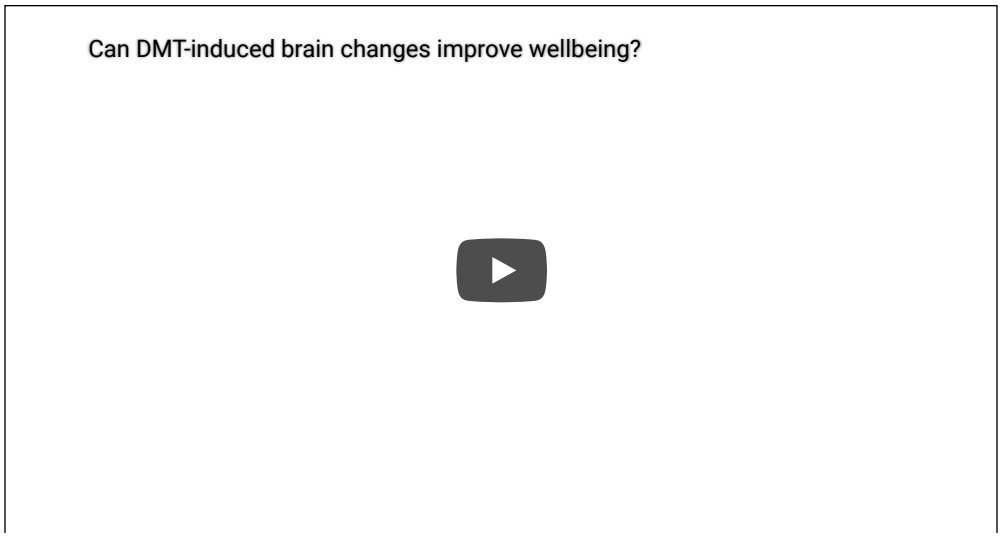
UNITy: World's first study of how DMT-induced brain changes predict improved wellbein



£6,812.00
PLEDGED OF £70,000.00 GOAL

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26 DAYS TO GO

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All funds will be collected by July 4, 2022.

COMMENTS BACKERS

Launched: April 19, 2022 Funding Ends: July 4, 2022

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Psychedelic drugs like psilocybin ('magic mushrooms'), LSD ('acid') and Dimethyltryptamine ('DMT') can have profound positive impacts on mental wellbeing. They are therefore thought to hold great potential for improving the lives of both mentally healthy and unhealthy people. These improvements might arise from neuroplasticity, the capacity of the brain to change and adapt. Neuroplasticity is thought to be reduced in mental illness, resulting in psychologically inflexible and rigid states that are resistant to positive change. However, there are no large, well controlled studies that test whether and how neuroplasticity associated with psychedelics improves wellbeing. The UNITy Project will change this.

ABOUT THE AUTHOR

Unity Team
Created 1 Campaign • View Profile

https://www.psychedelicunit.com

https://www.twitter.com/PsychedelicUNIT

We are a multidisciplinary team of University College London based (neuro)scientists leading the 'Understanding Neuroplasticity Induced by Tryptamines' or UNITy Project

PLEDGE £12.00

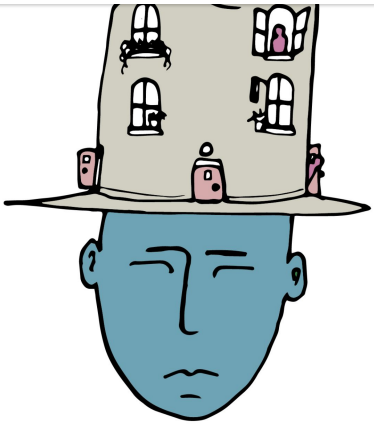
8 BACKERS

A personal thank-you on the UNITy 'Supporters Page' on our website

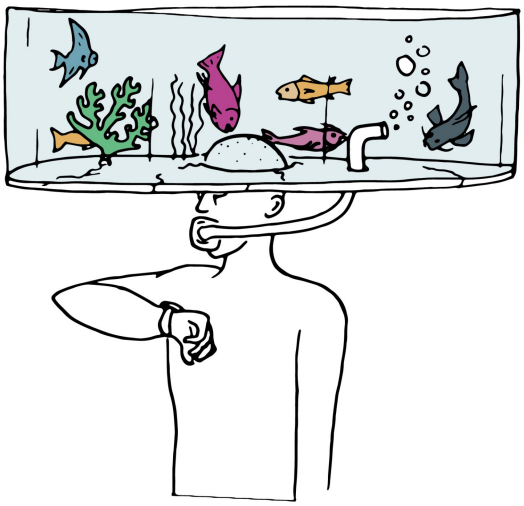
PLEDGE £15.00

6 BACKERS

Original UNITy artwork postcard



UNITy stands for 'Understanding Neuroplasticity Induced by Tryptamines' and our overarching goal is to address the unanswered question of which brain networks become plastic after psychedelics, leading to positive changes in wellbeing. It could be through changes in those networks responsible for vision, memory, or language or all of these and more. We do not know which because no one has studied the brain either during or after psychedelics under natural or real-world conditions. Moreover, no one has linked plasticity in any of these real-world brain networks to subsequent changes in wellbeing. The UNITy Project will be the first to do so both in adults who are healthy and, building on our prior work, those who drink harmful amounts of alcohol.



The UNITy Team will accomplish all this using functional magnetic resonance imaging (fMRI) to scan the brains of healthy and problem drinkers while they are experiencing a Dimethyltryptamine, or DMT, 'trip'.

While indigenous Amazonian cultures have been using DMT in the form of ayahuasca for millennia in ceremonial contexts to treat personal and societal ailments, we are choosing to use the 'pure' form of

Early bird discounted entry to a UNITy party in a London venue (August 2022, date & venue TBC)

PLEDGE £35.00

9 BACKERS

Limit of 30 — 21 remaining

Early bird Ticket to the UNITy results extravaganza + discounted entry to a UNITy party in a London venue (TBC)

PLEDGE £65.00

3 BACKERS

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ORIGINAL Rufus Shakespeare artwork print PLUS tickets to UNITy results extravaganza + drinks reception In addition to an invite to the results extravaganza, you will also receive a ticket to the post results extravaganza drinks reception. There you can chat with the full UNITy Team and ask them anything you desire. It will be a fun and open discussion and a chance to delve deeper into the results or just to get to know us.

PLEDGE £150.00

5 BACKERS

Limit of 50 — 45 remaining

ORIGINAL Rufus Shakespeare artwork print, inspired by UNITy pilot results + drinks reception + Discounted entry to a UNITy party in a London venue

PLEDGE £500.00

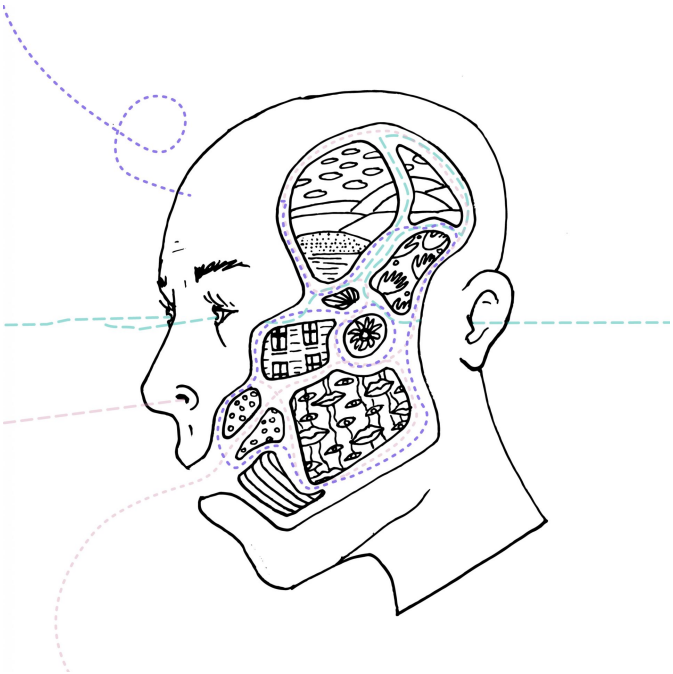
1 BACKER

Limit of 10 — 9 remaining

Original UNITy limited print artwork by Georgia Turner For the lovers of science and art, an original design by neuroscientist-artist Georgia Turner specifically for UNITy could be yours (see design here). Here are some examples of Georgia's gorgeous work:

PLEDGE £1,000.00

length movies. This will allow the first detailed and controlled labelling of which real-world brain networks become plastic after DMT. We will then continue to track participants through a mobile phone app for a year. This data will make it possible for the first time to specify which brain networks in an individual have sufficient neuroplasticity to predict positive changes in wellbeing or reduced drinking behaviour.



Our Goals

The UNITy Team have five specific goals we would like to accomplish in order to determine how DMT has its powerful positive impact on the human brain and subsequent wellbeing:

- Our first goal is to have people take DMT in a brain scanner while resting so we can see what the brain is doing during a DMT 'trip' vs. placebo. Our medical-grade DMT has been tested to be safe for use by our licensed supplier. This will be the first large, placebo controlled study looking at brain changes on DMT.
- Our second goal is to have those same people come back a week later to watch a movie while their brains are being scanned. This allows us to precisely determine whether and which real-world brain networks are affected after DMT.
- Our third goal is to follow these participants for one full year and sample their momentary experiences while they are out in the real-world using a mobile phone-based application made by our industry partner, eMoodie Labs. DMT may have lasting effects on how people see and interact with the world around them.
- Our fourth goal is to assess whether DMT can help people who drink too much change their relationship with alcohol, and whether this is amplified by 'reactivating' alcohol memory networks prior to DMT.
- Our final goal is to relate these four: We will analyse how changes in the brain during DMT impact the subsequent organisation of real-world brain networks and whether this is the same for healthy controls and harmful drinkers. We will then see which specific changes are related to lasting changes in mood and thought patterns and how this affects wellbeing and drinking.

Though this might seem 'straightforward' it is quite a bit more complex and expensive than it sounds. However, our team has all the necessary research experience to make this project happen.

PLEDGE £1,000.00

1 BACKER

Limit of 10 — 9 remaining

Choice of original print Harry Pack Art (see description on page)

PLEDGE £2,000.00

1 BACKER

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Dinner with the scientists. The UNITy team will extend an invitation to you for a dinner party in celebration of your generosity. Spend the evening geeking out with us and discussing the future of psychedelic neuroscience and psychiatry! This reward includes an original artwork print from Brian Bloomerth OR Harry Pack.

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PLEDGE £10,000.00

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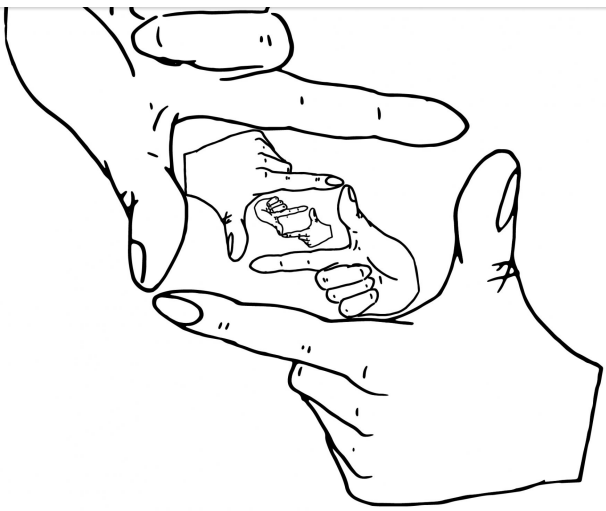
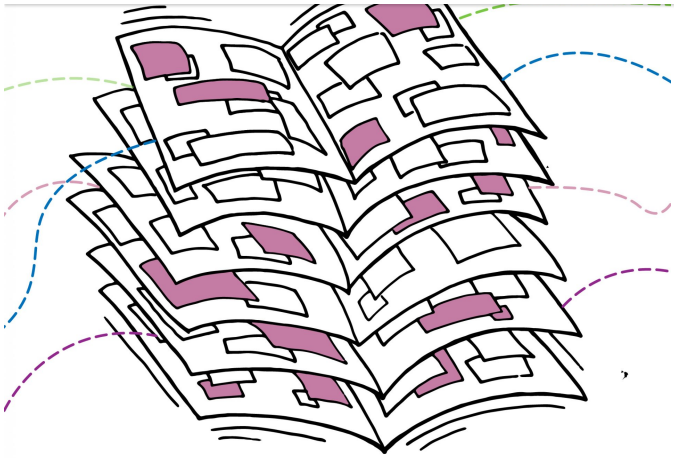


Why is this project Important?

Mental health disorders like addiction, anxiety, and depression place a huge burden both on individuals and society at large, costing billions in healthcare and lost productivity. Part of the reason for this is the lack of long-lasting, effective treatment options. In a world that is increasingly impacted by mental health concerns, the need for such treatments is more urgent than ever. Psychedelic drugs are touted to be 'game changers' in this regard and many people already use illegal psychedelics as a way to enhance their wellbeing. However, there is a lack of properly placebo-controlled trials examining the impact of psychedelic drugs like DMT on typical brain function. As such, we do not understand the basic mechanisms of how the brain produces a profound 'trip' nor why this can result in lasting beneficial changes in users' psychology and behaviour. While there are many people rushing to offer psychedelic-based therapies in private clinics and profit from the patenting of these interventions, to know whether psychedelics can truly live up to the 'hype' and when they do not work, we must understand why, how, and in whom they can produce beneficial changes. Only when we know the answer to these questions can we attempt to tailor treatments to target specific brain networks in specific individuals to maximise the benefit of psychedelic drugs for therapy and general wellbeing. The UNITy project will take major steps forward in making these goals a reality. Without this research, it is likely that, like many other experimental treatments in psychiatry, psychedelics will fail to live up to the promise that has been placed on them.



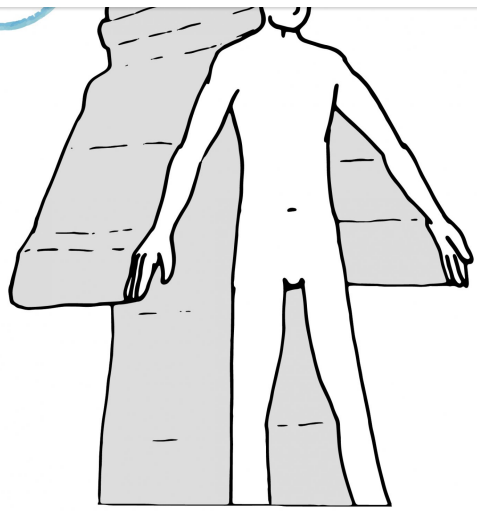
Potential Outcomes

This will be the largest placebo-controlled study to use fMRI to scan the brain during a DMT trip and assess lasting changes in real-world brain networks that underlie changes in cognition, behaviour and wellbeing. It is also the first fMRI study to examine how brain changes induced by DMT might change drinking behaviour. We think our results will lead to the first mechanistic understanding of the effects of psychedelic drugs on the human brain. This research is invaluable in that it can lead to faster development of treatment approaches by understanding how, when, and for whom DMT might be helpful for people.

Some of our world firsts include:

1. How DMT acutely changes brain network function during the 'trip' and whether these changes last after drug effects have worn off.
2. Whether DMT produces lasting changes in mood, behaviour, and wellbeing compared to placebo in healthy volunteers.
3. Whether DMT products lasting changes in mood, drinking behaviour, and wellbeing compared to placebo in harmful drinkers.
4. What brain changes are related to self-reported changes in mood, wellbeing, and quality of experience.
5. Who might benefit more or less from using DMT to enhance mental health and what cognitive systems to target for the best outcomes.

We also strongly believe in open science and sharing our data with the world so that other researchers can also test their own hypothesis about the mechanisms of psychedelic drug actions.



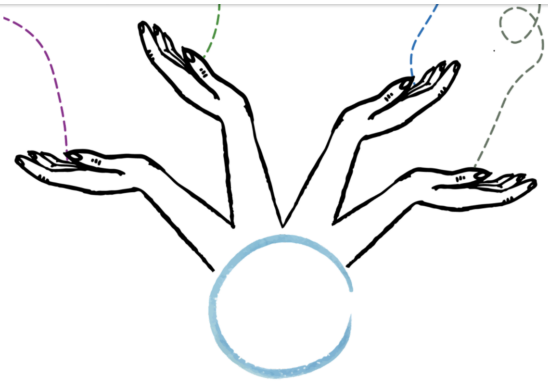
Our budget

Brain imaging is expensive. To get us started on the first round of data collection, we will start with 40 healthy participants stage I. As we will bring them to the lab three times for a baseline movie, DMT, and follow up movie fMRI scans, we are asking for £70,000. This number includes not only the scans for the DMT and placebo group but also the cost of equipment to deliver DMT, professional medical help at the scanning facility, and participants payments for time (about 12 hours each) and transportation.

If we get the promising results we are expecting, we will look to source further funding to test an additional 60 people in Stage II, the important alcohol arm of the study intended to investigate if DMT reduces dangerous drinking behaviour. The extension of the study will cost a further £105,000 in total with the same costs as Stage I but involving people who drink hazardous amounts of alcohol and an additional control group.

Finally, full completion of the first two stages of the study would lead to a final Stage III funding extension. This would involve collecting an additional 10 people in each of arm of the study. This would allow us to have a large number of participants and account for any unforeseen participant drop out. We would ask for £88,000 for an additional 50 participants, again, with the same costs as Stage I.

Upon completion, this will be the largest psychedelic neuroscience study ever conducted.



To thank you for your support

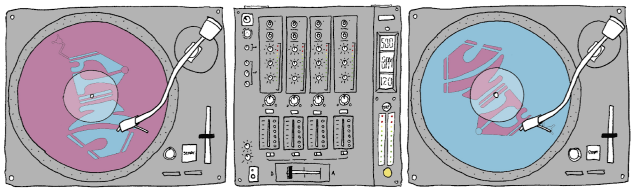
Pledge £12 – A personal thank-you on the UNITy 'Supporters Page' on our website

The UNITy Team will add you to the wall of fame on our website to show our deep appreciation for supporting the science behind psychedelics.

See: https://www.psychedelicunit.com/

Pledge £15 – Original UNITy artwork postcard

In addition to posting our thanks on the website, the UNITy Team will send you a beautiful postcard, thanking you for your support of new psychedelic science with original artwork designed by Rufus Shakespeare specifically for the UNITy study (see https://www.psychedelicunit.com/ for examples).



Pledge £20 – Early bird discounted entry to a UNITy party in a London venue (August 2022, date & venue TBC).

We're a musical bunch over at Team UNITy. In addition to a personal thank you on the supporters page and a UNITy postcard, you'll be the first to know about an upcoming chance to come and stomp

Pledge £35 – Early bird Ticket to the UNITy results extravaganza + discounted entry to a UNITy party in a London venue (TBC)

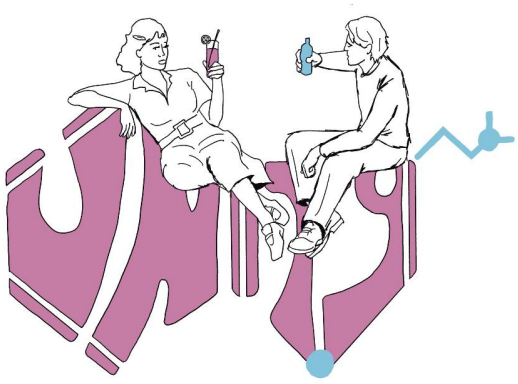
The UNITy Team will be hosting an exclusive presentation of the study's first set of results, featuring music, talks, and performances set at the intersection of arts, neuroscience, & psychedelics. You will be one of the first people, besides the team itself, to see the true effects of DMT on the brain. The date and place are still to be confirmed, but the event will most likely take place in mid 2023 in London.

Pledge £65 – UNITy results extravaganza + drinks reception + Discounted entry to a UNITy party in a London venue (TBC).

In addition to an invite to the results extravaganza, you will also receive a ticket to the post results extravaganza drinks reception. There you can chat with the full UNITy Team and ask them anything you desire. It will be a fun and open discussion and a chance to delve deeper into the results or just to get to know us.

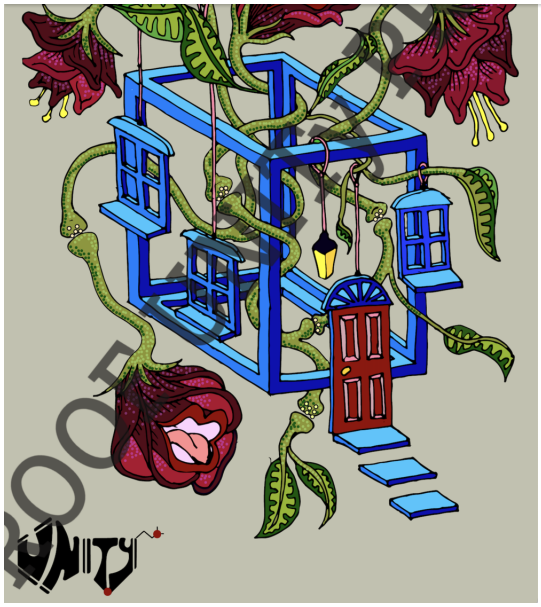
Pledge £150 – ORIGINAL Rufus Shakespeare artwork print, inspired by UNITy pilot results + drinks reception + Discounted entry to a UNITy party in a London venue

This will be created by the artists whose work you see on this page. The artwork will be inspired by the research.



Pledge £500 – Original UNITy limited print artwork by Georgia Turner

For the lovers of science and art, an original design by neuroscientist-artist Georgia Turner specifically for UNITy could be yours (see design here). Here are some examples of Georgia's gorgeous work:



Pledge £1,000 – Choice of original print by Brian Bloomerth (https://www.instagram.com/pupsintrouble/)

Brian Bloomerth (creator of Bicycle Day and Mycelium Wassonii) has created original prints for the UNITy project, inspired by our main goals. Choose one of these artists and we'll send you their original UNITy print!

Pledge £1,000 – Choice of original print by Harry Pack Art (https://www.instagram.com/harrypackart/)

Popular NFT artist Harry Pack (https://www.harrypackart.com/) has created original prints for the UNITy project, inspired by our main goals. Choose one of these artists and we'll send you their

Pledge £2000 – Dinner with the scientists.

The UNITy team will extend an invitation to you for a dinner party in celebration of your generosity. Spend the evening geeking out with us and discussing the future of psychedelic neuroscience and psychiatry! This reward includes an original artwork print from Brian Bloomerth OR Harry Pack.

Pledge £5000 – Executive producer status – named acknowledgement on all scientific publications from the UNITy group.

This reward also includes an invitation to dinner with us, as well as art from Harry Pack AND Brian Bloomerth.

Pledge £10,000+ – A giant hug from the UNITy Team

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Our team

We have a large, growing, and diverse team, including four team leaders and seven PhD students. The latter are supported by full scholarships from University College London and the UK government.

Team Leaders

Dr Jeremy I Skipper @thelablab

I am an Associate Professor at University College London, UK with over 20 years of experience doing brain imaging. My modest mission for UNITy is to help us understand the neurobiology of language, inner speech, and consciousness, and their relationship to wellbeing and mental health. Psychedelics, movie-fMRI and mobile phone based experience sampling will help us do this.

Dr Ravi Das

I am Dr Ravi Das, a psychopharmacologist at University College London, UK. I am interested in how we can use drugs to develop better treatments for mental health disorders by leveraging neural plasticity, particularly in memory systems. For example, it may be possible to update or directly weaken unhelpful patterns of learned behaviour (like excessive drug use) by rewriting problematic memories. This includes studying how often-maligned drugs can be repurposed for therapeutic benefit.

Dr Tessa Dekker **@TesDekker**

I'm a visual neuroscientist studying how our expectations shape how we see the world. In the Unity project she will test this by investigating communication between visual brain regions and other parts of the brain during hallucinations.

Professor Sunjeev Kamboj **@sunjeevk**

I'm interested in optimising psychotherapeutic interventions using psychedelic treatments (and vice versa). I'm a clinical psychologist and psychotherapist by training and will be involved in participant care.

PhD Team

Greg Cooper **@GregetarianC**

I'm Greg Cooper, I'm into drug harm reduction, and bad dancing. I did my MSc with @Imperial_PRG and now I'm working on my PhD with @PsychedelicUNIT @UCL, looking at new ways to decode aspects of the psychedelic experience directly from fMRI data.

Agathe Fauchile **@FauchilleAgathe**

Hi, I'm Agathe Fauchile, I'm fascinated by the power of psychedelics to uncover the mysteries of consciousness and heal the mind. I've worked on the world's first clinical trial of DMT for depression at Small Pharma and am now working on the UNITy project at UCL. I enjoy writing, bedroom music production and DJing in random locations.

Marcus Glennon **@marcus_glennon**

Hi! I graduated from the University of York with a degree in psychology and neuroscience, and now I am a PhD student assisting with the neuroimaging side of the UNITy project. I am fascinated by linking the psychology and neurobiology of psychedelic drugs.

Regan Harle **@reggae_regan**

I'm a first year PhD student, with an MSc in Biomedical Research, looking to investigate the neurobiology of language and consciousness, mostly through inner speech in the psychedelic experience. I will look at fMRI data, and ultimately explore plasticity in the brain, with the goal of using psychedelics as therapeutics for mental health disorders.

Rosalind McAlpine **@rosmcalpine**

I'm Rosalind McAlpine, a Wellcome-UCL Mental Health Science PhD student.. I'm interested in psychedelic mechanisms of action, the extra-pharmacological processes which shape the response to these substances, and the development of effective preparation/integration practises.

Shelan Ofori **@shelanzaynah**

Hey! I completed my BSc Neuroscience at The University of Edinburgh and then went on to complete my MRes Neuroimaging at UCL. I am currently in the first year of my PhD. My research is focusing on visualising neuroplasticity induced by DMT, post a memory destabilisation intervention, in hazardous drinkers. When I'm not doing science, you can find me listening to music or watching Vikings 😊

Hey! I am a UCL MSc Cognitive Neuroscience graduate and current first year LIDo PhD student. I am interested in what hallucinations and psychedelics can tell us about our visual processes.

Other Team Members

Haya Al-Hejailan, MSc @Hayahuascah

I'm a positive psychologist from Saudi Arabia. I specialise in psychedelic integration and my main interests include positive clinical psychology, harm reduction, MDMA assisted psychotherapy for cPTSD & BPD and bridging the gap between psychedelic science and the MENA/SWANA region (Middle East & North Africa/ Southwest Asia & North Africa). Twitter @Hayahuascah

I'm a Saudi-American UCL psychology grad working on participant care within the UNITy project. I'm interested in the study of consciousness through psychedelics and would like to pair this with either forensic psychology or dementia research.

George Blackburne @rhizoqualia

I'm an MSci student interested in using psychedelic-induced ego dissolution to inform neurobiological models of self-consciousness. More generally, my hope is that psychedelics will prove more eloquent tools for studying consciousness than the on/off switch supposed by general anaesthesia.

Rachel Morse

Hi! I'm UCL MSc in Psychological Sciences graduate with a background in implementation science and global health research. I'm passionate about investigating consciousness through psychedelics and alterations to the self, including how changes to representations of the self can influence mental health and wellbeing. In my free time, I enjoy any opportunity to explore the outdoors, especially hiking.

Alex Piot @AlexPiott

Hi! I'm a Clinical Neuroscience MSc student and the president of @uclsap. I'm interested in the therapeutic potential of psychedelics from a biochemical and clinical perspective, to treat various neuropsychiatric disorders and better understand consciousness.

SELECT YOUR PLEDGE AMOUNT

○ PLEDGE £12.00

8 BACKERS

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