

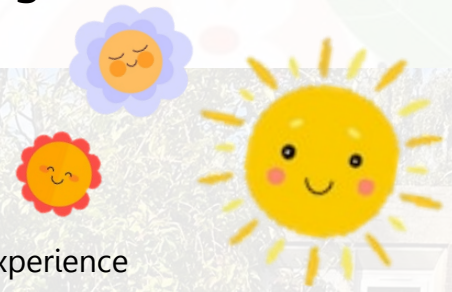


Spring & Summer Newsletter

December 2022, Volume 2, Issue 3

In this issue of the e-BRAIN Newsletter you will find:

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Dear reader,

We are so excited to share our seventh edition of the eBRAIN newsletter with you! We hope it will give you an idea of what we have been up to since March this year, we have had a lot to celebrate! We wanted to introduce Corentin, our new postdoctoral image analyst, and Olivia, our new placement student. We also wanted to share a reflective piece from our participant and work experience student, Stephanie. You can test your knowledge in a true or false about the brain! As you know, the focus of eBRAIN is mental wellbeing for everyone, so make sure you look after your physical and mental wellbeing during these times, practicing kindness to yourself and others.

Well wishes and solidarity, wherever you may be.

The e-BRAIN team



Recruitment update and eBRAIN wins



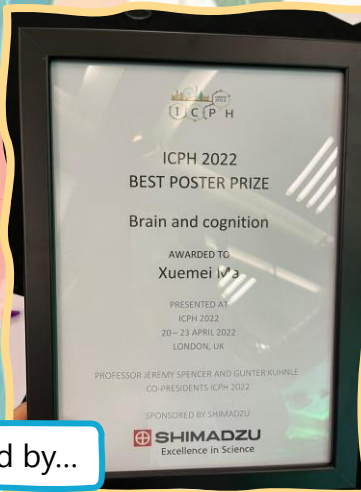
We have had a very busy summer and reached our study cohort target of **230 participants!** This is a huge victory for the team as well as for research focusing on furthering our understanding of young people's mental health and how we can better support them.



We also celebrated individual wins within the team!

Xuemei was awarded with **Best Poster Prize** in the category of Brain and Cognition, at the **International Conference on Polyphenols** in April!

Maryam (finally!) attended her **graduation** to celebrate completing her **Master's in Neuroscience** in 2020, alongside her course mates.



The eBRAIN team have also published 3 **papers in academic journals** throughout the year!

- Epidemiology and Psychiatric Sciences
- Psychological Medicine
- Brain, Behavior, & Immunity - Health

You can check them out and have a read by **clicking** on the paper's titles.

Published by...

ALICE

March 2022

[Parental education and youth suicidal behaviours: a systematic review and meta-analysis](#)

XUEMEI

June 2022

[Mediators and moderators in the relationship between maternal childhood adversity and children's emotional and behavioural development: a systematic review and meta-analysis](#)

BECKY

October 2022

[The eBRAIN study: The impact of early adversity on trajectories of brain maturation and mental health in young adolescents – A prospective cohort study](#)

Meet our new team member, Corentin!

Corentin is our **Postdoctoral Image Analyst** who joined the team in March this year. Welcome to the team, Corentin!

Hello, I'm Corentin and I joined the e-BRAIN project in March 2022. **I am honoured to become part of such a dedicated team!**

The involvement of everyone in this project, the positive energy and the kindness are extremely driving. My work in the team consists of **processing MRI images of the brain** and exploring these images for features that can help us understand brain development.



Before joining the team, I obtained a **master's degree in Applied Mathematics** in France, and did a **PhD on the study of brain images when the brain is just resting**.

During my PhD, I worked in China, at the **Brainnetome Center of the Chinese National Pattern Recognition Laboratory in Beijing**, and since then I have been really looking forward to conducting research on how the brain functions. As you can imagine, I am therefore **very grateful and excited to contribute to such an inspiring and exciting project as e-BRAIN**.



In my spare time I like to **go out with my friends** when the weather is nice, otherwise I like to watch movies, especially **Korean movies**, and I like to **play video games** of all kinds.

I also like to travel a lot, I have visited half of the countries in Europe by car, and I will most probably visit the other half in the near future.



How to get involved with the eBRAIN Study

We will no longer be recruiting participants for the study, but there are plenty of other ways to get involved! **Please express your interest via email: ebbrain@kcl.ac.uk**

Engagement sessions at school

We can visit your school and talk to students about our careers in research, our journeys here and what it's really like to be a scientist.

We can also deliver sessions on topics about mental health wellbeing for your school – just get in touch and let us know what you would like!

Work experience

We are offering work experience opportunities to students who are interested!

We have been able to offer several work experience opportunities to both Key Stage 4 and Key Stage 5 students, as well as students in higher education.

Writing opportunities

If you like creative writing, you could potentially write a blog or written piece that we could feature on our website or in our newsletters.

We'd love to hear from you if you have a topic you would like to write about or an idea for a written piece!

You can **view other opportunities to participate or get involved with research studies** at the Institute of Psychiatry, Psychology and Neuroscience [here!](#)



Social media

Listen to an [episode](#) of the **At the Back of Your Mind**, a mental health podcast created by researchers at King's College London, who believe in having relaxed and open conversations about mental wellbeing, making scientific research more accessible.

Maryam is one of the hosts and **Paola is an amazing guest**, providing her insight on the **importance of diverse perspectives and voices in science**.



LISTEN TO EPISODE 5

WOMEN IN SCIENCE: WHY THE CONVERSATION IS STILL ONGOING WITH PROF. PAOLA DAZZAN



Summer and Christmas celebrations



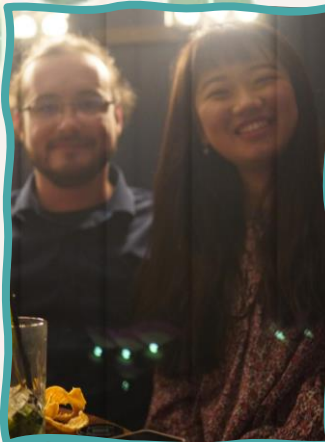
In June, the eBRAIN team got together to **celebrate our achievements!**

We also said a huge thank you and goodbye to **our amazing Master placement student, Lucy**, a Developmental Psychology and Psychopathology student at King's College London.



In November, we had our team's joint **Christmas party** with members from the **Section of Imaging and Neurobiology of Psychosis** research team and the **Stress, Psychiatry and Immunology** lab.

The whole team had an **opportunity to unwind** and have some healthy competitive fun through **bowling, games, and delicious dinner and drinks** in Central London!



Meet our new placement student, Olivia!

Olivia is our new **Undergraduate Research Assistant!** We are so excited to have her with us during her placement year.

Currently, I am a **Psychology Undergraduate student at the University of Westminster** and will be joining the eBRAIN team for a year from September 2022, as part of my studies. My love for psychology began when I decided to take it for GCSE, which I then continued into A-Levels and now at university. I'm interested in **understanding what factors make young people more vulnerable to experiencing mental health problems**, and what effective mechanisms can be put into place to make them more resilient to life stressors.



I have previously gained work experience as a teaching assistant at a primary school, and it fascinated me **how noticeably I could understand behaviours in the children that are explained in psychological literature**. In the future **I strive to become a Clinical Psychologist**, so I am very excited to take part in such a significant piece of research that poses real life benefits for children and adolescents mental wellbeing.

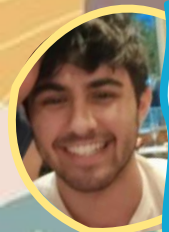
In my spare time **I am a dog sitter**, so I like to be out and about with them as well as **socialising with friends**. I'm also a **foodie** so I like to experiment in the kitchen or find new spots to eat out. When I graduate, **I hope to finish off my travels** in Southeast Asia that were cut short because of the pandemic!

Meet one of our summer placement students, Theo!

Theo joined us for a **summer placement** throughout August this year, we absolutely loved having him as part of the team.

My name is Theo and I am a first year **Psychology and Neuroscience (MSci) student from Birmingham**, studying at the **University of Bristol**. I am **considering a career in therapy** and wanted to do a work experience placement with the eBRAIN team as I believed the interviews with the participants **would give me insight** into the kind of interaction with people I could expect in future. I learnt a lot about confidentiality; how sensitive information is handled on the interpersonal level with the participants but also within the broader context of the study in data processing. I also **gained first-hand experience** with the computer software used to administer tasks while the participants were in their MRI scan. I learnt a lot about MRI safety protocols and procedures, which **gave me a real-world context for the information I learn as part of my degree**.

I felt **extremely welcome** on the team from the get-go. I found I had a lot in common with members of the team, some of whom even studied my degree at the University of Bristol. I was given lots of freedom to engage in the parts of the study I wanted to focus on, and a good level of responsibility. For example, I was secondary interviewer on the study visits, responsible for the digital portion of the interviews and vocabulary tests, and I also administered the emotional recognition tasks while the participants were in the scanner. **I really enjoyed my time on the study**, I gained valuable skills and experience and met lots of likeminded people. Thanks Maryam and eBRAIN team, I may be back next year!



Stephanie's reflection on her eBRAIN work experience

For three months at the beginning of 2022, I did a work experience with the eBRAIN team. According to Indeed, work experience is when you gain practical wisdom with an employer by learning about a particular role, organisation, or career path. During my time, I was able to **gain insight into the work of a modern-day researcher and psychologist** as well as gain a nuanced understanding of the work conducted in the IOPPN, both from a student participant and research assistant's perspective.

I worked closely with the team, shadowing their weekly activities whilst **conducting preliminary analysis of anonymised generic data, creating infographics and presentations, and relaying findings to the team**. I appreciated the fact that the team closely involved me in the work they were doing as this allowed me to feel as though I was actually part of the team and not just a student watching them from the outside in. I observed the team communicate with participants, ensuring they understood the procedures and why they were necessary, especially when participants or parents presented fears or worries about the procedure. From this, I was able to appreciate the **patience and care the team had with myself and other children in the study**. As a medical applicant, I was able to **explore my passion for health advancement and treatment from a new lenses and explore in real time**, with real life examples. The clinical and research overlaps and links in psychology, psychiatry and medicine.

I also conducted my own mini research paper on the impacts of Covid on Child and Adolescent mental health. During this, I was able to **improve my independent research skills** as I created a scientific poster and presented this and my findings to the team. Conducting this mini research paper not only gave me **transferable analytical and reviewing skills** (that I later used to gain an A on my EPQ!) but also **widened my knowledge** on current problems regarding child and adolescent mental wellbeing.



Going into the project, I knew that I wanted to shift away from the notion that the impacts of communicable and infectious diseases are purely biological and I quickly realised that there were fundamental flaws in the way research in mental health has been conducted, especially with young people. **There is a need for Improved ways of overcoming mental ill health** within systematic institutions and making sure that there is better accessibility to mental health services and support systems.

Taking part in this work experience with the eBRAIN team has allowed me to gain **transferable knowledge-based and practical skills that I deeply value** and will be able to use in my ongoing academic life and future. I look forward to potentially working with the eBRAIN team again.



True or False about the brain!

See if you can figure out which of the following statements about the brain are true and which are false!

Find the answers on the final page of the newsletter.

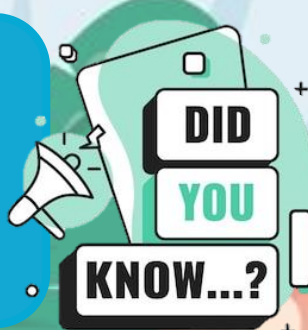
MYTHS

FACTS

1. When you learn, you change the structure of your brain **TRUE or FALSE**
2. Some of us are "left-brained" and some are "right-brained," and this helps explain differences in how we learn **TRUE or FALSE**
3. Your brain generates enough electricity to power a lightbulb **TRUE or FALSE**
4. We only use 10% of our brain **TRUE or FALSE**
5. When we sleep, the brain shuts down **TRUE or FALSE**



Fun facts about the teenage brain



The brain reaches its biggest size in early adolescence

For girls, the brain reaches its biggest size around 11 years old. For boys, the brain reaches its biggest size around age 14. But this difference does not mean either boys or girls are smarter than one another!

The brain continues to mature even after it is done growing

Though the brain may be done growing in size, it does not finish developing and maturing until the mid-to-late 20s. The front part of the brain, called the prefrontal cortex, is one of the last brain regions to mature. This area is responsible for skills like planning, prioritising, and controlling impulses. Because these skills are still developing, teens may be more likely to engage in risky behaviors without considering the potential results.

Teens need more sleep than children and adults

Research shows that melatonin (the "sleep hormone") levels in the blood are naturally higher later at night and drop later in the morning in teens than in most children and adults. This difference may explain why many teens stay up late and struggle with getting up in the morning. Teens should get about 9 to 10 hours of sleep a night, but most teens do not get enough sleep. A lack of sleep can make it difficult to pay attention, may increase impulsivity, and may increase the risk for irritability or depression.



Dear reader,

Thank you for reading our Newsletter. We hope you enjoyed it!

We wanted to take this opportunity to say thank you so much for being involved with the eBRAIN study! Wishing you all a very happy holiday, have a lovely break and take care of yourselves. We'll see you in the new year!

If you'd like to get involved with the study, find out more or ask any questions, please don't hesitate to get in touch! You can find our contact details and social media accounts below. We look forward to hearing from you! Bye for now!

The e-BRAIN team

Happy Holidays


This newsletter was created by Maryam Matter with lots of help from the eBRAIN team!

1. **TRUE** – when you learn something new, your brain sends messages along pathways of cells called neurons again and again, forming new connections; the structure of your brain changes every time you learn, have a new thought or memory!
2. **FALSE** – the left and right hemispheres of the brain work together and there is no strong evidence that people's learning differs in significant ways based on one hemisphere being more dominant than the other
3. **TRUE** – while a single neuron generates only a very small amount of electricity, all of your neurons together can produce enough energy to power a low-wattage light bulb!
4. **FALSE** – a healthy person uses 100% of their brain
5. **FALSE** – patterns of brain activity shift when we go to sleep but the brain is active 24 hours a day, whether we are awake or asleep





If you missed our last newsletter or would like to view our previous newsletters, you can find them here:

<https://www.ebrainstudy.com/blog>

 ebrain@kcl.ac.uk

 ebrainstudy.com

 [@e_brainstudy](https://twitter.com/e_brainstudy)

 [@ebrainstudy](https://facebook.com/ebrainstudy)

Want more? Why not check out our [website](#) for more eBRAIN content, including blogs, mental health resources, challenges and more! 😊

