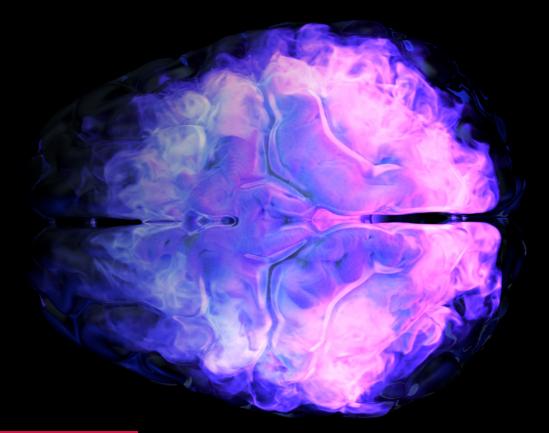
# **ROYAL SOCIETY LATES**WHAT'S ON YOUR MIND?

WEDNESDAY 21 FEBRUARY 2024

### **PROGRAMME**





## **Event** information

#### **TALKS**

Admittance to our talks will be on a first-come, first-served basis, unless otherwise stated. Please ensure you arrive at least 10 minutes before the scheduled talk time as it may be busy.

Some of our talks will be ticketed – please see more information below.

#### **DROP-IN ACTIVITIES**

These run throughout the evening, so you can drop in at any time. Please note if the room is at capacity you may have to wait.

### TICKETED TALKS

These sessions are timed and have limited capacity. To attend, please collect a free ticket from the information desk. Tickets for all sessions will be available from 6.30pm. Without a ticket, you will be denied entry.

## **General** information

### Photography policy

Please be aware that photography/filming may take place during your visit to the Royal Society. If you do not wish to consent, please visit the information desk to collect an opt-out sticker from a member of staff. If you wish to use photograph or filming equipment at the event, remember to respect visitors wearing a 'no photography' sticker who do not wish to be photographed/filmed.

### Accessibility

The event is fully wheelchair accessible. The basement can be accessed from the lifts situated near the main staircase.

Subtitles are provided for certain talks. We also provide free portable hearing loops and portable seats on demand.

Please talk to a member of staff for more information or if you require any assistance.

Large print programmes are available from the information desk.

### Staff

Should you require any help during your visit to the Royal Society, our team will be happy to assist you. You can visit the information desk or find a member of our team around the building.

### Welcome

Tonight we're opening up our historic building for a special evening to explore our brains and cutting-edge neuroscience research.

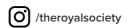
Journey into the depths of the human brain to explore how individuals experience the world differently and meet the researchers trying to better understand how we think, feel, and behave.

Try out phone apps that are taking brain research beyond the boundaries of lab experiments, learn more about neurodiversity, meet the minds at the forefront of neuroscience research in a series of lightning lectures, and delve into the Royal Society archives to discover how our understanding of the brain has evolved.

### royalsociety.org/events







### Lightning talks

Come along to a 20-minute lightning talk with one of our neuroscientists. Each talk will be a whirlwind tour of a topic with time at the end to ask your burning questions.

These talks are taking place in the Kohn centre.



**Time:** 6.40pm

### Tackling brain injuries in sports

Sports have multitude of benefits, but they can also expose the brain to large forces. Quantifying these forces can inform pitch-side decisions, long-term management of exposures and improvements in laws of the games. Dr Mazdak Ghajari explores how we are tackling this problem by using instrumented mouthguards, detailed computational models of brain injury biomechanics and machine learning.



**Time:** 7.10pm

### Between prudence and paranoia: the brain basis of social strategy gone right, and wrong

Dr Joe Barnby is a computational and cognitive neuroscientist interested in the brain basis of social interaction in health, disorder, and neurodiversity. His recent work focuses on building mathematical models of how humans build models of their social world, testing which neurochemical and social factors cause this ability to go awry, and how this may explain psychopathological symptoms.



### How do we recognise unfamiliar faces?

Face recognition is a task that we all engage in every day. Although it is quite easy to recognise the faces of our friends, family and even celebrities, it is very difficult to recognise unfamiliar faces and often We make mistakes. The recognition of unfamiliar faces plays an important role in our society, for example in our use of photographic-ID. Join Dr Kristen Baker to learn more about unfamiliar face recognition.



### Dementia: Hope for the future

Join neuroscientist and science communicator Dr Emma Yhnell as she shares her lived experiences of dementia before exploring current research in diagnosis, scientific breakthroughs and ongoing clinical trials.



Workshop

City of London Room 1

Time: 6.45pm, 7.30pm, 8.15pm, 9pm

### NeuroSoup

Join art-science practitioner Dr Jennifer Crouch who will demonstrate how to make jelly prints and combine images of different neurotransmitters to create interesting images for you to take home During the workshop select neurotransmitters to superpose on one another making a 'neurosoup' image and discuss how they interact and combine, resulting in different behaviours. You may need to wait for your print to dry before taking it with you.

Tickets can be collected from the information desk from 6.30pm.

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**Drop-in activity** 

City of London Room 2

**Time:** 6.30pm – 9.30pm

### Feeling molecules

Neurotransmitters are part of everyday life and are responsible for different types of behaviour although some of them overlap in their roles. Neurodivergence is a wonderful, complex and sometimes difficult aspect of human diversity. In some types of neurodivergence neurotransmitters are produced and sensed by the body in higher or lower concentrations, which alters what people can do.

Join Dr Jennifer Crouch in this doodling activity by finding different neurotransmitters illustrated on the roll of paper. Draw, doodle, write your feelings and illustrate the affects and effects of different neurotransmitters.



**Drop-in activity** 

City of London Room 3

**Time:** 6.30pm – 9.30pm

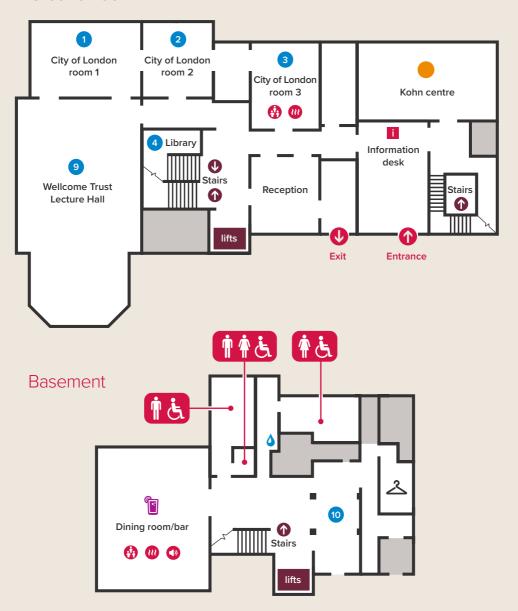
### Food for thought

Join our professional chefs on a culinary journey inspired by the senses.

Registration is not required, but due to limited quantities of ingredients, this activity may close earlier than the advertised time

### Мар

### Ground floor



### First floor



- Activities and talks
- Lightning talks
- Bar and café
- Water fountain
- Cloakroom

- Noisy
- Crowds
- **Bright lights**
- Strong smells



Talk

Library reading room

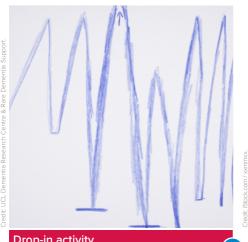
Time: 7pm, 7.30pm, 8pm, 8.30pm (Each session is 20 minutes)

### **Memory lane**

One function of the brain – memory – has long fascinated scientists and writers, asking the question 'How do we retain information?'

Join our Library team as they delve into the archives to discover how the nature and uses of the mind's most unreliable talent has surfaced in fact and fiction.

Tickets can be collected from the information desk from 6.30pm.



**Drop-in activity** 

Wolfson Room 1

**Time:** 6.30pm – 9.30pm



**Drop-in activity** 

Wolfson Room 1

**Time:** 6.30pm – 9.30pm

### **Talking lines**

An interdisciplinary team of artists, social scientists, neuropsychologists, and people living with or affected by rare dementias have been working together to develop a line-drawing methodology to better understand experiences of rare dementia diagnosis and support. Join the team to find out more and to express yourself through line-drawing.

### OCD and the brain

How are mental illnesses related to the brain? Join Professor Tobias Hauser and his team to learn more about obsessive-compulsive disorder (OCD), brain functioning, and the research approaches they use to decipher the brain using mobile games.



### Workshop

### Wolfson Room 2

**Time:** 6.30pm - 9.30pm (Each session is 15 minutes)

### The multisensory world of synaesthesia

Do sounds have colours to you? Or do words have tastes? Exciting news: you might have synaesthesia! But did you know that all of us make connections. across the senses, whether or not we are synaesthetes? Come and find out more about your own crosssensory connections through two fun games, Name that Dog and Emotion Sculptures.



#### **Drop-in activity**

**Conference Room** 

**Time:** 6.30pm – 9.30pm

### Senscapes

Explore this immersive experience that brings science and art together to communicate altered conscious states. Senscapes is a music and arts project that uses brain imaging data from participants in research studies and converts them into ambient music soundscapes.



### Alternative perspectives — how to embrace neurodiversity

Join us for a captivating panel discussion and Q&A to explore neurodiversity. Find out more about the ways we experience the world around us, and how we can make this world more accessible with our panel of experts.

Neuroscientist, Professor Eva Loth, Professor of Psychology, Julia Simner, and founder of 2eMpowerUK, Professor Sara Rankin, will talk about current research and their personal experiences in this conversation Chaired by Dr Steve Cross.



### **Exhibition**

Basement

**Time:** 6.30pm – 9.30pm

### Clamorous wings: birds in science

Birds loom large in human culture; celebrated in poetry, exploited for their feathers, consumed, pestered by egg-collectors, kept as pets, and considered symbols of freedom and peace. From annual avian counts in our gardens, to contests for favourite national birds, these creatures continue to fascinate.

But how have scientists tried to understand them? This exhibition looks at attempts to classify, record, and study our feathered companions, as birds come under pressures of extinction, avian flu and other threats to their populations and diversity.

### Discover more

Sign-up to our public newsletter to hear about the Society's events and other news, or visit royalsociety.org/events

### What do you think?

Shape our future events by giving your feedback.

Please complete the feedback survey in the reception area or scan the QR code.



#### The Royal Society

The Royal Society is a self-governing Fellowship of many of the world's most distinguished scientists drawn from all areas of science, engineering, and medicine. The Society's fundamental purpose, as it has been since its foundation in 1660, is to recognise, promote, and support excellence in science and to encourage the development and use of science for the benefit of humanity.

The Society's strategic priorities emphasise its commitment to the highest quality science, to curiosity-driven research, and to the development and use of science for the benefit of society. These priorities are:

- The Fellowship, Foreign Membership and beyond
- Influencing
- · Research system and culture
- Science and society
- · Corporate and governance.

#### For further information

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Founded in 1660, the Royal Society is the independent scientific academy of the UK, dedicated to promoting excellence in science.

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