

Suffering, Psychedelics, and the Future of Palliative Medicine

LOU LUKAS, MD

Chief Of Palliative Medicine
Nebraska Western Iowa Veterans Health
Administration

Associate Professor Palliative Medicine,
University Of Nebraska Medical Center

DISCLAIMER 1:

I work for VA,
I do NOT speak for VA

ALL OPINIONS AND INFORMATION ARE MINE AND ARE NOT
ENDORSED OR SUPPORTED BY VA

Don't try this at home!

I DON'T SUPPORT OR CONDONE
THE USE OF ILLEGAL OR
UNAUTHORIZED PSYCHEDELIC
SUBSTANCES.



What We Know about Psychedelics and Healing So Far

Change Your Mind | Official Trailer | Netflix



How To Change Your Mind

1. Ergot (*Claviceps paspali*)

2. Psilocybin Mushroom (*Psilocybe*)

3. Sassafras (*Sassafras albidum*)

4.



NOVA: Can Psychedelics Cure?

By Jennifer Robinson / Web Producer

Published October 17, 2022 at 4:54 PM PDT



THE WALL STREET JOURNAL

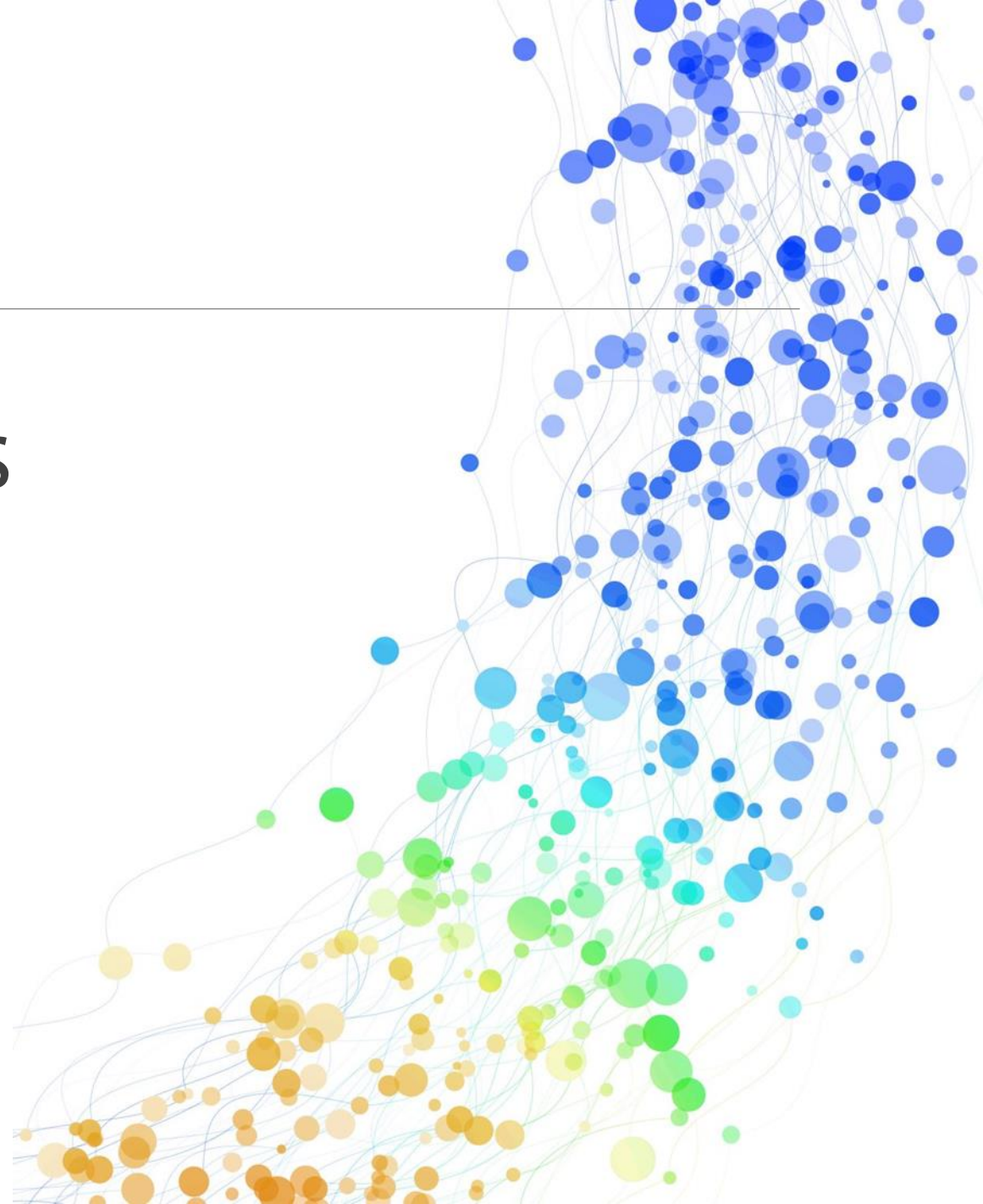
HEALTH

Psilocybin, Psychedelic Compound in Magic Mushrooms, Shown Effective for Alcohol Addiction

What do Psychedelics have to do with us?

Let's take a poll!

- Naïve
- Psychedeli-Curious
- On the “Magic Bus”
- Opposed to “Mushroom Madness”



Objectives

Why psychedelic assisted treatment is relevant, and possibly central, to hospice and palliative medicine

Summary of psychedelic substances that are expected to become available soon.

Considerations for policy, leadership, workforce, and clinical practice

Hospice and Palliative Medicine

To relieve suffering!

Pain and Suffering:



Suffering in Serious Illness:

- a broken story
- rumination

Loss of narrative coherence. The inability to update your story in light of pain, discomfort, or loss.

Loss of purpose and meaning

Who am i if this is happening to me?

Rumination: perseverative cognition that focuses on negative content, generally past and present, and results in emotional distress.

Impact:

Depression, despair, demoralization, suicidal thoughts (and actions)

What We Know about Psychedelics and Healing So Far

Change Your Mind | Official Trailer | Netflix



How To Change Your Mind

1. Ergot (*Claviceps paspali*)

2. Psilocybin Mushroom (*Psilocybe*)

3. Sassafras (*Sassafras albidum*)

4.



NOVA: Can Psychedelics Cure?

By Jennifer Robinson / Web Producer
Published October 17, 2022 at 4:54 PM PDT



THE WALL STREET JOURNAL

HEALTH

Psilocybin, Psychedelic Compound in Magic Mushrooms, Shown Effective for Alcohol Addiction

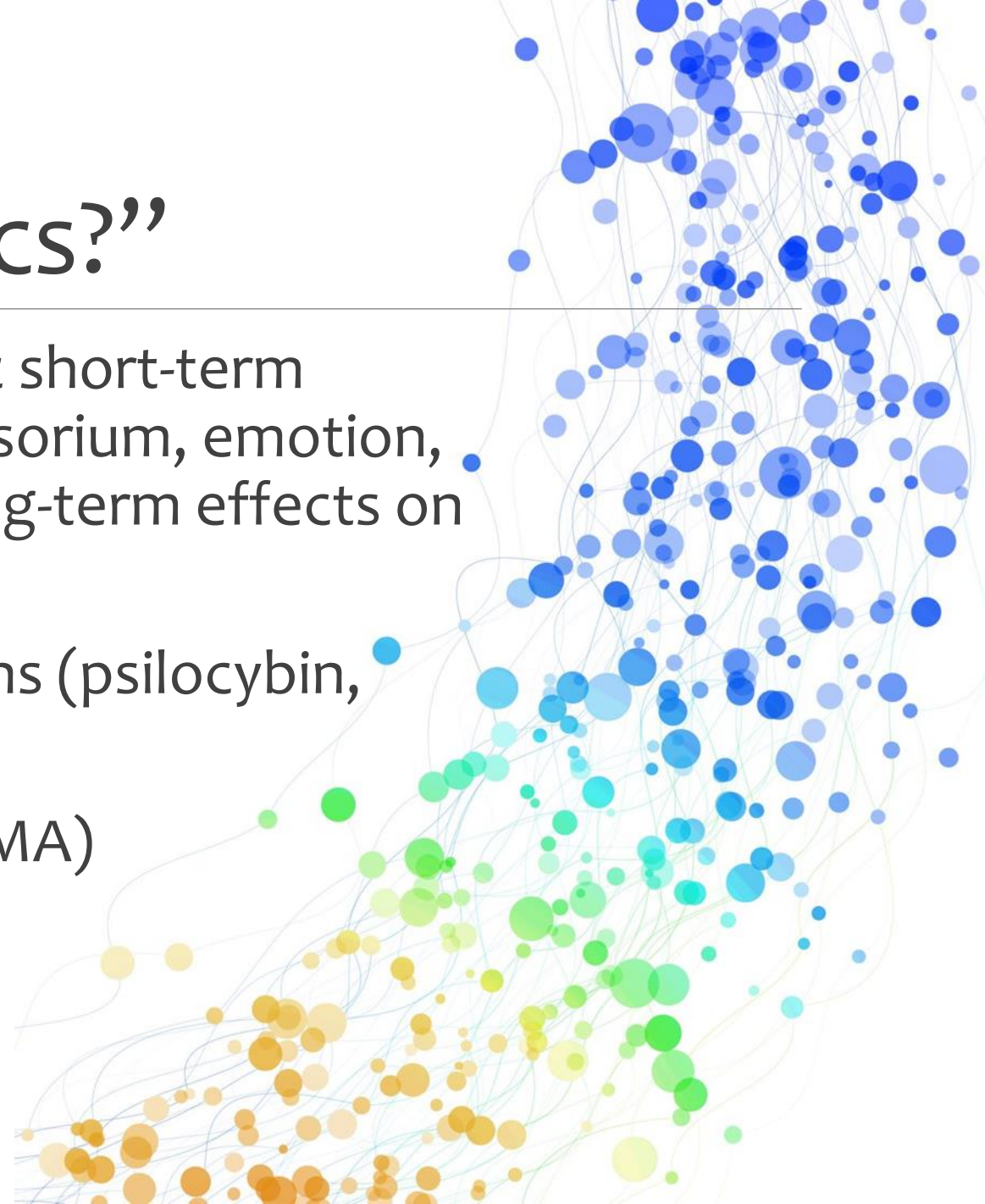
Because
suffering is
everywhere



What are “Psychedelics?”

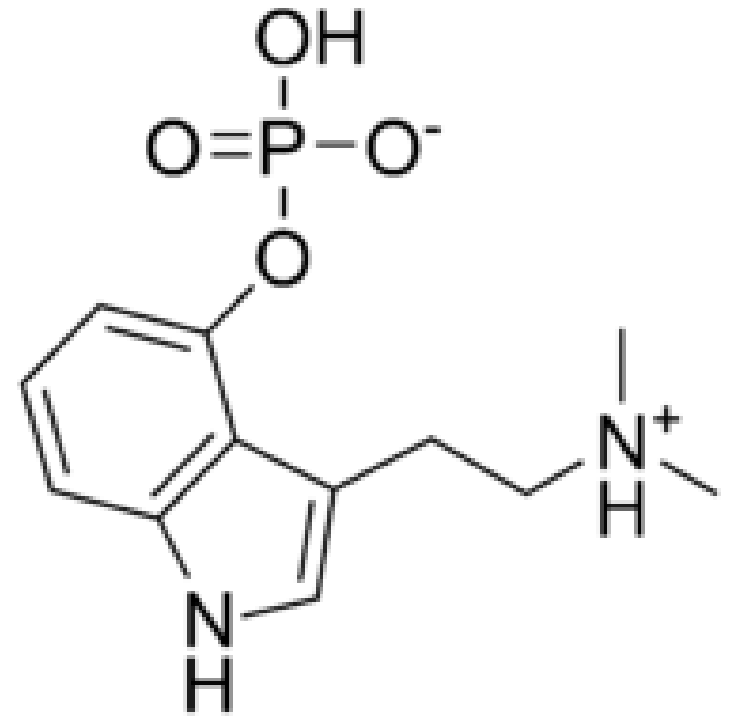
Compounds that produce a dramatic short-term experience of altered/expanded sensorium, emotion, and consciousness and that have long-term effects on brain function, mood, and coping.

- Classic Psychedelics/Hallucinogens (psilocybin, LSD)
- Entactogens/Empathogens (MDMA)
- Anesthetics (Ketamine)

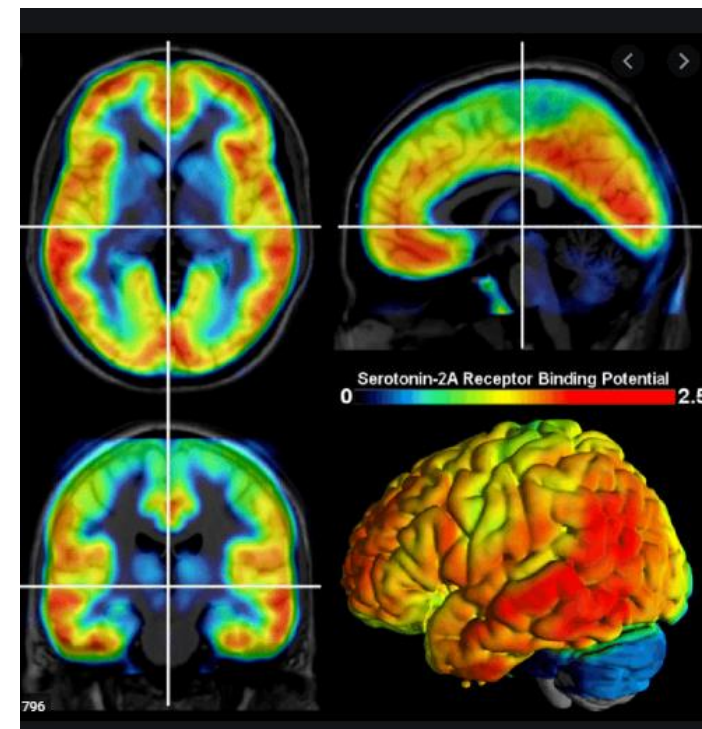
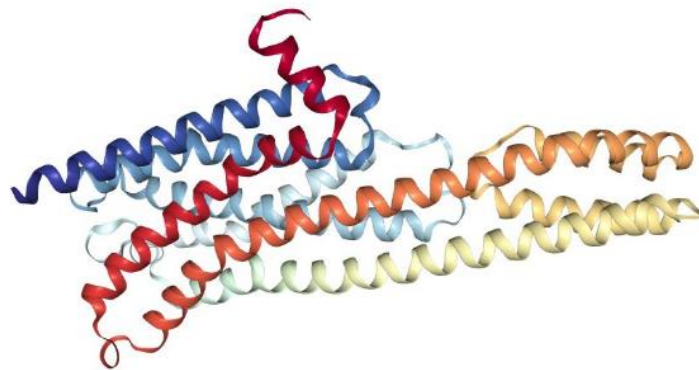
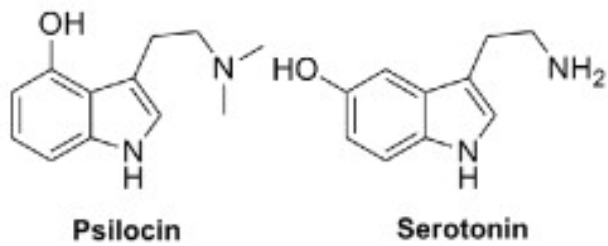




Psychedelic agents are ubiquitous in nature and through history, and synthesized in labs

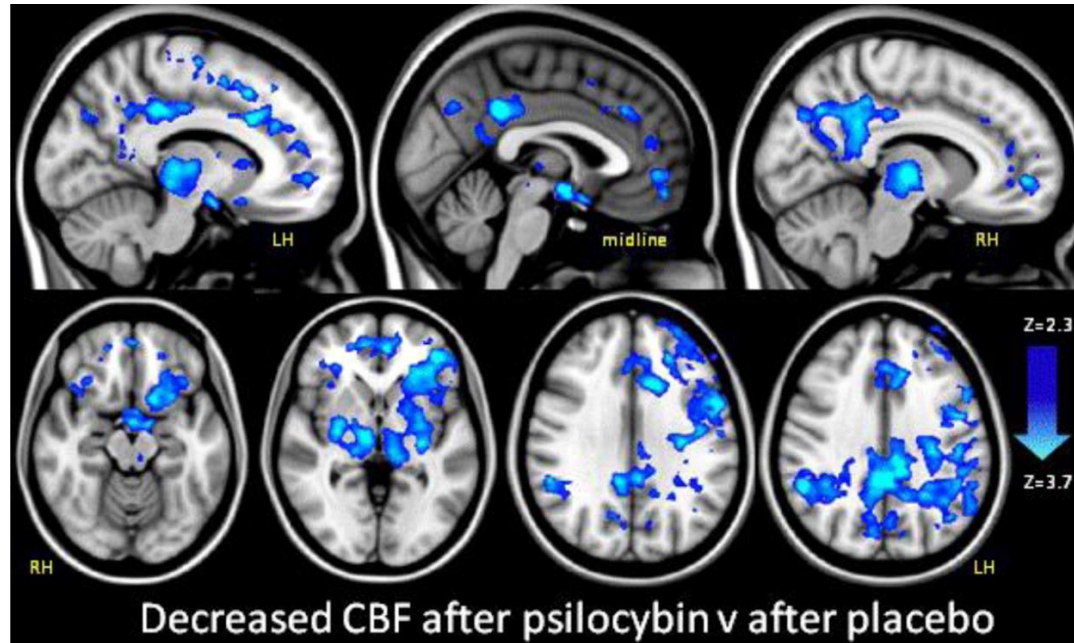


Psilocybe Mushrooms → Psilocybin



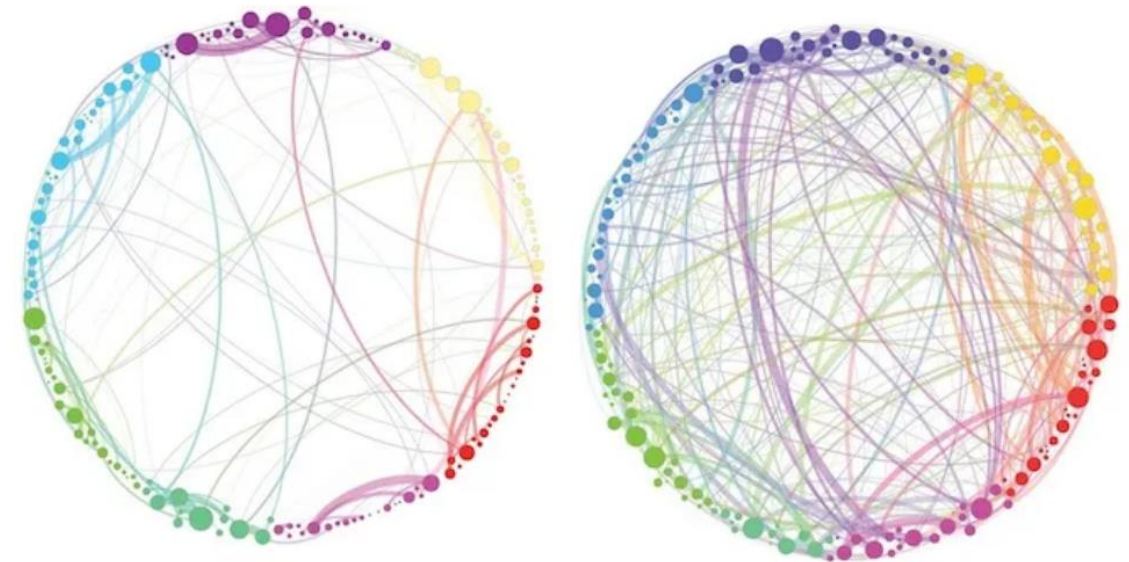
Serotonin (5HT) 2A receptor on neurons

Decreased activity in Default Mode Network



**Default Mode Network holds our sense of self.
Rewriting our stories**

Increase in Cross Network Connectivity



Communication between brain networks in people given psilocybin (right) or a non-psychedelic compound (left). PETRI ET AL./PROCEEDINGS OF THE ROYAL SOCIETY INTERFACE

**Getting out of neural ruts
Increase in alternate connections.
Able to see more possibilities**

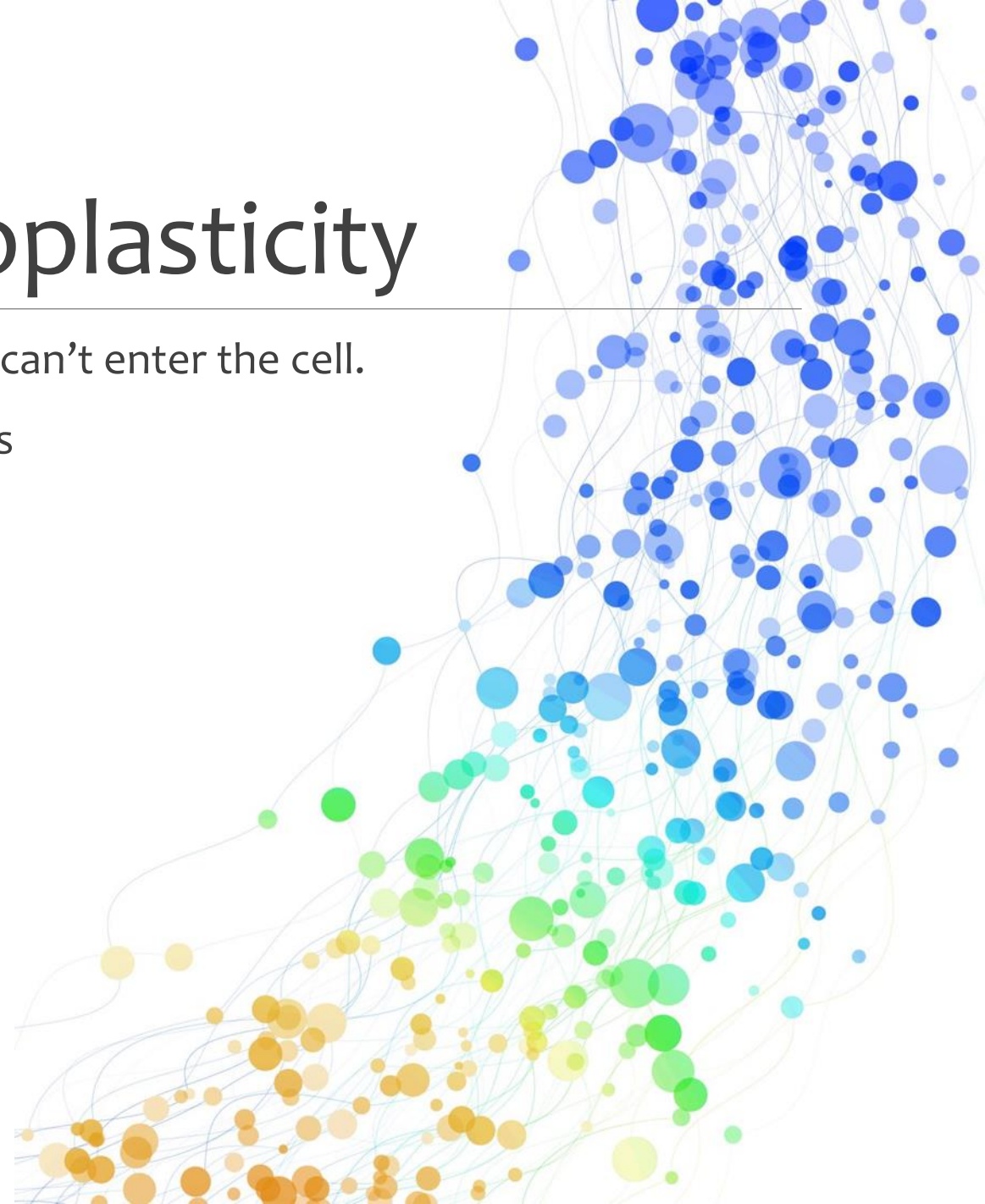
2023 update on Neuroplasticity

Serotonin acts on receptors on the cell surface but can't enter the cell.

Psilocin enters the cell to activate internal receptors

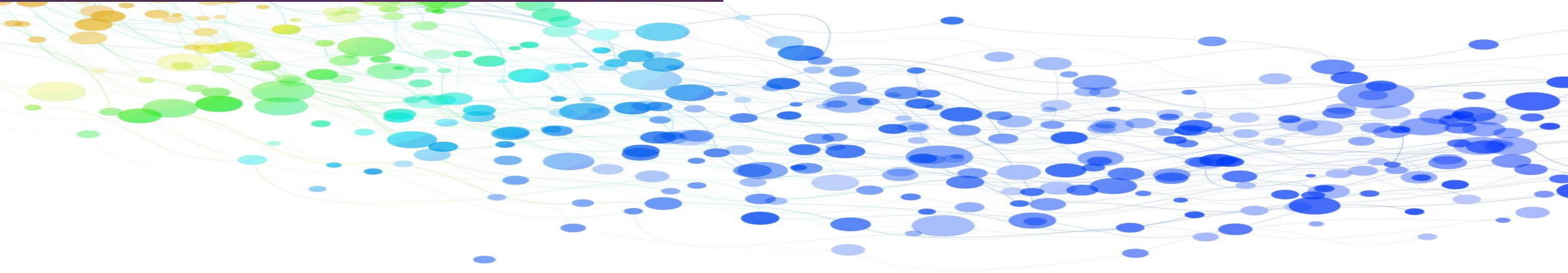
- triggers neuronal growth (neuroplasticity)
- and enhance connections (meta plasticity)

Vargus, MV, etal “Psychedelics promote neuroplasticity through the activation of intracellular 5-HT_{2A} receptors”
Science vol 379, issue 6633, pp700-706 Feb 16, 2023





Patient Experience



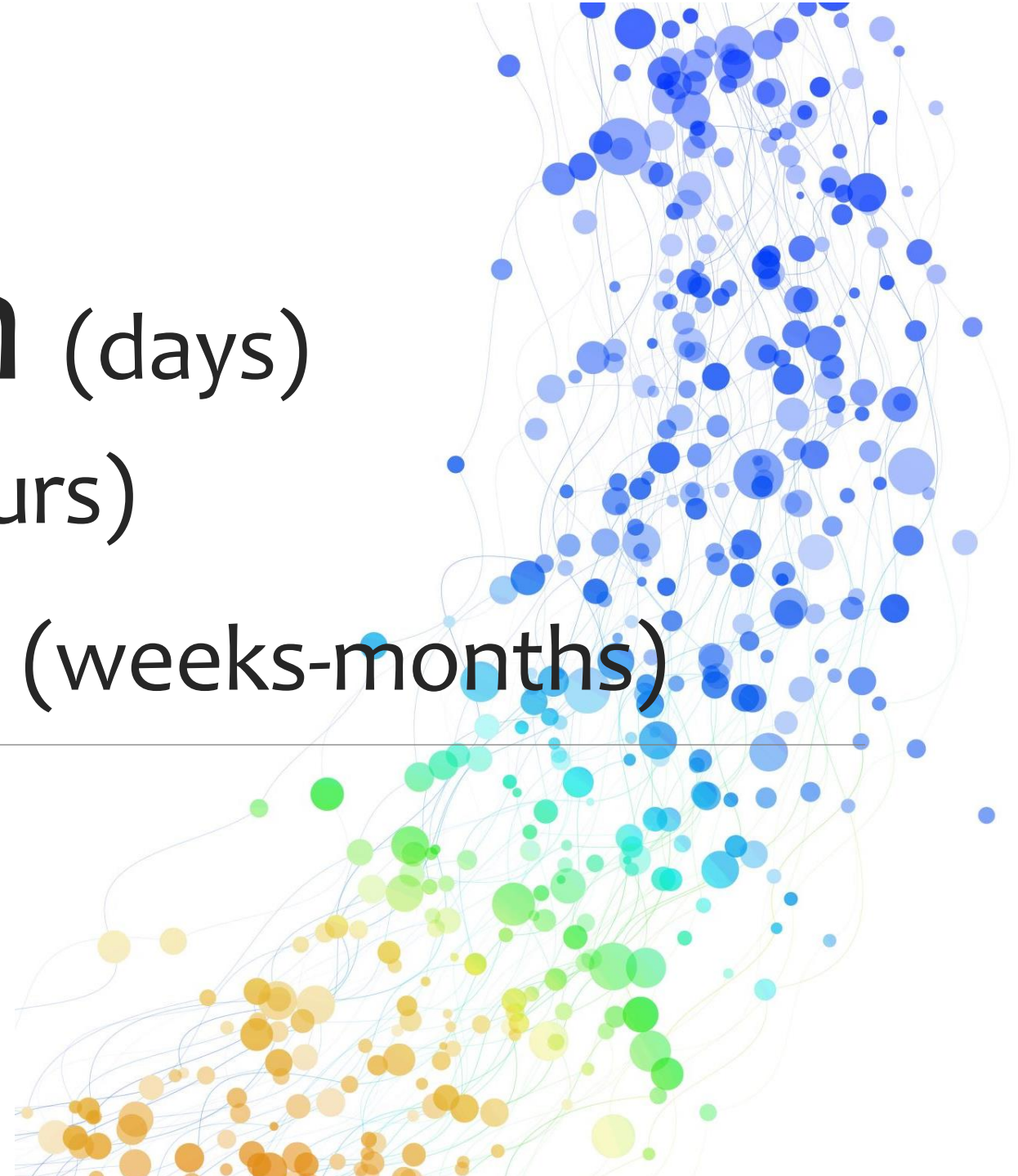
Preparation (days)

Experience (~hours)

Integration (weeks-months)

SET & SETTING

LOTS OF ROOM TO EXPLORE



Dosing and Duration

Dose

~0.5mg “micro dose”
<3mg “active placebo”
10-12mg low dose
20mg moderate dose
30mg high dose
40mg+ “too-high” dose
(higher anxiety and BP)

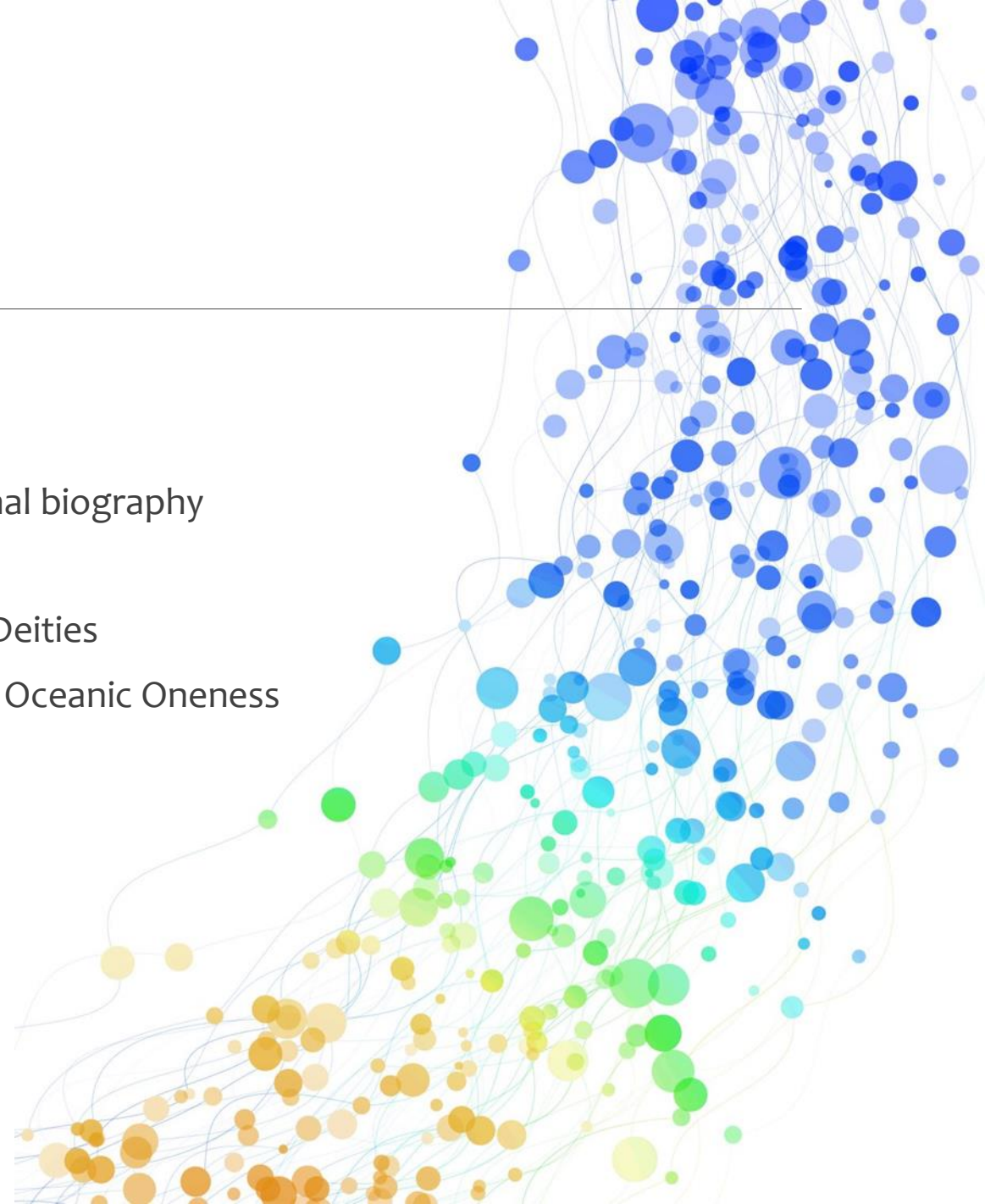


Response

No change
“Psycholectic” personal biography
“Psychedelic”
Archetypal imagery/Deities
Mystical Experience, Oceanic Oneness

Duration of activity

~30 onset
~6 hours duration



The Psychedelic Experience

Non-Ordinary Consciousness

Vibrant sensory distortions and
illusions

Synesthesia

Heightened emotional experiences

Personal memories and experiences

Imaginal experiences

Nightmares

Mystical/Spiritual encounters



Phase II Psilocybin Cancer Research

Journal of Psychopharmacology December 2016

JOHNS HOPKINS

n=51

0.3mg/kg (~25mg/avg adult)

Randomized, double-blind, placebo controlled (low-dose psilocybin)

Mixed cancer patients with “potentially life-threatening cancer” and diagnosable depression, anxiety, etc.

~80% response, 60% remission, largest effect sizes of psychiatric trial of anything, ever.

Improved QOL

Among the most significant events of their lives.

Results: 6 Weeks and 6 Months

NYU- LANGONE

n=29

0.3 mg/kg (~25mg/avg adult)

Randomized, double-blind, placebo controlled (niacin)

Mixed cancer patients with “potentially life-threatening cancer” and diagnosable depression, anxiety, etc.

~80% response, 60% remission, largest effect sizes of psychiatric trial of anything, ever.

Improved QOL

Mediated through mystical experience.

8 Weeks and 6 Months, (4 year follow up with survivors.)

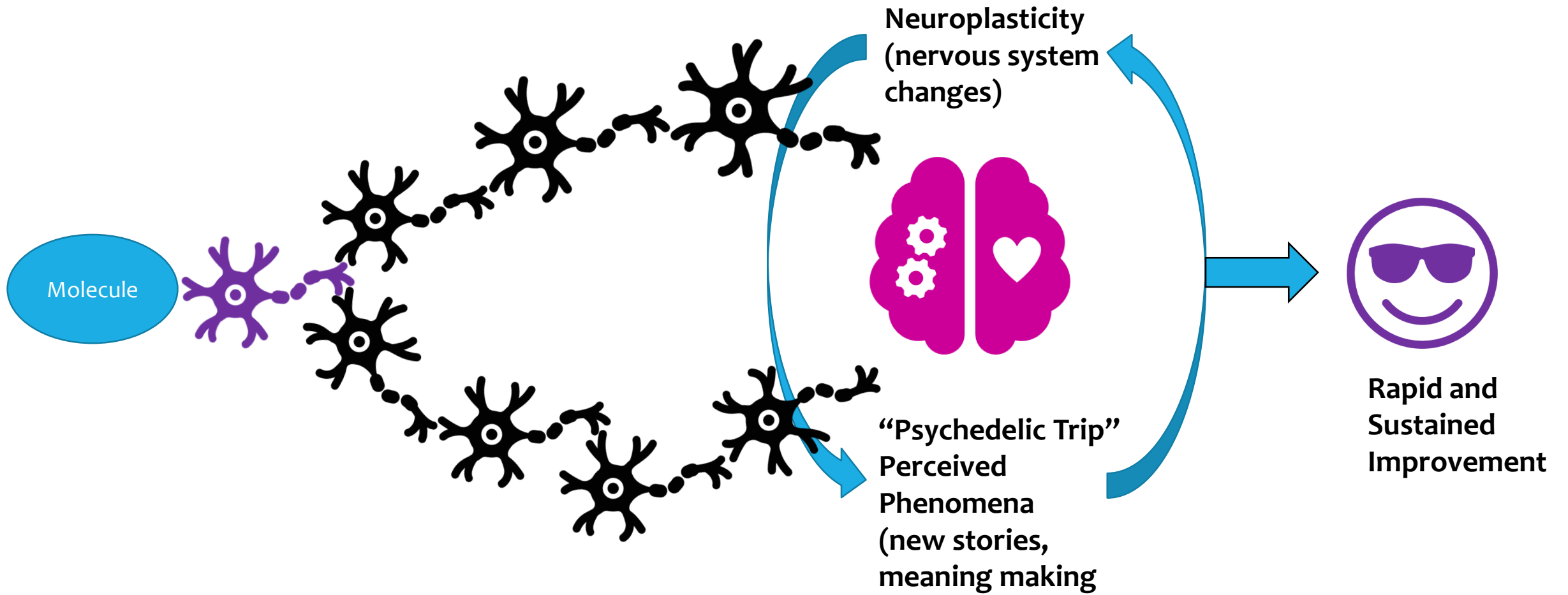
More Palliative Specific Research

Single Site Studies	
“Palliative Treatment” for distress in pancreaticobiliary cancer w/family and health utilization follow-up.	Buffet Cancer Center, University of Nebraska
Individual/Group PAT* for MDD for patients with Cancer	Aquilino Cancer Center, Maryland
Psilocybin-Enhanced Group Therapy in patients with Cancer	Huntsman Cancer Center, University of Utah
Pilot Study of PAT for demoralization in patients receiving Hospice Care- PATH Study	Dana Farber Cancer Institute, HMS/Care dimensions
Pilot Study of PAT for relief of existential angst in patients with Terminal Cancer in a Palliative Care Setting	Emory University, Atlanta
Multi-Site Study	
Individual PAP +palliative care to address psycho-existential suffering at the end of life (cancer and non-cancer)	UCLA, Lundquist Institute

*PAT= Psilocybin Assisted Therapy



Switch to Videos



History, Safety, Legality

Psychedelics Legal Until 1969

Sandoz Pharmaceuticals

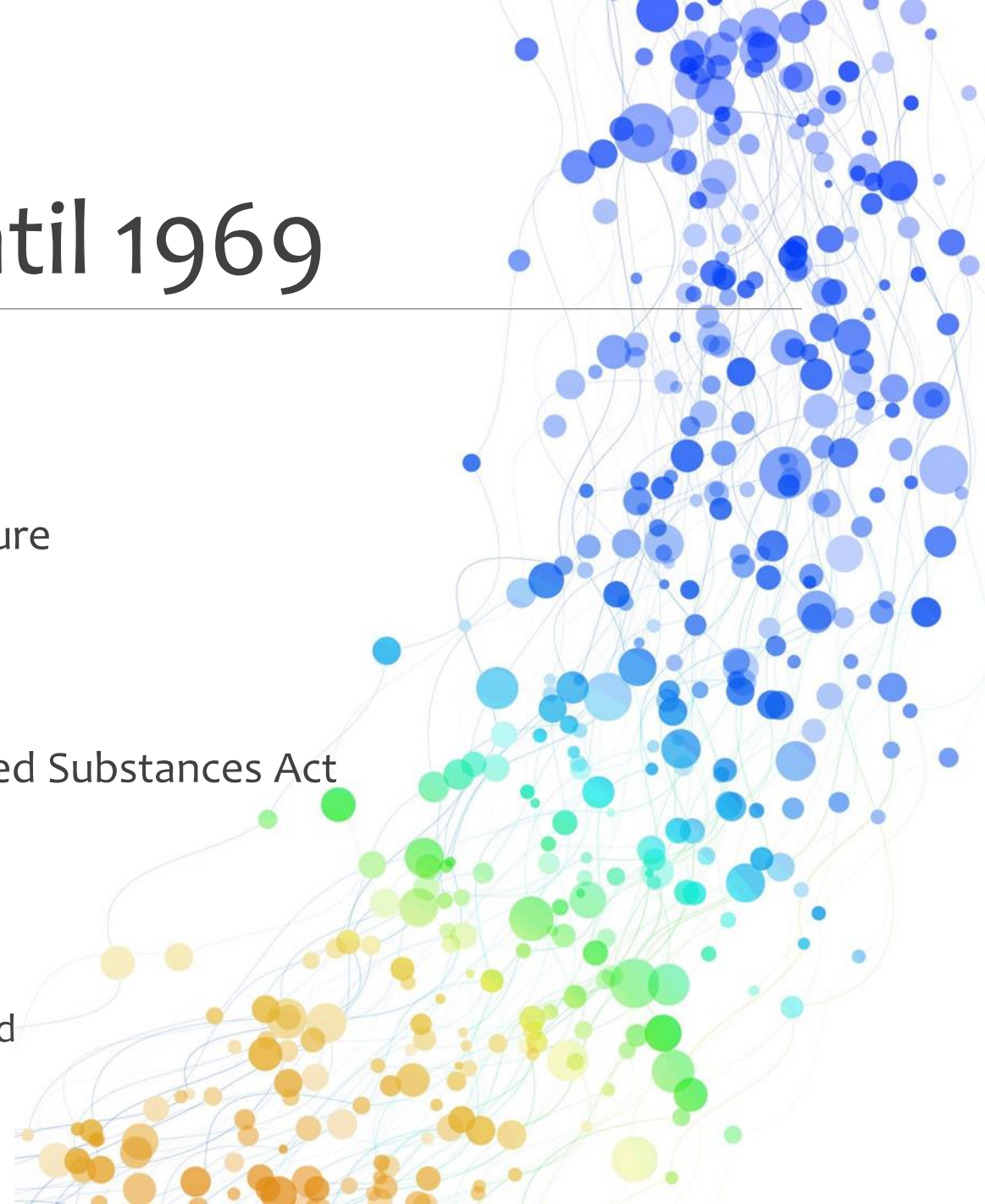
- LSD = Delysid
- Psilocybin= Indocybin

From 1940-1970 over 1000 papers in medical literature

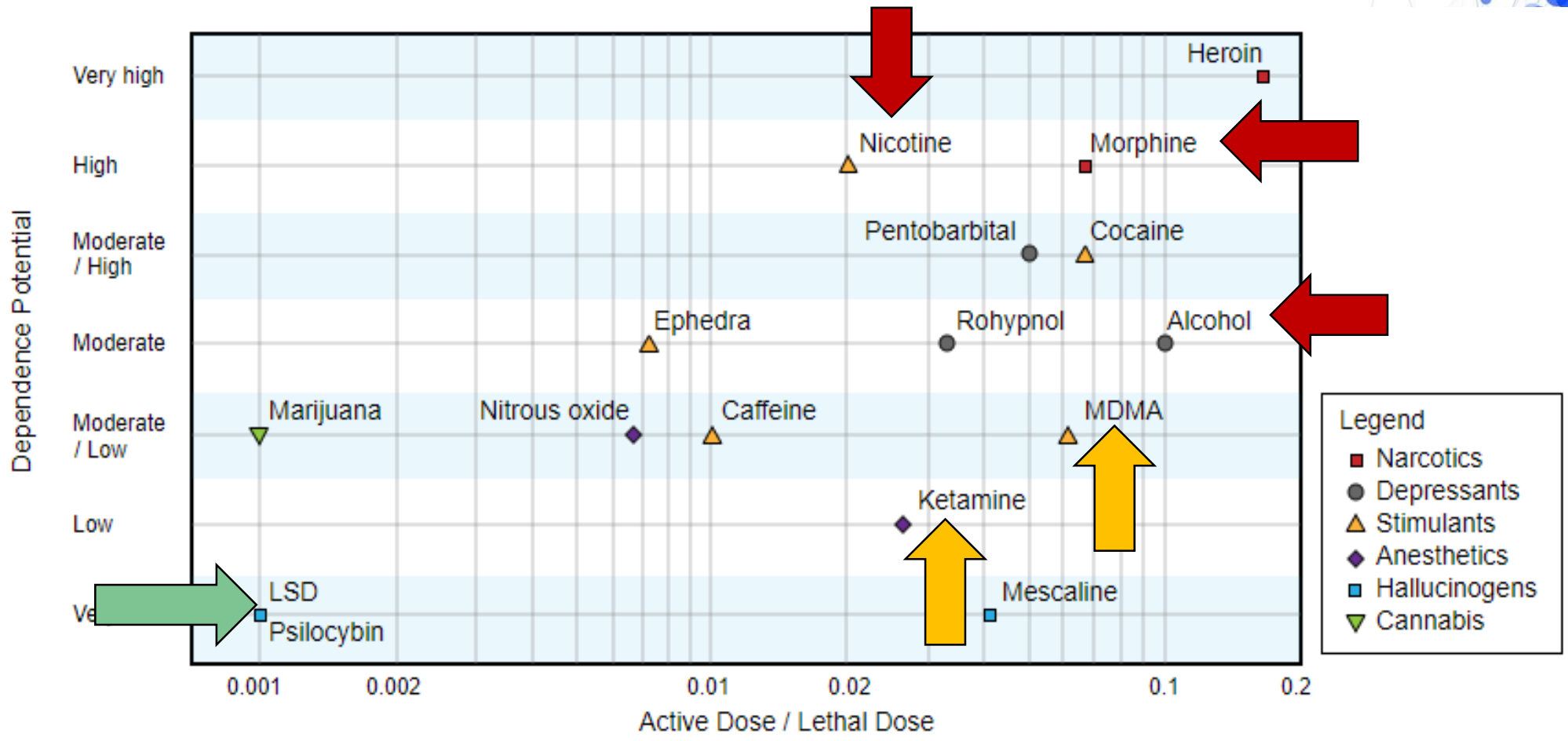
- Addiction (mostly alcohol, Bill W.)
- Neurosis (depression, anxiety)
- Existential distress of terminal illness

All came to a crashing halt in the late 1969 Controlled Substances Act

- Morphine and Cocaine Schedule II
- Benzodiazepines Schedule IV
- Phenobarbital Schedule IV
- Psychedelics Schedule I- “no medicinal value”
- Interestingly, Tobacco and Alcohol were not scheduled



Relative Safety of Psychoactive Agents



Real Risks

Accidents from unsupervised use!!

- Highly intoxicated substances that change perception of reality

Potential to unmask latent psychotic illness

- Screen out schizophrenia and other psychotic disorders, patient or family
- Greatest risk in 16-25 y/o males

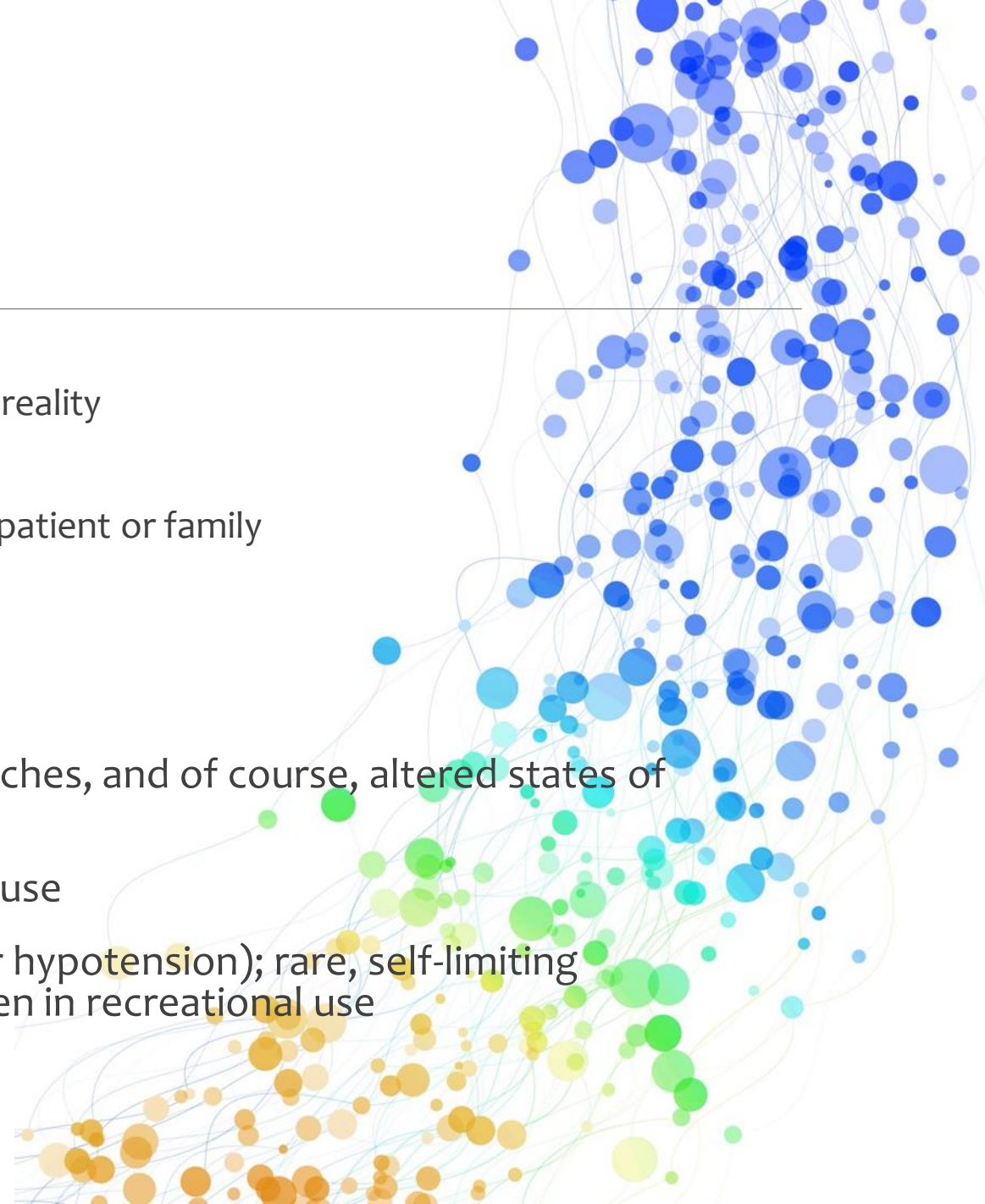
Terror, Panic and “Bad Trips”

- Poor preparation, unskilled facilitation

Short term side effects: Nausea, transient HTN, headaches, and of course, altered states of consciousness

MDMA has cardio toxicity at high doses or prolonged use

Ketamine- sedation (but not respiratory depression or hypotension); rare, self-limiting laryngospasm; bladder irritation, ulcerative cystitis seen in recreational use

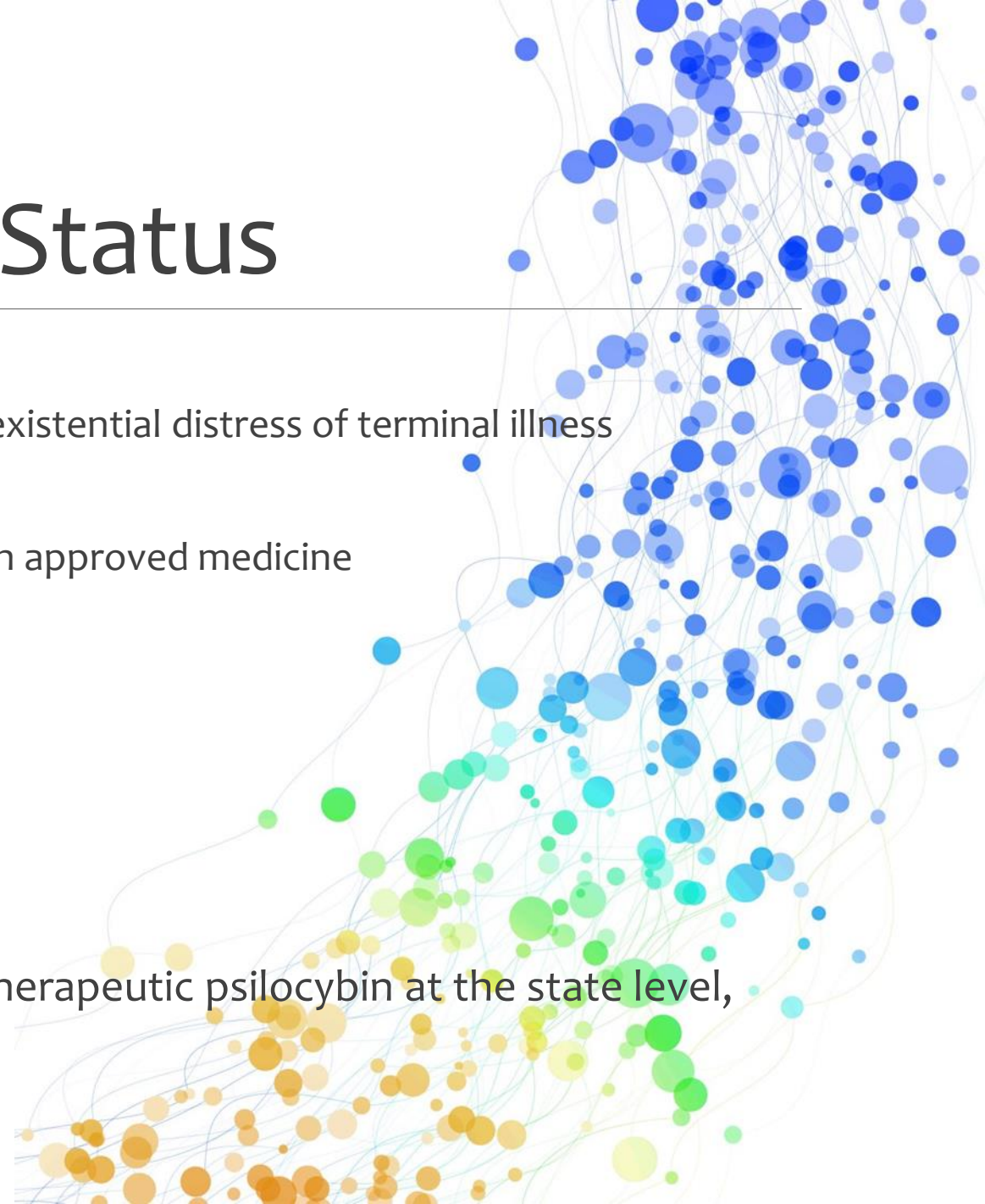


Legal and Regulatory Status

- Ketamine is available “off-label” for depression
 - Current clinical trial of Ketamine assisted therapy for existential distress of terminal illness
- Psilocybin and MDMA
 - 2021 FDA gave “breakthrough status” to develop as an approved medicine
 - MDMA for PTSD (approval expected 2024)
 - Psilocybin for depression

Federal Legislative Measures

- “Right to Try” and “Breakthrough Therapies Bill”
- Decriminalized in several communities across US
- Oregon and Colorado passed measures legalizing therapeutic psilocybin at the state level, but still a federal crime



Ethical Issues

The “Right to Try” vs the “Right to Die”

- Psychedelics versus Assisted Suicide for existential suffering

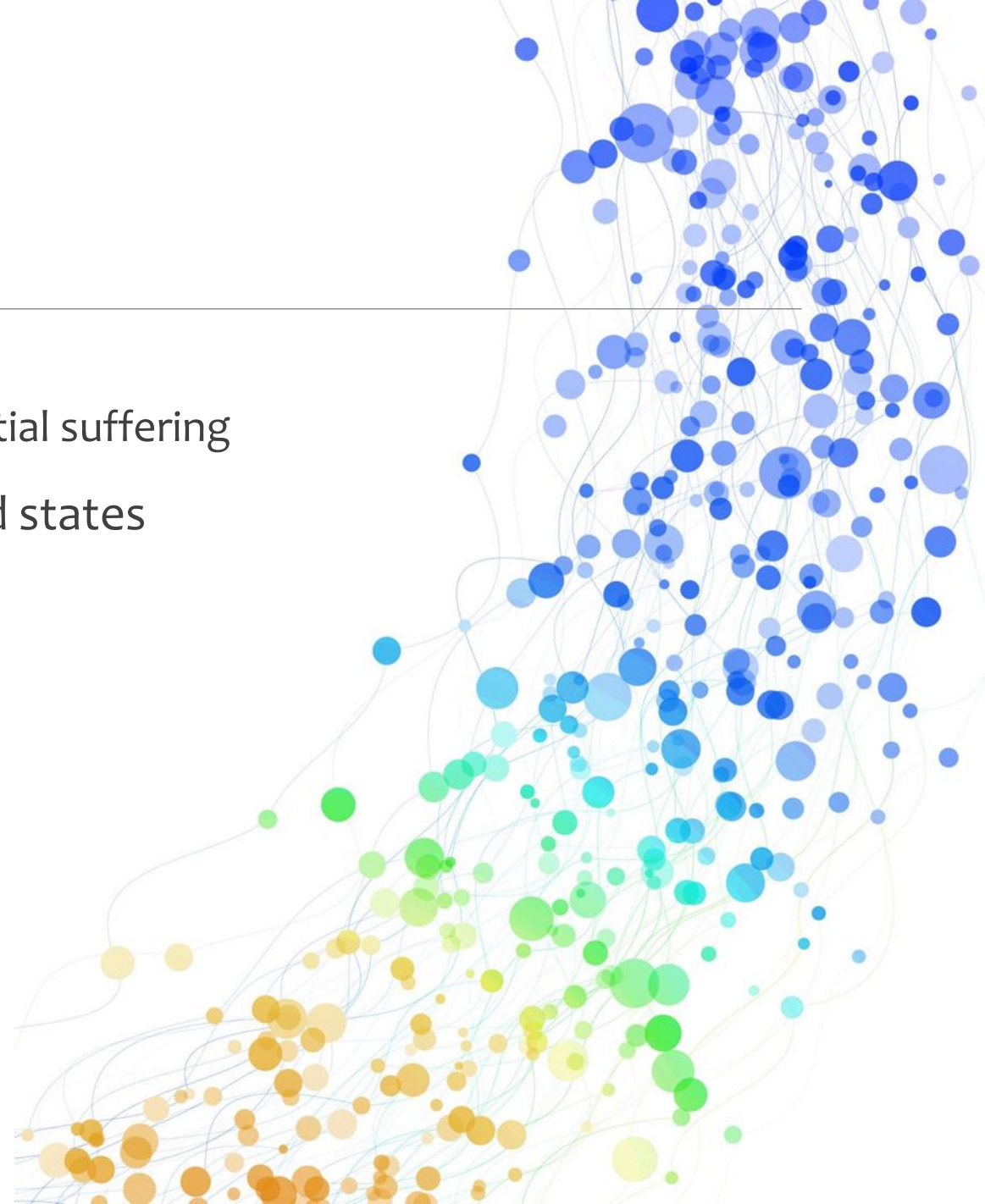
Unique patient/provider vulnerability in altered states

Who is qualified?

- Psychiatry, Palliative Care, Primary Care?
- Nurses? Doctors? Chaplains?

Traditional use and indigenous people?

Access for underserved?

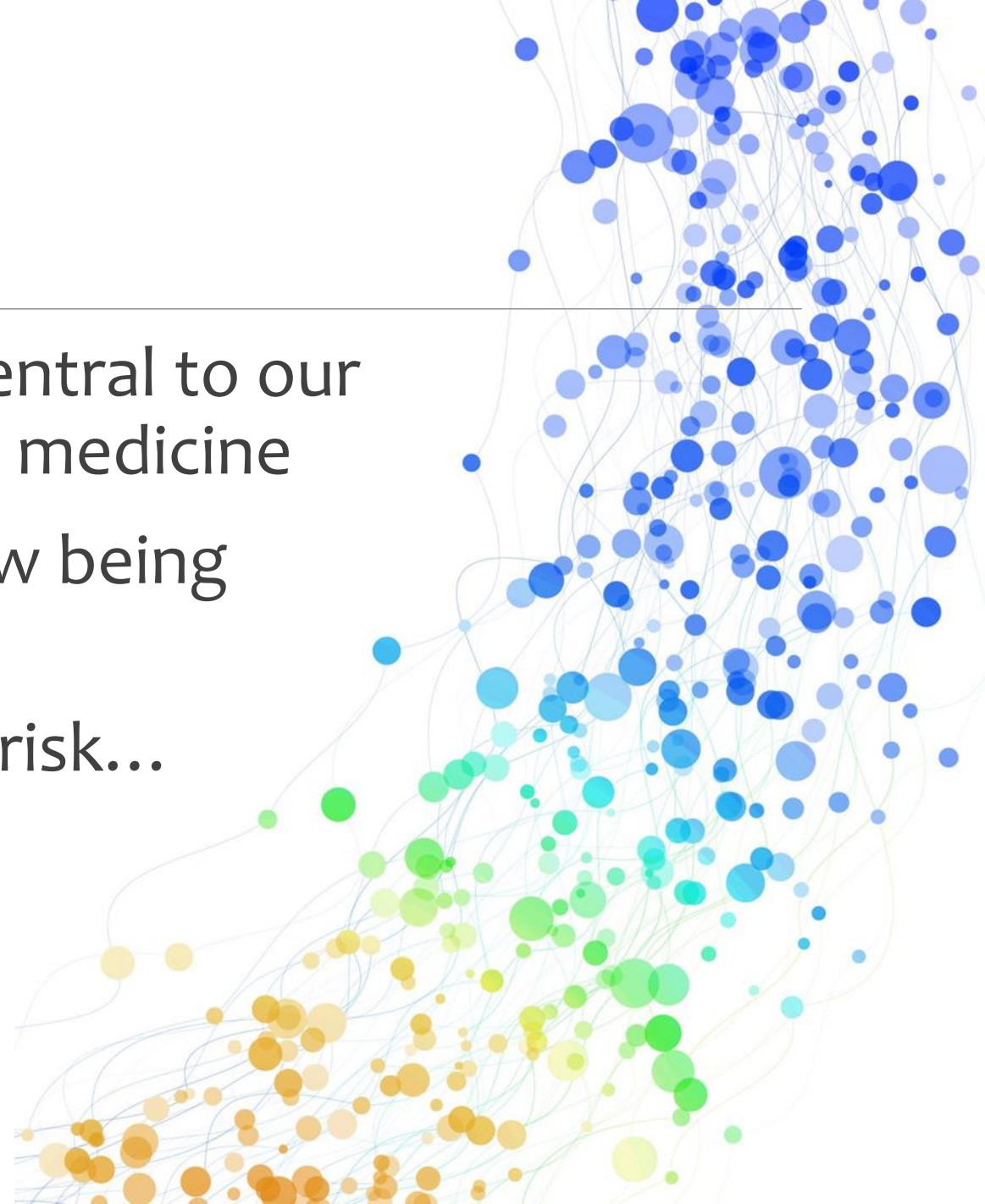


Summary

“New” class of drugs that are central to our mission in hospice and palliative medicine

(Imagine if opioids were just now being approved as medicines)

A lot of potential benefit, some risk...





Moving Forward

What can we do now?

How do we talk about this?

It comes with a fair amount of old cultural baggage.

It comes with a fair amount of new cultural hype.

It is nothing like common antidepressants.

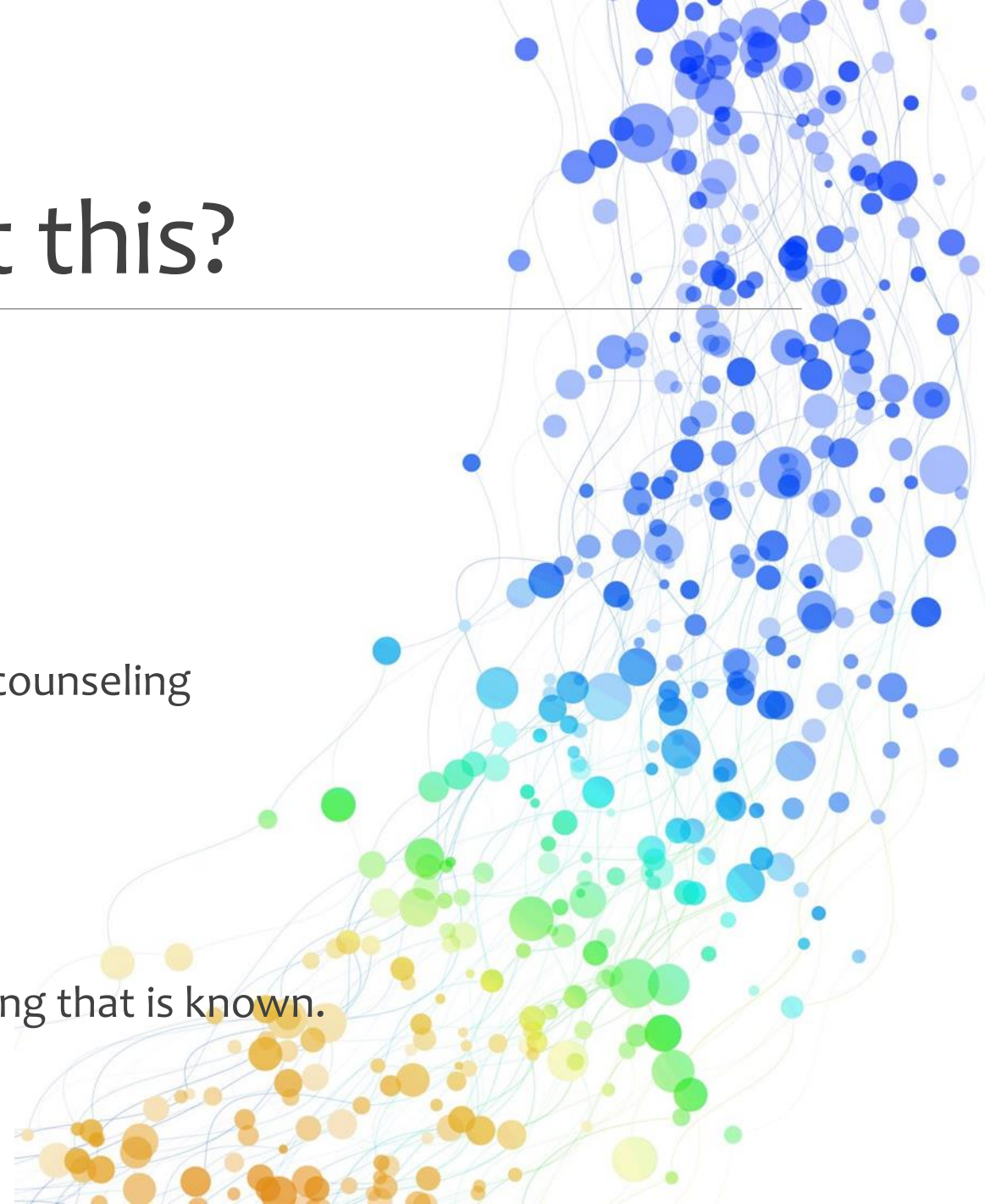
It isn't like cannabis/medical marijuana.

It is much different than psychotherapy or spiritual counseling

How do you introduce a new paradigm?

A metaphor is worth a 1000 words.

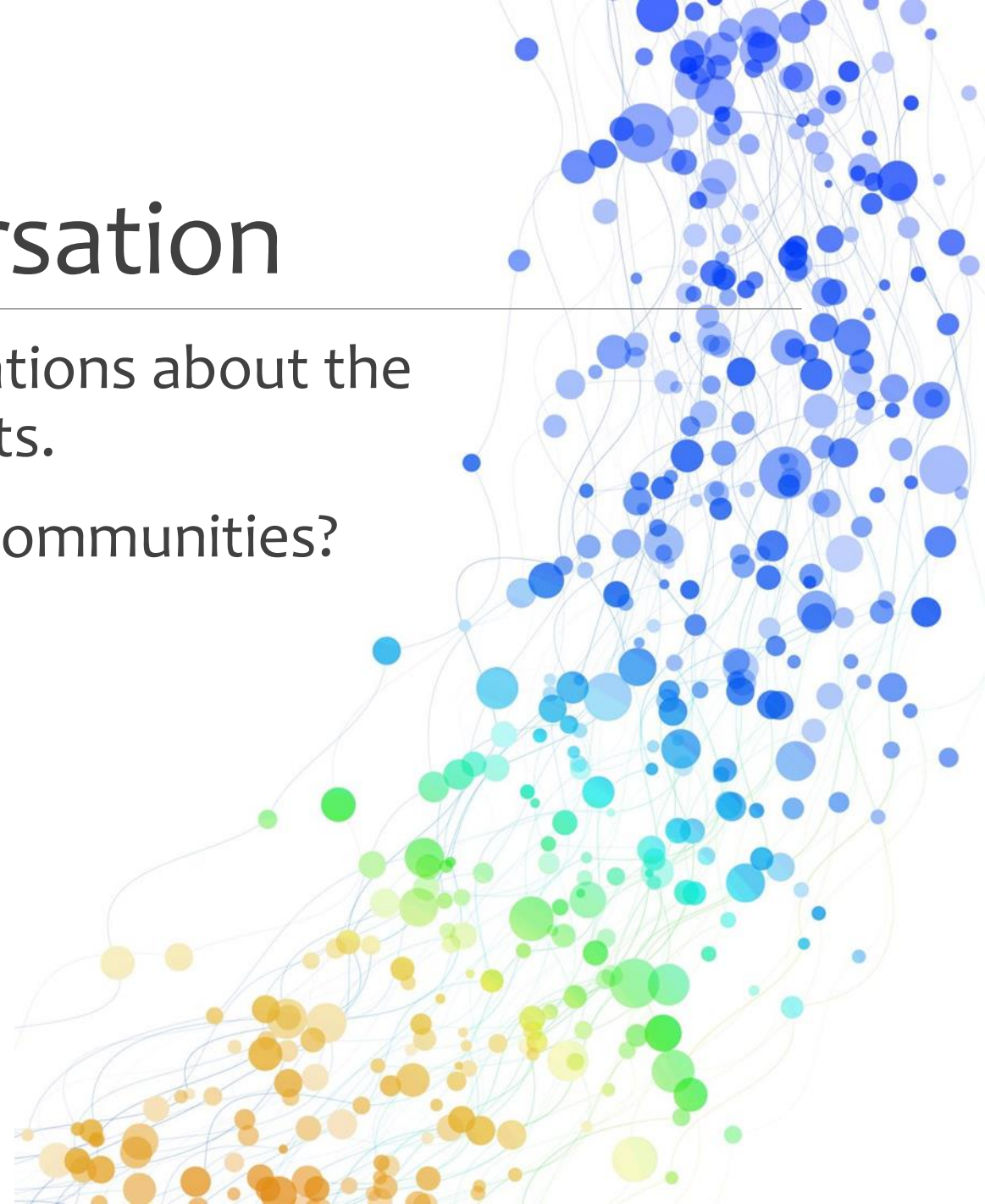
Creating a new world view by relating it to something that is known.



Education and Conversation

Professional education and conversations about the risks and benefits of these treatments.

How do they fit in our practice, our communities?



Preparing our Workforce

Education to be able to inform “underground” use

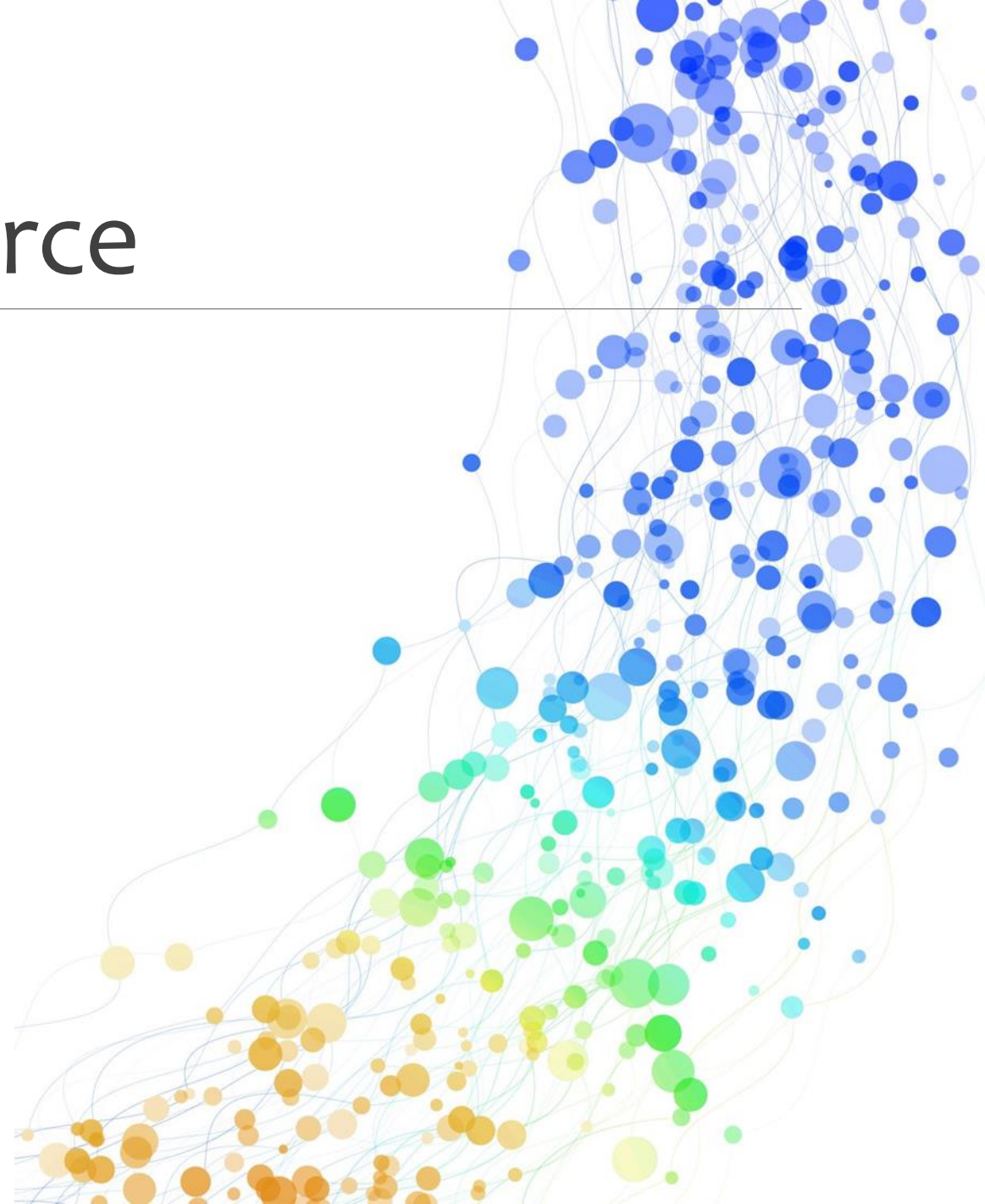
- These substances aren't hard to get
- More publicity will lead to more use

Clinical Training

- MDMA next year (Yikes!)
- Psilocybin available in a few years
- Will we be ready?
- Good training takes a least a year

Operational issues

- Will this be part of our programs?
- Collaborations?
- Community Centers?
- Payers?



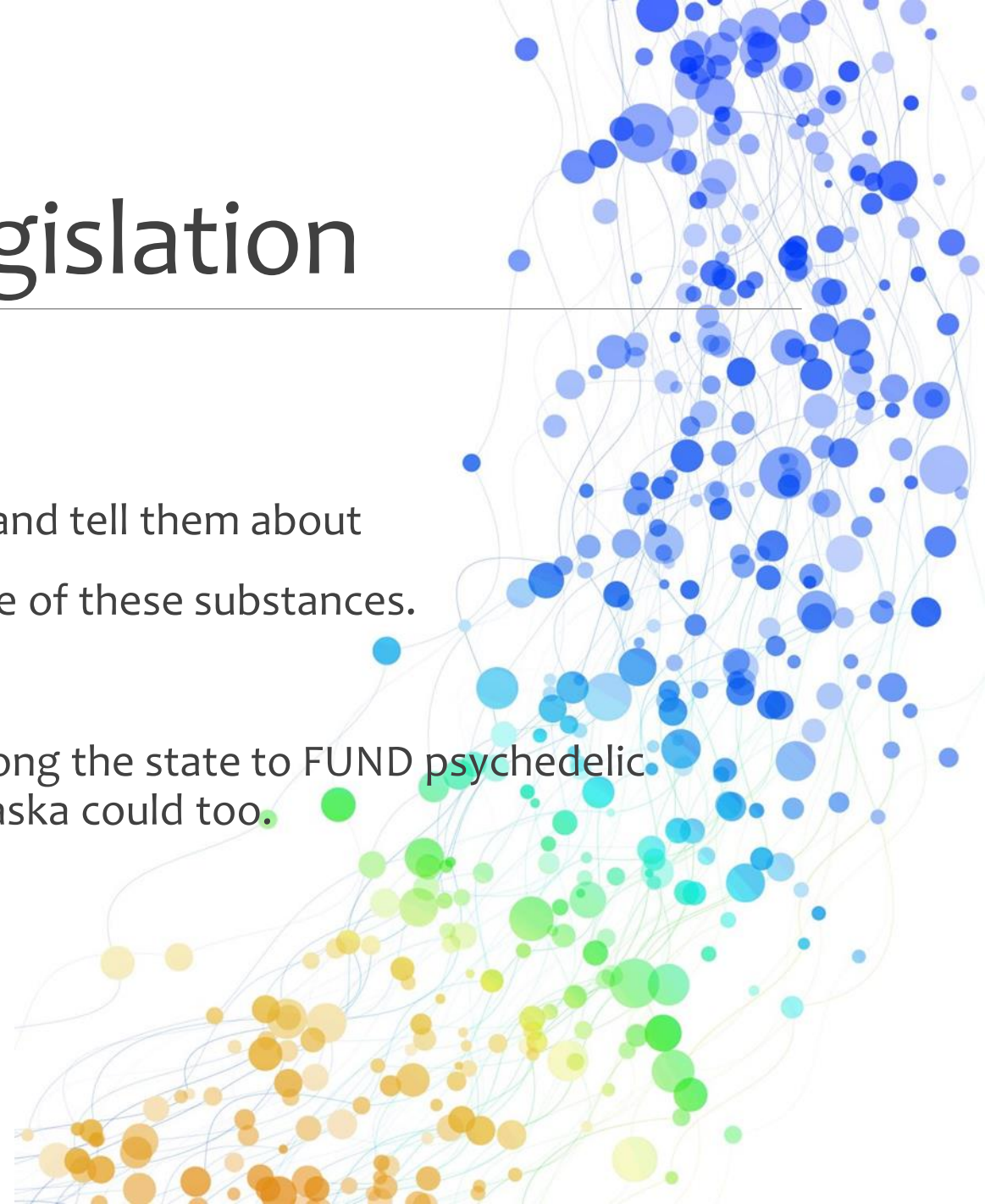
Policy, Regulation, Legislation

Participate in research.

Educate State and Local legislators and regulators and tell them about the potential of safe, legal, medically supervised use of these substances.

Texas, Utah, Arizona, Oklahoma, Maryland, are among the state to FUND psychedelic research specifically for cancer and veterans. Nebraska could too.

Federal Legislation “Breakthrough Therapies Act”



Local Training

UNO school of Social Work- continuing education

4-session series this fall August- November

- Psychedelic Overview
- Ketamine
- MDMA
- Psilocybin

