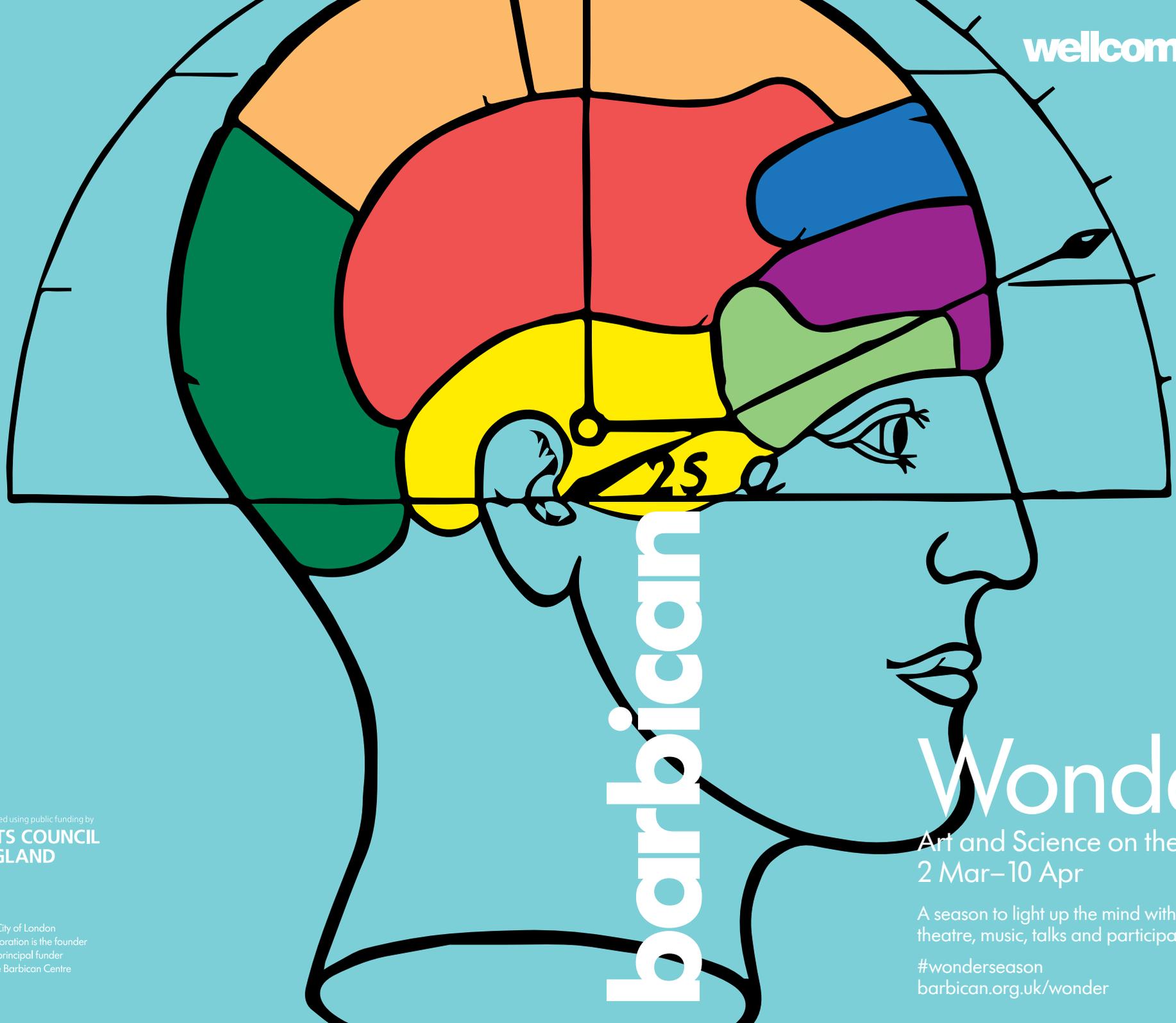


wellcome trust



barbican

# Wonder

Art and Science on the Brain  
2 Mar–10 Apr

A season to light up the mind with film,  
theatre, music, talks and participation

#wonderseason  
[barbican.org.uk/wonder](http://barbican.org.uk/wonder)



Supported using public funding by  
**ARTS COUNCIL  
ENGLAND**



The City of London  
Corporation is the founder  
and principal funder  
of the Barbican Centre

# Wonder

## Art and Science on the Brain

**The Barbican's season Wonder: Art and Science on the Brain puts the growing relationship between the arts and neuroscience under the microscope. Among the headline attractions in this collaboration with the Wellcome Trust are an audio-visual lecture on the theme of consciousness from Oxford Professor of Public Understanding of Science Marcus du Sautoy, a free weekend of art and science events, and a talk by comedian Ruby Wax about her struggle with depression.**

The season will also feature films about neuroscience and mental health and a theatrical recreation of a 19th-century Parisian debating salon. For du Sautoy, the old distinction between the 'two cultures' of science and the arts is finally, and rightly, fading away. He believes imagination has always been important in science, just as rigorous analysis has always been useful to the artist. 'In science our common sense is often our worst enemy,' he says.

The Wellcome Trust has long supported activities that allow scientists and artists to engage on an equal footing but has rarely brought their activities to the public on such a large scale. Dr Amy Sanders, of the Trust's Special Projects team, says 'science is part of culture and we are excited about this opportunity to bring people into contact with the latest research and to enable scientists to look at their work from new perspectives.' Researchers are at the heart of the Wonder season, whether talking about their work at the Salon, competing for the public votes in 'I'm a neuroscientist get me out of here ...' or knitting neurons in the Street Fair.

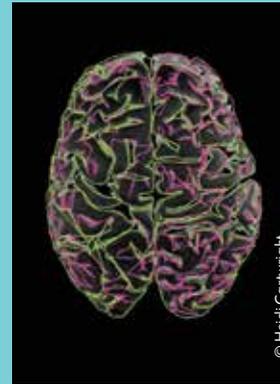
The very nature of the season has already broken down barriers, since it followed the decision of the British Neuroscience Association to hold their science conference BNA 2013: Festival of Neuroscience at the Barbican. Wonder will bring together neuroscientists from around the world to exchange the latest knowledge about brain research.

'We really wanted to give the public a sense of what is going on in the building as well as give the scientists a sense they are in an arts centre,' said Sean Gregory, the Barbican's director of creative learning. Perhaps one of the most outward-looking elements, Gregory believes, will be this year's Barbican Box project, put together with the innovative theatre company Complicite thanks to the long-held interest in neuroscience of Simon McBurney, its artistic director. A battered suitcase, full of clues about a particular scientist and their discoveries, will be delivered to participating schools in surrounding London boroughs.

Du Sautoy, who worked with McBurney on *A Disappearing Number*, is also keen to be part of a season that brings arts and science together. 'Scientists and artists are often homing in on the same structures. Keats wrote "A thing of beauty is a joy forever", but I wonder whether the truth is that we call things beautiful when we recognise something useful in their structures.'

*Vanessa Thorpe*

For more information on Barbican Box, please visit [barbicanbox.org.uk](http://barbicanbox.org.uk)



© Heidi Cartwright

**Barbican Weekender**  
2–3 Mar / Page 3



Marcus du Sautoy

**Prof Marcus du Sautoy**  
2 Mar / Page 8



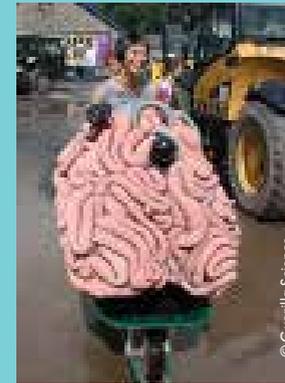
Persona © Svensk Film Institut

**Wonder on Film**  
2 Mar–10 Apr / Page 9



© Tommy Goh Ken Wan

**The Salon Project**  
4–14 Apr / Page 13



© Guerilla Science

**Wonder Street Fair**  
7, 8 and 9 Apr / Page 14



© Robert Kingham

**Grey Soul of London**  
7 and 8 Apr / Page 19



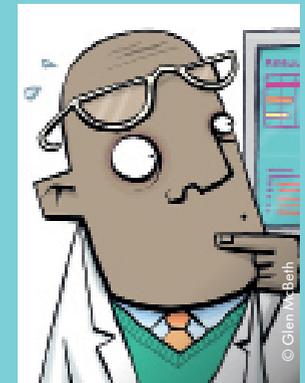
© Ruby Wax / BBC/ITV

**Ruby Wax**  
8 Apr / Page 20



© Wellcome Collection

**Packed Lunch**  
8–10 Apr / Page 21



© Glen W. Beth

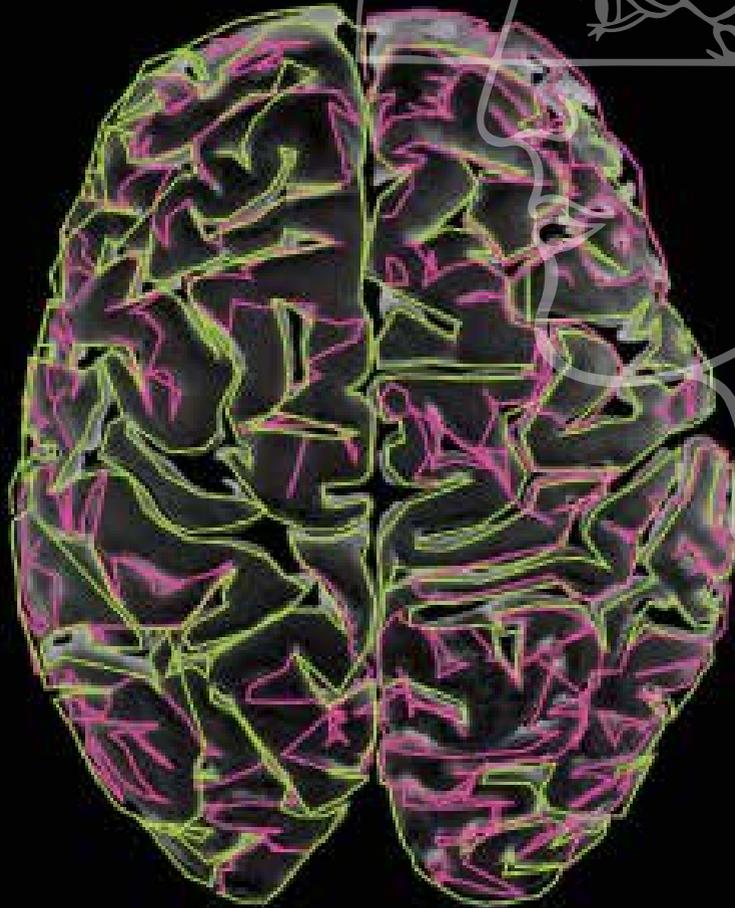
**I'm a Neuroscientist Get Me Out of Here LIVE!**  
9 Apr / Page 21

2–3 Mar, 11am–6pm, Barbican foyers

# Barbican Weekender: Brain Waves

Art and neuroscience put their heads together this March for an array of creative events that are sure to blow your mind. Bring your family and your friends along for two brainy days of dance, theatre, music and art for all ages.

Join us on a journey into the Barbican's grey matter and uncover facts, fiction and have fun with all things cerebral – it's a no-brainer.



Christopher Green © Tom L Russell

## Sat 11am–7pm, Sun 11am–6pm ClubStage, level -1 The Singing Hypnotist's Tent

Christopher Green and friends

Experience the amazing power of the human mind and the mysteries of mesmerism as The Singing Hypnotist sings you into a trance. Learn how the mind can be set free of everyday concerns and feel better than you ever thought possible. Live hypnosis will be performed on willing volunteers from the audience by accredited stage hypnotist **Christopher Green**.

Volunteers, who must be aged 18 or over, can refuse at any point to continue taking part in the performance

Free, sign up on the day

## Sat and Sun 11am–6pm Stalls floor foyer, level -1 $\alpha, \beta, \gamma, \delta, \theta, \mu$

(Alpha, Beta, Gamma, Delta, Theta, Mu)

James Bulley and Daniel Jones

$\alpha, \beta, \gamma, \delta, \theta, \mu$  is a musical composition that explores the rhythms and properties of neural activity, following the same patterns observed in physical brainwaves. Just as your thoughts and feelings emerge from the collective effects of countless electrical impulses in your brain, this composition emerges from countless musical elements – each one played by a visitor to the piece on their smartphone.

For further details on how to log on and play your brainwave, visit [barbican.org.uk/wonder](http://barbican.org.uk/wonder)

Free, drop in

## Sat and Sun 11.15am, 12.30pm, 1.45pm, 3pm, 4.15pm and 5.30pm Mezzanine floor, level M Jelly Brain Dissection

Guerilla Science

Come and dissect, discuss and digest the most complex thing in the known universe. Explore the evolutionary history of the brain with **Guerilla Science** as they serve up a range of delectable jelly brain creations from across the animal kingdom.

Free, sign up on the day

## Sat and Sun 11am–6pm Hammerson Room, Mezzanine level Memory Clinic

Guerilla Science

**Guerilla Science** invite you to explore your memories and leave one for safe-keeping in our collection of test tube treasures, designed by artist Evy Jokhova. Plus, join Grand Master of Memory **Ed Cooke** to learn how to remember everything you never thought you could.

Free, drop in

## Sat and Sun 11am–6pm Mezzanine, level M Sonic Tour of the Brain

Guerilla Science

What does the brain sound like? Join **Guerilla Science** and their giant brain as they take you through a range of recordings, from hissing hair cells to singing cortices. Discover what we can learn about the brain, just by listening to it.

Free, drop in

## Sat and Sun 11am–6pm Fountain Room, Level G Knit a Neuron

British Society for Immunology

Pick up your needles and hooks and knit a neuron as we chat about the brain.

Free, drop in

**Sat 2.15pm and Sun 1.30pm**  
**Freestage, level G**  
**Naked Neuroscience**

Naked Scientists

Cambridge University's **Naked Scientists** take you on an interactive journey through the workings of the nervous system. Volunteer if you want to find out how to read your brainwaves, activate your muscles electrically, learn how to fool your senses and more.

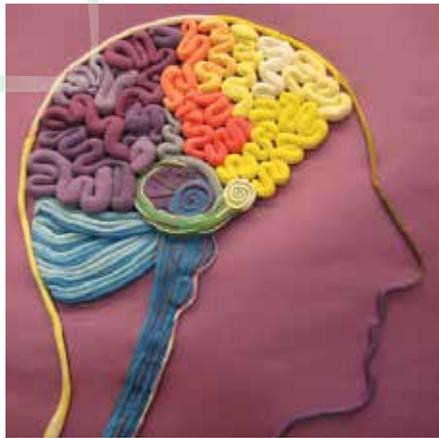
Free, drop in

**Sat and Sun 11am–6pm,**  
**Fountain Room, level G**  
**Build-a-Brain**

Dr Lizzie Burns

Scientist-turned-artist **Dr Lizzie Burns** guides you through different parts of the brain to help you make a work of art. At the end of the session, you can take your brain home with you.

Free, drop in



© Dr Kay Kelly/Dr Lizzie Burns

**Sat 12.15pm and Sun 12 noon,**  
**Freestage, level G,**  
**Brains Showoff**

The people who bring you Science Showoff bring you a chaotic half-hour of brain-related comedy, music, sketches, demonstrations and talks. Hosted by **Dr Suze Kundu**, fresh from her stint on Radio 4, every performance is unique.

Free, drop in

**Sat 3.45pm and Sun 3.15pm**  
**Freestage, level G**  
**I'm a neuroscientist get**  
**me out of here – LIVE!**

Are male and female brains different? Is the brain more like a sponge or a computer? Do we really only use ten percent of our brain? Join comedian, songstress and science presenter **Helen Arney**, who puts five brain scientists on the spot with your questions as they compete on stage for your vote to win 'I'm a neuroscientist get me out of here' – LIVE!

Free, drop in

**Sat 1.45pm and 3.15pm,**  
**Sun 1pm and 2.30pm**  
**Ground Floor Foyer, level G**  
**Brain Flash**

Join **Dr Peter Lovatt** and his team of dancers to learn the 'Brain Flash': our brain-inspired flash mob. Learn a few simple moves and become part of a human brain wave. You can learn the dance on the day or in advance at [barbican.org.uk/wonder](http://barbican.org.uk/wonder)

Free, drop in



Dr Peter Lovatt © Ian Scott

**Sat and Sun 11am–6pm**  
**Curve Exit, level G**  
**Ping Pong Plus**

Venice as a Dolphin

Table tennis as you've never seen (or heard) it before. Every shot you play will come back to haunt you as you do battle, not just against your opponent, but against the limitations of your own perception.

Free, drop in

**Sat and Sun 12 noon–2pm**  
**and 3pm–5pm**  
**Ground floor foyers, level G**  
**Navigate your Neuron**

MzTek

Use soft-circuit electronics to make a wearable, interactive neuron glove with **MzTek** - using electricity to send the signal from a touch sensor on the finger, through lights all the way up the arm to a buzzer in the elbow.

Free, sign up on the day

**Sat and Sun 11am–6pm**  
**Ground floor foyer, level G**  
**3-2-1 Ignition**

Ignite!

Can you smell a thought? Can you map a memory? Ignite! presents activities to tempt your curiosity. There'll be jars to peer in and sniff at, thoughts to create and space to ask the brain-related questions you've always wanted answered.

Free, drop in

**Sun 5pm, Freestage, level G**  
**Music of the Mind**

Like nothing you've ever heard out loud before, *Music of the Mind* opens doors to a whole new world of possibility. This is a performance of several tracks from Finn Peters' *Music of the Mind* album, using brain computer interfaces (BCI), traditional instruments and laptops. Performed by **Finn Peters, Prof Mark, Dr Mick Grierson** and **Dr Matthew Yee-King**, this special software allows the musicians to literally think music into being.

Free, drop in

**Sat and Sun 11.30am–6pm**  
**Ground floor foyer, level G**  
**Brain Food**

Compass

Stimulate your little grey cells with a selection of hot food and tasty snacks from our brain food stall, available throughout the Weekender.

**Sat and Sun 11am–6pm**  
**Foyers**  
**Consciousness Pods**

Five plasma screens around the foyers will each offer a different audiovisual insight into the nature of consciousness, covering the following themes: A Tour of the Brain, Emerging Consciousness, Tricking the Brain, Switching Consciousness Off and Heightened Consciousness.

Free, drop in

**Sat 5pm, Freestage, level G**  
**Barbican Young Poets**

The **Barbican Young Poets** get cerebral as they delve into the wonders and mysteries of neuroscience, diving deep for stimulus and epiphanies to present on stage through finely crafted poetry and spoken word. Expect synaptic sparks and anything but grey matter.

Free, drop in



Barbican Young Poets © Katie Henfrey

**Sat and Sun 11am–8pm**  
**The Curve, level G**  
**Random International:**  
**Rain Room**

Contemporary art studio **Random International** invites you to experience what it's like to control the rain. Can you push aside your learnt behaviours to move carefully through rain, putting your trust in the work to the test?

Admission free

Please check online for queue times

*Rain Room* has been made possible through the generous support of the Maxine and Stuart Frankel Foundation for Art.

Supported using public funding by Arts Council England.

**Sat 11am–6pm and Sun 11am–2.30pm**  
**Balcony, level 1**  
**Brain Flash Warm Up**

Dr Peter Lovatt

Warm up for the big Brain Flash event in our DIY practice zone.

Free, drop in

# Consciousness

**2 Mar 7.30pm, Hall**

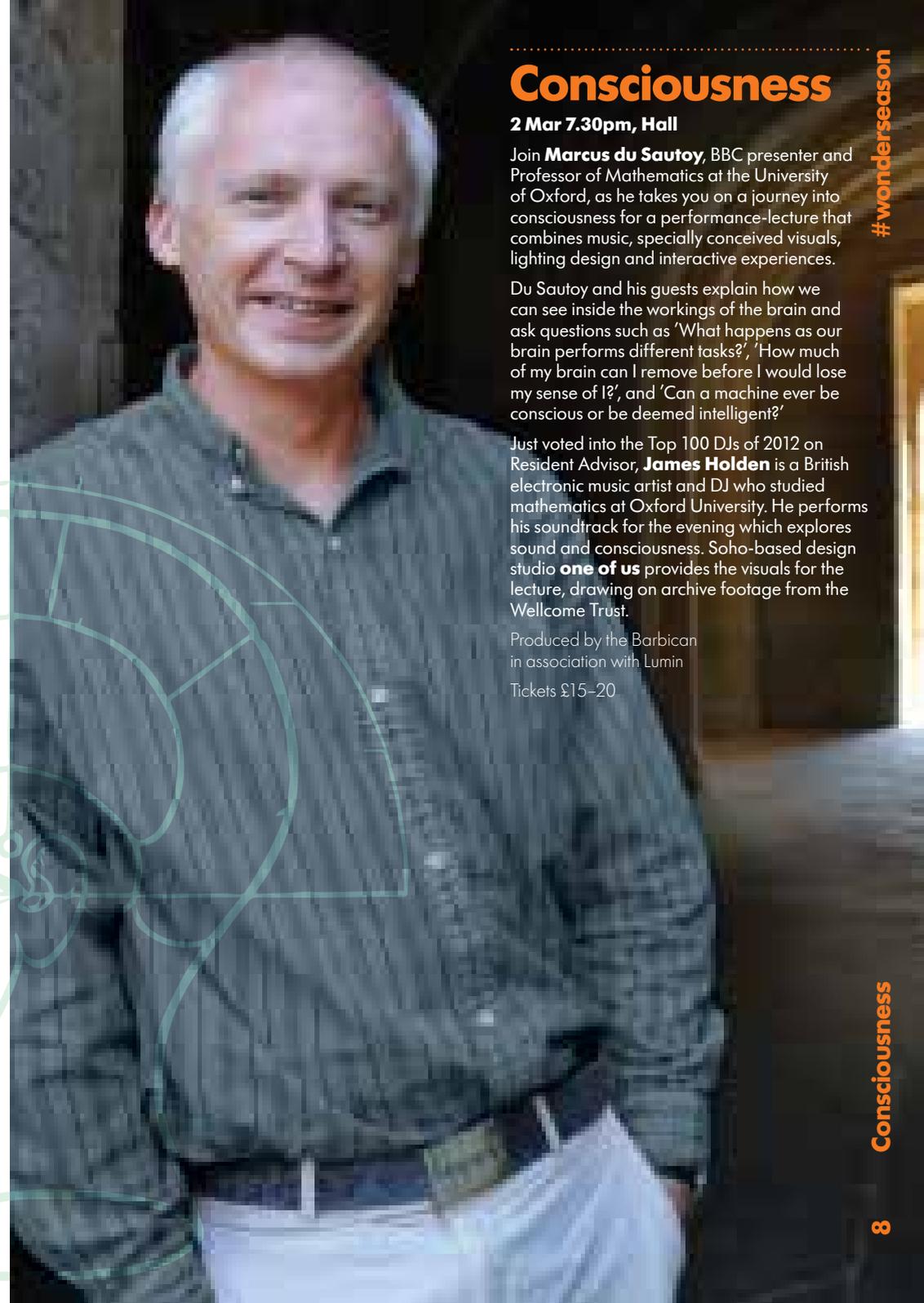
Join **Marcus du Sautoy**, BBC presenter and Professor of Mathematics at the University of Oxford, as he takes you on a journey into consciousness for a performance-lecture that combines music, specially conceived visuals, lighting design and interactive experiences.

Du Sautoy and his guests explain how we can see inside the workings of the brain and ask questions such as 'What happens as our brain performs different tasks?', 'How much of my brain can I remove before I would lose my sense of I?', and 'Can a machine ever be conscious or be deemed intelligent?'

Just voted into the Top 100 DJs of 2012 on Resident Advisor, **James Holden** is a British electronic music artist and DJ who studied mathematics at Oxford University. He performs his soundtrack for the evening which explores sound and consciousness. Soho-based design studio **one of us** provides the visuals for the lecture, drawing on archive footage from the Wellcome Trust.

Produced by the Barbican in association with Lumin

Tickets £15–20



# Wonder on Film

Running across the Weekender (2–3 Mar), Brain Awareness Week (11–17 Mar) and BNA2013 Festival of Neuroscience (7–10 Apr), our film programme explores the links between the arts and neuroscience and examines the human mind on screen. With mainstream and art-house features and shorts, we address current debates in neuroscience, consider how movies have questioned our definitions of mental health and sanity, and look at the representation of neurological and psychiatric conditions in cinema.

## Tickets

Standard  
£10.50 online/£11.50 on the door

Barbican Members  
£8.40 online/£9.20 on the door

Concessions  
£9.50 online/£10.50 on the door  
Under 18s £6

Persona © Svensk Film Institut



*Eternal Sunshine of the Spotless Mind* © Focus Features

## Sat 2 Mar 3pm, Cinema 3 **Eternal Sunshine of the Spotless Mind**<sup>15</sup>

Joel (**Jim Carrey**) tries to erase all memories of Clementine (**Kate Winslet**) when the relationship goes sour. However, in the middle of a shady, brain-zapping procedure, Joel realises that he doesn't want to forget and tries to hide his memories of her, before it's too late.

US 2004 Michel Gondry 108 min

### + Introduction

What if you could erase unpleasant memories – would you and should you? Dr Anders Sandberg considers this question before the film.

## Sun 3 Mar 3pm, Cinema 3 **Mission to Lars**<sup>12A</sup>

Tom Spicer has Fragile X Syndrome and lives in a care home in Devon. When his siblings promise to make his dream of meeting his hero, Lars Ulrich, the heavy metal drummer from Metallica, a reality, what starts out an exciting adventure soon becomes a nightmare.

UK 2012 Dirs James Moore and William Spicer 74 min

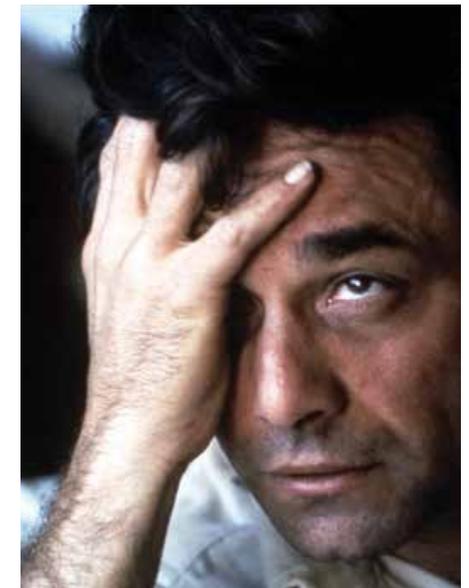
### + Introduction

Producer **Kate Spicer** and director **Will Spicer**, Tom's siblings, discuss living with Fragile X syndrome.

## Sun 10 Mar 2pm, Cinema 3 **A Woman Under the Influence**<sup>15</sup>

In one of the greatest performances in cinema history, **Gena Rowlands** stars as Mabel, a suburban housewife suffering a mental breakdown. As her behaviour becomes increasingly erratic, her husband (**Peter Falk**) struggles to cope.

US 1974 John Cassavetes 147 min



*A Woman Under the Influence* © Ronald Grant Archive

**Sun 10 Mar 4.30pm, Cinema 1**  
**A Page of Madness** <sup>PG</sup>  
 + live accompaniment  
 by **In The Nursery**

**Silent Film and Live Music series**

Director Teinosuke Kinugasa uses a dazzling array of photographic techniques, camera angles and expressionist lighting to tell the moving story of a former sailor who takes a job at an asylum in order to be close to his wife, who is a patient. **In the Nursery's** unique musical blend of the symphonic and the modern comes to fruition in this live accompaniment to the Japanese silent masterpiece.

Japan 1926 Dir Teinosuke Kinugasa 75 min



*A Page of Madness* © Kinugasa Productions

**Sat 16 Mar 2pm, Cinema 3**  
**Clean, Shaven** <sup>18\*</sup>

Just released from an institution, Peter goes in search of his missing daughter; en route, he is plagued by hallucinations, and falls under suspicion of murder. Peter's lacerated, hallucinatory perceptions of the world are suggested through expressionistic sound design and skilful use of imagery, plunging us headfirst into the perspective of a schizophrenic protagonist.

US 1993 Lodge Kerrigan 79 min

**Sat 16 Mar 4pm, Cinema 3**  
**Persona** <sup>15</sup>

On a remote island, psychiatric nurse Alma (**Bibi Andersson**) cares for famous actress Elisabeth (**Liv Ullmann**), who has stopped speaking. An admirer of Elisabeth's beauty and talent, Alma allows her identity to merge with that of her ward... at least, that may be what's happening here. One of the most debated art films ever, its radical disjunctions attempt to represent the interior experience of her psychological state.

Sweden 1966 Ingmar Bergman 83 min

**+ScreenTalk**

Madness has been a popular subject in film – and yet the complaint is often that cinema has only ever contributed to the stigmatisation of mental illness. Is this the case? With **Dr Peter Byrne** (Consultant Psychiatrist at Newham University Hospital and Director of Public Education at the Royal College of Psychiatrists), **Sal Anderson** (Institute of Inner Vision), and film-makers **Gregory Hilton** and **Dolly Sen**.

**Sun 17 Mar 2–6pm, Cinema 3**  
**Cinema and Psychosis Event**

'Cinema and Psychosis' is a pan-European group of theorists, filmmakers, psychiatrists, psychologists and neuropsychologists that pioneers research into the interface between film and psychiatry. Join them for a fascinating afternoon of talks and screenings launching The Institute of Inner Vision: an exciting new academic initiative that places cinema at the centre of an exploration of the subjective experience of psychosis.

Event curated by Sal Anderson, with thanks to the Wellcome Trust and The London College of Communication at the University of the Arts London.

Tickets £5; free for the unwaged

**Sun 7 Apr 6pm, Cinema 1**

**Fiend Without a Face** <sup>PG\*</sup>

In this fun British B-movie, human thoughts are transformed into brain-sucking creatures that terrorise a US military base. A special effects bonanza, it climaxes in an outrageous gun battle against flying, splattering brains.

Come early to experience the Wonder Street Fair and stay after the screening to challenge your disembodied brain with body illusions and mind tricks.

UK 1958 Arthur Crabtree 71 min



*Fiend Without a Face*, Courtesy of the BFI

**Mon 8 Apr 6pm, Cinema 3**  
**All Divided Selves** <sup>15\*</sup>

The Turner-prize nominated film by artist and musician **Luke Fowler** forms an intriguing portrait of Glasgow-born psychiatrist **R D Laing**, who spearheaded the social and cultural revolutions of the 1960s. Fowler's collage weaves archival material with his own filmic observations into an engrossing exploration of Laing's brilliant mind.

UK 2011 Dir Luke Fowler 93 min

**Mon 8 Apr 8pm, Cinema 3**  
**The Manchurian Candidate** <sup>12A</sup>

One of the greatest paranoid thrillers and nastiest political satires ever: Korean War veteran Major Marco (**Frank Sinatra**) unravels a Communist plot to brainwash his old platoon and turn war hero Raymond Shaw (**Laurence Harvey**) into a human weapon against fellow American PoWs.

US 1962 John Frankenheimer 126 min

**+ Introduction**

**Kathleen Taylor**, author of *The Brain Supremacy*, asks whether it is possible to erase or implant memories and explores what it would take to turn a person into a would-be assassin.



Mary and Max © Soda Pictures

**Tue 9 Apr 6pm, Cinema 3**  
**Mary and Max** <sup>12A</sup>

Oscar-winning director Adam Elliot's claymation feature is a whimsical yet poignant account of the pen-pal friendship between the chubby, lonely, eight-year-old Australian Mary Dinkle and an obese, autistic and middle-aged New Yorker, Max Horowitz. Featuring the vocal talents of **Eric Bana, Toni Colette, Philip Seymour Hoffman** and **Barry Humphries**.

Australia 2009 Dir Adam Elliot 92 min

**Tue 9 Apr 8pm, Cinema 3**  
**The English Surgeon** <sup>12A</sup>

What's it like to possess God-like surgical powers, but fail to save a life? Shot in Ukraine, this documentary is an intimate portrait of neurosurgeon **Henry Marsh**, as he confronts the dilemmas of the doctor-patient relationship on his latest mission to Kiev.

UK 2007 Dir Geoffrey Smith 93 min

**+ ScreenTalk with Henry Marsh**

After our screening, hear the English Surgeon himself talk about his life and work as a neuroscientist.

**Wed 10 Apr 8pm, Cinema 3**  
**Titicut Follies** <sup>15\*</sup>

A landmark in documentary film-making and a disturbing look at the treatment of the criminally insane. Quietly observing activities and procedures with inmates, guards, social workers and psychiatrists at the Bridgewater Hospital in Massachusetts, this extraordinarily powerful film was banned in the US for over 25 years.

US 1967 Dir Fred Wiseman 84 min

**4–14 Apr**  
**Timed entry: 6pm, 6.30pm, 7pm, The Pit**

**Untitled Projects**

**The Salon Project**

The Salon Project recreates the exclusive meetings at the heart of what was French society's golden age – an era of change, excess and inquiry. Relive its splendour, contrast it with the present, and imagine what the future will hold in this beautifully crafted night of fashion and conversation.

Your evening begins in the Barbican dressing rooms, where you will be costumed in full period evening dress before emerging into a mirrored impression of a 19th-century Parisian salon.

As you mingle with guests, pioneers in their fields will provoke discussion, speaking on subjects at the vanguard of 21st-century thought: science, politics, technology and the arts.

Tickets £35

Age guidance 16+ (contains nudity)

Presented in partnership with SPILL Festival of Performance

Supported by Creative Scotland.

Originally created with Traverse Theatre, Edinburgh and Citizens Theatre, Glasgow.



The Salon Project © Tommy Ga-Ken Wan



**Sun 7 Apr 12 noon–6pm, Mon 8 and Tue 9 Apr 12 noon–7.30pm, Barbican Foyers**

**Wonder Street Fair**

The Barbican Foyer springs to life with free, drop in activities, performance, interaction and demonstrations. From cave painting to motion sensors, eye-trackers to body illusions, come and knit a neuron, test your reactions, and pit your wits against brain scientists. With over twenty different activities to stimulate, inspire and amuse your little grey cells.

Sun 7 Apr 12 noon–6pm, Mon 8 and Tue 9 Apr 12 noon–7.30pm, Barbican foyers

# Wonder Street Fair

## Walking without a Brain

School of Psychology and Neuroscience  
University of St. Andrews

Although our brains control much of what we do, our spinal cords can also control complex behaviours such as walking. See a spinal cord up close and witness how we can measure the electrical signals that power our movement.

Free, drop in

## The Beuchet Chair

Psychology, University of York

Fool your visual system and shrink your friends on the magical Beuchet Chair. Learn about the conflict between our 2D and 3D perceptions, and capture your illusion with a specially positioned camera.

Free, drop in



The Beuchet Chair

## A Sixth Sense and Beyond

Psychology, University of Sheffield

Have you ever wanted an extra sense? Explore the mysterious world of sensory augmentation, and decide what extra sense you would have.

Free, drop in

## What Your Eyes Can Tell Us About Your Mind

Centre for Brain and Cognitive Development,  
Birkbeck, University of London

How do young children develop the cognitive skills necessary to interact with others? Using eye-trackers and virtual experiences, gain insight into your gaze behaviour, and learn what it says about you.

Free, drop in

## Beastly Brains

The Roslin Institute, University of Edinburgh

How do animal brains compare to ours? Play with beanbag brains, discover some amazing animal facts and find out how a brain disease in sheep is helping scientists to understand human diseases such as Alzheimer's.

Free, drop in

## Body Illusions: Can you fool the brain about what the body is like?

Institute of Cognitive Neuroscience, University College London

Using mirrors and deceptively simple perceptual illusions, experience the surprising ways in which the brain can produce the experience of touch.

Free, drop in

## Neurotrauma: Traumatic Brain Injury, Recovery and Emergency Treatment

Neurotrauma and Division of Brain Sciences,  
Imperial College London

Traumatic brain injury is the most common cause of death in the under 40s. In a collaboration between **Imperial**, the **Royal College of Surgeons** and **London's Air Ambulance**, try your hand at simulated brain surgery, record your brain waves, witness up-close magic tricks and more.

Free, drop in



Neurotrauma

## Stimulating Game to Stimulate the Brain

Experimental Psychology,  
University of Oxford

Move your body to solve number games as motion sensors display the intriguing connection between neuroscience, psychology and education behind mathematical learning. You'll never do your times tables the same again.

Free, drop in

## How does what you see affect your balance?

Brain Sciences, Imperial College London

Have you ever sat on a train and thought you were moving, but in fact you were completely still? Test how much your balance is affected by what you see with an illusory spinning disc and only your senses to guide you.

Free, drop in

## Reaction Time Race

Nuffield Department of Clinical Neurosciences,  
University of Oxford

Test your motor processes on the reaction machine. Harness your competitive spirit and bring home a reaction tester of your own.

Free, drop in

## Are you Smarter than a ...?

Ginny Smith in association with the  
Cambridge Science Centre

Compare yourself to an elephant, six-month old baby and even a crow. What games do you excel at, and can a chimp outsmart you?

Free, drop in

## Forget-me-not: Amazing Brain Cell Connections

Department of Neuroscience, King's College London, Institute of Psychiatry

What happens when our memories fail? Pick up your pipe cleaners, jigsaw pieces and Plasticine and find out what happens when dementia strikes. See how researchers are trying to understand these illnesses.

Free, drop in



The Mind in the Cave

## The Mind in the Cave

Guerilla Archaeology

Put on a blindfold, pick up some ochre or charcoal and take your mind back to the earliest days of cave painting. Learn how phosphenes – patterns generated in the absence of light – might connect our brains to the origins of art.

Free, drop in

## Knit a Neuron

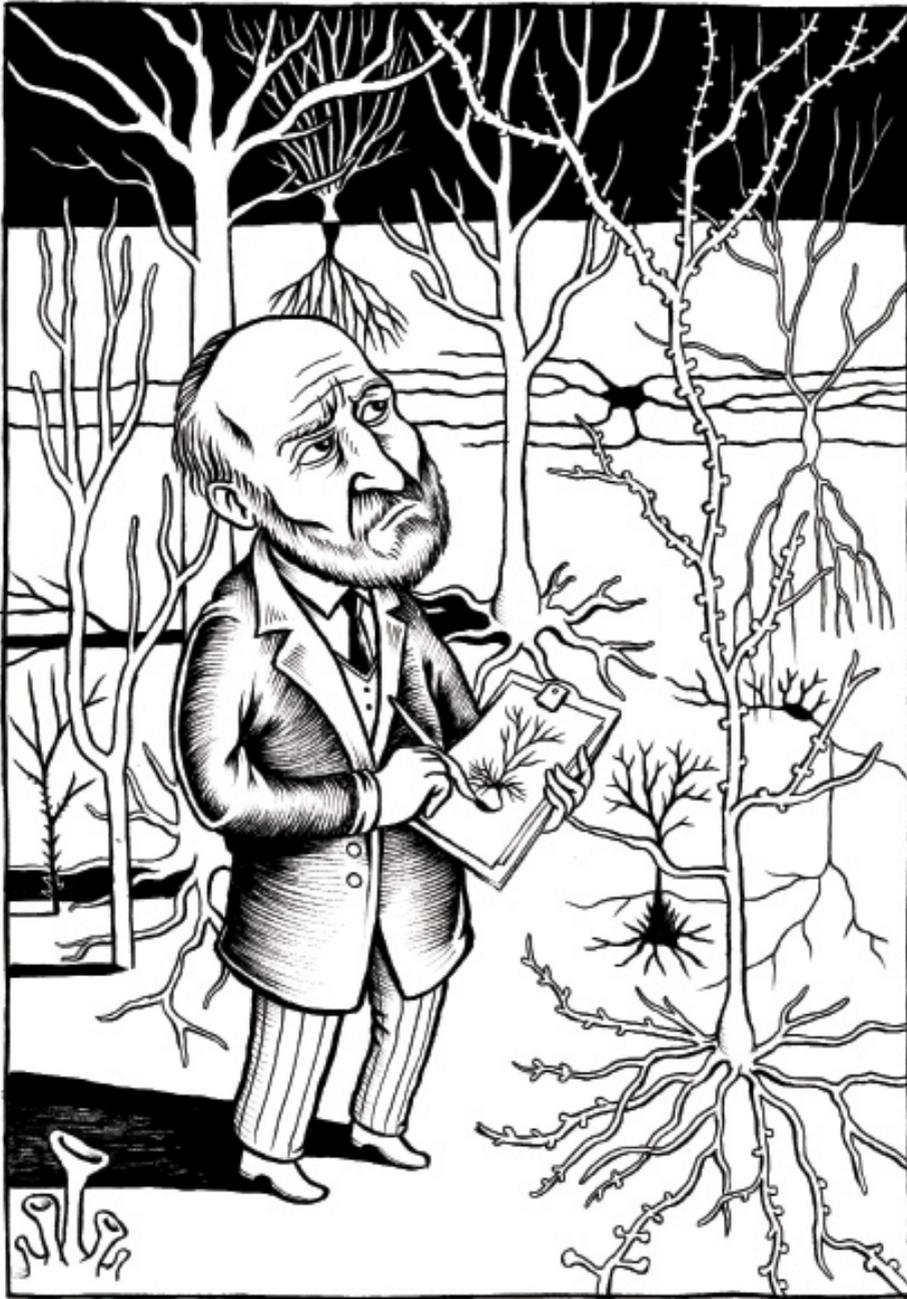
University of Exeter and British Society of Immunology

Stop by and knit a neuron while chatting about all things brainy. Come with questions, comments and observations for brain scientists and take up your needles to make an installation of woolly brain cells.

Free, drop in



Knit a Neuron



Neurocomic

### Neurocomic

Neuroscience, Physiology and Pharmacology  
University College London

Joined by illustrator and neuroscientist team **Neurocomic**, gaze at slides of real brain tissue stained with 'black reaction' to unveil individual neurons. Get your sketch pad ready to draw what you see and learn about the challenges of visualising the brain.

Free, drop in

### 3-2-1 Ignition Pop-up Shop Ignite!

Can you smell a thought? Can you map a memory? Ignite! presents activities to tempt your curiosity. There'll be jars to peer in and sniff at, thoughts to create and space to ask the brain-related questions you've always wanted answered.

Free, drop in

### Musical Muscles

Institute of Neuroscience, Newcastle University

An amazing instrument you can play using the electrical signals in your muscles. Make music with your hands, your feet or even your face. Learn how these signals become movement and how they can be used to help people with disabilities.

Free, drop in

### Superlatively, Actually Awake Analogue

Drawing inspiration from the case study of British musicologist **Clive Wearing**, this specially created looping experience places you inside an audio performance that explores what it means to have only moment-to-moment consciousness.

Free, drop in

### Open your Mind

Naked Neuroscientists,  
University of Cambridge

Take an interactive journey through the workings of the nervous system. **The Naked Scientists** will use volunteers to read brainwaves and investigate how our senses can be fooled into seeing and feeling imaginary things and even how they can pick up when we are lying.

Free, drop in

### Lionel, the Spaceship of our Imagination

Sound of Science

Meet Lionel, the Spaceship of our Imagination: a unique cinema in a campervan. Showing a range of neuroscience footage and films, enter the Spaceship and begin your journey into the mind...

Free, drop in

### The Crick's Science Buskers – Brain Edition

The Francis Crick Institute

Meet a range of scientists as they dazzle you with visual experiments, puzzles and illusions. Science buskers will challenge your grey cells with simple demonstrations that bring to life the wide world of neuroscience.

Free, drop in



The Crick Science Buskers



Sonic Tour of the Brain

### Sonic Tour of the Brain

Guerilla Science

What does the brain sound like? Join **Guerilla Science** and their giant brain as they take you through a range of recordings – from firing neurons to hissing hair cells and singing cortices – and discover how much we can learn about the brain just by listening to it.

Free, drop in

### What Makes Me Me? A Treasure Hunt for the Neural Basis of Behaviour

School of Life Sciences, Kingston University

Take an interactive journey through the foyer of the Barbican where you can track down, meet and talk to the individual parts that make up our brains. Come face to face with an amygdala and hippocampus to find out what they do, and what makes them so special.

Free, drop in

### Changing Minds through Neuroscience Inspired Fashion

Biological Sciences, University of Southampton

Marvel at this installation where fashion meets the mind, and designers inspired by neuroscientists and patients have interpreted brain diseases through the medium of clothes.

Free, drop in

Sun 7 and Mon 8 Apr 2.30pm

## Walking Tour: The Grey Soul of London

**Robert Kingham** leads a walk around Finsbury, the lesser-known London district to the north-west of the Barbican. The writer Arthur Machen (1863–1947) called it 'a district both devious and obscure' and promised that the explorer would find 'wonder, mystery, awe, the sense of a new world and an undiscovered realm'. What kept drawing Machen back to this place? Robert explores how the history of an area can imprint itself on the psychology of one person, and what this tells us about our subconscious relationship with our urban environment.

Tickets £5

To book please call 0207 001 9844 or visit [www.museumoflondon.org/events](http://www.museumoflondon.org/events)

Programmed in partnership with the Museum of London



## Ruby Wax

Mon 8 Apr 7.30pm, Hall

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? As she has learned to handle 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.

Tickets £8/£10

8–10 Apr 1–1.45pm, Conservatory

## Packed Lunch

Packed Lunch travels to the Barbican from its regular home at Wellcome Collection, with a special series of events exploring neuroscience and the city. Find out about the effect of the modern workplace on our circadian rhythms; how our brains navigate the urban environment; and how city life affects our minds, all in the space of a supercharged lunch hour.

### Mon 8 Apr

Navigating the City, with **Hugo Spiers**, Lecturer in Cognitive and Perceptual Brain Science, UCL

### Tue 9 Apr

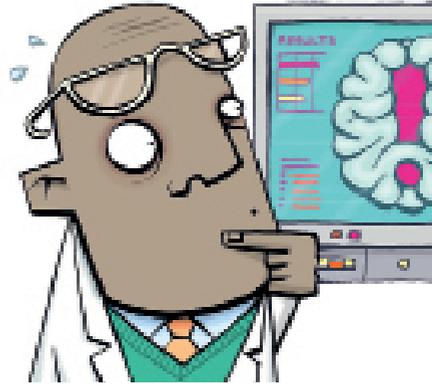
Body Clocks, with **Katharina Wulff**, Senior Research Scientist, University of Oxford

### Wed 10 Apr

Gambling, with **Henrietta Bowden-Jones**, Honorary Clinical Senior Lecturer, Imperial College London

Admission free

Advance booking advised



© Glen McBeth

Tue 9 Apr 7.30pm, Cinema 1

## I'm a neuroscientist, get me out of here – LIVE!

Are male and female brains different? Is the brain more like a sponge or a computer? Do we really only use ten percent of our brain? Pitch your questions to our brave brain scientists as they compete on stage for your vote to win 'I'm a neuroscientist get me out of here' – LIVE!

Join comedian, songstress and presenter **Helen Arney**, as she puts brain scientists on the spot with your questions. The winner will receive a donation to the charity of their choice – all they need is your vote. These neuroscientists are ready to take on your most challenging questions. From whether you're smarter than a dolphin, to why you like opera – what will you ask?

Tickets £5

## The 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.

Its breadth of support includes public engagement, education and the application of research to improve health. It is independent of both political and commercial interests.

[www.wellcome.ac.uk](http://www.wellcome.ac.uk)

## British Neuroscience Association

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. BNA 2013: Festival of Neuroscience is the BNA's biennial scientific meeting taking place from 7-10 April 2013 at the Barbican.

[www.bna2013.com](http://www.bna2013.com)

## Barbican Centre

A world-class arts and learning organisation, the Barbican pushes the boundaries of all major art forms including dance, film, music, theatre and visual arts. Its creative learning programme further underpins everything it does.

To find out more and get involved visit [barbican.org.uk](http://barbican.org.uk)

Stay up to date with the Barbican events and special offers, sign up for e-updates at [barbican.org.uk](http://barbican.org.uk)

Follow us on Twitter and tweet **#wonderseason**

Like us on Facebook

## Getting here and booking

[barbican.org.uk/visitor-information](http://barbican.org.uk/visitor-information)

### Our address

Barbican Centre, Silk Street, London EC2Y 8DS

### Underground

Barbican, Moorgate, St Paul's, Bank, Liverpool Street and Mansion House.

### Train

Liverpool Street, Farringdon and Blackfriars. City Thameslink services serve Barbican, Moorgate and Cannon Street.

### Car park

Four car parks, two off Beech Street and two off Silk Street near the main entrance. Alternative parking is available in Aldersgate Street.

### Bus

The following bus routes operate near the Barbican: 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). Late buses: N35, N55, N243, 43, 205, 214, N76, N133.

## Booking Information

Phone 0844 848 3397

In person – advance box office (10am–8pm Mon–Sat, 12pm–8pm Sun/bank holidays)

Booking transaction fees may apply

[barbican.org.uk/wonder](http://barbican.org.uk/wonder)