

NEH Application Cover Sheet (TD-254004)

Media Projects Development

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INSTITUTION

Teddy Bear Films Inc.
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APPLICATION INFORMATION

Title: *FORBIDDEN KNOWLEDGE: Psychedelics & Science*

Grant period: From 2017-05-01 to 2017-11-01

Project field(s): Interdisciplinary Studies, Other

Description of project: Forbidden Knowledge: Psychedelics & Science explores our Western culture's long, turbulent relationship with psychedelic substances across time. The recently permitted medical trials using hallucinogens form the film's core, which are otherwise still illegal. Following a number of PTSD victims through their psychedelic-assisted therapy will provide the film's dramatic arc and help viewers judge these experiments for themselves. This is the first time camera access is granted to film participants before, during and after such a trial. The film will also shed light on neuroscientists' explorations of the brain's inner workings through psychedelics, and on the spiritual dimensions they induce. Critics and skeptics of will give voice to concerns about the safety and value of psychedelic research. Placing the topic in a broad cultural and philosophical context, the film will braid together historical and present-day narratives, employing perspectives from both the sciences and humanities.

BUDGET

Outright Request	75,000.00	Cost Sharing	6,130.00
Matching Request	0.00	Total Budget	81,130.00
Total NEH	75,000.00		

GRANT ADMINISTRATOR

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A. NATURE OF THE REQUEST

Teddy Bear Films is requesting \$75,000 for research and scripting of *Forbidden Knowledge: Science and Psychedelics* (working title). The total budget for this two-hour documentary, shot on high definition for PBS, is \$870,000. The project will also include a website hosting a series of additional short films and the standard PBS features, as well as an educational tool and an audience engagement project that will provide online viewing and free DVDs to community groups.

The NEH funds will be used to support additional content and archival research, to consult with our advisers and to create a full film script. The research will enable us to identify the scholars, drug policy experts, scientist-researchers, and subjects of their studies who will appear in the film. The work will take place over a six-month period beginning shortly after notification of funding.

Forbidden Knowledge aims to explore our Western culture's turbulent relationship with psychedelic substances through time. In recent years, a number of FDA-approved therapeutic trials of psychedelic substance, which are otherwise still banned, have taken place. Placing these trials in a broad cultural, scientific, and philosophical context, it will braid together historical and present day narratives. To understand why research of psychedelics has been so controversial, the film will take us to the 1950s, when medical investigations of the potential of hallucinogens began in earnest. They were halted in the late 1960s when psychedelics were banned, following a public outcry over the widespread abuse of LSD. The recently-approved crop of studies, done on a very limited scope, focuses on testing the therapeutic potential for patients suffering from end-of-life depression, chronic PTSD and addiction. To explore the value and risks involved, the film will follow one study of veterans suffering from PTSD, as it unfolds. This will be the first time a film will show participants in a psychedelic-assisted therapy trial before, during and after their therapy. The film will follow participants until a year after the therapy to assess its long-term effect.

For a number of reasons, the studies remain contentious. Critics raise issues about public safety, the unpredictability of psychedelic substances and other matters, which will be amply explored in the film. Indeed, psychedelics pose unique challenges, unlike any other class of drugs being studied as medicine. This is where the role of the humanities is critical. The age-old history of humans and psychedelics, the contrasting attitudes toward them in different cultures and the philosophical issues raised by their consciousness-altering properties are important aspects the film will examine. By exploring how these topics intersect with psychedelics, the film intends to offer a fresh perspective on our cultural values.

Visually, this film will blend an array of techniques and formats to support its content and tell a compelling story. 3D animation and CGI will be used to illustrate cutting-edge neuroscientific discoveries about the brain on psychedelics. A vast range of archival footage will bring historical periods to life, while interviews with leading scholars will provide context. Character-based observational scenes will take us inside new trials as they unfold.

Directors' Statement

Forbidden Knowledge is the first documentary in the mainstream media to fully explore the topic of psychedelic-assisted medicine. Aiming for a national PBS broadcast, we approach this topic not only with the joy and passion of exploration, but with a profound sense of civic responsibility to inform an important and contentious debate.

To do this, we intend to go beyond simply providing screen time for opposing views. Presenting the controversy over psychedelics as black-and-white or merely a two-sided dispute

would miss the nuanced range of viewpoints on this topic. The opposition side alone includes staunch opponents who believe the work is dangerous or has no value, skeptics who want more and better studies, and those who simply urge caution. Proponents are not all of one mind either, differing on the appropriate level of regulation and breadth of medical use. MAPS, the leading advocacy organization, admits the “uncontrollable complexity” of the drugs’ effects presents a challenge in standardizing medical trials, and supports a long-term, nuanced approach.

We believe a serious examination of any controversy can only take place when the strongest arguments of all sides are presented and interlocutors are asked to grapple with views that differ from their own. It is not only intellectually more honest, but makes for a more compelling film. With this in mind, we intend to present the strongest available arguments from all credible viewpoints. Our aim is to enable the audience to draw their own conclusions.

While some of the trials show higher success rates than currently used therapies, the very idea of a “miracle drug” should raise red flags for anyone familiar with the history of pharmacological psychiatry, especially in recent decades. A number of new drugs have been introduced with fanfare to combat anxiety or depression, only for us to learn later about dangerous side effects, or that benefits were overstated. Given that recent history, which will be mentioned in the film, psychedelics should be thoroughly tested by non-biased researchers and viewed with caution before FDA approval.

We’re particularly excited about the NEH call for projects about science, because the topic of mind-altering psychedelics demonstrates how our understanding of the universe is enriched by a multidisciplinary approach. It requires disciplines such as neuroscience and pharmacology, but also interrogates what philosophers have called “the biggest question of all” -- the nature of consciousness. Exploring the meaning of the mystical experience triggered by hallucinogens took us to unexpected places where evidence-based science and theology intermingle. A simple but profound example: at the Large Hadron Collider, the most complex machine ever built, a major discovery was recently made through the collision of subatomic particles. Known as the “Higgs boson,” it was the “God Particle,” a suggestion that its existence helps us reinterpret our place in the universe. Whether discussing the invisible nature of the dark matter of the universe, or the impact of psychedelics on neurotransmitters, ignoring the humanities can only result in impoverished thinking.

PBS has 350 local station Programming Directors attentive to local sensitivities. We intend to make a film that will be embraced by all of them. In addition, we aim with this film to create a valuable educational tool, as we’ve done with our previous films (see bios). Nearly half of Americans over 12 have used an illicit drug, and we will make sure nothing in this film encourages any recreational use, but rather cautions against it. As always the proof is in the proverbial pudding -- we believe this proposal adequately reflects our commitment to a nuanced and well-rounded exploration of its topic.

B. HUMANITIES CONTENT

Introduction

When we started researching the recent re-emergence of psychedelics in therapy and medicine, we did not expect such a rich and multi-layered topic. We did not anticipate the Spanish Inquisition and the Large Hadron Collider, the ideas of Galileo and William James and the poetry of William Blake to find relevance in this proposal.

Science and culture interact in unexpected and complex ways in this film. While recent trials with psychedelics clearly raise intriguing questions in psychotherapy, pharmacology and brain research, the perspectives of history, philosophy and religion are crucial for putting these mysterious molecules and the controversies that surround them into a proper context. Our interest is in broadening the conversation. We intend to do that by placing the current experiments within Western culture's age-old struggle to understand the meaning of the psychedelic experience, and to explore what this struggle tells us about ourselves.

The humanities themes in this film focus on four interrelated topics:

- Viewing the history of humans' relationship with hallucinogens within the context of "**Forbidden Knowledge**" – information considered both alluring and dangerous. From discoveries that threatened prevailing dogmas, such as Copernicus's assertion that the sun and not the earth is at the center of our universe, to innovations that may cause great harm as well as benefit, such the splitting of the atom and genetic engineering, societies have determined their own blacklists.
- While Western societies have always been suspicious of mind-altering substances, that has not been the case universally. The **Contrasting Attitudes** of Western and tribal cultures toward psychedelics have intrigued anthropologists for centuries. The same substances are agents of social integration in indigenous cultures yet often have a disruptive, anti-social effect in the West. What does that suggest about our culture and values?
- Besides their social effect, psychedelics are known for triggering cosmic-mystical "trips." Mainstream "hard sciences" have no modalities for such non-measurable, yet undeniable phenomena, and the recent trials have challenged researchers to stretch scientific thinking to its limits. Some have embraced the nonlinear and unpredictable nature of our universe. Can psychedelics-induced transcendental experiences offer new insights into worldviews that **straddle the divide between science and spirituality**?
- Psychedelics challenge not only scientists but philosophers as well. Since Ancient Greece, philosophers and others have been preoccupied with the elusive nature of our thoughts, how we perceive reality and who does the perceiving. Today, whether the human mind is unique or not, comprehensible or not, is hotly debated by theologians, cognitive scientists, psychiatrists and even computer engineers. Can the profound mental shifts triggered by psychedelics reveal something fundamental about "**The Biggest Question of Them All**" – **Consciousness**?

Theme #1 - Forbidden Knowledge: Psychedelics in the Context of the History of Science

Intro

Psychedelics can be viewed as a form of knowledge. It is primarily an experiential knowledge, one with powerful implications. In tribal societies, psychoactive plants are commonly used in, spiritual or initiation ceremonies, as a gate to the world of carefully preserved wisdom. In the West, numerous accounts credit psychedelic experiences with a profound influence on people's lives, for better or for worse. Great works of art and technological breakthroughs are associated

with this influence, but so are suicides and psychotic breakdowns. The same substances alleged to trigger unparalleled mystical and visual experiences also inspire abuse and anti-social behavior. They have been studied, worshipped, regulated, and used in a wide range of treatments. They are currently banned in the entire Western World.

Looking at the turbulent relationship humans have had with psychedelics since early history, the film will examine hallucinogens within the concept of “forbidden knowledge” – information deemed both tempting and perilous. It will draw a parallel with certain watershed discoveries in the history of science, from Galileo’s astronomical findings to the splitting of the atom, which were also seen as “forbidden knowledge” at certain times.

It will raise questions about the limits of the freedom of scientific research. If in the past the objections to new ideas may have mostly come from flat-earthers and defenders of church dogma, in today’s world considerations such as public safety and patients’ rights must be taken into consideration. The field of biological psychiatry, in particular, has seen more than its share of “miracle drugs” which were later discovered to be harmful.

Forbidden knowledge and psychedelics in ancient times

Are there things that we should *not* know? Can anyone in our secular and rational culture seriously propose limits on knowledge in the Age of Information? Throughout history, the tension between the desire to discover and the power to restrict access to knowledge has been among the most dynamic currents forming our culture and knowledge base. The late Roger Shattuck, a National Book Award winner and President of the Association of Literary Scholars and Critics, explored this aspect of the history of science at length in his book *Forbidden Fruit: From Prometheus to Pornography* (1997). Shattuck traced the origin of prohibited knowledge to the biblical story of Adam and Eve eating the forbidden fruit of the Tree of Knowledge. Another relevant Old Testament story is that of the Tower of Babel; those wielding new technological know-how in an effort to approach God were punished by suddenly being rendered unable to understand each other.

In ancient times, shamans and herbalists closely guarded information about their methods of preparing mind-altering substances and the elaborate rituals surrounding their ingestion. Psychoactive plants and fungi, inspiring secret ceremonies and credited with mystical properties, were destined from the beginning for the label of “forbidden knowledge.” In ancient Greece, the annual Eleusinian Mysteries, religious practices that were celebrated by such historic figures as Socrates and Plato, centered on an ecstatic rite induced by a psychotropic brew. The brew was believed to enable a direct connection between the human soul and divine consciousness. According to historian Will Durant in his book *The Life of Greece: The Story of Civilization* (1939):

In this ecstasy of revelation...they felt the unity of God and the oneness of God and soul; they were lifted up out of the delusion of individuality and knew the peace of absorption into the deity.

Psychiatrist Thomas Szasz notes in *Ceremonial Chemistry: The Ritual Persecution of Drugs, Addicts, and Pushers* that the Greeks identified a connection between healing and toxic drugs. The Greek root of the prefix “pharmaco” means both medicine and poison.

But in the 4th century A.D. the ancient practices came to an end. Roman emperor Theodosius, intent on destroying what he saw as a pagan threat to Christianity, shut down the Mysteries forever. This is the first event recorded in history in which the authorities considered psychedelics as undermining prevailing theology and social control.

In medieval Europe, the connection between psychoactive plants and healing was kept alive, but because these practices were associated with paganism, they were persecuted by the church. Healers, mostly females who were excluded from institutions of learning, were punished with

fines, flagellation, excommunication and exile for their use of psychoactive brews of belladonna and mandrake roots. According to Dr. William Minkowski in *Public Health Then and Now, American Journal of Public Health* (1992), these healers often became the targets of deadly witch-hunts, promoted by the church and supported by civil authorities.

Both the Greek rites and the medieval practices sought a direct connection between the practitioner and the divine, bypassing the role of the church as intermediary between man and God. Such challenges to the supremacy of the church, whether from psychoactive rites or from burgeoning scientific exploration and invention that was soon to emerge, were bound to meet with powerful opposition. Most texts of esoteric or “occult” nature were prohibited by the Church. The world they represented, of magic and the supernatural, was now viewed with contempt, and psychoactive plants were part of it (See Theme #3: Contrasting Attitudes). No sooner was movable type invented and books printed than the Catholic Church created its first list of prohibited books. The burning of books began in the 16th century.

The most prominent instances of Forbidden Knowledge came early in the 17th century, though they were labeled at the time more bluntly, as “heresy.” Astronomers Nicolaus Copernicus and Galileo Galilei presented proof that the sun and not the Earth is the center of our universe. Future generations came to see these discoveries as heralding the dawn of modern science, but at the time their meaning was considered more ominous. The notion that the sun and all stars in the heavens revolved around the Earth was a fundamental article of belief, a sign of the central place God had provided to his chosen creatures: mankind. The astronomers, using calculations and observations while ignoring the authority of sacred texts, threatened to upend the entire cosmology of the Judeo-Christian world. Their transgressions were punished with severe church sanctions and Galileo was left to die under house arrest.

Around the time of these discoveries, European colonialism came to dominate Africa and the Americas, where indigenous spiritual practices using mind-altering substances were prevalent. For the Colonialists, the rituals were not only a rejection of Christian monotheism, but also a form of resistance to foreign rule. Just as troubling for the church was the fact that these pagan ceremonies promoted direct communications with the divine. In 1620, as Galileo was becoming embroiled in controversy with the Church, the Spanish Inquisition in Mexico outlawed peyote rituals. Those caught ignoring the command often met with torture and death. Historian Robert C. Fuller chronicled in his book *Stairways to Heaven: Drugs in American Religious History* (2000) the dominant role of the church in Spain’s new territories:

By the time of Christopher Columbus, European religious life was highly bureaucratized. Ecstatic states were restricted only to those under the careful control of the church.

Despite the prohibitions, clandestine use by tribal natives survived through the centuries. In the United States in the early 20th century, peyote ceremonies by Native Americans in the Southwest alarmed government officials, who launched a campaign to eradicate them. Legal battles raged until 1993, when Congress recognized the constitutional rights of Native Americans to use psychedelic plants in their religious practices.

A contemporary take on the reasons psychedelics have inspired discomfort in the West comes from neuroscientist Roland Griffiths. One of the nation’s leading drug-addiction researchers, Griffiths conducts FDA-approved studies examining the effects of psilocybin (the psychedelic chemical in “magic mushrooms”). According to Griffiths:

There is such a sense of authority that comes out of the primary mystical experience that it can be threatening to existing hierarchical structures.

Modern science and contemporary prohibitions

Modern science arrived in the 17th century, following discoveries of Copernicus and Galileo. Groundbreaking works, such as Isaac Newton's radically revised model of the universe, changed human understanding of the cosmos, triggered the Scientific Revolution, and informed the Enlightenment movement. The ascendance of science to prominence in the eyes of the public was supported by a prevailing belief that science was a pure search for objective truth. The new religion of secularism was bound to put its faith in evidence-based scientific progress and the value of unfettered freedom to pursue research.

Psychedelics entered the realm of modern science in the mid 20th century, when laboratories began to synthesize psychoactive drugs, sparking wide-ranging scientific inquiry. It was a time when attitudes toward science were evolving. The nuclear age at the end of World War II ushered in the specter of utter annihilation, and the notion that science had become too potent to be left unsupervised began to gain wide support. Demands rose for stricter regulations of scientific experiments. In 1956, for the first time, public opinion coalesced behind a proposal for a nuclear test ban. A few years later the FDA was given broad powers to regulate new drugs, which included psychedelics.

A more nuanced public understanding of science emerged: not as pure objective truth, but as a set of conclusions reached through methods that were inevitably colored by the opinions and motivations of the scientists themselves. Peter Bowler and Iwan Morus describe in their book *Making Modern Science* (2005) the growing public recognition of the variety of influences that shape how scientists construct their models of the world:

These influences vary from philosophical commitments to political values, from professional interests to organizational priorities.

The first production of recombinant DNA molecules in the 1970s, the Human Genome Project from the mid 1980s to its conclusion in 2003, the cloning of Dolly the sheep in 1996 and embryonic stem cell research in the 2000s, not to mention the entire field of climate research, have met with sustained controversy, as have numerous research projects of the U.S. National Institutes of Health. New legislation and regulations, along with growing public awareness, provided new controls to unimpeded scientific freedoms. In his book *Forbidden Fruit*, the aforementioned Roger Shattuck was adamant that the modern concerns for safety should trump all other considerations, especially in the field of medicine:

The sacred freedoms of inquiry, thought, and speech on which scientific research is founded do not include the freedom to do harm.

Philosopher of science Nicholas Rescher concluded in his book *The Limits of Science* (1984) that even a free society must put boundaries on the freedom to acquire knowledge or:

...we may well have to pay a price for knowledge in terms of moral compromise.

The debate between freedom and protection, between community needs and personal rights, is bound to be contentious. Some voices push for near-complete freedom to conduct scientific research. Among them is the acclaimed sociobiologist Edward O. Wilson. At the end of his immense tome, *Sociobiology: The New Synthesis* (1975) he wrote:

To maintain the species indefinitely we are compelled to drive toward total knowledge, right down to the levels of the neuron and gene.

Safety concerns aside, even contemporary and relatively open-minded societies still find certain new discoveries troubling when they appear to threaten core beliefs and values. Describing such a dynamic of resistance in *Incognito* (2012), David Eagleman reaches back to the early instances of "Forbidden Fruit:"

Humans used to believe they were the center of the universe. Then Galileo discovered that the Earth revolves around the Sun and Darwin that humans were just another branch of the animal kingdom. In the early 1900s quantum mechanics altered our sense of the very fabric of reality. In 1953 Crick and Watson deciphered the code of DNA. Human life was no longer a mystery, but something that can be written down in 4-letter sequences and stored on a computer. And neuroscience showed that consciousness isn't in the driver seat. Dethronement is the process in which humans discovered they are inconsequential in the cosmos.

According to studies by the National Resource Center (2000, 2004), the frontiers of science are generally located at the intersections among disciplines. Scientific advances are more likely to arise when scientists from different disciplines are brought together to collaborate. During the years of legal research of psychedelics, from the 1950s to the early 1970s, these substances migrated among disparate scientific disciplines including biochemistry, pharmacology, psychiatry, and finally, neuroscience. Over 1000 clinical papers appeared along with several dozen books, describing the potential medical and therapeutic potential of psychedelics from a range of perspectives. But despite this interdisciplinary character, promising trial results and considerable government investment, psychedelic research came to a halt when it hit “a perfect storm” of modern concerns for public safety and the age-old resistance to offensive ideas. These combined to label the substances once again “Forbidden Knowledge.”

The Rise and Fall of LSD

The story of how LSD the “wonder drug” became a substance of abuse is among the defining narratives of mid 20th century America. It is told in detail in the Treatment. Using interviews with historians and extensive records (including the recently-released patient files of LSD treatments at the Hollywood Hospital), the film will reach beyond the familiar narrative that attributes the ban on psychedelics solely to President Nixon’s backlash against the 1960’s counterculture and the anti-Vietnam War movement. In fact, there were significant concerns for public safety. There was a media frenzy and pressure on elected officials for oversight, as well as a desire by pharmaceutical companies to ban competing medications that could not readily be patented and made profitable. These forces all came to bear on the criminalization of psychedelics. For a detailed account, please see Act II in the Treatment section.

To understand the process which lead to the banning of all psychedelics in 1970 requires the context of the history of medicine of that period. LSD, first synthesized by Albert Hoffman in the Sandoz Labs in Switzerland, was becoming a widespread drug of experimental therapies in the 1950s, just when a wide-ranging psycho-pharmacological revolution was triggered by the discovery of Thorazine. For the first time, psychiatrists could treat patients with pills.

LSD arrived just as the idea that chemicals can affect the brain in ways that cure mental disorders first gained traction. Psychiatrists and physicians in general enjoyed a privileged place in American society and controlled public access to drugs. Celebrating the exalted position of the profession, Dr. Louis Orr, the American Medical Association president, said in 1958:

Americans have come to believe that science is capable of almost anything.

It took only one misstep for public faith in medical authority to be shaken. In 1961 it was determined that the drug Thalidomide was responsible for 8000 babies being born with birth defects, and for an unknown number of abortions. Responding to public demands for tighter controls, Congress passed the Kefauver-Harris amendments, giving the FDA control over all experimental drug research. For the first time, drug manufacturers were required to prove to the FDA the effectiveness of their products before marketing them. Congress acted shortly after Dr. Sidney Cohen, a Los Angeles psychiatrist who had previously been enthusiastic about LSD’s potential, testified that the drug was becoming widespread on the street. Cohen warned

against LSD's risks of suicide and psychotic reactions. From that point on, all LSD research required prior approval by the FDA.

In 1966 California banned LSD. In 1970, President Nixon signed the Controlled Substance Act, placing all psychedelic drugs in the most restrictive category; Schedule I. Psychedelics were grouped, as they still are, with cocaine and heroin, in a category described as:

No currently accepted medical use and a high potential for abuse. Schedule 1 drugs are the most dangerous drugs of all the drug schedules with potentially severe psychological or physical dependence.

The modern trajectory of psychedelics should be viewed in the context of other drugs once seen as potential medical treatments. Drug historians have long held the theory that drugs conform to cyclical careers or patterns involving, typically, intense periods of enthusiasm, therapeutic optimism, critical appraisals, and eventually, limited use. In today's world, these cycles are part of a complex universe, influenced by consumer habits, government regulations and corporate lobbying effort.

Psychiatrist Max Siegel, who applied his concept of "siege cycles" to examine the careers of psychotropic drugs in modern medicine, took into account complex factors including biomedical research, marketing, industry, and consumer demands. Siegel concluded that drugs circulate through fairly consistent patterns that ultimately wane into disuse. The length of time for the cycles differs from one substance to the next. Another drug cycle historian, David Courtwright, tracked trajectories of a host of pleasure-oriented substances, from coffee and wine to nicotine and opium in *Forces of Habit: Drugs and the Making of the Modern World* (2001). He too suggests examining the trajectory of drugs through a period of fascination, medicalization, regulation, and then market availability or prohibition.

The impact of the 1970 ban was far-reaching. As one prominent researcher put it, "It was as if psychedelic drugs had become undiscovered." The Johns Hopkins researcher Roland Griffiths asks rhetorically in a *New Yorker* article (2015) by Michael Pollan:

Can you think of any science regarded as so dangerous and taboo that all research gets shut down for decades? It's unprecedented in modern science.

The Revival of Psychedelic Drug Studies

With the recent approval by the FDA of studies with psychedelics, we may be at the beginning of a new cycle. In the mid-2000s the FDA began to approve a few highly controlled, double blind trials for a small number of subjects and under strict protocols. The studies used psychedelics along with talk therapy, treating patient volunteers suffering from serious disorders including PTSD, alcoholism and chronic depression. Among the leading researchers are Dr. Michael Mithoefer who treats PTSD victims with MDMA, and Dr. Steve Ross at New York University, who uses psilocybin ("magic mushrooms") to help advanced cancer patients to cope with their distress. Dr. Mithoefer has allowed us film access to his next study— see Dr. Mithoefer's letter of consent in Attachment #9: Related Documents. Project advisor Frank Miller, a medical ethicist who supervised clinical trials for the National Institutes of Health, has been consulting us to ensure patients' rights are not compromised by the filming.

One of Dr. Mithoefer's patients, a U.S. veteran who underwent trial therapy for PTSD, Nigel McCourry, described to his experience on camera:

It prepares the brain to have a healing experience. When I was on the MDMA, I felt for the first time like I was able to clearly see the individual components that were working together to create PTSD. Before, it just seemed like this jumbled up mess of psychological junk that I couldn't work through. It was like the MDMA gave me an aerial view of the terrain.

By modern standards, many of the studies done in the 1950s and 60s are now considered “bad science.” In *The New Yorker* article *The Trip Treatment* (2015), Michael Pollan cautioned:

Many of the studies were, by modern standards, poorly designed and seldom well controlled...When there were controls, it was difficult to blind the researchers – that is, hide from them which volunteers had taken the actual drug.

Determined to avoid past mistakes, today’s researchers follow rigorous scientific methodology and are guided by strict safety protocols. They have to satisfy the requirements of new actors who were not present at the pre-ban era. Detailed consent forms, for example, are the result of the emergence of bioethical professionals who advocate for patients’ rights. Approval is required from regulatory agencies such as the FDA and the DEA.

Whether further trials (the final Phase III) will be approved is still uncertain, and depends largely on the results of smaller studies. In Federal institutions, we come across a range of viewpoints on continuing the psychedelics research. Thomas R. Insel, a neuroscientist and until recently the director of the National Institute of Mental Health (N.I.M.H.), is encouraging:

If it proves useful to people who are really suffering, we should look at it. Just because it is a psychedelic doesn’t disqualify it in our eyes.

However, Dr. Nora Volkow, director of the National Institute on Drug Abuse (NIDA), cautions: *It is important to remind people that experimenting with drugs of abuse outside a research setting can produce serious harms.*

While psychedelic researchers are encouraged by the results of their studies, there are a number of prominent voices of caution among their colleagues. John Mendelson, Senior Scientist at the Addiction and Pharmacology Research Laboratory at California Pacific Medical Center Research Institute, raises a concern regarding the unpredictable nature of psychedelics. He says there is no way of ensuring that none of the patients will have a psychotic breakdown, raised blood pressure or other negative effects. Would it be more responsible for the medical profession to establish a unifying neurobiological theory for the effects of psychedelics first, as Dr. Mendelson advocates, before using these drugs with real patients?

Peter D. Kramer, author of the best-selling *Listening to Prozac*, elucidates a different type of reservation, based on philosophical and ethical concerns. Kramer’s concern is that LSD “encourages self-absorption,” and that unlike SSRIs such as Prozac, LSD is “pleasurable in itself and induces distortion of reality.” The danger is of people seeking to repeat, often, an experience that disconnects them from reality.

Dr. Herbert Kleber is a psychiatrist at Columbia University Medical Center and director of the Division on Substance Abuse at New York State Psychiatric Institute. He is among the skeptics, noting that the small number of subjects in the recent studies and their careful selection may have tipped the scale in favor of best outcomes. This means that the mostly positive results reported so far cannot predict reliably similar outcomes in larger studies. Dr. Kleber worries that once psychedelic drugs are approved for therapy, they will inevitably fall into the hands of therapists who are not as highly skilled as the current crop of dedicated researchers:

The question is, is it ready for prime time?

Theme #2 - Contrasting Western and indigenous attitudes: What a long journey it has been

Human history suggests that without a social vessel to hold the wine of revelation, it dribbles away...even the most extraordinary experiences provide lasting benefits to those who undergo them only if they become the basis of ongoing work. The next question is, what conditions of community and practice best help people hold onto what comes to them in those moments of revelation, converting it into abiding light in their own lives. In the end, it's altered traits, not altered states that matter.

Huston Smith, *The World's Religions* (1958)

Mind-altering drugs are used in all parts of the world, but societies have differed widely in their attitudes toward them. Substances that act as agents of social integration in indigenous cultures have often had a disruptive, anti-social effect in the West. In contrast to tribal societies, the West has developed deep-seated attraction / rejection ambivalence toward mind-altering drugs. Clearly, hallucinogens have assumed different cultural meanings depending on the context of their use - as substance of abuse, of treatment, of social non-conformity and of spiritual rituals. Examining the historical and intellectual background of our society's views on psychedelics offers insights into our culture and ways of thinking.

A pro-social role in indigenous cultures:

At least 150 psychoactive plants and fungi are known to humans, and they vary greatly in their effects. Most grow in the Americas, but they are found on every continent save Antarctica. The desire for intoxication appears to have occurred throughout recorded history and across diverse cultures. Author-physician Andrew Weil in *The Natural Mind: A New Way of Looking at Drugs and the Higher Consciousness* (1972) and psychiatrist Ronald Siegel in *Intoxication* (1989) both reached the same conclusion that humans have always ingested mind-altering drugs. Cave drawings appear to indicate that humans worshipped with mind-altering substances as long as 5,000 years ago. Today, indigenous societies from locations as far-flung as the African savannah, the Amazonian jungle and the Siberian tundra continue to practice religious rituals centered on psychoactive plants and fungi.

Since the 18th century, anthropologists investigating tribal societies have noticed that the plants created spiritual experiences and meanings that were vastly different from what they themselves experienced. This was widely explained by the fact that the indigenous people's lives and worldviews were so different. This concept is particularly well described by Marlene Dobkin de Rios in her book *Hallucinogens: Cross-Cultural Perspectives* (1984).

By and large, tribal cultures consider psychoactive plants an integral part of religious ceremonies. Anthropologist Erika Bourguignon analyzed data of 500 traditional societies in her book *Religion, Altered States of Consciousness, and Social Change* (1973). Of the 500, 91% had "institutionalized, culturally patterned forms of altered states of consciousness... in a sacred context." Psychedelic-based ceremonies made for the most important dates on the annual calendar. They were conducted by shamans or priests and inspired a sense of community, cultural integration, and shared values.

Andrew Weil provides a psychological and social perspective on the anthropological observations. Two main variables, known as "Set" and "Setting," explain how an ingested drug's effects may differ from person to person. Set is the individual's mood, personality, and expectations of what a drug will do. Setting is the environment, both physical and social, in which a drug is taken. The "set and setting" concept is now a broadly accepted theory about how the effects of psychedelics are mediated.

According to Weil, the cultural setting is key to the pro-social role psychedelics play in the indigenous community. He points to Amazon Indian tribes who use hallucinogenic concoctions regularly. Because they are ingested during organized rituals and are orchestrated by a respected shaman, the practice is not seen as an act of defiance, but rather partaking in a communal tradition.

In small societies, whose environment requires community vigilance and collaboration against constant threats and enemies, the need for every member to conform to the group's values and modes of behavior is a survival imperative. In such tribal societies, hallucinogen-centered ceremonies can be viewed as not only responding to a religious and cultural call, but performing a vital evolutionary role.

Similar reports appear in contemporary anthropological accounts of indigenous communities in Mexico, where people often credited the peyote ceremonies for keeping them from drinking, even where alcoholism was pervasive among their neighbors who did not regularly use psychedelic drugs. Anthropologist Nicolas Langlitz (one of our advisers), reports that peyote initiation ceremonies among the Huichol Indians in Mexico are used to inspire youngsters – not to become rebels, but full members of the tribe, compliant with its customs.

This pro-social effect was observed also among urban groups in Brazil who also use psychedelics in an organized religious setting. In the 1990s, UCLA psychiatrist Charles Grob studied members of the Santo Daime church that uses an Amazonian psychedelic plant regularly as a sacrament. Grob reported:

We found noticeable differences between the group of regular practitioners and our control group. Those who regularly took part in the psychedelic rituals were distinctly better adjusted socially – they held steady jobs, were close to their families, and volunteered in the community.

Western world rejects ancient traditions

Even though psychedelics reliably cause the same chemical changes in every human brain, in the West they tend to produce the opposite social effect. In contrast to the pro-social role in indigenous communities, mind-altering drugs have historically inspired rebelliousness, disengagement and even criminal behavior in our culture. Most commonly we identify this observation with the various forms of social ferment and escapism associated with the explosion of street drugs such as LSD in the late sixties. But Western literature has presented anti-social and non-conformist associations with mind-altering drugs much earlier, for example in Thomas De Quincey's *Confessions of an English Opium Eater* (1821), or Samuel Coleridge's poem "*Kubla Khan: or, a Vision in a Dream.*"

Much of this contrast can be explained by the difference in the "setting" between indigenous faith-based ceremonies and Western recreational use, and between cultures that recognize a natural human drive to experience altered states of consciousness and those like ours which are conflicted about such practices. This journey that psychedelics have made from their tribal origins to the West offers certain insights about our culture.

Historically, in Western culture psychedelics and their attendant mystical properties were viewed as part of what Dutch historian Wouter Hanegraaff calls the "ancient wisdom narrative." This refers to a cluster of practices and philosophies we recognize as pagan or esoteric, and associate with the magical and supernatural. Countless psychoactive connotations – from witches' brew to visionary warping of space and time – fit easily into popular conceptions of the occult.

That any of these ancient texts survived is due to the influence of Platonic philosophy that encouraged an open debate between a range of viewpoints, according to Hanegraaff. These

included religious and philosophical traditions from late Antiquity that challenged the foundations of biblical religion and Greek rationality, and which came to form an important part of our early intellectual history. In the 1500s, the complete dialogues of Plato became available in Latin. Hanegraaff says Plato's enduring influence enabled Florentine humanists to appeal to the Fathers of the Church to preserve texts of magic, Jewish Kabala, and the Persian religion of Zarathustra, claiming they did not oppose Christianity. At that pre-printing era, the Church held absolute power on which texts were allowed to survive. Those deemed considered forbidden knowledge (were simply burned.

But times were changing. Historian Frances Yates tracks in *Occult Philosophy* (1971), how by the end of the 16th century the Catholic Church accepted the view that these texts were dangerous. The Pope issued a condemnation of "witchcraft" for the practice of using cannabis for sacrament, instead of wine. This movement of intolerance culminated with the burning at the stake of philosopher Giordano Bruno for heresy in 1600.

In his book *Esotericism and the Academy: Rejected Knowledge in Western Culture* (2012), Hanegraaff demonstrates that even more damaging-than Church censorship were the new discoveries in philosophy and natural sciences in the 17th century (see the Forbidden Knowledge). The "ancient wisdom narrative" was losing intellectual credibility when its underlying assumptions were challenged by the dawn of modern science in the times of Galileo and Newton, Descartes and Locke.

Isaac Newton embodied the dichotomy between modern science and belief in the occult and the magical because he straddled both. A. C. Grayling, in *The Age of Genius: the 17th Century and the Birth of the Modern Mind* (2016), describes Newton as a rigorous, mathematical scientist, but says that as a man of his times, the old concepts of alchemy and numerology were to Newton as real as mass and force.

John Locke laid out at length a new conception of the mind in *Essay Concerning Human Understanding* in 1688. Enormously influential, the book introduced a naturalistic theory of the inner life. Locke rejected anything mystical and replaced "soul" with "mind." In Holland, Baruch Spinoza was formulating his own secular and materialistic view of the universe. New ideas travelled faster and farther for a number of reasons. According to Grayling, the breakdown of authority during the Thirty Year War (1618 – 1648) enabled freedom of thought to flourish. Another contributing factor was the development of a reliable postal service, which facilitated scholarly exchange and open debate.

In the ensuing Enlightenment era, ancient esoteric ideas became incompatible with the dominant intellectual culture. They were labeled as "occult" and expelled from academic learning. If in Renaissance times the Church held the power to decide what knowledge and convictions are passed on from generation to generation, in post-Enlightenment times that role was taken over by academia. The rise of science and secular philosophy required a new concept of knowledge, based on observation, not authority. As George Makari puts it in *Soul Machine: The Invention of the Modern Mind*,

To find out about the world you had to observe it with your senses, then make inferences using your faculty of reason, not study ancient texts.

This kind of empiricism involved rejecting the entire hierarchy of learning that had been taken for granted for centuries. By the end of 18th century, Wouter Hanegraaff explains, "the Western traditions of Platonism gave way to a worldview we call 'modern.'" Plato's hero escaped from the cave of the senses and saw the sun of mind outside.

By the time powerful mind-altering substances were introduced to the West in the middle of the 20th century, our worldview had been shaped by centuries of wholesale debunking of ancient bodies of knowledge, as primitive and backward. Philosopher Karl Popper argued that Western identity is informed in part by what we perceive as the “other.” Celebrating the supremacy of scientific rationalism in *The Open Society and Its Enemies* (1945) Popper was blunt about what is to be considered the contemptible “other:”

This civilization has not yet fully recovered from the shock of its birth — the transition from the tribal or “enclosed society,” with its submission to magical forces, to the “open society,” which sets free the critical powers of man.

Theologian Jeffrey Kripal, an adviser to the project, named “the study of anomalous states of cognition and consciousness” as an example of an important topic that suffers from a lack of serious academic study, an area to which mind-altering drugs could make a significant contribution. David Egleman in his book *Incognito* (2012) reached the conclusion that material processes cannot yield a full explanation of how the mind works. His prediction is that to reach such an understanding will require us to go back to formerly discredited areas of human knowledge:

The likelier scenario is that the more we learn about the brain and consciousness, the stranger, not simpler, things will get.

Current viewpoints

Of course contemporary Western culture is far from monolithic and the rejection of certain forms of knowledge could never be complete. In science, quantum mechanics, chaos mathematics and other recent disciplines have altered our sense of the very fabric of reality and embraced paradoxical ways of thinking (See the Science-Spirituality theme). In psychology, the Human Potential movement was influenced by the humanist ideas of 19th century thinkers and the early American psychology of William James, who associated drug-induced altered states with divine illumination. The immensely popular New Age movement, which was influenced in part by Aldous Huxley and Gerald Heard, English visionary writers who experimented with paranormal events and psychedelics, proved hospitable to the esoteric and the metaphysical.

This non-static fluidity of Western worldview is described by Kripal, in his article *Visions of the Impossible*:

Western intellectual history over the last two and a half millennia has seen immense swings back and forth between a Platonism and an Aristoteleanism, that is, between a philosophy rooted in mystical, intuitive, and visionary experience and an empirical rationalism that bases its knowledge on sense data, linear logic, and mathematical measurement. We never seem to get it just right, to strike a balance.

Still, in the halls of academia, humanities scholars have seen the evidence-based scientific mindset push aside other worldviews. Literary critic Victoria Nelson described this mindset in her book *The Secret Life of Puppets* (2002):

The greatest taboo among serious intellectuals of the century just behind us, in fact, proved to be... the heresy of challenging a materialist worldview.

Whether one subscribes to a God-centered universe or to a secular worldview based on reason, one is part of a culture that has long ago rejected the old pagan ways of the cosmic and supernatural. The anti-social attitudes inspired by mind-altering drugs in the West may be one response to navigating the complexities of living in the 21st century, yet they still raise relevant questions for contemporary Western society: Are psychedelics agents of personal transformation, of social upheaval, or both? Do we encourage the non-conformism they promote or prioritize conformism in the name of social stability and cohesion?

Questions also arise when thinking about civic community and the notion of the commonwealth. Even if psychedelic-assisted therapies prove safe and effective for certain disorders, will they trigger tension between the common good and individual rights? This may well be a topic of future debate around the medical use of psychedelics. The film will give expression to such questions not only through expert interviews, but also via man-on-the-street soundbites that will reflect a vox populi of our attitudes to psychedelics.

I am... struck by a curious symmetry between people who abuse drugs and people who study them. The person who is convinced that highs come in drugs, if he is negatively oriented toward society, becomes a drug abuser; if he is positively oriented toward society, he becomes a drug researcher.

Andrew Weil

Theme #3 - Science and Spirituality: Clashing or Complementing Cosmologies?

Intro

It is quite certain that we can never get a sufficient knowledge of organized beings and their inner possibility, much less get an explanation of them, by looking merely to mechanical principles of nature.

Emmanuel Kant, *Critique of Judgment*

At least since the time of the Enlightenment, the realms of science and spirituality have largely been considered separate, even as individual scientists and men and women of faith have struggled to reconcile the two. Science is defined by its method, a fact-based form of inquiry based on experimentation. Spirituality is treated as a matter of faith, evidence or no, which does not lend itself to exploration through traditional scientific modalities. Psychedelics however, are known for triggering mystical experiences. For some of the researchers investigating them, this offers an opening to try and bridge the gap between the two systems of belief.

Psychedelics Induce Spiritual Experiences

The divine is to be found in an inner experience; psychedelics serve as the chemical keys to the God within.

Nicolas Langlitz, *Neuropsychodelia*

The very name “psychedelic” means “mind-manifesting” in Greek. The term was coined by British addiction therapist Humphrey Osmond, who had made a name for himself treating alcoholics with LSD, with a high success rate. He first mentioned “psychedelics” in a 1957 letter to his fellow countryman, the author Aldous Huxley, after the pair experimented together with hallucinogens. To Huxley, psychedelics revealed our senses to be an untrustworthy filter. He felt the drugs offered a gateway to a plane of reality that our conscious mind normally hides from sight. Invoking the poet William Blake, he titled his cult-classic meditation on the topic *The Doors of Perception*

*If the doors of perception were cleansed,
every thing would appear to man as it is, infinite.
For man has closed himself up, till he sees all
things thro 'narrow chinks of his cavern.'*

William Blake, *The Marriage of Heaven and Hell*

In a wry response to his friend, Osmond replied,
To fathom hell or soar angelic / just take a pinch of psychedelic.

As Osmond was aware, sensations of awe, terror, sacredness and ego dissolution are distinctive, cross-cultural hallmarks of both spiritual experience and the experience of taking psychedelics.

According to psychiatrist Neal Goldsmith in his book *Psychedelic Healing* (2011), none of the other methods commonly used to access spiritual experience, such as prayer, fasting, meditation, and breathing techniques, produce the mystical state so reliably.

The quest for spiritual experience is universal, according to Huston Smith, author of *The World's Religions* (1991) the definitive text on comparative religions, and the subject of Bill Moyers' PBS series *The Wisdom of Faith with Huston Smith* (1996):

Mystical experience seems to be as old as humankind, forming the core of many if not all of the great religious traditions. Some ancient cultures, such as classical Greece, and some contemporary small-scale cultures have made use of psychoactive plants and chemicals to occasion such experiences.

Smith, who experimented with psychedelic substances in the early 1960s with Timothy Leary, connected their spiritual properties to the cultural setting of older or small societies. As detailed in the Contrasting Attitudes Theme, mind-altering materials have been prevalent in indigenous cultures. But even in the United States and Europe, studies have found that most participants, regardless of their culture and personal beliefs, make similar claims of having undergone a spiritual experience.

A recent, double blind study conducted by the neuroscientist Roland Griffiths at Johns Hopkins University School of Medicine is a case in point. His study concluded that when psilocybin was administered under supportive conditions, it "occasioned experiences similar to spontaneously occurring mystical experiences." Participants ranked psilocybin-induced spiritual experiences as among the most meaningful events in their lives, comparable to the birth of a child or the death of a parent. A third ranked it the most spiritually significant experience they had ever had.

In this study, as well as in a study at New York University testing the capacity of psychedelic drugs to alleviate anxiety in patients with a serious illness, atheists and traditional religious participants alike described gaining similar perspectives during and after the experience. They reported a sense that the universe is benign and that the value of possessions, hierarchies, and ego boundaries is meaningless, especially when compared with love and compassion. They reveled in psychedelic-induced feelings that they were traveling through space and time, to other historical periods or to scenes from their childhoods. Journal entries provide a glimpse into their experiences:

- *I understand love is the most powerful force on the planet.*
- *I had an encounter with my cancer, this black cloud of smoke.*
- *I feel I'm bathed in god's love, and I'm an atheist.*

The last comment, made by Dina B., a cancer patient in her 60s, encapsulates the challenge such experiences present to secular people. Her comment was typical of the study participants; most reported significant shifts in attitudes about their place in the world and their mortality. Follow-ups conducted six and fourteen months later showed that these changes were long lasting.

Science and Spirituality Are Traditionally at Odds

From church battles with Copernicus and Galileo, to complaints that evolution reduced man's stature to that of a base animal, to today's "New Atheist" movement, advocates for science and for spirituality have eyed each other with suspicion if not outright hostility.

Today, the latter is exemplified by the biologist Richard Dawkins, who has published several broadsides against both organized religion and the less defined notion of modern "spirituality." Dawkins calls faith

the great cop-out, the great excuse to evade the need to think and evaluate evidence. Faith is belief in spite of, even perhaps because of, the lack of evidence.

In a 2013 essay in the *New Republic*, Steven Pinker, a cognitive scientist at Harvard University, made the case for what he called, “scientism.”

We know that our intuitions about space, time, matter, and causation are incommensurable with the nature of reality on scales that are very large and very small.... There is no such thing as fate, providence, karma, spells, curses, augury, divine retribution, or answered prayers—though the discrepancy between the laws of probability and the workings of cognition may explain why people believe there are. And we know that we did not always know these things, that the beloved convictions of every time and culture may be decisively falsified, doubtless including some we hold today.

While belief in God is not a perfect stand-in for a sense of spirituality, surveys on the topic are strongly suggestive. A 2009 Pew survey found that scientists were ten times as likely as members of the general public to say they do not believe in God or a higher power; less than a third of biologists, physicists and earth scientists said they believe in God.

Pinker is probably correct to a large degree when he claims,

The worldview that guides the moral and spiritual values of an educated person today is the worldview given to us by science.

While Pinker’s views are typical of many fields, we focus here on the science of the human mind, since it is the central focus of most research involving psychedelics. Modern science helped us understand that laws of time, space, mass, and energy govern the natural world, but science did not concern itself with understanding something as unquantifiable as human nature until the beginning of the 20th century, according to Peter Bowler and Iwan Morus in *Making Modern Science* (2005).

When psychiatrists began to use psychedelic drugs as a tool to observe brain functions, they inevitably were confronted with questions that lay outside the traditional scientific paradigm. Psilocybin, a chemical found in so-called “magic mushrooms,” is the substance most closely associated with mystical experiences. According to neuroscientists, psilocybin increases metabolic activity in the frontal cortex and interacts with serotonin receptors. For mainstream science, this supports the firm conviction that cognitive activity is explicable solely in terms of synapses and neurotransmitters

David Nichols, a biochemist and co-founder of the Heffter Institute as well as an adviser on this project, believes that there is no role for neuroscientists in exploring phenomenology for which they have no modality. His description of what happens to the brain under the influence of psychedelics is purely materialistic, echoing the majority of brain scientists:

The tools of today’s neuroscience... have put a modern face on the hallucinogens. Scientists can no longer see them as “magic” drugs but rather as 5-HT_{2A} receptor-specific molecules that affect membrane potentials, neuronal firing frequencies, and neurotransmitter release in particular areas of the brain.

And yet, even the most advanced technology cannot explain how these neurochemical changes translate into feelings of transcendence, awe, and unity.

Is There a Spiritual Dimension?

Science is meaningless because it gives no answer to our question, the only question important to us: What shall we do and how shall we live?

Leo Tolstoy

The upsurge in psychedelic research comes amid a rapidly-expanding scientific focus on the brain, as underscored by major efforts such as President Obama's BRAIN Initiative and the European-led Blue Brain Project, with its aim to "build biologically detailed digital reconstructions and simulations of the rodent, and ultimately the human brain." Summing up the materialist view in 2015, *The Economist* magazine wrote:

There is no result from decades of neuroscientific research to suggest that the brain is anything other than a machine, made of ordinary atoms, employing ordinary forces, and obeying the ordinary laws of nature. There is no mysterious "vital spark," in other words, that is necessary to make it go.

At stake is not only a philosophical stance on how to comprehend these dualities, but also a practical understanding of the role of medicine. John Mendelson, a senior scientist at the California Pacific Medical Research Center in San Francisco and an adviser to this project, cautions against blurring the lines:

How are those spiritual experiences noticed in the brain? It's a fundamentally interesting question. What we need is a basic empirical theory and ways to measure that theory... We are not purveyors of spirituality. Having an epiphany is not a part of medicine.

This view, however, is not unquestioned, especially to scientists who consider themselves open to metaphysical perspectives. Treating science and spirituality as separate, even contradictory realms, becomes an ethical challenge, according to Nicolas Langlitz, an adviser to this project:

During my fieldwork, one of the psycho-pharmacologists I worked with spoke of "double-entry bookkeeping" to designate the intellectually dishonorable practice -- which he knew firsthand -- of holding a belief in a spiritual reality while being unable to justify it in naturalist or materialist terms.

Others agree that the mechanics of neuroscience cannot explain the profound user experience with psychedelics, but prefer psychiatric, rather than spiritual interpretations. A notable scientist in this camp is the British researcher Robin Carhart-Harris who performs brain scans of subjects who have ingested LSD. His approach is described by author Michael Pollan, an adviser on this project, when reporting in *The New Yorker* (*The Trip Treatment*, 2015):

Carhart-Harris doesn't romanticize psychedelics, and he has little patience for the sort of "magical thinking" and metaphysics" they promote... Following Freud, he says that the mystical experience -- whatever its source -- returns us to the psychological condition of the infant, who has yet to develop a sense of himself as a bounded individual.

A very different view, that we should look beyond the "mind equals brain" equation, comes from Dr. Stanislav Grof, a psychiatrist who began investigating LSD in the 1950s and who has conducted more LSD research sessions than any other scientist. His response to the "hard science" approach is:

If somebody can explain it within a materialistic worldview, I will be the first one to be excited about it. But I haven't been able to do that. The only way to explain these facts is with a new scientific paradigm.

Such ideas amount to virtual heresy among traditional scientists, but they find sympathy among contemporary theologians. Jeffrey Kripal, a scholar of religion at Rice University, writes:

It's not that materialism is wrong; it is that it is half-right.

Kripal, an adviser on this project, pinpoints what he considers the most important way in which science comes up short, saying that neuroscientists can describe how psychedelics affect the brain, but they can't explain the user experience. Envisioning the potential for a meeting of the minds in the science-spirituality dialogue, Kripal states in his article *Visions of the Impossible* in *The Chronicle Review* (2014):

The solution is...to affect a synthesis of the two modes of knowing.

This view is seconded by Francis Collins, director of the National Institutes of Health. Collins, who rose to prominence as director of the Human Genome Project, is a born-again Christian who often speaks about the intersection of science and spirituality

There are some really important questions that science cannot really answer. Why is there something instead of nothing? Why are we here?... I'm interested in the whys. I find many of those answers in the spiritual realm. That in no way compromises my ability to think rigorously as a scientist.

Contemporary Psychedelic Research That Tackles Spirituality

While most practitioners of mainstream science keep their distance from talk of spirituality, many psychedelic researchers have not shied away. Some have worked – both in the 1950s and 60s, and today – at elite academic institutions, using traditional scientific tools to tackle a topic that is rarely put under such scrutiny.

The first serious attempt to use scientific methods to measure consciousness shifts triggered by psychedelics was a double-blind experiment made by Walter Pahnke, a minister and psychiatrist studying under Timothy Leary. Before a Good Friday service at the chapel of Boston University, he gave capsules of white powder to twenty divinity students. Half of the capsules contained psilocybin (“magic mushrooms”), the rest an active placebo. To compare the spiritual experience of the participants, Pahnke devised questionnaires using a checklist of nine characteristics: (1) unity with the universe, the hallmark of mystical experiences; (2) certainty of the knowledge obtained; (3) transcendence of space and time; (4) sense of sacredness; (5) deeply-felt positive mood; (6) paradoxical thinking; (7) alleged ineffability; (8) transiency; and (9) lasting positive changes in attitude and/or behavior. The experiment was later criticized for lack of scientific rigor, but it pioneered efforts to use psychedelics as a tool to study spirituality with scientific methods.

Pahnke concluded that the experiences triggered by the psilocybin were “indistinguishable from, if not identical with,” the classic mystical experiences reported by William James, the famed philosopher and psychologist, in his classic book *The Varieties of Religious Experience* (1902). These descriptions influenced recent experiments in the same vein by Roland Griffiths at Johns Hopkins University and Steve Ross at New York University. Both have been trying to wrangle the spiritual phenomenology into scientific modalities by developing ways to measure the “completeness” of the mystical experience. Relying on subjects’ self-assessment and on the assessments of co-workers and family members, the current questionnaire has scales to measure feeling of unity, sacredness, ineffability, peace, and joy, as well as the impression of having transcended time and space.

Echoing James’s earlier observations, Griffiths explains:

The scientific method works with what can be observed in the physical realm, using tools such as atomic particle detectors, medical imaging devices, people’s responses to psychological tests, interviews, and behavioral observations. We are attempting neither to validate nor to invalidate the truth of claims that some people have made about metaphysical realities as a consequence of their psilocybin experiences.

As noted, a key aspect in the recent studies has been the lasting impact of the sessions on the participants. Griffiths believes this is due not only to the capacity of the drugs to change the brain’s long-term chemistry, but to the transformative experiences they produce. The power of such experience was not lost on Carl Jung. As reported in *Psychology Today* by Dan Mager (2014):

Carl Jung viewed addiction as a spiritual malady and addicts as frustrated spiritual seekers. He believed the craving for altered states of consciousness reflected a spiritual thirst for wholeness, and that only those who had a spiritual awakening could successfully overcome addiction.

This view found its practical implication in the long-term impact observed in the 1950s when LSD was used to treat alcoholism. At the time, many participants attributed their success to the spiritual experience they had undergone, which enabled them to reframe and then break their drinking habits. This research caught the eye of Alcoholics Anonymous founder Bill Wilson, who took LSD with Huxley and said the drug might be helpful for many addicts.

Addiction, of course, is not the only realm where the challenge of reconciling science and spirituality has real and deeply personal implications. It's highly likely that the quest to understand these mysteries of the mind and spirit will continue to involve both science and the humanities. In a time when great value is attributed to interdisciplinary approaches, psychedelic research is a field where the two sides can, and do, maintain a robust dialogue.

As Wittgenstein quite rightly said, "When we understand every single secret of the universe, there will still be left the eternal mystery of the human heart."

Stephen Fry

Theme #4 - Consciousness: Are psychedelics a doorway to the "Biggest Question of Them All"?

Introduction

Philosophers have often called the question: "What is Consciousness?" the most important question that we face, the basis of understanding of our place in the universe. The film will examine the question of whether psychedelic drugs, through their unique properties, may shed light on how our brains either create or mediate consciousness.

The study of consciousness has grown tremendously in recent decades. The range of disciplines in both science and the humanities that are actively involved is reflected in the titles of papers and presentations at a recent conference at the university of Arizona: "Conscious Intention and Free Will," "Brain Biology," "Quantum Approaches," "Artificial Intelligence and Machine Consciousness," "Consciousness and Evolution" and hundreds more, offered up by scholars from every continent. Even the conference's title shows that this nascent academic field has arrived: while the first annual conference 23 years ago was called "Toward a Science of Consciousness," today it's simply, "The Science of Consciousness." Rice University religious scholar Jeffrey Kripal is not surprised by the proliferation of interest in consciousness. Kripal, an adviser to the project, wrote in his article *Embrace the Unexplained*:

Consciousness is the fundamental ground of all that we know or ever will know. It is the ground of all of the sciences, all of the arts, all of the social sciences, all of the humanities, indeed all human knowledge and experience.

Both the humanities and hard sciences agree on the importance of this topic. U.C. Berkeley Molecular biologist David Presti, another adviser to the project, puts it this way:

Where does our capacity for consciousness come from? It's still a huge mystery, the biggest in all of science.

Defining the Problem

Despite the intense attention from so many perspectives, consciousness remains a conundrum. It cannot be observed, nor easily defined. There is no agreed-upon theory of consciousness. The Questions about the nature of consciousness have been tackled with a variety of ontological approaches. Like the elephant approached by a group of blind men, descriptions have varied, greatly, depending whether answers are sought via philosophy, neuroscience, theology, psychiatry, artificial intelligence, mysticism or any other line of inquiry.

Throughout, key questions remain unresolved: When and how did consciousness evolve? Are our thoughts solely our own, i.e. do we have free will? Is it, as philosopher and cognitive

scientist Daniel Dennett argues, an emergent phenomenon, the result of billions of mindless interactions among neurons? Or does the brain “tune into” conscious precursors existing naturally in the universe? Can consciousness be reproduced through brain mapping or artificial intelligence? What are the implications of any of these views for the nature of existence, and mental, cognitive and spiritual disorders?

Influential Views of Consciousness

“I think, therefore I am,” the famous formulation of René Descartes, for centuries summarized the dominant view that our thoughts define us. While many who followed Descartes tried to define various modes of “thinking,” it was Freud who most dramatically challenged the notion that our ideas, and our meaningful selves, are governed solely or largely by conscious thought. As Freud wrote in *The Interpretation of Dreams* (1899):

The unconscious is the real psychic; its inner nature is just as unknown to us as the reality of the external world, and it is just as imperfectly reported to us through the data of consciousness, as is the external world through the indications of our sensory organs.

To Freud, the unconscious was the product of individual experience – the result of repressing, for various reasons, our true desires. A different perspective was developed by Freud’s most famous student, Carl Jung. While Jung agreed that we are swayed by ideas and impulses of which we are largely unaware, his theory of the “collective unconscious” posits that these drives and impulses are innate, inherited from our ancestors and shared at some primal level.

While these views found no shortage of critics over ensuing decades, the basic existence of an unconscious, an elusive part of the human psyche, has remained a key component in today’s ideas about consciousness. In *The Denial of Death*, (1973), anthropologist Ernst Becker strove to explain just why humans have developed a subconscious. Becker, who wrote extensively about the practice of psychiatry, suggested the function of the subconscious is to stave off the absolute terror of existence:

What does it mean to be a self-conscious animal?... Man is literally split in two: he has an awareness of his own splendid uniqueness in that he sticks out of nature with a towering majesty, and yet he goes back into the ground a few feet in order to blindly and dumbly rot and disappear forever. It is a terrifying dilemma to be in and to have to live with.

Fear of death has long been viewed as part of the human condition. Before psychiatry, the struggle to reconcile it was mainly the realm of philosophers. More recently, it has been the focus of several clinical trials using psychedelic drugs. Researchers posit that psychedelics – in particular, psilocybin, which is being used in a number of current studies – may tap into subconscious fears of death and unify fragmented pieces of the psyche. Jeffrey Guss, an NYU psychiatrist and co-investigator on the psilocybin trials, told us many patients with cancer suffer a kind of existential crisis.

Life becomes nothing but, ‘my chemo, my radiation, my cancer numbers.’ Life outside of cancer shrinks. They’re petrified by death. They become immobilized. The whole point is to dislodge them from that. What’s remarkable is that even though we don’t tell them what narratives to form, there is an enormous commonality. Patients will come to me and say, ‘I understand intuitively now that love is truly the most important force on the planet. I experienced a profound sense of peace that I never felt before and it has stayed with me. I know now that my consciousness is bigger than me.’

His co-investigator, Anthony Bossis, returns to Jungian ideas, noting that the concepts described form the basis of many religions:

There’s all this overlap. They speak the words of the mystics, without ever having read them.

Is the Brain a Computer?

Approaches rooted in harder science have also laid important foundations to our view of consciousness. In particular, the dawn of the computer age, and developments in the realm of pure mathematics, led to the now-common view that the brain is a kind of super-computer, and consciousness its output.

“Can machines think?” was the provocative question asked by Alan Turing in the 1950 article sometimes credited for launching the field of artificial intelligence. That work led to what is known as the “computational theory of mind,” a phrase coined by philosopher Hilary Putnam. The theory holds that consciousness, or thinking, is the product of measurable, definable processes. The argument was not wholly new; Aristotle, sounding much like a modern neuroscientist, had asserted, “The study of the soul must fall within the science of Nature.” To Turing, Putnam and the engineers who followed, a soul might not just be studied, but created.

If in the 1950s scientists were wondering-whether they can build a computer that will operate like the human brain, today consciousness researchers commonly ask: is the brain itself a kind of computer? To some the answer is clearly yes. To others, it’s more complicated. To Dennett, the author of “Consciousness Explained” (1991):

The vision of the brain as a computer, which I still champion, is changing so fast. The brain’s a computer, but it’s so different from any computer that you’re used to. It’s not like your desktop or your laptop at all, and it’s not like your iPhone except in some ways. It’s a much more interesting phenomenon.

Clearly, consciousness is no longer the exclusive domain of philosophers and psychologists. A new generation of scientists, influenced by concepts from quantum physics to Buddhism, has begun to look in surprising directions to understand consciousness. Andrew Newberg, a neuroscientist at the University of Pennsylvania and author of *Why God Won’t Go Away* (2002) and *Born to Believe* (2007), worked closely with nuns to study the effects of prayer and intense meditation on the brain. He’s been able to identify specific brain regions and changes in brain activity that correspond with deeply “spiritual” states.

Similar findings were made by Richard Davidson, a psychologist and neuroscientist at the University of Wisconsin, who conducted extensive research with Buddhist monks, famed for their intense meditation practices. Buddhism, which incorporates the belief that all sentient creatures have some level of consciousness, also inspired the intriguing work of Christof Koch. With fellow neuroscientist Giulio Tononi, he has developed a mathematically dense hypothesis called Integrated Information Theory (IIT), which suggests that consciousness is a physical property, which can be measured.

A Role For Psychedelics?

The potential role of psychedelics in progressing the modern study of consciousness was articulated early on by the British visionary writer Aldous Huxley. After experimenting with mescaline and LSD, Huxley speculated that psychedelics trigger extreme states of consciousness, which enable us to perceive what is normally invisible. In his book *The Doors of Perception* (1954), Huxley proposed an analogy between the drugs’ effects and scientific experiments:

We have no reason to deduce that water is composed of two gases glued together by invisible forces. We know this only by exposing water to extreme conditions, by traumatizing it, and then by detecting and measuring the gases with technology that no ordinary person possesses or understands.

Because psychedelic drugs often “stress” or alter consciousness to unusual states, which can be considered extreme, they have drawn growing interest in the field of consciousness research. David Presti, another scientist who has worked closely with Buddhist monks, confirms that psychedelics may have an important role in this field:

We still don't understand much about the connection between physical and mental activities. We just know there is a connection. All psychoactive drugs can help, but psychedelics most dramatically and profoundly change brain activity for us to study.

Yet some challenge the authenticity of the experience on psychedelics. If therapy facilitated by psychedelic drugs simply foists a comforting delusion of spiritual harmony and connectedness on the user, is it really a reliable tool for investigating consciousness? And if chemical changes do profoundly impact our worldview, what implications does that hold for our identity, defined in large part by the way we think?

Anthropologist Nicolas Langlitz, who serves as an adviser on this project, explores this idea in his book *Neuropsychedlia* (2013):

How can a spiritual experience be meaningful if it is caused by a drug? What kind of referent should it have other than the psychoactive compound by which it was induced?

Some researchers suggest that however consciousness is mediated by the brain, its existence originates outside the skull. In the view of Dr. Stanislav Grof, the Czech-born psychiatrist who conducted thousands of LSD therapy sessions in the 1950s and 1960s, consciousness may be a property of the universe, to which our minds tap in, like tuning into a radio signal:

The only way to explain these facts is with a new scientific paradigm, which accepts that consciousness is not merely an epiphenomenon of the brain, but can exist as an independent entity.

While Grof's view is not shared by most mainstream figures, the question of whether consciousness can be observed and measured is far from settled. To some, including theologian Jeff Kripal, explanations of a purely neuro-physical brain are unconvincing:

Many want to claim... that consciousness is not its own thing, is reducible to warm, wet tissue and brainhood. But no one has come close to showing how that might work. Probably because it doesn't.

Of course, not everyone has reached the same conclusion. One neuroscientist using psychedelics in his studies of the brain and consciousness is Robin Carhart-Harris at Imperial College in London. One of his key findings emerged when he gave his subjects an infusion of psilocybin and noticed reduced connectivity between brain regions that are usually linked only when a person is not actively problem-solving or focused on a particular task. Carhart-Harris believes this finding speaks "to a general principle that psychedelics alter consciousness by disorganizing brain activity."

After giving subjects psilocybin, Carhart-Harris' team also found a particularly dramatic decrease in blood flow to the medial temporal lobes, brain regions thought to be crucial to our sense of self as distinct from other objects or individuals. Changes resemble those seen by Newberg and Davidson in brain scans of experienced meditators and nuns engaged in intense prayer. This suggests that what happens in the brain on psychedelics is similar to the effect created by prayer, buttressing the idea that these experiences are rooted in "warm, wet brainhood," a concept that is now also being studied by neuroscientists at Johns Hopkins School of Medicine.

For neuroscientists like Carhart-Harris, the role of psychedelics in investigating the nature of consciousness is obvious, since they manifest the phenomena being studied. If psychedelics reliably trigger brain changes associated with shifts in consciousness, perhaps they can help unravel the complexity that underlies our more ineffable qualities.

Philosopher and cognitive scientist David Chalmers, who is the Director of the Centre for Consciousness at the Australian National University, says "the hard problem of consciousness" exposes the shortcomings of science, a failure to explain "why" along with "how."

Why any physical state is conscious rather than nonconscious? This suggests that an explanation of consciousness will have to go beyond the usual methods of science. Consciousness therefore presents a hard problem for science, or perhaps it marks the limits of what science can explain.

As the Arizona conference and other academic meetings suggest, the field of consciousness studies is rapidly evolving to include more disciplines and perspectives. For a while, we can expect more questions than answers. Amid uncertainty, psychedelics may provide a valuable tool, by allowing us to correlate flesh and blood measurements to subjective mind states far different from those we experience in normal life.

Any fool can know. The point is to understand.

- Albert Einstein

C. CREATIVE CONTENT

This two-hour documentary will look at our relationship to hallucinogenic substances across time, exploring their scientific, spiritual, and cultural aspects. It will weave together two narrative arcs: the history of scientific research involving psychedelics, and the current revival of research and its associated controversies.

The **historical arc** will cover two main elements:

- Ancient times through the early 20th century
- 1950-1970 – the Rise and Fall of LSD

The **historical sections** will be visually illustrated by abundant archival material. Thousands of archival photographs, newspaper articles, films, television and radio programs are available, as are letters and diaries. Interviews with scholars and researchers who took part in the 1950s and 60s studies will illuminate this section.

This archival section will also benefit from a major new discovery. The 1960s files of some 500 LSD patients were recently released through the Freedom of Information Act to historian Erika Dyck, one of the film's advisers. The files of the Hollywood Hospital, where patients were treated for alcoholism, are currently being entered into a database. Analyzing the data is expected to yield new insights into the nature of psychedelics and their medical potential in one of the most highly regarded treatment programs of the time. The personal files will be correlated with published Hollywood Hospital case studies, which detailed success rates of over 50%, better than standard treatment, even today. This section will be enlivened by a number of compelling personal narratives based on autobiographies patients were instructed to write both before and after the single-session LSD sessions.

The **contemporary narrative** includes a number of distinct elements:

- Observational segments will document a number of trial patients and the therapist-researchers treating them. The film will follow these patients from before the beginning of their therapy to approximately a year afterwards, in order to reflect the long-term effects and uncertainties of psychedelics-assisted therapy.
- Interviews presenting philosophical, spiritual and cultural contexts, as well as a range of perspectives, pro and con, on the current studies. Researchers, psychiatrists, regulators, public policy experts, former patients and scholars will offer their views.
- A section, illustrated with animation, on the latest neuroscientific findings about the human brain and the nature of consciousness, as revealed through experiments with psychedelics.

We intend to bring this rich story to life through a visual and structural approach that is engaging and conducive to an interpretative exploration. Voiceover narration and captions will inform and guide the film, along with an original score.

Observational sections:

These character-based sections form the emotional core of the film and provide its dramatic arc. They will appear episodically throughout the film's three acts in chronological order, enabling viewers to follow the treatments as they unfold. We will film a number of patients, aiming to portray a range of outcomes that will be representative of the entire trial.

The psychedelic therapy sessions will not be filmed by us, but short clips of the sessions will be used from the therapists' video, which is routinely recorded. Profiles of the lead researcher-therapists will form another part of these sections.

Notes:

This will be the first time that a film documents psychedelic trial subjects before, during and after their sessions. Until now, regulatory agencies or the hosting educational institutes have refused permission. We have obtained permission from the therapists conducting the study and the regulating Institutional Review Board (IRB).

Study participants will be fully informed of the filming process before signing a consent. The filming and editing will respect their privacy and treatment needs. We developed the consent process in consultation with the ethicist on our advisory board, Dr. Frank Miller, who has supervised clinical trials for the National Institutes for Health for many years.

Included in this proposal is the filming authorization letter of the lead researcher, Dr. Michael Mithoefer, who outlines the constraints under which filming can be done. Also included is a draft of the informed consent release form that patients will be asked to sign.

As noted, we will use short clips recorded and approved by the therapists. Similar clips from past studies are already available on-line (without the before/after footage we will film). They are more low-key than one would expect, and they clearly don't compromise patients' privacy nor the integrity of the treatment. For those interested, here are links to two such segments:

- A clip called MDMA therapy and Healing (currently at top of the page) at about 02:52.
<http://www.mdmathemovie.com/videos/>
- In the film A New Understanding: The Science of Psilocybin, at 08:50 there is a sequence that goes in and out of footage of a trial subject at NYU
Vimeo: <https://vimeo.com/138992937> Password: Summertime

If the clips are inactive, please copy and paste into your browser.

Interviews:

Given the controversial nature of our topic, which explores substances that are illegal and can be dangerous, the film intends to place an emphasis on presenting the strongest arguments, representing a range of opinions, voiced by articulate and highly-regarded interviewees. We will be guided in this endeavor by our academic advisers, who reflect a diversity of viewpoints from disciplines in both the humanities and the sciences.

Animation:

The technology available to neuroscientists today, such as functional Magnetic Resonance Imaging (MRI), is no less sophisticated than the hardware and software used in Hollywood. We

will use animation and computer-aided design to bring those scientific animations to life for the viewer, including file formats that can be shared between 3D medical and entertainment programs. Using 3D CGI and modern graphic design, we will transform fMRI visualizations of subjects undergoing a psychedelic experience into an anatomically realistic and easily understood animation. The animation will depict brain activities such as oxygen and blood flow in real time, observing the parts of the brain that are over or under stimulated. The CGI will allow us to explore the most minute, otherwise inaccessible parts of the brain. We will also look “inside” the brain at the cellular level, to see synapses and neurotransmitters at work.

Outline of the film

Film is an ideal medium to examine the ideas, people, and conflicts at the heart of our topic. Given the vast historical archives, the recordings by trial therapists, and our own filming, this is an eminently visual story. It will be organized into a traditional three-act structure, with the main narrative arc sprinkled across all of them.

Act I: Current Psychedelic Research: Practice & Theory

Early on, the film introduces the historical context of “Forbidden Knowledge” for the exploration of humans’ relationship with mind-altering substances. Toward the end of Act I, neuroscientific research triggers a discussion with philosophers about “the biggest question of them all – Consciousness,” which often intersects with psychedelic use.

A. Prologue: **PTSD Study Part 1**, Charleston, SC:

1. Patients Neil, Matt and Patricia recount the events that triggered their PTSD, observational segments showing how the condition is affecting their lives.
2. Researcher-therapists Michael and Annie Mithoefer explain the trial and how the participants were selected.
3. Participants arrive for their first psychedelic (MDMA) session.

B. Establishing Controversy

1. The Title Sequence is followed by a montage of contemporary views of psychedelics, summing up the current climate: A renewed interest in psychedelics is confronted with skeptics and critics.

C. Forbidden Knowledge

1. Interview clips and archival material place human interest in psychedelics in the context of “Forbidden Knowledge,” a realm of inquiry both alluring and potentially dangerous. (**See Theme: Forbidden Knowledge**).
2. A brief historical survey provides context: Ancient Greece, medieval witches, Copernicus, Galileo and the rise of Modern Science, Church prohibitions of native peoples’ practices in the New World)
3. Contemporary critics, such as Herbert Kleber of Columbia University and John Mendelsohn of California Pacific Medical Center, say LSD and other psychedelics were banned for legitimate reasons and demand extreme caution and more research before the drugs can be incorporated into mainstream medicine.

D. **PTSD Study Part 2:**

1. Clips of video recordings of sessions with Neil, Matt and Patricia - the participants who agreed to take part in the film.

2. A profile of Dr. Mithoefer, a former ER doctor whom because the world's leading researcher in psychedelic treatment of PTSD victims. His life with Annie, his wife and research partner.
 3. Critics including Dr. Edna Foa, who developed Prolonged Exposure Therapy, the most-widely used form of treatment for PTSD, and Francine Shapiro, who invented EMDR, another VA-approved technique for treating PTSD, question the effectiveness and rationale for MDMA-assisted therapy.
 4. Neil, Matt and Patricia recount their first drug session; Observational segments follow their life in the week following the treatment.
- E. Neuroscience (a Window on the Mind)
1. Scientists at the University of South Carolina using brain-imaging techniques to study the effects of MDMA, including Mithoefer's study participants.
 2. The work of neuroscientist Robin Carhart-Harris of Kings College, London, a pre-eminent expert on the effects of psychedelic drugs in the brain is illustrated with footage of his experiments with LSD and psilocybin, using the latest brain imaging methods.
 3. 3D animation illustrates the neuroscientist research and leads to:
 4. A discussion of how psychedelics are part of a fast-growing field of research into the nature of consciousness. **(See Theme: What is Consciousness?)**

Act II: The Rise and Fall of LSD: Its Continuing Influence

This historical examination of how LSD turned from a "miracle drug" to a substance of abuse is provided a new dimension through a sociological look at the fact that while psychedelics often have an anti-social effect in our culture, they are usually pro-social agents in tribal societies.

A. **PTSD Study Part 3:**

1. Catching up with the progress of the study following the second and last psychedelic session. This includes more clips from the sessions and from follow-up talk therapy sessions with Neil, Matt and Patricia, discussions among the therapists, and update segments on the participant's lives with a particular focus on whether changes have occurred as a result of the treatment.
2. Michael Mithoefer discusses how the study is designed to meet today's scientific standards why the legacy of the 60's LSD abuse has made it difficult to convince the FDA to allow renewed trials with psychedelics.

B. LSD - the Rise in the 1950s. **(See Treatment for details)**

1. Zurich, Switzerland, 1943: Chemist Albert Hoffmann's colorful tale of accidentally discovering LSD in the Sandoz lab. Struggling to find commercial uses for the new drug, the company sends free samples to hundreds of psychiatrists.
2. Extensive archival footage of lab and psychiatry work in the 1950s-60s in a variety of locations, including clandestine experiments run by the military and the CIA and psychologist Tim Leary's pioneering work with prison inmates. Intimate scenes of LSD treatment for alcoholism and depression at Spring Grove

Hospital in Maryland and therapists' offices in Los Angeles. Effusive press coverage about the transforming potential of the new drugs, ranging from *Life* magazine to the *Ladies' Home Journal*.

3. Historian Erika Dyck discusses her work analyzing the just-released 500 patient files at Hollywood Hospital, which form the best surviving documentation of LSD treatment and have never been filmed before. These files shed new light on how the mind-altering drug contributed to the 50% success rate of the alcohol addiction. This includes personal narratives of a few of the patients, based on the autobiographies they wrote as part of their therapy.

C. LSD - The Fall – 1970. (**See Treatment for details**)

1. New Concerns: archival footage and interviews document the Congressional hearings that shock the nation, as doctors reveal they have been using experimental drugs without informing patients. In the same period, a leading psychiatrist and former advocate for LSD research, Dr. Sidney Cohen, warns that LSD medical use is turning into uncontrolled abuse. Congress passes the Kefauver-Harris Drug Amendment, giving the FDA, for the first time, the power to approve new drugs, including psychedelics.
2. A visual and vibrant summary of the 1960s counterculture focuses on the widespread acid use and its anti-establishment influence.
3. Media reports on the dangerous effects of LSD, Senate hearing, California banning of LSD in 1966 and President Nixon signing the Controlled Substances Act in 1970 – a range of historians and sociologists interpret the political, cultural and economic perspectives that led to the beginning of the War on Drugs. LSD and all other psychedelics enter once again the realm of “Forbidden Fruit.”
4. The anti-social role psychedelic drugs have played in the counterculture are and beyond is contrasted with the pro-social role the same substances usually have in tribal cultures. The cultural context in which the drugs are consumed is considered. (**See the Theme, “Contrasting Attitudes”**)

D. Underground lab works – 1980 and beyond

1. Scientists like Alexander Shulgin and David Nichols continue – legally – to explore the effects of psychoactive drugs on the brain.
2. Shulgin re-synthesizes the compound MDMA (invented in the early 20th century but never exploited). Its potential in therapy barely begins to be explored when the drug explodes as the rave party favorite under the name “Ecstasy” and is and banned by the DEA in 1985, on an “emergency” basis.

Act III

Psychedelics researchers often struggle to apply scientific tools to the spiritual aspects that come up for their patients. To fully appreciate this challenge, the film looks at history of science and more recent efforts to bridge between its modalities and dimensions of spirituality.

A. PTSD Study Part 4:

1. Segments on Neil, Matt and Patricia in their homes and daily environment, one to two months after the therapy was completed. Observational scenes and interviews provide update on their post-therapy lives.

2. Dr. Mithoefer, the study lead researcher, along with his colleagues, provide information on the study's overall results – how many participants were helped by the therapy and to what degree, based on detailed questionnaires of PTSD symptoms.
3. Discussion of what the researchers intend to do with the study results and their future plans.

B. NYU Psilocybin Study

1. This section features another study, to illustrate the range of current psychedelic research. The study subjects are patients with life-threatening illnesses, and given psilocybin to help relieve their anxiety. A number of patients briefly recount their psychedelic therapy experiences, nearly all of which have a strong spiritual component, regardless of how successful they were in treating the anxiety.
2. NYU study leaders Dr. Steven Ross and Anthony Bossis explain the working hypothesis behind the approach: that psilocybin might trigger a mystical experience that renders the patient open to a new worldview – in this case, a healthier and more accepting perspective on death.
3. Bossis explains that psychedelics have a long association with mystical experience, as reflected both in traditional religions and recent experiments.

C. Spirituality and Other Psilocybin Studies.

4. Researchers at Johns Hopkins University, led by Roland Griffiths, are investigating other aspects of spirituality through psychedelics. In interviews, they discuss their study attempting to measure the depth of mystical experience in a patient taking psilocybin.
5. An exploration of the science-spirituality divide, including a wide range of perspectives, from within and outside of the psychedelic research community. The discussion addresses the question of whether a drug-induced experience has the same value as other versions of religious experience. (**See Theme: Science & Spirituality**)

D. The future of psychedelics

1. What are the steps required by any new drug before it can be approved by the FDA? The ethical, clinical and other considerations of safety and effectiveness are explained.
2. What's next for substances like psilocybin and MDMA? Researchers are hoping the FDA will clear the way for a large, Phase 3 trial, the final stage before a new drug can be considered for medical use.
3. A range of critics and skeptics present their arguments in a dialogue with the researchers who believe their work should be allowed to continue.

E. PTSD Study Part 5:

1. A final check-in with Neil, Matt and Patricia, whom the film has now followed for a year. Observational scenes give a sense of the extent to which they recovered. In interviews, the patients reflect on the experience.

Existing films

The subject of psychedelics arouses widespread interest, as a quick look at YouTube instantly reveals. All the films and video clips that we saw, even the ones that were professionally made with high production values, are clearly advocacy vehicles for the use of psychedelics. In contrast, our film's balanced, factual, and analytic approach will offer a valuable public service. *Forbidden Knowledge* will bring the lens of the humanities - history, philosophy and religion foremost – to present a nuanced exploration of psychedelics in the West.

Unlike the existing works, *Forbidden Knowledge* will not cover the recreational use of either psychedelics or any other popular substance.

Out of hundreds of audio-visual works on psychedelics that are available online, the list below highlights the most professional productions released in recent years.

DMT: The Spirit Molecule (Mitch Schultz, 2010) - The feature-length documentary offers an in-depth look at the hallucinogenic compound DMT, and traces Dr. Rick Strassman's DMT research and its many trials, tribulations, achievements, and inconceivable realizations.

<https://www.youtube.com/watch?v=Qep-DefDC7c>

Neurons to Nirvana (Oliver Hockenhull, 2013) - A stylish look at the renaissance in psychedelic drug research. This advocacy film presents the illegal substances as crucial but neglected medicines and as technologies of consciousness. <http://www.imdb.com/title/tt2195566/>

Dying to Know (Gay Dillingham, 2014) - An intimate portrait celebrating the lives of two controversial icons of the drug subculture in the 1960s, Timothy Leary and Richard Alpert.

<http://dyingtoknowmovie.com>

The Substance: Albert Hofmann's LSD (Martin Witz, 2011) and *Hoffman's Potion* (Connie Littlefield, 2012) – Two films about the coincidental manner in which LSD was invented by the Swiss chemist Albert Hofmann in 1943. <http://www.imdb.com/title/tt2075352/> and

<https://www.youtube.com/watch?v=OpSLjdPiSH8>

Peyote to LSD: A Psychedelic Odyssey (Peter von Puttkamer, 2008) – A History Channel television production about plant explorer Richard Evans Schultes, narrated by his former student Wade Davis. <https://www.youtube.com/watch?v=R1euBV3WkZw>

Inside LSD (Pamela Caragol Wells, 2009) – A National Geographic Explorer television show that asks the question: Could LSD be the next drug in your doctor's arsenal?

https://www.youtube.com/watch?v=eqQzsMz_hD4

Drugs Inc. (Ben Reid, 2012) – This National Geographic production focuses on a center in the Amazon jungle in Peru that supplies the psychoactive plant ayahuasca. A University of San Francisco expert and undercover narcotics agent weighs in.

<http://channel.nationalgeographic.com/drugs-inc/episodes/hallucinogens/>

Manna – The Psilocybin Mushroom (Simon Powell, 2011) – A detailed look at the ecological and psychological virtues of psilocybin.

<http://documentaryaddict.com/manna+the+psilocybin+mushroom-6282-doc.html>

Dirty Pictures (Etienne Sauret 2010) – An investigation into the lifework of Dr. Shulgin and like-minded scientists, during the years of underground research.

<http://www.imdb.com/title/tt1592855/>

D. AUDIENCE AND DISTRIBUTION

We expect *Forbidden Knowledge: Psychedelics & Science* to reach a broad PBS audience. The topic of psychedelics arouses widespread interest, as is easily confirmed by the bottomless abundance of YouTube clips on the subject. It is of particular interest to the Baby Boomer generation, who have personal memories of the 1960s. (*New York Times* art critic Ken Johnson: "You may never have taken LSD, but America has.")

The duration of our film – two television hours – is a length preferred by PBS over one-hour-and-a-half programs for primetime programming. Most likely, the film will be divided into two parts. Given that all six of co-Producer/Director Micha Peled's films aired on PBS, and that co-Producer/Director Caleb Hellerman is currently working on multiple PBS projects, we feel confident about getting this film on PBS as well. Peled's last three films were funded by ITVS, which funds only projects deemed appropriate for PBS. Forming *The Globalization Trilogy*, these films were *Store Wars: When Wal-Mart Comes to Town*, *Bitter Seeds*, and *China Blue*, winner of the audience award on PBS's *Independent Lens* series. In addition to broadcast, the film's launch will be accompanied by PBS.org streaming, college curricula materials, and a public engagement campaign.

The wide distribution track record of these previous films is the best indication that this film will also get wide distribution. Our long-time educational distributor, **Bullfrog Films** (letter attached), sees a multidisciplinary college audience for this film in the areas of Religious Studies, Neuroscience, Psychology, Psychiatry, Medical and Cultural Anthropology, Social Work, and Family Issues. Our international distributor, **Film Transit**, believes *Forbidden Knowledge* will find worldwide distribution (letter attached). This is based on our track record – our previous films were sold to 33 foreign television broadcasters.

In addition to a general audience, there are specific population groups that will find this film of particular interest. They comprise people suffering from the same disorders as those described in the film, along with their families. One such group is the 500,000 U.S. veterans who suffer from chronic PTSD that does not respond to any of the available medications and treatments. Another large interested group are cancer patients who suffer from anxiety and depression. In the U.S. alone, cancer patients and their families number in the tens of millions.

Audience engagement activities are a key to bringing viewers to your program. In addition to partnering with PBS to promote the national broadcast, we will contact nonprofit organizations and community groups that would have a particular interest in the subject. These groups, including patient rights groups and veteran organizations such as the National Organization of Veteran Advocates and Wounded Warrior, will receive free viewing copies. We intend to make extensive use of online and social media on a variety of platforms.

All of our previous films are offered for on-line viewing – either through rental or download-to-own – at affordable rates. We will do it in conjunction with PBS.

E. RIGHTS AND PERMISSIONS

Collections of television news and special reports, film clips, photos, and manuscripts are housed in several major institutions. A significant share of the archival footage is in the public domain. Based on our archivist Kenn Rabin's estimate, our budget is appropriate to cover the required rights. The recently released Hollywood Hospital patient files of the LSD clinics will be available to us through the historian Erika Dyck, on the project advisers.

For documenting the current psychedelic-assisted therapy studies, an important archival source would be the video recordings made by the researchers. Pending the patients' consent, the researchers will provide us access to the video recordings. Co-Producer/Director Caleb Hellerman has obtained patient consent to use similar recordings in previous projects.

F. HUMANITIES ADVISERS

Erika Dyck is a Professor of History at the University of Saskatchewan and a Canada Research Chair in Medical History. She is the author of *Psychedelic Psychiatry: LSD from Clinic to Campus* and of *Facing Eugenics: Reproduction, Sterilization and the Politics of Choice*, which was shortlisted for the Governor General's award for non-fiction. She has a forthcoming book on the history of medical experimentation with humans. Dyck will advise on medical research with LSD and other psychedelics in the 1950-1970 period, when such research was widely conducted.

Kathleen J. Frydl is a political historian who specializes in the modern American state. Her doctorate in history is from the University of Chicago. She was an Assistant Professor of History at University of California, Berkeley and a Fellow at the Woodrow Wilson Center for International Scholars. Frydl's major work includes the books *The Drug Wars in America, 1940-1973* and *The GI Bill*, winner of the Louis Brownlow book prize. She will advise on the complex web of factors involved in the 1970 legislation that banned all psychedelics, providing historic, economic and social contexts.

Jeffrey Kripal is the J. Newton Rayzor Professor in Philosophy and Religious Thought at Rice University. He is also the former Chair of the Department of Religious Studies at Rice. He has published seven books, among them *Comparing Religions: Coming to Terms*. His new book, *The Super Natural: A New Vision of the Unexplained*, will appear in 2016. He will advise on theological issues and the mystical experience, as they relate to psychedelics.

Nicolas Langlitz is a professor of anthropology at The New School for Social Research in New York. His book, *Neuropsychodelia: The Revival of Hallucinogen Research since the Decade of the Brain*, details his observations at labs of scientific research with psychedelics. Unlike other writers on the topic, Langlitz can describe the user's experience from the inside, having been a volunteer participant in one neuroscientific study. He will advise on the current studies and medical research from an anthropological perspective.

John Mendelson, MD, is an internist and clinical pharmacologist. He founded the Addiction Pharmacology Research Laboratory at California Pacific Medical Center. His clinical research, including NIH-funded studies, involves the pharmacology, physiology and psychology of commonly abused drugs. He has developed treatments for drug abuse and associated psychiatric complications. Mendelson is in a unique position to advise on current studies using psychedelics because, while deeply familiar with the issues, he is not an interested party. In our conversations, and in his writing, he has emerged as a leading voice of caution about permitting the wider use of psychedelics in medicine.

Frank Miller, MD, is Professor of Medical Ethics in Medicine at Weill Cornell Medical College. Till 2015 he served on Senior faculty, Department of Bioethics, National Institutes of Health; at the National Institute of Mental Health, where he oversaw clinical trials. He is currently advising us on the content of the release form and arrangements with participants in the PTSD trial whom we intend to film. Dr. Miller will help guide this aspect of the film all the way through.

David Nichols taught in the College of Pharmacy at Purdue University from 1974 until his retirement in 2012. He was the Robert C. and Charlotte P. Anderson Distinguished Chair in Pharmacology and was named a Distinguished Professor of Medicinal Chemistry. He is currently an Adjunct Professor, University of North Carolina. He also consults for the pharmaceutical industry and has served on numerous government research review groups. Nichols has studied all of the major classes of psychedelic agents, and is recognized as one of the foremost experts on the medicinal chemistry of psychedelics. He is a co-founder of the Heffter institute, which has supported clinical studies of psilocybin-assisted psychotherapy in OCD, alcoholism, nicotine addiction, and cancer-related distress. Nichols will advise us on the science and methodology of the current research and trials using psychedelics.

Michael Pollan has served as the John S. and James L. Knight Professor of Journalism at the University of California, Berkeley and has just begun a yearlong sabbatical. He is the author of seven books, of which *The Omnivore's Dilemma* was a finalist for the National Book Critics Circle Award in 2006. He was named by *Time* magazine to its list of the 100 most influential people in the world. Pollan's *The New Yorker* article, *The Trips Treatment*, described in great detail the various studies of psychedelics in recent years. He is currently writing a book about plant intelligence and the science of psychedelics. As he knows personally most of the leading researchers and is familiar with their study methods and objectives, he has and will continue to advise on current research and make personal introductions.

David Presti teaches Neurobiology, Psychology and Cognitive Science at the University of California, Berkeley. His book, *Foundational Concepts in Neuroscience: A Brain-Mind Odyssey*, was published in 2015. He is also one of the American scholars who have responded to the Dalai Lama's call for a dialogue between science and spirituality and goes regularly to India to teach science to Tibetan monks. He will draw on this unique background to advise us on the science-spirituality dichotomy and on brain and consciousness matters as they relate to psychedelics.

G. MEDIA TEAM

Producer/Director: Micha Peled (Teddy Bear Films) has been producing critically acclaimed documentary films since 1993. Each of his six full-length documentaries aired on PBS, as well as by 37 foreign broadcasters. His films screened in more than 100 festivals, including Toronto, Berlin and Telluride international film festivals. His last three films, which comprise the *Globalization Trilogy*, were distributed theatrically in the U.S., Japan and Europe, and received favorable reviews in national print and web-based media, from the *New York Times* to *Huffington Post*. He is the recipient of twenty international awards, including the **Amnesty International Human Rights Award**, the **Oxfam Global Justice Award**, the **IDFA Green Screen competition Award**, the **PBS/Independent Lens Audience Award**, and the San Francisco Film Festival's **Golden Gate Award**.

Producer/Director: Caleb Hellerman (Curiosity Lane) makes films about science and medicine, including a current collaboration with *WGBH/NOVA*, and covers science for the PBS NewsHour. From 2004 to 2014 he was Supervising Producer for health and medical news at Cable News Network (CNN), where he covered breaking news, produced more than two-dozen documentaries and specials with Chief Medical Correspondent Dr. Sanjay Gupta and oversaw the weekly program, *Sanjay Gupta MD*. At CNN, he produced a number of stories about MDMA and psychedelic research. Caleb also spent six years as a writer and producer with ABC News' *Good Morning America* and *World News Tonight* with Peter Jennings. His work has won recognition including multiple Peabody Awards, National Headliner Awards and Emmy Award nominations.

Writer: Ken Chowder has scripted over 30 documentary films broadcast on PBS, NBC, TBS, Discovery, AE, and BBC, and published three acclaimed novels with Harper/Collins. His films have been nominated for the **Academy Award for Best Documentary**, won the **Primetime Emmy, Columbia/Dupont Prize, Peabody Award**, and been Best Documentary at many festivals, including the American Film Festival. Credits include 7 films for PBS' *The American Experience*, one *American Masters*, and 7 National Geographic films. His articles have appeared in *Smithsonian*, *Audubon*, *American Heritage*, and more.

Director of Photography: Stephen McCarthy has thirty years of experience in non-fiction cinematography. His work appears regularly on PBS, Discovery, BBC, Channel Four Television, HBO, the History Channel and MTV. He served as Director of Photography for two recent **Emmy-nominated** PBS series: *Cancer: The Emperor of All Maladies* and *Your Inner Fish*. He has also photographed the **Peabody- and Emmy-award-winning** series *The African Americans: Many Rivers to Cross*. His recently aired work includes three episodes for *The American Experience*; two for *Frontline*; and one each for *Nova* and *American Masters*.

Archivist and Archival researcher: Kenn Rabin has over one hundred credits as writer, producer, researcher, or consultant. They include PBS's 14-hour series *Eyes on the Prize*; Barry Levinson's *Yesterday's Tomorrows*; PBS's *Frontline*, ABC's *20/20*; and the 13-hour WGBH series *Vietnam: A Television History*. His work on the PBS series *American Experience*, *American Masters* and *POV* include many award-winning films, including *Daughter From Danang* and *The Weather Underground* and others). He co-produced and co-wrote *The Storm that Swept Mexico* for PBS. Rabin received two **Emmy nominations** and a **FOCAL International Award**. He is coauthor of the book *Archival Storytelling: A Filmmaker's Guide*.

Animator: Amit Sethi has been working in film and television since the early 1990's, designing title sequences and visual effects for feature films, documentary films, reality and scripted TV. He won **Emmy awards** for PBS' *Sesame Street* opening sequence in 2003 and for PBS' *Between the Lions* in 2001. He was nominated for his work on HBO's *Angels in America* in 2004. His documentary work is one of the aspects of his profession that is closest to his heart. He has worked with such celebrated filmmakers as Laura Poitras (*The Oath*), Joe Berlinger (*Metallica: Some Kind of Monster*), Lawrence Hott (Florentine Films), among many others. For the subject of this project, Amit will create elaborate animated abstractions to technical 3D visualization.

Editor: Lenny Feinstein has over 30 years of editing experience, including National Geographic Specials, PBS series including *American Experience*, *NOVA*, *Craft in America*, and docs and children's programs for HBO. He co-edited the ground breaking PBS series *Joseph Campbell and the Power of Myth*, and the feature documentary *Darfur Now* for Participant Films. For Teddy Bear Films he edited *Bitter Seeds*, which won numerous awards, including the **International Documentary Assoc. (IDA) Award**, and the **Berlin Cinema for Peace award**. He won an **ACE Eddie** for best non-fiction series editing award, and was nominated for an **Emmy**.

H. PROGRESS

We have assembled a board of advisers for the project that reflects multiple points of view and backgrounds in both the sciences and the humanities. Our on-going communications with the advisers, as well as with other scholars who did not end up on our board, and reading the books on the Bibliography list, have all contributed to shaping the film's content and approach.

We've obtained permission to film the next trial of Dr. Michael Mithoefer and his team, using MDMA to treat PTSD victims. This permission has been approved by the Internal Review Board which provides oversight to the trial. In consultation with our adviser Dr. Frank Miller we have

created a release form for trial subjects who will agree to be filmed. Filming will begin later this year, before the NEH funding decisions are made.

The project's archival researcher, Kenn Rabin, has already identified some of the archives that will serve us well in this program. We're particularly excited about one large likely source - the NIH (National Institutes of Health). The NIH owns several collections, including one of historical stills. The Stanley Burns Collection in New York, the largest historical medical photography collection in the world, may well have some things of interest. Rabin has established contact with Elizabeth Burns, director of the Collection. In addition, the National Archives in Washington, DC, have several collections that might be useful for us.

I. WORK PLAN

Our aim would be to complete the work in four months in order to submit a Production grant proposal to the NEH at the earliest next deadline. But since we don't want to rush the work at the expense of quality preparations, we have elected to plan a six-month process.

Month 1

- Project team holds planning sessions with advisers and other scholars to discuss content and creative approaches to storytelling.
- Producer/Director plans scouting trips to locations including Charleston, SC, Baltimore, MD, New York, Los Angeles and London.
- Producer/Director and Writer conduct research and scripting interviews with scholars and advisers.
- Writer researches published materials.
- Producer/Director meets with archival researchers to determine priorities.
- Producer/Director continues fundraising by applying to other funders.
- Producer/Director contacts PBS to get a letter of support and researches other distribution strategies.

Month 2

- Producer/Director begins on-location scouting trips and completes meetings with scholars.
- Writer and Producer/Director begin review of materials gathered on scout trips with project team.
- Researcher reviews archival materials and contacts rights owners.
- Researcher commences archival research.
- Researcher creates database for archival and art images.
- Researcher prepares and distributes materials to writer.
- Writer begins crafting script.

Month 3

- Project team reviews all materials.
- Writer and Producer/Director initiate discussions on visual resources.
- Writer prepares locations, archival, and interview details for inclusion in revised script.
- Producer/Director and DP plan the shoot for the sample reel.
- Producer/Director completes on-location scouting trips.
- Producer/Director begins conducting pre-interviews.
- Researcher continues archival research.

- Producer/Director begins preparation of detailed production budget and schedule.
- Producer/Director and Writer continue on-going review of materials gathered on scout trips.

Month 4

- Writer incorporates review notes into draft script.
- Producer/Director develops production budget.
- Writer completes final script and distributes to project team, scholars, and NEH for final review.
- Producer/Director and DP shoot the footage for the sample reel.
- Producer/Director and editor cut a sample reel.
- Producer/Director and writer prepare the first draft of script and essay and circulate it to scholars.

Month 5

- Producer/Director refines production plans and schedules.
- Producer/Director develops production budget.
- Producer/Director and writer revise script and essay based on scholars' comments and circulate a second draft.
- Research of archival materials, in response to producer and scholars' requests, is completed.

Month 6

- Project team completes draft of educational outreach plans and submits to advisers for review.
- Producer/Director and writer finalize script and essay based on scholars' comments on the second draft.
- Producer/Director and writer finalize fundraising proposals for PBS/CPB and foundations.
- Scholars sign off on script and essay
- Producer/Director submits application for an NEH Production grant.

J. FUNDRAISING PLAN

Our application for Massachusetts Humanities funding was rejected because our in-stage angle wasn't sufficient. We have been encouraged by the director to re-apply with a new approach. Funding decisions on the next round will be announced in January.

Later this year we intend to approach the Alfred P. Sloan Foundation, which regularly funds PBS programs on science. Their funding for 2016 was already spoken for when we approached last year. We will also approach the National Science Foundation, the John Templeton Media Project, the Jerome Foundation, and the Ford Foundation. In addition, our writer Ken Chowder has had numerous successes with the CPB, Ford Foundation, Rockefeller Foundation, and Arthur Vining Davis Foundations.

Teddy Bear Film's track record in fundraising speaks for itself. Our last three films were funded in part by ITVS, which funds only films for PBS. Clearly, foundations are key to successful funding. In the past we have received funding from the following: Funding Exchange (two films), CAAM – Center for Asian American Media, the Sundance Film Institute, the Virginia

Foundation for the Humanities, the San Francisco Foundation, Columbia Foundation, Ben & Jerry's Foundation, the Park Foundation, and the Fleishhacker Foundation.

As the attached letters attest, we already have distributors interested in representing this film, based on our on-going relationship – Bullfrog Films for the educational market and Film Transit for international television.

K. ORGANIZATION PROFILE

Teddy Bear Films was founded in 1999 and is a 501(c)3 nonprofit organization incorporated in the state of California. Teddy Bear Films (TBF) produces and distributes documentary films for public television, as well as for schools, public libraries and community organizations. Films such as *Inside God's Bunker*, *You, Me, Jerusalem*, and *Bitter Seeds* aim to inform, engage, surprise and generate public debate, while maintaining excellent standards of fairness and accuracy. To facilitate and strengthen audience engagement, TBF is committed to a robust social media and online presence. TBF has previous experience with humanities councils, having received a grant from the Virginia Foundation for the Humanities for the film *Store Wars: When Wal-Mart Comes to Town*.

L. LIST OF COLLECTIONS OF MATERIALS TO BE USED

In the National Archives, there are several collections that we believe will be useful, including Record Groups 200 (the donated gifts record group, including Universal Newsreels, outtakes from the *March of Time*, CBS material, the Harmon Foundation Collection, and so much more), 69 (the WPA record group), 263 (the CIA records group), and even Record Group 111 (Armed Forces). Other important sources are the NIH (National Institutes of Health's collections, including one of historical stills, and the Stanley Burns Collection in New York, the largest historical medical photography collection in the world,

Other archival sources:

ABC News, AP Images, APTN, the Bay Area Television News Archive - SFSU Special Collections, Budget Films, CBS News, Critical Past, F.I.L.M, Footage Farm, Gaumont/Pathé, Getty Images, ITN Source, KRON-TV, the Library of Congress, NBC News Archives, Periscope, Pond 5, The Prelinger Collection at the Internet Archive, and newspaper's archives at the *Chicago Tribune*, *Dallas Morning News*, *Los Angeles Times*, *Miami Herald*, *New York Times* and *The San Francisco Chronicle*.

M. PRELIMINARY INTERVIEWS

Nicholas Blackston, U.S. Marine Corps (ret.) and participant in trial of MDMA-assisted therapy;

Anthony P. Bossis, Professor of Psychiatry, New York University School of Medicine, and Co-Principal Investigator & Director, Cancer & Palliative Care Research/Psilocybin Research Project

Nancy Campbell, author of a visual history of the federal drug treatment hospital in Lexington, Kentucky, titled *The Narcotic Farm: The Rise and Fall of America's First Prison for Drug Addicts*, Rensselaer School of Humanities, Arts and Social Sciences;

Robin Carhart-Harris, neuroscientist at Imperial College, London and leading researcher in using brain imaging technology to study drug-altered brain states;

Mary Cosimano, therapist, study guide and research coordinator in psychedelic-assisted therapy, Johns Hopkins University Medical School;

David Courtright, author of *Forces of Habit: Drugs and the Making of the Modern World*, Presidential historian at the University of North Florida;

Alicia Danforth, therapist and researcher of psychedelic-assisted therapy studies at Harbor-UCLA Medical Center;

Rick Doblin, founder and executive director of the Multidisciplinary Association for Psychedelic Studies;

Richard Doyle, author of *Darwin's Pharmacy: Sex, Plants, and the Evolution of the Noosphere*, English and Liberal Arts Research Professor, Pennsylvania State University;

George Greer, co-founder of the Heffter Institute, published research findings on MDMA prior to its being made illegal and presented testimony to DEA administrative judge;

Charles Grob, conducted the first FDA approved study of the physiological and psychological effects of MDMA, and professor of Psychiatry & Biobehavioral Sciences at Harbor-UCLA Medical Center;

Stuart Hameroff, founder of the Center for Consciousness Studies, University of Arizona;

Colleen Hanlon, neuroscientist at the University of South Carolina Medical School, conducting brain-imaging studies of patients with PTSD, including participants in study of MDMA-assisted therapy;

C.J. Hardin, U.S. Army (ret.) and participant in trial of MDMA-assisted therapy;

David Herzberg, author of *Happy Pills in America*, professor of History, University at Buffalo (SUNY);

Rachel Hope, survivor of childhood sexual assault and participant in trial of MDMA-assisted psychotherapy;

Virgil Hughes, U.S. Army (ret.) and participant in trial of MDMA-assisted therapy;

Herbert D. Kleber, psychiatrist and the director of the substance-abuse division at the Columbia University–N.Y. State Psychiatric Institute;

Mark Kleiman, author of *Drugs and Drug Policy: What Everyone Needs to Know*, professor of Public Policy at the NYU Marron Institute of Urban Management and NYU-Wagner;

Don Lattin, journalist and author of *The Harvard Psychedelic Club: How Timothy Leary, Ram Dass, Houston Smith and Andrew Weil Killed the Fifties and Ushered In a New Age For America*;

David Lenson, author of *On Drugs*, English professor, University of Massachusetts, Amherst;

Jonathan Lubecky, U.S. Army (ret.) and participant in trial of MDMA-assisted therapy;

Bertha Madras, served as Deputy Director for the White House Office of National Drug Control Policy, professor of Psychiatry, Harvard Medical School;

Anne Mithoefer, registered nurse and co-investigator on several FDA- and DEA-approved studies involving MDMA-assisted psychotherapy.

Michael Mithoefer, psychiatrist and lead investigator on several FDA- and DEA-approved studies involving MDMA-assisted psychotherapy.

Candice Monson, co-investigator on trial of MDMA-assisted psychotherapy, research affiliate at the National Center for PTSD and psychologist at Ryerson University School of Medicine;

Jonathan Moreno, author of *The Body Politic* and *Mind Wars: Brain Research and National Defense*, David and Lyn Silfen University Professor of Ethics, University of Pennsylvania Medical School;

Marcela Ot'alara, sexual assault survivor treated with MDMA-assisted therapy when it was legal in the early 1980s, now a psychologist and co-investigator on a trial of MDMA-assisted therapy;

Chuck Raison, psychiatrist at University of Wisconsin School of Medicine and Public Health and Usona Institute, University of Wisconsin, Madison;

Barbara Rothbaum, psychiatrist specializing in neural correlates of PTSD, Emory University School of Medicine;

Paula Schnurr, Executive Director, National Center for PTSD;

Lois Shepard, author of *Informed Consent and Standard of Care: What Must Be Disclosed*, and *The End of End-Life Law*, University of Virginia School of Medicine;

Paul Summergrad, past-president of the American Psychiatric Association;

Loree Sutton, U.S. Army (ret.), New York City Commissioner of Veterans Affairs and Founding Director of the U.S. Defense Centers of Excellence for Psychological Health and Traumatic Brain Injury;

Dominique Tobbell, author of *Pills, Power, and Policy: The Struggle for Drug Reform in Cold War America and its Consequences* historian of medicine at the University of Minnesota;

Andrew Weil, physician and best-selling author of *The Natural Mind: A New Way of Looking at Drugs and the Higher Consciousness*;

Phil Wolfson, psychiatrist, currently conducting a study on depression, using MDMA with patients who suffer life-threatening illnesses in Marin County, California.

FORBIDDEN KNOWLEDGE: Science & Psychedelics
TREATMENT

Notes on the Treatment:

In this Treatment we flesh out certain segments of this a 2-hour film which are not covered in other parts of the proposal. For a detailed structure, please see the Film Outline section in C. Creative Content. Much of the content is discussed in the Humanities Themes sections.

The PTSD sections describe one patient, while in the film we will follow three. “Neil” is a composite character based on actual trial participants we’ve interviewed.

What speakers say is approximate, and is based on what they have written or said to us in pre-interviews.

Indented sections indicate visuals: archival materials and footage that we will film. Only a small sample of these visuals is listed. All locations and time periods will be identified visually.

PROLOGUE

A. PTSD STUDY PART 1, CHARLESTON, SC:

Patient #1 (out of 3):

A young man arises in his Charleston, SC, apartment, covered in cold sweat. It’s been ten years since **Neil Stanton** came home from Iraq, but to Neil it feels like yesterday. Stumbling into the kitchen to make coffee, he tells his wife Skye about the nightmare.

Skye has heard the story before; it’s the day Neil’s best friend was killed in an ambush. Now he’s frozen, spilled coffee spreading across the counter as he stares into space.

Skye (over shots of the couple gathering things and walking out the door): Neil has tried every treatment under the sign. Psychologists, group therapy, he’s tried six different medications. I feel like this is our last shot.

Neil (over driving shot): I don’t leave the house much. I stay up late, I drink too much and then I can’t sleep. I avoid crowds. I’m always on edge.

The therapists:

A middle-aged couple is chatting in the kitchen of a small bungalow. The mood is calm but focused. **Dr. Michael Mithoefer** and his wife **Anne Mithoefer**, a nurse, are the leading practitioners of treating post-traumatic stress disorder (PTSD) with MDMA. Dr. Mithoefer enters the combination on an imposing-looking safe, and takes out a bottle with Neil’s name on it. He tells

Michael (over shots of him w/ Anne): We’re trying to see if MDMA, which is better known as Ecstasy, can help people overcome post-traumatic stress disorder. The first studies got good results but now we have to see if it can work for more people.

Anne explains how the trial is structured: two sessions with the drug and four talk sessions (some through video conferencing.)

Neil is being greeted by the Mithoefers. As they settle down for the first session, they coach him about what to expect from a 125 mg dose of MDMA and advise him to relax into the sensations.

Narration: All participants in this study have tried other medications and therapies, but their PTSD symptoms have persisted. In this experimental therapy they will have two sessions with MDMA. This substance is still illegal, though recently, for the first time in decades, the Federal government has allowed a few controlled trials using banned psychedelics and MDMA.

OPENING TITLE SEQUENCE

Over processed images from historical archives and from our own footage.

ACT I

A. ESTABLISHING CONTROVERSY

Narration: Psychedelics have always elicited extreme reactions of both attraction and antagonism. They are now being tested for their medical potential, but clearly we do not approach these powerful substances as just any other new drug.

A sequence of brief opinions, expressing a wide range of perspectives, establishes the controversial nature of psychedelics.

Steve Ross, New York University: The fact that a drug given once or twice can have such an effect for so long is unprecedented. We have never had anything like it in the history of psychiatry.

Nora Volkow, director of the National Institute on Drug Abuse (NIDA): It is important to remind people that experimenting with drugs of abuse outside a research setting can produce serious harms.

John Halpern, Harvard Medical School: Just when you're on the edge of death, the psychedelic experience gives you hope for something more, the belief that something else is out there that's bigger than you.

John Mendelson, California Pacific Medical Research Center: They need to grow up. If you're going to call this treatment, it has to be in a place that is set up to provide emergency medical care. Patients can have severe anxiety reactions, which can persist for a long time afterwards.

Also figures from the past weigh in:

Timothy Leary: I learned more about my brain and its possibilities in the five hours after taking these mushrooms than I had in the preceding fifteen years of doing research in psychology.

British researcher Michael Hollingshead: Acid was a bundle of solutions looking for a problem.

Sociologist Todd Gitlin: The drug became a centerpiece of the counterculture revolt against authority and materialism – against the values of the consumerist society itself.

B. FORBIDDEN KNOWLEDGE

UCLA pharmacologist Ronald Siegel: Since early history, humans have consumed psychoactive plants, almost always during spiritual rites. This compulsion for intoxication has deep evolutionary roots.

Author-physician Andrew Weil: Intoxication has been a feature of human life all over the planet. It all stems from a normal, inordinate human drive.

Narration: The earliest known evidence of humans using psychoactive plants is here, in the Tassili-n'Ajjer Plateau in the Sahara desert of southern Algeria. Ancient rock paintings depict shamans eating psychedelic mushrooms amidst grazing cattle. They date back to the late Neolithic period, roughly 12,000 B.C.

The Tassili-n'Ajjer desert landscape. Rock pictures show shamans dancing with fists full of mushrooms. They also have mushrooms sprouting out of their bodies. Another picture of shamans running joyfully, surrounded by the geometric structures of their hallucinations.

Ronald Siegel: The desire for intoxication is not unique to humans. Field biologists have observed elephants, chimpanzees, parrots and other species deliberately ingesting fermented fruit and other intoxicants. We can consider the desire to alter your mind is "the fourth drive" after hunger, thirst and sex.

Narration: About 150 psychoactive plants and fungi are known to man, and they vary greatly in their effects. Most grow in the Americas, but they are also found in Europe, where rituals with mind-altering concoctions appear early in recorded history.

Narration: In Ancient Greece, the annual **Eleusinian Mysteries** were religious practices of initiation rites. Participants drank a barley and mint hallucinogenic brew, which is believed to have been infused with the psychotropic fungus ergot. It will take a few millennia for a scientist to rediscover the unique properties of ergot, which is the original source of LSD.

Summary of THEME #1 -- early and medieval history sections

These sections present key examples of how psychoactive substances were used in ancient Western cultures and introduce the concept of "forbidden knowledge."

The Eleusinian Mysteries in Greece were shut down when the Roman rulers converted to Christianity. The old ceremonies were viewed as an act of rebelliousness against the new religion.

In medieval Europe, healers often used psychoactive plants in their healing and magic practices. Frequently considered witches, they were widely persecuted and sometimes burned at the stake.

In the 16th-17th centuries, astronomers Copernicus and Galileo made scientific claims that upended accepted cosmology and undermined church dogma.

Summary of THEME #1 -- the Conquest of the Americas

At the same time, the Spanish discovered the New World and conquered large swathes of it. The conquerors prohibited the indigenous population from conducting any ceremonies that used psychedelics. They felt that the mind-altering effects threatened the colonial hierarchy and were offensive to the church.

Historian Isaac Campos-Costero from the University of Cincinnati discusses the colonial attitudes in Mexico, where such rituals were prohibited under pain of death.

Isaac Campos-Costero: Mexico is the richest country in the world for natural psychedelics -- over half are native to Mexico. Indigenous communities used a wide range of hallucinogens, depending on what grew in their area. Most well known were peyote cacti and magic mushrooms, called "Teonanácatl" in Nahuatl, or "god's flesh." Native faith was closely linked to the psychedelics, which were used as sacrament. They ingested sacred mushrooms in order to be possessed by the deity that resided within them. Not surprisingly, the Spanish Inquisition regarded practitioners of psychedelic ceremonies to be possessed by the devil. There is a wealth of archival texts on how the Spanish regarded psychedelic rituals.

Summary of THEME #1 -- evolving public attitudes toward science

Newton and his discoveries ushered in the era of Modern Science. Unfettered freedom to pursue scientific research became one of the hallmarks of a post-Enlightenment society.

But in the 20th century, as science and technology grew more potent, public attitudes shifted toward government regulation. Scientific discoveries like the splitting of the atom and cloning became controversial.

At the same time, psychedelics made their entry into Western societies. Manufactured in labs, they became not only a product of science, but also the focus of new scientific research.

Summary of THEME #1 – current psychedelic-assisted therapy trials

A survey of the recent FDA-approved studies. Contemporary critics demand extreme caution and more research before the drugs can be incorporated into mainstream medicine.

C. PTSD STUDY PART 2:

Clips of video recordings:

A nervous Neil Stanton tries to make himself comfortable on the futon, tries on the eyeshades and headphones. With a gentle smile, Michael Mithoefer asks: “Are you ready?” Neil drops the pill into his mouth.

The session lasts six hours. Dissolving shots and pictures of clock and changing light (filmed by us outside) makes it clear that time is passing. For the first long stretch, Neil is quiet. Then, he begins to talk → about signing up with the Marines at age 17, about the power he felt the first time he unleashed a burst of fire from the .50-cal machine gun.

He talks about Skye, and lights up. Their first meeting, at a party where they came as other people’s dates. He’s smiling.

The mood grows darker. Neil talks about the doomed mission, a pointless patrol past children flipping them off and yelling curses. The explosion, the terror of smoke filling the Humvee. The firefight, the sense of relief when a tank pulled up to blast the enemy into retreat. Looking up to see his friend gasping for breath. The quiet after the helicopter took him away. His own face reflected against the bloody seat.

Neil is in tears. Michael holds his hand. Anne asks him if he wants a hug – they embrace.

PROFILE 1: Dr. Michael & Anne Mithoefer

Anne Mithoefer (over end of session with Neil): At first glance, MDMA-assisted psychotherapy looks very different from any conventional treatment. There is a lot of time when the participant just lies there on the futon, listening to music. We don’t rush them, and eventually they’re moved to talk and do the work. There are always two of us, male and female therapists, sitting with the patient throughout the session.

Michael and Annie discuss the details of Neil’s session, going over their notes.

Michael Mithoefer (to camera): The subjects in this study are military veterans, firefighters, and police officers with PTSD. People with PTSD get stuck in a permanent state of fight or flight. It can be extremely debilitating and it’s also very hard on the people around them

Annie: The MDMA not only reduces fear, but it also increases interpersonal trust. That also helps us reach an intimate, trusting connection with the subject.

Q.: What about the findings that have shown the potential for brain damage from MDMA?

Michael: The potential exists, but one would have to use the drug many times before it would be of concern. Recreational users who use impure substances and spend hours in a club without drinking water often suffer from dehydration. We provide only two sessions with MDMA and control the circumstances very carefully.

The Charleston, SC, shoreline. The Mithoefers sail their boat in the open ocean.

Michael (over sailing shots) After college, Annie and I lived on a boat for a while in the Caribbean. I came back and felt that I wanted to help people in crisis situations. I went to medical school, and for a few years I worked the ER, but it became frustrating- I didn't know how to fix these people, especially the psychiatric cases. Out of curiosity I went to the Peruvian jungle to experience shamanic psychedelics, and returned with a whole new idea about how I wanted to spend the rest of my life.

Annie: You also returned with a terrible intestinal infection. For weeks you were depressed.

Michael: Perhaps that's partly why I relate well to our study subjects. They are all patients who didn't respond well to any of the treatments offered to them at the V.A.

Narration: The Veteran's Administration deals with close to half a million soldiers who returned from Iraq and Afghanistan with PTSD symptoms. It provides a range of medication and talk therapy treatments. However, at least a third of the PTSD patients do not improve significantly with any of the approved treatments. The Ecstasy therapy provided by Dr. Mithoefer and his team is considered experimental, and has come under criticism from some of the leading PTSD therapists.

Narration: Dr. Edna Foa developed the most widely used treatment, "prolonged exposure" therapy, which involves repeatedly going over a traumatic experience until it loses its sting.

Edna Foa: Memory of the trauma blocks recovery. You have to confront it. They say that MDMA makes it easier to talk about the trauma, but that defeats the purpose. You need to train yourself to deal with it without being high, not avoid it.

Narration: Francine Shapiro developed another popular form of treatment, involving special eye movements that help to retrain the brain to cope with sensory overload.

Francine Shapiro: In the first studies with MDMA, people got better but most of them were still on medication. It's not a cure. Also, PTSD patients are very fragile. They can be suicidal. You have to be careful and I'm very skeptical of trying a new treatment when we have no idea how it works.

Neil and Skye at home:

It's the next morning; Skye is picking up Neil at the Mithoefers' place. They embrace and ride home quietly.

Skye (to camera): I want him to talk to me. I want to understand what he's feeling.

Neil (to camera): Telling that story felt so natural, but it's been a long time since I talked about Skye and felt happy. I've caused her so much pain.

Skye: (to camera): He never really came back from Iraq. I feel like I'm living with someone else.

Short segments of the next few days suggest the ongoing strain between the couple. Skye wants Neil to open up, but he's not ready. Neil rises at dawn, going out to set crab traps when no one else is around.

Neil (over shots of him crabbing): I want to tell her everything but it's too much to process. But I feel different. I still can't sleep much, but the nightmares stopped right away.

Michael: We're just learning how mental illness affects the brain. With PTSD, you have increased activity in a part of the brain that's called the amygdala. It's associated with fear. Now from studies done with functioning MRI, we know that MDMA significantly decreases activity in the amygdala. When they are less afraid, the subjects can go inside more easily and relive the events that caused them the trauma, only now they can remain unafraid and keep a healthy perspective.

Michael: For this new study, we've been able to add neuroimaging and other physiologic measures.

D. NEUROSCIENCE

University of South Carolina campus. The lab at the Medical School. Study participant Neil's is being examined by scientists operating an fMRI machine.

Dr. Colleen Hanlon (USC): There is so much we still don't know about how the brain works. No one knows how any psychiatric treatment actually works, but this is especially complicated because it combines psychotherapy and psychopharmacology.

Brain Neuroimaging/animation sequence:

Narration: Perhaps the most ambitious attempt to pick apart the biochemical mystery of the psychedelic experience has been taking place in a lab at Imperial College, in London.

Researcher Robin Carhart-Harris injects healthy volunteers with LSD. Then, using a variety of scanning tools, including fMRI and magnetoencephalography (MEG), he observes what happens in their brains. Images on the screens morph into 3D animation and CGIs demonstrating what the scientist explains.

Robin Carhart-Harris: If the only way we can access the unconscious mind is via dreams and free association, we aren't going to get anywhere. Surely there must be something else.

Carhart-Harris elaborates while looking at evidence in scans of brain waves. Animated sequences illustrate his explanations. His scientific lingo is made simpler through an accompanying narration.

Narration (over animation): In a nutshell, Carhart-Harris talks about "our most intriguing and potentially important finding on the neurobiology of the hallucinogenic state to date": that blood flow and electrical activity drop off dramatically under the influence of psychedelics. This takes place in important hub structures in the brain, such as the thalamus and the posterior cingulate cortex.

Robin Carhart-Harris: We call these areas the brain's default-mode network. It's as if the brain had an "orchestra conductor." This reduced brain activity that you see takes place at same time that the patient reports a loss of the sense of self.

Robin Carhart-Harris: The result of this reduction in brain activity is increased cognitive flexibility – the ability to restructure habitual thought patterns – which may be useful in treating disorders such as depression, obsessive-compulsive disorder, and addiction.

Summary of THEME #4

Consciousness: Are psychedelics a doorway to the "Biggest Question of Them All"? An examination of man's age-old quest to understand the nature of consciousness and why it is so elusive. This is followed by a look at the potential role of the mind-altering properties of psychedelics in studying consciousness, a topic which has become in recent years a focus of many disciplines from philosophy to neuroscience.

ACT II

A. PTSD STUDY PART 3:

Catching up with Neil and the other participants following the second and last psychedelic session.

Dr. Mithoefer explains how the study is designed to meet today's scientific standards to prevent a repeat of the 1960s LSD abuse.

B. LSD – THE RISE

Basel, Switzerland, Basel Convention Center, January 13, 2006

Signs announcing the 100th birthday of **Albert Hofmann**.

The discoverer of LSD and Psilocybin, bent by a century to a height of barely 5 feet, climbs onto the stage on crutches. Almost 2000 people – pharmacologists and brain researchers -- rise to their feet and offer a thunderous applause. Dozens of cameramen and photographers jostle in front of the birthday boy.

Albert Hofmann: (his speech is sub-titled from German) The last few years I've watched with great delight efforts to bring back legal LSD research. And I'm so delighted that you have succeeded, that once again LSD is available for serious, legal research.

Anthropologist Nicolas Langlitz, author of *Neuropsychodelia*: The "old guard" was all there - researchers and psychiatrists who were old enough to have done this research before the 1970 ban. But just as many were young scientists, eager to introduce psychedelics to the age of cognitive science.

Albert Hofmann: It's very important that you're prepared to do psychedelics. They are powerful and should be treated with respect.

Prompted by a question, Hofmann begins to tell how he discovered LSD.

World War II iconic images place us in that era.
Switzerland, Zurich, 1943

Narration: No one expected anything of significance to come out of Switzerland during World War II. The country's avowed neutrality kept it out of the war that raged across Europe.

But in Zurich, Switzerland, one man discovered a chemical compound that was destined to change the life of an entire generation, the post-war baby boomers.

Five years earlier, Swiss biochemist Albert Hoffman had been looking for a stimulant for blood circulation. He had synthesized a chemical derived from ergot, a grain fungus that typically grows on rye. He tried combining lysergic acid with diethylamine, a derivative of ammonia, and various other organic molecules, but none of the combinations produced the desired effect.

B&W Footage from the archives of Sandoz Labs, showing Albert Hoffman in his early 30s, working in a lab. Close ups of hands writing notations, tubes, and microscopes, along with still photos of Albert Hofmann from that era, at work and with colleagues.

Title: Jan. 13, 1943

Narration: Today, Albert Hofmann decides, on a hunch, to synthesize once again the 25th combination. He fails to put on his gloves. In the middle of the process, he feels dizzy. He asks an assistant to escort him while he rides his bike home. He barely makes it. Once at home, he lies down in such a strange state that his doctor is called.

Albert Hoffman (in his 100th birthday) recounts the details of that distant day and continues: In a dream-like state, with eyes closed, I perceived an uninterrupted stream of fantastic pictures, extraordinary shapes with an intense, kaleidoscopic play of colors. It took me a few hours to return to my normal state.

Narration: In his 25th concoction, Albert Hoffman has combined lysergic acid with diethylamine, a derivative of ammonia. The lab calls it LSD-25. Hoffman calls it “my problem child.” But the world is soon to know it just as “LSD.”

Hoffman: The LSD compound has a molecular structure similar to things that exist in nature. What’s even more remarkable is that LSD and other psychedelics turn out to be remarkably similar in structure to chemicals found in the central nervous system. In fact, they mostly boost what our body is already creating.

Narration: The world pays little attention to anything taking place in Switzerland during the turbulent 1940s.

The writer Graham Greene may therefore be forgiven for penning the following line for Orson Welles in his script for the 1950 film *The Third Man*.

Film clip, Orson Welles: In Italy for 30 years under the Borgias, they had warfare and bloodshed, but they produced Michelangelo and the Renaissance. In Switzerland they had 500 years of peace, and what did that produce? The cuckoo clock.

Narration: Orson Welles’ quip becomes an instant classic. Switzerland is the last place one expects to produce anything that will revolutionize, antagonize, delight, and alarm people around the world.

U.S. period footage, 1950.

Narration: Sandoz Laboratories, the Swiss company that employs Albert Hofmann, has a dilemma. They don’t know how to sell the “wonder drug” that their biochemist invented. They begin to ship free samples to clinical psychiatrists and hospitals, hoping useful applications will be found for their new drug.

Historian Erika Dyck: The timing of LSD could not have been better. The mid-20th century was the time psychiatry began to embrace drugs, as opposed to just talk, as a means of “curing” mental illness. Pharmaceuticals such as anti-depressants were being developed and tested.

Footage of LSD experiments at Boston Psychotherapeutic Hospital

Narration: The first thing that draws the interest of psychiatrists is that the hallucinations and sensory distortions of LSD appear to mimic a psychotic breakdown. Pharmacologists investigate, hoping the drug might help to identify the physiology of schizophrenia.

Many self-experiment, hoping to replicate the experience schizophrenics have from the inside.

1950s footage of psychiatrist **Dr. Humphrey Osmond** filmed while tripping on LSD. Osmond describes how he was seeing everything around him anew, as if with the eyes of a newborn. The wood grain on the chair looked so unique...

Narration: Soon, LSD is discovered to be much more versatile, and researchers test its benefits for a wide range of ailments, such as depression, obsessive-compulsive disorder, and alcoholism. They note that LSD does not produce addiction, though they are surprised by the profound inner experiences it generates.

CBS Report: *The Spring Grove Experiment* (link to this show is in section 6. Images) was filmed inside this Maryland state mental hospital. Scenes with two patients: a middle-aged woman who has had a mental breakdown and an alcoholic young man. Scenes of LSD sessions with both of them, and later their discharge from the hospital. A follow-up a few months later shows the woman integrated back into family life, and the man, looking much healthier, says that since the treatment he has not wanted to have another drink.

Erika Dyck: In particular, LSD appeared effective in combatting alcoholism. Osmond treated hundreds of alcoholics in Saskatchewan.

Weyburn Psychiatric hospital, Saskatchewan, Canada.
Patients in a Humphrey Osmond trial with alcoholics swallow a pill with a glass of water. They write notes in a journal. They lie down on a couch, eyes covered.

Osborn in a TV talk show explains that they chose alcoholics for their first trials with LSD because it was easy to see right away if they improved.

Erika Dyck: His success rate with alcoholics was stable at 50%. This was more than double that of other available treatments.

Narration: Scores of trials are conducted throughout the 1950's and into the early 1960s, and most report positive results. Some 40,000 patients are treated with LSD, and over 1000 clinical papers appear along with several dozen books.

Steven Novak, author of *LSD before Leary*: The drug was remarkably safe when used medically. We have compiled results of 25,000 doses of LSD, and they resulted in only ten prolonged psychotic attacks and no deaths.

Tom Shroder, author of *Acid Test*: A 1958 analysis of all studies attributed the large success rate to LSD's effects of lessening defensiveness, increasing access to "unconscious material," and enhancing the therapist-patient relationship.

Narration: The U.S. government funds hundreds of LSD trials, spending over \$4 million on studying the drug. The CIA and the U.S. Army conduct classified LSD trials. They are interested in its potential in brainwashing and as a "truth serum."

With the Cold War at its height, fears of Soviet brainwashing are prevalent in the cultural zeitgeist. The 1960 movie *The Manchurian Candidate* illustrates this fear.

Clip from *The Manchurian Candidate*:

Dr. Yen Lo: His brain has not only been washed, as they say... It has been dry-cleaned.

Tom Shroder: In San Francisco, the CIA creates a brothel where unwitting subjects are slipped LSD in their drinks, and then observed through one-way mirrors.

1955 San Francisco: American Psychiatry Association sponsors a major LSD conference. British writer **Aldous Huxley** describes how taking Mescaline two years earlier has changed his perception of reality.

Narration: The writer Aldous Huxley, best known for his science fiction novel *A Brave New World*, publishes *The Doors of Perception*, recounting his mystical experiences. The slim book quickly becomes a cult classic. The rock band *The Doors* later will choose its name in tribute to this book. As a result of Huxley's popularity, psychedelics begin to crossover from the medical world into popular culture.

Articles and photos in *The New York Times*, *Saturday Review*, and *The Reporter* showing Huxley at his home in the Hollywood Hills.

A critical article in *The Washington Post* calling Huxley's "strange campaign to induce civilization to switch from alcohol and tobacco" to mescaline "a little wacky."

Narration: By the late 1950s, psychedelics begin to appear in the mainstream media. Soon, they are no longer just the interest of the medical profession.

Life magazine, June 1957: An article entitled *Seeking the Magic Mushroom*, with photos of Wall Street banker Gordon Wasson sampling mushrooms in a remote Mexican village.

Stephen Siff, author of *Acid Hype: American News Media and the Psychedelic Experience*: the publisher of *Time* and *Life*, Henry Robinson Luce, announced to his staff at the company's annual ball that he and his wife, Clare Booth Luce, were taking LSD "under our doctor's supervision." He said that, while on LSD, he began to hear music so enchanting that he began conducting an imaginary orchestra in the middle of his cactus garden. Henry Luce was tone-deaf. At the time, there was no national "drug problem" to speak of, and LSD was still a legal substance being prescribed by pioneering psychotherapists.

San Francisco Chronicle 1958 headline: five sessions of LSD, at one dollar each, are more effective than thousands of hours of psychoanalysis.

Narration: The apex of favorable press for LSD is the coverage of Cary Grant. The Hollywood star admits that he is using psychedelics as part of his psychotherapy.

Stills of Cary Grant.

"Puff pieces" about the actor and his use of LSD in *Look*, *Time*, *The Washington Post*, and *Good Housekeeping*

Narration: An article by Richard Gehman in *Ladies' Home Journal* effuses about the actor's LSD-induced metamorphosis:

By courageously permitting himself to be one of the subjects of a psychiatric experiment with a drug that eventually may become an important tool in psychotherapy, Grant has become a radically different man. He has become something few stars have ever become: a healthy, reasonably well-adjusted, mentally fit human being.

Narration: One thing researchers value about LSD is that, while it transports patients to a dramatically altered reality for 8-12 hours, it still preserves their ability to communicate with the researchers.

BBC TV interview of noted psychologist **R. D. Laing**: Any advice for those wishing to become a psychoanalyst?

Laing: Number One, read the works of Freud. Number Two, undergo a personal analysis. Number Three, take LSD.

Yet, for the all enthusiasm LSD generates and the promising early results, in just a few short years, the drug will be shunned by almost everyone in the medical profession.

The Hollywood Hospital LSD clinic experiments are covered in detail, based on the recently-released patient files. For details see C. Creative Content.

C. LSD – THE FALL

Historian Dominique Tobbell, author of *Pills, Power, and Policy: The Struggle for Drug Reform in Cold War America and its Consequences*: The story of how LSD first was seen as a "miracle drug" and then became publicly perceived as a dangerous, anti-social substance has become deeply entangled in the broader history of the 1960s counterculture and its excesses. As a result, it has

shaped one of the most defining narratives of America in the mid 20th century.

Narration: In Los Angeles and a few other cities, some therapists begin to sell LSD. They can easily reorder supplies directly from Sandoz Labs, the Swiss manufacturer.

Steve Novak: Sidney Cohen, a UCLA professor, was one of the psychiatrists using LSD in therapy. In 1960 he published a study that concluded that LSD was safe as long as it was given in a supervised medical setting and in fairly small doses.

Narration: But shortly afterwards, Dr. Cohen grows alarmed. The drug is spilling onto the streets, there is a black market with pills of unknown quality, and people have begun to use it recreationally and irresponsibly.

Steve Novak: Most people today believe that the reason for the ban on all psychedelics was a backlash by the establishment against the counterculture and the Vietnam War protest movement. But this is only partly true.

Narration: The restrictions on LSD started earlier. In 1962, Dr. Cohen is called to testify before Congress.

Dr. Sidney Cohen (audio recording of his testimony): We have seen something which is more alarming than death in a way, and that is the loss of all cultural values, the loss of the feeling of right and wrong, of good and bad. These people...are deculturated, lost to society, lost to themselves.

Steve Novak: Following Dr. Cohen's testimony, Congress passed the Kefauver-Harris Drug Amendment. It gave the FDA, for the first time, the power to approve the testing and marketing of new drugs. Shortly thereafter, Sandoz halted all commercial sales.

Narration: And all of this happened before the hippies, and before Leary burst onto the scene.

Summary: the Counterculture Era:

This segment presents a variety of images of the period and footage of iconic figures such as **Alan Ginsberg** and **Ken Kesey**, who evoke the era and its celebration of psychedelics.

A significant section will cover **Timothy Leary** and **Richard Alpert**, their Harvard experiments, and later their evangelizing for LSD. **Andrew Weil** confesses to being the one whose report in the *Harvard Crimson* got Leary and Alpert expelled from academia.

As psychedelics go viral, they become a defining part of the new drug subculture. Some four million Americans are estimated to have taken psychedelics by 1967. In addition to recreational use, many are drawn to the mystical effects of the drug, to the quest for meaning, which begins to find expression in the period's music and art.

Sociologist Todd Gitlin, author of *The Sixties: Years of Hope, Days of Rage*: Drugs like LSD were understood by both users and the authorities alike as a sign of revolt, as a port of entry into the subculture of opposition. For the youth culture, they represented a metaphysical alternative to the consumerism and commercialism of Western society.

A cascade of lurid newspaper headlines and TV reports warn about the perils of LSD. **Stephen Siff** and **Tom Shroder** analyze the role of the media – the sensationalist reporting which exaggerated both the evils and joys of LSD, the clichés of surreal visual effects and music - in shaping America's opinions about the drug. Most Americans never sampled LSD. But popular culture was so obsessed with the topic that those who never took psychedelics felt a shared experience with those who had.

Ken Johnson, *The New York Times* art critic: You may never have taken LSD, but America has.

Stephen Siff: LSD promoted a lifestyle and mindset that intrinsically challenged the rationalist, materialist underpinnings of our culture. It was hard not to draw a connection between LSD and growing discontent with the status quo in a society riven by the anti-war and civil rights movements, a society that was soon at war with itself.

Narration: In 1968, responding to pressure from concerned parents, Congress makes possession of LSD a criminal offense.

Narration: A lonely voice in defense of LSD is first term Senator Robert Kennedy.

Senator Kennedy: I fear of FDA interference with the scientific investigation of so promising a drug as LSD... Perhaps to some extent we have lost sight of the fact that it can be very, very helpful to our society if used properly.

Narration: Two years later, President Nixon signs the 1970 Controlled Substance Act, establishing a schedule with five classes of different degrees of control. All psychedelics are placed in Schedule 1.

Section of the 1970 Act: Schedule I drugs are defined as drugs with no currently accepted medical use and a high potential for abuse. Schedule I drugs are considered the most dangerous drugs, with potential for severe psychological or physical dependence.

Erika Dyck: One way to look at the Controlled Substances Act of 1970 is as the rise of federal regulatory agencies. Now, the FDA had the power to tell scientists not to follow a certain course of research.

Historian Kathleen Frydl, author of *The Drug Wars in American 1940 - 1973*: The ban on psychedelics must be seen in the context of other drugs, like heroin and cocaine, which had also been used medically. All these prohibitions can be understood as a power move by the federal government to increase its control over the growing pharmaceutical industry. The criminalization of other drugs also had pronounced racial dimensions. In that sense, psychedelics stood apart, because they were mostly consumed by white, middle-class kids.

Narration: At congressional hearings, senators are shocked to learn that doctors have been allowed to give patients experimental drugs without informing them. The legislation is in part a reaction to that. The government began to step into the doctor's office for the first time, assuming the power to determine which drugs would be approved.

President Nixon, in a speech: The growing use of illegal drugs is a serious national threat to the personal health and safety of millions of Americans.

Narration: Valid concerns for public safety helped drive the decision to make LSD illegal for public use. But the fact that in one fell swoop, all psychedelics were also prohibited for research, suggests a more complex set of factors at play. This is the era in which pharmaceutical companies grew into multinational corporations. Between 1940 and 1980, sales of pharmaceuticals rose 30 fold, reaching over \$18 billion a year.

Kathleen Frydl: There was also an economic aspect to the 1970 Act. None of the drugs that were manufactured by major American drug companies were criminalized, unlike cannabis and LSD, which had no corporate patron. Some of the drugs that ended up on the most restrictive schedules, such as LSD, cocaine, and heroin, had been previously used in medicine. The pharmaceutical companies saw them as competing with their new painkillers and sedatives. The fact that psychedelics had no addictive properties had little bearing on Congress.

Roland Griffiths: Can you think of any science regarded as so dangerous and taboo that all research gets shut down for decades? It's unprecedented in modern science.

Narration: The meteoric rise and fall of LSD tells us much not only about psychedelics, but also about who we are as a culture. The drug arrived at a moment when a distinct youth culture emerged in America. It was a substance that seemed to lead users to flout authority and challenge traditional social expectations. The choice America made regarding which psychoactive substances to ban and which to advertise in mass media drew a kind of self-portrait of American society with its cultural, economic, and racial concerns. These choices reflected back a society that, despite its modern trappings, was still gripped by ancient, hazy fears about forms of knowledge that it didn't fully understand, and therefore moved to forbid.

Ken Johnson, art critic of *The New York Times*, and author of the book *Are You Experienced? How Psychedelic Consciousness Transformed Modern Art*: Hallucinogenic drugs have altered the minds of so many people that practically all contemporary art has come to conform with a "psychedelic paradigm." The big changes in art, which began in the 1960s, have defined post-modern art. No longer was art something just to appreciate for its aesthetic qualities. Formalism didn't matter. Boundaries became fluid and porous. Think of the mashing of ideas, mixing of art forms, and genre-bending. Hierarchical distinctions between high and low culture were rendered irrelevant.

Johnson's views have been criticized as over-reaching. **Art historian Thomas Crow**, author of *The Rise of the Sixties: American and European Art in the Era of Dissent*, offers a more tempered view of the era's art, which takes into account the large political movements in America at the time.

Sociologist Todd Gitlin: The desire for the kind of mystical, transformative experience that psychedelics triggered for millions in the early 1960s led down numerous circuitous paths beyond drug options. Some of those that have since become widespread are meditation, Buddhism, and New Age spirituality in general. LSD also popularized Native American drug practices, which only recently had been considered backward.

Political scientist Stephen Macedo, author of *Reassessing the Sixties: Debating the Political and Cultural Legacy*: Our political and personal lives continue to be lived in the broad wake of the 1960s. Basic conflicts came to the fore in that decade and continue to define our politics: a greater willingness to challenge authority of all kinds; more egalitarian race and gender relations; a new openness with respect to sexuality; but also higher rates of divorce and drug abuse and crime.

Summary of THEME #2

The anti-social effect common to psychedelics in the 1960's and since then in Western cultures is contrasted with the pro-social effect psychedelics have had in indigenous societies. **Andrew Weil** defines "Set" and "Setting."

Narration: And yet, these findings beg the question – can there be a pro-social role for psychedelics in our culture? Can we imagine psychiatrists as modern-day shamans?

Psychotherapist and Co-Principal Investigator Jeffrey Guss, NYU: In our studies, treating end of life depression with psilocybin, patients typically reported behavior changes such as improved self-care, accepting responsibility for one's actions, and a greater sense of connection to others. These are values, which in the psychedelically altered state, the sufferer is more likely to take in as deeply held cultural values.

Psychiatrist John Mendelson, California Pacific Medical Center Research Institute: We are not purveyors of spirituality. Having an epiphany is not a part of medicine. The role of medicine is to cure people, not to make them better than they were before they got sick.

D. UNDERGROUND LAB WORKS

Narration: The 1980s and 90s, following the ban on psychedelics, are called “The Dark Era.” And yet, there is a flowering of unauthorized underground research going on.

Summary of the underground era’s most prominent scientist:

The most well known scientist of the era is **Alexander Shulgin** of Lafayette, CA. He invents in his home lab close to 200 new mind-altering compounds, as well as drugs to treat hypertension and senility. Shulgin also resurrects an obscure substance, which had been invented early in the century in Germany, called MDMA. This earns him the nickname “the Godfather of Ecstasy.”

Richard Doyle: The most important tool of underground drug research during this period is the World Wide Web. People who were suffering from cluster headaches, these excruciating headaches that resisted absolutely any medication thrown at them, found each other online. They started sharing tips. It turned out that small doses of psilocybin mushroom, just one gram dried, not enough to trip, was actually eliminating their headaches. **Bob Wold**, one of the founders of Microsoft, created an on online community. They called themselves “psychonauts” and their discussion boards claimed they were sharing “peer reviewed science.”

Narration: Not only the underground research, but also some of the findings from the two decades of approved earlier research still appear valid, and have provided a basis for present day research.

Richard Doyle, Timothy Leary and other 60s scientists did important work. It’s now looked down upon because they didn’t use our standards of methodology and controls, but the results in recent studies are similar to theirs. Albert Hoffman can be criticized for not being careful. He didn’t wear gloves. But that’s how he got LSD into his system. He didn’t know LSD would be 1000 times more powerful than mescaline, which was his reference marker at the time.

ACT III

A. PTSD STUDY PART 4:

Neil and the other participants in their daily life one month after the sessions. Dr. Mithoefer reveals the study overall results.

B. NYU PSILOCYBIN STUDY – see Film Outline

C. SPIRITUALITY AND OTHER PSILOCYBIN STUDIES

Portrait of Roland Griffiths, MD

Video clip of a younger Roland Griffiths, though with the same shock of white hair, announcing at a press conference that caffeine is a psychoactive drug and that it is as addictive as cigarettes and cocaine.

A series of questions and answers with Dr. Griffiths, each exchange taken from a different interview.

Q: How did you get interested in psychedelics?

A: Since I was in school I have had an interest in the pharmacology of mind-altering drugs, mostly those considered drugs of abuse. I started with things that were legal, like coffee and energy drinks. But I wanted to continue where research of LSD left off in the 60s. It was a long road, but finally I was able to get funding for a study of hallucinogens and I chose psilocybin.

Q: Which population of patients can most benefit from a psilocybin therapy?

A: No doubt these would be patients with terminal illnesses. The existing treatments for depression and anxiety, both pharmacological and psychological, are very limited.

Q: How can a spiritual experience improve someone's mental state?

A: Most of us have a restrictive sense of being defined by our body. But you can suddenly see your own upcoming death in a more detached way, as part of the ebb and flow since time immemorial. Before you know it, you've rearranged your attitude about death.

Then we will ask him more "hard-hitting" questions. A sample:

Q: By being so carefully selective about whom you admit to the studies, aren't you ensuring outcomes that are more positive than the norm?

Q: Are you trying to find a shortcut to the spiritual journey that some people pursue for years? Is the experience still "spiritual" if it is caused by a drug?

Q: Do you have any sign that the same brain "machinery" affected by psilocybin is identical to what is activated when people experience spiritual epiphanies without drugs?

Q: Aren't hallucinogens dangerous because of their unpredictability?

Griffiths is attending a meditation conference. He talks about his long-time interest in meditation, and how he came to the conclusion, inspired by Aldous Huxley's novel *Island* (1962), that hallucinogens and meditation take subjects "to the same place."

Summary of THEME #3

The dichotomy between mainstream "hard sciences" and spirituality is explored in the context of the mystical experiences often induced by psychedelics. Some of the researchers in the current trials are able to straddle the divide between science and spirituality, as they look for ways to scientifically measure their subjects' spiritual experiences.

D. IS THERE A FUTURE FOR PSYCHEDELICS?

See Film Outline for topic of the FDA and Phase 3 studies.

Mostly, this section brings the debate that is present throughout the film into a sharp focus. While scientists and researchers conducting the studies argue to be able to continue, the range of perspectives includes critics and those arguing caution.

Examples of Critical Voices urging caution in psychedelic research:

Herbert D. Kleber, psychiatrist at Columbia University Medical Center, is one of the nation's leading experts on drug abuse. He is filmed at the 100-employee substance -abuse division, which he directs at N.Y. State Psychiatric Institute.

Dr. Kleber: One concern is that the number of study subjects is too small at this point to be meaningful. I'm also concerned that other researchers, who are less experienced, may not be as careful as Roland Griffiths. You are not playing around with aspirin here. These are potent agents.

Dr. John Mendelson, filmed at his Addiction and Pharmacology Research Laboratory, at the California Pacific Medical Center Research Institute, San Francisco.

Dr. Mendelson: I'm concerned about safety. Some patients had severe anxiety reactions. This is not trivial. The anxiety can persist for a long time afterwards. I understand at Johns Hopkins they are doing it in a room designed to look like a pleasant living room. It doesn't have to be an ugly hospital room, but it has to be in a place that is set up to meet the standards of medical care. They need at least two professionals, one to manage the physiological and another to monitor the psychological aspects. This can turn sour quickly.

Dr. Mendelson: For me to accept it as a treatment, I need some empirical theory that explains the biological story. Otherwise, I can't tell the patient how it works. Would you take the risk of a treatment for a non-fatal disease if all we know is it works 80% of the time but in 20% of cases it's an awful experience, and we have no idea with which patients it will succeed?

Others who will be interviewed include **Dr. Nora Volkow**, director of the National Institute on Drug Abuse (NIDA) and Columbia professor of psychiatry **Elias Dakwar**.

Narration provides an update on the recent trials.

EPILOGUE

PTSD Study Part 5:

A final check-in with Neil and the other participants one year after the sessions.

End credits will include an invitation for viewers to join the conversation online.

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Letters of Support and CVs

Humanities Advisers:

- 1) Erika Dyck (History, University of Saskatchewan)
- 2) Kathleen J. Frydl (Historian, University of Chicago)
- 3) Jeffrey Kripal (Philosophy and Religious Thought, Rice University)
- 4) Nicolas Langlitz (Anthropology, New School for Social Research)
- 5) John Mendelson (Clinical Pharmacology, California Pacific Medical Center)
- 6) Frank Miller (Ethicist, Weill Cornell Medical College)
- 7) David Nichols (College of Pharmacy, Purdue University)
- 8) Michael Pollan (Journalism, University of California, Berkeley)
- 9) David Presti (Neurobiology and Psychology, University of California, Berkeley)

Media Team:

- 1) Micha Peled (Producer/Director, Teddy Bear Films)
- 2) Caleb Hellerman (Producer/Director, Curiosity Lane)
- 3) Ken Chowder (Writer)
- 4) Stephen McCarthy (Director of Photography)
- 5) Kenn Rabin (Archivist and Archival Research)
- 6) Amit Sethi (Animator)
- 7) Lenny Feinstein (Editor)

Distributors:

- 1) Bullfrog Films
- 2) Film Transit



July 25, 2016

To the NEH Review Committee,

I am pleased for this opportunity to write a letter in enthusiastic support for Micha Peled's application to NEH to fund his documentary film project *Forbidden Knowledge: Psychedelics and Science*. Micha approached me in 2015, at which point I learned about his plans to produce a film that looks critically at the historical and contemporary debates over the scientific and medical implications of psychedelics. This promises to be an important and timely evaluation of a topic that has generated substantial new interest within scientific circles, and Micha's film is poised to bridge the historical and contemporary knowledge gap in this field. After learning about his approach, I was pleased to offer my assistance and agreed to serve as one of the advisory board members.

In 2016 I received funding from the Social Sciences and Humanities Research Council (Canada) to produce the first-ever retrospective analysis of over 500 case files of LSD trials conducted at the infamous Hollywood Hospital. To date the historical literature on LSD has relied on published accounts, scientific correspondence, and newspaper accounts. In January 2016 the British Columbia (BC) Provincial Archives received the largest set of patient case files from one of the significant LSD trials in North America; in April 2016 I received approval from the BC provincial courts to review this material for the purposes of generating an academic study of these historic studies. The documentary evidence consists of more than 500 individual case files, complete with nursing notes, medical examination results, patients' responses before and after the experience, and correspondence. This represents a rich and unique body of material that allows me to produce a retrospective comparative analysis of experiences, doses, and results.

Over the past decade a psychedelic renaissance has renewed popular and clinical interest in the use of drugs such as LSD, psilocybin, MDMA, and ayahuasca for their legitimate use in clinical medicine and public health. Experimental therapies have been explored in Europe, the United States, and Canada, in areas of addiction, palliative care, and post-traumatic stress disorder (citation). In each of these cases, the mechanism of healing relies on elements of care that stretch beyond a more conventional biomedical approach and, sometimes, even tap into areas of spirituality, ritual, and non-western practices. Yet, contemporary scientists, philosophers, and journalists, alike have been asking why substances like LSD were banned in the past, and what we might learn first from re-examining that history before treading down what might be a familiar path. My new study of the Hollywood Hospital has already generated interest from contemporary neuroscientists interested in how these trials were originally designed in the 1950s and



1960s. There has effectively been a gap in knowledge production about psychedelic therapies as a consequence of the prohibition on these substances. Revisiting psychedelic science in the 21st century therefore requires collaboration with historians, particularly for their archival training and use of historical methodologies to provide a sophisticated analysis of the historical trials and what they might offer for contemporary science. This case is a clear example of the importance of humanities-based research for shedding light on contemporary questions related to science and society.

Currently I am a full professor and Canada Research Chair in medical history at the University of Saskatchewan (Canada) in the Department of History. I earned my PhD in History in 2005 at McMaster University, Hamilton, Ontario (Canada) in the field of medical history. In 2008 I published *Psychedelic Psychiatry: LSD from Clinic to Campus* (Johns Hopkins University Press), which chronicled the research and experimentation with LSD in the 1950s and 1960s, ending with its criminalization at the end of that decade. Beyond the book I published a number of peer-reviewed articles on medical experimentation and the history of LSD research or psychedelic science in key history journals in Canada, the United States, and Britain; and others within medical or psychiatric journals, including the *Canadian Medical Association Journal*, the main organ for the medical profession in Canada. Building on that study, my research program has continued to critically examine the history of psychiatry, medical and scientific experimentation, and patients' perspectives throughout the 20th century. In 2013 I published *Facing Eugenics: Sterilization, Reproduction, and the Politics of Choice* (University of Toronto Press), which was nominated for both the Governor General's award for the best book in Canadian history and the Canada Prize for the best book in the Social Sciences. My main research interests lie in analyzing how historical medical and scientific knowledge informs cultural practices, and how states interpret risks that guide the regulation of this complicated relationship.

The renewed interest in LSD as a clinical tool demands an empirically rigorous assessment of the historical uses of psychedelics that situates them within a broad context of science and society. Anthropologist Nicolas Langlitz recently examined how psychedelic science changed over the past 50 years as a result of criminalization in the 1960s (Langlitz 2013). His detailed description of the laboratory research of both neuroscientists Franz Vollenweider and Mark Geyer shows how mainstream scientists altered their research objectives to meet new regulations, and how modern scientific research has emphasized data accumulation over asking big questions, like Vollenweider's premise that spirituality belongs in modern medicine. Langlitz suggests that in order for psychedelic science to truly make a return, contemporary scientists need to pay attention to its history. The 2014 editorial in *Scientific American* similarly



indicates that the historical hiatus has had an affect on modern treatments, underscoring the need to revisit the history of psychedelic science in the 1950s. My work aims to play a role in addressing this gap.

Micha Peled's proposed film on psychedelic science has substantial potential to produce a meaningful evaluation of this history that is well-informed and analytical. The history of psychedelics has generated significant media and popular interest for several decades, but the majority of those inquiries provide decontextualized and ideologically-driven accounts. Micha is proposing a careful investigation of the culture of psychedelic science, which will add a critical dimension to our understanding of psychedelics since the mid-twentieth century. By contextualizing this history within the wider set of debates on the rise of the psychopharmaceutical industry, the secularization of medicine, and the splintering of mental health and addictions into sub-categories of professionalization, *Forbidden Knowledge* has the potential to offer significant insights into the development of scientific medicine over the past several decades. Bringing this story to the public is a necessary and timely endeavor, and I fully support it.

I enthusiastically support this film project and am happy to provide more details upon request.

Sincerely,

Erika Dyck
Professor
Canada Research Chair, History of Medicine
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Erika Dyck, Brief Curriculum Vitae

PhD, McMaster University (Hamilton), 2001-2005, Department of History, Canadian History/History of Psychiatry

Current and past positions

Full professor (2014) and Tier 2 Canada Research Chair, History of Medicine, University of Saskatchewan, 2008-present

Assistant professor and co-director of history of medicine program, University of Alberta, 2005-2008

Awards and Nominations

- Inducted to the New College of Scholars and Artists, Royal Society of Canada (2014);
- Nominated for the John A Macdonald Book Prize in Canadian History (2014)/ Governor General's Award for the best non-fiction book in Canadian history for *Facing Eugenics*
- Nominated for the Canada Prize for best book in Social Sciences, 2014, for *Facing Eugenics*
- University of Saskatchewan, New Researcher Award, (2013)
- Tier 2, Canada Research Chair, History of Medicine, renewed (2014)
- Tier 2, Canada Research Chair, History of Medicine, awarded 2009
- Hyogo Overseas Research Fellow, Japan Visiting Scholar, September –October 2008

Selected Recent Peer-Reviewed Publications:

Books

Dyck, E., Alexander Deighton, with John Elias, Gary Gerber, Tracey Mitchell, and Hugh Lafave. *Who Has Seen the Asylum?: The Rise and Fall of the Weyburn Mental Hospital* (advance contract with University of Manitoba Press), under preparation for submission Fall 2016

Dyck, E (introduction) and Fannie Kahan (posthumously), *A Culture's Catalyst: Peyote and the Native American Church in Canada* (University of Manitoba Press, in press for 2016)

Dyck E and Larry Stewart (eds) *The Uses of Humans in Experiment, Seventeenth to twentieth centuries* (Amsterdam: Clio Medica Series, in press for 2016)

Dyck, E. *Facing the History of Eugenics: Reproduction, Sterilization and the Politics of Choice* (Toronto: University of Toronto Press, 2013)

Dyck, E. and Chris Fletcher (eds), *Locating Health: Explorations of Healing and Place* (Social History of Medicine Series, London: Pickering and Chatto Pubs Ltd, 2011)

Dyck, E. *Psychedelic Psychiatry: LSD from Clinic to Campus* (Baltimore: Johns Hopkins University Press, 2008)

- republished by University of Manitoba Press, as *Psychedelic Psychiatry: LSD on the Canadian Prairies* (2011)

Editorships:

Erika Dyck and Kenton Kroker, co-editors of the *Canadian Bulletin for Medical History* (2015-2020)

Series co-editor (books), History of Health and Medicine, McGill-Queens University Press (2015 – present)

Dyck, E. (guest editor) "Revisiting Eugenics: Science, Gender, and Body Politics," special issue of the *Canadian Bulletin for Medical History* (2014)

Dyck, E. (Guest Editor): "After the Asylum/Après l'asile" special bilingual thematic volume of *Histoire Sociale/Social History* (2011) 88(2)

Select Peer-reviewed articles and book chapters

- Dyck, E. and Lucas Richert, "No Longer Novel: The Transition from Emerging to Mainstream Drug," in *Novel and Synthetic Drugs: Emerging Issues, Legal Policy, and Public Health* (eds) John Stogner, Bryan miller and David Khey (CRC Press) – invited submission (in press for 2016)
- Dyck, E. "Peyote, Psychedelics and Post-colonial Encounters on the Canadian Prairies," in Labate, B. C. & Cavnar, C. (eds). (2016). *Peyote: History, Tradition, Politics, and Conservation*. Santa Barbara: ABC-CLIO/Praeger Publishers. (in press, for December 2015)
- Dyck, E. "LSD: a new treatment emerging from the past," *Canadian Medical Association Journal* (In press, August 2015)
- Dyck, E. "The Psychedelic Sixties in North America: Drugs and Identity," chapter in edited volume *Debating Dissent: The Sixties in Canada* (eds) Lara Campbell, Dominique Clement and Gregory Kealey (Toronto: University of Toronto Press, 2012): 46-63
- Dyck, E. and Tolly Bradford, "Peyote on the Prairies: Religion, Scientists and Native-Newcomer Relations in 1950s Western Canada," *Journal of Canadian Studies*, (2012) 46(1): 1-25
- Dyck, E. "Just Say Know: Criminalising LSD and the Politics of Psychedelic Expertise," chapter in (ed) Edgar-Andre Montigny *"The Real Dope:" Historical and Legal Perspectives on the Regulation of Drugs in Canada* (Toronto: University of Toronto Press, 2011): 169-196
- Dyck, E. "Dismantling the Asylum and Charting New Pathways into the Community: Mental Health Care in 20th century Canada," (introduction) *Histoire Sociale/Social History* (7,000 words) (2011) 88(2): 181-196
- Dyck, E. "Madness, Mennonites and Modernity: An Historical Look at the Mennonite Youth Farm in Rosthern, Saskatchewan," *Journal of Mennonite Studies* (2011): 91-104
- Dyck, E. "Spaced Out in Saskatchewan: Modernism, Anti-Psychiatry and Deinstitutionalization, 1950-1968," *Bulletin for the History of Medicine* (2010) 84(4): 640-666
- Dyck, E. "Building an 'Ideal Society': Mixing Politics and Health in Canadian Prairie Society," *The Annual Review of Canadian Studies* [Japanese Association for Canadian Studies] (2009) 7: 59-71
- Dyck, E. "Prairies, Psychedelics and Place: The Dynamics of Region in Psychiatric Research," *Health and Place* (2009) 15(3): 888-94
- Dyck, E. "Kiyoshi Izumi and Mental Hospital Designs" in *Annual Bulletin of the Institute for Economic and Cultural Studies* (2009): 71-87
- Mills, John and Erika Dyck, "Trust Amply Recompensed: Psychological Research at Weyburn, Saskatchewan, 1957-1961" *Journal for the History of Behavioral Sciences* (2008) 44(3): 199-218
- Dyck, E. "Land of the Living Sky with Diamonds: A Place for Radical Psychiatry?" *Journal of Canadian Studies* (2007) 41(3): 42-66
- Dyck, E. "The Original Psychedelic Drug: Historical Reflections on LSD," *The Biochemist* April, 2007(29): 2-5
- Dyck, E. "Hitting Highs at Rock Bottom: LSD Treatment for Alcoholism, 1950-1970," *Social History of Medicine*, 2006 (19)2: 313-29
- Dyck, E. "Psychedelic Pioneers': Mental Health Research in Saskatchewan, 1945-1967," in J. Moran and D. Wright (eds) *Mental Health and Canadian Society: Historical Perspectives* (Montreal: McGill-Queen's Press, 2006): 221-44
- Dyck, E. "Flashback: Psychiatric Experimentation with LSD in Historical Perspective" *Canadian Journal of Psychiatry* (2005) 50(7): 381-8

August 1, 2016

To the NEH Review Committee:

I write to endorse Micha Peled's proposal, "Forbidden Knowledge: Psychedelics & Science," and urge you to consider awarding financial support to his project, a much needed consideration of the history and science of drugs which people tend to regard as familiar, but in fact remain poorly understood.

It is especially important to situate the neglected story of the research conducted on these drugs within the framework of the humanities. Without an examination of power, discourse, and identity, we will be unable to understand the particular purchase of certain results and perspectives, and the virtual silence on others.

As an adviser to the project, I will draw heavily upon the insights of my book, *The Drug Wars in America, 1940-1973*; in it, I tie the 1970 Controlled Substances Act to previous efforts toward illicit drug regulation, including a set of criminal policies designed to punish those who trafficked and used drugs like heroin and cocaine, associated with the Harrison Narcotic Act—and, in contrast, a regulatory (one could argue non-existent) approach crafted for the illicit traffic in amphetamines or barbiturates. All of these drugs had medical application; heroin was the oxycodone of its day, hailed as a life-saving medicine, and it is still prescribed in the UK to treat pain. All of these drugs had numerous recreational markets as well. They could all impose harm, both on the user and others, and all were—and are—habit-forming.

What distinguished these drugs from each other was history more than science—and, following that, the nature of their production chain. The prohibition of heroin, not formalized in this country until 1960, plunged that market into subversion, or an entirely illicit process of growing, manufacturing and distribution. In contrast, underground markets for regulated drugs were supplied by the comparatively benign process of diversion, or licit production by a pharmaceutical company (as was once the case with heroin and cocaine) that was redirected, at some point, to an illicit end.

Considered in the light of postwar history, the Controlled Substances Act of 1970, the foundational legislation of the modern drug war, was not a radical departure at all but rather a mechanism to inherit and endow some legal order to all that had come before it: prohibition for Schedule I drugs initially regulated by Harrison Narcotic Act, and regulation for Schedule II and all other subordinate classifications.

What is so intriguing about psychedelic drugs, then, are their disruption of this pattern. It is not too much to say that psychedelics challenge any and all reigning schools of thought on the drug war.

For example, much of what I summarized above is intimately related to the history of race, both at home and abroad. When viewed as a project of the state, the drug war evolved into a unique methodology of government power, whether applied to policing the inner city, or influencing and intervening throughout the developing world. My work joins that produced by a host of other scholars in noting that both of these had pronounced racial dimensions. The regulation and ultimate prohibition of marijuana fits into this state-centered framework as well, albeit with less initial medical application (though the drug's defenders persistently remind me that it had some) and, by the 1960s, with more evocations of youth culture than race.

In contrast, psychedelic drugs always enjoyed considerable licit backing, whether in production or in use. To be sure, the demonization of these drugs became intimately related to cultural stereotype of "hippie," but even in the period immediately prior to their assignment to Schedule I, the Veterans Administration prescribed LSD in five of its hospitals. Dr. Sam Kain, head of the VA's psychiatric research department during that time, pronounced results "encouraging" and saw a "future for LSD in the treatment of alcoholism." Psychedelics enjoyed strong bastions of licit, medical support right up to the moment of their prohibition.

From my perspective, that is precisely what is so interesting about them. There was no state-power derived from their prohibition; no latent purpose of social control in terms of race and hardly any in terms of further deriding hippie culture when weighed against the various authorities that viewed psychedelics as possessing legitimate medicinal value. In fact, as Hamilton Morris' journalism demonstrates, synthetic engineering of psychedelics consistently remains one step ahead of prohibition. Instead of imparting a stigma, the relegation of psychedelics to Schedule I becomes a curse for government officials, an awkward and one might say often futile enforcement agenda without the "usual suspects" to redeem the effort.

As I told Peled, when it comes to these drugs, what we need is more history and less storytelling. Our impressionistic narrative and tenuous grasp on the nature of these drugs leave us with a profound disconnect, a scholarly analog to psychedelics' purported hallucinogenic properties, and one that serves us poorly as we struggle to come to terms with and repair this country's approach to drug regulation.

I will be only one among several advisers, and my role will be to impart an understanding of the history, and in a sense the puzzle, of the Controlled Substances Act and psychedelics. I am as eager as anyone to learn more about these expectation-defying drugs.

Again, I very much hope that you will consider an award of financial support to this inquiry, which sits astride many schools of thought on the drug war, yet cannot be explained adequately by any of them.

Sincerely yours,
Kathleen Frydl

Kathleen J. Frydl

Abbreviated CV

Education

Ph.D., University of Chicago, Department of History

“The GI Bill,” defended with *distinction*, September 2000

M.A., University of Chicago, Department of History, 1996

B.A., University of California, Davis, History and Political Science, 1994

Major Publications

Enlarge the Place of Your Tent: Catholic Hospitals in the Modern United States, forthcoming

The Drug Wars in America, 1940-1973, (New York: Cambridge University Press)

- One of *Vox Media's* “Best Books We Read in 2014”
- Recent reviews
 - Paul Gootenberg, SUNY Distinguished Professor of History:
“The Drug Wars in America, 1940-1973 is the most compelling scholarly book to date written on an important subject: America's post-war transition to punitive domestic drug policy. It should be the standard on this topic for many years...”
 - Evelyn Krache Morris of Harvard University:
"[Frydl] argues persuasively that the drug wars have been essential for the enhancement of state power in both domestic and foreign policy. The work also contributes to our understanding of how state power is built and reinforced, often through narratives that appear to be about something else. Deeply researched and thoughtfully argued, *The Drug Wars in America, 1940-1973* tells an important story about why a failed set of policies continues to endure."

The GI Bill, (New York: Cambridge University Press)

- Winner: *Louis Brownlow Book Prize*, 2010
- Recent citations
 - Ta-Nehisi Coates, “The Case for Reparations,” *The Atlantic*:
“But it was, as Frydl acutely observes, “a congressionally federalized program -- one that was run through the states, supervised by Congress; one central policy making office and hundreds of district offices bounded, in a functional as well as political way, by state lines.” Operating in this manner, she notes, the “exclusion of black veterans came through the mechanisms of administration,” and this “flexibility that enabled discrimination against black veterans also worked to the advantage of many other veterans.”
- Consultant for Florentine Film's “GI Bill” project in development

Fairness and Effectiveness in Policing, ed. with Wesley Skogan, National Research Council, National Academy of Sciences, 2003

Research Articles

Peer-reviewed

The Criminalization of Distress: Foundlings and the US State, *Journal of Policy History*,

Kathleen J. Frydl

26:2 (Spring 2014): 188-218

Kidnapping and State Development in the United States, *Studies in American Political Development*, (Spring 2006): 18-44

Edited volume

“Trust to the Public”: Academic Freedom in the Multiversity, in *Academic Freedom After September 11*, Beshara Doumani, ed., (New York: Zone Books, 2006): 175-202

“The Incidental State: Coercion in the Age of Big Data,” *Dissent*, May 2, 2014 [<http://www.dissentmagazine.org/blog/the-incidental-state-coercion-in-the-age-of-big-data>]

“A Case for Universal Service,” *The American Interest*, January 16, 2014 [<http://www.the-american-interest.com/articles/2014/01/16/why-america-needs-the-draft/>]

“The District and the Drug War: The Triumph and Limits of Drug Reform,” *Dissent*, January 13, 2013 [http://www.dissentmagazine.org/online_articles/the-district-and-the-drug-war-the-triumph-and-limits-of-drug-reform]

Career & Positions

Principal, Palacky LLC, 2013-present

Assistant Professor of History, UC Berkeley Department of History, 2003-2011

Woodrow Wilson Center for International Scholars Fellow, 2009-2010

Program Officer, National Academy of Sciences, 2000-2003

Grants & Fellowships

Woodrow Wilson Center Fellow, 2009-2010

Presidential teaching grant, UC Berkeley, 2004-5

COR Jr. Faculty Research Grant, UC Berkeley, 2005

Mellon Dissertation Fellowship, 1999-2000

Spencer Dissertation Fellowship, 1998-9

University of Chicago University Fellowship, 1994-8



Department of Religion • Rice University

TRULY
UNCONVENTIONAL
WISDOM

RELIGION

26 July 2016

To Whom It May Concern,

I write to offer my support for the proposal to develop the film project *FORBIDDEN KNOWLEDGE: Science & Psychedelics in America*.

I am a historian of religions (Ph.D., University of Chicago, 1993) who has written extensively about alternative spiritual movements in both India and the Americas, particularly as these entered American culture in the second half of the twentieth century through California literary circles, the human potential movement, and the American counterculture. My book, *Esalen: America and the Religion of No Religion* (University of Chicago Press, 2007), is a standard work in this historical field. My most recent work has been on the mind-matter question and how this plays out in the same spiritual currents of American life and in conversation with the sciences.

I am delighted to serve as an adviser to a film that will explore the topic of mind and consciousness through the renewed medical studies of psychedelics. By challenging the materialist "mind equals brain" consensus model, psychoactive drugs have become a potential portal into studying a wide range of anomalous states of cognition and consciousness. The very lively and quickly changing present debates about the relationship between matter and mind are poorly understood by the general public. Nor are the deep philosophical and religious backgrounds of these debates generally known. I welcome the opportunity to bring some historical and philosophical nuance to these debates and so raise the bar for any potential PBS television audience.

A broad historical perspective would be very helpful here. As I explain in my *Chronicle of Higher Education* article, "Visions of the Impossible: How Fantastic Stories Unlock the Nature of Consciousness," Western intellectual history over the last two and a half millennia has seen immense swings back and forth between a Platonism and an Aristotleanism, that is, between a philosophy rooted in mystical, intuitive, and visionary experience and an empirical rationalism that bases its knowledge on sense data, linear logic, and mathematical measurement. We never seem to get it just right, to strike a balance. But without considering the subjective, the mystical, and the spiritual, we are ignoring huge swaths of the human experience and, by so doing, impoverishing our thinking and theorizing about the nature of mind—perhaps the biggest scientific and spiritual question of all.

I sincerely hope that you will approve this request for funding an important film. I for one very much look forward to seeing it, showing it, and teaching it.

I am sincerely,

Jeffrey J. Kripal
J. Newton Rayzor Professor of Religion
Rice University

Jeffrey J. Kripal

J. Newton Rayzor Professor in Philosophy and Religious Thought
Rice University

Abbreviated

PROFESSIONAL HISTORY

Education

Ph.D. *With Distinction*, The University of Chicago, History of Religions, 1993
M.A. The University of Chicago, Religion, 1987
B.A. *summa cum laude*, Conception Seminary College, Religion, 1985

Professional History (selected)

J. Newton Rayzor Professor in Philosophy and Religious Thought, Rice University (2004 to present)
Chair of the Department of Religious Studies, Rice University (2004-2013): proposed and led the complete re-visioning of the department's Ph.D. program to national and international prominence; helped orchestrate the hiring of faculty toward the creation of the country's only Ph.D. concentration in the history of Western heterodox traditions (Gnosticism, Esotericism, Mysticism or "the GEM Program")
Vice-Chairman of the Board of Trustees, Esalen Institute (2014 to present): elected by the Board to succeed Sam Yau as the Chairman of the Board when Mr. Yau steps down; duties include holding the vision and mission of the institute, organizational review, budget approvals, fund-raising, physical campus renewal, and planning for the future
Associate Director of the Center for Theory and Research, Esalen Institute, Big Sur California (2011 to present): plan, organize, and co-host with founder Michael Murphy private symposia each year at the institute, often of a multi-year or annual nature on a particular theme (intellectual freedom and fundamentalist harassment, the history of Western esotericism, the paranormal and popular culture, science and psychical phenomena)
Director of Asian Studies Program, Rice University (2003-2004)
Lynette S. Autry Associate Professor of Religious Studies, Rice University (2002-2004)
Visiting Associate Professor of the History of Religion, Harvard Divinity School (2000-2001)

Select Awards, Fellowships, and Grants

Gates Lecturer, Grinnell College, 4 December 2013
Roy Eckhard Scholar-in Residence, Lehigh University, 20-23 October 2013
DesignerObserver Award for *Mutants and Mystics* as one of the best 50 books (in all categories) of 2011
Prose Award for *Mutants and Mystics* in the category of media and cultural studies (2011)
Choice Outstanding Academic Title Award for *Authors of the Impossible* (2010)
Humanities Research Center Collaborative Fellowship (2010) to write *Comparing Religions* and explore "Third Coast Consortium" collaboration between Rice, SMU, and UT
First Scholar Award to teach as a Visiting Professor of Religion at the University of Colorado, Boulder, summer 2009
Mellon Fellowship from the Humanities Research Center, Rice University, to dedicate a full year to teaching a graduate research seminar on "Comparativism"
Choice Outstanding Academic Title Award for *Esalen* (2007)
Pulitzer Prize submission to nominate *Esalen*, by the University of Chicago Press, 2007
Elected to the American Society for the Study of Religion (2007 to present)

American Council of Learned Societies Contemplative Practice Fellowship (2006, with Prof. Marcia Brennan of the Department of Art History, Rice University)
 Henderson Award for Excellence in Research, Westminster College (1997)
 American Academy of Religion's History of Religions Prize for *Kali's Child* (1996)
 Dissertation awarded *With Distinction* (1993)
 Ph.D. Qualifying Exams passed *With Distinction* (1991)
 American Institute of Indian Studies Junior Language Fellowship (1989-1990)
 American Bible Society Award for the Study of Biblical Languages (1985)
 High School Valedictorian (1981)

Body of Writings

For a succinct summary of each of my published books, see kripal.ric.edu

Books under Contract and in Process

10. *Mind Manifesto: Epiphanies of Mind and the Future of Knowledge* (Bellevue Literary Press, to be delivered in 2018).

9. *Sex of the Spirit: Desire, Deity and Deification in the History of American Religions* (Chicago: University of Chicago Press, to be delivered in 2017).

Published or Forthcoming Books

8. Whitley Strieber and Jeffrey J. Kripal, *The Super Natural: A New Vision of the Unexplained* (New York: Penguin/Tarcher, 2016).

7. *Comparing Religions: Coming to Terms*, with Ata Anzali, Andrea Jain, and Erin Prophet (Oxford: Wiley-Blackwell, 2014). Although this is not technically a monograph, I wrote about 90% of this next-generation textbook with three of my former or present graduate students.

6. *Mutants and Mystics: Science Fiction, Superhero Comics, and the Paranormal* (Chicago: University of Chicago Press, 2011).

5. *Authors of the Impossible: The Paranormal and the Sacred* (Chicago: University of Chicago Press, 2010); published in Spanish as *Autores de lo Imposible: Lo Paranormal y lo Sagrada*, trans. Pawel Odyniec (Barcelona: Kairos, 2012).

4. *Esalen: America and the Religion of No Religion* (Chicago: University of Chicago Press, 2007).

3. *The Serpent's Gift: Gnostic Reflections on the Study of Religion* (Chicago: University of Chicago Press, 2006).

2. *Roads of Excess, Palaces of Wisdom: Eroticism and Reflexivity in the Study of Mysticism* (Chicago: University of Chicago Press, 2001).

1. *Kali's Child: The Mystical and the Erotic in the Life and Teachings of Ramakrishna* (Chicago: University of Chicago Press, 1995; 2nd ed., 1998; 25th anniversary edition set for 2020).

THE NEW SCHOOL FOR SOCIAL RESEARCH

The New School for
Social Research
Department of Anthropology
6 East 16th Street, 9th Floor
New York, NY 10003
212.229.5757
newschool.edu/nssr/anthropology

August 9, 16

To the NEH Review Committee:

I'm writing to express my wholehearted support of Micha Peled's documentary film project *Forbidden Knowledge: Psychedelics & Science*, which explores the re-emergence of psychotherapeutic uses of psychedelic drugs. I serve as an advisory board member for this project. As Associate Professor of Anthropology at The New School for Social Research I have acquired a thorough understanding of the historical background and of the contemporary scientific field of psychedelic science. I published an academic book titled *Neuropsychodelia: The Revival of Hallucinogen Research since the Decade of the Brain* (University of California Press, 2012) as well as many book chapters and peer-reviewed articles on the recent resurgence of neuroscientific research on psychedelic drugs at European and American universities. Having been trained as a medical doctor, I also have an interest in the clinical side of the story Peled wants to tell.

An NEH-supported documentary on contemporary therapeutic applications of psychedelics would be particularly important as this aspect of the psychedelic revival has not yet been covered by any humanities scholarship. It would provide an opportunity to not just popularize already available academic knowledge, but to produce new insights into a clinical practice, which we will not sufficiently understand on the basis of scientific publications alone. His film will give voice to the experiences of patients and therapists, which cannot be accurately captured by survey data, self-rating scales, and measures of symptom reduction. It will also shed light on the tensions and difficulties accompanying the revival and further development of a therapeutic practice that had fallen into disrepute when drug safety concerns and the political turmoil surrounding the 1960s counterculture had led to the prohibition of hallucinogenic drugs. Just as the subsequent decay of psychedelic research reflected not only pharmacological but also social and political problems of its time, Peled's investigation of its renaissance will introduce a broad audience to a problematic, which has too many existential and cultural layers to be deliberated by drug regulatory authorities alone. Therefore I give my unreserved support to a documentary film project, which presents the complexities of this topic to a wider public.

If you have any more questions, please do not hesitate to contact me (langlitz@newschool.edu).

Sincerely,



Nicolas Langlitz, M.D., Ph.D., Ph.D.
Assistant Professor of Anthropology
The New School for Social Research

D. NICOLAS LANGLITZ

The New School for Social Research

(abbreviated)

EMPLOYMENT AND PROFESSIONAL ACTIVITIES

- 2015 – **Associate Professor**, Department of Anthropology, The New School for Social Research and Eugene Lang College, New York
- 2010 – 2015 **Assistant professor**, Department of Anthropology, The New School for Social Research and Eugene Lang College, New York
- 2014 – **Director of Undergraduate Studies**, Department of Anthropology, The New School for Social Research and Eugene Lang College
- 2009 – **BioSocieties Reviews Editor**
- 2007 – 2009 **Postdoctoral Fellow** at Max Planck Institute for the History of Science (MPIWG)
- 1999 Part-time position at the Institute for the History of Medicine, Freie Universität Berlin

EDUCATION

- 2003 – 2007 **Ph.D.** in Joint Ph.D. program in Medical Anthropology at University of California, Berkeley, and University of California, San Francisco.
Advisor: Prof. Paul Rabinow.
- 2004 **Ph.D. (Dr. med.)** In History of Medicine from Medizinische Fakultät der Charité – Universitätsmedizin Berlin at Humboldt-Universität Berlin and Freie Universität Berlin.
Advisor: Prof. Rolf Winau.
Grade: *summa cum laude*.
- 2002 – 2003 One Year Internship (*Praktisches Jahr*) at Hôpital Necker-Enfants Malades, Université Paris V, France
- 1997 – 2004 **M.D.**, Medicine, Charité Universitätsmedizin Berlin. Grade: *very good* [1.49],
M.A., Philosophy, Freie Universität Berlin. Grade: *very good* [1.0].

GRANTS, FELLOWSHIPS, AND AWARDS

- Faculty Research Fund 2014/15 (\$4700)
- Volkswagen Foundation grant as member of the "Dream Team," *European Platform for Life Sciences, Mind Sciences, and the Humanities*, 2007-2010 (€89,200 or \$121,300)
- Postdoctoral Fellowship 2007-2009, Max Planck Institute for the History of Science, Dep. II, Berlin. (\$1500 per month)
- Chancellor's Dissertation-Year Fellowship from University of California, Berkeley, 2006/07. (\$19,000)
- Dean's Normative Time Fellowship from University of California, Berkeley, 2006. (\$7500)

PUBLICATIONS

I. Books

- *Neuropsychedelica. The Revival of Hallucinogen Research since the Decade of the Brain*, Berkeley: University of California Press, 2012.
- *Die Zeit der Psychoanalyse. Lacan und das Problem der Sitzungsdauer*, Suhrkamp: Frankfurt/M., 2005.

2. Peer-reviewed Articles

- "On a Not so Chance Encounter Between Neurophilosophy and Science Studies in a Sleep Laboratory." *History of the Human Sciences* (forthcoming).
- "Vatted Dreams: Neurophilosophy and the Politics of Phenomenal Internalism." *Journal of the Royal Anthropological Institute* (forthcoming).
- "The Persistence of the Subjective in Cognitive Neuroscience. Observations of Contemporary Hallucinogen Research." *History of the Human Sciences* 23:1 (2010), 37-57.
- "Pharmacovigilance and Post-Black Market Surveillance." *Social Studies of Science* 39 (2009), 395-420.
- "Ceci n'est pas une psychose. Toward a Historical Epistemology of Model Psychosis." *BioSocieties* 1 (2006), 158-180.
- Mazda Adli, Christopher Baethge, Andreas Heinz, Nicolas Langlitz, and Michael Bauer, "Is dose escalation of antidepressants a rational strategy after a medium-dose treatment has failed? A systematic review," *European Archive of Psychiatry and Clinical Neuroscience*, 255: 6 (2005), 387-400.

ACADEMIC SERVICE

University Level

- **Director of Undergraduate Studies** (from Fall 2014 onwards)
- **University-wide Faculty Senate:** serving as alternate (from Fall 2014 onwards)
- **New School Committees:** Institutional Review Board; Middle States committee; Faculty Research Fund Committee (Spring 2015); Lang Admissions Committee (2010-2014); Lang Curriculum Committee (Fall 2014 onwards); Colloquium Planning Committee (2011/11, 2012/13); and annually MA/PhD admissions and MA exams.

3. Solicited Articles and Book Chapters (selected)

- "Fieldwork in Perennial and Neurophilosophy." In: Pieter Lemmens, Pieter Stokkink, Thomas Meijer, Stephen Whitmarsh and Govert Derix (eds.), *Philosophy and Psychedelics: Exploring the logos of Psychedelia* (submitted).
- "Hallucination." In: Vyjayanthi Rao, Prem Krishnamurthy, and Carin Kuoni (eds.), *Speculation, Now: Essays and Artwork*, Duke University Press: Durham (forthcoming).



California Pacific Medical Center

A Sutter Health Affiliate

Addiction & Pharmacology Research Laboratory
California Pacific Medical Center Research Institute
475 Brannan Street, Suite 220
San Francisco, CA 94107
415-600-1652

July 25, 2016

To the NEH Review Committee:

I'm writing to express my strong support of Micha Peled's documentary film project *Forbidden Knowledge: Psychedelics & Science*, which explores the re-emergence of psychotherapeutic uses of psychedelic drugs. I serve as an advisory board member for this project. I am Internist and Clinical Pharmacologist and the Founder and Director of the Addiction and Pharmacology Research Laboratory at the California Pacific Medical Center Research Institute. Our laboratory has conducted numerous NIH-funded human clinical trials that characterized the effects of MDMA (Ecstasy) and I hold an IND to study the human pharmacology of LSD.

Over the last 10 years there has been a marked increase in human clinical research with psychedelic drugs with many laboratories conducting therapeutic trials with psychedelics. Some of these studies show promising effects. If these results are published with supportive peer reviews public interest will dramatically increase. For example, a recent study by Matthew Johnson and Roland Griffiths at Johns Hopkins demonstrated marked reductions in relapse to cigarette smoking after a single dose of psilocybin. If these results are replicated the treatment of nicotine addiction may change profoundly. This transformation should not occur without robust debate among researchers, regulators, drug policy experts and the general public. It will require new models of drug regulation, systems to assure patient safety and methods to address abuse and diversion. It will also present challenges to insurers and payors. Peled understands the complexities surrounding the science of psychedelics and can bring a much-needed perspective to the debate including issues on clinical efficacy, public safety, morality and cost.

I will assist Mr Pelad on sifting through the clinical research, assuring scientific accuracy and directing him to some of the most respected researchers in the field. I regularly collaborate with film makers, television shows and print and web media outlets. Thus I am well suited for a role as an advisor for this project.

As a scientist, by both training and temperament, I am cautious and do not accept claims of benefit easily. There are many who view psychedelics as medical and spiritual panaceas; their personal experience is more than sufficient evidence to justify widespread use of these drugs by all strata of society. One essential role I will fill for this project is that of the scientific skeptic. I will help balance the often dramatic anecdotal reports (both good and bad) with the data accepted by most scientist and point out areas where we simply do not know enough to draw firm conclusions.

Now is the time for a documentary that explores the contentious and possibly transformative science that is emerging. I urge your support of this important project.

Sincerely,

John Mendelson MD
Senior Scientist

**JOHN EDWARD MENDELSON, M.D.
CURRICULUM VITAE**

EDUCATION

- Antioch College, Yellow Springs, OH 06/77
B.A., Biology
- University of California, San Francisco 06/82
M.D., Medicine
- Department of Medicine, Highland General Hospital 06/83
Internship, Medicine
- Department of Medicine, Highland General Hospital 06/85
Residency, Medicine, ABIM certified, 09/86

EMPLOYMENT (selected)

California Pacific Medical Center (CPMC)

- Senior Scientist, Research Institute 10/04 - present
- Founder and Director, Addiction and Pharmacology Research Laboratory (APRL)

Private Practice

10/87 - present

- Internal Medicine/Addiction Medicine
909 Hyde Street, San Francisco, CA

Medical Director, BAART Programs

07/14 - present

- Internal Medicine/Addiction Medicine
1111 Market Street, San Francisco, CA

University of California, San Francisco (UCSF)

- MSP Physician 10/04 – 06/06
Drug Dependence Research Center – Department of Psychiatry
- Clinical Professor of Medicine 07/05 - present

MEDICAL STAFF APPOINTMENTS

- St. Francis Memorial Hospital, Active Staff 1986 – present
- California Pacific Medical Center, Active Staff 1986 – present
- St. Luke's Hospital, Active Staff 2006 – present

HONORS AND AWARDS

- Best Doctors USA 2009 – present
- Best Doctors San Francisco Bay Area 2010 – present
- National Science Foundation 1974 – 1975
J. E. Mendelson, Project Director
Student Originated Studies Program, Grant GY-11484,
*A Study of the Effects of Methadone Addiction on the Sexual Development of the
Laboratory Rat*

COMMITTEES AND PANELS (selected)

- Chair, California Pacific Medical Center Institutional Review Board 2010 – 2012
- FDA Advisory Committee: Analgesic Drugs 2010 – present
- Board Member, Winter Conference on Brain Research 2007 – 2013
- Research Advisory Panel of California 2000 – present

- National Science Foundation
Student Originated Studies Program Proposal
Evaluation Committee (Peer Review Committee) 1975
2002 – 2005

EDITORIAL ACTIVITIES (selected)

- Academic Editor: PLoS One 2011 – present
- Editorial Board: American Journal of the Addictions 2000 – 2012
- Ad Hoc Reviewer:
Journal of Pharmacology and Experimental Therapeutics
Clinical Pharmacology and Therapeutics
Drug and Alcohol Dependence
Psychopharmacology

RESEARCH AND PUBLICATIONS (selected)

Kirkpatrick MG, Baggott MJ, Mendelson JE, Galloway GP, Liechti ME, Hysek CM, de Wit H. MDMA effects consistent across laboratories. *Psychopharmacology* (Berl). 2014 Mar 15. [Epub ahead of print] PubMed PMID: 24633447.

De La Garza R 2nd, Galloway GP, Newton TF, Mendelson J, Haile CN, Dib E, Hawkins RY, Chen CY, Mahoney JJ 3rd, Mojsiak J, Lao G, Anderson A, Kahn R. Assessment of safety, cardiovascular and subjective effects after intravenous cocaine and lofexidine. *Prog Neuropsychopharmacol Biol Psychiatry*. 2014 Apr 3;50:44-52. doi: 10.1016/j.pnpbp.2013.11.013. Epub 2013 Dec 4. PubMed PMID: 24316175.

Pal R, Balt S, Erowid E, Erowid F, Baggott MJ, Mendelson J, Galloway GP. Ketamine is associated with lower urinary tract signs and symptoms. *Drug Alcohol Depend*. 2013 Sep 1;132(1-2):189-94. PMID: 23474358

Chan, H.A., and Mendelson, J.E. (2014) Hallucinogens. In: *The Effects of Drug Abuse on the Human Nervous System* (B. Madras and M. Kuhar: Eds), Elsevier, Chapter 17

Mendelson, J. Cocaine, sex and physicians. *Nat Med*. 2012 Nov;18(11):1608 PMID: 23135506

Mendelson J, Li L, Flower K, Harris W, Coyle JR, Chen YC, Sadee W, Galloway GP. The Effects of 6 β -Naltrexol, a Putative Neutral Opioid Antagonist, in Opioid-Dependent Subjects: A Proof-of-Concept Trial *Journal of Addiction Research & Therapy* In Press

Book Chapters

GHB: Principles of Addiction Medicine; 4th Ed; Lippincott, Williams, and Wilkin; 2009.

MDMA (Ecstasy): *Clinical Perspectives*; Principles of Addiction Medicine; 3rd Ed; Lippincott, Williams, and Wilkins; 2003.

Franklin G. Miller, Ph.D.
(b) (6)

July 12, 2016

To the NEH Selection Committee:

I'm writing to support the application of Micha Peled and Caleb Hellerman for a grant to support the production of "Forbidden Knowledge: Psychedelics & Science," a documentary film about medical research involving psychedelic drugs. After decades of quiescence, in recent years there has been a surge of interest in medical uses of psychedelic drugs, most of which are currently designated as Schedule 1 by the DEA, the most tightly restricted substances. Psychedelic drugs have a long and controversial history in psychiatry, and I believe that a well-crafted, responsible film would be an important contribution to public understanding of this field.

As a medical ethicist, I believe my background can serve the project when it comes to filming subjects of studies, both before and after their sessions. I recently retired from the National Institutes of Health (NIH), where I was a senior faculty member in the Department of Bioethics. A major focus of my research has been the ethics of clinical trials. I have taught seminars on research ethics for psychiatric research fellows at the National Institute of Mental Health, and for many years I was a member of Institutional Review Boards at the NIH that reviewed and approved psychiatric research.

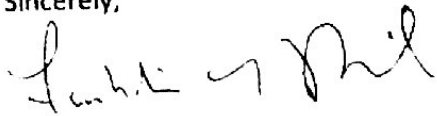
As a member of the advisory board, my role will be to help guide the filmmakers as they produce a documentary of journalistic integrity that respects the rights and needs of the volunteers taking part in this research. One of my tasks will be to review their proposed consent and filming agreement from an ethical perspective.

My conversations with Caleb and Micha convinced me that they are committed to presenting the study's results realistically, rather than trying to put any particular spin on it. I believe the filmmakers are hoping to document the process of investigation and discovery, as it unfolds from both the subjects' and the researchers' perspectives. For this reason, I support their approach of filming study participants before they're treated as part of the research, as well as afterwards. Following research participants prospectively allows the filmmakers to present a more complete picture than if they only interview patients who have successfully completed the trial.

Interviewing people in the course of experimental treatment raises a number of sensitive issues. Patients taking part are suffering from significant distress; they may feel subtly pressured to take part; or they and their physicians may come to feel that the on-camera role is affecting the course of treatment. I believe that Peled and Hellerman have given considerable thought to these challenges and

developed a thoughtful and responsible approach. I am confident that they recognize that in these cases, the patient's rights and well-being are paramount. I am impressed by their commitment to protecting both participants and the integrity of the research. As an adviser, I hope to contribute to their understanding of potential ethical issues, and to serve as a resource both in the development and in later stages of the projects.

Sincerely,

A handwritten signature in black ink, appearing to read "Franklin G. Miller". The signature is written in a cursive, flowing style.

FRANKLIN G. MILLER, Ph.D.

(b) (6)

EDUCATION

- 1977 Columbia University, Ph.D. in philosophy.
Dissertation: *A Theory of Political Obligation*,
an inquiry into the grounds for a moral obligation to obey the law;
awarded Distinction.
Specialized in ethics and political philosophy.
- 1971 Columbia College, B.A., majored in philosophy.

PROFESSIONAL EXPERIENCE

Current Position

- 2014- Professor of Medical Ethics in Medicine (Courtesy) Weill Cornell Medical College
- 2015- Adjunct Faculty, Department of Bioethics, National Institutes of Health

Previous Position

- 1999-2015 Senior faculty, Department of Bioethics, National Institutes of Health; special expert Intramural Research Program, National Institute of Mental Health.

Teaching - selection

- 2001-2003 Bioethics seminar for Faculty Associates, Division of Medical Ethics, Cornell University Medical School
- 2001 - 2007 Small group leader, Kennedy Institute of Ethics, Intensive Bioethics Course
- 1999-2009 Seminar for NIMH psychiatric research fellows on the ethics of psychiatric research. Awarded 2002 Alan Stoudemire Award for Innovation and Excellence in Consultation-Liaison Education.
- 1990-1999 Associate Professor of Medical Education (from 7/1/97)
University of Virginia, Center for Biomedical Ethics.
- 1998 The New York Hospital-Cornell Medical Center, Advanced Seminar in Medical Ethics.

Consultation in Biomedical Ethics - selection

- 2012-2015 Member of Data Safety and Monitoring Board, NIMH Intramural Research Program
- 9/1/12-2013 Member of Data Safety and Monitoring Board, PITCH-HF, National Heart, Lung, and Blood Institute
- 2/8/08 Member of NIH Study Section, Research on Ethical Issues in Human Studies
- 1991-2006 Member of Institutional Review Board, National Institute of Mental Health.
- 2007-2012 Member of CNS Institutional Review Board, Intramural Research Program, National Institutes of Health

Books - selection

Quill TE, **Miller FG**, eds. *Palliative Care and Ethics*. New York: Oxford University Press, 2014.

Miller FG, Colloca L, Crouch RA, Kaptchuk TJ, eds. *The Placebo: A Reader*. Baltimore: Johns Hopkins University Press, 2013.

Miller FG. *The Ethical Challenges of Human Research: Selected Essays*. New York: Oxford University Press, 2012.

Miller FG, Truog RD. *Death, Dying, and Organ Donation: Reconstructing Medical Ethics at the End of Life*. New York: Oxford University Press, 2012.

Miller FG, Wertheimer A, eds. *The Ethics of Consent: Theory and Practice*. New York: Oxford University Press, 2010.

Emanuel EJ, Crouch RA, Grady C, Lie R, **Miller FG**, Wendler D, eds. *The Oxford Textbook of Clinical Research Ethics*, New York: Oxford University Press, 2008.

Miller FG, Fletcher JC, Humber JH, eds. *The Nature and Prospect of Bioethics: Interdisciplinary Perspectives*. Humana Press, 2003.

BOARD MEMBERSHIPS

- 1996-1997 Board of Directors, Choice in Dying, New York, NY
- 1995-1997 Board of Directors, Death with Dignity Education Center, San Mateo, CA

July 18, 2016

To Whom It May Concern,

I write to offer my support for the proposal to develop the film project *FORBIDDEN KNOWLEDGE: Science & Psychedelics* (working title) by Micha Peled.

I would be delighted to serve as an adviser to a film that will explore the topic of mind and consciousness through renewed medical studies of psychedelics. I have worked in this field continuously since I began my graduate studies in 1969 and have been considered by most scientists as the most knowledgeable person in the world on psychedelics, their chemistry and neuropharmacology.

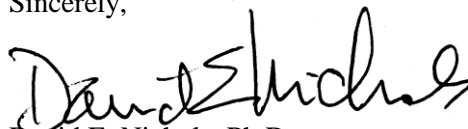
In 1993 I founded the Heffter Research Institute (www.heffter.org) in order to support and fund modern studies into the potential medical value of psychedelics. Since then we have provided support for psilocybin-assisted psychotherapy in the treatment of Obsessive-Compulsive Disorder (OCD), three very successful Phase 2 clinical studies of the use of psilocybin-assisted psychotherapy in cancer-related psychosocial distress, one pilot study of psilocybin-assisted psychotherapy for alcoholism, and one pilot study of psilocybin-assisted psychotherapy for treatment of nicotine addiction. These successful studies have generated tremendous interest among objective scientists and clinicians who had only been waiting on hard data to develop their own conclusions. Some of this work has recently been reaching the public through various media sources, and I welcome the opportunity to help to bring a factual background on these studies to any potential PBS television audience.

I am delighted that Micha is intent on making a fair and balanced film. This topic has often been misrepresented in the media, and therefore misunderstood by the public. Some aspects of the topic are scientific in nature, and I would be glad to be able to guide the filmmaker on those aspects to ensure accuracy. I also will assist him in contacts with the community of researchers and therapists who currently conduct approved clinical trials with psychedelics. A serious and balanced film on this topic is an idea whose time has come, and I welcome the opportunity to be of assistance.

Among those of us who are intimately involved in current efforts to obtain FDA approval for psilocybin-assisted psychotherapy for the indications I mentioned above, as well as certain others, we are convinced that this work will generate a new paradigm for psychiatry. Recently, Dr. Jeffrey Lieberman, the head of the Department of Psychiatry at Columbia University, has expressed the opinion that we need research to elucidate the value of psychedelics for medicine.

I sincerely hope that you approve this funding request for what I see as a very important film. I look forward to consulting on it and showing it.

Sincerely,



David E. Nichols, Ph.D.

Distinguished Professor Emeritus

Former Robert C. and Charlotte P. Anderson

Chair in Pharmacology

Adjunct Professor, UNC Chapel Hill, NC

David E. Nichols, PhD
Curriculum vitae

Abbreviated

Current Affiliation

Adjunct Professor, University of North Carolina, Chapel Hill 2012-present

Education

University of Cincinnati, B.S. Chemistry	1969
University of Iowa, PhD Medicinal Chemistry	1973
Postdoctoral Fellow, Pharmacology, U of Iowa College of Medicine	1973

Positions and Honors

Assistant Professor of Medicinal Chemistry, Purdue University	1974-1979
Associate Professor of Medicinal Chemistry, Purdue University	1979-1984
Professor of Medicinal Chemistry, Purdue University	1984-2012
Professor of Pharmacology Purdue University	1985-2012
Interim Head, Dept. of Medicinal Chemistry and Pharmacognosy	9/1/94-6/30/95
Interim Head, Depts. of Med Chem and Pharmacognosy, and Pharmacology and Toxicology	7/1/95-6/30/96
Interim Head, Dept. of Medicinal Chemistry and Molecular Pharmacology	7/1/96-10/1/96
Named Irwin H. Page Lecturer by the International Society for Serotonin Research	Summer 2004
Named Provost Outstanding Faculty Mentor, Purdue University	May 2006
Named Distinguished Professor of Medicinal Chemistry and Molecular Pharmacology	October 2008
Named Robert C. and Charlotte P. Anderson Distinguished Chair in Pharmacology	October 2008
Distinguished Alumnus, University of Iowa, College of Pharmacy,	June 2012

Peer-Reviewed Scientific Publications - 268

Book Chapters and Monographs – 23

Published Symposium Proceedings – 15

Letters and Commentaries related to Teaching – 10

Issued United States Patents – 7

Invited Lecturer at National or International Meetings – 34

Invited Seminars at Academic and Medical Institutions – 82

Presentations at Scientific Meetings – 172

Graduate Students trained – 45

Postdoctoral Fellows Trained – 19

Graduate School of Journalism

University of California • 121 North Gate Hall
• Berkeley, CA 94720-5860



Michael Pollan
Knight Professor of Journalism
tel: 1-510-642-8240
fax: 1-510-643-9136
mp@michaelpollan.com

July 16, 2016

To: the NEH Selection Committee:

I'm writing in enthusiastic support of Micha Peled's application for a grant to support the development of his documentary film, *Forbidden Knowledge*. I have known Micha since seeing *Bitter Seeds*, his superb film about Indian farmer suicides, and count myself an admirer of his work. He is uniquely able to address controversial subjects without falling into the usual traps of ideological thinking or oversimplification. He actually gravitates toward complexity and ambiguity, which is rare in any journalist, and even rarer in filmmakers.

I raise this because the subject he now plans to address, the history and revival of research into psychedelic drugs, needs to be handled with subtlety and nuance—all too often the topic is approached with either evangelism or alarmism. But it's so much more interesting than either of those approaches can possibly suggest.

I spent a year researching this world for "The Trip Treatment," my February 2015 story in the *New Yorker*. I soon came to understand that this is one of those rich stories where science and culture intersect in complicated ways, and where without the lens of the humanities—history foremost, but also philosophy, literature and religion—it is impossible to put these molecules and the controversies that surround them into a proper context. The struggle in the West to interpret the meaning of the psychedelic experience is as fascinating a story as the research to discover what they reveal about the mind and if they might help treat some of its disorders. Few scientific subjects of current interest can make such powerful use of the tools of the humanities.

I have confidence Micha will attack this subject with intelligence, a skeptical mind, and with artistic distinction. And as an adviser to the project, I stand ready to help.

Please don't hesitate to be in touch if I can be of any further assistance.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael Pollan". The signature is fluid and cursive, with a long horizontal line extending from the end.

Michael Pollan

James L. and John S. Knight Professor of Journalism

Michael Pollan
Curriculum vitae

Abbreviated

Current Affiliation

Contributing writer, <i>New York Times Magazine</i>	1995-
present	
Knight Professor of Journalism	
University of California, Berkeley, School of Journalism	2003-present

Education

Bennington College, Bennington, VT	1977
Mansfield College, Oxford University	1975
Columbia University (Masters, English; President's Fellowship)	1981

Publications: Books

<i>Second Nature: A Gardener's Education</i> (Atlantic Monthly Press)	1991
Recipient of the QPB New Vision Award; VLS best seller; published also in England, Japan, Holland. Named one of the 75 best gardening books of the century by the American Horticultural Society; the book is taught in many environmental studies and history courses. Second edition published in 2004.	
<i>A Place of My Own: The Education of an Amateur Builder</i> (Random House)	1997
Recipient of John Burroughs Natural History Award; <i>New York Times Book Review</i> "notable book" of 1997.	
<i>The Botany of Desire: A Plant's-Eye View of the World</i> (Random House)	2001
<i>New York Times</i> bestseller; published also in England, France, Germany, Japan, China, Israel, Italy. Winner of the Border's Original Voices award for the best work on non-fiction in 2001, and a finalist for the Book Sense best book of the year award for 2001.	
<i>The Omnivore's Dilemma: A Natural History of Four Meals</i> (The Penguin Press)	2006
<i>New York Times</i> bestseller; named one of the ten best books of 2006 by the <i>New York Times</i> and the Washington Post. It also won the California Book Award, the Northern California Book Award, the James Beard Award for 'Best Writing on Food,' and was a finalist for the National Book Critics Circle Award.	
<i>In Defense of Food: An Eater's Manifesto</i> (The Penguin Press)	2008
<i>New York Times</i> bestseller.	
<i>The Omnivore's Dilemma: the Secrets Behind What You Eat</i> (The Penguin Press) Young Readers Edition.	2009
<i>New York Times</i> bestseller; named one of Booklist's Top 10 Environmental Titles for Youth.	
<i>Food Rules: An Eater's Manual</i> (The Penguin Press)	2010
<i>New York Times</i> bestseller.	

Film and Television Projects

- 2009 Special Consultant and co-narrator, *Food Inc.*, a theatrical documentary nominated for an academy award and broadcast on public television, spring 2010
2009 Appeared in *The Botany of Desire*, a two-hour public television special based on *The Botany of Desire: A Plant's-Eye View of the World*

Awards and Honors (Selected)

- 1991 QPB New Visions Award for *Second Nature*
1997 John Burroughs Prize for Best Natural History Essay
1999 Horticultural Society of America Golden Trowel Award
2000 Reuters-World Conservation Union Global Award for Excellence in Environmental Journalism for "Playing God in the Garden." (Prize was a fellowship to Green College, Oxford).
2001 Borders Original Voices Prize for the year's best non-fiction book for *Botany of Desire*
2002 Award from the Connecticut Center of the Book for Best Nonfiction Book of the Year
2002 Genesis Award from the Humane Society of the United States for "Power Steer" and "An Animal's Place"
2002 James Beard Award for Best Magazine Feature Article for "Sustaining Vision" in September 2002 *Gourmet*
2006 Fellowship, The National Humanities Center, Research Triangle Park, North Carolina
2006 *The Omnivore's Dilemma* selected as one of the 10 Best Books of the Year by *The New York Times Book Review*, *Amazon.com*, *The Washington Post*, and *The Boston Globe*
2006 California Book Award for *The Omnivore's Dilemma*
2006 Northern California Book Award for *The Omnivore's Dilemma*
2006 Finalist for the National Book Critics Circle Award for *The Omnivore's Dilemma*
2007 James Beard Award for Best Writing on Food for *The Omnivore's Dilemma*
2008 Humanities Prize from the Center for the Humanities, Washington University
2009 Voices of Nature Award from the Natural Resources Defense Council
2009 President's Citation Award of the American Institute of Biological Sciences
2009 named as one of *Newsweek's* top 10 "New Thought Leaders"
2010 Social Justice Champion Award from the California Center for Public Health
2010 Finalist, National Magazine Award for "Out of the Kitchen, Onto the Couch"
2010 named to the *TIME* 100, the magazine's annual list of the world's 100 most influential people



Berkeley
UNIVERSITY OF CALIFORNIA

David E. Presti
University of California
Department of Molecular and Cell Biology
Berkeley, CA 94720-3200 USA

phone: 510 643 2111
email: presti@berkeley.edu

July 18, 2016

To whom it may concern at the National Endowment for the Humanities:

It is my great pleasure to write in support of Micha Peled's proposed film "Forbidden Knowledge: Psychedelics and Science." I would be delighted to serve on the panel of advisers for this film.

I am a neurobiologist and clinical psychologist, with doctorates in molecular biology and in clinical psychology. I worked for eleven years as a fulltime clinician in the treatment of drug and alcohol addiction at the Veteran's Administration Medical Center in San Francisco and have treated thousands of veterans for addiction and post-traumatic stress problems. I have taught neuroscience at UC Berkeley for 26 years and have held a fulltime tenured position there for the past 16 years. In addition to teaching large undergraduate classes at UC Berkeley (to enrollments of more than 1,200 students each year), I supervise student research, mentor graduate students in teaching, engage in research projects in human cognitive science, and am involved with numerous UC Berkeley campus administrative projects related to student welfare.

For more than 25 years I have been closely observing the return of clinical and neurobiological studies with psychedelic plants, fungi, and chemicals to the scientific mainstream. The unique psychotherapeutic and neurobiological utilities of these substances make them powerful tools that may, with great care, be used in beneficial ways in the service of reducing human suffering and expanding scientific knowledge and understanding.

A particular interest of mine is the intersection of science and spirituality. As part of this, I have been teaching neuroscience to Tibetan Buddhist monastics in India for more than decade in an educational program initiated by the Dalai Lama. One way the word "spirit" is used in contemporary society is to reference experiences (sacred, mysterious) that appear to be beyond the pale of investigation by the methods of science. However, I contend that whenever the really big questions in science are asked – What is the nature of reality? What is the nature of mind and consciousness? – one necessarily encounters territory often described as spiritual. There is


much to be accomplished by expanding our efforts at this interface, and psychedelics may offer a uniquely powerful approach to this.

Millennia of shamanic use, coupled with the lessons of the scientific findings and societal impact of psychedelics in the 1960s, serve to indicate that psychedelics are substances of great power. Within our contemporary culture methods must be developed to contain and channel this power if the science is to flourish. It is impossible to overstate the importance of education to this endeavor. And it is here that the proposed film can have tremendous impact – presenting clear and balanced coverage of a complex subject, a subject with a history of strong emotional associations, both positive and negative.

It is my opinion that the proposed film will be an invaluable contribution to this process – educational to the public at large, to scientists and clinicians, and to populations of university students, who would see it in the classes I teach, for example.

I hope that the NEH chooses to support this very timely and important project!

Sincerely,

A handwritten signature in black ink that reads "David E. Presti". The signature is written in a cursive, flowing style with a large initial 'D'.

David E. Presti, PhD (Molecular Biology), PhD (Psychology)
Teaching Professor of Neurobiology, Psychology, and Cognitive Science
Chair, Undergraduate Council, Academic Senate, UC Berkeley
California-Licensed Clinical Psychologist

DAVID EUGENE PRESTI

University of California
Department of Molecular and Cell Biology
Berkeley, California 94720-3200

phone: 510 643 2111
email: presti@berkeley.edu
web: mcb.berkeley.edu/labs2/presti/

PRIMARY PRESENT AND RECENT POSITIONS

Department of Molecular and Cell Biology - University of California, Berkeley
Teaching Professor of Neurobiology, Psychology, and Cognitive Science
Affiliated Faculty (UC Berkeley): Department of Psychology, Program in Cognitive Science, Berkeley Food Institute
Adjunct Faculty in Neurobiology (1991-1999); tenured faculty (2000-present)
Neuroscience Faculty, Science for Monks Program, Tibetan Library, India (2004-present)
Department of Veterans Affairs Medical Center - San Francisco, California
Clinical Psychologist; Program Director (inpatient and outpatient) - Mental Health Service (1990-2000)

PROFESSIONAL LICENSE Psychologist license, state of California (1991-present)

EDUCATION

1970-74	Butler University, Indianapolis, Indiana	B.S.	Chemistry, Mathematics, Physics
1974-75	California Institute of Technology, Pasadena	M.S.	Physics
1975-79	California Institute of Technology, Pasadena	Ph.D.	Molecular Biology and Biophysics
1986-90	University of Oregon, Eugene	Ph.D.	Clinical Psychology

UNIVERSITY-LEVEL TEACHING

Department of Molecular and Cell Biology, Cognitive Science Program, Department of Psychology, and
College of Letters and Science, University of California, Berkeley (1991-present)
Consciousness: Buddhist and Neuroscientific Perspectives (L&S 124)
Molecular Neurobiology and Neurochemistry (MCB 165)
Drugs and the Brain (MCB 62 / L&S 30T / PSY 119 / PSY 19) (taught annually to ~600 students)
Brain, Mind, and Behavior (MCB 61 / PSY 61) (taught annually to ~600 students)
Brain, Mind, and Behavior (online class) (MCB w61)
Music, Mind, Brain (MCB 90) - Freshman Seminar
Mind, Matter, Consciousness (MCB 90) - Freshman Seminar
Foods, Drugs, Moods, and Mystics: Current Issues in Science, Health, and Policy (L&S 23)
Ethical Issue in Neuroscience (MCB 84) - Sophomore Seminar
From Synaptic Pharmacology to Consciousness (MCB 290) - Graduate Seminar
Counseling, Psychotherapy, Public Health & Social Services Program, and Alcohol & Drug Abuse Studies Program,
University of California Extension, Berkeley (1995-present)
Advances in Human Brain Science for Clinicians
Practical Clinical Psychopharmacology
Assessment and Treatment of Alcohol and Drug Problems
Contemporary Topics in the Assessment and Treatment of Substance Abuse for Clinicians
Osher Lifelong Learning Institute (OLLI), University of California, Berkeley (2008-present)
Your Brain on Plants and Drugs
Brain, Mind, Perception, and Consciousness
Dimensions of Silence in the Human Experience
Postgraduate Program in Clinical Psychopharmacology (comprehensive training program for licensed clinical psychologists),
(core faculty from inception of the program), California School of Professional Psychology / Alliant University,
San Francisco (1999-2010)
Clinical Biochemistry, Clinical Neurochemistry, Clinical Neurophysiology, Chemical Dependency
VA Medical Center and University of California Medical School, San Francisco (1990-2000)
Intensive clinical supervision to psychology interns, UCSF psychiatry residents, and UCSF medical students
Department of Psychology, University of Oregon (1987-90)
Psychology as a Science; Psychoactive Drugs; Biological Psychology
Esalen Institute, Big Sur, California (1998-present)
Annual or biannual Continuing Education workshops on topics related to the neuroscience, brain, mind, consciousness,
and psychopharmacology.

UNIVERSITY OF CALIFORNIA SERVICE ACTIVITIES (REPRESENTATIVE, RECENT)

2000-present	Regents' and Chancellor's Scholarship Review: Undergraduate Scholarship and Honors Committee
2010-2014	Student Affairs Committee, UCB Academic Senate (task complete)
2010-2011	College of Letters & Science Faculty Forum on Re-Visioning Undergraduate Education (task complete)
2010-2011	Chancellor's Task Force to Examine and Revise the UCB Code of Student Conduct (task complete)
2011-present	MCB Department undergraduate major student advising
2011-2014	Chair, Student Affairs Committee, UCB Academic Senate
2011-present	Faculty Representative to ASUC, UCB Academic Senate
2011-2012	Chancellor's Advisory Committee on Sustainability
2012-present	Chancellor's Advisory Committee on Student Mental Health
2012-present	University Honor Code Implementation Committee
2013-2014	Dean of Students Search Committee (task complete)
2013-2014	Student Athletics Council, UCB Academic Senate
2015-present	Board of Directors, Bowles Hall Foundation (tasked with re-establishing UC Berkeley's Bowles Hall as a Campus residential college, opening in Fall 2016)
2015-present	Chair, Undergraduate Council, UCB Academic Senate
2015-present	Divisional Council, UCB Academic Senate
2015-present	Undergraduate Initiative Steering Committee

HONORS AND AWARDS (RECENT)

2003	Department of Molecular and Cell Biology, UC Berkeley, Teaching Award
2006	Golden Apple Award for Outstanding Teaching, UC Berkeley
2008	Honored Instructor Award, UC Berkeley Extension
2014	Invited Keynote Address, UC Berkeley Undergraduate and Interdisciplinary Studies, Commencement

COMMUNITY SERVICE ACTIVITIES (PRO-BONO)

2014-present	Board of Trustees, North Atlantic Books, and Society for the Study of Native Arts and Sciences, Berkeley
2014-present	Advisory Board, Indra's Net Theater Company, Berkeley
2015-present	Board of Directors, Bowles Hall Foundation

PROFESSIONAL PUBLICATIONS AND OTHER ACTIVITIES (REPRESENTATIVE, RECENT)

- DE Presti & JE Beck (2001) Strychnine and other enduring myths: expert and user folklore surrounding LSD. *Psychoactive Sacramentals: the Vallombrosa Conference* (edited by TB Roberts). Council on Spiritual Practices. {Reprinted as "Myths and misperceptions" in J Fadiman (2011) *The Psychedelic Explorer's Guide: Safe, Therapeutic, and Sacred Journeys*. pp 90-102, Park Street Press.}
- DE Presti & DE Nichols (2004) Biochemistry and neuropharmacology of psilocybin mushrooms. *Teonanacatl: Sacred Mushrooms of Visions* (edited by R Metzner). Green Earth Foundation.
- MS Jacob & DE Presti (2005) Endogenous psychoactive tryptamines reconsidered: an anxiolytic role for dimethyltryptamine. *Medical Hypothesis*, 64, 930-937.
- OL Carter, DE Presti, et al (2005) Meditation alters perceptual rivalry in Tibetan Buddhist monks. *Current Biology*, 15, R412-R413.
- DE Presti (2011) Neurochemistry and altered consciousness. In *Altering Consciousness: A Multidisciplinary Perspective* (edited by E Cardeña & M Winkelman), vol 2, chap 2, pp 20-41. Praeger.
- DE Presti (2012) Drugs, the brain, and behavior. *Encyclopedia of Human Behavior*. Elsevier Press.
- DE Presti (2012) The mind-body problem. *Encyclopedia of Human Behavior*. Elsevier Press.
- JR Coyle, DE Presti, & MJ Baggott (2012) Quantitative analysis of narrative reports of psychedelic drugs. arXiv:1206.0312 [quantitative biology].
- DE Presti (2014) Too big for a Nobel Prize: Remembering Sasha Shulgin. *MAPS Bulletin*, 24(3), 46-49.
- EF Kelly & DE Presti (2015) A psychobiological perspective on "transmission" models. In *Beyond Physicalism: Toward Reconciliation of Science and Spirituality* (edited by EF Kelly, A Crabtree, & P Marshall), pp 115-155. Roman & Littlefield.

IN PRESS

- DE Presti (2015) *Basic Concepts in Neuroscience: A Brain-Mind Odyssey*. New York: WW Norton.
- DE Presti (2016) Altered states of consciousness: drug-induced states. In *Blackwell Companion to Consciousness* (2nd edition) (edited by S Schneider & M Velmans). John Wiley & Sons.

COLLOQUIA AND WORKSHOPS Several per year

Micha X. Peled
Teddybearfilms@earthlink.net

FILMS

- BITTER SEEDS, 88 min. 2011 ([Globalization Trilogy III](#))

Credits: Producer, Director, Camera, Additional editing

In India, a farmer kills himself every 30 minutes because he can no longer provide for his family. In a village at the epicenter of the crisis, the film tracks the root causes to the tragic intersection of GMO seeds and the global economy. World premiere at Telluride Film Festival.

- CHINA BLUE, 87 min. 2005 ([Globalization Trilogy II](#))

Credits: Producer, Director, Camera, Additional editing

The inside story of a jeans factory in China told from the perspectives of both the owner and a teenage peasant girl who arrives from a far-away village to get a job. World premier at the Toronto Int'l Film Festival. 12 awards, 85 film festivals, theatrical release and broadcasts in U.S, Europe, Japan, DVD editions in seven languages.

- STORE WARS: When Wal-Mart Comes to Town min., 56 min., 2001 ([Globalization Trilogy I](#))

Credits: Producer, Director, Writer

A year in the life of a small Southern town as it is torn apart struggling to reach a decision whether to let in a Wal-Mart megastore. A look at the impact of Big Box chain stores on Small Town America. PBS national broadcast.

- YOU, ME, JERUSALEM 52 min., 1996

Credits: Producer, Co-Director

Co-directed with George Khleifi, it is the first Israeli-Palestinian film about the biggest obstacle to peace between them - Jerusalem. The film follows an ambulance crew with an Arab doctor and an Israeli paramedic who respond to emergencies in all parts of town. Premiered at New York's Lincoln Center and aired in Europe, Australia and Japan.

- INSIDE GOD'S BUNKER 52 min., 1994

Credits: Producer, Director, Writer

An up-close, chilling portrait of the extremist Jewish settlers in the West Bank town of Hebron. Includes the only footage filmed when Hebron was closed to the media after the 1994 massacre. Aired by 17 broadcasters in 14 countries.

- WILL MY MOTHER GO BACK TO BERLIN?, 52 min. 1992

Credits: Director, Writer

A first-person documentary about a Jewish refugee from Germany and her filmmaker son who tries to convince her to visit with him the city of her childhood. An intimate and surprising portrait of a mother-son relationship. Produced for German television and aired also on U.S. public television stations.

FICTION

- DELINQUENT 18 min. 2008

Credits: Producer, Director, Writer

Fiction short shot in San Francisco, winner of the **Platinum Remi Award** at the Houston WorldFest.

TV MAGAZINE ITEMS

- MAD MUNDO, 26 min., weekly television magazine, Internews Europe, 1997

Senior producer of pilot of international magazine for eight European broadcasters

- SCAN a CNBC weekly magazine on technology and new media, 1996

Produced international items for the show, which also aired on United Airlines.

- FR2 (France) and ARD (Germany) 1993-96

Produced investigative reporting for Envoyé Spécial in France and Weltspiegel in Germany.

MAJOR AWARDS

- **Berlin Cinema for Peace Green Award**, 2013
- **IDA** (Int'l Documentary Assoc.) **Humanitas Award**, 2012
- **IDFA Green Screen** Competition Award, 2011
- **Oxfam-Novib Global Justice Award**, 2011
- **PBS/Independent Lens** Audience Award, 2007
- **DOEN/Amnesty International Human Rights Award**, IDFA, 2005
- **Hugo Awards**, the Chicago International Television Competition, 2001, 2007
- Nominated for the **Joris Ivens Prize**, feature documentary competition, IDFA 2005
- **Best Documentary**, Mar Del Plata (Argentina) Independent Film Festival, 2006
- **CINE national Golden Eagle Award** (Washington DC), 2001, 2007
- Nominated, IDA (Int'l Doc. Assoc.) **Distinguished Achievement Pare Lorenz Award**, 2001
- Honorable Mention, Vancouver International Film Festival, 2005
- The **Golden Gate Award**, San Francisco International Film festival, 2001
- **Best Documentary**, Hawaii International Film Festival, 1994
- **The Robert Geisendorfer Preis** honoring the best television program in Germany contributing to better understanding between nations, 1993
- **Gold Apple award** the U.S. National Educational Film & Video Festival, 1993

MAJOR FILM FESTIVALS

- Telluride Film Festival 2011
- Toronto International Film festival 2005
- IDFA (Amsterdam) 1994, 2005, 2011
- Palm Springs Int'l FF 2012
- Berlin International FF 1994
- San Francisco Int'l FF 2001, 2012
- Vancouver Int'l FF 2001, 2005, 2012
- Thessaloniki (Greece) Int'l FF 2006, 2012
- South By Southwest (Austin, TX) 2001
- It's All True (Brazil) 2006, 2012
- New Zealand Int'l FF 2002, 2006
- Prague One World 2006, 2012
- Margaret Mead Film Festival 2006
- Full Frame Documentry FF 2006
- Hong Kong Int'l FF 2006, 2012
- Sunny Side of the Doc (France) 1994, 1996
- Rotterdam Int'l FF 1996
- Montreal Festival du Nouveau Cinema 1996
- Hawaii Int'l FF 1994, 1995, 2006
- Buenos Aires Independent Film Festival 2002
- CPH: Dox (Denmark) 2006
- Jerusalem Int'l Film festival 1996, 2006

TELEVISION (selected list)

- Germany: ARD (First Channel), BR, WDR, NDR, ORB, ARTE
- Britain: Channel Four
- France: ARTE, FR2, FR3, Planète Cable
- United States: national PBS broadcasts
- Australia: SBS, Belgium: BRTN, Denmark: DR1, TV2, Finland: TV2, Hungary: MTV, Israel: Yes Cab:e, Italy: RAI cable Japan: NHK, MICO, Netherlands: NOS, KOR, Norway: NRK, Spain: TVE, TV3 Televisio de Catalunya, TV3 Galicia Sweden: SVT1 and 2.

THEATRICAL

U.S. (Bullfrog Films & Argot Pictures), Netherlands (Cinema Delicatessen), Germany (Eyz Media), New Zealand (Realto), Japan (Shin Nippon Films)

DVD RELEASES

U.S. (Bullfrog Films), Japan (Shin Nipon Films), France (Editions Montparnasse), Spain (Morena Films and Parallel 44), Italy (Fandango), Netherlands (Cinema Delicatessen), Germany (EYZ Media), Danish Film Inst.

Caleb Hellerman

(b) (6)



SUMMARY

A versatile journalist working with top talent and major organizations to produce award-winning television, documentaries and digital content. An innovative storyteller whose powerful explanatory journalism captures a broad, highly-engaged audience. A resourceful manager with a track record of leading teams to success in both traditional and emerging media.

WORK EXPERIENCE

CURIOSITY LANE

November 2014 – present

Founded independent production company creating documentaries and other innovative content that cuts through the clutter to shape thinking and to make the world a better and more humane place. A focus on health, medicine, science and education.

PBS NEWSHOUR / MILES O'BRIEN PRODUCTIONS / NOVA

April 2015 – present

Working with science correspondent Miles O'Brien to produce long-form television and online reports on Ebola, Zika virus and other health threats. Managing editor of weekly science segment that will debut on the NewsHour in May, 2016.

CABLE NEWS NETWORK (CNN)

Supervising Producer, "Sanjay Gupta MD"

2011 - 2014

Produced weekly program showcasing enterprise reporting, major news of the week and issues relating to personal health. Led program to a steady increase in ratings and revenue, while being nominated for three Daytime Emmys and numerous other awards. Helped manage CNN's transition to a "digital first" emphasis in newsgathering, storytelling and audience engagement.

- Oversaw the editorial vision of "Sanjay Gupta MD" as well as all facets of production, including live broadcasts when warranted by breaking news.
- Wrote scripts, produced tape pieces and interviews and field produced as needed.
- Developed and executed a variety of sponsored content.
- Managed the budget and staff of "Sanjay Gupta MD"
- Helped oversee CNN's overall medical coverage. Responded to breaking news, developed stories from concept to final product, made assignments, sent guidance notes and served as key resource to the rest of the network.
- Produced regular stories featured on all CNN shows and platforms.
- Wrote frequent articles and produced multimedia features for CNN.com.

Senior Producer, CNN Medical Unit**2004 - 2011**

Lead producer for more than 20 documentaries and specials featuring Dr. Sanjay Gupta and other CNN reporters.

- Developed programs from initial concept to final product.
- Managed team of producers, writers, editors, photographers and other technical staff.
- Hands-on experience with WordPress & CMS
- Worked closely with marketing and PR teams to shape promotional efforts.

SELF-EMPLOYED**2008 – 2009**

Developed, researched and ghost-wrote Sanjay Gupta's "Cheating Death," an exploration of cutting-edge emergency care and the way that science is re-defining the border between life and death.

ABC NEWS**Writer/Segment Producer, "Good Morning America"****1999 – 2003**

Produced interview segments, wrote tape packages, did off-air reporting and supervised tape editing and graphics.

- Worked primarily on breaking news, politics and "hard news" coverage.
- Worked as field producer, most extensively with Diane Sawyer and John Miller covering the 2003 "D.C. Sniper" saga.

Writer, "World News Tonight with Peter Jennings"**1997 - 1998**

Reported and wrote voice-overs, VO/SOTs and short packages. Worked with correspondent Betsy Stark to investigate and produce a story on sub-prime mortgage fraud.

SPECIAL EXPERTISE

Infectious disease & outbreak investigations
Drugs & drug policy
Health care policy
Emergency medical care
Psychiatry & neuroscience

PROFESSIONAL TRAINING & MEMBERSHIPS

Investigative Reporters & Editors
Ochberg Fellow, DART Center for Journalism and Trauma
Knight Fellow, Centers for Disease Control and Prevention

EDUCATION

Columbia University, Bachelor of Arts in American History

July 9th, 2016

(b) (6)

Micha Peled
Teddy Bear Films

(b) (6)

Dear Micha –

I write to affirm my enthusiastic commitment to write *Forbidden Knowledge* for you. Any writer would be thrilled to work with the producer/director of *China Blue*, *Bitter Seeds*, and *Store Wars*. Your talent is undeniable and unailing.

I'm also delighted that we'll be probing an area that is both a central topic for a generation within my lifetime, yet curiously avoided in humanities-oriented documentary films. Many films do deal with hallucinogens, of course; there's a standard set of warped images and belittling tones, but little serious discussion. Psychedelic drugs have become a standard cultural joke and their depiction all but thoughtless. (Even in fairly-intelligent pop-cultural feature films like *Inherent Vice* and television series like *Mad Men*, hippies are depicted as inane clichés.) The fact that psychedelics changed many thousands of lives, both for better and worse, and had a profound philosophical effect on virtually everyone who took it, has not survived in the cultural consciousness. The roots of Western thinking in regards to such drugs, from De Quincey to Huxley to Kesey, are far less well-known today than they were 40 years ago. Exploring the reasons why that is so in your film will be a great adventure.

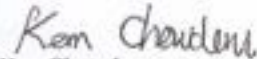
At the same time, I'm certain your film will not advocate drug-taking on any level. Examining the risks of drugs escaping the clinic into recreational use should be a key counter-point in the script we will write.

The film will take a serious and balanced look at the recent crop of studies using psychedelics in neuroscientific research and psychotherapies. It's an unfortunate fact that the topic is still so loaded with controversy it's impossible to get a factual, dispassionate assessment of the pros and cons of these studies. We'll view the science through the lens of the humanities – for even science is often culturally-loaded and –biased.

I know you will rectify that wrong, and I think I can help. I'm excited to be a part of this project.

I send my best, of course.

Your truly,


Ken Chowder
www.KenChowder.com

SCRIPTWRITING

- 1) **JANESTOWN**, one-hour documentary for WNET and PBS series *Secrets of the Dead*, to be broadcast on national PBS in 2015
- 2) **RIISING VOICES**, a one-hour documentary for Florentine Films/Hott Productions (funded by NEH, Native American Public Telecommunications fund)
- 3) **THE LATINO AMERICANS** (co-writer), six-part documentary series by WETA (funded by CPB, NEH, Rockefeller Foundation); **winner, 2014 Peabody Award**
- 4) **FREDERICK LAW OLMSTED: DESIGNING AMERICA**, 60-minute documentary by Florentine Films/Hott Productions for WNED, funded by NEH; broadcast on national PBS June 2014
- 5) **ANITA: SPEAKING TRUTH TO POWER** (co-writer), 90 minute feature documentary by Freida Mock, released in theatres fall 2013, distributed by Samuel Goldwyn Films
- 6) **THE WAR OF 1812**, two-hour documentary by Florentine Films/Hott Productions for WETA/WNED, broadcast on PBS in 2012
- 7) **THE FIRST FREEDOM** (co-writer), 90-minute documentary by Groberg Films for WETA, broadcast on PBS in December 2012
- 8) **HAVE YOU HEARD FROM JOHANNESBURG?** (co-writer), seven-part, ten-hour series by Clarity Films (funded by NEH, Ford Foundation, NEA, MacArthur Foundation)
Winner, Primetime Emmy for Exceptional Merit in Documentary Filmmaking, 2012
I.D.A. Award, Best Documentary Series
Winner, Best Documentary Feature (Vancouver Film Festival; National Film Board of Canada)
Winner, Best Documentary Feature (Pan-African Film Festival)
- 9) **THROUGH DEAF EYES**, two-hour documentary by Florentine Films for WETA (PBS)
Winner, duPont/Columbia Award 2008
Winner, Erik Barnouw Prize 2008
- 10) **ANNIE OAKLEY**, one-hour documentary by Riva Productions for *The American Experience* (WGBH -- PBS)
- 11) **DRAWN FROM NATURE: THE LIFE OF JOHN JAMES AUDUBON**, one-hour documentary by Florentine Films/Hott Productions for *American Masters* (WNET – PBS)
- 12) **THE AMERICAN DREAM** (co-writer), five-hour documentary series for Discovery/BBC
- 13) **THE RETURN OF THE CUYAHOGA**, one-hour documentary by Florentine Films (PBS)
- 14) **NIAGARA FALLS**, 1-hour documentary by Florentine Films/Hott Productions for WNED (PBS)
- 15) **JOHN BROWN'S HOLY WAR**, 90-min. documentary by Robert Kenner for *American Experience* (PBS)
- 16) **THE HARRIMAN ALASKA EXPEDITION RETRACED**, two-hour documentary by Florentine Films/Hott Productions (PBS)
- 17) **INFLUENZA 1918**, a one-hour documentary by Kenner Films for *The American Experience* (PBS)
- 18) **HUBBLE AND BEYOND**, one-hour documentary for National Geographic Channel (NGC)
- 19) **DON'T SAY GOODBYE: AMERICA'S ENDANGERED SPECIES**, one-hour *National Geographic Special* (NBC)
- 20) **DEFENDING EVERYBODY: THE STORY OF THE ACLU**, one-hour documentary by Florentine Films (PBS). Golden Apple, Nat. Educational Film Festival
- 21) **THE BOYHOOD OF JOHN MUIR**, 90-minute dramatic film by Florentine Films (PBS). Gold Hugo (Best Children's Feature Film), Chicago Television Festival; Silver Award (Best Adult Feature Film), Charleston Television Festival
- 22) **TREASURES OF THE LIBRARY OF CONGRESS**, 1-hour film by Wentworth Films, (PBS)
- 23) **THE LAST TSAR**, one-hour *National Geographic Special* (NBC)
- 24) **DINOSAUR HUNTERS**, one-hour National Geographic *Explorer* (TBS)
- 25) **THE PEOPLE'S PLAGUE: TUBERCULOSIS IN AMERICA**, series of two one-hour documentaries by Florentine Films (PBS)
- 26) **THE LOST FLEET OF GUADALCANAL**, 105-minute National Geographic *Explorer* (TBS)

Gold Award, WorldFest Film Festival – Best Documentary

Best Documentary Feature, Hong Kong Film Festival/Script nominated for Humanitas Award

27) **KNUTE ROCKNE**, one-hour documentary by Florentine Films for *The American Experience* (PBS).

Golden Apple Award, National Educational Film Festival

28) **WILD BY LAW**, one-hour documentary by Florentine Films for *The American Experience* (PBS)

Nominated for Academy Award -- Best Documentary Feature

Telluride Film Festival; CINE Golden Eagle Award

29) **THE WILDERNESS IDEA**, 1-hour documentary by Florentine Films for *The American Experience* (PBS)

Blue Ribbon (Best History Film), American Film Festival

Golden Apple Award (Best History Film) Nat. Educ. Film Fest.

Golden Gate Award (Best History Film), San Francisco Film Festival

Golden Plaque (Best History Film), Chicago Film Festival

30) **SIBERIAN SOUL ON ICE**, half-hour National Geographic *Explorer* (TBS)

SCRIPT CONSULTANT credits include: 31) **TYPHOID MARY**, one-hour *NOVA* program (PBS)

32) **THE SHAPE OF LIFE**, 4-part National Geographic series (PBS) – scripted two of the four parts

33) **REBUILDING THE TEMPLE: CAMBODIANS IN AMERICA**, award-winning documentary by

Florentine Films; 34) **THE SECRET LIFE OF A GEISHA**, documentary by A&E

PUBLICATIONS: 1) **JADIS**, a novel

Harper & Row, 1985; paperback, Penguin (Contemporary American Fiction series), 1986

West Germany: Zsolnay Verlag, 1987; paperback, Grumann Verlag, 1990

Editors' Choice Book: N.Y. Times, Wash. Post

2) **DELICATE GEOMETRY**, a novel - Harper & Row, 1982

3) **BLACKBIRD DAYS**, a novel - Harper & Row, 1980;

paperback, Pinnacle Books, 1981

4) **GOLD MINERS AND GUTTERSNIPE: MARK TWAIN'S TALES OF CALIFORNIA** (Editor, author of Introduction) -- Chronicle Books, 1991

SHORT FICTION: HARPER'S, SOUTHERN REVIEW, AMERICAN SHORT FICTION, NEW ENGLAND REVIEW, SOUTHWEST REVIEW, BOULEVARD, FICTION NETWORK, YANKEE, THE IDLER, SHORT STORY INTERNATIONAL; "The Sound of Writing" (NPR).

NONFICTION: SMITHSONIAN, AMERICAN HERITAGE, THE NEW YORK TIMES, AUDUBON, THE [LONDON] TIMES, GOURMET, TRAVEL & LEISURE, NY TIMES SOPHISTICATED TRAVELER, many other magazines/newspapers; articles anthologized in eight college textbooks.

PRIZES & AWARDS: National Endowment for the Arts Fellowship (twice)

Ingram Merrill Foundation Fellowship (twice)

Ludwig Vogelstein Foundation Fellowship

Shifting Foundation Fellowship

Artists Foundation Fellowship

Oregon Arts Commission Grant

Mary Roberts Rinehart Foundation Fellowship

Harper-Saxton Prize

Winner, O. Henry Prize

Winner, NEA-PEN award (twice)

Winner, Pushcart Prize

ARTIST RESIDENCIES: Djerassi Foundation (six times); Yaddo; MacDowell Colony; Montalvo Center for the Arts; Centrum Foundation; Ossabaw Island Project; Fondation Valparaiso (Spain)

s t e p h e n m c c a r t h y

18 July, 2016

Micha Peled
2670 Leavenworth St. #F
San Francisco, Ca 94133

Dear Micha,

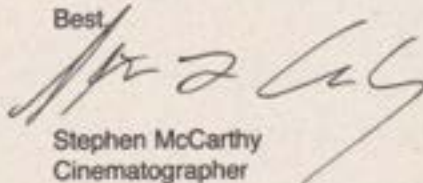
I'm flattered to be considered a potential collaborator on your forthcoming project currently entitled *Forbidden Knowledge: Psychedelics & Science*. As we discussed, your project touches on medical research that is tangential to other life sciences projects I've been involved with recently. **Cancer: The Emperor of All Maladies** explored the emerging field of palliative care as it relates to end of life choices faced by cancer patients while PBS *Frontline's "Being Mortal"* took on the struggle to develop new regimens that balance quality of mental health issues with potentially toxic drug regimens and procedures from the perspectives of clinicians dealing directly with terminal illnesses.

Similarly, a film I'm currently shooting for PBS **Nova** deals with the current state of research and treatment of Alzheimer's disease. The enigma in this story is the very limited knowledge that even most eminent neuro-biologists have regarding the many functions of the human brain. In working with Dr. Oliver Sacks and also in field research with teams studying early-onset Alzheimers, I've found the role of psychedelic and psychotropic substances in unlocking the mysteries of brain function seems to be constant part of the background chatter.

Obviously the wide-spread criminalization of psychedelic substances in the late 20th century has made use of these drugs in peer-reviewed medical research something of a taboo subject on the current life sciences landscape. I gather this will be an element of your story. I feel that my previous experience in filming similar topics will help us design an exciting cinematographic strategy, and I look forward to working together.

The subject of your film certainly fills in some of the gaps in my own understanding of the interactions between science and social history and I hope you'll keep me in the loop as your project moves forward.

Best,


Stephen McCarthy
Cinematographer



73 Florence street, roslindale, ma 02131

phone/fax: 617.469.5214 scheduler: 617.277.5700 e-mail: stephmcc@tiaz.net

[Stephen McCarthy](#) - Cinematographer

Stephen McCarthy is a director of photography whose thirty year career has spanned the breadth of non-fiction filmmaking. His work appears regularly in prime time documentary series including PBS's American Experience, American Masters, Frontline, Nova and P.O.V. as well as HBO's "YoungArts Masterclass"

Stephen has served as Director of Photography for two recent Emmy-nominated PBS series: "Cancer: The Emperor of All Maladies" and "Your Inner Fish," based the best-selling book by evolutionary biologist Neil. He has also photographed the Peabody- and Emmy-award-winning series "The African Americans: Many Rivers to Cross"; two seasons of HBO Family's Emmy-nominated "Masterclass" and three seasons of PBS's "Finding Your Roots with Henry Louis Gates, Jr." Mr. McCarthy's photography has been featured in "Whitey: United States of America v. James J. Bulger" as well as both "War of the Worlds" and "Butch Cassidy and the Sundance Kid" for PBS's The American Experience. Forthcoming projects include "Mass Extinction: Life at the Brink" for the Smithsonian Channel, "Ruby Ridge to the Oklahoma City Bombing" for The American Experience. Also in the works is a far-reaching documentary about Alzheimer's Disease for PBS Nova.

Stephen is a visiting lecturer on cinematography at Boston University, Rhode Island School of Design, The Maine Media Workshops and MIT's graduate program in science writing. He lives in (b) (6).

Cinematography (Television Documentary Series – Partial)

[Cancer: The Emperor of All Maladies](#) (3 episodes, 2015)

[Your Inner Fish](#) (3 episodes, 2014)

[The American Experience](#) (29 episodes, 1999 - 2015)

[The Italian Americans](#) (3 episodes, 2014)

[Nova](#) (29 episodes, 2001 - 2014)

[Nova ScienceNow](#) (12 episodes, 2007-2012)

[Frontline](#) (16 episodes, 2000-2013)

[Finding Your Roots with Henry Louis Gates, Jr.](#) (24 episodes, 2012-2015)

[The African Americans: Many Rivers to Cross](#) (4 episodes, 2013)

[Through the Wormhole](#) (4 episodes, 2011-2012)

[Masterclass](#) (19 episodes, 2010-2014)

[Faces of America with Henry Louis Gates Jr.](#) (4 episodes, 2010)

[African American Lives 2](#) (4 episodes, 2008)

[The War](#) (7 episodes, 2006)

[Independent Lens](#) (6 episodes, 1997-2007)

[Ten Days That Unexpectedly Changed America](#) (1 episode, 2006)

[Jazz](#) (10 episodes, 2000)

[Real World 6 - Boston](#) (26 episodes, 1998)

[Vote For Me: Politics in America](#) (4 episodes, 1997)

Cinematography (Independent Documentary Films – Partial)

[Lake of Betrayal: The Story of Kinzua Dam](#) (2015) ([filming](#))

[Mass Extinction: Life at the Brink](#) (2014)

[Anna Deveare Smith: The Pipeline Project](#) (2014)

[The Day the Mesozoic Died](#) (2013)

[Into Harm's Way](#) (2011)

[The War of 1812](#) (2011)

[We Still Live Here: As Nutayunean](#) (2010)

[Jews and Baseball: An American Love Story](#) (2010)

[The Sun Behind the Clouds](#) (2009)

[Scenes from a Parish](#) (2009)

[Luckey](#) (2009)

[Secrecy](#) (2008)

[Truth About Cancer \(2008\)](#)

[Food, Inc. \(2008\) \(Additional Photography\)](#)

[Sacco & Vanzetti \(2007\)](#)

[Banished \(2007\)](#)

[John James Audubon: Drawn From Nature \(2007\)](#)

[Have You Seen Andy? \(2007\)](#)

[Boston PD \(2007\)](#)

[Rehearsing a Dream \(2006\)](#)

[Stockpile: The Nuclear Menace \(2002\)](#)

[People Like Us: Social Class in America \(2002\)](#)

[The Harriman Alaska Expedition Retraced \(2001\)](#)

[Raise The Dead \(1999\)](#)

[Moms \(1999\)](#)

[Divided Highways: The Interstate and the Transformation of American Life \(1998\)](#)

[Ringl and Pit \(1997\)](#)

[Signal to Noise: Life With Television \(1996\)](#)

F U L C R U M M E D I A S E R V I C E S

PO Box 177 San Anselmo California 94979.0177 ☐ Tel: 415.459.4429 Fax: 415.459.4498

August 9, 2016

The National Endowment for the Humanities
400 7th Street SW
Washington, D.C. 20506

I am writing in support of the proposed film, *Forbidden Knowledge: Science and Psychedelics*, which is to be produced by Teddy Bear Films. This documentary would explore the historic use of, and the possible therapeutic value of, psychoactive natural and laboratory-manufactured substances, such as LSD, Psilocybin, Mescaline and Ecstasy. Only now is there starting to be targeted and more controlled examinations of the possible therapeutic and palliative effects of these chemicals – although the CIA has experimented extensively on the possible use of psychotropics, particularly LSD, as a weapon of war. The positive possibilities of this group of medications, under safe, tightly-controlled circumstances, in a hospital or hospice setting, for example, have barely been tested. LSD was outlawed in the U.S. (and elsewhere in the world) in or around 1968 as part of the backlash against the counter-culture of the 1960s, where it was used for recreational purposes. In the meantime, small groups of scientists have continued – in near secrecy – to study the effect of these substances on late-stage-of-life fear, alcoholism, pain, and other conditions, with more than a little success.

I believe a documentary film such as *Forbidden Knowledge* is important, right now, because it has the opportunity to bring the general public up to date about what's being discovered about these compounds, and to help separate myth from the burgeoning hard science that is being done.

I therefore lend my support and commitment to this project, which I hope you will consider funding, so that the very talented and experienced producer, Michal Peled, can move forward with more detailed exploration of the subject matter, the approach, the people who tell the story, and the relevant archival materials available to help tell it. I would be happy and excited to work on this project.

Many thanks for your consideration given to this deserving proposal.

Sincerely,

A handwritten signature in black ink, appearing to read "Kenn Rabin". The signature is fluid and cursive, with a large, stylized initial "K" and a long, sweeping underline.

Kenn Rabin
Fulcrum Media Services

KENN RABIN

PRODUCTION CREDITS – SELECTED HIGHLIGHTS

Consulting Producer – Green Fuse Films, *Obit: Life on the Death Beat*. 2015-present
Archive Producer - Plan B/Paramount/Pathé, *Selma*. 2013-2014.
Archival Producer/Consultant – Apple, Inc, various online films promoting educational software. 2013-present.
Archival Supervisor - Apple Corps/OVOW Productions, *Beatles Live!* 2012-present.
Production/Archival Consultant - 72 Productions, *Inequality for All*. 2012-2013.
Production Consultant/Film Researcher - HTSAP LLC, *How to Survive a Plague*. 2011-2012.
Producer, Writer, Archivist - Paradigm Productions, *The Storm that Swept Mexico*, 2008-2011.
Archival Consultant - Kovno Communications, *The Most Dangerous Man in America*, 2010.
Archival Consultant - Telling Pictures, *Howl*, 2008.
Archival Film Researcher - Smoke House/Warner Bros., *The Men Who Stare at Goats*, 2008-2009.
Archival Film Researcher - Groundswell/Focus Features, *Milk*, 2008.
Archival Film Researcher - Bauer Martinez, *I Could Never Be Your Woman*, 2004-2006.
Archival Film Researcher - Bauer Martinez, *Land of the Blind*, 2001-2006.
Archival Film Researcher/Consultant - Warner Bros/Section Eight, *The Good German*, 2001-2006.
Archival Scene Researcher - Warner Bros/Section Eight, *Good Night, and Good Luck*, 2002-2005.
Film Researcher - Interfaze Productions, *Daughter From Danang*. 1999-2002.
Researcher/Consultant - Tell the Truth Pictures, *Mighty Times: The Legacy of Rosa Parks*. 2001.
Archival Consultant - New Images Productions, *Ralph Ellison: An American Journey*. 1999-2002.
Associate Producer/Writer - Touchstone Television/Barry Levinson, *Yesterday's Tomorrows*. 1998-1999.
Series Archival Consultant - Touchstone Television, *The 20th Century: A Moving History*. 1998-1999.
Archival Consultant - Telling pictures, *Paragraph 175*. 1999.
Archival Consultant/Archival Researcher - Sonneborn Productions, *Regret to Inform*. 1998-1999.
Archival Consultant - American Film Foundation, *Return With Honor*. 1998.
Production Consultant - Paradigm Productions, *Fight in the Fields*. 1995-1997.
Archival Consultant - HBO Films, *Truman*. 1995. (uncredited)
Archival Consultant - Trans Pacific Television, *Cadillac Desert*. 1995-1996.
Production Consultant/Researcher - ABC News, and NHK, *The 20th Century Project*. 1993-1999.
Archival Consultant - HBO Films/John Frankenheimer, *Up Against the Wall*. 1994.
Production Consultant - Cronkite/Ward Productions, *Walter Cronkite Remembers*. 1993-1995.
Production Consultant/Researcher - Clarity Film Productions, *Freedom on My Mind*. 1993-1994.
Archival Manager - Tig/Pathways Productions, *500 Nations*. 1993. (uncredited)
Film Researcher - Marlon T. Riggs Films, *Color Adjustment*. 1989-1993. **(Emmy nomination)**
Writer/Consultant - The Rockefeller Foundation/National Video Resources, 1991-1995.
Writer/Director of Film Research - Blackside, Inc., NEH funding proposals, *America's War on Poverty*, and *The Great Depression*. 1991-1993.
Film Researcher - Columbia Pictures/Sean Penn, *The Indian Runner*. 1991. (credited Special Thanks)
Production/Archives Consultant, Researcher - Varied Directions, Inc., *Making Sense of the Sixties*. 1991.
Archival Consultant - WGBH Educational Foundation. Various projects including: *War and Peace in the Nuclear Age*, *American Experience*, *American Masters*, *Frontline*, specials, etc.
Film Researcher/Consultant - WQED-TV, *W. Eugene Smith: Photography Made Difficult*. 1989.
Archivist, Film Research Coordinator - Blackside, Inc., *Eyes on the Prize: America's Civil Rights Years* and *Eyes on the Prize II: America at the Crossroads*. 1985-1989. **(Emmy nomination)**
Archivist, Film Research Coordinator - WGBH, Educational Foundation, *Frontline: Crisis in Central America*. 1984-1985.
Archivist, Film Research Coordinator - WGBH, Educational Foundation, *Vietnam: A Television History*. 1980-1983.
Production Associate/Publicist - WNET/Thirteen, *Bill Moyers' Journal*. 1979-1980.
Production Associate - *The Lathe of Heaven*, WNET/13. 1978-1979.

TEACHING/LECTURING EXPERIENCE

Workshop Presenter/Panelist - EBS International Documentary Film Festival, Seoul, Korea, 2012.
Workshop Presenter - Independent Television Service (ITVS), 2012.
Workshop Presenter/Panelist - Broadcast Educators' Association, 2008-2011.
Visiting Lecturer - Northwestern University, Graduate Film Program. 2008.
Visiting Lecturer - Columbia College, Film Program. 2008.
Visiting Lecturer - San Francisco State University, Graduate Film Department. 1999-2005.
Visiting Lecturer - University of California at Berkeley, Graduate Journalism School. 1999-present.
Visiting Lecturer - Stanford University, Graduate Film Program. 1994-2005.
Adjunct Faculty - Sonoma State University, Hutchins School for Liberal Studies. 1996-2003.
Visiting Lecturer - Sonoma State University, Hutchins School, "The Human Enigma." 1995-1998.
Workshop Presenter - Miami Film Festival. 1995.
Visiting Lecturer - Sonoma State University, History Department. 1995.
Visiting Lecturer - Northeastern University, History Department. 1991-1993.
Instructor - Film Arts Foundation, San Francisco, CA. 1994-1998.
Instructor - Boston Film/Video Foundation. 1983-1994.
Instructor - Maine International Film & Television Workshops. 1992.
Presenter - Woodrow Wilson Center for Scholars, Smithsonian Institution, Washington, DC
Paper: "Media Coverage of Black Americans." 1988.
Teaching Assistant and Lecturer - State University of NY at Albany, Film History

SELECTED PUBLICATIONS, INTERVIEWS & MISC.

Interview, "An Interview with SELMA Archive Producer Kenn Rabin," in *The American Historian*, Feb. 2015
Panelist, National Endowment for the Humanities, "Bridging Cultures" grants, 2013.
Juror, San Francisco International Jewish Film Festival, 2011, 2012, 2015.
Panelist, National Endowment for the Humanities, "America's Media Makers" grants, 2010.
Book, *Archival Storytelling: A Filmmaker's Guide to Finding, Using, and Licensing Third-Party Visuals and Music*, 2008, Focal Press/Elsevier
Article, "Ethical Use of Archival Visuals: Memories of *Vietnam: A Television History*," *Stills, Audio, Motion* (UK), 2008.
Winner, FOCAL International, Best Use of Archival in a Feature Film, for *Good Night, and Good Luck*. 2006.
Sidebar Article, "Fair Use: A Statement of Best Practices," in *Release Print*, January/February, 2006.
Interview in *Documentary Storytelling for Film and Videomakers*, Sheila Curran Bernard, Focal Press 2004.
Feature Interview, "Overheard," in the *Pacific Sun*, October 31, 2001.
Chapter, "Licensing Footage: A Researcher's Perspective," in *The Administration of Television Newsfilm and Videotape Collections: A Curatorial Manual*, Davidson & Lukow, eds., AFI, 1997.
Article, "Not Worth the Gamble: 10 Misconceptions about Archival Rights & Clearances," in *The Independent Film & Video Monthly*, May 1997.
Article, "Changes in New York Film Archives," in *Focal International*, Issue #13, Autumn 1994, (reprinted in *Moving Image Review*, Summer 1994).
Subject of *NVR Reports* (newsletter of National Video Resources, Rockefeller Foundation), Issue #8, February 1992.
Interviewed for "The Archives Gets Strict," in *The Washington Post*, January 27, 1992.
Interviewed for "Black Filmmakers Re-trace the Civil Rights Struggle," in *The New York Times*, Sunday January 26, 1986.
Feature Interview, "Looking Back on War," in *Visions*, December 1983.
Interviewed for "Preserving the Best of Today's Programming For Tomorrow's Viewers," in *The New York Times*, Sunday October 2, 1983.

PLEASE ALSO SEE: WWW.FULCRUMMEDIASERVICES.COM AND WWW.IMDB.COM/NAME/NM0704899/
FOR ADDITIONAL CREDITS AND INFORMATION

Amit Sethi
Title Design and Animation

(b) (6)

July 10, 2016

Micha Peled
Teddy Bear Films

(b) (6)

Dear Micha,

Thank you so much for considering me for the graphic and animation work for your forthcoming film, *Forbidden Knowledge: Psychedelics and Science*. The documentary sounds fascinating, and I would be very excited to put my knowledge and skills as an artist to work helping to visualize and produce the imagery necessary to bring brain scans to life for the layman.

While this is a unique and novel project, I have worked with medical imagery on other professional projects in the past. I worked on a film about deep-sea freediving and created several animations, using complex 3D models of the human lung and respiratory system that demonstrated the biology involved as the body absorbs and holds oxygen at great depths. I have also created more whimsical but equally realistic looking animations for other feature and commercial projects, involving pregnancies and the layers of human skin. In 2008 I worked on a documentary about the effects of LSD on prison inmates in tests conducted over 40 years until 1975 and overseen by CIA. There were some animations about the science, and others about the scientists and drug culture of the time, and while the film was very different from this one, it should serve as a start for my understanding of the subject matter.

As we discussed, the technology used in medical imagery and visual effects shares much of the same technology. I look forward to working with you to bridge the gap between the neuroscientists' work and yours, to create exciting and clear animations that explore the effects on your test patients' brains as they undergo psychedelic experiences.

Sincerely,

A handwritten signature in black ink that reads "Amit Sethi". The signature is stylized, with the first name "Amit" written in a cursive-like script and the last name "Sethi" in a more blocky, slightly cursive font.

Amit Sethi

AMIT SETHI

(b) (6)

SUMMARY

Emmy Award winning Motion Graphic and Print Designer, Animator, Illustrator, and Cinematographer

SKILLS

Computer Software

- Adobe After Effects
- Adobe Photoshop and Illustrator
- Softimage 3D and Maya
- Avid Media Composer and Adobe Premiere

Fine Arts

- Illustration
- Storyboarding
- Still Photography

EXPERIENCE

1993-1994

Assistant Animator, *181 Productions*

- Built stop-motion animations for various childrens' education programs

1994-1996

Assistant Animator, *Lancet Media*

- Worked in a professional production facility, assisting video online and learning modern 3D animation software and hardware

1996-2006

Animator/Designer/Director *Balsmeyer & Everett, later Big Film Design*

- Created award winning title sequences and special effects for Hollywood and New York based feature films and television.

2006-present

Animator/Designer/Director *Amit Sethi Title Design and Animation*

- Designed and directed graphics packages for feature documentaries, network television series, and national advertising campaigns

EDUCATION

1989-1993	Bachelor of the Arts – Modern Culture & Media, <i>Brown University</i>
1992	Certificate in Film Production, <i>NYU</i>

Leonard Feinstein

film and television production

(b) (6)

July 11, 2016

Micha Peled

(b) (6)

Dear Micha,

I look forward to possibly collaborating with you on your upcoming project *Forbidden Knowledge: Science and Psychedelics*.

As a documentary editor with almost 40 years of experience, I have worked on a range of diverse topics, including shows for NOVA and American Experience. Science topics have always especially interested me, and in fact I have my BS in Biological Science. The fascinating and somewhat taboo subject of our culture's relationship with psychedelic substances interests me deeply, and I am sure that together, we can create unexpected and visually intriguing ways to tell the story.

Working closely with you to edit *Bitter Seeds*, I found the task both challenging and very satisfying. The constant sense of discovery as we experimented with different ways to edit each scene, often trying dozens of variations, is a way of working that is sometimes forgotten in the "time-is-money" environment of many film and TV projects.

This subject will require the deft handling of historical and scientific content as well as dealing with raw human emotions. It sounds like a great undertaking for both of us, so let's continue our conversation as the project unfolds.

Best,

Leonard Feinstein

LEONARD FEINSTEIN

Award-winning Editor of
Documentaries and Reality Television

(b) (6)

(b) (6)

SELECTED CREDITS:

Spirit of the Marathon II

Feature documentary, 26.2 Productions, Editor / Story Editor, 2012-13

Bitter Seeds

Feature documentary, Teddy Bear Films, 2011.

Telluride Film Festival official selection. Winner, IDA Award & 18 international awards.

Mona Lisa is Missing

Feature documentary, Mid-Air Rose Productions, 2011.

Best Editing, DocUtah Festival

When Strangers Click

HBO feature documentary, Robert Kenner Films. 2010.

Emmy Award nominee.

NOVA

PBS documentary series. Gemini Productions.

"The Ultimate Mars Challenge", 2012

"Secrets of Stonehenge," 2010.

"Rx for Survival: Delivering the Goods," 2005. *Emmy Award, outstanding documentary.*

"The Mummy That Would Be King," 2004. *Emmy Award winner.*

"Evolution: An Evolutionary Arms Race," 2001.

Greensburg

Discovery reality series, Pilgrim Studios, 2008 and 2009 seasons.

American Cinema Editors EDDIE award - best-edited non-fiction/reality series, 2009.

Craft in America

PBS documentary series, Craft in America.Org

"Landscape", 2008, *Peabody Award for Excellence in Television*

"Holiday", 2013

"Service", 2014

"Celebration", 2015

"Music", 2015

Darfur Now

Feature documentary, Warner Bros/Participant Films, 2007.

American Cinema Editors EDDIE Award nominee, best edited documentary.

HBO Children's Specials

HBO Productions.

"Classical Baby," 2006. *Emmy and Peabody Awards for children's programming.*

"Through a Child's Eyes," 2002. *Emmy Award for children's programming.*

"Twas the Night," 2001.
"Kids are Punny," 1996.

National Geographic Specials.

"Inside The New FBI," Leibovitz-Hellman Productions, 2003.
"Don't Say Goodbye," National Geographic Productions, 1997. *Emmy Award nominee, outstanding non-fiction editing. IDA Award winner.*
"Russia's Last Tsar," National Geographic Productions, 1995.
"The Lost Fleet of Guadalcanal", National Geographic Productions, 1993.

EGG: The Arts Show

Director / Editor. PBS documentary series, WNET / Thirteen, 2000-2002 seasons.
Peabody Award winning series.

The American Experience

PBS documentary series, Robert Kenner Films.
"War Letters", 2001. *IDA Award nominee.*
"John Brown's Holy War," 1999.

Robert Irwin: The Beauty of Questions

Director / Editor. Feature documentary, 1998. *Grand Prize, International Biennale of Films on Art, Paris. (Directed & edited by Leonard Feinstein)*

Joseph Campbell and the Power of Myth

PBS documentary series, Alvin H. Perlmutter Inc., 1987. *Emmy Award winner.*

OTHER CREDITS:

Lindsay

8 part Doc/reality series, Pilgrim Studios, 2013-14

1000 Ways To Die

Docu/comedy, Original Productions, Editor/Story Editor, 2009 season; Finish Editor, 2012 season.

North Mission Road

TruTV reality series, Vantage Point Productions, 2006 and 2007 seasons.

American Monsters

Director / Editor. Discovery special, Original Productions, 2003.

Above Suspicion

Feature drama, Upright Films, 2000.

Cats & Dogs

Opus Films/Muse Film and TV, 1994. *Emmy Award winner.*

The Human Rights Now Tour

HBO music documentary, 1988. *Monitor Award for outstanding editing.*

Bullfrog Films, Inc.

Box 149, Oley PA 19547
Phone: (610) 779-8226
Fax: (610) 370-1978
Email: info@bullfrogfilms.com
Website: www.bullfrogfilms.com

July 31, 2015

Micha X. Peled
Teddy Bear Films
2670 Leavenworth St. #F
San Francisco, Ca 94133

Re: *Forbidden Knowledge: Science and Psychedelics*

Dear Micha,

Thanks for sending us the outline for your new film, ***Forbidden Knowledge: Science and Psychedelics***, about Western culture's turbulent relationship with psychedelic substances. It's good to hear of a new project from you because your films always bring a balanced and well-researched exploration to issues of society and culture, and are well-adapted to, and therefore widely used in, the academic marketplace.

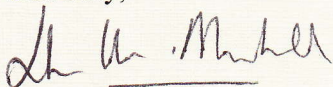
Bullfrog Films has established itself over the last 42 years as the leading North American distributor of films on environmental and related social justice issues. Our producers include the National Film Board of Canada, the BBC, the Australian Broadcasting Corporation, the United Nations, and independent producers from around the world. While we have no films on psychedelics, for a long time we have had a strong collection of films about Native Americans and other indigenous peoples, not least because of the earth wisdom and knowledge still stored in their traditions and practices.

One of our main markets is higher education. The audience for your film, like many we distribute to colleges and universities, will be interdisciplinary. It will be used for courses in Neuroscience, Psychiatry, Psychology, Medical Anthropology, Religious Studies, Cultural Anthropology, Social Work, and Family Issues.

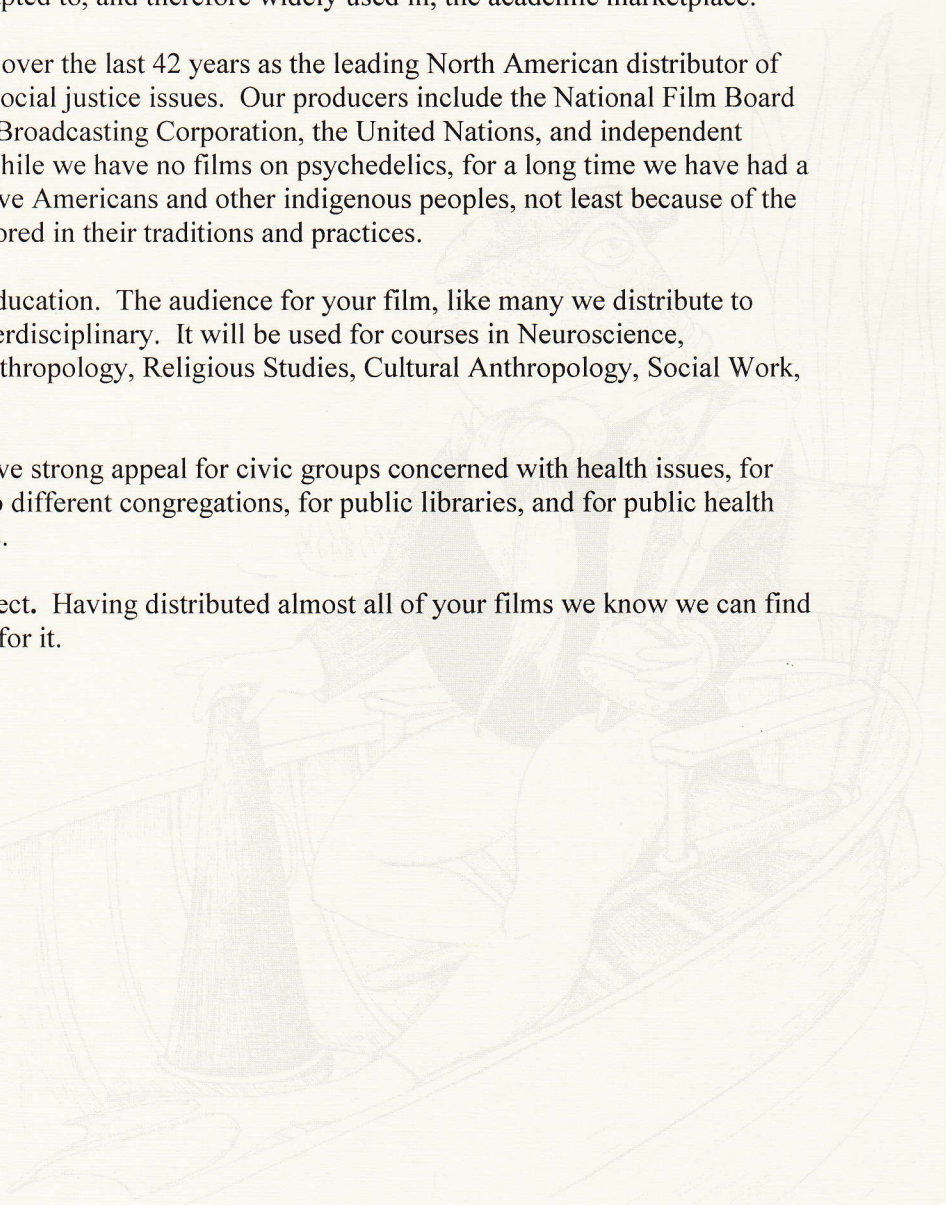
In addition, we expect the film to have strong appeal for civic groups concerned with health issues, for social issue committees connected to different congregations, for public libraries, and for public health organizations and local governments.

We urge funders to support this project. Having distributed almost all of your films we know we can find a wide range of receptive audiences for it.

Sincerely,



John Hoskyns-Abrahall, President
Bullfrog Films





Promotion et ventes internationales
International sales and promotion

Montreal, August 4th, 2015

Micha X. Peled
TEDDY BEAR FILMS
2670 Leavenworth St. #F
San Francisco, Ca 94133

RE: *Forbidden Knowledge: Science and Psychedelics*

Dear Micha,

It was very good to hear from you and I am very excited to learn about your new documentary project *Forbidden Knowledge*.

The subject is very interesting. There has always been a fascination with these themes and their history.

We have known each other for many years and our company Films Transit has very successfully internationally sold many of your films. I am very interested to continue this relationship and we are happy to confirm that we are committed to handling the foreign sales for your new film.

The broadcast market for, what we call 'high end' documentary programming is even though a bit 'rocky today' still a vast and very loyal one. On a subject like this and being a strong and well made documentary, good broadcast sales can be expected all over Europe, Japan and North America.

Films Transit has been in the business of television sales with strong, auteur and subject driven feature documentaries for more than 25 years and via our regular presence at all major TV markets and specialized events such as Idfa, Amsterdam, Sunny Side, Hotdocs, Toronto, we are able to "get a film on the map" very efficiently and quickly.

6. Images

This is the first part of the 1965 *CBS Report: The Spring Grove Experiment* that was filmed inside this Maryland state mental hospital. It is cited in page 9 of our Treatment.

<https://www.youtube.com/watch?v=wIOysM1briU>

Description of Sample Work

Bitter Seeds is a feature documentary film directed and produced by Micha Peled, co-producer-director of *Forbidden Knowledge: Psychedelics & Science*. It takes place in a village in India where the farmers can no longer make a living, and explores the reasons for the crisis.

It is the third and final film in Peled's *Globalization Trilogy*, following *Store Wars: When Wal-Mart Comes to Town*, and *China Blue*. The Trilogy films were shot in the U.S., China and India. They are distributed internationally by Film Transit and in U.S. educational markets by Bullfrog Films.

Bitter Seeds aired on PBS stations, as well as on a number of foreign channels. World premier took place at the Telluride Film Festival, followed by screenings in film festivals on all five continents. Among the awards the film garnered are the **Oxfam Global Justice Award**, the **Green Competition Award** at IDFA (Int'l Doc Festival, Amsterdam), the **Humanitas Award** from IDA (Int'l Documentary Assoc., Los Angeles) and the **Seoul (South Korea) Green Int'l Film Festival Jury Award**.

A brief synopsis:

Every 30 minutes a farmer in India kills himself in despair because he can no longer provide for his family. Micha Peled's vivid and profound documentary takes us to an Indian village at the center of the suicide crisis region to explore what's behind these shocking statistics. Tracking the root causes of the crisis, it follows Ram Krishna, a cotton farmer, and his family over a season as they struggle to hold on to their land. It's also the story of the neighbors' daughter, Manjusha, who is determined to overcome village traditions and become a journalist. Ram Krishna's plight becomes her first assignment. *BITTER SEEDS* raises critical questions about the human cost of genetically modified agriculture and the future of how we grow things.

The entire film can be viewed at <https://vimeo.com/131812341>. Passowrd: tigers14!



Travel (scholars, research) - New York, Baltimore, Charleston, Washington DC, Los Angeles, Chapel Hill		6 @ 550	\$3,300					\$3,300
Charleston (one trip_)		2 @ 600	\$1,200					\$1,200
clip shoort Travel - Baltimore, Charleston (one trip)		1 @ 750	\$750					\$750
Local Transport		5 @ 100	\$500					\$500
Director Lodging		12 @ 100	\$1,200					\$1,200
Crew Lodging		6 @ 100	\$600					\$600
director Per Diem		12 @60	\$720					\$720
Crew Per Diem		6 @ 60	\$360					\$360
5. Supplies & Materials								
Camera Package Rental		4 @ 600	\$2,400					\$2,400
Sound Package Rental		4 @ 350	\$1,400					\$1,400
Hard Drives			\$1,000					\$1,000
Research/screener Fees			\$1,500					\$1,500
Production Misc.			\$300					\$300
7. Other Costs								
Office Rental		6 mo@ 1200	\$7,200					\$7,200
Telephone/Internet		6 mo@ 100	\$600					\$600
Shipping			\$200					\$200
8. Total Direct Costs	Per Year		\$77,530		\$0		\$0	\$77,530
9. Total Indirect Costs								
Fiscal Sponsorship			\$2,500					\$2,500
10. Total Project Costs	(Direct and Indirect costs for entire project)							\$80,030

11. Project Funding	a. Requested from NEH	Outright:	\$80,030
		Federal Matching	
		Funds:	\$0
		total budget	\$80,030
	b. Cost Sharing	Applicant's Contributions:	\$5,030
		Third-Party Contributions:	\$0
		TOTAL COST SHARING:	\$5,030
		REQUESTED FROM NEH:	\$75,000
	12. Total Project Funding		\$80,030

Total Project Costs must be equal to Total Project Funding ----> (\$80,030 = \$80,030 ?)
 Third-Party Contributions must be
 greater than or equal to Requested Federal Matching Funds ----> (\$0 ≥ \$0 ?)

Forbidden Knowledge: Science & Psychedelics

Related documents attached to NEH proposal:

- Consent letter from Dr. Michael Mithoefer for camera access to film the subjects in his PTSD study.
- Release form (draft), created in consultation with Ethicist and project adviser, Dr. Frank Miller
- Historical document: the questionnaires filled by patients at the LSD clinic at Hollywood Hospital in the 1970s. 500 patient files were just released to historian and project adviser, Erika Dyck.

MICHAEL C. MITHOEFER, MD
208 SCOTT ST.
MT. PLEASANT, S.C. 29464

PHONE: (843) 849-6899

FAX: (843) 278-9188

2 May, 2016

Dear Caleb and Micha,

I'll be glad to be interviewed again for your film, "Forbidden Knowledge," and to let you film subjects in our upcoming clinical trial, so long as they agree to participate.

This upcoming study, sponsored by the Multi-Disciplinary Association for Psychedelic Studies (MAPS), is the first time that MDMA-assisted therapy will be used along with conjoint treatment of couples, where one half of the dyad -- which could be spouses, a parent and child or any other close relationship -- is diagnosed with post-traumatic stress disorder.

In prior studies, we have not allowed filming of any study participants prior to the end of their treatment. However, this pilot study affords a unique opportunity to demonstrate to a general audience the unique aspects of the treatment approach, and the challenge of developing new research protocols.

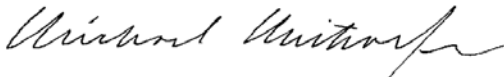
Assuming the fully informed consent of all participants, my colleagues and I will allow you to film several steps in the process:

- **A portion of our selection process, choosing study participants**
- **The preparation process**
- **Appropriate sections of our own conversations as therapists/researchers, regarding the process and patients' progress.**

We will be filming the actual therapy sessions and post-session video conferences with patients, and will make the video available to you, if participants agree on portions to be released. In addition, you are welcome to ask participants if they're willing to let you film them at home, before and after the sessions.

Once the study is open to enrollment, you and I and the rest of our team can sit down together to work out all the necessary details. As always, our paramount concerns will be the patients' well-being and the integrity of research protocols. That said, this is an exciting and important film project, and my wife Anne and I are glad to take part.

Sincerely,

A handwritten signature in cursive script, appearing to read "Michael Mithoefer".

Michael Mithoefer, MD

Appearance Release

This agreement contains the terms and conditions under which I agree to appear in the film and/or series, "Forbidden Knowledge" (working title).

I agree that, in connection with the film, the filmmakers may:

- (a) tape and photograph me;
- (b) record my voice, conversation and sounds; and
- (c) tape, photograph, and use materials provided by me including photographs, documents, medical records, and other personal information.

Teddy Bear Films and Curiosity Lane, LLC shall be the exclusive owner of the results and proceeds of such taping, photography and recording with the worldwide right in perpetuity to copyright, to use, and to license others to use, in any manner, all or any portion thereof. in connection with the Film or otherwise. I understand that I will not be paid any compensation for my participation in the Film or any of the rights granted in this agreement.

I also agree that the filmmakers may use my name, voice, likeness and any biographical material concerning me, in any and all media and in the promotion, advertising, sale, publicizing and exploitation of the Film, worldwide in perpetuity.

I represent that any statements made by me during my appearance in the Film are true, to the best of my knowledge, and that neither they nor my appearance will violate or infringe upon the rights of any third party.

I hereby waive and agree not to assert any claim of any nature whatsoever against anyone arising out of any use, blurring, alteration, distortion or illusionary effect, or use in composite form of your name, voice, picture or likeness or out of any faulty reproduction of your name, voice, picture or likeness in the finished materials produced hereunder or relating to the exercise of the permissions granted hereunder, including but not limited to claims of defamation, invasion of privacy rights, infringement of copyright or rights of publicity.

For a period of up to one week after the first day of filming, I maintain the right to cancel this agreement at no cost or other adverse consequences. The filmmakers may not use footage created prior to the time of cancellation.

I will be able to view the raw footage of myself and have the right to request that any section of it not be used in the project. I understand that my request must be provided in writing within two weeks after the footage was provided to me in order to be considered. I will also be able to view a rough cut of the film and inform the filmmakers of any accuracy or privacy issues that may arise. I understand that my request must be provided in writing within two weeks after the footage was provided to me in order to be considered. I understand that my objections should be on the grounds of protecting the privacy of myself and people near me, or on the grounds of accuracy. I agree with the project's main focus which is to present on camera an accurate impression of the effectiveness and safety of the study using MDMA-assisted therapy. If I provide no response for a period of two weeks after the footage was made available to me, the filmmakers may consider that I don't have any objections and that they have my full permission to use any part of the footage

I am of full legal age and capacity and fully understand the rights I am assigning or waiving. This agreement shall bind and benefit my heirs and assigns. This agreement contains the entire understanding among us with respect to its subject matter. No waiver or modification of any of the terms of this agreement shall be valid unless in writing, signed by both me and the filmmakers.

AGREED & ACCEPTED:

By: _____
[NAME]

Signed: _____

Date: _____

Questionnaires used in the 1970s with alcoholic abuse patients at the LSD clinic, 1970

HOLLYWOOD HOSPITAL

FOLLOW-UP QUESTIONS RE L.S.D. EXPERIENCE

1. What is your evaluation of the experience with L.S.D.?
2. Have relatives or close friends commented on any change they have noted in you? If so, who, and what did they say?
3. Do you have any regrets that you underwent the experience? If so, please elaborate fully.
4. Are you pleased that you underwent the experience? If so, why?
5. Do you feel, after this period of time, that the experience obtained and the results were commensurate with the expense involved?
6. Would you like to comment on the manner of approach of the Doctor, your preparation of the experience, the carrying out of the experience or the follow-up?
7. Would you be willing to undergo a second experience? Why?
8. Have you any other comments to make on the experience? and [sic] its effects on you to date?

L.S.D. – AUTOBIOGRAPHY [questions]

[first unnumbered page]

1. State reasons for taking L.S.D., what you hope to accomplish by it, and the problems confronting you now. Describe birthplace, date, and circumstances surrounding your birth.
2. Discuss early development, temper tantrums, bedwetting, nightmares, illnesses and other unusual feelings or circumstances.
3. FAMILY: (a) Describe Father – his age; if dead, at what age did he die, and the circumstances of his death. Describe his physical and mental characteristics as a father, husband and person. What was your relationship to him and how did he affect your life.
(b) Mother – Describe as above.
(c) Brothers [sic] and Sisters – Describe similarly.
(d) Any other individuals concerned with your care and development or living in your home.
(e) What effect did you have on your family (i.e.) your family's response to you.
4. EDUCATION: Discuss all aspects of your education, formal education and age accomplished. Describe your attitudes and relationship with teachers and other pupils, and your role in extracurricular activities. Describe your passes and failures, and reasons and feelings re [sic] leaving school. What was our goal in getting an education – if any.
5. ECONOMIC: Discuss jobs held, and your relationship to others at work, your ambitions, successes and frustrations. Number of times promoted or fired.
6. MILITARY HISTORY: Reasons for entering. Age of entry. Service? Ranks. Promotions, demotions – why? Experiences and attitudes in the Services. Time of, and reason for, discharge.

7. LEGAL HISTORY: Any imprisonments? Charges, fines etc? Reasons for such and results. Attitude to courts, and police. Any other legal involvements such as divorce, law suits, accidents. Describe circumstances and outcome of each.

[second unnumbered page]

8. AMBITION: Goals you desire in life.
9. INTERESTS:
10. RELIGION: Describe your religious beliefs, conflicts, concept of God, Heaven and Hell and Death, philosophies, prejudices, and the influence religion and philosophy have on your life. Have you had any religious or mystical experiences?
11. HABITS: (a) Tobacco – Amount. When started – problems associated with it, etc?
(b) Alcohol – When started, amount, problems associated with it, and how it influences you when under it, and the problem it poses with you, your family and society. Any unusual experiences.
(c) Drugs – Same as with alcohol.
12. SEX AND MARITAL HISTORY: Describe attitudes developed towards sex, and whence they came. If a woman, describe age of onset of menses, pain associations with it, irregularities. Attitudes, concept of pregnancy, fears, etc., associated with it. Attitudes to change of life, etc.
Describe sexual experiences, circumstances under which they began, with whom, at what age, their age, reasons for it, and feelings associated with it. Describe masturbatory and homo-sexual [sic] experiences, and relationships with the opposite sex. Elaborate on this paragraph only if you wish to.
If married, describe courtship, age of spouse, and reasons and circumstances of marriage, oppositions to it, and conflicts surrounding it. Describe spouse in detail, your relationship with spouse, attitudes and relationship sexually. Describe attitudes to children, their desirability, their acceptance, ages, and present relationship towards them.
13. Describe all past illnesses and their effect upon you. Describe any fears or phobias, their onset and attitudes towards them. What effect do you think that your ego or personality had on the production of illness? [changes to handwriting] No illnesses of any consequence
14. Discuss any chronic or hereditary illnesses in your family – emotional, alcoholic, other.
15. SELF-DESCRIPTION: What kind of person are you? How do you see yourself as a person? Do you like yourself? Why? Describe your moods, sensitivities, jealousies, adequacies and inadequacies, complexes, fears, guilts [sic], philosophies, capacities for self-deception, your role to other people, your family and yourself. Concept of honesty, sincerity, rejection, etc., – describe in full, etc. What is your ideal of the personality you wish to become. How could you become this ideal?
16. HOW DO YOU FEEL OTHER PEOPLE SEE YOU? Their attitudes towards you, their acceptance of you and their expectations of you, etc.
17. Describe any other outstanding experiences or feelings that have played an important part in your life.