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SSA Conference

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Newcastle, UK

**From
Childhood
Trauma to
Adult
Addiction:**

Finding A Way
Forward With

MDMA

Psychotherapy



Contents

- Child abuse, trauma and child development
- The Burden of Trauma and Alcohol
- MDMA Antibiotic Therapy
- How MDMA treats trauma
- The BIMA Study
- Will MDMA work for addictions?
- The Psychedelic Renaissance
- A Career in Psychedelic Science

DID YOU KNOW?



#EndTheDrugWar

THERE IS A STRONGER LINK BETWEEN CHILDHOOD TRAUMA AND ADDICTION, THEN THERE IS BETWEEN OBESITY AND DIABETES. TWO THIRDS OF ADDICTS REPORT BEING ABUSED AS CHILDREN. THAT MEANS THAT THE WAR ON DRUGS IS A WAR ON TRAUMATIZED PEOPLE THAT JUST NEED HELP.

My Personal Trajectory

- Adolescent interest in psychedelic culture.
- Medical training.
- Psychiatry.
- What happened to Psychiatric LSD?
- Child and Adolescent Psychiatry.
- Child abuse and maltreatment. Tackling stigma.



- Psychopharmacology research.
- Adult Substance Misuse. Same cohort as my CAMHS patients.
- **MDMA Therapy**

Fear, distortion of self and insecurity....

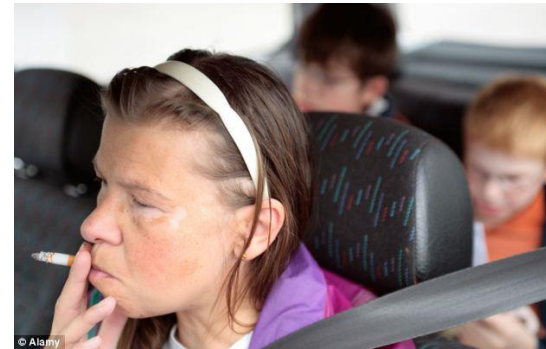


- Sexual abuse
- Physical abuse
- Emotional abuse
- Neglect



- **Insecure attachment relationship**
 - Feeling unloved and unlovable
 - Feeling unsafe
- **Infantile Attachment is your Blueprint For Life**

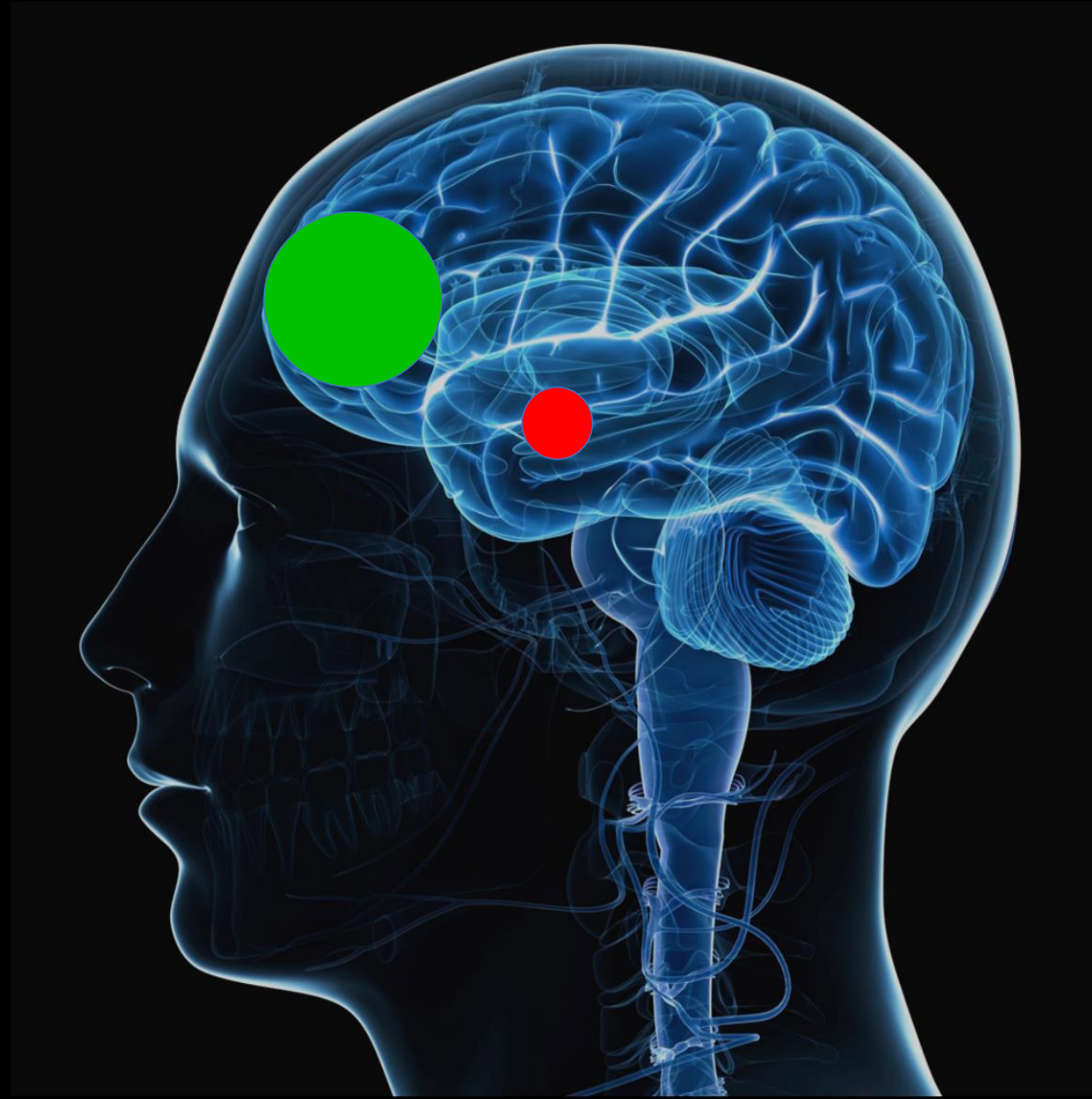
Unstable Psychological and Social Environments...



- Parental criminality
- Parental mental illness
- Domestic Violence
- Parental Substance Misuse
- Unemployment
- Poor housing
- Race and social exclusion
- Poor education

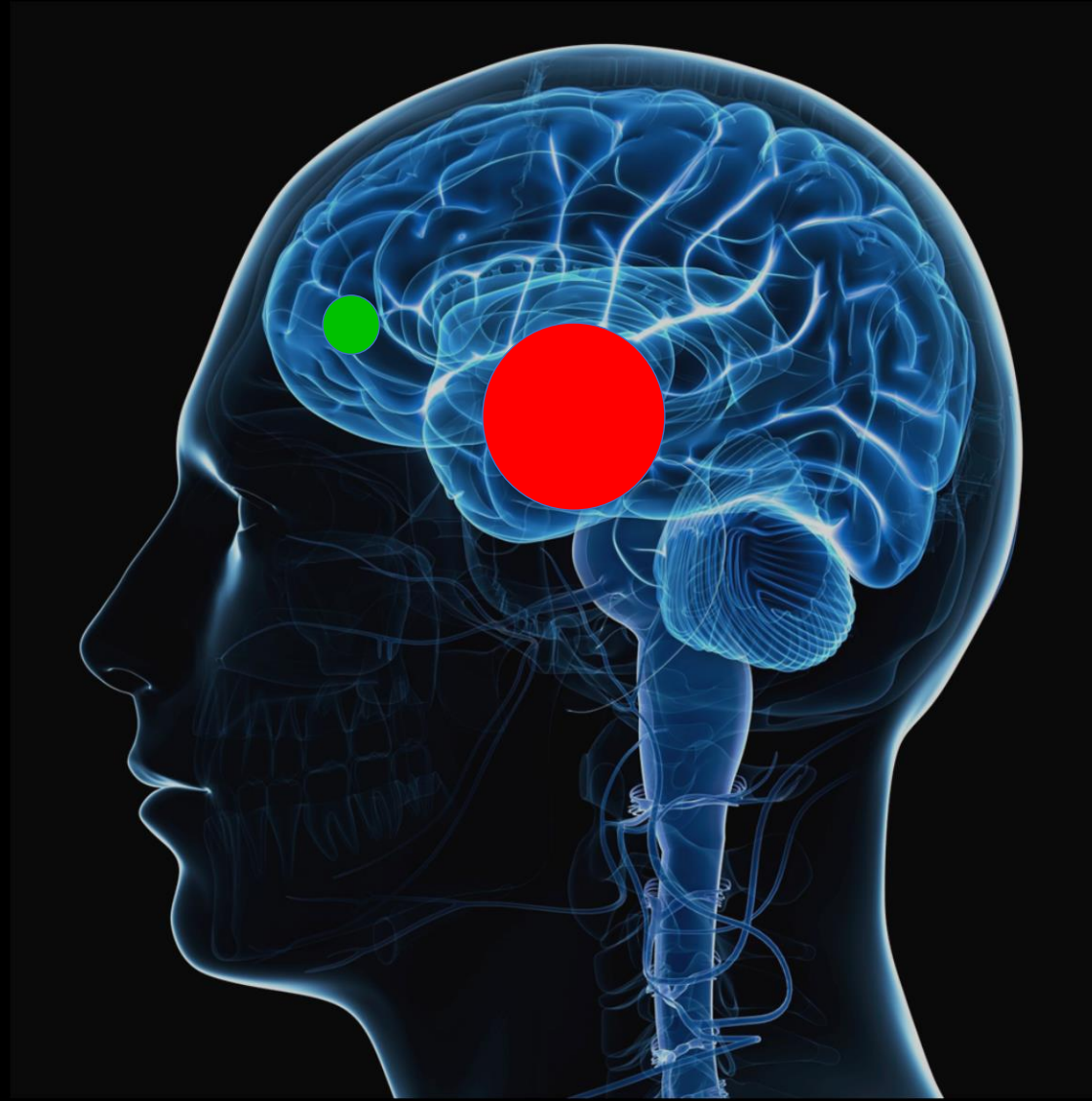
Fear, Trauma and the Developing Brain:

The Prefrontal Cortex versus The Amygdala



Fear, Trauma and the Developing Brain:

The Prefrontal Cortex versus **The Amygdala**



Trauma

The Killer Legal High:



The Clinical, Social and Financial Burden of Alcohol Dependence



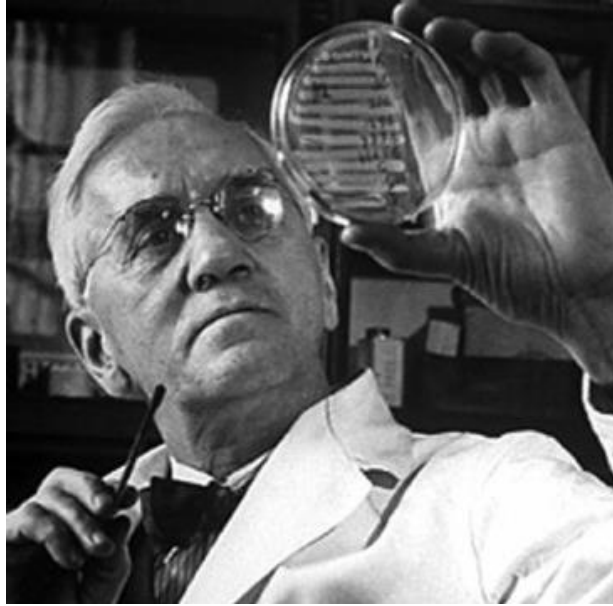
- **One quarter** of adults consume alcohol harmfully.
- 6% of men and 2% of women are **dependent**.
- Self-medication for **Undiagnosed PTSD**.
- Impact on employment, family and community.
- 10,000 alcohol-related deaths in UK annually.
- Costs around £20 billion a year in England alone.
- **‘The UK’s drinks industry is the US’s N.R.A.’.**



After 100 years
of modern
Psychiatry

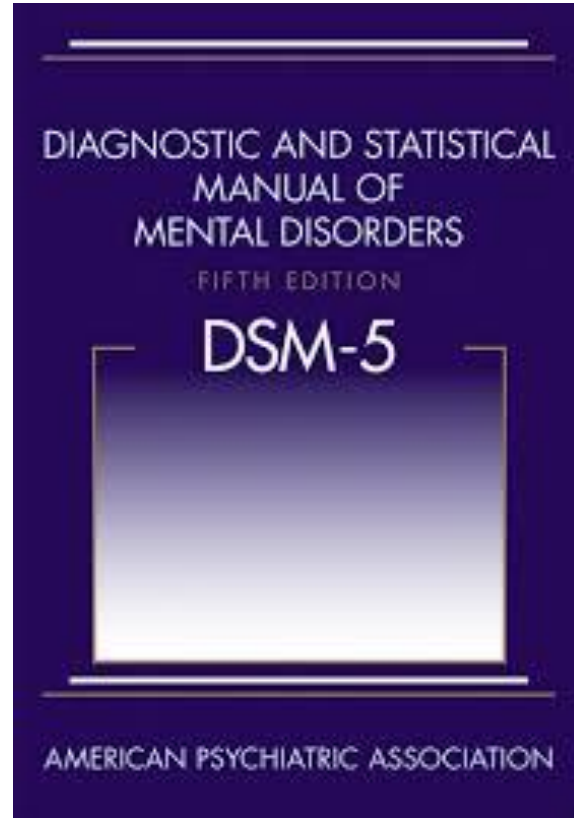
**This is not
good
enough!**

So where are
we going
wrong?

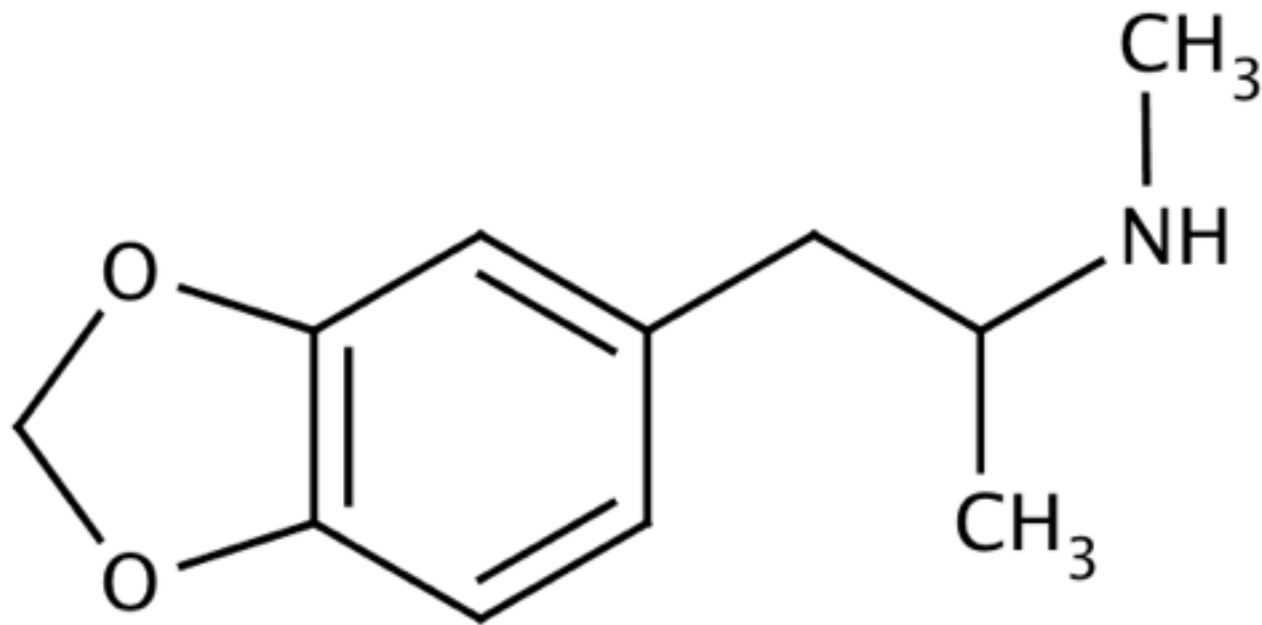


Trauma:

Where is Psychiatry's
Antibiotic?



MDMA



3,4 Methylenedioxyamphetamine (MDMA)

The 'Perfect Tool' for Trauma Psychotherapy



- Synthetic phenethylamine psychedelic stimulant drug.
- Short acting
- Less perceptually disturbing than classical psychedelics
- Almost always pleasurable
- Safe in therapeutic applications
- Access to painful traumatic memories
- **Enhances empathy**

Receptors or site in the brain where MDMA acts:		What are the effects?	Why this helps with psychotherapy?
Increased Serotonin: (POSITIVE MOOD + CREATIVE THINKING)	5-HT _{1A} 5-HT _{1B}	<ul style="list-style-type: none"> • ↓ depression • ↓ anxiety • ↓ fear (at the amygdala) • ↓ aggression and defensiveness • ↑ self-confidence 	<ul style="list-style-type: none"> • Less anxiety and aggression improves relationship with therapist • Allows patient to focus on trauma without being overwhelmed by negative affect
	5-HT _{2A}	<ul style="list-style-type: none"> • Alterations in perception of meaning 	<ul style="list-style-type: none"> • Facilitates new ways of thinking of old experiences
Increased Dopamine and Norepineprine (STIMULATION)		<ul style="list-style-type: none"> • ↑ level of alertness • ↑ arousal • ↑ conscious registration of external stimuli (at LC) 	<ul style="list-style-type: none"> • Improved behavioural readiness • Improved recall of state-dependent memories of stressful events • Provides ‘Optimum Arousal Zone’
Increased alpha-1 and 2 activity (RELAXATION)		<ul style="list-style-type: none"> • ↑ calmness and relaxation 	<ul style="list-style-type: none"> • Provides improved mental state for exploring negative cognitions • Provides ‘Optimum Arousal Zone’
At the hypothalamus (EMPATHY / BONDING)		<ul style="list-style-type: none"> • Release of oxytocin 	<ul style="list-style-type: none"> • Improved attachment with therapist • Improved empathy and closeness

Effects of MDMA

In summary:

Improved positive mood

Increased creative thinking

Stimulation

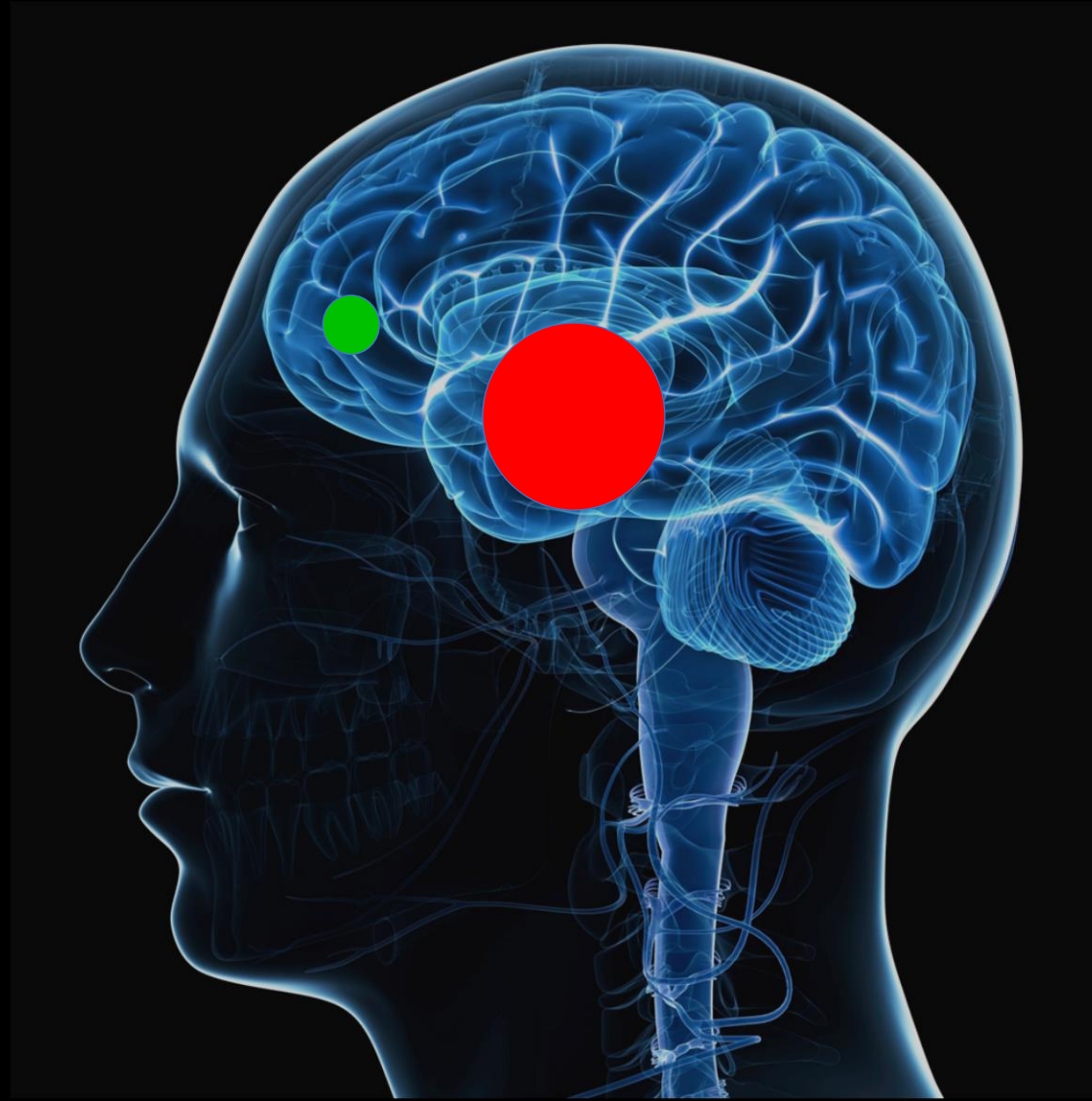
Relaxation

Empathy and Bonding

Well-placed to assist trauma-focused therapy

Fear, Trauma and the Developing Brain:

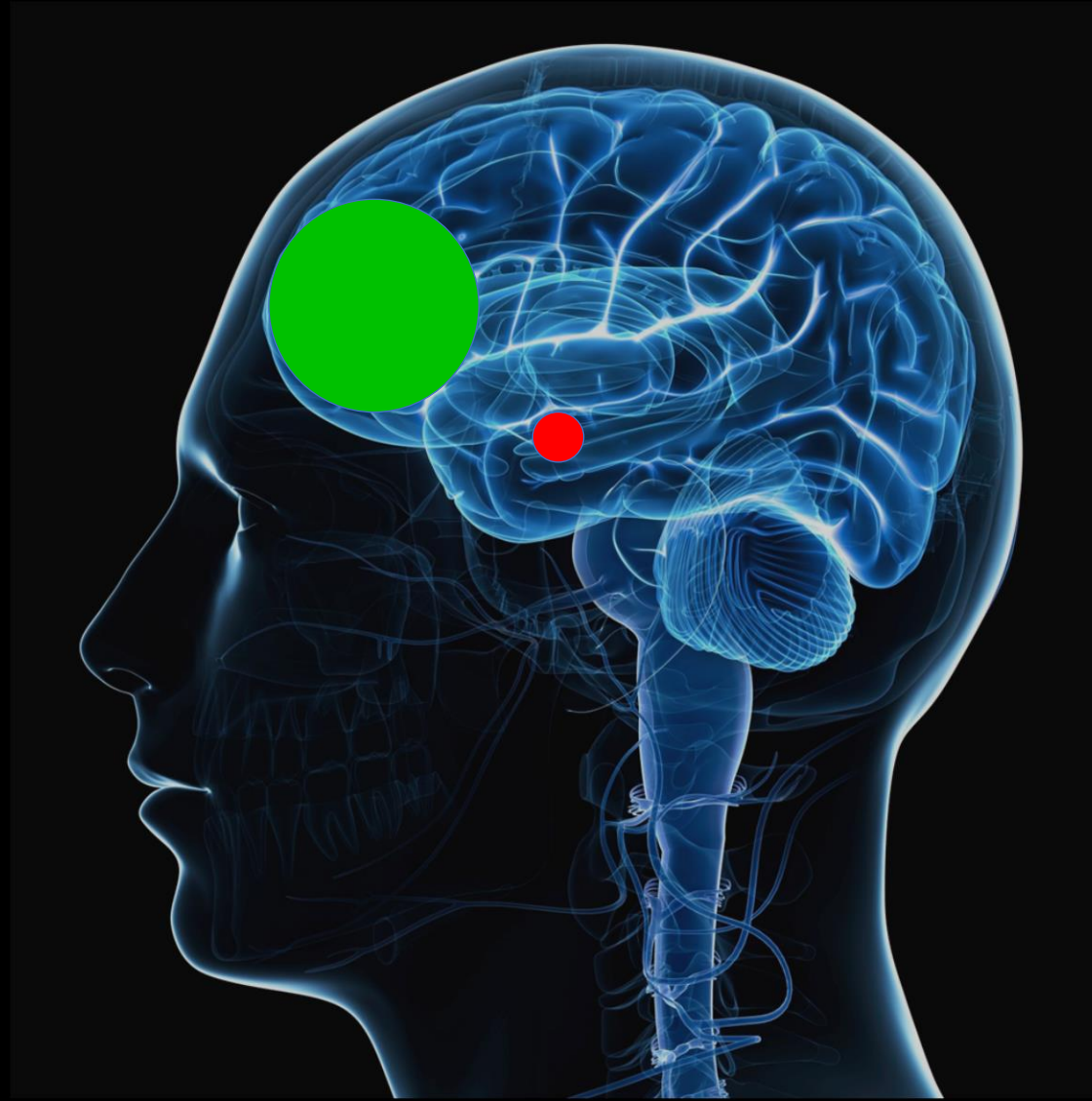
The Prefrontal Cortex versus **The Amygdala**



Trauma

Fear, Trauma and the Developing Brain:

The Prefrontal Cortex versus **The Amygdala**



MDMA

The Bristol-Imperial MDMA-Alcohol Study (BIMA)

Hypothesis:

3,4-methylenedioxyamphetamine (MDMA) can be used as a safe and effective adjunct for psychotherapy in the treatment of alcohol use disorder, for patients having undergone alcohol detoxification.



The Bristol MDMA-Alcoholism Project 'BIMA'



Ben Sessa, Tim Williams, Claire Durant,
Laurie Higbed and David Nutt

Avon and Wiltshire NHS Trust and Imperial College, London

- 20 participants
- **Open-Label** Safety and Tolerability Study Design
- 8-week course of psychotherapy
- Male-Female co-therapist pair
- Two MDMA Sessions
- 125mg + 62.5mg MDMA
- Overnight stay
- Alcohol abstinence, mental health and Quality of Life follow-up measures

2-weeks pre-detox	Screening, consent and eligibility interview	
Alcohol Detox	Seven to Ten Days, carried out by local Community Alcohol Detox Team. Followed by baseline assessments.	
1 week post detox	Session 1	60-minute therapy session.
2 weeks post detox	Session 2	60-minute therapy session
3 weeks post detox	Session 3	MDMA-assisted therapy session 1 (~6-8 hours)
	Session 4	Next day follow-up session (60 min) then daily phone calls 4 days.
4 weeks post detox	Session 5	60-minute therapy session
5 weeks post detox	Session 6	60-minute therapy session
6 weeks post detox	Session 7	MDMA-assisted therapy session 1 (~6-8hours)
	Session 8	Next day follow-up session (60 min) then daily phone calls 4 days.
7 weeks post detox	Session 9	60-minute therapy session
8 weeks post detox	Session 10	60-minute therapy session
3 months post detox	Face-to-face Follow-up interview	
6 months post detox	Face-to-face Follow-up interview	
9 months post detox	Face-to-face Follow-up interview	

Safety Profile of MDMA

- Rates of morbidity and mortality from recreational ecstasy consistently low for last 25 years.
- Risks (hyponatremia and hyperthermia) easily controlled in clinical setting.
- Neurotoxicity scares of 1990s not born out epidemiologically and not relevant at moderate and infrequent doses.
- **Clinical MDMA is not recreational ecstasy.**




BIMA Safety measures



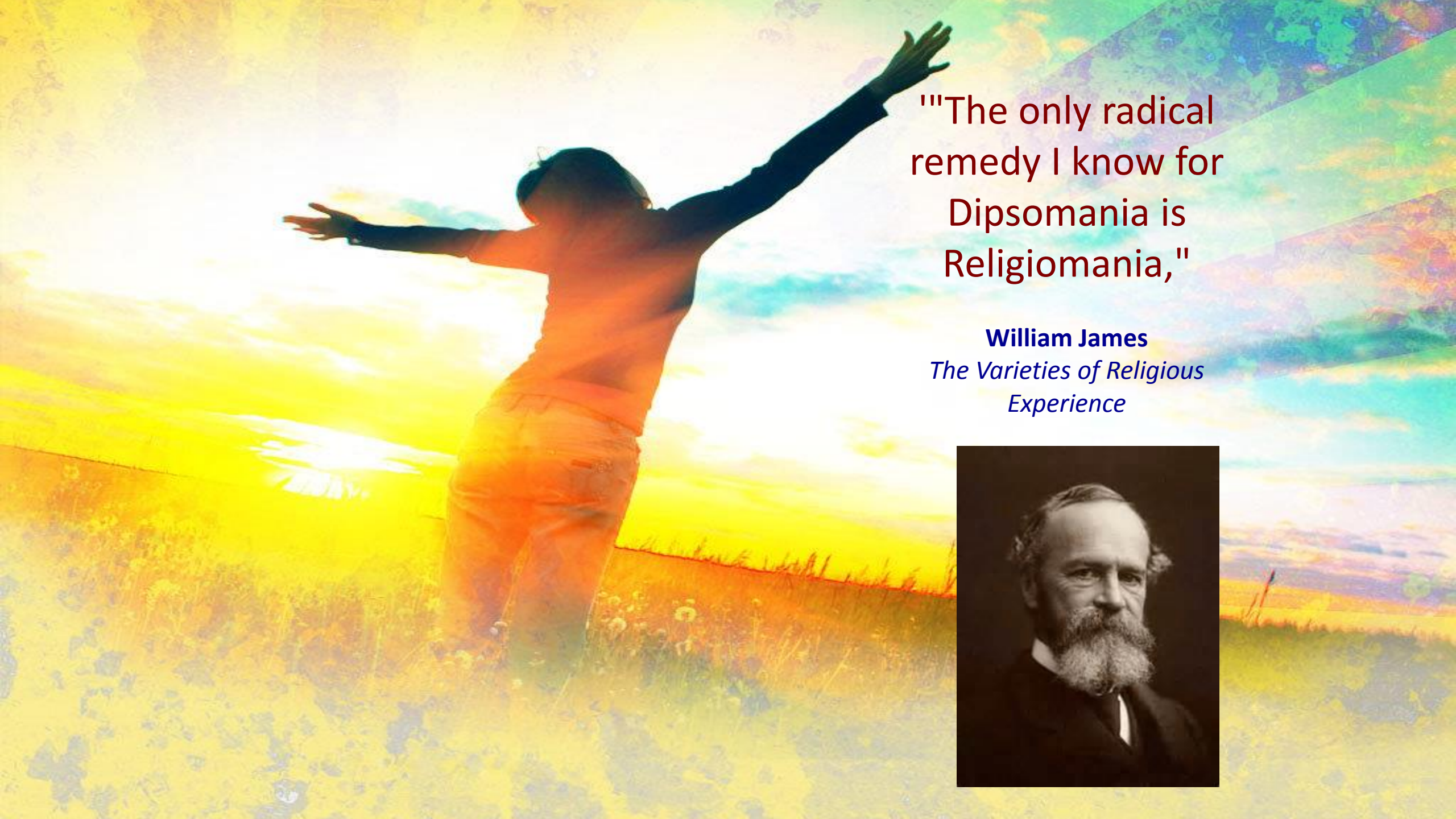
- Strict inclusion/exclusion criteria
- Monitored MDMA sessions taking place in specialist clinical research centre (CRIC) in Bristol University.
- HR, BP and temperature monitored throughout sessions.
- Clinical responsibility
 - Shared care agreement between AWP NHS Trust and Imperial College
 - Preparatory sessions, telephone contact after MDMA
- Involvement of significant other
- Crisis plan
- Specialist training in MDMA Therapy

Why MDMA **might not work** to Treat Alcohol Dependence:

- Lack of anecdotal evidence
- Lack of prominent spiritual experience
 - Osmond (1950/60s) – LSD for alcohol
 - Krupitsky (1990s) – Ketamine for alcohol and opiates
 - Bogenschutz (Contemporary) – Psilocybin for alcohol
 - Johnson (Contemporary) – Psilocybin for nicotine

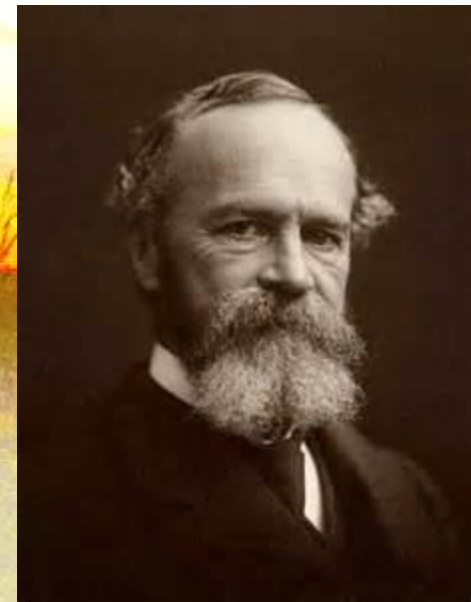


**The greater
mystical
experience...
The better the
abstinence rates**

A person is seen from behind, standing in a field of tall grass. Their arms are raised high in the air, reaching towards a bright, glowing sunset sky. The scene is bathed in warm, golden light, with the sun low on the horizon, creating a silhouette effect on the person. The overall mood is one of joy, freedom, and spiritual connection.

"The only radical
remedy I know for
Dipsomania is
Religiomania,"

William James
*The Varieties of Religious
Experience*



Why MDMA **could work to** Treat Alcohol Dependence:



- Non-specific adjunct / to enhance the psychotherapeutic relationship
- More acceptable / clinically tolerated than classicals
- Peak experience / mild spiritual experience
- Co-morbid depression and anxiety
- **Trauma**
- **Empathy**

The Psychedelic Renaissance

*Reassessing the Role of Psychedelic Drugs in
21st Century Psychiatry and Society* SECOND EDITION

Ben Sessa



The Psychedelic Renaissance



By ASHLEY WELCH / CBS NEWS August 31, 2017, 2:34 PM

FDA designates MDMA as "breakthrough therapy" for PTSD



A researcher holds capsules containing doses of MDMA. **MULTIDISCIPLINARY ASSOCIATION FOR PSYCHEDELIC STUDIES (MAPS)**

15 Comments / f Share / t Tweet / Stumble / @ Email

Last Updated Aug 31, 2017 5:23 PM EDT

After years of lobbying and experimental research, the FDA has granted

The All-new Ibiza.



Is Ecstasy the Key to Treating Women with PTSD?

Some say yes—and that the prescription could come as early as 2021.



by KELLEY MCMILLAN AUG 17, 2015

4.5K f t

On a bright, sunny morning in June 2012, 36-year-old massage therapist Roxann Murphy and her husband, David, 34, were driving to Oklahoma City's Myriad Botanical Gardens with their 18-month-old daughter, Romy. Almost as soon as David—blond and handsome, with light-blue eyes—turned their Honda Fit onto the highway, they saw a

Clinical MDMA Research is enjoying a lot of positive media attention

Science Advertisement

On-the-spot Recruitment in Japan and America

- October 22 University of Tokyo
- October 25 University of California-Berkeley
- October 26 Stanford University

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MDMA is better known as the party drug ecstasy.

All clear for the decisive trial of ecstasy in PTSD patients

By Kai Kupferschmidt | Aug. 26, 2017, 6:30 PM

One of the main targets in the war on drugs could well become a drug to treat the scars of war. The U.S. Food and Drug Administration (FDA) has



COULD A CLUB DRUG BE THE SECRET TO CURING PTSD?

The groundbreaking, remarkably effective, and more-than-a-little-trippy new treatment for severe trauma.

BY LOUISA KAMPS MAR 1, 2017

1.3K f t

Julie Nelson learned at an early age to keep her younger siblings quietly entertained whenever their parents locked them up in the basement of their derelict Kansas City home. Her mother and stepfather didn't want to hear a word from them while they were getting high on cocaine and methamphetamine upstairs—whether their

MDMA approved for final trials to treat PTSD before possible legalization

FDA could make drug legal by 2021 if phase three tests involving controlled dosage and talk therapy are shown to alleviate post-traumatic stress disorder

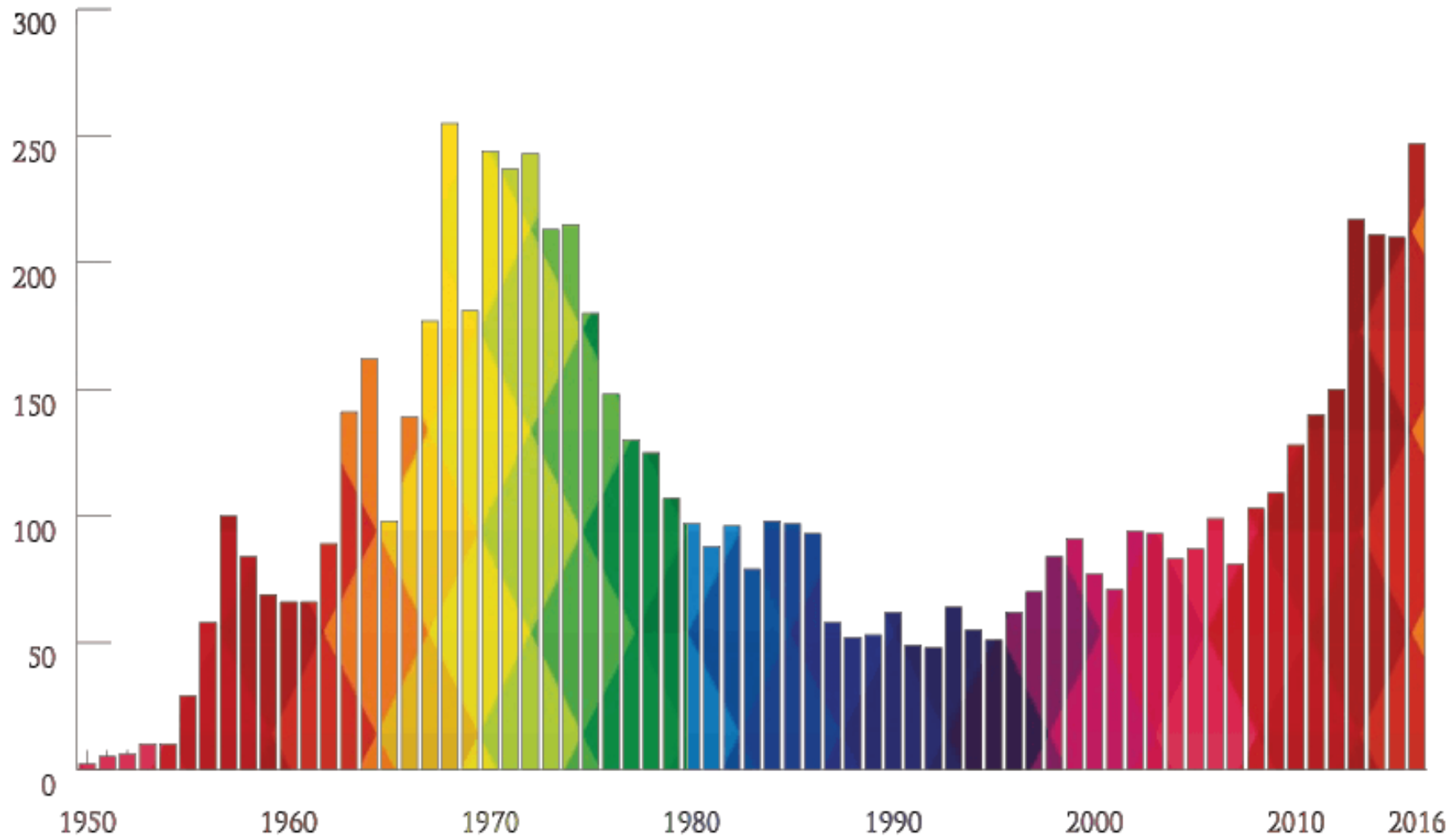


How to Know When You Can Stop Working



The Psychedelic Renaissance:

NUMBER OF SCIENTIFIC ARTICLES PUBLISHED ABOUT LSD



- Bristol Psilocybin Project 2007 - 2009
- Imperial Psilocybin fMRI Project 2012
- Imperial MDMA fMRI Project 2012
- Oxford Ketamine Project 2012
- Imperial LSD fMRI Project 2014
- Imperial Depression-Psilocybin 2015
- Northwick LSD Dementia Project 2015
- Northwick LSD Creativity Project 2015
- Cardiff MDMA for PTSD 2016
- Bristol MDMA for Alcoholism Project 2016
- UK MDMA-PTSD Phase 3 Project 2018
- Exeter Ketamine for Alcoholism Project 2016
- Imperial DMT project 2017
- Guernsey Psychedelic Research Project 2017
- Isle of Man Psychedelic Research project 2017

Ten Years of UK Psychedelic Research

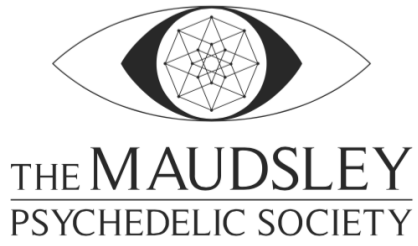


OPPORTUNITY

Are You a Young Person Considering
Working in Psychedelic Research?

Is it 'Career Suicide'?



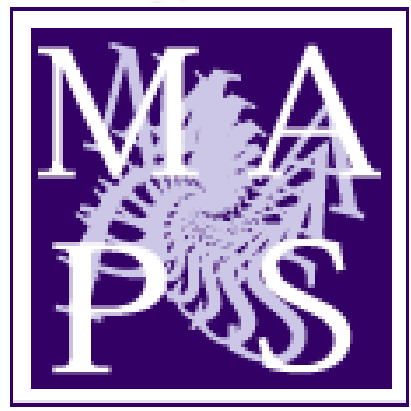


University of
BRISTOL



HARVARD
UNIVERSITY

UNIVERSITY OF
CAMBRIDGE



Imperial College
London



Yale University



THE
LANCET

BMJ





#EndTheDrugWar

A wide-angle, fisheye photograph of a large group of people, likely students, gathered in a courtyard between two grand, classical-style buildings with domes and columns. The people are sitting on the ground, many with their arms raised in celebration, and confetti is falling from the sky. The sky is blue with scattered white clouds.

Thanks

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