different interneuronal subpopulations in regulating cortical activity.
Andrew Trevelyan
Newcastle University

2.02 12.00h-12.30h
Astrocyte involvement in initiating and terminating seizures.
Giorgio Carmignoto
Universita degli Studi di Padova, Padova, Italy

2.03 12.30h-13.00h
Glial learning: the influence of serine released from glia in regulating long term potentiation.
Dmitri Rusakov
Institute of Neurology, London

2.04 13.00h-13.30h
Unravelling the role of astroglial connexins in synaptic strength.
Nathalie Rouach
College de France

The Symposium is sponsored by **The Physiological Society**.

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3. Theme B: Molecular, Cellular and Synaptic Mechanisms ***Venue:*** **Garden Room**

Hormonal regulation of synaptic function in health and disease.

Convenors: Jenni Harvey and Andy Irving (Dundee University)

Chaired by: Jenni Harvey (Dundee University)

3.01 11.30h-12.00h
Leptin regulation of hippocampal synaptic function in health and disease.
Jenni Harvey
Dundee University

3.02 12.00h-12.30h
Insulin-like hormones in neuroprotection and synaptic function.
Christian Holscher
University of Ulster

3.03 12.30h-13.00h
Modulation of hippocampal glutamatergic synapses by ghrelin.
Ana-Luisa Carvalho
University of Coimbra, Portugal

3.04 13.00h-13.30h
The JAK/STAT pathway is involved in synaptic plasticity.
Celine Nicholas
Bristol University

This Symposium is sponsored by the **British Society for Neuroendocrinology**.

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4. Theme B: Molecular, Cellular and Synaptic Mechanisms ***Venue:*** **Frobisher Auditorium 1**

Epigenetics in neuroscience – from development to disease.

Convenor: Hans Reul (Bristol University)
Chaired by: Hans Reul (Bristol University)

4.01 11.30h-12.00h
Epigenetic mechanisms and chromatin-associated proteins in stem cell to neuron differentiation.
Katherine West
Glasgow University

4.02 12.00h-12.30h
Histone arginine methylation and the control of neural stem cell proliferation and differentiation.
Alexandra Chittka
University College London

4.03 12.30h-13.00h
Behavioural Epigenetics: Exciting but uncertain prospects.
Lawrence Wilkinson
Cardiff University

4.04 13.00h-13.30h
Epigenetic mechanisms underlying gene transcriptional responses to behavioural challenges.
Hans Reul
Bristol University

This Symposium is sponsored by the **British Neuroscience Association**.

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5. Theme F: Nervous System Disorders ***Venue:*** **Frobisher Auditorium 2**

Treating depression with antidepressants: Where are we now and where are we going?

Convenor: Hamish McAllister-Williams (Newcastle University), Val Curran (University College London) and Susan Chandler (British Association for Psychopharmacology)
Chaired by: Val Curran (University College London)

5.01 11.30h-12.00h
Do antidepressants work?
Philip Cowen
Oxford University

5.02 12.00h-12.30h
Psychological perspectives on the mechanism of action of antidepressants.
Catherine Harmer
Oxford University

5.03 12.30h-13.00h
Beyond the monoamines: New advances in treatments for depression?
Ian Anderson
Manchester University

5.04 13.00h-13.30h
Can we use psychedelic drugs to treat depression?
David Nutt
Imperial College London

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

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6. Theme D: Cognition *Venue:* **Frobisher Room 1**

The plasticity of the self.

Convenor: Manos Tsakiris (Royal Holloway, University of London)
Chaired by: Manos Tsakiris (Royal Holloway, University of London)

6.01 11.30h-12.00h
Multisensory mechanisms of body ownership .
Henrik Ehrsson
Karolinska Institute, Stockholm, Sweden

6.02 12.00h-12.30h
The transitional body: Insights from neuropsychology and neuroimaging.
Katerina Fotopoulou
King's College London

6.03 12.30h-13.00h
The self as another: using the senses of the body to study changes in self-identity.
Manos Tsakiris
Royal Holloway, University of London

6.04 13.00h-13.30h
Virtual Reality - changing the self not just the place.
Mel Slater
ICREA-University of Barcelona, Spain and University College London

This Symposium is sponsored by the **British Neuroscience Association**.

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7. Theme C: Sensory and Motor Systems *Venue:* **Frobisher Room 4**

Pain.

Convenor: Anthony Dickenson (Imperial College London), Stephen McMahon (King's College London) and the London Pain Consortium
Chaired by: Anthony Dickenson (Imperial College London)

7.01 11.30h-12.00h
Pain and mechanosensation.
John Wood
University College London

7.02 12.00h-12.30h
Spinal nuclear control of structural and functional plasticity in inflammatory pain.
Rohini Kuner
University of Heidelberg, Heidelberg, Germany

7.03 12.30h-13.00h
The immune system and pain.
David Bennett
King's College London

7.04 13.00h-13.30h
Pain in the newborn.
Rebeccah Slater
Oxford University

This Symposium is sponsored by the **British Neuroscience Association**.

LUNCH

13.30h – 15.15h

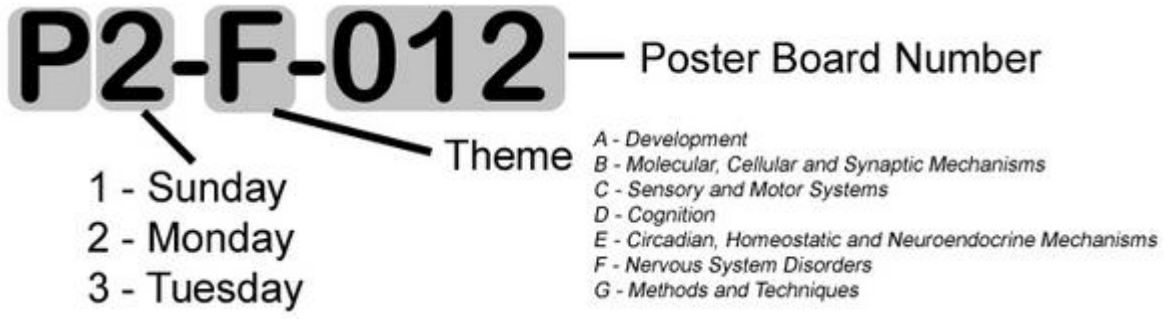
POSTER SESSION P1 and TRADE EXHIBITION

Exhibition Hall 2.

Presenters will be present at their posters at the following times:

- Odd number boards: 13.30h – 14.15h
- Even number boards: 14.15h – 15.00h

Poster reference explanation:



Please visit the Trade Stands on both floors of the Exhibition Hall.

SYMPOSIA

15.15h – 17.15h

8. Theme F: Molecular, Cellular and Synaptic Mechanisms ***Venue:*** **Barbican Hall**

The multi-faceted NMDA receptor: From cradle to grave

Convenors: Zafar Bashir and Jack Mellor (University of Bristol)
Chaired by: Zafar Bashir (University of Bristol)

8.01 15.15h-15.45h
NMDA receptors and the functional birth of cortical circuits.
Michael Ashby
Bristol University

8.02 15.45h-16.15h
Activity-dependent plasticity of NMDA receptors at hippocampal mossy fiber synapses.
Christophe Mulle
Université Bordeaux 2, Bordeaux, France

8.03 16.15h-16.45h
The role of NMDA receptors in learning and memory.
David Bannerman
Oxford University

8.04 16.45h-17.15h
Molecular basis for pro-survival and pro-death signalling from the NMDA receptor.
Giles Hardingham
University of Edinburgh

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

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9. Theme A: Development ***Venue:*** **Cinema 1**

Early life stress and its long-term effects – experimental studies

Convenors: Jolanta Opacka-Juffry (Roehampton University, London)
Chaired by: Jolanta Opacka-Juffry (Roehampton University, London)

9.01 15.15h-15.45h
Animal-model studies to increase understanding of development-gene-environment interactions underlying depression aetio-pathology.
Christopher Pryce
Psychiatric University Hospital, Zurich, Switzerland

9.02 15.45h-16.15h
Perinatal programming of stress-related behaviour by glucocorticoids.
Megan Holmes
University of Edinburgh

9.03 16.15h-16.45h
Brain remodelling in response to early life stress in rats.
Jolanta Opacka-Juffry
Roehampton University

9.04 16.45h-17.15h
Genes learn from stress - epigenetic effects of early life experience.
Christopher Murgatroyd
Manchester Metropolitan University

This Symposium is sponsored by the **British Neuroscience Association**.

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10. Theme C: Sensory and Motor Systems ***Venue:*** **Garden Room**

Visual ecology

Convenors: Daniel Osorio (University of Sussex) and Ian Russell (Brighton University)
Chaired by: Daniel Osorio (University of Sussex)

10.01 15.15h-15.45h
State-dependent motion vision in moving flies.
Kit Longden
Imperial College London

10.02 15.45h-16.15h
Colour vision limits.
Almut Kelber
University of Lund, Lund, Sweden

10.03 16.15h-16.45h
Seeing in different worlds: The visual and behavioural ecology of insect masquerade.
Hannah Rowland
Cambridge University

10.04 16.45h-17.15h
What does the World look like to a navigating ant?
Paul Graham
University of Sussex

This Symposium is sponsored by the **British Neuroscience Association**.

NOTE: SESSION STARTS AT 14.30h

11. Theme G: Methods and Techniques ***Venue:*** **Frobisher Auditorium 1**

Workshop: New analysis tools in human neuroimaging

Convenors: Saad Jbabdi (Oxford University), Ged Ridgway (University College London) and Narender Ramnani (Royal Holloway, University of London)
Chaired by: Saad Jbabdi (Oxford University)

11.01 14.30h-15.00h
Human Connectome Project: Advances in data acquisition and pre-processing.
Saad Jbabdi
Oxford University

11.02 15.00h-15.30h
Modelling longitudinal structural change from serial MRI.
Ged Ridgway
University College London

11.03 15.30h-16.00h
Anatomical connectivity and the resting state activity of large cortical networks.
Dimitris Pinotsis
Wellcome Trust Centre for Neuroimaging

11.04 16.00h-16.30h
Multimodal exploratory analyses.
Adrian Groves
Oxford University

11.05 16.30h-17.00h
PRoNTo: pattern recognition for neuroimaging toolbox.
Janaina Mourao-Miranda
University College London

11.06 17.00h-17.30h
Meta-analysis approaches in Neuroimaging.
Eugene Duff
Oxford University

This Workshop is sponsored by the **British Neuroscience Association**.

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12. Theme F: Nervous System Disorders ***Venue:*** **Frobisher Auditorium 2**

Stroke and inflammation

Convenor: Felicity Gavins (Imperial College London)
Chaired by: Felicity Gavins (Imperial College London)

12.01 15.15h-15.45h
Inflammation and the neurovascular unit.
Greg de Zoppo
University of Washington, Seattle, USA

12.02 15.45h-16.15h
Inflammation in stroke.
Felicity Gavins
Imperial College London

12.03 16.15h-16.45h
Modulation of inflammation in acute stroke.
Pippa Tyrell
Manchester University

12.04 16.45h-17.15h
PET imaging of inflammation after stroke.
Jean-Claude Baron
Cambridge University

This Symposium is sponsored by the **British Neuroscience Association**.

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13. Theme E: Circadian, Homeostatic and Neuroendocrine Mechanisms ***Venue:*** **Frobisher Room 1**

Pharmacology of sleep and its circadian organisation: From cells to behaviour

Convenor: Raphaelle Winsky-Sommerer (University of Surrey)
Chaired by: Raphaelle Winsky-Sommerer (University of Surrey)

13.01 15.15h-15.45h
Cellular clocks directing sleep and physiology.
Steven Brown
University of Zurich, Switzerland

13.02 15.45h-16.15h
Pharmacological approaches to manipulate circadian rhythms.
John O'Neill
Cambridge University

13.03 16.15h-16.45h
Human neuropharmacology of sleep and circadian rhythms.
Derk-Jan Dijk
University of Surrey

13.04 16.45h-17.15h
Extrasynaptic GABAA receptors as a therapeutic target for sleep disorders.
Stephen Brickley
Imperial College London

14. Theme C: Sensory and Motor Systems ***Venue:*** **Frobisher Room 4**

Re-engineering and repairing the damaged spinal cord: Much more than 'walking again'

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

14.01 15.15h-15.45h
Activity induced plasticity after spinal cord injury and rehabilitation.
Ronaldo Ichiyama
University of Leeds

14.02 15.45h-16.15h
Dynamics of early locomotor network dysfunction in an *in vitro* model of SCI.
Giuliano Taccola
SISSA, Trieste, Italy

14.03 16.15h-16.45h
Manipulating the extracellular matrix to promote repair following spinal cord injury.
Elizabeth Bradbury
King's College London

14.04 16.45h-17.15h
Functional regeneration beyond the glial scar.
Jerry Silver
Case Western Reserve University, Cleveland, Ohio, USA

This Symposium is sponsored by the **British Neuroscience Association**.

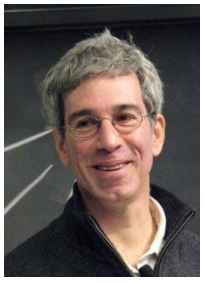
PLENARY LECTURE

17.30h - 18.30h Barbican Hall

PLENARY LECTURE
Michael White (*University of Manchester*)
"Quantitative analysis of the dynamics of signalling and transcription in single cells and tissues."
Chaired by: Ashley Grossman (Oxford University)
Sponsored by the **Society for Endocrinology**.

WELCOME TO THE FESTIVAL OF NEUROSCIENCE

18.30h – 19.00h Barbican Hall



Marc Abrahams
We are delighted to announce that **Marc Abrahams** (right) – editor and co-founder of the *Annals of Improbable Research* and MC of the World-Famous **Ig-Nobel** Awards – will entertain all registered delegates on Sunday evening in the main Barbican Hall. This will be followed by a Reception in the Exhibition Hall, giving an opportunity for delegates to interact with Exhibitors and be able to view the poster session.

WELCOME RECEPTION **19.00h – 20.00h Exhibition Hall 2**

MONDAY 8th APRIL 2013

PLENARY LECTURE

08.30h - 09.30h Barbican Hall

PLENARY LECTURE
Irene Tracey (*University of Oxford*)
"Imaging pain, relief and altered states of consciousness in the human brain."
Chaired by: Stephen McMahon (King's College London)
Sponsored by the **British Neuroscience Association**.

09.30h – 10.15h
REFRESHMENTS SERVED IN EXHIBITION HALL 2.
Poster viewing and Trade Exhibition.

SYMPOSIA

10.15h – 12.15h

15. Theme B: Molecular, Cellular and Synaptic Mechanisms ***Venue:*** **Barbican Hall**
LTP: Still exciting neuroscience after 40 years
Convenors: Tim Bliss (NIMR, London), Terje Lømo (University of Oslo, Norway) and Graham Collingridge (Bristol University)
Chaired by: Tim Bliss (NIMR, London)

15.01 10.15h-10.45h
NMDA receptors and induction of LTP: New insights 30 years on.
Arturas Volianskis
Bristol University

15.02 10.45h-11.15h
Presynaptic LTP: the truth is out there you will see.
Lindsay McGuinness
Oxford University

15.03 11.15h-11.45h
2B or not 2B: Illuminating the role of NMDA receptors in LTP.
Ole Paulsen
Cambridge University

15.04 11.45h-12.15h
Brain plasticity and memory: LTP and beyond.
Serge Laroche
Université Paris-Sud, France

This Symposium is sponsored by the **British Neuroscience Association**.

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16. Theme A: Development ***Venue:*** **Cinema 1**

Development of the nervous system: From molecular pattern to circuit formation

Convenors: James Briscoe (NIMR, London) and Elizabeth Robertson (Oxford University)
Chaired by: James Briscoe (NIMR, London)

16.01 10.15h-10.45h
Temporal regulation of signalling centres in the control of forebrain size and complexity.
Corinne Houart
King's College London

16.02 10.45h-11.15h
Regulation of visual circuit assembly in *Drosophila*.
Iris Salecker
NIMR London

16.03 11.15h-11.45h
Generation and regeneration of respiratory motor neurons.
Ivo Lieberam
King's College London

16.04 11.45h-12.15h
Human stem cell models of cerebral cortex development.
Rick Livesey
Cambridge University

This Symposium is sponsored by the **British Society for Developmental Biology**.

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17. Theme C: Sensory and Motor Systems ***Venue:*** **Garden Room**

Auditory controls

Convenors: Joerg Albert (University College London) and Ian Russell (Brighton University)
Chaired by: Joerg Albert (University College London)

17.01 10.15h-10.45h
Principles of auditory processing: Lessons learned from crickets.
Berthold Hedwig
Cambridge University

17.02 10.45h-11.15h
Female mosquitoes on-the-wing tune into acoustic distortion.
Ben Warren
University of Cologne, Germany

17.03 11.15h-11.45h
The mechanics of auditory frequency analysis in insects.
Daniel Robert
Bristol University

17.04 11.45h-12.15h
Evolutionary approaches to *Drosophila* song.
Michael Ritchie
University of St. Andrews

This Symposium is sponsored by the **British Neuroscience Association**.

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18. Theme D: Cognition ***Venue:*** **Frobisher Auditorium 1**

Impulsivity, compulsivity and habit formation

Convenors: Luke Clark (Cambridge University), Val Curran (University College London) and Susan Chandler (British Association for Psychopharmacology)
Chaired by: Luke Clark (Cambridge University)

18.01 10.15h-10.45h
The new conceptualisation of obsessive-compulsive and related disorders.
Dan Stein
University of Capetown, South Africa

18.02 10.45h-11.15h
OCD in translation: From animal models to clinical treatments.
Naomi Fineberg
University of Hertfordshire

18.03 11.15h-11.45h
Trichotillomania: A fascinating model of an impulsive-compulsive disorder.
Sam Chamberlain
Cambridge University

18.04 11.45h-12.15h
The neural basis of distorted thinking in gambling addiction.
Luke Clark
Cambridge University

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

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19. Theme C: Sensory and Motor Systems ***Venue:*** **Frobisher Auditorium 2**

Visual processing of dynamic natural scenes: A cross-disciplinary perspective

Convenor: Johannes Zanker (Royal Holloway, University of London)
Chaired by: Johannes Zanker (Royal Holloway, University of London)

19.01 10.15h-10.45h
Sources of visual motion and ways of their analysis.
Markus Lappe
Institute of Psychology, Münster, Germany

19.02 10.45h-11.15h
Moving natural scenes: Statistical properties and perceptual mechanisms.
Steven Dakin
University College London

19.03 11.15h-11.45h
From insects to robots: Neuro-morphic engineering of sensori-motor control.
Holder Krapp
Imperial College London

19.04 11.45h-12.15h
The effect of eye movements on motion information during real-world navigation.
Szonya Durant
Royal Holloway, University of London

This Symposium is sponsored by the **British Neuroscience Association**.

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20. Theme F: Nervous System Disorders ***Venue:*** **Frobisher Room 1**

Huntington's Disease

Convenors: Roger Barker (Cambridge University) and Martin Rossor (University College London)
Chaired by: Roger Barker (Cambridge University)

20.01 10.15h-10.45h
Huntington's disease: Molecular pathogenesis and therapeutic target validation.
Gillian Bates
King's College London

20.02 10.45h-11.15h
Autophagy, a therapeutic target for neurodegenerative conditions like Huntington's disease.
David Rubinsztein
Cambridge Institute for Medical Research

20.03 11.15h-11.45h
What is the true range of clinical features in Huntington's Disease? Lessons learnt from patients.
Roger Barker
Cambridge University

20.04 11.45h-12.15h
The promises and challenges of finding potential disease-modifying therapies for Huntington's disease.
Sarah Tabrizi
Institute of Neurology, University College London

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

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21. Theme G: Methods and Techniques ***Venue:*** **Frobisher Room 4**

Workshop: Ultra-High Field MRI – State of the art.

Convenor: Penny Gowland (Nottingham University)
Chaired by: Penny Gowland (Nottingham University)

21.01 10.15h-10.45h
Anatomical imaging at 7T: Beyond high resolution.
Adam Thomas
Oxford University

21.02 10.45h-11.15h
Ultra-High field fMRI - a window to the fundamental functional architecture of the human brain.
Natalia Petridou
University Medical Center, Utrecht, The Netherlands

21.03 11.15h-11.45h
Imaging of tissue function.
Susan Francis
Nottingham University

21.04 11.45h-12.15h
Clinical applications of UHF.
Peter Luijten
University Medical Center, Utrecht, The Netherlands

This Symposium is sponsored by the **British Neuroscience Association**.

LUNCH

12.15h – 14.15h

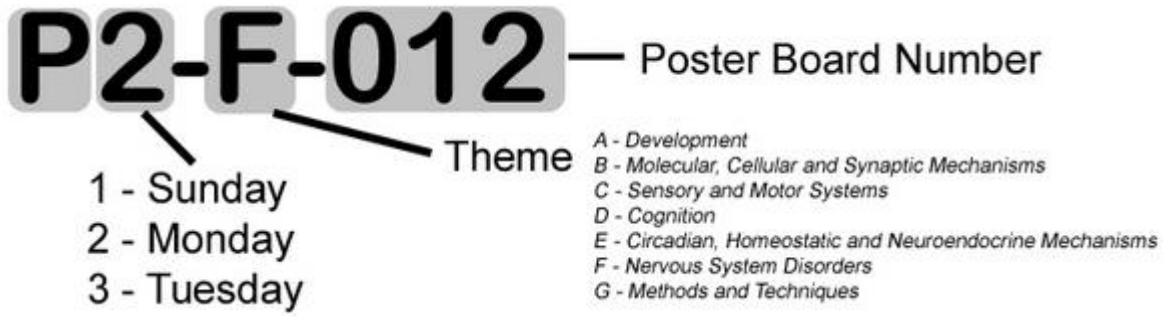
POSTER SESSION P2 and TRADE EXHIBITION

Exhibition Hall 2.

Presenters will be present at their posters at the following times:

- Odd number boards: 12.30h – 13.15h
- Even number boards: 13.15h – 14.00h

Poster reference explanation:



Please visit the Trade Stands on both floors of the Exhibition Hall.

SYMPOSIA

14.15h – 16.15h

22. Theme G: Methods and Techniques ***Venue:*** **Barbican Hall**

Human-induced pluripotent stem cells for nervous system disease modelling and development of new therapeutics.

Convenors: Paul Whiting and James Bilsland (Neusentis, Pfizer UK)
Chaired by: Paul Whiting (Neusentis)

22.01 14.15h-14.45h
An iPS-based platform for modelling pain.
James Bilsland
Neusentis

22.02 14.45h-15.15h
Studying pathogenesis and screening therapeutics in human stem cell models of Alzheimer's disease.
Rick Livesey
Cambridge University

22.03 15.15h-15.45h
Modelling Parkinson's and dementia with human pluripotent stem cells.
Tilo Kunath
University of Edinburgh

22.04 15.45h-16.15h
Twenty years of HD research in a dish, up to the iPS cells.
Elena Cattaneo
University of Milan, Milan, Italy

This Symposium is jointly sponsored by the **Pfizer** and **British Neuroscience Association**.

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23. Theme D: Cognition ***Venue:*** **Cinema 1**

The neural basis of social behaviour

Convenors: Chris Frith (University College London), Judi Ellis (Reading University) and Lisa Morrison-Coulthard (British Psychological Society)
Chaired by: Chris Frith (University College London)

23.01 14.15h-14.45h
How to (de)-humanise another person: Fundamental dimensions of social cognition.
Susan Fiske
Princeton University, Princeton, New Jersey, USA

23.02 14.45h-15.15h
The development and function of mirror neurons.
Cecilia Heyes
Oxford University

23.03 15.15h-15.45h
Reward and empathy: How they are connected, or not.
Bhismadev Chakrabarti
Reading University

23.04 15.45h-16.15h
When and how can two heads be better than one?.
Bahador Bahrami
University College London

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

24. Theme C: Sensory and Motor Systems ***Venue:*** **Garden Room**

Computational audition

Convenor: Maneesh Sahani (University College London)
Chaired by: Maneesh Sahani (University College London)

24.01 14.15h-14.45h
Size is not a problem in hearing: Invariance and covariance in peripheral processing.
Roy Patterson
Cambridge University

24.02 14.45h-15.15h
Modulation cascades, sound textures, and mid-level audition.
Richard Turner
Cambridge University

24.03 15.15h-15.45h
Hearing is believing: Perceived pitch is best predicted by an inferential model.
Maneesh Sahani
University College London

24.04 15.45h-16.15h
Competition and cooperation in a model of auditory scene analysis.
Susan Denham
Plymouth University

This Symposium is sponsored by the **British Neuroscience Association**.

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25. Theme G: Methods and Techniques ***Venue:*** **Frobisher Auditorium 1**

Workshop: Transcranial stimulation of the conscious brain

Convenor: John Rothwell (University College London)
Chaired by: John Rothwell (University College London)

25.01 14.15h-14.45h
Transcranial methods of brain stimulation.
John Rothwell
University College London

25.02 14.45h-15.15h
Biasing oscillatory brain activity *via* neurostimulation.
Paul Sauseng
University of Surrey

25.03 15.15h-15.45h
Therapeutic potential of transcranial brain stimulation.
Shaheen Hamdy
Manchester University

25.04 15.45h-16.15h
Imaging the neurotransmitter effects of transcranial stimulation.
Charlotte Stagg
Oxford University

This Symposium is sponsored by the **Magstim Company Ltd.**

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26. Theme B: Molecular, Cellular and Synaptic Mechanisms ***Venue:*** **Frobisher Auditorium 2**

Somato-axonal computation of neurotransmitter release

Convenor: Dmitri Rusakov (University College London)
Chaired by: Dmitri Rusakov (University College London)

26.01 14.15h-14.45h
Electrodiffusion of released glutamate triggers synaptic potentiation.
Dmitri Rusakov
University College London

26.02 14.45h-15.15h
Direct measurement of signalling in mammalian central axons.
Beverley Clark
University College London

26.03 15.15h-15.45h
Analogue-digital signalling in hippocampal axons.
Dominique Debanne
Université de la Méditerranée, *Marseille, France*

26.04 15.45h-16.15h
The role of glutamate autoreceptors in transmitter release.
Nigel Emptage
Oxford University

This Symposium is sponsored by the **British Neuroscience Association.**

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27. Theme F: Nervous System Disorders ***Venue:*** **Frobisher Room 1**

Epilepsy

Convenor: Dimitri Kullmann and Martin Rossor (University College London)
Chaired by: Dimitri Kullmann (University College London)

27.01 14.15h-14.45h
MEG, oscillations and epilepsy.
Khalid Hamandi
University Hospital of Wales, Cardiff

27.02 14.45h-15.15h
Epilepsy and autobiographical memory.
Adam Zeman
Peninsula Medical School, Exeter

27.03 15.15h-15.45h
Brain networks in epilepsy.
Mark Richardson
Institute of Psychiatry, King's College London

27.04 15.45h-16.15h
Experimental treatment of focal epilepsy.
Matthew Walker
National Hospital for Neurology and Neurosurgery, London

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

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28. Theme A: Development ***Venue:*** **Frobisher Room 4**

The development of self-regulation

Convenor: Philip Asherson (King's College London)
Chaired by: Ulrich Müller (Cambridge University)

28.01 14.15h-14.45h
How does the environment get 'under the skin': Epigenetic pathways to neuropsychiatric disease.
Jon Mill
Exeter University and Institute of Psychiatry, King's College London

28.02 14.45h-15.15h
Dopamine, genes and the brain.
Jim Swanson
University of California, Irvine, USA

28.03 15.15h-15.45h
Drugs affecting the reward pathways of the brain: relevance to ADHD treatments.
Mitul Mehta
Institute of Psychiatry, King's College London

28.04 15.45h-16.15h
The neurochemical basis of impulsive and accurate responding in rats.
Emma Robinson
Bristol University

This Symposium is sponsored by the **UK Adult ADHD Network (UKAAN).**

16.15h – 17.00h
REFRESHMENTS SERVED IN EXHIBITION HALL 2.
Poster viewing and Trade Exhibition.

PLENARY LECTURE

17.00h - 18.00h Barbican Hall

PLENARY LECTURE
David Attwell (*University College London*)
"CAN White Matter: The role of neurotransmitter signalling to oligodendrocytes and their precursors in health and disease."
Chaired by: Jonathan Ashmore (University College London)
Sponsored by the **The Physiological Society**.

EVENING

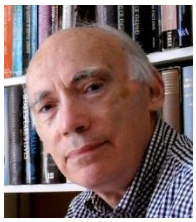
19.30h – 00.00h

BrainStorm at the Grand Union, Farringdon. Entry is by ticket only. Tickets are available from Registration.
Click here for more information.

TUESDAY 9th APRIL 2013

PLENARY LECTURE

08.30h - 09.30h Barbican Hall



PLENARY LECTURE
Tim Bliss (*NIMR London*) *The Wolstencroft Lecture*
"LTP: Forty years on."
Chaired by: Terje Lømo (University of Oslo, Norway)
Professor John Coote (Trustee of the Wolstencroft Fund) will present an award to Professor Bliss before he delivers the lecture. See page 120 for details of the award.

09.30h – 10.15h
REFRESHMENTS SERVED IN EXHIBITION HALL 2.
Poster viewing and Trade Exhibition.

SYMPOSIA

10.15h – 12.15h

29. Theme B: Molecular, Cellular and Synaptic Mechanisms ***Venue:*** **Barbican Hall**
GABAergic neurotransmission in the human cerebral cortex: Same rules apply?
Convenor: Gavin Clowry (Newcastle University)
Chaired by: Gavin Clowry (Newcastle University)

29.01 10.15h-10.45h
Triggering and modulation of identified neuronal assemblies in the human cerebral cortex.
Gabor Tamas
Szeged University, Hungary

29.02 10.45h-11.15h
The role of GABAergic neurotransmission in the generation of γ-oscillatory activity in human cortical slices.
Mark Cunningham
Newcastle University

29.03 11.15h-11.45h
Single cell responses in the human medial temporal lobe.
Rodrigo Quiroga
Leicester University

29.04 11.45h-12.15h
Non-invasive human studies of individual variability in GABAergic inhibition and its relationship to behaviour and oscillatory dynamics.
Krish Singh
Cardiff University

This Symposium is sponsored by the **Anatomical Society**.

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30. Theme F: Nervous System Disorders ***Venue:*** **Cinema 1**

Neuropsychiatry research in the 21st Century

Convenor: Eileen Joyce (University College London)
Chaired by: Eileen Joyce (University College London)

30.01 10.15h-10.45h
The neuroscience of functional neurological symptoms.
Mark Edwards
University College London

30.02 10.45h-11.15h
The genetics of Attention Deficit Hyperactivity Disorder (ADHD).
Anita Thapar
Cardiff University

30.03 11.15h-11.45h
Small world brain networks and schizophrenia.
Ed Bullmore
Cambridge University

30.04 11.45h-12.15h
Insights into the social brain.
John Hodges
Neuroscience Research Australia

This Symposium is sponsored by the **British NeuroPsychiatry Association**.

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31. Theme G: Methods and Techniques ***Venue:*** **Garden Room**

Beyond the diffusion tensor: Non-invasive insights into macro- and micro-structure of brain white matter

Convenor: Derek Jones and John Aggleton (Cardiff University)
Chaired by: Derek Jones (Cardiff University)

31.01 10.15h-10.45h
Diffusion MRI-based tractography: Perspectives from axonal tract tracing in animals.
John Aggleton
Cardiff University

31.02 10.45h-11.15h
White matter matters: behavioural relevance of variation in white matter microstructure.
Heidi Johansen-Berg
Oxford University

31.03 11.15h-11.45h
Hemispheric asymmetries in white matter connectivity: Functional implications.
Michel Thiebaut de Schotten
Institute of Psychiatry, King's College London

31.04 11.45h-12.15h
Learning in the fast lane: new insights into neuroplasticity.
Yaniv Assaf
Tel Aviv University, Israel

This Symposium is sponsored by the **British Neuroscience Association**.

NOTE: SESSION STARTS AT 10.00h

32. Theme G: Methods and Techniques ***Venue:*** **Frobisher Auditorium 1**

Workshop: Filling the Systems Neuroscience gap in Translational Neuroscience

Convenors: Mark Tricklebank and John Isaac (Eli Lilly & Co., Windlesham)
Chaired by: Mark Tricklebank (Eli Lilly & Co., Windlesham)

32.01 10.00h-10.30h
Conceptual and technical milestones toward truly translational cognitive neuroscience research.
Martin Sarter
University of Michigan, Ann Arbor, USA

32.02 10.30h-11.00h
Active sensing and its discontents.
Daniel Javitt
Nathan Kline Institute for Psychiatric Research, Orangeburg, USA

32.03 11.00h-11.30h
Needles in haystacks: chasing cell assemblies around circuits.
Matthew Jones
Bristol University

32.04 11.30h-12.00h
Assessing resting-state functional connectivity with oxygen amperometry coherence.
Jennifer Li
Eli Lilly & Co., Windlesham

32.05 12.00h-12.30h
Assessing frontostriatal function during reward processing with *in vivo* oxygen amperometry.
Jennifer Francois
Eli Lilly & Co., Windlesham

32.06 12.30h-13.00h
Functional MR Imaging: from Mouse to Man.
Steve Williams
King's College London

This Symposium is sponsored by **Eli Lilly & Co**.

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33. Theme F: Nervous System Disorders ***Venue:*** **Frobisher Auditorium 2**

Neuro-oncology: Cell signalling and therapeutic targets

Convenors: Geoff Pilkington (Portsmouth University), Anne Leaver (University of Edinburgh), Ray Hill (Imperial College London) and Karen Schlaegel (British Pharmacological Society)
Chaired by: Geoff Pilkington (Portsmouth University)

33.01 10.15h-10.45h
Exploiting brain tumour biology to develop new treatments.
Tracy Warr
Wolverhampton University

33.02 10.45h-11.15h
Hypoxia and angiogenesis in tumour biology.
Rolf Bjerkvig
University of Bergen, Norway

33.03 11.15h-11.45h
The role of stem cells in glioma progression and therapy.
Tamara Lah Turnšek
National Institute of Biology, Slovenia

33.04 11.45h-12.15h
Tumour specific targets in glioma.
Andreas von Deimling
Ruprecht Karls University and CCUN, Germany

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

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34. Theme C: Sensory and Motor Systems *Venue:* Frobisher Room 1

The Brain Machine Interface: A tool for patients and basic neuroscience

Convenors: Roger Lemon and Alexander Kraskov (University College London)
Chaired by: Roger Lemon (University College London)

34.01 10.15h-10.45h
Stability and distribution of grasp related information in LFPs for potential use in grasping BMI.
Alexander Kraskov
University College London

34.02 10.45h-11.15h
Beyond decoding: Optimising control of abstract interfaces.
Andrew Jackson
Newcastle University

34.03 11.15h-11.45h
Human brain-machine interfaces based on epicortical recording.
Carsten Mehring
Imperial College London

34.04 11.45h-12.15h
Progress toward high performance brain-machine interfaces.
Andrew Schwartz
University of Pittsburgh, Pittsburgh, USA

This Symposium is sponsored by the **British Neuroscience Association**.

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35. Theme D: Cognition *Venue:* Frobisher Room 4

The re-emergence of schemas in memory research

Convenor: Richard Morris (University of Edinburgh)
Chaired by: Richard Morris (University of Edinburgh)

35.01 10.15h-10.45h
Schemas and memory consolidation in animals.
Richard Morris
University of Edinburgh

35.02 10.45h-11.15h
Learning along our mental schemas.
Guillen Fernandez
Donders Institute for Cognitive Neuroimaging, Nijmegen, The Netherlands

35.03 11.15h-11.45h
Schemas, novelty and prediction-error-driven learning.
Rik Henson
Cambridge University

35.04 11.45h-12.15h
Sleep, consolidation, and semantic memory.
Penny Lewis
Manchester University

This Symposium is sponsored by the **British Neuroscience Association**.

LUNCH

12.15h – 15.00h

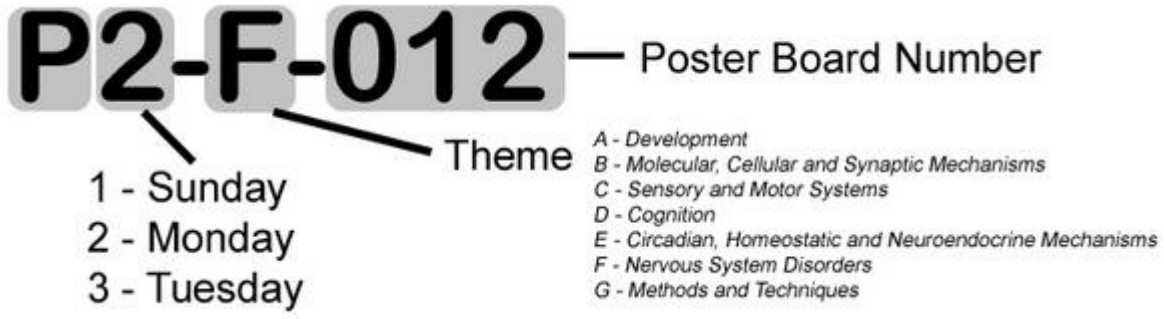
POSTER SESSION P3 and TRADE EXHIBITION

Exhibition Hall 2.

Presenters will be present at their posters at the following times:

- Odd number boards: 12.30h – 13.15h
- Even number boards: 13.15h – 14.00h

Poster reference explanation:



Please visit the Trade Stands on both floors of the Exhibition Hall.

SYMPOSIA

15.00h – 17.00h

36. Theme F: Nervous System Disorders ***Venue:*** **Barbican Hall**

Pathways to neuro-degeneration: Deciphering early mechanisms for early intervention

Convenors: Jean Manson and Jane Haley (University of Edinburgh)
Chaired by: Jean Manson (University of Edinburgh)

36.01 15.00h-15.30h
Molecular pathways mediating axon degeneration.
Lukas Neukomm
University of Massachusetts Medical School, Boston, USA

36.02 15.30h-16.00h
The role of astrocytes in the pathogenesis of age-related neurodegenerative pathology.
Julie Simpson
Sheffield University

36.03 16.00h-16.30h
Molecular regulation of synaptic degeneration.
Tom Gillingwater
University of Edinburgh

36.04 16.30h-17.00h
Prion timeline cause, effect and consequences.
Vincent O'Connor
Southampton University

This Symposium is sponsored by the **British Neuroscience Association**.

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37. Theme D: Cognition ***Venue:*** **Cinema 1**

Choosing and doing: The neuroscience of voluntary action

Convenor: Patrick Haggard (University College London)
Chaired by: Patrick Haggard (University College London)

37.01 15.00h-15.30h
"Voluntariness": Behavioural freedom and decision-making in flies.
Björn Brembs
University of Regensburg, Regensburg, Germany

37.02 15.30h-16.00h
Towards deciphering the neuronal circuits in human cortex underlying voluntary action.
Gabriel Kreiman
Harvard University, Boston, USA

37.03 16.00h-16.30h
Intention and agency in the human brain.
Patrick Haggard
University College London

37.04 16.30h-17.00h
Neuroimaging of volition.
John-Dylan Haynes
Bernstein Centre for Computational Neuroscience, Berlin, Germany

This Symposium is sponsored by the **Experimental Psychology Society**.

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38. Theme F: Nervous System Disorders *Venue:* **Garden Room**

The neuroscience of bipolar disorder: Inositol phosphates and phosphoinositides in pathology and treatment

Convenor: Robin Williams (Royal Holloway, University of London)
Chaired by: Robin Williams (Royal Holloway, University of London)

38.01 15.00h-15.30h
Disease biomarkers for bipolar disorder.
Sabine Bahn
Cambridge University

38.02 15.30h-16.00h
The effect of lithium and of knockout of inositol metabolism-related genes on inositol turnover; implications on the mechanism of mood stabilization by lithium.
Galila Agam
Ben-Gurion University of the Negev, Israel

38.03 16.00h-16.30h
A safe lithium mimetic for bipolar disorder.
Sridhar Vasudevan
Oxford University

38.04 16.30h-17.00h
Investigating inositol phosphate and phosphoinositide signalling as a target for the bipolar disorder and epilepsy treatment, valproic acid, using multiple model systems.
Robin Williams
Royal Holloway, University of London

This Symposium is sponsored by a supporter of the **BNA2013: Festival of Neuroscience**.

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39. Theme G: Methods and Techniques *Venue:* **Frobisher Auditorium 1**

Stem cells as therapies for the neurosciences and tools for pharmacology and toxicology

Convenors: Robert Halliwell (University of the Pacific, USA), John Haynes (Monash University, Australia), Ray Hill (Imperial College London) and Karen Schlaegel (British Pharmacological Society)
Chaired by: Robert Halliwell (University of the Pacific, USA)

39.01 15.00h-15.30h
Characterization of stem cell-like populations found within the olfactory mucosa: Use in CNS repair.
Sue Barnett
Glasgow University

39.02 15.30h-16.00h
Modelling neurodegeneration using human midbrain dopaminergic neurons.
John Haynes
Monash University, Clayton, Australia

39.03 16.00h-16.30h
Neurons from stem cells for neuropharmacology and neurotoxicology studies.
Bob Halliwell
University of the Pacific, Stockton, USA

39.04 16.30h-17.00h
Stem cells therapy for neurodegenerative disease.
Anne Rosser
Cardiff University

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

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40. Theme F: Nervous System Disorders ***Venue:*** **Frobisher Auditorium 2**

CNS and immune system interactions: Novel GPCR functions

Convenors: Trevor Bushell (Strathclyde University) and Kumlesh Dev (Trinity College Dublin, Ireland)
Chaired by: Kumlesh Dev (Trinity College Dublin, Ireland)

40.01 15.00h-15.30h
The role of EBI2 in inflammatory autoimmune diseases.
Andreas Sailer
Novartis Institutes of Biomedical Research, Basel, Switzerland

40.02 15.30h-16.00h
The role of S1P receptors in the CNS.
Kumlesh Dev
Trinity College Dublin, Republic of Ireland

40.03 16.00h-16.30h
The role of inflammation in the effect of obesity on ischaemic damage.
Catherine Lawrence
Manchester University

40.04 16.30h-17.00h
Proteinase-activated receptor 2 (PAR2): Do peripheral inflammatory roles translate to the CNS?
Trevor Bushell
Strathclyde University

This Symposium is sponsored by the **British Neuroscience Association**.

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41. Theme C: Sensory and Motor Systems ***Venue:*** **Frobisher Room 1**

Cerebellar contributions to motor, cognitive and emotional behaviour

Convenors: Richard Apps and Stella Koutsikou (Bristol University), Mike Spyer (University College London) and Nick Boross-Toby (The Physiological Society)
Chaired by: Richard Apps (Bristol University)

41.01 15.00h-15.30h
New insights into cerebellar function based on an analysis of its outputs.
Peter Strick
University of Pittsburgh, Pittsburgh, USA

41.02 15.30h-16.00h
Cerebellar outputs to muscle.
Stuart Baker
Newcastle University

41.03 16.00h-16.30h
Distribution of plasticity in cerebellum-dependent learning.
Christopher Yeo
University College London

41.04 16.30h-17.00h
Neural substrates underlying fear: The periaqueductal grey-cerebellar link.
Stella Koutsikou
Bristol University

This Symposium is sponsored by **The Physiological Society**.

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42. Theme E: Circadian, Homeostatic and Neuroendocrine Mechanisms ***Venue:***
How the brain controls appetite **Frobisher Room 4**

Convenors: Waljit Dhillo (Imperial College London) and Rachel Evans (Society for Endocrinology)
Chaired by: Waljit Dhillo (Imperial College London)

42.01 15.00h-15.30h
The skinny on smoking: Molecular basis for nicotine effects on appetite.
Marina Picciotto
Yale University, New Haven, USA

42.02 15.30h-16.00h
How do gut hormones released after a meal make you feel full?
Victoria Salem
Imperial College London

42.03 16.00h-16.30h
How the fat hormone leptin reduces food intake.
Sadaf Farooqi
Cambridge University

42.04 16.30h-17.00h
Thyroid hormone, tanycytes and seasonal regulation of body weight.
Francis Ebling
Nottingham University

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

PUBLIC LECTURE

18.00h - 19.00h Barbican Hall

PUBLIC LECTURE

Anders Björklund (*University of Lund, Sweden*)

"Stem cell therapy for Parkinson's Disease: Problems and Prospects."

Chaired by: Humphrey Rang (Emeritus Professor of Pharmacology, UCL)

A pioneer of cell transplantation in the 1970s, Anders Bjorklund has focused his research on reparative and neuroprotective mechanisms in the CNS using cell replacement and gene transfer techniques. In recent years the group at the Wallenberg Neuroscience Center have developed an interest in the mechanisms underlying L-DOPA-induced dyskinesia, and the role of dopamine released as a "false transmitter" from serotonin terminals in the induction and triggering of this side effect of L-DOPA medication.

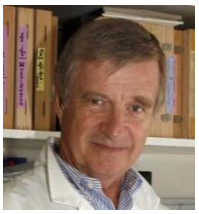
This Public Lecture is sponsored by the **British Pharmacological Society**.

WEDNESDAY 10th APRIL 2013

PLENARY LECTURE

08.30h - 09.30h Barbican Hall

PLENARY LECTURE
Yves Agid (Hôpital Pitié-Salpêtrière, Paris, France)
"Subconsciousness and the brain."
Chaired by: Martin Rossor (University College London)
Sponsored by the **Association of British Neurologists.**



09.30h – 10.15h
REFRESHMENTS SERVED IN BARBICAN STALLS FOYER.

SYMPOSIA

10.15h – 12.15h

43. Theme F: Nervous System Disorders ***Venue:*** **Barbican Hall**

Emerging therapeutic targets for neurodegeneration
Convenor: Tom Connor (Trinity College Dublin, Republic of Ireland)
Chaired by: David Henshall (RCSI Dublin, Republic of Ireland)

43.01 10.15h-10.45h
MicroRNA targeting to protect brain from seizures.
David Henshall
Royal College of Surgeons in Ireland

43.02 10.45h-11.15h
Inflammatory changes drive neurodegeneration in age and Alzheimer's disease.
Marina Lynch
Trinity College Dublin, Republic of Ireland

43.03 11.15h-11.45h
Ubiquitin-proteasome system and endoplasmic reticulum-stress in Huntington's disease.
José Lucas
CSIC/UAM, Madrid, Spain

43.04 11.45h-12.15h
A novel role for prolyl hydroxylases and tumour necrosis factor alpha in hypoxia.
John O'Connor
University College Dublin, Republic of Ireland

This Symposium is sponsored by **Neuroscience Ireland**.

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44. Theme C: Sensory and Motor Systems ***Venue:*** **Cinema 1**

Heterogeneity of dopamine neurons. What do they do and how do they do it?

Convenor: Paul Bolam (Oxford University)
Chaired by: Paul Bolam (Oxford University)

44.01 10.15h-10.45h
Heterogeneous activity and plasticity of dopamine neurons *in vivo*.
Mark Ungless
Imperial College London

44.02 10.45h-11.15h
Structural basis of heterogeneous activity of nigral dopaminergic neurons: The role of afferent synaptic organisation and dendritic architecture.
Pablo Henny
Pontificia Universidad Católica de Chile, Santiago, Chile

44.03 11.15h-11.45h
What do dopamine neurons see?
Peter Redgrave
Sheffield University

44.04 11.45h-12.15h
Probing dopamine neurons in intact brain tissue: What do dopamine neurons do?
Mark Wightman
University of North Carolina at Chapel Hill, USA

This Symposium is sponsored by the **British Neuroscience Association**.

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45. Theme B: Molecular, Cellular and Synaptic Mechanisms ***Venue:*** **Garden Room**

Molecules and mechanisms of the insect brain

Convenor: Jörg Albert (University College London) and Ian Russell (Brighton University)
Chaired by: Ian Russell (Brighton University)

45.01 10.15h-10.45h
From sounds to spikes: The molecular and biophysical logic of auditory transduction in insects.
Jörg Albert
University College London

45.02 10.45h-11.15h
First take an egg: How mechanosensory neurons are made in embryonic development.
Andrew Jarman
University of Edinburgh

45.03 11.15h-11.45h
Love on the fly: Dissecting the neural networks underlying sexual behaviour.
Stephen Goodwin
Oxford University

45.04 11.45h-12.15h
Cracking the peripheral olfactory code with maggots.
Matthew Cobb
Manchester University

This Symposium is sponsored by the **British Neuroscience Association**.

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46. Theme B: Molecular, Cellular and Synaptic Mechanisms ***Venue:*** **Frobisher Auditorium 1**

Axonal injury and functional repair: Basic mechanisms

Convenors: Rhona Mirsky and Kristjan Jessen (University College London)
Chaired by: Rhona Mirsky (University College London)

46.01 10.15h-10.45h
Nerve repair depends on c-Jun driven Schwann cell transdifferentiation to generate a specialized repair cell in injured nerves.
Kristjan Jessen
University College London

46.02 10.45h-11.15h
Building connections: RNA-based control of axon guidance and survival.
Christine Holt
Cambridge University

46.03 11.15h-11.45h
Inhibitors of axon growth in the CNS.
Stephen McMahon
King's College London

46.04 11.45h-12.15h
Moderate microtubule stabilization reduces scarring and causes axonal regeneration after spinal cord injury.
Frank Bradke
DZNE Bonn, Germany

This Symposium is sponsored by the **British Neuroscience Association**.

NOTE: SESSION STARTS AT 09.45h

47. Theme G: Methods and Techniques ***Venue:*** **Frobisher Auditorium 2**

Workshop: Opening up the 'Black Box' of neuroscience disease to deliver new medicines

Convenor: Ceri Davies (GSK Singapore) and David Trist (Consultant)
Chaired by: Ceri Davies (GSK Singapore)

47.01 09.45h-10.15h
Why the Black Box of Neuroscience - Introduction.
David Trist
Consultant

47.02 10.15h-10.45h
Human brain pharmacology - can this help choose better targeted compounds?
Ceri Davies
GSK R&D Singapore

47.03 10.45h-11.15h
Leaving the party early; how new approaches and findings are transforming our understanding of complex brain disorders (just as drug companies disengage from neuroscience research).
Lawrence Wilkinson
Cardiff University

47.04 11.15h-11.45h
Circuit based approaches to understanding neuropathology - how can we exploit this therapeutically?
Miles Whittington
York University

47.05 11.45h-12.15h
Novel experimental medicine approaches.
Ed Bullmore
Cambridge University

47.06 12.15h-12.45h
The changing pharma industry and the opportunity for precision medicine.
Ruth McKernan
Pfizer R&D

47.07 12.45h-13.15h
Exploiting the power of academic, government, industrial collaborations to progress novel medicines.
James Hagan
GMEC, London

47.08 13.15h-13.45h
What has experimental medicine done for the development of new treatments for CNS disorders?
Gerry Dawson
P1 Vital, Wallingford

This Symposium is sponsored by the **British Neuroscience Association**.

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48. Theme F: Nervous System Disorders *Venue:* **Frobisher Room 1**

The contribution of inflammation to the pathogenesis of neurological disease

Convenors: Nicola Woodroofe (Sheffield Hallam University) and Sandra Amor (VUMC, Amsterdam, The Netherlands)
Chaired by: Nicola Woodroofe (Sheffield Hallam University)

48.01 10.15h-10.45h
Heterogeneity of CNS myeloid cells and their roles in neurodegeneration.
Richard Ransohoff
Cleveland Clinic, Cleveland, USA

48.02 10.45h-11.15h
Immunological mechanisms influencing stroke aetiology, pathology and recovery.
Barry McColl
University of Edinburgh

48.03 11.15h-11.45h
Epilepsy and brain inflammation.
Annamaria Vezzani
Mario Negri Institute for Pharmacological Research, Milan, Italy

48.04 11.45h-12.15h
A new model for optic neuritis and measurement of neurodegeneration in real time.
Katie Lidster
Queen Mary, University of London

This Symposium is sponsored by the **British Society of Immunology**.

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49. Theme H: Public Awareness and Societal Impacts ***Venue:*** **Frobisher Room 4**

Workshop: Drugs and Society: The neuroethics of enhancing or erasing memories

Convenors: Barbara Sahakian (Cambridge University), Barbara Gill (Dana) and Karen Graham (International Neuroethics Society)
Chaired by: Barbara Sahakian (Cambridge University)

49.01 10.15h-10.45h
Increasing lifestyle use of cognitive enhancing drugs and drugs for erasing memories.
Barbara Sahakian
Cambridge University

49.02 10.45h-11.15h
Cognitive enhancing drugs and drugs of abuse: How do they work in the brain?
David Nutt
Imperial College London

49.03 11.15h-11.45h
Discussion: Drugs, Society and Neuroethics.
Judy Illes
University of British Columbia Hospital, Vancouver, Canada

49.04 11.45h-12.15h
Erasing memories: How can we do it and why would we want to?
Barry Everitt
Cambridge University

This Symposium is sponsored by **EDAB** and the **International Neuroethics Society**.

LUNCH

12.15h – 1400h

12.45 **British Neuroscience Association ANNUAL GENERAL MEETING.** Cinema 1
All BNA members are invited to attend this meeting.

12.30 **Coming to our senses**. Frobisher Room 1
Organised by the School of Advanced Study, University of London

Perception enables us to see, touch, smell, taste and hear the world around us, or so we suppose. However, neuroscience is teaching us that many more senses are involved in these experiences than we think, and showing just how interactive these senses are. We are still some way from knowing exactly how the brain brings together inputs from different sense modalities to provide conscious subjects with a seemingly unified experience of the world, but already surprising discoveries of how sound affects what we taste, or how smell affects our sense of touch, are having an impact on the world of the arts, music, cooking, and design. In this session, we look at the influence of sensory neuroscience across a wide range of disciplines and sectors from the arts and humanities to the food and drinks industry.

Chair: Professor Colin Blakemore, Director of the Centre for the Study of the Senses, London
Speakers: Professor Charles Spence, Cross-Modal Research Laboratory, University of Oxford
Professor Marina Wallace, Central Saint Martins, University of the Arts,
Professor Barry Smith, Institute of Philosophy , University of London
Dr Victoria Williamson, Goldsmiths College, London

12.30 **Understanding Animal Research**. Frobisher Room 4
Organised by Understanding Animal Research

Animal research is a small but essential part of medical and scientific progress. But how much do non-scientific audiences really know and understand about why and how animals are used in research in the UK? UAR uses a variety of platforms to communicate with the public about this issue and is currently leading the development of a new Concordat on Openness about animal research.
In this session, UAR will present what we know about public opinion on science in general and animal research in particular, and will explore what openness about animal research means to the various different groups with an interest in this issue.

Speaker – Wendy Jarrett

SYMPOSIA

14.00h – 16.00h

50. Theme D: Cognition ***Venue:*** **Barbican Hall**

The prefrontal cortex and decision making
Convenor: Matthew Rushworth (Oxford University)
Chaired by: Matthew Rushworth (Oxford University)

50.01 14.00h-14.30h
The brain valuation system and its neural partners.
Matthew Pessiglione
Hôpital Pitié-Salpêtrière, Paris, France

50.02 14.30h-15.00h
Decision making in reward systems.
Tim Behrens
Oxford University

50.03 15.00h-15.30h
Decision making in the frontal cortex: Evidence from single neuron electrophysiology.
Steve Kennerley
University College London

50.04 15.30h-16.00h
Damaged decisions: The effects of frontal lobe lesions on value-based choice and learning.
Lesley Fellows
Montreal Neurological Institute and Hospital, Canada

This Symposium is sponsored by the **British Neuroscience Association**.

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51. Theme A: Development ***Venue:*** **Cinema 1**

The development of hippocampal circuits

Convenor: Francesca Cacucci (University College London)
Chaired by: Francesca Cacucci (University College London)

51.01 14.00h-14.30h
Functional anatomy of the developing hippocampal system.
Menno Witter
Norwegian University of Science and Technology, Trondheim, Norway

51.02 14.30h-15.00h
Assembly and plasticity of hippocampal principal neuron microcircuits.
Pico Caroni
Friedrich Miescher Institute for Biomedical Research, Basel, Switzerland

51.03 15.00h-15.30h
Understanding developments to treat brain disorders: When a diuretic is efficient to treat autism.
Yehezkel Ben-Ari
Institut de Neurobiologie de la Mediterranée, Marseille, France

51.04 15.30h-16.00h
Ontogenetic development of hippocampal spatial representations. *In vivo* recording of hippocampal neurons in awake and behaving young rats.
Tom Wills
University College London

This Symposium is sponsored by the **British Neuroscience Association**.

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52. Theme E: Circadian, Homeostatic and Neuroendocrine Mechanisms ***Venue:***
Timing in neuroendocrinology **Garden Room**

Convenors: Stafford Lightman (Bristol University) and Rachel Evans (Society for Endocrinology)
Chaired by: Stafford Lightman (Bristol University)

52.01 14.00h-14.30h
Seasonal synchrony.
David Hazlerigg
University of Aberdeen

52.02 14.30h-15.00h
Cyclical activity of hypothalamic GnRH neurones: A role for nitric oxide?
Vincent Prevot
Université de Lille 2, Lille, France

52.03 15.00h-15.30h
Molecular and cellular mechanisms of daily timekeeping.
Hugh Piggins
Manchester University

52.04 15.30h-16.00h
Origin and relevance of ultradian activity in the HPA axis.
Stafford Lightman
Bristol University College

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

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53. Theme F: Nervous System Disorders ***Venue:*** **Frobisher Room 1**

Brain tumours: A complex, challenging and under-recognised area of neuroscience

Convenors: Geoff Pilkington (Portsmouth University) and David Walker (Nottingham University)
Chaired by: David Walker (Nottingham University)

53.01 14.00h-14.30h
Novel and state of the art approaches and developments in brain tumour surgery.
Conor Mallucci
Alder Hey Children's NHS Trust, Liverpool

53.02 14.30h-15.00h
Optimising chemo/ radiotherapeutic response in brain tumour; a scientific perspective.
Anthony Chalmers
Glasgow University

53.03 15.00h-15.30h
A foot in both camps: Clinical and laboratory neuroscience.
Stuart Smith
Nottingham University

53.04 15.30h-16.00h
The brain tumour journey - collaboration is crucial.
Kathy Oliver
International Brain Tumour Alliance

This Symposium is sponsored by the **British Neuro-oncology Society**.

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54. Theme C: Sensory and Motor Systems ***Venue:*** **Frobisher Auditorium 2**

From mice to men: Mechanisms of neuronal adaptation in the mammalian visual system

Convenors: Jonas Larsson (Royal Holloway, University of London)
Chaired by: Jonas Larsson (Royal Holloway, University of London)

54.01 14.00h-14.30h
Adaptation maintains homeostasis in cortical populations.
Matteo Carandini
University College London

54.02 14.30h-15.00h
Contrast adaptation in the early visual system: Roles for excitation and inhibition.
Sam Solomon
University of Sydney, Australia

54.03 15.00h-15.30h
Visual motion adaptation in a distributed network.
Adam Kohn
Albert Einstein College of Medicine, New York, USA

54.04 15.30h-16.00h
Spatial specificity and inheritance of adaptation in the human visual cortex.
Jonas Larsson
Royal Holloway, University of London

This Symposium is sponsored by the **British Neuroscience Association**.

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55. Theme D: Cognition ***Venue:*** **Frobisher Auditorium 1**

Improving cognitive functions in ageing

Convenor: Emil Toescu (University of Birmingham)
Chaired by: Emil Toescu (University of Birmingham)

55.01 14.00h-14.30h
Determinants of cognitive performance in healthy older people: The Lothian Birth Cohorts of 1921 and 1936.
Ian Deary
University of Edinburgh

55.02 14.30h-15.00h
The impact of cognitive lifestyle on cognition in normal ageing.
Fiona Matthews
Cambridge University

55.03 15.00h-15.30h
Modification of cognitive decline in ageing by nutritional interventions.
David Smith
Oxford University

55.04 15.30h-16.00h
Physical exercise and cognitive improvements in the healthy aged.
Jeanette Thom
Bangor University

This Symposium is sponsored by the **British Neuroscience Association**.

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56. Theme H: Public Awareness and Societal Impacts ***Venue:*** **Frobisher Room 2**

Workshop: Neuroscience and society: Opportunities, challenges and policy

Convenor: Steven Rose (Open University)
Chaired by: Steven Rose (Open University)

55.01 14.00h-14.30h
Neuroeducation and neuromyths.
Paul Howard-Jones
Bristol University

55.02 14.30h-15.00h
Neuroscience, conflict and security.
Rod Flower
Barts and the London School of Medicine and Dentistry

55.03 15.00h-15.30h
Neuroscience and the law.
Nicholas Mackintosh
Cambridge University

55.04 15.30h-16.00h
Governance of neuroscience: Challenges and responses.
Andy Stirling
University of Sussex

55.05 16.00h-16.30h
Neuroethics for neuroscientists.
Sarah Chan
Manchester University

This Symposium is sponsored by the **British Neuroscience Association**.

16.00h – 16.45h
REFRESHMENTS SERVED IN BARBICAN STALLS FOYER.

PLENARY LECTURE

17.00h - 18.00h Barbican Hall

PLENARY LECTURE

Dame Uta Frith (*University College London*)
"Autism and cognitive development."
Chaired by: Colin Blakemore (University of London)
Sponsored by the **British Neuroscience Association**.

END

Speaker list

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

Agam, Professor Galila

Ben-Gurion University of the Negev, Beer-Sheva, Israel

The effect of lithium and of knockout of inositol metabolism-related genes on inositol turnover; implications on the mechanism of mood stabilization by lithium. Tuesday 9th April – PM.

Aggleton, Professor John

Cardiff University, Cardiff, UK

Diffusion MRI-based tractography: Perspectives from axonal tract tracing in animals. Tuesday 9th April – AM.

Agid, Professor Yves

Hôpital Pitié-Salpêtrière, Paris, France

PLENARY. *Subconsciousness and the brain*. Wednesday 10th April – AM.

Albert, Dr Joerg

University College London, London, UK

From sounds to spikes: the molecular and biophysical logic of auditory transduction in insects. Wednesday 10th April – AM.

Anderson, Professor Ian

University of Manchester, Manchester, UK

Beyond the monoamines: new advances in treatments for depression? Sunday 7th April – AM.

Ashby, Dr Michael

Bristol University, Bristol, UK

NMDA receptors and the functional birth of cortical circuits. Sunday 7th April – PM.

Assaf, Professor Yaniv

Tel Aviv University, Tel Aviv, Israel

Learning in the fast lane: new insights into neuroplasticity. Tuesday 9th April – AM.

Attwell, Professor David

University College London, UK

PLENARY. *CNS White Matter: The role of neurotransmitter signalling to oligodendrocytes and their precursors in health and disease*. Monday 8th April – PM.

Bahn, Professor Sabine

Cambridge University, Cambridge, UK

Disease Biomarkers for Bipolar Disorder. Tuesday 9th April – PM.

Bahrami, Dr Bahador

University College London, London, UK

When and how can two heads be better than one? Monday 8th April – PM.

Baker, Professor Stuart

Newcastle University, Newcastle-upon-Tyne, UK

Cerebellar outputs to muscle. Tuesday 9th April – PM.

Bannerman, Dr David

Oxford University, Oxford, UK

The role of NMDA receptors in learning and memory. Sunday 7th April – PM.

Barker, Professor Roger

Cambridge University, Cambridge, UK

What is the true range of clinical features in Huntington's Disease? Lessons learnt from patients. Monday 8th April – AM.

Barnett, Professor Sue

Glasgow University, Glasgow, UK

Characterization of stem cell-like populations found within the olfactory mucosa: use in CNS repair. Tuesday 9th April – PM.

Baron, Professor Jean-Claude

Cambridge University, Cambridge, UK

PET imaging of inflammation after stroke. Sunday 7th April – PM.

Bates, Professor Gillian

King's College London, London, UK

Huntington's disease: molecular pathogenesis and therapeutic target validation. Monday 8th April - AM.

Behrens, Dr Tim

Oxford University, Oxford, UK

Decision making in reward systems. Wednesday 10th April – PM.

Ben-Ari, Professor Yehezkel

Institut de Neurobiologie de la Mediterranée, Marseille, France

Development of hippocampal circuits, with particular emphasis on the role of early oscillatory and spontaneous activity. Wednesday 10th April – PM.

Bennett, Dr David

King's College London, London, UK

The immune system and pain. Sunday 7th April – AM.

Bilsland, Dr James

Neusentis, Cambridge, UK

Sensory neurones derived from iPS cells in pain disease modelling and drug discovery. Monday 8th April - PM.

Bjerkvig, Professor Rolf

University of Bergen, Bergen, Norway

Hypoxia and angiogenesis in tumour biology. Tuesday 9th April – AM.

Björkland, Professor Anders

University of Lund, Lund, Sweden

PUBLIC LECTURE. *Stem cell therapy for Parkinson's disease: Problems and prospects*. Tuesday 9th April – Evening.

Bliss, Professor Tim

NIMR, London, UK

PLENARY. *LTP: Forty years on*. Tuesday 9th April – AM.

Bradbury, Dr Elizabeth

King's College London, London, UK

Manipulating the extracellular matrix to promote repair following spinal cord injury. Sunday 7th April - PM.

Bradke, Professor Frank

DZNE Bonn, Bonn, Germany

Moderate microtubule stabilization reduces scarring and causes axonal regeneration after spinal cord injury. Wednesday 10th April – AM.

Brembs, Dr Björn

Freie Universität Berlin, Berlin, Germany

Voluntariness: Behavioral freedom and decision-making in flies. Tuesday 9th April – PM.

Brickley, Dr Stephen

Imperial College London, London, UK

The potential of extrasynaptic GABAA receptors as targets of sedative/hypnotic drugs. Sunday 7th April – PM.

Brown, Professor Steven

University of Zurich, Zurich, Switzerland

Cellular clocks directing sleep and physiology. Sunday 7th April – PM.

Bullmore, Professor Ed

Cambridge University, Cambridge, UK

Small world networks in schizophrenia. Tuesday 9th April – AM.

Bullmore, Professor Ed

Cambridge University, Cambridge, UK

Novel experimental medicine approaches - Human synaptic plasticity and evaluation of novel pharmacological targets. Wednesday 10th April – AM.

Bushell, Dr Trevor

Strathclyde University, Glasgow, UK

Proteinase-activated receptor 2 (PAR2): Do peripheral inflammatory roles translate to the CNS? Tuesday 9th April – PM.

Carandini, Professor Matteo

University College London, London, UK

Adaptation maintains homeostasis in cortical populations. Wednesday 10th April – PM.

Carmignoto, Dr Giorgio

Universita degli Studi di Padova, Padova, Italy

Astrocyte involvement in initiating and terminating seizures. Sunday 7th April – AM.

Caroni, Professor Pico

Friedrich Miescher Institute for Biomedical Research, Basel, Switzerland

Assembly and plasticity of hippocampal principal neuron microcircuits. Wednesday 10th April – PM.

Carvalho, Professor Ana-Luisa

University of Coimbra, Coimbra, Portugal

Modulation of hippocampal glutamatergic synapses by ghrelin. Sunday 7th April – AM.

Cattaneo, Professor Elena

University of Milan, Milan, Italy

Twenty years of HD research in a dish, up to the iPS cells. Monday 8th April – PM.

Chakrabarti, Dr Bhismadev

Reading University, Reading, UK

Reward and empathy: How they are connected, or not. Monday 8th April – PM.

Chalmers, Professor Anthony

Glasgow University, Glasgow, UK

Optimising chemo/radiotherapeutic response in brain tumour; a scientific perspective. Wednesday 10th April – PM.

Chamberlain, Dr Sam

Cambridge University, Cambridge, UK

Trichotillomania: a fascinating model of an impulsive-compulsive disorder. Monday 8th April – AM.

Chan, Dr Sarah

Manchester University, Manchester, UK

Neuroethics for neuroscientists. Wednesday 10th April – PM.

Chittka, Dr Alexandra

University College London, London, UK

Histone arginine methylation and the control of neural stem cell proliferation and differentiation. Sunday 7th April – AM.

Clark, Dr Beverley

University College London, London, UK

Direct measurement of signalling in mammalian central axons. Monday 8th April – PM.

Clark, Dr Luke

Cambridge University, Cambridge, UK

The neural basis of distorted thinking in gambling addiction. Monday 8th April – AM.

Cobb, Professor Matthew

Manchester University, Manchester, UK

Cracking the peripheral olfactory code with maggots. Wednesday 10th April – AM.

Cowen, Professor Philip

Oxford University, Oxford, UK

Do antidepressants work? Sunday 7th April – AM.

Cunningham, Dr Mark

Newcastle University, Newcastle-upon-Tyne, UK

The role of GABAergic neurotransmission in the generation of γ-oscillatory activity in vitro in human cortical slices. Tuesday 9th April – AM.

Dakin, Dr Steven

University College London, London, UK

Statistical properties of moving images in natural scenes, and perceptual mechanisms. Monday 8th April – AM.

Davies, Professor Ceri

GSK R&D Site, Singapore, Singapore

Human brain pharmacology – can this help choose better targeted compounds? Wednesday 10th April – AM.

Dawson, Dr Gerry

P1 Vital, Oxford, UK

What has experimental medicine done for the development of new treatments for CNS disorders? Wednesday 10th April – AM.

Deary, Professor Ian

Edinburgh University, Edinburgh, UK

Determinants of cognitive performance in healthy older people: the Lothian Birth Cohorts of 1921 and 1936. Wednesday 10th April – PM.

Debanne, Dr Dominique

Université de la Méditerranée, Marseille, France

Analogue-digital signalling in hippocampal axons. Monday 8th April – PM.

del Zoppo, Professor Gregory

University of Washington, Seattle, USA

Inflammation in stroke. Sunday 7th April – PM.

Denham, Professor Susan

Plymouth University, Plymouth, UK

Competition and cooperation in a model of auditory scene analysis. Monday 8th April – PM.

Dev, Professor Kumlesh

Trinity College Dublin, Dublin, Ireland

The Role of S1P Receptors in the CNS. Tuesday 9th April – PM.

Dijk, Professor Derk-Jan

University of Surrey, Guildford, UK

Human neuropharmacology of sleep and circadian rhythms. Sunday 7th April – PM.

Duff, Dr Eugene

Oxford University, Oxford, UK

Meta-analysis approaches in neuroimaging. Sunday 7th April – PM.

Durant, Dr Szonya

Royal Holloway, University of London, Egham, UK

The effect of eye movements on motion information during real-world navigation. Monday 8th April - AM.

Ebling, Professor Francis

Nottingham University, Nottingham, UK

Thyroid hormone, tanycytes and seasonal regulation of body weight. Tuesday 9th April – PM.

Edwards, Dr Mark

University College London, London, UK

The neuroscience of functional neurological symptoms. Tuesday 9th April – AM.

Ehrsson, Professor Henrik

Karolinska Institutet, Stockholm, Sweden

Multisensory mechanisms of body ownership. Sunday 7th April – AM.

Emptage, Professor Nigel

Oxford University, Oxford, UK

The role of glutamate autoreceptors in transmitter release. Monday 8th April – PM.

Everitt, Professor Barry

Cambridge University, Cambridge, UK

Erasing memories: How can we do it and why would we want to? Wednesday 10th April – AM.

Farooqi, Professor Sadaf

Cambridge University, Cambridge, UK

How the fat hormone leptin reduces food intake. Tuesday 9th April – PM.

Fellows, Dr Lesley

Montreal Neurological Institute and Hospital, Montreal, Quebec, Canada

Damaged decisions: The effects of frontal lobe lesions on value-based choice and learning. Wednesday 10th April – PM.

Fernandez, Professor Guillen

Donders Institute for Cognitive Neuroimaging, Nijmegen, The Netherlands

Learning along our mental schemas. Tuesday 9th April – AM.

Fineberg, Professor Naomi

University of Hertfordshire, Welwyn Garden City, UK

OCD in translation: from animal models to clinical treatments. Monday 8th April – AM.

Fiske, Professor Susan

Princeton University, Princeton, USA

How to (de)humanize another person: Fundamental dimensions of social cognition. Monday 8th April – PM.

Flower, Professor Rod

Barts and The London School of Medicine and Dentistry, London, UK

Neuroscience, conflict and security. Wednesday 10th April – PM.

Fotopoulou, Dr Katerina

King's College London, London, UK

The transitional body: Insights from neuropsychology and neuroimaging. Sunday 7th April – AM.

Francis, Dr Susan

Nottingham University, Nottingham, UK

Imaging of tissue function. Monday 8th April – AM.

Francois, Dr Jennifer

Eli Lilly & Co., Windlesham, UK

Assessing frontostriatal function during reward processing with in vivo *oxygen amperometry.* Tuesday 9th April – AM.

Frith, Professor Dame Uta

UCL Institute of Cognitive Neuroscience, London, UK

PLENARY. *Autism, and cognitive development.* Wednesday 10th April – PM.

Gavins, Dr Felicity

Imperial College London, London, UK

Inflammation in stroke. Sunday 7th April – PM.

Gillingwater, Professor Tom

Edinburgh University, Edinburgh, UK

Molecular regulation of synaptic degeneration. Tuesday 9th April – PM.

Goodwin, Dr Stephen

Oxford University, Oxford, UK

Love on the fly: Dissecting the neural networks underlying sexual behaviour. Wednesday 10th April – AM.

Graham, Dr Paul

Sussex University, Brighton, UK

What does the World look like to a navigating ant? Sunday 7th April – PM.

Groves, Dr Adrian

Oxford University, Oxford, UK

Multimodal exploratory analyses. Sunday 7th April – PM.

Hagan, Dr James

GMEC, London, UK

Exploiting the power of academic, government, industrial collaborations to progress novel medicines. Wednesday 10th April – AM.

Haggard, Professor Patrick

University College London, London, UK

Intention and agency in the human brain. Tuesday 9th April – PM.

Halliwell, Professor Bob

University of the Pacific, Stockton, USA

Neurons from human stem cells for neuropharmacology and neurotoxicology studies. Tuesday 9th April – PM.

Hamandi, Dr Khalid

University Hospital of Wales, Cardiff, UK

MEG, oscillations and epilepsy. Monday 8th April – PM.

Hamdy, Professor Shaheen

Manchester University, Salford, UK

Therapeutic potential of transcranial brain stimulation. Monday 8th April – PM.

Hardingham, Professor Giles

Edinburgh University, Edinburgh, UK

Molecular basis for pro-survival and pro-death signaling from the NMDA receptor. Sunday 7th April – PM.

Harmer, Dr Catherine

Oxford University, Oxford, UK

Psychological perspectives on the mechanism of action of antidepressants. Sunday 7th April – AM.

Harvey, Dr Jenni

Dundee University, Dundee, UK

Leptin regulation of hippocampal synaptic function in health and disease. Sunday 7th April – AM.

Haynes, Professor John-Dylan

Bernstein Center for Computational Neuroscience, Berlin, Germany

Neuroimaging of volition. Tuesday 9th April – PM.

Haynes, Dr John

Monash University, Parkville, Australia

Modelling neurodegeneration using human midbrain dopaminergic neurons. Tuesday 9th April – PM.

Hazlerigg, Dr David

Aberdeen University, Aberdeen, UK

Seasonal synchrony. Wednesday 10th April – PM.

Head, Dr Mark

Western General Infirmary, Edinburgh, UK

Human prion diseases. Sunday 7th April – AM.

Hedwig, Dr Berthold

Cambridge University, Cambridge, UK

Principles of auditory processing: Lessons learned from crickets. Monday 8th April – AM.

Henny, Dr Pablo

Pontificia Universidad Católica de Chile, Santiago, Chile

Structural basis of heterogeneous activity of nigral dopaminergic neurons: the role of afferent synaptic organization and dendritic architecture. Wednesday 10th April – AM.

Henshall, Professor David

Royal College of Surgeons in Ireland, Dublin, Ireland

MicroRNA targeting to protect brain from seizures. Wednesday 10th April – AM.

Henson, Dr Rik

Cambridge University, Cambridge, UK

Schemas, novelty and prediction-error-driven learning. Tuesday 9th April – AM.

Heyes, Professor Cecilia

All Souls College, Oxford, UK

The development and function of mirror neurons. Monday 8th April – PM.

Hodges, Professor John

Neuroscience Research Australia, Randwick, Australia

Insights into the social brain. Tuesday 9th April – AM.

Holmes, Professor Megan

Edinburgh University, Edinburgh, UK

Perinatal programming of stress-related behaviour by glucocorticoids. Sunday 7th April – PM.

Holscher, Professor Christian

Ulster University, Coleraine, UK

Insulin-like hormones in neuroprotection and synaptic function. Sunday 7th April – AM.

Holt, Professor Christine

Cambridge University, Cambridge, UK

Building connections: RNA-based control of axon guidance and survival. Wednesday 10th April – AM.

Houart, Professor Corinne

King's College London, London, UK

Regional patterning of the forebrain in zebrafish and mouse. Monday 8th April – AM.

Howard-Jones, Dr Paul

Bristol University, Clifton, UK

Neuroeducation and Neuromyths. Wednesday 10th April – PM.

Ichiyama, Dr Ronaldo

Leeds University, Leeds, UK

Activity induced plasticity after spinal cord injury and rehabilitation. Sunday 7th April – PM.

Illes, Professor Judy

University of British Columbia Hospital, Vancouver, UK

Discussion: Drugs, Society and Neuroethics. Wednesday 10th April – AM.

Ince, Professor Paul

Sheffield University, Sheffield, UK

Molecular pathology of Motor Neuron Disease/Amyotrophic Lateral Sclerosis. Sunday 7th April – AM.

Ironside, Professor James

Edinburgh, UK

MRC UK Brain Bank Network for neuroscience research. Sunday 7th April – AM.

Jackson, Dr Andrew

Newcastle University, Newcastle-upon-Tyne, UK

Beyond decoding: Optimising control of abstract interfaces. Tuesday 9th April – AM.

Jarman, Professor Andrew

Edinburgh University, Edinburgh, UK

First take an egg: how mechanosensory neurons are made in embryonic development. Wednesday 10th April – AM.

Javitt, Professor Daniel

Nathan S. Kline Institute for Psychiatric Research, Orangeburg, USA

Functional imaging, neurophysiology, and sensory dysfunction in neuropsychiatry: an integrative and cross species approach. Tuesday 9th April – AM.

Jbabdi, Dr Saad

Oxford University, Oxford, UK

Human Connectome Project: advances in data acquisition and pre-processing. Sunday 7th April – PM.

Jessen, Professor Kristjan

University College London, London, UK

Nerve repair depends on c-Jun driven Schwann cell transdifferentiation to generate a specialized repair cell in injured nerves. Wednesday 10th April – AM.

Johansen-Berg, Professor Heidi

Oxford University, Oxford, UK

White matter matters: behavioural relevance of variation in white matter microstructure. Tuesday 9th April – AM.

Jones, Dr Matt

Bristol University, Bristol, UK

Needles in haystacks: chasing cell assemblies around cognitive circuits. Tuesday 9th April – AM.

Kelber, Professor Almut

University of Lund, Lund, Sweden

Colour vision limits. Sunday 7th April – PM.

Kennerley, Dr Steve

University College London, London, UK

Decision making in the frontal cortex: evidence from single neuron electrophysiology. Wednesday 10th April – PM.

Kohn, Professor Adam

Albert Einstein College of Medicine, Bronx, USA

Visual motion adaptation in a distributed network. Wednesday 10th April – PM.

Koutsikou, Dr Stella

Bristol University, Bristol, UK

Neural substrates underlying fear: the periaqueductal grey-cerebellar link. Tuesday 9th April – PM.

Krapp, Dr Holger

Imperial College London, London, UK

From insects to robots: Neuro-morphic engineering of visuo-motor control. Monday 8th April – AM.

Kraskov, Dr Alexander

University College London, London, UK

Stability and distribution of grasp related information in LFPs for potential use in grasping BMI. Tuesday 9th April – AM.

Kreiman, Professor Gabriel

Harvard University, Boston, USA

Towards deciphering the neuronal circuits in human cortex underlying voluntary action. Tuesday 9th April – PM.

Kunath, Dr Tilo

Edinburgh University, Edinburgh, UK

Modelling Parkinson's with human pluripotent stem cells. Monday 8th April – PM.

Kuner, Dr Rohini

University of Heidelberg, Heidelberg, Germany

Spinal nuclear control of structural and functional plasticity in inflammatory pain. Sunday 7th April - AM.

Lah Turnšek, Professor Tamara

National Institute of Biology, Ljubljana, Slovenia

The role of stem cells in glioma progression and therapy. Tuesday 9th April – AM.

Lappe, Professor Markus

Institute of Psychology, Münster, Germany

Sources of visual motion and ways of their analysis. Monday 8th April – AM.

Laroche, Professor Serge

Université Paris-Sud, Orsay cedex, France

Brain plasticity and memory: LTP and beyond. Monday 8th April – AM.

Larsson, Dr Jonas

Royal Holloway, University of London, Egham, UK

Spatial specificity and inheritance of adaptation in human visual cortex. Wednesday 10th April – PM.

Lawrence, Dr Catherine

Manchester University, Manchester, UK

The role of inflammation in the effect of obesity on ischaemic damage. Tuesday 9th April – PM.

Lewis, Dr Penny

Manchester University, Manchester, UK

Sleep, consolidation and semantic memory. Tuesday 9th April – AM.

Li, Dr Jennifer

Eli Lilly & Co., Windlesham, UK

Assessing resting-state functional connectivity with oxygen amperometry coherence. Tuesday 9th April - AM

Lidster, Dr Katie

Queen Mary University of London, London, UK

A new model for optic neuritis and measurement of neurodegeneration in real time. Wednesday 10th April – AM.

Lieberam, Dr Ivo

King's College London, London, UK

Generation and regeneration of respiratory motor neurons. Monday 8th April – AM.

Lightman, Professor Stafford

Bristol University, Bristol, UK

Origin and relevance of ultradian activity in the HPA axis. Wednesday 10th April – PM.

Livesey, Dr Rick

Cambridge University, Cambridge, UK

Human stem cell models of cerebral cortex development and disease. Monday 8th April – AM.

Livesey, Dr Rick

Cambridge University, Cambridge, UK

Studying pathogenesis and screening therapeutics in human stem cell models of Alzheimer's disease. Monday 8th April – PM.

Longden, Dr Kit

Imperial College London, London, UK

State-dependent motion vision in moving flies. Sunday 7th April – PM.

Lucas, Professor Jose

CSIC/UAM, Madrid, Spain

Ubiquitin-proteasome system and endoplasmic reticulum-stress in Huntington's disease. Wednesday 10th April – AM.

Luijten, Professor Peter

University Medical Center Utrecht, Utrecht, The Netherlands

Clinical applications of UHF. Monday 8th April – AM.

Lynch, Professor Marina

Trinity College, Dublin, Ireland

Inflammatory changes drive neurodegeneration in age and Alzheimer's disease. Wednesday 10th April - AM.

Mackintosh, Emeritus Professor Nicholas

Cambridge University, Cambridge, UK

Neuroscience and the law. Wednesday 10th April – PM.

Mallucci, Mr Connor

Alder Hey Children's NHS Foundation Trust, Liverpool, UK

Novel and state of the art approaches and developments in brain tumour surgery. Wednesday 10th April – PM.

Matthews, Professor Fiona

Cambridge University, Cambridge, UK

The impact of cognitive lifestyle on cognition in normal ageing. Wednesday 10th April – PM.

McColl, Dr Barry

Edinburgh University, Easter Bush, UK

Immunological mechanisms influencing stroke aetiology, pathology and recovery. Wednesday 10th April - AM.

McGuinness, Dr Lindsay

Oxford University, Oxford, UK

Presynaptic LTP: the truth is out there you will see. Monday 8th April – AM.

McKernan, Dr Ruth

Pfizer R&D, Sandwich, UK

The changing Pharma Industry and the opportunity for precision medicine. Wednesday 10th April – AM.

McMahon, Professor Stephen

King's College London, London, UK

Inhibitors of axon growth in the CNS. Wednesday 10th April – AM.

Mehring, Dr Carsten

Imperial College London, London, UK

Learning to control movement with a human BMI. Tuesday 9th April – AM.

Mehta, Dr Mitul

Institute of Psychiatry, London, UK

Drugs affecting the reward pathways of the brain: relevance to ADHD treatments. Monday 8th April - PM.

Mill, Dr Jon

Institute of Psychiatry, London, UK

How does the environment get 'under the skin': epigenetic pathways to neuropsychiatric disease. Monday 8th April – PM.

Morris, Professor Richard

Edinburgh University, Edinburgh, UK

Schemas and memory consolidation in animals. Tuesday 9th April – AM.

Mourao-Miranda, Dr Janaina

University College London, London, UK

PRoNTo: pattern recognition for neuroimaging toolbox. Sunday 7th April – PM.

Mulle, Professor Christophe

Université Bordeaux 2, Bordeaux, France

Activity-dependent plasticity of NMDA receptors at hippocampal mossy fiber synapses. Sunday 7th April – PM.

Murgatroyd, Dr Christopher

Manchester Metropolitan University, Manchester, UK

Genes learn from stress – epigenetic effects of early life experience. Sunday 7th April – PM.

Neukomm, Dr Lukas

University of Massachusetts Medical School, Worcester, USA

Molecular basis of neuron-glia signalling. Tuesday 9th April – PM.

Nicolas, Dr Celine

Bristol University, Bristol, UK

The JAK/STAT pathway is involved in synaptic plasticity. Sunday 7th April – AM.

Nicoll, Professor James

Southampton General Hospital, Southampton, UK

Alzheimer's Disease: the prospects for a vaccine. Sunday 7th April – AM.

Nutt, Professor David

Imperial College London, London, UK

Can we use psychedelic drugs to treat depression? Sunday 7th April – AM.

Nutt, Professor David

Imperial College London, London, UK

Cognitive enhancing drugs and drugs of abuse: How do they work in the brain? Wednesday 10th April – AM.

O'Connor, Dr John

University College Dublin, Dublin, Ireland

A novel role for prolyl hydroxylases and tumor necrosis factor alpha in hypoxia. Wednesday 10th April – AM.

O'Connor, Dr Vincent

Southampton University, Southampton, UK

The molecular basis of synaptic function and dysfunction. Tuesday 9th April – PM.

Oliver, Mrs Kathy

International Brain Tumour Alliance, Tadworth, UK

The brain tumour journey - collaboration is crucial. Wednesday 10th April – PM.

O'Neill, Dr John

Cambridge University, Cambridge, UK

Pharmacological approaches to manipulate circadian rhythms. Sunday 7th April – PM.

Opacka-Juffry, Dr Jolanta

Roehampton University, London, UK

Long-term effects of early life stress on regional brain volume and astroglia – experimental studies in rats. Sunday 7th April – PM.

Patterson, Professor Roy

Cambridge University, Cambridge, UK

Size is not a problem in hearing: Invariance and covariance in peripheral processing. Monday 8th April – PM.

Paulsen, Professor Ole

Cambridge University, Cambridge, UK

2B or not 2B: Illuminating the role of NMDA receptors in LTP. Monday 8th April – AM.

Pessiglione, Dr Mathias

Hôpital Pitié-Salpêtrière, Paris, France

The brain valuation system and its neural partners. Wednesday 10th April – PM.

Petridou, Dr Natalia

University Medical Center Utrecht, Utrecht, The Netherlands

Ultra-High field fMRI - a window to the fundamental functional architecture of the human brain. Monday 8th April – AM.

Picciotto, Professor Marina

Yale University, New Haven, USA

The skinny on smoking: molecular basis for nicotine effects on appetite. Tuesday 9th April – PM.

Piggins, Professor Hugh

University of Manchester, Manchester, UK

Molecular and cellular mechanisms of daily timekeeping. Wednesday 10th April – PM.

Pinotsis, Dr Dimitris

Wellcome Trust Centre for Neuroimaging, London, UK

Anatomical connectivity and the resting state activity of large cortical networks. Sunday 7th April – PM.

Prevot, Dr Vincent

University of Lille 2, Lille Cedex, France

Cyclical activity of hypothalamic GnRH neurones : a role for nitric oxide? Wednesday 10th April – PM.

Pryce, Dr Christopher

Psychiatric University Hospital, Zurich, Switzerland

Animal-model studies to increase understanding of development-gene-environment interactions underlying depression aetio-pathology. Sunday 7th April – PM.

Quiroga, Professor Rodrigo

Leicester University, Leicester, UK

Single cell responses in the human medial temporal lobe. Tuesday 9th April – AM.

Ransohoff, Professor Richard

Cleveland Clinic, Cleveland, USA

Heterogeneity of CNS myeloid cells and their roles in neurodegeneration. Wednesday 10th April – AM.

Redgrave, Professor Peter

Sheffield University, Sheffield, UK

What do dopamine neurons see? Wednesday 10th April – AM.

Reul, Professor Hans

Bristol University, Bristol, UK

Epigenetic mechanisms underlying gene transcriptional responses to behavioral challenges. Sunday 7th April – AM.

Revesz, Professor Tamas

University College London, London, UK

The enigma of progression in Parkinson's disease. Sunday 7th April – AM.

Richardson, Professor Mark

Institute of Psychiatry, London, UK

Brain networks in epilepsy. Monday 8th April – PM.

Ridgway, Dr Gerard

University College London, London, UK

Modelling longitudinal structural change from serial MRI. Sunday 7th April – PM.

Ritchie, Professor Michael

St Andrews University, St Andrews, UK

Evolutionary approaches to Drosophila *song*. Monday 8th April – AM.

Robert, Professor Daniel

Bristol University, Bristol, UK

The mechanics of auditory frequency analysis in insects. Monday 8th April – AM.

Robinson, Dr Emma

Bristol University, Bristol, UK

The neurochemical basis of impulsive and accurate responding in rats. Monday 8th April – PM.

Rosser, Professor Anne

Cardiff University, Cardiff, UK

Stem cell transplantation for neurodegenerative diseases. Tuesday 9th April – PM.

Rothwell, Professor John

University College London, London, UK

Transcranial methods of brain stimulation. Monday 8th April – PM.

Rouach, Dr Nathalie

College de France, Paris, France

Unraveling the role of astroglial connexins in synaptic strength. Sunday 7th April – AM.

Rowland, Dr Hannah

Cambridge University, Cambridge, UK

Seeing in different worlds: the visual and behavioural ecology of insect masquerade. Sunday 7th April - PM.

Rubinsztein, Professor David

Cambridge Institute for Medical Research, Cambridge, UK

Autophagy, a therapeutic target for neurodegenerative conditions like Huntington's disease. Monday 8th April – AM.

Rusakov, Professor Dmitri

Institute of Neurology, London, UK

Glial learning: the influence of serine released from glia in regulating long term potentiation. Sunday 7th April – AM.

Rusakov, Professor Dmitri

University College London, London, UK

Electrodiffusion of released glutamate triggers synaptic potentiation. Monday 8th April – PM.

Sahakian, Professor Barbara

Cambridge University, Cambridge, UK

Increasing lifestyle use of cognitive enhancing drugs and drugs for erasing memories. Wednesday 10th April – AM.

Sahani, Dr Maneesh

University College London, London, UK

Hearing is believing: Perceived pitch is best predicted by an inferential model. Monday 8th April - PM.

Sailer, Dr Andreas

Novartis Institutes for Biomedical Research, Basel, Switzerland

The role of EBI2 in inflammatory autoimmune diseases. Tuesday 9th April – PM.

Salecker, Dr Iris

NIMR, London, UK

Regulation of visual circuit assembly in Drosophila. Monday 8th April – AM.

Salem, Dr Victoria

Imperial College London, London, UK

How do gut hormones released after a meal make you feel full? Tuesday 9th April – PM.

Sarter, Professor Martin

University of Michigan, Ann Arbor, USA

Conceptual and technical milestones toward truly translational cognitive neuroscience research. Tuesday 9th April – AM.

Sauseng, Dr Paul

University of Surrey, Guildford, UK

Biasing oscillatory brain activity via *neurostimulation.* Monday 8th April – PM.

Schwartz, Professor Andrew

University of Pittsburgh, Pittsburgh, USA

Progress toward high-performance brain-machine interfaces. Tuesday 9th April – AM.

Silver, Professor Jerry

Case Western Reserve University, Cleveland, USA

Functional regeneration beyond the glial scar. Sunday 7th April – PM.

Simpson, Dr Julie

Sheffield University, Sheffield, UK

The role of astrocytes in the pathogenesis of age-related neurodegenerative pathology. Tuesday 9th April – PM.

Singh, Professor Krish

Cardiff University, Cardiff, UK

Non-invasive human studies of individual variability in GABAergic inhibition and its relationship to behaviour and oscillatory dynamics. Tuesday 9th April – AM.

Slater, Dr Rebeccah

Oxford University, Oxford, UK

Pain in the newborn. Sunday 7th April – AM.

Slater, Professor Mel

ICREA-University of Barcelona & UCL, London, UK

Virtual Reality - Changing the self not just the place. Sunday 7th April – AM.

Smith, Professor David

Oxford University, Oxford, UK

Modification of cognitive decline in ageing by nutritional interventions. Wednesday 10th April – PM.

Smith, Mr Stuart

Nottingham University, Nottingham, UK

A foot in both camps: clinical and laboratory neuroscience. Wednesday 10th April – PM.

Solomon, Professor Sam

University of Sydney, Sydney, Australia

Contrast adaptation in the early visual system: roles for excitation and inhibition. Wednesday 10th April – PM.

Stagg, Dr Charlotte

Oxford University, Oxford, UK

Imaging the neurotransmitter effects of transcranial stimulation. Monday 8th April – PM.

Steel, Professor Karen

King's College London, London, UK

PLENARY. *Understanding the genetics of deafness using mouse mutants.* Sunday 7th April – AM.

Stein, Professor Dan

University of Capetown, Capetown, South Africa

The new conceptualisation of obsessive-compulsive-and related disorders. Monday 8th April – AM.

Stirling, Professor Andy

Sussex University, Brighton, UK

Governance of neuroscience: challenges and responses. Wednesday 10th April – PM.

Strick, Professor Peter

University of Pittsburgh, Pittsburgh, USA

New Insights into cerebellar function based on an analysis of its outputs. Tuesday 9th April – PM.

Swanson, Professor James

University of California, Irvine, Irvine, USA

Dopamine genes and the brain. Monday 8th April – PM.

Tabrizi, Professor Sarah

Institute of Neurology, London, UK

Promises and challenges of finding potential disease-modifying therapies for Huntington's disease. Monday 8th April – AM.

Taccola, Dr Giuliano

SISSA, Trieste, Italy

Dynamics of early locomotor network dysfunction in an in vitro *model of SCI*. Sunday 7th April – PM.

Tamas, Professor Gabor

University of Szeged, Szeged, Hungary

GABAergic excitation and inhibition in microcircuits of the human cerebral cortex. Tuesday 9th April - AM.

Thapar, Professor Anita

Cardiff University School of Medicine, Cardiff, UK

The genetics of Attention Deficit Hyperactivity Disorder (ADHD). Tuesday 9th April – AM.

Thiebaut de Schotten, Dr Michel

Institute of Psychiatry, London, UK

Hemispheric asymmetries in white matter connectivity: Functional implications. Tuesday 9th April - AM.

Thom, Dr Jeanette

Bangor University, Bangor, UK

Physical exercise and cognitive improvements in the healthy aged. Wednesday 10th April – PM.

Thomas, Dr Adam

Oxford University, Oxford, UK

Anatomical imaging at 7T: Beyond high resolution. Monday 8th April – AM.

Tracey, Professor Irene

Oxford University, Oxford, UK

PLENARY. *Imaging pain, relief and altered states of consciousness in the human brain.* Monday 8th April – AM.

Trevelyan, Dr Andrew

Newcastle University, Newcastle-upon-Tyne, UK

The role of different interneuronal subpopulations in regulating cortical activity. Sunday 7th April – AM.

Trist, Dr David

Via N Sauro, 24, San Bonifacio (VR), Italy

Why the Black Box of Neuroscience – Introduction. Wednesday 10th April – AM.

Tsakiris, Dr Manos

Royal Holloway, University of London, Egham, UK

The self as another: using the senses of the body to study changes in self-identity. Sunday 7th April - AM.

Turner, Dr Richard

Cambridge University, Cambridge, UK

Modulation cascades, sound textures, and mid-level audition. Monday 8th April – PM.

Tyrrell, Dr Pippa

Manchester University, Salford, UK

Modulation of inflammation in acute stroke. Sunday 7th April – PM.

Ungless, Dr Mark

Imperial College London, London, UK

Heterogeneous activity and plasticity of dopamine neurons in vivo. Wednesday 10th April – AM.

Vasudevan, Dr Sridhar

Oxford University, Oxford, UK

Identification of a FDA approved drug that acts as a lithium mimetic through inositol depletion. Tuesday 9th April – PM.

Vezzani, Dr Annamaria

Mario Negri Institute for Pharmacological Research, Milan, Italy

Epilepsy and brain inflammation. Wednesday 10th April – AM.

Volianskis, Dr Arturas

Bristol University, Bristol, UK

NMDA receptors and induction of LTP: New insights 30 years on. Monday 8th April – AM.

von Deimling, Professor Andreas

Ruprecht Karls University and CCUN, Heidelberg, Germany

Tumour specific targets in glioma. Tuesday 9th April – AM.

Walker, Professor Matthew

National Hospital for Neurology and Neurosurgery, London, UK

Experimental treatment of focal epilepsy. Monday 8th April – PM.

Warr, Dr Tracy

Wolverhampton University, Wolverhampton, UK

Exploiting brain tumour biology to develop new treatments. Tuesday 9th April – AM.

Warren, Dr Ben

University of Cologne, Cologne, Germany

Female mosquitoes on-the-wing tune into acoustic distortion. Monday 8th April – AM.

West, Dr Katherine

Glasgow University, Glasgow, UK

Epigenetic mechanisms and chromatin-associated proteins in stem cell to neuron differentiation. Sunday 7th April – AM.

White, Professor Michael

University of Manchester, Manchester, UK.

PLENARY. *Quantitative analysis of the dynamics of signalling and transcription in single cells and tissues*. Sunday 7th April – PM.

Whittington, Professor Miles

York University, York, UK

Circuit based approaches to Disease – how do we develop this approach? Wednesday 10th April – AM.

Wightman, Professor Mark

The University of North Carolina at Chapel Hill, Chapel Hill, USA

Probing dopamine neurons in intact brain tissue: What do dopamine neurons do? Wednesday 10th April – AM.

Wilkinson, Professor Lawrence

Cardiff University, Cardiff, UK

Behavioural epigenetics; exciting but uncertain prospects. Sunday 7th April – AM.

Wilkinson, Professor Lawrence

Cardiff University, Cardiff, UK

Leaving the party early; how new approaches and findings are transforming our understanding of complex brain disorders (just as drug companies disengage from neuroscience research). Wednesday 10th April - AM

Williams, Dr Robin

Royal Holloway, University of London, Egham, UK

Investigating inositol phosphate and phosphoinositide signalling as a target for the bipolar disorder and epilepsy treatment, valproic acid, using multiple model systems. Tuesday 9th April – PM.

Williams, Professor Steve

Institute of Psychiatry, London, UK

Functional MR Imaging: from mouse to man. Tuesday 9th April – AM.

Wills, Dr Tom

University College London, London, UK

Ontogenetic development of hippocampal spatial representations. In vivo *recording of hippocampal neurons in awake and behaving young rats*. Wednesday 10th April – PM.

Witter, Professor Menno

Norwegian University of Science and Technology, Trondheim, Norway

Functional anatomy of the developing hippocampal system. Wednesday 10th April – PM.

Wood, Professor John

University College London, London, UK

Mechanotransduction and pain. Sunday 7th April – AM.

Yeo, Professor Christopher

University College London, London, UK

Distribution of plasticity in cerebellum-dependent learning. Tuesday 9th April – PM.

Zeman, Professor Adam

University of Exeter Medical School, Exeter, UK

Epilepsy and autobiographical memory. Monday 8th April – PM.

Exhibitor listing (alphabetical)

Abcam Biochemicals – Stand 18

Abcam Biochemicals are a range of receptor agonists and antagonists, ion channel modulators, enzyme inhibitors, and signaling tools for life science research:
· High purity range (typically >98%) and exceptional quality
· Worldwide service, with next day delivery to most of Europe and North America
· Comprehensive product data and expert scientific support.

ACS Publications – Stand 28

ACS Chemical Neuroscience, a peer-reviewed journal published by the American Chemical Society, showcases research on molecular mechanisms in neuroscience. ACS Chemical Neuroscience just received its first ever Impact Factor of 3.676 in 2012. The journal offers a 7 week average submission to publication time, worldwide dissemination, and no author fees.

Alzheimer's Research UK – Stand 9 (Barbican Stalls Foyer)

Alzheimer's Research UK is the UK's leading dementia research charity. As research experts, we fund world-class pioneering scientists to find preventions, treatments and a cure for dementia.
Our findings improve the lives of everyone affected by dementia now and in the future and we help people to understand dementia and the progress we are making.

Andor Technology – Stand 47

Andor Technology plc. is a global leader in the pioneering and manufacturing high performance scientific imaging cameras, spectroscopy solutions and microscopy systems for research and OEM markets. Andor has been innovating the photonics industry for over 20 years and continues to set the standard for high performance light measuring solutions.

BBSRC - Stand 13 (Barbican Stalls Foyer)

BBSRC invests in world-class bioscience research and training on behalf of the UK public. Our aim is to further scientific knowledge, to promote economic growth, wealth and job creation and to improve quality of life in the UK and beyond.
Funded by Government, and with an annual budget of around £500M (2012-2013), we support research and training in universities and strategically funded institutes. BBSRC research and the people we fund are helping society to meet major challenges, including food security, green energy and healthier, longer lives. Our investments underpin important UK economic sectors, such as farming, food, industrial biotechnology and pharmaceuticals.
For more information about BBSRC, our science and our impact see: www.bbsrc.ac.uk.

Bilaney Consultants – Stand 19

Bilaney Consultants are based in the UK and Germany supply quality pre-clinical research equipment and software for the life sciences in Europe. We represent David Kopf Instruments (stereotaxic equipment and pipette pullers), Coulbourn Instruments (animal behaviour and psychophysiology), Actimetrics (video based monitoring) and Plastics One (cannula and electrodes). www.bilaney.com

Biochemical Society – Stand 24

The Biochemical Society exists to promote the advancement of the molecular biosciences and is the largest discipline-based learned society with over 6000 members. We achieve our mission through our publications, scientific meetings, educational activities, policy work, awards and grants. We will be showcasing ASN Neuro (www.asnneuro.org), a gold open access publication.

Blackrock Microsystems – Stand 60

Founded by researchers, Blackrock Microsystems designs, builds, and manufactures quality driven, flexible, electrophysiology equipment to neurophysiology researchers. Built on the foundation of research innovation and application, our goal is to improve quality of human health by advancing researcher information of behavioral, neurodegenerative diseases and disorders, Brain Machine Interface (BMI), ophthalmology, and cardiology.

BNA Local Groups – Stand 12 (Barbican Stalls Foyer)

The BNA represents UK neuroscience and have established a network of Local Group Representatives (LGR's) at universities across the UK who are engaged in neuroscience research. This network acts as a conduit for information between their universities and the BNA. Come along and meet your LGR.

Brain Bank for Autism - Stand 4 (Barbican Stalls Foyer)

The Brain Bank for Autism is responsible in the UK for the care of brain tissue donated for research into autism and related conditions. It makes brain tissue available to approved neuroscience projects worldwide to increase understanding of how autism effects brain structure and development and help develop effective treatments.

BrainBits UK – Stand 5

BrainBits supply precision dissected CNS tissue for primary cell culture, together with custom media specific to your requirements. Overnight delivery of tissue ready for dissociation, allows preparation of your neuronal cultures in 30 minutes. Save time, money and labour without compromising experiments. For all your primary culture needs visit: www.brainbits.co.uk.

Brains for Dementia Research - Stand 8 (Barbican Stalls Foyer)

Brains for Dementia Research (BDR) is a unique brain donation scheme, supported by Alzheimer's Research UK and Alzheimer's Society. Human brain tissue is vital for research into dementia, and BDR makes high quality tissue with detailed clinical information available to scientists to help find new treatments and a cure faster.

British Association for Psychopharmacology – Stand 70

The BAP was founded in 1974 with the aim of bringing together academics and health service and industry professionals involved in the study of psychopharmacology. The Association arranges scientific meetings, fosters research and teaching, encourages publication of research results and provides guidance and information to the public on psychopharmacology matters.

British Pharmacological Society – Stand 71

The BPS has, at its heart, the development and promotion of pharmacology and of those who are training and working in the field. With over 3000 members from 60 countries around the world, we are a truly international organization. We cover the whole spectrum of pharmacology, including laboratory, clinical, and toxicological aspects and support our members at work in academia, industry and the health service.

British Psychological Society - Stands 1&2 (Barbican Foyer)

The British Psychological Society, incorporated by Royal Charter, is the learned and professional body for psychologists in the United Kingdom, with a total membership of just over 50,000.
The Society provides and disseminates evidence-based expertise and advice, engages with policy and decision makers, and promotes the highest standards in learning and teaching, professional practice and research.

Cambridge Electronic Design – Stand 4

Data acquisition, analysis and experiment control systems. CED specialist applications include intracellular and extracellular physiology, spike shape analysis, dynamic clamp, EEG, EMG, ECG, LTP/LTD, behavioural studies, evoked response and single channel/whole cell patch clamp. Systems can also be customised by CED or the user for specific applications.

Carl Zeiss Limited – Stand 9

Carl Zeiss Microscopy is one of the leading manufacturers of light, electron and ion beam microscope systems and offers complete solutions for biomedical research, the healthcare sector and high-tech industries. Its product line spans a broad spectrum from routine light microscopes to research level imaging systems and ultra-resolution systems.
Contact: customercare@zeiss.co.uk – Web : www.zeiss.co.uk

CARMEN – Stand 20

CARMEN (www.carmen.org.uk) is a virtual laboratory that allows neurophysiologists to store, share and analyse their data in a secure web environment. Whilst having the functions of a neurophysiology database, the site also supports the running of analysis services and workflows, thereby enabling access to novel methods to analyse your recordings. Our security architecture enables file sharing in near real time to foster collaboration between distributed research groups with the confidence that the data can remain private until after publication. Visit the stand for demonstrations of the capabilities of the site, free user registration, and details of how CARMEN can support your research.

Cellectricon – Stand 6

Cellectricon provides state-of-the-art discovery services and enabling technologies to accelerate drug discovery and cell-based research. The Cellaxess® Technology enables selective transfection of primary and iPSC-derived cells, field stimulation of excitable cells and compound delivery. The Dynaflow® Technology advances ion channel research and discovery applications.
For more information please visit www.cellectricon.com

Cellular Dynamics International – Stand 42

Cellular Dynamics International is the leading producer of fully functional human cells derived from induced pluripotent stem (iPS) cells. Our iCell® and MyCell™ product lines provide industrialized quantities of pure, homogenous human cells enabling basic research, efficient drug discovery programs, and reliably predictive toxicity and efficacy screening programs.

Charles River UK Ltd – Stand 21

CHARLES RIVER provides globally standardised research models and support services.
We supply ALZET® osmotic infusion pumps, and are the exclusive UK distributor for The Jackson Laboratory's product.
Our surgical teams can carry out surgical alterations, including lesioning and device implants.
Be sure to talk to our representatives about our extensive range of products and services.
Further information: margate.enquiries@crl.com www.criver.com

Cheltenham Festivals - Stand 10 (Barbican Foyer)

Cheltenham Festivals runs the internationally acclaimed Jazz, Science, Music and Literature Festivals, as well as FameLab a high-profile, international science and engineering communications competition.
Every year Cheltenham Festivals invites more than 2,500 of the world's finest musicians, writers, scientists, performers and thinkers to entertain and inspire audiences of all ages.

Clever Sys Inc – Stand 35

Clever Sys, Inc. is THE leader in providing next generation technologies and products for automated lab animal's behavioral analysis for biological and medical research, and drug discovery applications. Its revolutionary "Behavior Recognition" technology, with 6 approved patents, transcends earlier photobeam and video tracking technologies, and enables recognizing complex, natural, spontaneous and stereotypic behaviors.:

Data Sciences International – Stand 43

DSI offer a wide variety of physiological monitoring solutions for applications in chronic and acute studies. DSI offer solutions for free moving animal models with widely used and recognized implantable telemetry systems. Products include data collection and analysis systems that allow monitoring of parameters such as EEG, EMG, EOG, ECG, Pressure, Temperature and much more.

Denator – Stand 50

Denator AB develops and markets products that use rapid heating to stabilize components in tissues thereby revealing biologically-relevant information. Heat stabilization stops biological changes that cause vital information to be lost or distorted. Denator offers sample preparation solutions upstream in order to significantly enhance data quality from analytical techniques downstream.

Digitimer Ltd – Stand 17

Manufacturers of scientific instrumentation for research & clinical environments. We offer our modular NeuroLog electrophysiology system and a wide range of electrical stimulators for every situation.
Digitimer also represents companies with complementary equipment, including: AutoMate Scientific, Axelgaard, Harvard/Medical Systems, HEKA Elektronik, Narishige, Scientific Systems Design, ThorLabs and Quest Scientific.

Eicom Europe – Stand 48

Eicom is a world leader in HPLC-Electrochemical Detection and Microdialysis Sampling Systems for diverse life science fields with a core focus in neuroscience and analytical chemistry. Our products enable researchers in academia and industry to effortlessly and efficiently collect samples and monitor the level of specific biological compounds.

Epilepsy Research UK - Stand 6 (Barbican Stalls Foyer)

Epilepsy Research UK is the only national charity in the UK that is exclusively dedicated to funding independent research into the causes, prevention and treatment of epilepsy. We support both clinical and basic research through an annual grant round, in which we offer three types of grant. For more information, please visit www.epilepsyresearch.org.uk.

Essen BioScience – Stand 45

Essen have a history of innovation in cell based assays, instrumentation and drug discovery. We specialise in ion channels and kinetic imaging, and will be profiling the IncuCyte imaging technology and Kinetic Neurotrack assays at the festeval along with our other kinetic assays for apotosis, cytotoxicity, migration and invasion.

Hamamatsu Photonics – Stand 51

Hamamatsu Photonics, a world-leading manufacturer of optoelectronic components and systems, will be introducing the ORCA-Flash4.0 V2, a 4-megapixel scientific CMOS camera that offers unrivalled flexibility across a wide range of microscopy applications, and the ImagEM X2 electron multiplying (EM) CCD camera, offering maximum speed and precision performance for low-light imaging.

Harvard Apparatus Ltd – Stand 23

Harvard Apparatus is a global developer and manufacturer of a broad range of specialized products, primarily scientific instruments. Harvard Apparatus products are used to accelerate drug discovery and aid research at pharmaceutical and biotechnology companies, universities and government laboratories worldwide. The Harvard Bioscience family of companies supplies the bioresearch community with such a broad line of specialized products for neuroscience, physiology, pharmacology toxicology and more, that we truly are a one-stop shop. We continually expand our product line through invention and acquisition. We have sales and manufacturing operations worldwide.

Hitachi Medical Systems – Stand 57

Hitachi Medical Corporation is a world leading electronics company and a first choice supplier of Optical Topography systems with over 10 years clinical experience in fNIRS for non-invasive study in the development and function of the human brain. Competitively priced bespoke systems delivering 'All-in-One' solutions for neuroimaging. www.hitachi-medical-systems.com

Institute of Child Health- Stands 1 & 2 (Barbican Stalls Foyer)

The UCL Clinical Paediatric Neuropsychology Training Programme is Europe's only professional training course of its kind. The programme offers a range of post-graduate degrees, CPD short-course opportunities and International symposia available on-line. The British Psychological Society accredits the programme. Visit our website for free lectures and further information: www.ucl.ac.uk/neuropsych

Intelligent Imaging Innovations (3i) – Stand 36

Intelligent Imaging Innovations [3i] designs and builds fluorescence imaging systems. Our multi-dimensional microscopy systems are intuitive to use. They are designed to meet the continually evolving needs of investigators. We configure our systems to our customer's needs for optimal productivity. Techniques include 2-Photon, tools for Optogenetics and Intravital Imaging.

Lafayette-Campden Neuroscience – Stand 14

Bussey-Saksida touchscreens systems for rat and mouse with task battery translational to n.h.p. In vivo electrophysiology is integrated into these e.m.c. shielded chambers. Video recording is also integrated and the three data streams are combined for easy analysis. Campden's Vibrotomes with z-axis deflection calibration are complemented by slice incubation chambers, slice recording chambers with integral heater/controllers and p.i.d. algorhythms for visual patching and LTP type recordings in submerged and interface methods.

LI-COR Biosciences UK Ltd – Stand 53

Your competent partner for Western blotting and Optical Imaging solutions.
Visit us at www.licor.com/bio

Life Technologies – Stand 40

Life Technologies is a biotechnology tools company dedicated to improving the human condition. Our extensive range of products and services, from instruments to everyday lab essentials, ensures quality and performance for every lab, every application. Life Technologies is proud to be the leading provider of novel tools for neural and stem cell research.

Lonza – stand 58

Lonza supports the critical needs of your QC laboratory by supplying endotoxin detection reagents, equipment, consumables, and WinKQCL™ Software, along with the MycoTOOL® PCR Mycoplasma Detection Kit from Roche, and contract testing services. MODA™ offers a robust informatics platform enabling paperless QC processes for environmental monitoring, product testing, and trending.

Magstim – Stand 7

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 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.

Media Cybernetics – Stand 54

Media Cybernetics develops image analysis software and systems that increase repeatability and sepeed to enhance research processes. Photometrics and QImaging design and manufacturer high-performance CCD, EMCCD cameras and multi-channel imaging solutions for life science research. Photometrics cameras offer market leading performance and functionality while QImaging cameras are versatile and easy-to-use.

Mega Electronics Ltd – Stand 61

Mega Electronics Ltd has specialised in physiological monitoring technology EEG, EMG, HRV and ECG for neurology, neurophysiology, rehabilitation, occupational health, sports medicine and physiotherapy since 1983. Mega products meet the requirements of appropriate safety and quality standards regarding medical devices.
www.megaemg.com

Miltenyi Biotech Ltd – Stand 8

Miltenyi Biotec is a global provider of products and services that advance biomedical research and cellular therapy. For more than 20 years, we have developed innovative tools for scientists and clinicians around the world. Our expertise covers research areas that include neuroscience, immunology, stem cell biology, and cancer.

MIT Press – Stand 30

The MIT Press publishes a distinguished programme of scholarly books in neuroscience and related brain and cognitive sciences. New titles include: Borges & Memory by Rodrigo Quian Quiroga; Language, Music and the Brain, edited by Michael Arbib, and Consciousness by Christof Koch. Robert Prior, Executive Editor, will be available during the conference to talk to you. prior@mit.edu

Medical Research Council (MRC) - Stand 5 (Barbican Stalls Foyer)

The Medical Research Council is a publicly-funded organisation that supports research across the spectrum of medical sciences. It receives funding from UK Government through the Department for Business, Innovation and Skills and works closely with other stakeholders to identify and respond to the UK's health needs. In 2010/11, the MRC spent £797.7 million on research.

Nature Publishing – Stand 29

Nature Publishing Group brings you leading scientific and medical research. Visit Stand 29 for free sample copies of Nature Neuroscience and Nature Reviews Neuroscience and to find out more about Scientific Reports and Nature Communications.

NC3Rs CRACKIT – Stand 27

The NC3Rs is an independent scientific organisation. Tasked by Government, we support the UK science base by driving and funding innovation and technological developments that replace or reduce the need for animals in research and testing, and lead to improvements in welfare where animals continue to be used.

Neuralynx Europe – Stand 44

Neuralynx, Inc. is an internationally recognized provider of electrophysiology data recording systems and solutions for neuroscience research, as well as for practical human medical data recording. Neuralynx Inc. specializes in the development of cutting edge electrophysiology data recording systems, optogenetics systems, and experimental accessories while providing quality, long term customer guidance and support.

New England Biolabs – Stand 1

New England Biolabs supplies molecular biology enzymes and DNA ladders. We also offer a range of PCR reagents, Epigenetic reagents, E. coli expression systems and Competent Cells. NEB also supplies many Neuroscience related activation state specific antibodies, ELISA kits from Cell Signaling Technology. http://www.neb.uk.com

Noldus IT – Stand 38

Noldus Information Technology develops software and instrumentation for animal behavior research, used by scientists worldwide to study behavioral processes, automate experiments, and improve the quality and efficiency of their research. Products include anything from video tracking software to completely integrated systems, all accompanied by excellent services and support.

Novus Biologicals – Stand 3

Novus Biologicals licenses, produces and markets antibodies to support niche and emerging areas of research. Our European office, based in Cambridge Science Park allows us to provide a more Europe-centric customer focus. To learn more about Novus Biologicals visit our website www.novusbio.com or contact Novus Europe directly at Europe@novusbio.com.

Olympus - Stand 13

Olympus KeyMed is a wholly-owned subsidiary of Olympus Corporation which is an important part of the global Olympus network, with responsibility for the development and manufacture of medical and industrial products for distribution worldwide. Olympus is recognised as a high-quality manufacturer of cameras, microscopes and endoscopes for medical and industrial applications.

Pearson Assessment – Stand 62

Pearson Assessment, the UK's leading publisher of standardised assessments for professionals continually strives to provide gold standard assessments, including the WAIS-IVUK and WISC-IVUK, whilst providing up-to-the-minute innovation. Q-interactive™ is the next step in our evolution giving you access to the most advanced assessment tools with the convenience of today's technology. Website: www.pearsonclinical.co.uk Tel: 0845 630 8888.

PhenoSys – Stand 49

PhenoSys engineers and markets cutting edge technology for behaviour 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.

Plexon Inc – Stand 2

Plexon is a pioneer and leading innovator of custom, high performance data acquisition, behavior and analysis solutions specifically designed for scientific research. We collaborate with and supply thousands of customers including the most prestigious neuroscience laboratories around the globe driving new frontiers in areas including basic science, brain-machine interfaces (BMI), neurodegenerative diseases, addictive behaviors and neuroprosthetics. Plexon offers integrated solutions for in vivo neurophysiology, optogenetics, and behavioral research -- backed by its industry-leading commitment to quality and customer support.

Proteintech Group – Stand 34

Proteintech Group appreciates that you need antibodies you can trust, we make every single one of the antibodies we sell and are able to trace every step of our antibody's production. We extensively validate our antibodies, using primary tissues and regular cell lysates. Every antibody in our catalog is covered by a 100% money back guarantee to give you 100% peace of mind.

Rogue Resolutions – Stands 11 & 12

Rogue Resolutions provides integrated solutions for neuroscience, which include best-in-class systems in the fields of neuromodulation, neuroimaging and neuronavigation.

Royem Scientific – Stand 16

Royem Scientific supplies a wide range of products for life science research. These include microdialysis equipment, surgical instruments and electrophysiology products.

RWD Life Science Co.,Ltd – Stand 26

RWD Life Science Co. Ltd, since its establishment in 2002, has been dedicated to being an international leading manufacturer of life science research and industry instruments. Products and solutions include: Stereotaxic Instruments and Accessories, Anesthesia machine, Ventilator, Syringe Pumps, Microdialysis System, Cannula System, Surgical Instruments. We would like some opportunities to offer top quality instruments for your research!

Scientifica Ltd – Stand 22

Electrophysiology and imaging experts - Scientifica will demonstrate their Multiphoton Imaging System; built around the trusted SliceScope for the “complete rig” option or components for “DIY”. Also showcasing microelectrode arrays offering superior, efficient data handling and flexibility. Working with leading researchers, Scientifica develop distinct electrophysiology needs into innovative solutions.

SfN London Chapter - stand 14 (Barbican Stalls Foyer)

The Society for Neuroscience is the world’s largest organization of scientists and physicians devoted to understanding the brain and nervous system. In London the Society operates through the activities of the SFN London Chapter (http://www.sfnlondonchapter.org), a local organization of neuroscientist based at the University College London. Current representative of the Chapter is Dr. Jasmina N. Jovanovic.

Sigma Life Science – Stand 56

We're here to provide you with the inspiration and resources you need to make the critical connections to help you stay on the leading edge of neuroscience research. Our neuroscience products range from standard biochemical reagents to the latest, cutting edge research tools, backed by unrivalled scientific knowledge and the best possible service.

SpheriTech – Stand 37

SpheriTech specialises polymer and particle design supporting a range of industries including peptide synthesis, oligonucleotide synthesis, biocatalysis, cell culture, tissue regeneration, wound dressings and all aspects of chromatography.

Stoelting Europe – Stand 41

Stoelting,since 1886, seek to offer high quality, reliable instruments, and support them with prompt, educated, customer service. Our world-renowned line of Stereotaxic Instrument includes the new Ultra Precise™ and New Lab Standard™ Stereotaxics. Experience our complete line of Stereotaxic instruments and accessories at www.StoeltingEurope.com. Stoelting also offers a complete line of behavioral testing equipment; anchored by the ANY-maze™ behavioral tracking software. ANY-maze has become the standard by which other software is measured (details at www.ANYmazeEurope.com).

Stratech Scientific – Stand 55

Stratech provides over 500,000 innovative research tools for life scientists. Our range includes high quality antibodies, proteins/peptides, biochemicals, reagents and kits at competitive prices.
This year we are celebrating our 30th anniversary with several special offers and promotions! To find out more visit stand 55, or go online to www.stratech.co.uk/offers.

Sue Ryder - Stand 7 (Barbican Stalls Foyer)

We're passionate about giving people the care they want. From Stagenhoe, our care centre in Hertfordshire, we support adults living with complex neurological conditions such as Huntington's disease, ABI and MND, to receive the care and support they need whether this is day care, respite or long term residential care.

Thorlabs – Stand 10

Thorlabs designs, develops, and manufactures equipment for the Photonics and Life Sciences markets, including optics, optomechanics, motion control equipment, patch clamp micromanipulators, lasers, LEDs, and anti-vibration work stations. In addition, we also provide complete system-level solutions such as complete OCT, multiphoton imaging, and confocal fluorescence microscopy systems.

Tocris Bioscience – Stand 39

Tocris Bioscience provides the highest performing and most innovative range of research reagents to cover all areas of neuroscience, including:

- Neurodegenerative Disorders
- Depression
- Memory, Learning and Cognition
- Neural Development
- Nociception
- Neuroendocrinology

Visit www.tocris.com to review our latest products and to request free posters on Alzheimer's, Depression, Parkinson's and Neuroprotection.

Trigeminal Neuralgia Association - stand 11 (Barbican Stalls Foyer)

Trigeminal Neuralgia Association UK (TNA UK) reaches those affected by trigeminal neuralgia (TN), an agonisingly painful neurological condition affecting the face. It provides evidence-based information, support and encouragement through helplines, literature and a website, www.tna.org.uk.

Tucker-Davis Technologies – Stand 46

Tucker-Davis Technologies (TDT) is a leading manufacturer of DSP-based data acquisition and stimulus generation systems, offering products ranging from electrodes to complete workstations for neurophysiology and evoked potentials. TDT puts 20 years of continuing innovation and experience supporting neuroscience research systems to work for you.
Tucker-Davis Technologies info@tdt.com www.tdt.com

UGO Basile – Stand 63

UGO BASILE, world leading manufacturer of instruments for Behavioral Research, with more than 10,000 hits in major bibliographic search engines, provides classic and innovative instruments scientists have been using since 1963:

- RotaRod
- Plethysmometer
- AnalgesyMeter
- Plantar Test (Hargreaves)
- Dynamic Plantar Aesthesiometer
- Orofacial Stimulation
- Rodent Ventilators
- Fear Conditioning
- Mazes
- Behavioural cages

UKABIF - Stand 3 (Barbican Stalls Foyer)

UKABIF aims to promote better understanding of all aspects of Acquired Brain Injury; to educate, inform and provide networking opportunities for professionals, service providers, planners and policy makers and to campaign for better services in the UK. UKABIF is a membership organisation and charity, established in 1998 by a coalition of organisations working in the field of Acquired Brain Injury.

University of Exeter – Stands 1 & 2 (Barbican Stalls Foyer)

The University of Exeter, current Sunday Times University of the Year, is ranked in the top 100 in the world for Psychology. As one of the foremost Psychology departments in the UK, the team is committed to providing an outstanding learning experience for students, generating high quality research, and advancing clinical practice.

VIVA Bioscience – Stand 69

VIVA Bioscience develops, manufactures and supplies products for the study of protein degradation and associated processes. Our reagents and kits are used worldwide by researchers working in the fields of autophagy, ubiquitin and proteasome research. We currently offer over 420 products, including kits, enzymes, substrates, inhibitors, activators and antibodies.

Wisepress – Stands 31, 32, 33

Wisepress.com, Europe's leading conference bookseller, has a complete range of books and journals relevant to the themes of the meeting. Books can be purchased at the stand or, if you would rather not carry them, posted to you – Wisepress will deliver worldwide. In addition to attending 200 conferences per year, Wisepress has a comprehensive medical and scientific bookshop online with great offers.

World Precision Instruments – Stand 15

World Precision Instruments is a leading global provider of powerful, cutting-edge laboratory solutions for the Life sciences. The Company's mission is to offer the broadest range of instruments and tools, to enable professionals throughout the biomedical community to conduct research that is more thorough, more efficient, and more accurate. WPI provides the equipment needed to ensure your success.

Exhibitor listing by stand number

Barbican Centre Stalls Foyer - Not-for-Profit Exhibitors

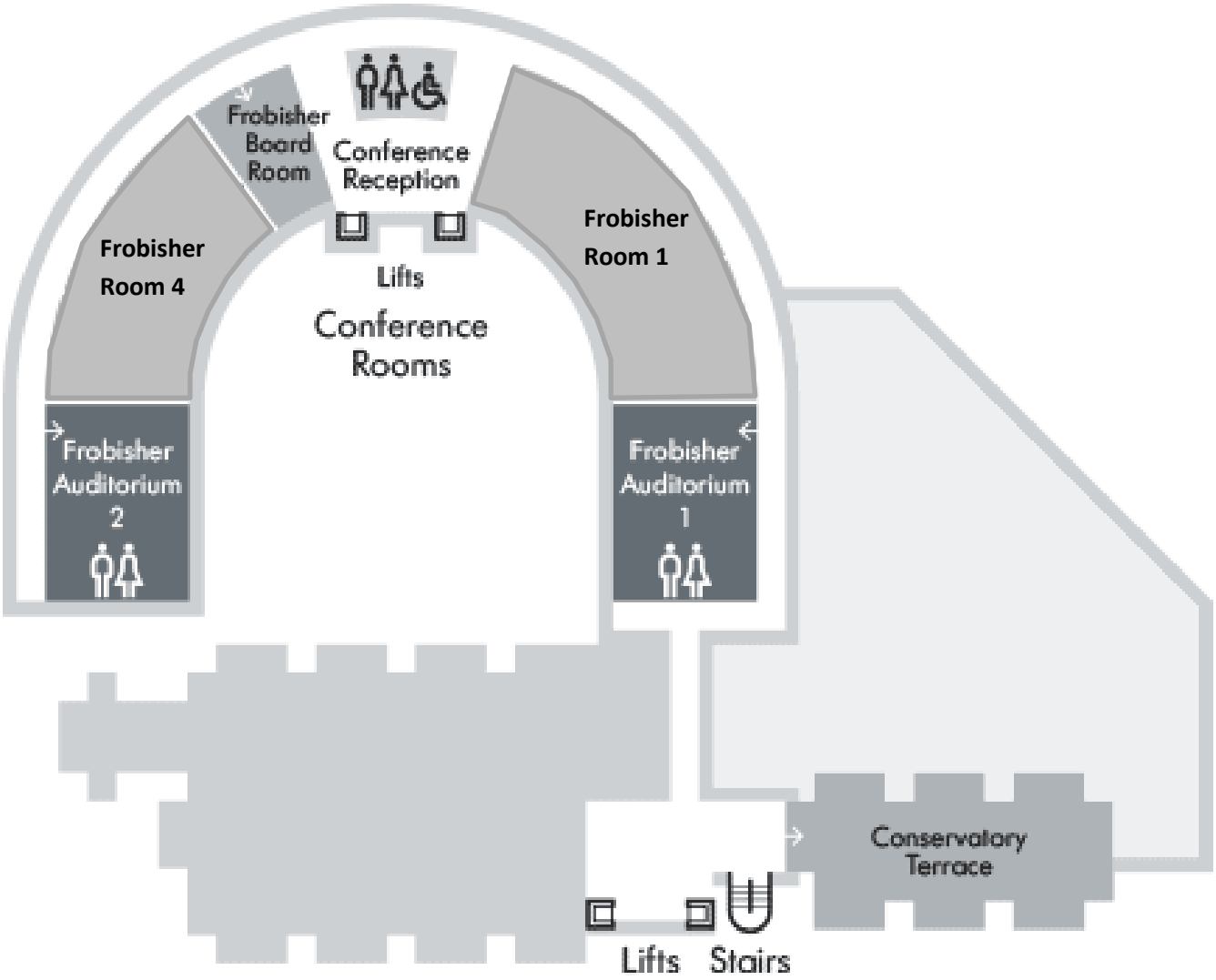
Stand	Organisation
1	British Psychological Society / Institute of Child Health / University of Exeter
2	British Psychological Society / Institute of Child Health / University of Exeter
3	UKABIF
4	Brain Bank for Autism
5	Medical Research Council (MRC)
6	Epilepsy Research UK
7	Sue Ryder
8	Brains for Dementia Research
9	Alzheimer's Research UK
10	Cheltenham Festivals
11	Trigeminal Neuralgia Association
12	BNA Local Groups
13	BBSRC
14	SfN London Chapter

Barbican Centre Exhibition Hall 2

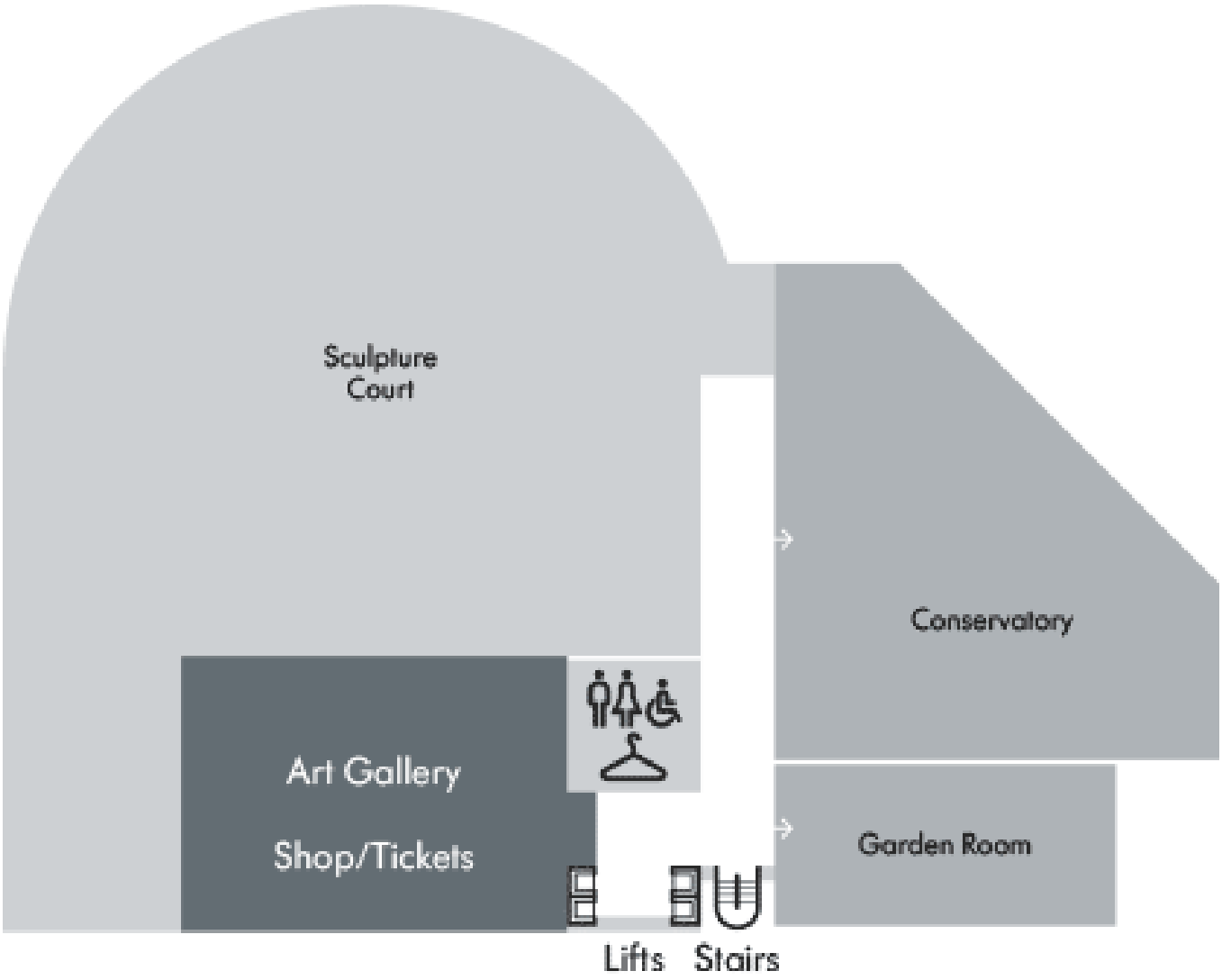
Stand	Organisation		Stand	Organisation
1	New England BioLabs.		34	Proteintech Group
2	Plexon Inc.		35	Clever Sys Inc.
3	Novus Biologicals		36	Intelligent Imaging Innovations (3i)
4	Cambridge Electronic Design		37	SpheriTech
5	BrainBits UK		38	Noldus IT
6	Cellectricon AB		39	Tocris Bioscience
7	Magstim		40	Life Technologies
8	Miltenyi Biotech Ltd.		41	Stoelting Europe
9	Carl Zeiss Ltd.		42	Cellular Dynamics International
10	Thorlabs		43	Data Sciences International
11	Rogue Resolutions		44	Neuralynx Europe
12	Rogue Resolutions		45	Essen BioScience
13	Olympus		46	Tucker-Davis Technologies
14	Lafayette-Campden Neuroscience		47	Andor Technology
15	World Precision Instruments		48	Eicom Europe
16	Royem Scientific		49	PhenoSys
17	Digitimer Ltd.		50	Denator
18	AbCam Biochemicals		51	Hamamatsu Photonics
19	Bilaney Consultants		52	Linton Instrumentation
20	CARMEN		53	LI-COR Biosciences UK Ltd.
21	Charles River UK Ltd.		54	Media Cybernetics
22	Scientifica Ltd.		55	Stratech Scientific
23	Harvard Apparatus Ltd.		56	Sigma Life Science
24	Biochemical Society		57	Hitachi Medical Systems
26	RWD Life Science Co Ltd.		58	Lonza
27	NC3Rs CRACKIT		60	Blackrock Microsystems
28	ACS Publications		61	Mega Electronics Ltd.
29	Nature Publishing		62	Pearson Assessment
30	MIT Press		60	Blackrock Microsystems
31	Wisepress		69	VIVA Bioscience
32	Wisepress		70	British Assoc. for Psychopharmacology
33	Wisepress		71	British Pharmacological Society

Venue Plan

Level 4 – Frobisher Auditoria and Rooms

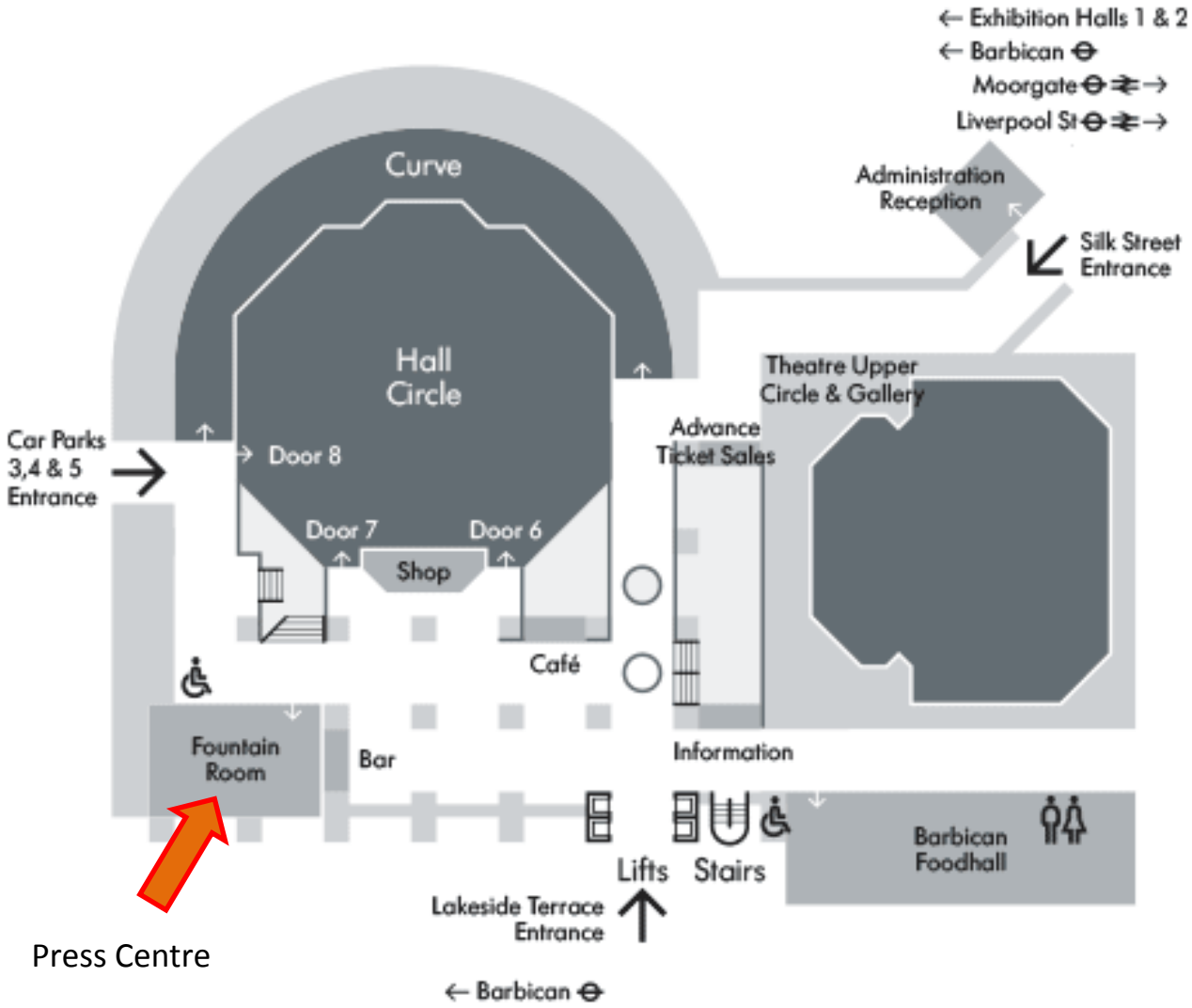


Level 3 – Garden Room & Conservatory



Ground Level – Fountain Room/Press Centre and Exhibition Hall

Please note that the Exhibition Hall 2 is located outside of the Barbican Centre. The path from the Barbican Centre to Exhibition Hall 2 will be clearly marked and staff will be available to help you find your way.



Press Centre

Filming and recording

- Photography, filming and recording will be permitted in the official press conferences.
- Filming will be permitted in a designated, general area of the conference centre, but is subject to authorisation from the media consultants. Filming in other areas including the scientific sessions is strictly forbidden unless prior permission has been obtained. Anyone found filming in these areas will be asked to leave the conference. Please contact the Press Office for further information

Level minus 1: Barbican Hall, Foyer & Lounge West Upper

barbican

The Barbican Centre Level minus 1

Silk Street
EC2Y 8DS

CITY OF LONDON

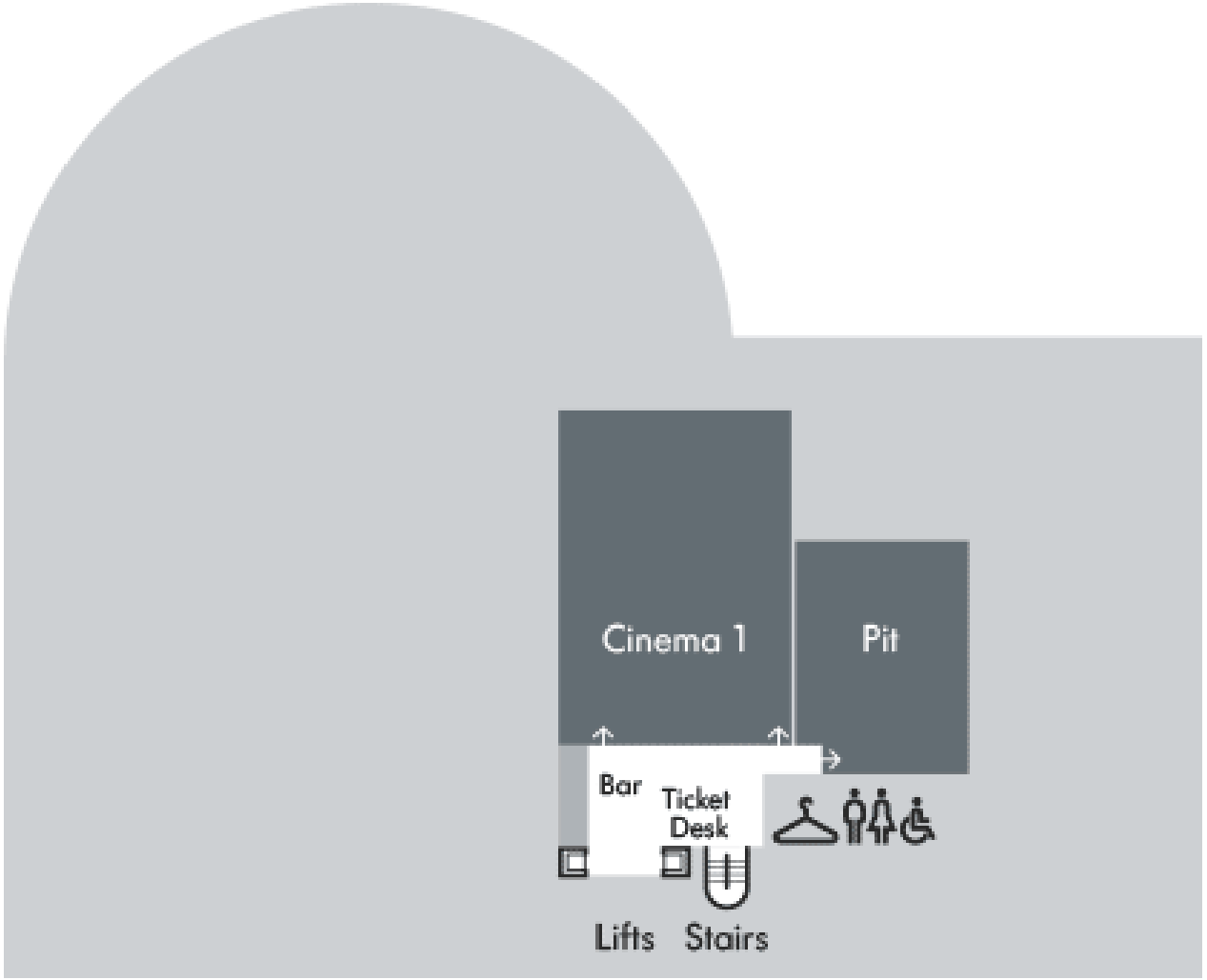
Exhibitors

1. University of Exeter/ICH/BPS
2. University of Exeter/ICH/BPS
3. UKABIF (UK Acquired Brain Injury Forum)
4. Brain Bank for Autism
5. MRC (Medical Research Council)
6. Epilepsy Research UK
7. Sue Ryder
8. Brains for Dementia Research
9. Alzheimer's Research UK
10. Cheltenham Festivals
11. TNA (Trigeminal Neuralgia Association)
12. BNA Local Groups
13. BBSRC
14. SfN London Chapter

- Ticket Desk
- Induction Loop
- Information point
- Hall door number
- Café / coffee point
- Bar point
- Restuarant
- Cloakroom
- Baby changing facilities
- Accessible toilet
- Womens' toilet
- Mens' toilet
- Car Park
- Car Park Pay Station
- Taxi phone
- Pay phone
- Ramped access
- Accessible lift
- Lift
- Automatic doors
- Stairs
- Stepped access
- Fire exit

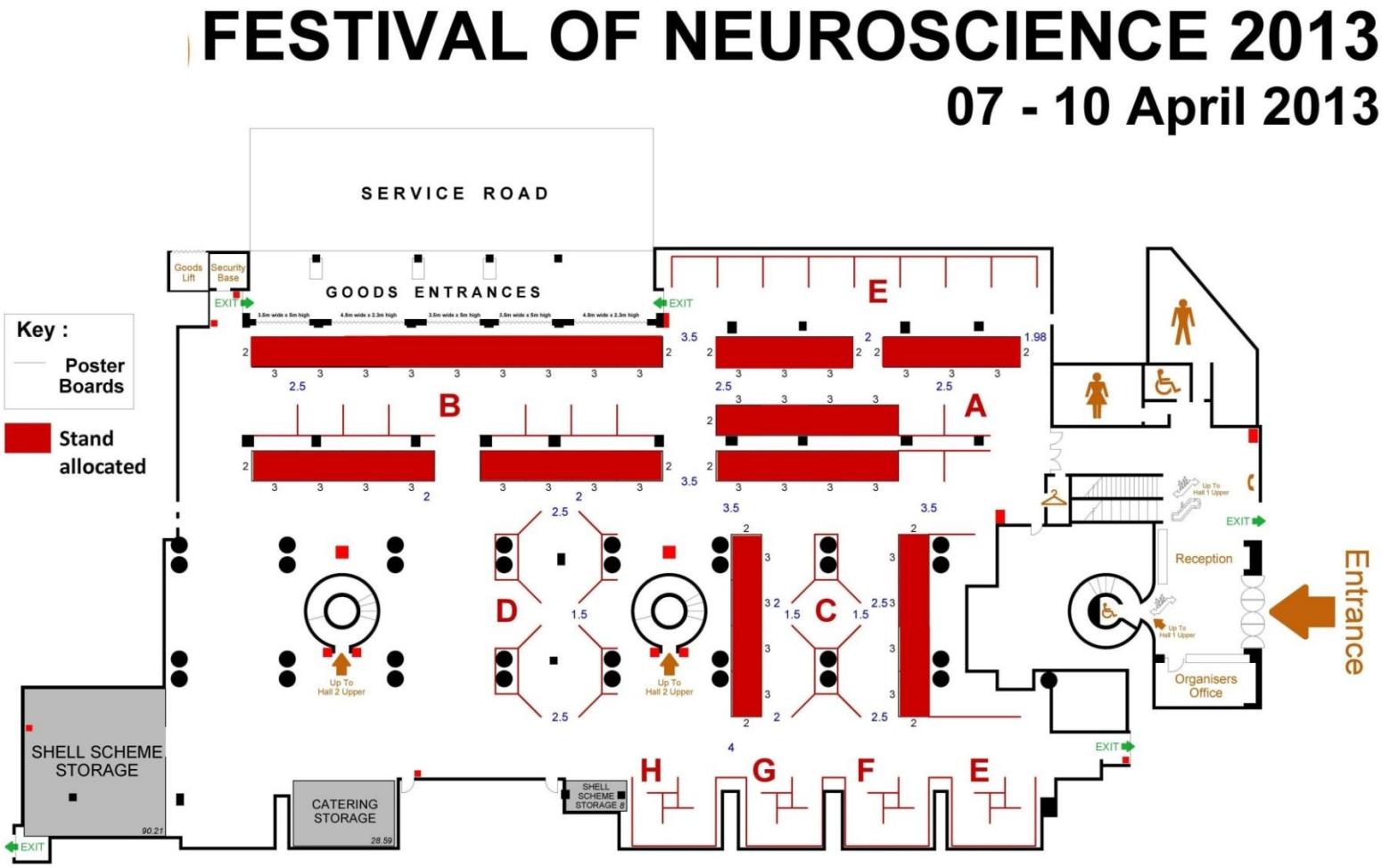
- Lift (restricted access)
- Goods Lift
- Loading Bay

Level minus 2: Cinema 1



Exhibition Plan – will change waiting for new version

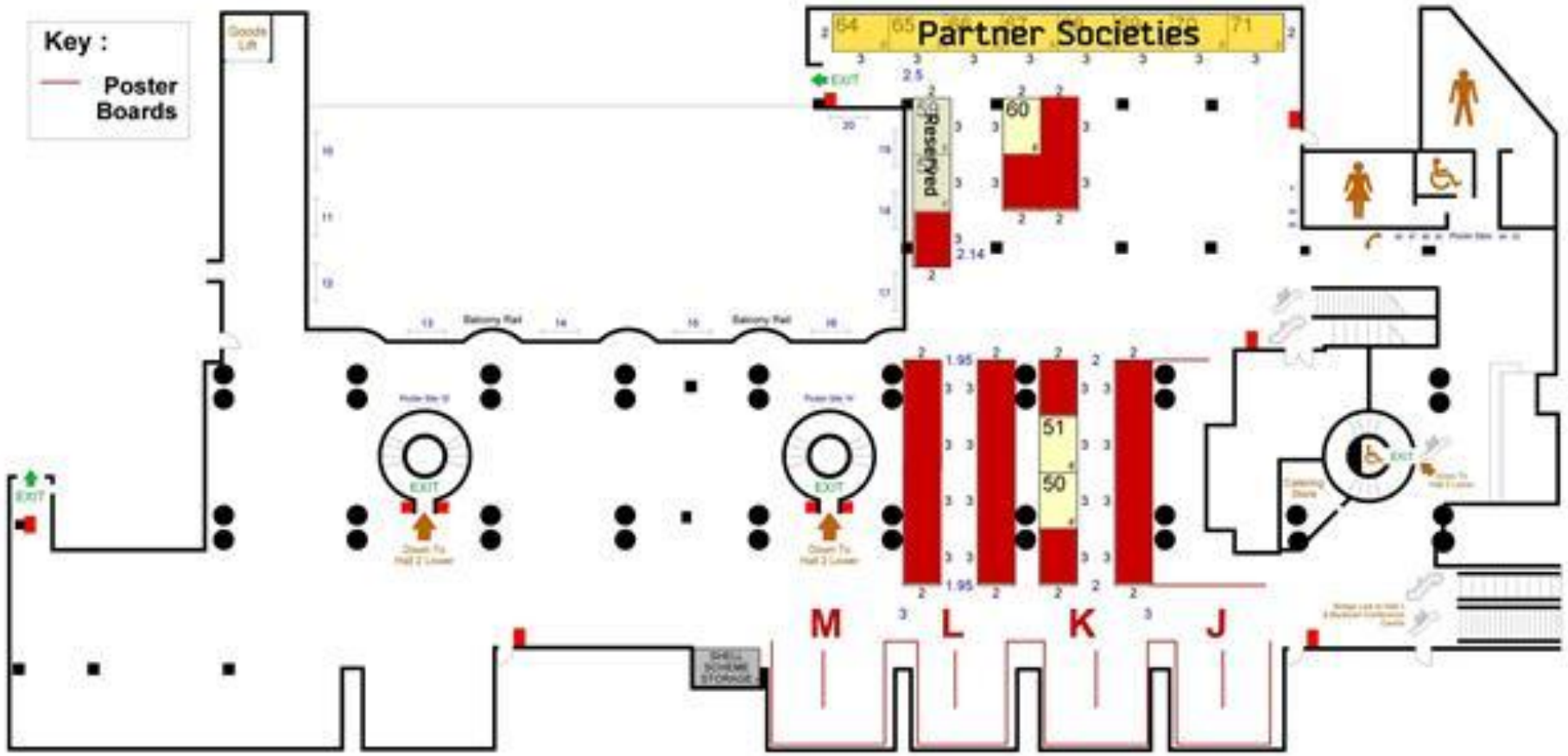
Lower level



Upper level

FESTIVAL OF NEUROSCIENCE 2013

07 - 10 April 2013



About the BNA

www.bna.org.uk

The British Neuroscience Association is the voice of UK neuroscience today

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:

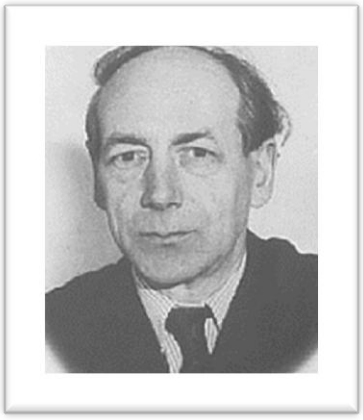
1. FREE registration for most BNA events.
2. Reduced registration fees for many other events.
3. Student prizes and bursaries for BNA and FENS meetings.
4. Reduced registration fees and FENS sponsored abstract forms for the Society for Neuroscience annual meeting.
5. Sponsorship of symposia at your university.
6. FREE online access to the *European Journal of Neuroscience*.
7. Discounts on journals and books and other occasional 'special offers'
8. BNA Bulletin and the latest neuroscience news, events and job vacancies.
9. Automatic membership of the Federation of European Neuroscience Societies (FENS) and the International Brain Research Organisation (IBRO).
10. Free advertising in the **BNA Bulletin**, the **BNA e.bulletin** and on the BNA Website.

To complete your application form, please **click here**.

For more information, please visit our website: **www.bna.org.uk**

The Wolstencroft Memorial 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 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 workings of the brain. The lecture is to be given biennially at the British Neuroscience National meeting. The purpose of the lecture is to communicate the most exciting and important advances in brain science.



John Wolstencroft 1922-1983

The 2013 Memorial Lecture will be given by Tim Bliss FRS.


2013
BNA
FESTIVAL OF
NEUROSCIENCE