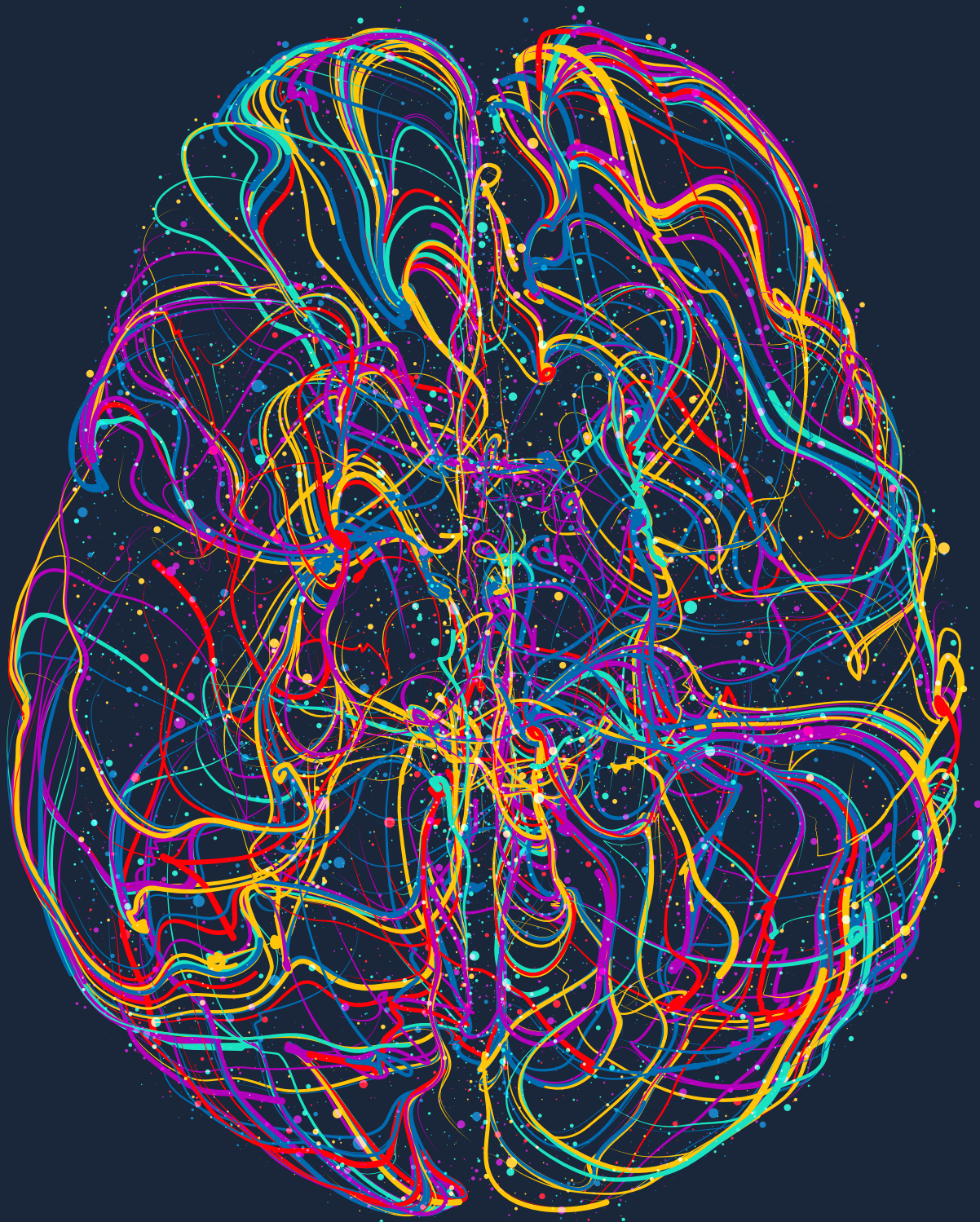


ANNUAL REPORT 2017-18



BECKLEY
FOUNDATION

Psychedelic Research, Changing Minds



The Beckley Foundation Annual Report 2017-2018

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MESSAGE FROM THE DIRECTOR

This is a truly exciting time for psychedelic research. For the past 20 years, I have been working through the Beckley Foundation to reform global drug policies and conduct pioneering research on psychedelics so that their value should be recognised and made use of. As past research collaborations have borne fruit, the field of psychedelic research is starting to expand in a multitude of exciting and interesting ways, with a number of Beckley Foundation collaborations continuing to open up new frontiers of knowledge and understanding with regard to how psychedelics work and how they can benefit us.

Rates of anxiety and depression are on the rise in the western world, exerting a truly vast personal and economic toll. The WHO recognises depression as the leading cause of disability worldwide, with a devastating \$1 trillion annual cost to the global economy.

In the UK suicide rates are now the leading cause of death among men under the age of 50. Given that up to 30% of depression and anxiety sufferers are unresponsive to current treatments, it appears that psychiatry is largely ill-equipped to remedy this situation. There is an urgent need for novel therapies and treatments, with the current options being of limited efficacy.

The WHO estimates that for every dollar invested into improving access to treatment, there is a \$4 return in better health and productivity. In the US, an alarming rise in overdose deaths, primarily catalysed by spiralling rates of addiction to prescription opioids, and users turning to adulterated street drugs is exerting a vast personal toll. It seems psychedelics could play major roles in allaying these crises, and more research is certainly warranted. The Beckley Foundation will be playing a pioneering role in this area.

MESSAGE FROM THE DIRECTOR

From 1966, I have had a particular interest in exploring the potential that LSD has to offer society and now the Beckley Foundation continues to make important ground-breaking advances with its LSD research programme. A number of 'world's first' studies on LSD microdosing are in motion, including research examining its effect on cognition, mood, neuroplasticity and learning, while pioneering research on LSD's effects in neural tissue to investigate its neurogenic potential is also ongoing. With this exciting expansion of LSD research, I was invited to give a talk entitled 'From Problem Child to Wonder Child: An Evolving Story' at a symposium at LSD's birthplace in Basel, Switzerland. This was organised in homage to LSD's 75th birthday reflecting on my friendship with Albert Hofmann and the slow breakdown of the taboo around LSD. I had made a promise to Albert to reignite research into his "problem child" and I feel he would be very pleased to see how things are beginning to evolve.

It is interesting to note that the long overdue recent changes to medical cannabis laws in the UK were not driven by pre-existing scientific evidence, but rather by the media coverage of two young boys who were wrongfully denied cannabis oil to control their epileptic seizures. The UK government subsequently caved into media pressure and changed the law. This was a great and long overdue move forward, for which we should rejoice. But how much unnecessary suffering could be averted and how many people could benefit through basing our drug laws on scientific evidence as opposed to questionable political morality? I will continue to campaign for global drug law reform in the hope of making both cannabis and the psychedelics more accessible to the people that need them.

Research resulting from the *Beckley/Imperial Research Programme* has found that a common theme linking the experience of severe depression is the feeling of disconnection, from self, others and the world at large. People frequently report feeling more connected to nature after their experiences with psychedelics, and one's nature connection is correlated with wellbeing and is a strong predictor of pro-environmental attitudes and behaviour. Given the ecological destruction humans are inflicting on the planet, putting both the long-term survival of our species and many others at risk, it seems that psychedelics have the potential to not just heal humans, but could also play a fundamental role in healing the biosphere by reconnecting our species with the natural world.

I am very excited to be leading the Beckley Foundation's research programme and overseeing its advancement. It gives me hope that psychedelics will find utility, not just as agents of therapy and healing but also as means of enhancing wellbeing, staving off cognitive decline, and allowing us to live happier, healthier lives.

Amanda Feilding

Founder and Director of the Beckley Foundation



“Psychedelics are wondrous non-specific medicines of the future. They can not only treat a wide range of mental and physical disorders, but can also facilitate transformation and inspiration which can leave an indelible mark.”

Amanda Feilding at Beckley Park. Image credit: ©Ana Cuba

SCIENTIFIC ADVISORY BOARD



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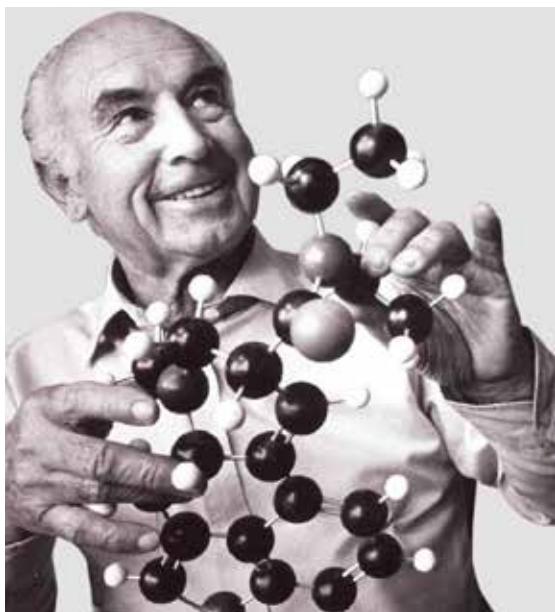
Dr Mark Geyer



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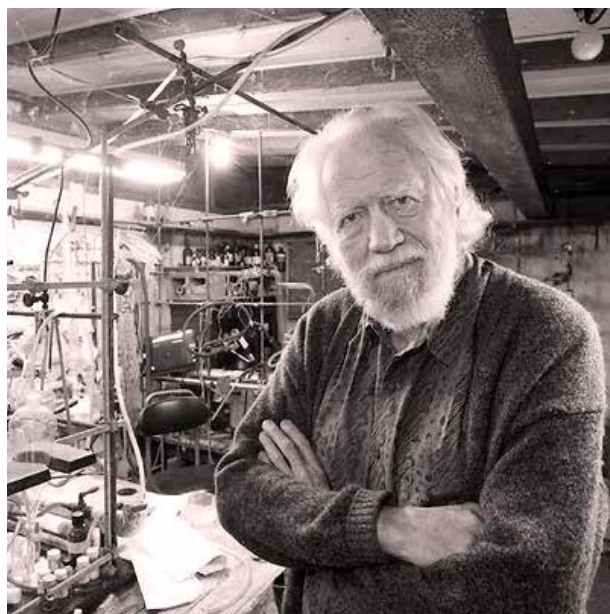
The Beckley Foundation Scientific Advisory Board includes leading international scientists on the topics of consciousness, neuroscience, biochemistry, psychiatry and psychology.

IN MEMORIAM



Dr Albert Hofmann

The Beckley Foundation's first Scientific Advisor



Dr Alexander Shulgin

An early member of the Scientific Advisory Board

IN MEMORIAM

29 July 1921 – 16 April 2018

“Gustav Born, son of Max Born and close friend of Albert Einstein, died this year at the age of 96. A great scientist himself, and always open to new ideas. As a Scientific Advisor to the Beckley Foundation, his endless enthusiasm through the years was much appreciated. His memorial service was a beautiful combination of Bach, Brahms and Mozart. A most moving farewell to a great and wonderful friend.”

-Amanda Feilding



Prof Gustav Born

THE TRUSTEES

The Earl of Wemyss

The Honourable Anthony Ramsay

Dr José Ramón López-Portillo

SCIENCE PROGRAMME

LSD

LAYING THE FOUNDATIONS OF A STRONG BECKLEY LSD RESEARCH PROGRAMME

In 2014 the *Beckley/Imperial Research Programme* overturned a fifty-year ban on LSD research, and began their pioneering brain-imaging study with LSD, a world first. The study has revealed the enormous impact that LSD has on brain function.

Following up on this success, Amanda is currently developing a three-armed LSD research programme to explore its various therapeutic applications and underlying mechanisms of action.



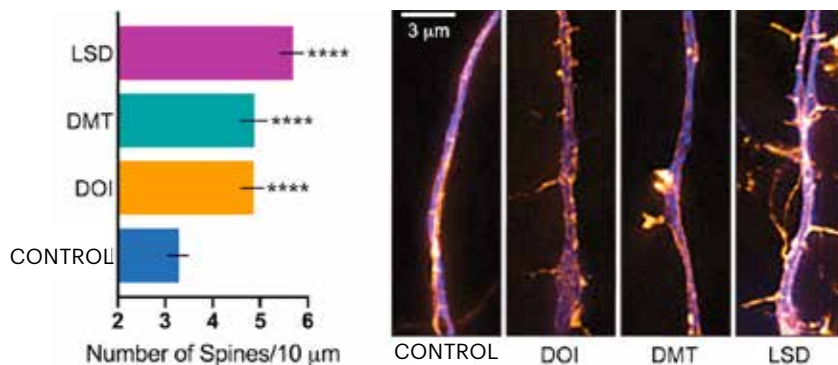
UNDERSTANDING LSD'S UNDERLYING MECHANISMS OF ACTION

Recent research has shown that LSD has strong potential for enhancing plasticity and reducing inflammation, both of which are well known to contribute to the cognitive decline associated with aging, as well as depression.

Brain plasticity or neuroplasticity is the inherent capacity of neural tissue to reorganize and form new synaptic connections. This property of brain cells forms the physiological basis for memory, learning, change and adaptability.

The ability to enhance neuroplasticity is therefore of particular interest in a wide range of illnesses (e.g. neurodegenerative disorders, chronic pain, mood disorders), as well as buffering against the cognitive decline associated with aging. Enhanced neuroplasticity may contribute to the previously observed positive long-term effects of psychedelics on disorders such as depression or addiction, and may open new doors to unexplored therapeutic applications.

Amanda is now in the process of setting up an exciting new transnational Research Programme involving multiple research centres to investigate LSD mechanisms of action on neural cells, mini-brains (in vitro cerebral organoids grown from stem cells), animals and humans.



LSD was found to boost the rate of growth of new synaptic connections on cortical neurones compared to control conditions.

Ly et al., 2018 Psychedelics Promote Structural and Functional Neural Plasticity

LSD MICRODOSING

Although many underground adherents attribute a variety of health and wellbeing benefits to microdosing psychedelics (particularly LSD), including enhanced mood, focus, and cognition, there is a dearth of reliable evidence of the benefits – or indeed any potential health effects – of the practice.

With our collaborators at Maastricht University, we will conduct a series of placebo-controlled microdosing studies to investigate in great detail this increasingly popular practice, and its potential therapeutic applications. In collaboration with Imperial College, we have been planning a web-based community trial where voluntary participants who are currently, or planning to start microdosing will track their progress on their own initiative.

Amanda has also been working further on the design of an important study particularly close to her heart, aiming to investigate the effects of repeated microdoses of LSD on mood, wellbeing, cognitive functions and brain activity. This placebo-controlled study will take place over a period of four weeks in a lab using EEG and other techniques.

Results from our studies will provide robust scientific data to a worldwide conversation currently dominated by speculation and anecdote, and so identify or confirm the potential benefits of microdosing and pave the way for the development of clinical trials investigating its therapeutic applications in more depth.

LSD-ASSISTED PSYCHOTHERAPY

In contrast to conventional psychiatric medications, which have to be taken regularly, psychedelic therapy involves only a few psychedelic-assisted therapy sessions, during and around the acute psychedelic activity, with effects lasting for up to 6 months, possibly even longer.



*“Instead of criminalising
LSD and psilocybin,
let us welcome these
great medicines, revered
by our ancestors.”*
-Amanda Feilding

Back in the sixties, many therapists witnessed the augmenting effect of psychedelics on the psychoanalytic process, making them particularly useful for patients with conditions such as alcoholism that are otherwise difficult to treat. However, as with most psychiatric research undertaken in that period, many of these trials did not meet the highly rigorous methodological standards that are required today.

Across the US and UK, new clinical trials are using psychedelics to explore their effectiveness in treating addiction to everything from controlled substances, such as cocaine, to alcohol and tobacco.

Following-up on the extremely successful Beckley Foundation collaboration with Johns Hopkins to evaluate the potential of psilocybin for smoking cessation, Amanda is now working on the development of a larger research programme to investigate the potential for LSD to treat various forms of hard-to-treat addiction.

ACHIEVEMENTS OF THE YEAR

In 2017-2018, the *Beckley/Imperial Research Programme* continued to deliver exciting results from our two recent landmark studies, the world's first fMRI investigation of the human brain on LSD, and a profoundly promising demonstration of the efficacy of psilocybin-assisted psychotherapy to combat treatment-resistant depression.

MORE RESULTS FROM OUR WORLD'S FIRST LSD BRAIN IMAGING STUDY

In-depth analyses of the rich neuroimaging data provided by the LSD study, including completely novel statistical techniques, such as connectome harmonic decomposition, have allowed the Beckley/Imperial Research Programme to expand our understanding of the neural basis of the psychedelic state even further. Using a new method of visualizing and quantifying the connectivity of different brain regions, this study describes some of the precise changes in how the brain reorganizes itself while on LSD.

Like decomposing a complex musical piece into its musical notes, fMRI data was translated into a type of 'brain harmonic language'. The effect of LSD was found to be comparable to jazz improvisation, where the brain combines much more of these brain harmonics (or 'notes') spontaneously yet in a structured way, just like improvising jazz musicians play many more musical notes in a spontaneous, non-random fashion. These changes are highly suggestive of a mechanism which may potentially underlie the enhanced sensitivity to the environment and context – set and setting – commonly observed under the influence of psychedelics.

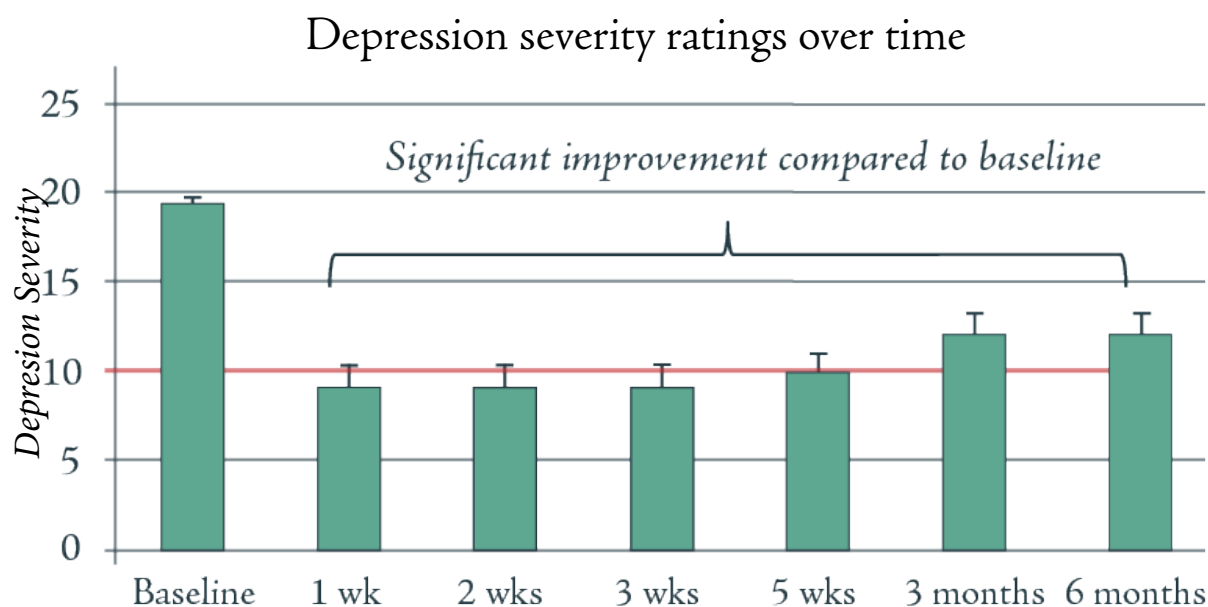


These results were complemented by our work led by former *Beckley Research Fellow* Mendel Kaelen, who explored the psychological and emotional responses to music in the LSD state. Indigenous shamans across the world have long recognized the importance of sound and music in supporting and guiding a psychedelic experience. Kaelen's study confirmed that LSD enhanced music-evoked emotions, particularly those related to 'power', 'transcendence', and 'wonder'. Emotions of transcendence and wonder are traditionally thought of as core constituents of the 'peak' or 'mystical' experience, which another *Beckley/Imperial* paper, published in *Frontiers in Pharmacology*, demonstrated to be predictive of the therapeutic benefits of psychedelics. As such, if the likelihood of mystical experiences occurring can be increased by music, this would substantiate the view that music is an important part of psychedelic-assisted psychotherapy.

We found direct support for this hypothesis from the analysis of patient interviews from the *Beckley/Imperial* study of psilocybin for treatment-resistant depression. A patient's sense of openness to, and resonance with, the music positively predicted the extent to which they reported a mystical experience. Crucially, the nature of the music experience was significantly predictive of reductions in depression one week after psilocybin, whereas the general drug intensity was not.

FOLLOWING UP ON THE PSILOCYBIN FOR DEPRESSION STUDY

The wider findings of the main study were confirmed and extended with the publication of a long-term follow-up study. We added more patients to the study, nearly doubling the size of the cohort. The findings corroborate our previous results, with many of the patients experiencing a fast and sustained response far exceeding what might be expected from a placebo.



Each bar indicates the average depression severity scores across the 20 participants.
The red horizontal line indicates the cut-off for mild (non-clinical) depression (i.e. scores lower than 10)

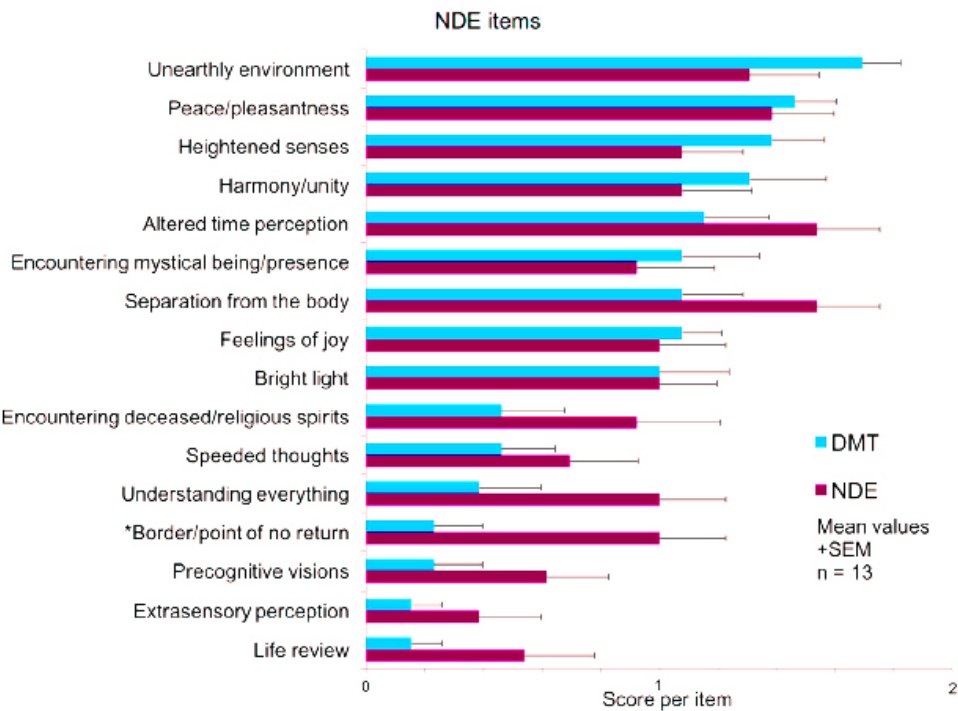
Moreover, our earlier positive results were found to be robust at the six-month mark, with several patients still in remission – completely depression-free – without any further intervention required. On the grounds of the significant success of the study, psilocybin-assisted therapy has now entered Phase II trials, if the results of this study are robust it will lead to final phase III trials, and ultimately the medicalisation and resultant rescheduling of psilocybin as a medicine for treatment-resistant depression.

In addition, data from the study has allowed the *Beckley/Imperial* team to produce a dozen peer-reviewed articles advancing distinct areas of psychology and neuroscience. These include the brain mechanisms underlying the therapeutic effects of psilocybin, the neural processing of emotional faces, the role of music in therapeutic outcomes, persistent psilocybin-driven changes to personality and values, and the development of natural speech algorithms to predict treatment success.

FIRST DMT NEUROIMAGING STUDY

This year, data collection also concluded for the *Beckley/Imperial Research Programme's* first investigations of the human brain under the influence of DMT, led by Chris Timmerman. By combining a suite of techniques to collect both neurophysiological and behavioural data, we examined the relationships between the changes in brain activity caused by DMT, and the uniquely powerful alterations to subjective experience that the compound is known for. DMT is a comparatively understudied psychedelic, and the aim of this study is to map participants' subjective experience with brain activity, via questionnaire surveys alongside EEG and fMRI, and so help elucidate DMT's modes of action in the brain, and how it differs from other psychedelics such as LSD and psilocybin.

Just as our earliest work exploring psilocybin suggested its promise in the treatment of depression and addiction and led to the development of novel theories of psychosis and of consciousness, by learning for the first time DMT's mechanisms of action in the brain, this study will advance our understanding of brain function and potentially provide further direction for mental health research.



Timmermann et al., 2018, DMT Models the Near-Death Experience

SHEDDING LIGHT ON SEROTONIN 2A RECEPTORS

Working within Imperial College's Laboratory for Neuronal Circuit Dynamics, Dr Tobias Buchborn has begun his investigations of the corticodynamics of psychedelics and their effects at the cell-type specific level. Using a range of techniques including recently developed optogenetic methods, Buchborn's research will make important strides towards explaining how psychedelics perturb connectivity in the cortex and affect blood flow to the brain via serotonin 2A receptors. These changes are thought to be integral to the mechanism of action underlying the effects of psychedelic compounds. Investigating changes in cerebral circulation has been a long-term interest of Amanda's.

BECKLEY/MAASTRICHT RESEARCH PROGRAMME: A PROMISING NEW COLLABORATION

In 2017, Amanda initiated the *Beckley/Maastricht Research Programme* with Prof Jan Ramaekers and Dr Kim Kuypers. One of the Programme's studies is assessing the often-reported capacity of psychedelics to enhance cognitive flexibility and creativity, by testing the influence of psilocybin on common tests of divergent and convergent thinking. It is believed that enhanced creativity will facilitate an individual's ability to devalue previously learned associations, thereby revealing a therapeutic target for altering the maladaptive learning mechanisms characteristic of conditions such as post-traumatic stress disorder, and addiction.



In a separate study, we are exploring the cognitive and emotional impact of the increasingly popular, and as yet under-researched, phenomenon of LSD microdosing. In this dose-finding study, 24 participants are given a range of microdoses of LSD (5, 10 and 20 ug) along with a placebo. We are measuring its acute effects on cognitive performance, wellbeing, neuronal markers of plasticity, and resilience to pain and stress, as well as other measures that will provide important information about the safety profile of the drug.

This study will pave the way to the first major placebo-controlled study, designed by Amanda, investigating the physiological and psychological effects of repeated LSD microdosing. Two groups of 25 participants will receive a microdose of LSD or a placebo, twice a week for one month. Changes in brain activity will be measured using EEG, and subjective reports, questionnaires, and tasks will be used to assess the acute and repeated exposure effects of microdosing on mood, cognitive functioning and creativity.



Inspired by her personal experience as a keen player of Go (the ancient Chinese spatial strategy game), Amanda has proposed an innovative approach of assessing changes in intuitive pattern recognition, and the 'Aha!' moment, often reported to occur with microdosing, and particularly challenging to investigate using conventional laboratory tests.

FURTHER EVIDENCE INTO THE THERAPEUTIC BENEFITS OF AYAHUASCA

Our collaborator Dr Jordi Riba and his team in Barcelona, published their much-anticipated research on the Amazonian psychedelic brew ayahuasca, conducted as part of the *Beckley/Sant Pau Research Programme*. The team demonstrated the *in vitro* potential of compounds found in the ayahuasca vine to stimulate adult neurogenesis – the growth of new neurons beyond adolescence – a phenomenon which was deemed impossible by neuroscience until the mid 1980's. This represents the first evidence that the main alkaloids found in ayahuasca, harmine and tetrahydroharmine, have neurogenic properties, which not only suggests a range of potential applications from treating neurodegenerative disorders and redressing the brain damage associated with stroke or trauma, but may also to some degree underlie the now well-established anti-depressant properties of the brew.

Two further studies from *Beckley/Sant Pau*, also published in 2017, assessed the neurological and psychological effects of ayahuasca in humans. Changes in certain neurotransmitters on the day following an ayahuasca ceremony predicted the extent of the commonly experienced increases in mindfulness capacities in the following months. The same neurotransmitters were previously implicated in the cellular mechanisms of LSD, with our study providing an important puzzle piece in the search for a complete account of the action of psychedelics in the brain.

The second study, built on these findings, directly compares the effects of undertaking ayahuasca ceremonies, with an eight-week course in mindfulness-based stress reduction. It was found that, although there were greater increases in mindfulness following the theoretical and practical training program specifically designed to foster that capacity, the ayahuasca sessions, which were performed with no specific direction towards improving mindfulness, nonetheless produced comparable reductions in self-judgmental patterns of thought.



Image by Tony Hoare / Temple of the Way of Light

With non-judgmental awareness commonly impaired in diverse clinical populations, our findings suggest that a small number of ayahuasca sessions may provide equivalent psychotherapeutic benefit to more lengthy and costly interventions.

Data collection recently concluded in our other collaboration focusing on ayahuasca, with analysis now underway. *The Beckley/ICEERS* research project was conducted at an ayahuasca retreat in the Peruvian Amazon, the *Temple of the Way of Light*, where ceremonies are led by healers of the Shipibo tribe. Building on our previous experimental and observational work, we are hoping to establish whether ayahuasca is an effective tool to facilitate improved emotional regulation in people suffering from anxiety, depression, grief, and PTSD.



Image by Tony Hoare / Temple of the Way of Light

CANNABIS

Our collaboration with UCL investigates the effects of two different strains of cannabis (one containing THC without CBD and the other containing THC with CBD) on the human brain's major resting-state networks using fMRI.

A collaboration with *Exeter University*, headed by Professor Celia Morgan, is investigating various therapeutic applications of cannabinoids, including the efficacy of CBD, a non-psychoactive component of cannabis, in treating tobacco addiction.

UPCOMING RESEARCH

Thanks to Amanda Feilding's drive to further the frontiers of psychedelic science, the Beckley Foundation is also developing its research network by initiating further collaborations with leading universities worldwide. Our upcoming projects include:

THE BECKLEY/BRAZIL PSYCHEDELIC RESEARCH PROGRAMME

This new collaborative research programme between the Beckley Foundation and leading research centres in Brazil is aiming to investigate various important aspects of LSD mechanisms of action, shedding some light on its therapeutic potential. The main objectives of this research include determining the effects of LSD on neurogenesis, neuroplasticity and inflammation in human neural cells and brain organoids, or 'minibrains', and evaluating the potential cognitive benefits of LSD in animal models and in humans.

CLINICAL TRIALS ON LSD-ASSISTED PSYCHOTHERAPY FOR ADDICTION

Amanda is in the process of setting up clinical trials exploring the role of LSD-assisted therapy in the treatment of various forms of addiction, including an exploration of the role LSD may play in curbing the opioid epidemic.

BECKLEY/IMPERIAL PSYCHEDELIC RESEARCH PROGRAMME

• **Naturalistic study of microdosing**

Launched in September 2018, this study is tracking the effects of microdosing in voluntary participants who are currently or are planning to start microdosing with LSD on their own initiative – but in a development from other microdosing surveys, the participants are guided through setting up their own placebo control.

Such design will allow us to investigate for the first time what role, if any, the placebo effect plays in the purported benefits of microdosing.

By collecting data from a naturalistic environment, with the support of hundreds of self-blinded participants from within the microdosing community, this design will complement our *Beckley/Maastricht* laboratory-based microdosing research and point us in directions to explore the applications of microdosing under clinical trial conditions.



SCIENTIFIC PUBLICATIONS

Over the course of the year ending March 2018, publications resulting from our research were featured in the highest-impact scientific journals, as well as receiving considerable interest from the media and the public at large.

Effects of psilocybin therapy on personality structure (2018) *Acta Psychiatrica Scandinavica*, Erritzoe D, Roseman L, Nour MM, MacLean K, Kaelen M, Nutt DJ, Carhart-Harris RL.

Four Weekly Ayahuasca Sessions Lead to Increases in “Acceptance” Capacities: A Comparison Study With a Standard 8-Week Mindfulness Training Program (2018) *Frontiers in Pharmacology*, Soler J, Elices M, Dominguez-Clavé E, Pascual JC, Feilding A, Navarro-Gil M, García-Campayo J, Riba J.

Natural speech algorithm applied to baseline interview data can predict which patients will respond to psilocybin for treatment-resistant depression (2018) *Journal of Affective Disorders*, Facundo Carrillo, Mariano Sigman, Diego Fernández Slezak, Philip Ashton, Lily Fitzgerald, Jack Stroud, David J. Nutt, Robin L. Carhart-Harris.

The hidden therapist: Evidence for a central role of music in psychedelic therapy (2018) *Psychopharmacology*, Mendel Kaelen, Bruna Giribaldi, Jordan Raine, Lisa Evans, Christopher Timmerman, Natalie Rodriguez, Leor Roseman, Amanda Feilding, David Nutt, Robin Carhart-Harris.

Increased nature relatedness and decreased authoritarian political views after psilocybin for treatment-resistant depression (2018) *Journal of Psychopharmacology*, Lyons T and Carhart-Harris RL.

Quality of Acute Psychedelic Experience Predicts Therapeutic Efficacy of Psilocybin for Treatment-Resistant Depression (2018), *Front. Pharmacol*, Roseman L, Nutt DJ, Carhart-Harris RL.

Connectome-harmonic decomposition of human brain activity reveals dynamical repertoire re-organization under LSD (2017), *Scientific Reports*, Atasoy S, Roseman L, Kaelen M, ..., Carhart-Harris RL.

Increased amygdala responses to emotional faces after psilocybin for treatment-resistant depression (2017) *Neuropsychopharmacology*, Roseman L, ..., Nutt DJ, Carhart-Harris RL.

LSD modulates effective connectivity and neural adaptation mechanisms in an auditory oddball paradigm (2017) *Neuropsychopharmacology*, Timmermann C, ..., Nutt DJ, Moran RJ, Carhart-Harris RL, Muthukumaraswamy SD

Psilocybin with psychological support for treatment-resistant depression: six-month follow-up (2017) *Psychopharmacology (Berl)*, Carhart-Harris RL, ..., Feilding A, Taylor D, Curran HV, Nutt DJ.

Psilocybin for treatment-resistant depression: fMRI-measured brain mechanisms (2017) *Scientific Reports*, Carhart-Harris RL, Roseman L, ..., Curran HV, Nutt DJ.

Altered Insula connectivity under MDMA (2017) *Neuropsychopharmacology*, Walpole IC, ..., Feilding A, Nutt DJ, Carhart-Harris RL

Psilocybin with psychological support improves emotional face recognition in treatment-resistant depression (2017) *Psychopharmacology (Berl)*, Stroud JB, ..., Nutt DJ, Curran HV, Carhart-Harris RL.

The alkaloids of *Banisteriopsis caapi*, the plant source of the Amazonian hallucinogen Ayahuasca, stimulate adult neurogenesis in vitro (2017) *Scientific Reports*, Morales-Garcia JA, ..., Feilding A, Perez-Castillo A, Riba J

Assessing the Psychedelic “After-Glow” in Ayahuasca Users: Post-Acute Neurometabolic and Functional Connectivity Changes Are Associated with Enhanced Mindfulness Capacities (2017), *International Journal of Neuropsychopharmacology*, Sampedro F, de la Fuente Revenga M, Valle M, ... Feilding A, Riba J.

CONFERENCES

2017 and 2018 were extraordinarily exciting years for psychedelic science. Many talented individuals from across the globe came together to share their collective expertise. From psychiatrists to pharmacists, psychedelic science has always produced innovative and stimulating ideas in response to health crises. Once again, the Beckley Foundation has been at the forefront of these ‘meetings of minds’ to make sure the debate is backed with scientific rigor.

Psychedelic Science 2017 - Oakland



In April, the Beckley Foundation joined our colleagues, the Multidisciplinary Association for Psychedelic Studies (MAPS), in hosting Psychedelic Science 2017 in Oakland, California.

This major conference brought together scientists, doctors, therapists, students, educators, policymakers and artists from around the world. The gathering was the biggest ever conference dedicated to sharing and

discovering recently completed and ongoing research in all aspects of psychedelic science. Amanda gave a talk and hosted a special session in the conference, which brought together presentations from other leading Beckley Foundation scientists and from her *Beckley/Imperial Research Programme* co-director, Professor David Nutt. Amanda also hosted the Beckley Sunset Cruise - the social highlight of the conference - entertaining scientists, colleagues and donors against panoramic views of the San Francisco Bay.

Breaking Convention 2017 - London

The Beckley Foundation was a Platinum Sponsor for a weekend-long gathering of the world's top psychedelic researchers at Greenwich University in London. The conference featured more than 150 interdisciplinary presentations, including five from members of the *Beckley/Imperial Research Programme*, detailing various findings from our investigations into the properties and potential benefits of LSD, psilocybin, and DMT. There was also a special screening of Cosmo Feilding-Mellen's film *The Sunshine Makers*.



Horizons Conference on Psychedelics 2017 - New York



As the driving force behind much of the recent progress in psychedelic research, Amanda Feilding's presentation, '*From the Mystical Experience to Microdosing*', was understandably among the most keenly anticipated. A packed-out auditorium listened to her discuss the various brain networks involved in generating a sense of self, and how psychedelics can influence the activity of these networks at various dose sizes.

“After decades of draconian drug laws and repressive stigma obstructing the development of psychedelic research, we are finally seeing a new dawn.”

-Amanda Feilding

Over the course of the year, Amanda has also represented the Beckley Foundation at a range of high-profile conferences. Among these were the *Oxford Neuroscience Symposium*, where Professor David Nutt, co-director of the *Beckley/Imperial Research Programme*, gave the keynote address on the need for a psychedelic enlightenment. Also, in Oxford, Amanda participated in an international conference on the use of ketamine in psychiatry, connecting with world leaders working at the cutting edge of a burgeoning field exploring the uses of the dissociative anaesthetic in treating a range of psychopathologies.

World Congress for Freedom of Scientific Research - Brussels



At the European Parliament in Brussels, Amanda Feilding's talk entitled '*Why Science Needs Psychedelics: A Paradigm Shift for Psychiatry*', called for concrete action, which must be taken by policy-makers to facilitate psychedelic research and therapy.

75th anniversary of the discovery of LSD by Albert Hofmann in 1943 - Basel

The celebrations of this event included a four-day symposium of art and music, as well as talks from renowned speakers. As a friend of the late Dr Hofmann, Amanda was invited to reflect on her own memories of Albert, as well as to describe our recent, current, and planned research activities with the compound.

Beyond Psychedelics 2018 – Prague



The aim of this convention was to facilitate the exchange of both scientific knowledge and experience at a global level. The event incorporated cross-cultural perspectives to elaborate guidelines for safe use and harm reduction; and the work with alternative states of consciousness, psychedelics and technologies. Amanda also spoke with psychedelic researcher David Luke about the enormous potential of psychedelics.

2018 Swedish Colloquium on Psychedelic Psychiatry 2018 - Stockholm

An international academic seminar on psychedelic science, with a special focus on the use of psychedelics in psychiatry. This conference brought cutting edge science to the forefront of clinical psychiatry. Amanda spoke on a panel with Torsten Passie, David Nichols and Ben Sessa on the historical and ethical perspectives of psychedelic psychiatry.



MEDIA

It has been a fantastic press year for Amanda Feilding and the Beckley Foundation, with our research and policy work regularly covered by the press: Vice News, Forbes, WIRED, The Times, Mail Online, Rolling Stone, The Economist, BBC News, BBC Radio 4, National Geographic, WikiTribune, BBC World Service, The New Statesman, The New York Times, The Guardian, The Independent, The Telegraph, Huffington Post, Sky News, Huck Magazine, ICON Magazine, and many more across the globe.



"If LSD is having its renaissance, Feilding is its Michelangelo. She works 15 hours a day, seven days a week, to coordinate—and contribute to—research on one of the most highly controlled substances on Earth. ...Study by study, each following rigorous research standards, Feilding is building a case for making LSD a standard weapon in the clinical fight against mental illness." – WIRED, Feb 2018

MEDIA APPEARANCES

Online and Print Media

- *Microdosing*: Features in publications including The Times, New Scientist, The Verge, The Economist, The Guardian, Wired, The Huffington Post and BBC London
- *LSD research*: Over 3,500 articles in international and national press, including The Sunday Times, The Guardian, Washington Post, The Financial Times, Frankfurter Allgemeine Zeitung, CNN, Scientific American
- *Psilocybin for Depression*: 2,000 articles including The Guardian (78,000 shares), The Spectator, The Mail Online, The Mirror, CNN and The Sun

Television and Video

- *LSD*: Live coverage on BBC News and CNN
- *Psilocybin and Depression*: BBC Newsnight
- *Guardian Video*: "LSD's impact on the brain revealed in groundbreaking images" (over 6 million views)

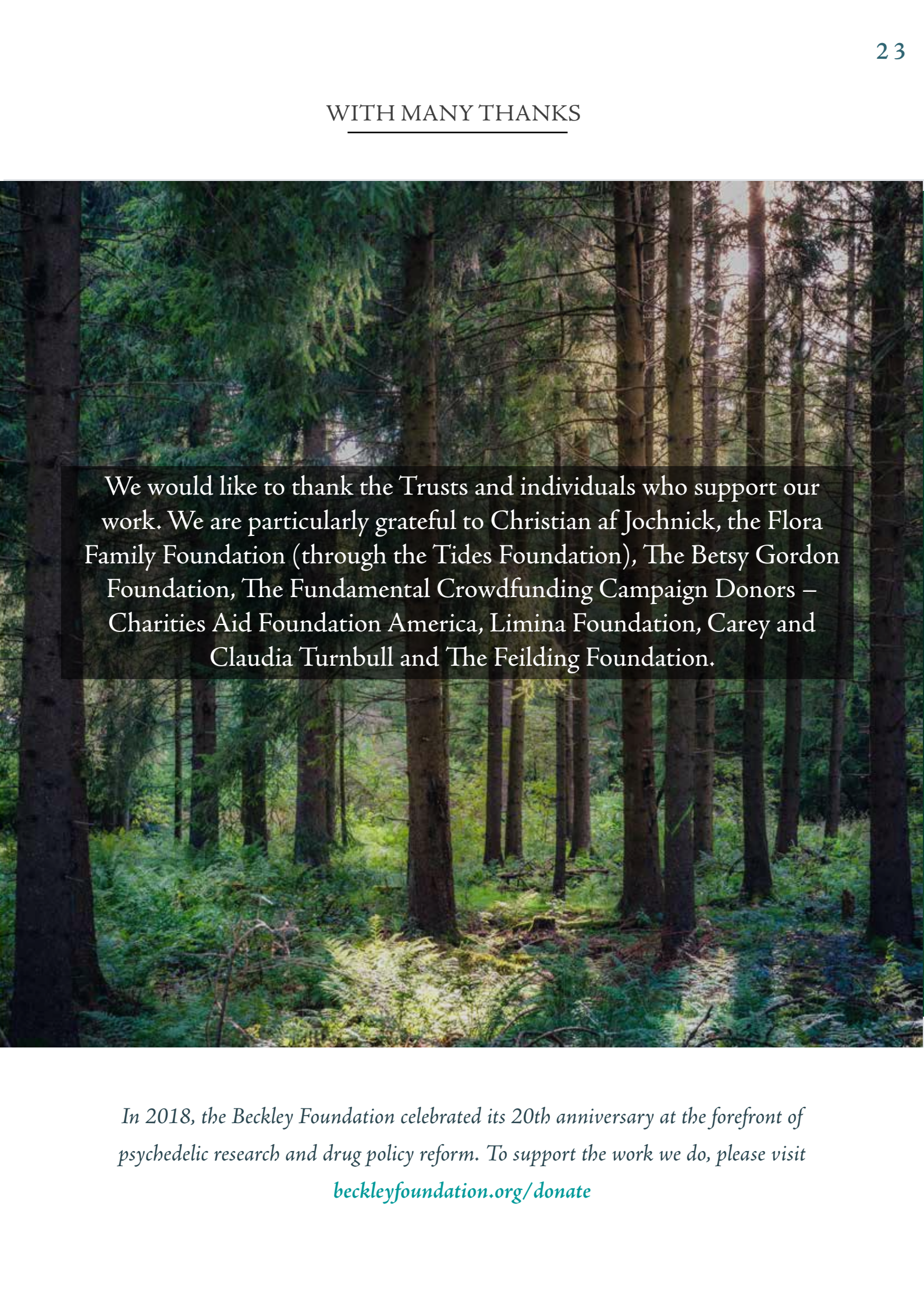
Podcasts and Radio

- *New Psychoactive Substances*: BBC Breakfast, Talk Radio (UK), Talk Radio (Europe)
- *Psilocybin for Treatment Resistant Depression*: BBC Radio 2

Social Media

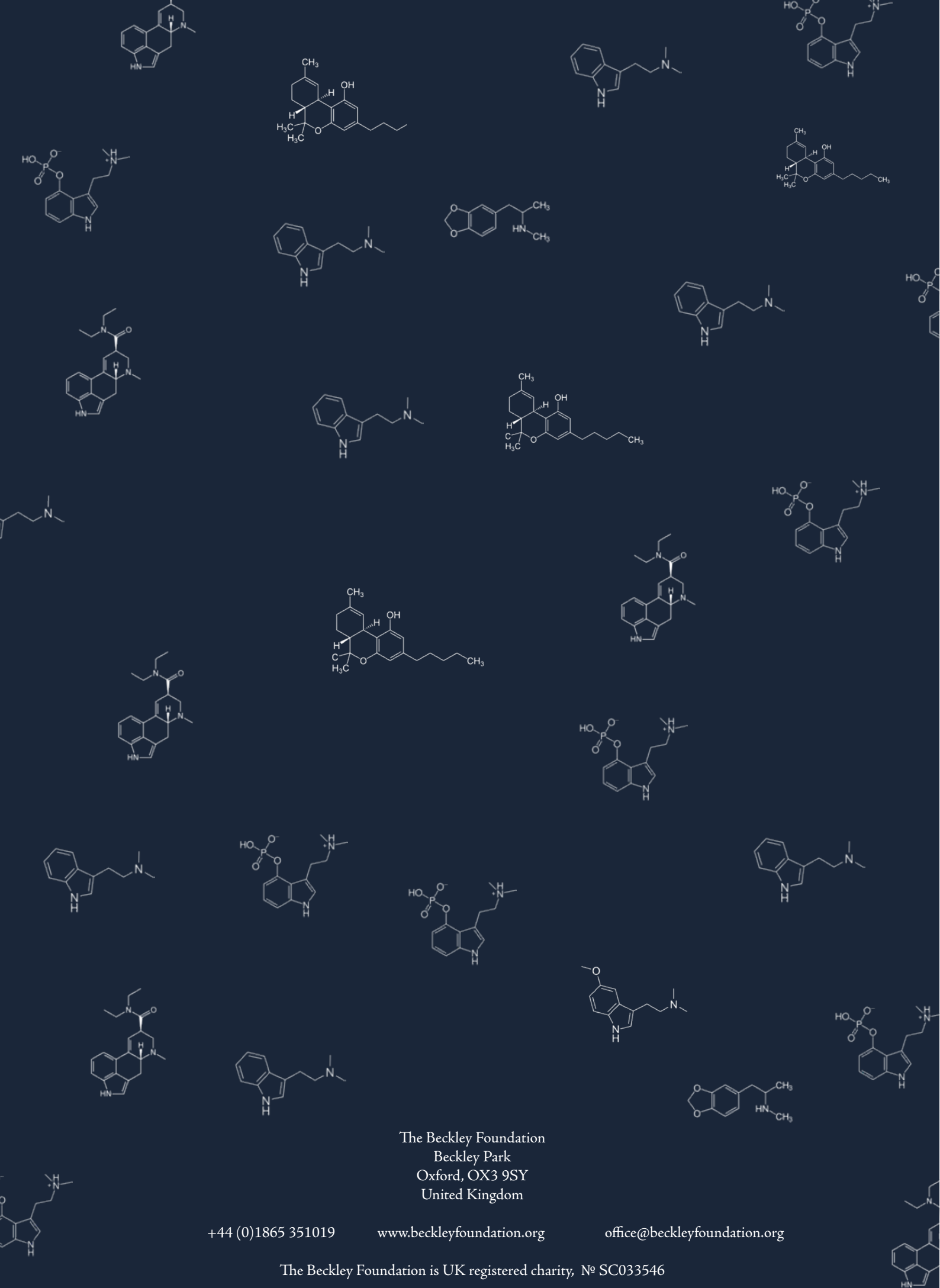
- *Twitter*: Tweets earn over 500,000 impressions per month. Followers include politicians, international journalists, healthcare professionals, academic researchers and leading research institutions
- *Facebook*: Post reach of up to 260,000. Fans include scientists, policymakers, top journalists and medical cannabis campaign groups. Beckley Research Videos have been watched over 400,000 times on Facebook.
- *Social media videos*: For the first time, the Beckley Foundation has produced a collection of high quality animated videos, which have been viewed over 500,000 times across our social media platforms.

WITH MANY THANKS



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In 2018, the Beckley Foundation celebrated its 20th anniversary at the forefront of psychedelic research and drug policy reform. To support the work we do, please visit beckleyfoundation.org/donate



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