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MAPS (Multidisciplinary Association for Psychedelic Studies) is a membership-based organization working to assist researchers worldwide to design, fund, conduct, obtain governmental approval for, and report on psychedelic research in humans. Founded in 1986, **MAPS is an IRS approved 501 (c)(3) non-profit corporation funded by tax deductible donations.** MAPS is focused primarily on assisting scientists to conduct human studies to generate essential information about the risks and psychotherapeutic benefits of MDMA, other psychedelics, and marijuana, **with the goal of eventually gaining government approval for their medical uses.** Interested parties wishing to copy any portion of this publication are encouraged to do so and are kindly requested to credit MAPS and include our address. The *MAPS Bulletin* is produced by a small group of dedicated staff and volunteers. **Your participation,** financial or otherwise, **is welcome.**

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Apology/Correction

Our apologies to Robert Venosa, whose portrait of Dr. Albert Hofmann on the inside front cover of the Winter 2006-07 issue suffered from some significant printing problems. The proper image, brighter and uncropped, has now been posted on the MAPS site at maps.org/catalog and the inside back cover of this issue. MAPS' proceeds from the sale of these signed, limited edition portraits will be restricted for MAPS-sponsored LSD psychotherapy research.

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FOR ME, MAPS feels as if it is in the chrysalis stage of organizational development, the transformative time between caterpillar and butterfly, when the caterpillar is reconstituted into a butterfly. MAPS is carefully undergoing a similar transformation this year, to prepare for the next stage of our mission to develop psychedelics and marijuana into legal prescription medicines.

To begin with, MAPS is undergoing a management review, conducted by Jerry Hauser and Rebecca Epstein of The Management Center (TMC). TMC works exclusively for Peter Lewis, a philanthropist who has been a major supporter of MAPS, the Marijuana Policy Project (MPP) and numerous other non-profit organizations. According to TMC, Peter “saw too many talented, committed leaders of progressive organizations struggling to manage effectively. TMC’s mission, therefore, is to help progressive organizations achieve great results more easily; our strategy is to do this by providing management assistance and coaching.” Fully funded by Peter, TMC provides its services at no cost.

Letter from Rick Doblin, MAPS President

As part of the preparation for the management review process, MAPS is refining its multi-year projected budgets in addition to articulating more clearly its goals, strategies and performance measures. MAPS has hired Sam Sternlight as our new bookkeeper/accountant to improve the sophistication and clarity of our financial systems. MAPS is also extensively redesigning our membership database and donation systems, in a process directed by volunteers Mark Nelson and Seth Hollub. MAPS will soon have an online database with direct links to our Web Store and automatic credit card processing for donations and merchandise orders. These new systems will create a platform for membership growth that can be managed with existing staff.

MAPS is also enhancing our governance structures. MAPS has added Shawn Hailey as a fourth member of the Board of Directors (the other three being John Gilmore, Marybeth Home and myself). Shawn and his twin brother created a successful company (primarily focused on the development of software tools for the manufacture and design of computer chips) that experienced remarkable growth over almost two decades before they took it public. In addition to guiding MAPS in the management of our internal, organizational growth, Shawn is also leading a project to estimate when MAPS will reach a “point of sustainability” whereby income from product sales (of future prescription drugs) and from therapeutic services (from MAPS-run psychedelic psychotherapy clinics) would be sufficient to cover operational, research and educational expenses, without the need for supplemental donations.

Another aspect of MAPS’ transformation and growth is that the chances of initiating a drug development effort with medical marijuana has reached a new level of possibility. On May 15, DEA Administrative Law Judge Mary Ellen Bittner formally submitted her recommendation to DEA that it approve Professor Lyle Craker’s application for a Schedule 1 license to grow research-grade marijuana under contract to MAPS. On May 23, MAPS held a press conference on the sidewalk in front of DEA headquarters to inform the public that it is now up to DEA to decide whether to accept or reject the Judge’s non-binding ruling. We’ve initiated a new Congressional sign-on letter campaign and need all MAPS members and friends to contact their Representatives to urge them to sign Rep. John Olver’s (D-MA) and Dana Rohrabacher’s (R-CA) Congressional Sign-on Letter in support of Prof. Craker’s application (see page 9).

MAPS has also reached a new level of social acceptability, as evidenced by the April 19 article in **Time** magazine in which MAPS is presented in a favorable light (see insert).

The prior support of MAPS members has enabled us to reach this chrysalis stage. Your continued support will enable MAPS to grow into a more capable and efficient organization in our 21st year.

 – Rick Doblin, Ph.D., MAPS President

MAPS Member Profile

"How I became a major donor to MAPS"



Tim Butcher
tim2cb@aol.com

I've been concerned with and quite active in drug policy reform since my teens. At one drug policy conference I saw MAPS' president, Rick Doblin, speak on a panel about psychedelic therapy – which I didn't know existed anymore. Following the panel, I just had to meet him, and Rick was surprisingly generous with his time and energy. Of course he had no idea I would become a serious MAPS funder – I know because *I had no idea*.

■ TOOK A FEW DOSES OF LSD in high school for "recreation." Then in my early 20s I took a fairly substantial dose. With my lifelong interest in neuroscience and philosophy, I quickly realized this mode of consciousness deserved serious respect, consideration, and study. As I reflected on the profound nature of that experience it became obvious that current policy of refusing to allow psychedelic research and therapy is a grave injustice to mankind. It seemed yet another ugly by-product of the failed War on Drugs, and I felt a personal need to do something about that.

So finding out about MAPS' groundbreaking work was very refreshing. I was impressed that MAPS works within the legal and medical system rather than just complaining about and criticizing "the system."

Around that time, my dad sold his successful art empire to us siblings, and my financial means greatly expanded. I was eager to learn about the latest psychedelic research and asked Rick what MAPS was doing and where. I first donated to some great high-tech psychedelic neuroscience in Switzerland - and I was hooked on the MAPS vision and strategy from then on. I became fast friends with the principal researchers for that study and started attending more conferences

related to psychedelics. For this reason, Rick and MAPS always feels more like a family to me than a dry research center.

I'm also a graphic artist, and it was delightful when Rick used one of my computer art pieces for the *Bulletin* cover art – that's the kind of personal attitude you don't see at many research journals and nonprofits. I've spread the message and *Bulletin* to friends and colleagues, organized MAPS outreach for festivals and parades, assisted in funding many research projects, traveled to Israel with a MAPS group for meetings and a conference about MDMA research, illustrated more *Bulletins*, and written a few neuroscience articles for MAPS. Even through inevitable changes over the years, Rick and the MAPS family always feel like my home away from home.

It's been more than a decade since I've taken any real psychedelics myself, but they will always remain part of my interests in psychology and medicine, as a real frontier in helping real people with real difficulties (or simply personal growth). MAPS is without a doubt the most efficiently organized and accomplished psychedelic research organization around.

MAPS and its members know that altered states of consciousness represent an important addition to more traditional

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survival strategies. Our chances for survival as a species improve with diversity, so if we come upon some dangerous condition, we have a variety of traits to deal with that danger just in case the more popular strategies aren't effective. Seeing the world from an alternate perspective has the potential to save us from our own misguided "common sense" about the way the world works - assumptions so obvious we never bother to question them even though they may be quite inaccurate or detrimental.

LSD, "ecstasy," marijuana, and other psychedelics have a bad reputation among the general public. Each of these drugs has moved as far along Food and Drug Administration approval process as is possible - almost entirely due to the efforts of MAPS. Through the media, people get the idea "drugs" are bad, dangerous, or immoral - as strange an idea as if I said eating or driving or other potentially harmful activities are bad simply because some people wind up getting hurt doing them each year. Yet most all the drugs MAPS researches have already received high marks for safety by the FDA's own standards. The real social distortion of our attitudes about psychedelics lies not in the drugs themselves but, rather, in the states of mind

that these drugs make possible. The drugs are just a convenient scapegoat for fearing nonordinary states of conscious. It's these states of mind that MAPS nurtures and finds appropriate ways for society to view with potential instead of paranoia.

MAPS promotes a vision I've always shared, and it does so very efficiently compared to other nonprofits I've worked with. Once viewed as taboo, psychedelic research, therapies, and responsible personal use continue to evolve day-by-day from the fringes of social acceptability to something much more mainstream. MAPS is the central engine behind this evolution, thanks to the dedication of its members and funders. As a MAPS donor, I get to be a part of it! I look forward to the day when I can joyfully explain to our next generation that psychedelics were once forbidden - but not anymore. Donating a few hundred or a few thousand dollars is a real privilege if it means slowly making history. And we are.

I have a somewhat counterintuitive view of donations and giving that I wish more people shared: Nothing could be a bigger selfish pleasure than the pride I get signing a check or promoting a vision I believe in.

For me, donating to worthy causes is quite selfish: I like the satisfaction of knowing I can make the world more like I want it; I like when others say good things about me; I like knowing a few more



Tim's designs were featured on two *MAPS Bulletin* covers: Summer 1996 and Spring 2003.

people believe this world is ours to change; and I like seeing progress and knowing I played some part in it. Of course, it's great that so many loving and generous people give out of duty, love of mankind, or social justice. But for me, I get far more from donating than I give.

In the deepest sense, my long history of supporting MAPS is the most selfishly rewarding relationship with any non-profit in my life.

Anybody can contribute without scrutiny to more standard causes like peace, poverty, the environment, reproductive rights, and so on. We all applaud that, and I'm proudly involved in those causes too. But psychedelics are stigmatized, and that can make potential donors feel anxious. Some fear that by donating to an organization like MAPS they'll risk tarnishing their reputation or becoming a target for the Drug Enforcement Administration, which simply doesn't happen. The fact that timid philanthropists with less flare are often dissuaded from organizations like MAPS makes the ones who aren't, like me, even more needed.

I'm lucky to be a more "small-time" capitalist/philanthropist. The uniqueness of this research brings me intense gratification just in and of itself: We the "psychedelic community" are a relatively small group. I feel needed, noticed, and important as a supporter of MAPS, and those are just a few of my selfish reasons for membership. It's the family I get to choose.

Aside from MAPS, I've always felt very political, and my remaining focus goes to other causes I feel strongly about, like political campaigns, voter registration, media reform, women's health and health in general, environment, drug policy reform, and so on.

I have no logical formula that guides my donations, but MAPS generally hears from me the day I get a happily large tax return, bonus, or other notable revenue. Some of my favorite memories are those surprise calls to Rick, telling him to count me in on the newest projects.

But there's a personal dimension to MAPS that's always exceeded my expectations by leaps and bounds. I feel immeasurable pride reading some random news article that mentions MAPS' work, or passing by a TV when Rick Doblin is on some talk-show or documentary describing psychedelic research projects. You know what I mean if you've ever said, "Hey! I know that guy!" And knowing I'm somehow involved in what Rick is discussing - well, OK, I won't spoil the surprise. You'll just have to feel that excitement and pride yourself.

And I know this isn't an advice column or anything, but I'd bet just about every reader would feel as great as I do if they gave a few hundred or a few thousand dollars to MAPS each year, or just when that unexpected check comes.

To me the biggest honor has always been that I'm lucky enough to get in on the early stages of psychedelic research and therapy - during the relative youth of MAPS. Given the inevitable triumphs MAPS is bound to achieve over the next five, 10, or 20 years, I'd guess anybody reading this will share this same, singular pride by investing in MAPS now. Whether we're selfish or altruistic in our charitable priorities, a good bet is a good bet.

I get to see the inception and completion of projects that our children will take for granted, but that we, the psychedelic community, fought tooth and nail to make happen. Each *Bulletin* brings a continuation of the long and winding adventure that only MAPS members and donors can truly appreciate. I'm excited that MAPS is doing so splendidly and that we are succeeding with "flying colors" in restarting psychedelic research: But in my selfish little heart of hearts, I'll always know *I get the better deal!* •

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compared to

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I've worked with.

NIDA's Monopoly: GAME OVER?

Why is the federal government going to such lengths to stop MAPS and Prof. Craker?

Jag Davies and Rick Doblin, PhD

FOR THE FIRST TIME SINCE 1941, the federal government's monopoly on research-grade marijuana is in danger of coming to an end. If so, the window of opportunity for putting marijuana through US Food and Drug Administration (FDA) clinical trials would finally be open.

Professor Lyle Craker, PhD, director of the medicinal plant program in the Department of Plant, Soil and Insect Sciences, at the University of Massachusetts-Amherst, has been attempting for six years to obtain a Drug Enforcement Administration Schedule I license to manufacture marijuana exclusively for privately funded, federally approved research. The federal government has a monopoly over the supply of marijuana – but no other Schedule I drug – and uses that monopoly to obstruct privately funded research. Craker's case is the focal point of the struggle to bring medical marijuana before the FDA to determine whether it meets the FDA's standards for safety and efficacy.

On Feb. 12, 2007, following a comprehensive review of the available evidence from the 2005 DEA law hearing, DEA Administrative Law Judge Mary Ellen Bittner issued a decisive – but nonbinding – opinion and recommended ruling that Craker's application be approved. It is now up to the DEA to decide whether to accept or reject Bittner's recommendation.

Patients, doctors, and scientists are in a catch-22 because the Supreme Court has insisted that they to go to the FDA, but the DEA, NIDA, and the federal government have systematically obstructed their ability to perform FDA-approved research.

Those of you who have followed the drug policy reform movement since the 1980s will remember two decisive instances in which the DEA rejected the advice of its administrative law judge. First, in 1984, the DEA rejected a law judge ruling that MDMA be placed in Schedule III, rather than Schedule I. Then, in 1989, DEA famously rejected another law judge's ruling that marijuana be rescheduled, from Schedule I to Schedule III.

Because the drug policy reform movement has gained unprecedented direction and momentum during the past two decades, we actually have a fighting chance to pressure the DEA to accept this ruling. We're going to put the DEA on notice that there will be a political backlash if they continue to use politics to obstruct legitimate and highly demanded scientific research. The DEA will begin to process the judge's recommendation in May and has an unlimited amount of time to issue a formal response. In previous DEA law judge hearings, the DEA has taken anywhere between three and 14 months to respond.

We will use this intervening period to build on our congressional and organizational lobbying efforts to demonstrate to the DEA that there will be a price to pay for the continued political obstruction of science. A congressional sign-on letter is currently being circulated in the U.S. House of Representatives, sponsored by Rep. John Olver, D-MA, and Dana Rohrabacher, R-CA, (see the side bar on pg. 9 for details about contacting your representative). Since members of Congress are more likely to register support for an issue if the message is coming from their constituents, the role of grassroots activism could be the tipping point.

Craker's applications for regulatory approval, legal struggles, and proposed facility are sponsored by MAPS, which plans to design, fund, and obtain government approval for the clinical research necessary to develop marijuana into an FDA-approved prescription medicine. If successful, MAPS would bring smoked and/or vaporized marijuana to market under a nonprofit pharmaceutical model similar to Planned Parenthood's development and distribution of RU-486. DEA

licensing is the final regulatory hurdle in MAPS' quest to create the nation's first privately funded, federally approved medical marijuana production facility, which would pave the way for a drug development effort aimed at developing marijuana into an FDA-approved prescription medicine.

The Problem: NIDA's Monopoly

All you have to do is read NIDA's full name to see their inherent conflict of interest with medical marijuana research.

Since 1968, the federal government's National Institute on Drug Abuse (NIDA) has maintained a monopoly on the supply of marijuana, but no other Schedule I drug, that can be legally used in federally approved research. NIDA's monopoly makes very little sense given that the DEA has licensed privately funded manufacturers of methamphetamine, LSD, MDMA (ecstasy), heroin, cocaine, and virtually all other controlled substances.

Human studies on any Schedule I drug must gain approval from the FDA, yet for studies with marijuana, researchers must submit their protocols for an additional review process by NIDA and the Department of Health and Human Services (HHS) that exists for no other drug. This extra review process has been imposed on medical marijuana research as a result of NIDA's monopoly power, which persists despite federal law that requires adequate competition in the production of Schedule I drugs [21 USC section 823(a)(1); 21 C.F.R. section 1301.33(b)]. The HHS/NIDA review has no deadlines and no formal appeals process, in contrast to the FDA's 30-day deadline. Thus, NIDA's monopoly results in lengthy delays or refusals in providing research material.

NIDA has refused to supply marijuana to two FDA-approved protocols sponsored by MAPS, preventing these studies from taking place (Dr. Abrams, UC San Francisco, marijuana for AIDS wasting syndrome-IND #43-542; Dr. Russo, U. Montana, marijuana for migraines-IND #58, 177). In addition, for the last three-and-a-half years, NIDA has refused to sell 10 grams of marijuana to a MAPS/CaNoRML-sponsored laboratory study evaluating the effectiveness of a marijuana vaporizer, a nonsmoking drug delivery device that eliminates the products of



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combustion that patients would inhale after burning marijuana. NIDA has also prevented this study from taking place, despite the fact that the development of nonsmoking drug delivery devices was recommended by the Institute of Medicine in its 1999 report on medical marijuana.

For those researchers whose protocols it approves, NIDA provides inferior, low-potency marijuana. NIDA's marijuana has limited cannabinoid profiles, so researchers are unable to optimize the strain of marijuana they prefer to use for costly drug development efforts. The highest potency marijuana available from NIDA for research is 7 percent; the marijuana used by patients in states where it is legal has been documented to be between 10 percent and 20 percent.

NIDA's lone marijuana production facility is directed by Professor Mahmoud El Sohly, at the University of Mississippi. Another egregious conflict of interest for NIDA is that El Sohly has personal commercial interests in marijuana-based products. This includes both his THC suppository and his new DEA license permitting him to grow marijuana to extract THC for sale to the pharmaceutical company, Mallinckrodt, to manufacture generic Marinol. El Sohly would have a major conflict of interest if he were the sole supplier of marijuana to MAPS for prescription use, since marijuana would compete with products in which he has a personal financial interest.

NIDA cannot even guarantee that the same research material will be available for prescription use if FDA clinical trials determine that marijuana meets its guidelines for safety and efficacy. This makes any drug development effort using NIDA marijuana a futile exercise. As NIDA well knows, sponsors will not invest millions of dollars into research studies until there is reliable access to a supply of high-quality research material that can be used both in research and - if the research should prove successful - as an FDA-approved prescription medicine.

The Plan: Independent Supply, the "Holy Grail" of Marijuana Research

Considering the problems with NIDA's monopoly, for the past six years MAPS has prioritized creating an independent supply of legal research-grade

marijuana for use in FDA-approved studies. In June 2001, with support from MAPS and UMass-Amherst's approval, Craker applied to the DEA for a license to manufacture marijuana exclusively for use in federally approved research.

One of the DEA's primary tactics for stifling research is delay, and Craker's application has been a case in point. One year after the application was submitted, the DEA claimed it was lost. After the application was resubmitted in 2002, the DEA failed to respond for two-and-a-half years, forcing Craker to sue the DEA in federal court for unreasonable delay. This prompted the DEA to finally reject Craker's application in December 2004, three-and-a-half years after the original application was submitted. In turn, MAPS and Craker immediately requested an administrative law judge hearing, which took place over the course of 11 months in 2005.

Prior to the February 2007 ruling, organizations that had already written to the DEA in favor of Craker's application included the Multiple Sclerosis Foundation, the Lymphoma Foundation of America, the National Association for Public Health Policy, the United Methodist Church, Americans for Tax Reform, the American Medical Students Association, several state nurses' associations, the Massachusetts Department of Public Health, and the California and Texas State Medical Associations, the two largest U.S. state medical associations. Also, as a result of MAPS' congressional lobbying efforts, Massachusetts senators John Kerry and Edward M. Kennedy and 38 members of the U.S. House of Representatives have already previously written to the DEA in support of Craker's application.

Conclusion: The Strategic Benefits of the Federal Research Route

Of course, if the DEA still decides to reject Bittner's recommendation, this will only lend credence to state and local marijuana reform efforts. MAPS and Craker will appeal in the Circuit Court of Appeals, but that would tie the case up in the courts for several more years. If the DEA rejects the ruling, it will be clear that the appropriate administrative channels have been exhausted and that the FDA

drug development route is fundamentally blocked by NIDA's monopoly. In fact, considering the success of state and local reform efforts, one is almost led to wonder if FDA drug development is even necessary for marijuana. In the final paragraphs of this article, we would like to contextualize MAPS' FDA research strategy in light of state and local reforms.

Thirteen states and numerous municipalities have enacted laws protecting patients who use marijuana when prescribed by a doctor. Several more states, such as New York, Illinois, Minnesota, and Wisconsin are considering similar legislation this year. While recognizing the inspiring success of state and local initiatives over the past decade, it is also important to understand their historical context as it relates to NIDA and DEA's obstruction of the FDA drug development route, which, for better or worse, is the regulatory channel that all other prescription medicines must successfully endure in the United States.

While enforcement is generally left up to local authorities, there are no guarantees that the Feds will not intervene. The U.S. Supreme Court did rule in 2005 in *Gonzales v. Raich* that the federal government can arrest medical marijuana patients and enforce federal marijuana laws even in states where it is legal. Justice Stephen Breyer stated in oral arguments during the *Raich* case that medical marijuana patients should go through the FDA's regulatory process to get marijuana approved as a prescription medicine, rather than focusing on courts and referendums. Patients, doctors, and scientists are in a catch-22 because the Supreme Court has insisted that they go to the FDA, but the DEA, NIDA, and the federal government have systematically obstructed their ability to perform FDA-approved research.

As discussed earlier, clinical research with human subjects that meets the FDA's strict guidelines is costly. MAPS estimates that it would cost \$5 million to \$7 million to get marijuana approved as a prescription medicine, over the course of five to seven years, once there is an independent source of supply.

When compared to the costs of other forms of medical marijuana policy reform,

however, such as statewide ballot initiatives, the costs of research are minimal. One statewide ballot initiative can cost several million dollars; it would be many, many times more costly for all 50 states to pass medical marijuana laws than it would be to go for the whole ball of wax by gaining FDA approval.

Why is the federal government going to such lengths to stop MAPS and Craker? The federal government knows that if the FDA had the opportunity to evaluate medical marijuana based on science, not politics, it would likely approve it for medical use.

For the first time in six-and-a-half decades, since marijuana was removed from the U.S. Pharmacopia in 1941, there is a window of opportunity for the establishment of a privately funded source of research-grade marijuana. To take advantage of this unique opportunity, we need all supporters to contact their federal legislators. •

Help MAPS and Marijuana Research Succeed by Contacting Your Federal Legislators – Here's How:

Tell your federal legislators that you would like them to add their names to the congressional sign-on letter urging the DEA to follow the administrative law judge's recommendation by issuing a Schedule I license to Professor Lyle Craker, UMass-Amherst. Tell them that you would like to see the controversy over medical marijuana resolved through privately funded FDA-approved research. Individualized letters and phone calls are the best ways to get the attention of your legislators. E-mails are helpful, but phone calls and especially personal letters or faxes carry significantly more weight.

Call the congressional switchboard at (202) 224-3121 or toll free at (800) 962-3524.

For senators:

The Honorable: (full name)
Senate Office Building
United States Senate
Washington DC 20510

For representatives:

The Honorable: (full name)
House Office Building
United States House of Representatives
Washington DC 20515

For additional info: maps.org/mmj/DEAlawsuit.html

MDMA-Assisted Psychotherapy in the Treatment of Posttraumatic Stress Disorder (PTSD): Tenth Update on Study Progress

15 SUBJECTS HAVE NOW completed my MAPS-sponsored Food and Drug Administration (FDA) Phase 2 pilot study evaluating MDMA-assisted psychotherapy for subjects with treatment-resistant posttraumatic stress disorder (PTSD). Six more potential subjects have passed phone screening and are currently scheduled for formal screening. Efficacy data at this stage is promising, so far making a strong case for continuing the research into multisite Phase 3 studies.

The Data Safety Monitoring Board (DSMB) met in late January for its final review, now that 15 out of 20 subjects have completed the experimental treatment. The DSMB is comprised of an MD, a Psy.D. and a Pharm.D. not otherwise involved in the study. It reports to MAPS, which forwards the DSMB reports to the institutional review board (IRB) and FDA. The DSMB recommended that the study continue without modification. The DSMB's only safety concern was that those subjects who received the placebo might experience a substantial increase in PTSD symptoms after tapering off of psychiatric medications.

Since the beginning of the study some subjects have expressed a desire to talk to the media about their experience to inform the public about the possible benefits of MDMA as a medicine.

The Internet advertising campaign that MAPS Clinical Research Associates Valerie Mojeiko and Josh Sonstroem developed with the expert help of Martin Polanco has yielded impressive results. Within a few weeks in late February and early March we received inquiries from 14 potential subjects, so we expect to have completed the enrollment for this study by the time of publication. The Internet advertising was so successful that we have discontinued it and are placing potential subjects who pass phone screening on a list of alternates in case we need to replace dropouts. Interestingly, two of the six people now scheduled for formal screening are Iraq veterans, the first veterans we have been able to recruit.

Early this year, we had several months of frustratingly slow recruitment. First, one subject who had passed all the screening except for the blood tests at the time of my previous *Bulletin* update was not able to be enrolled because her lab results revealed a previously undiagnosed medical problem that required treatment. In addition, another subject dropped out of the study one month after his first MDMA session. His decision to drop out was not related to an adverse event, but was because he lived far away and did not want to spend the additional time away from home that would have been required. He did have a significant improvement in symptom scores after one MDMA-assisted session. He felt he would be able to build

Efficacy data at this stage is promising, so far making a strong case for continuing the research into multisite Phase 3 studies.

on these improvements by continuing to work with his psychologist at home. Because we felt that the limits the IRB had placed on reimbursement of travel expenses had added to the stress this subject experienced we subsequently asked the IRB to allow MAPS to reimburse actual travel and lodging expenses (for economy-class tickets and moderately priced hotels) without an arbitrary upper limit and to add \$50 per day for meal expenses for people from out of town. The IRB has agreed to these changes, which we hope will make participation less stressful for future subjects from out of town.

In October 2006, we received permission from the IRB to collect long-term follow-up data on people who complete the existing protocol. We will now be able to re-administer the Clinician Administered PTSD Scale (CAPS) and a questionnaire one year following the subject's last MDMA therapy session (or longer for subjects who have already completed the study more than a year ago). We delayed implementing this follow-up protocol until early March because we linked that request to a request for clarification about the IRB's media policy for our study.

Since the beginning of the study some subjects have expressed a desire to talk to the media about their experience to inform the public about the possible benefits of MDMA as a medicine. At the IRB's request we have asked them to refrain from doing so until the study is completed. With the addition of the long-term follow-up we did not want to be in the position of having to ask people to prolong this period of not speaking to the media for another year or more. In late February, after several years of effort, three rejections, and an appeal, the IRB decided that review of postparticipation interviews falls outside its scope and determined that it has no jurisdiction to control subjects' decisions about whether or not to speak to the media. They did ask us to adhere to the following guidelines, with which we agree:

- That neither sponsors nor investigators should ever disclose information identifying a subject to the media;
- That subjects should be encouraged to refrain from discussing a trial until after their participation has ended; and
- That subjects who express an interest in sharing their experiences with representatives of the media may be provided contact information for such representatives by the investigator after the subject has completed their involvement in the study.

We have received inquiries from both print journalists and documentary filmmakers and are in the process of considering which are most likely to skillfully communicate information about our research to the public.

With the recent recruiting success we are in a position to finish the study by the end of 2007. At that point, if efficacy data continues to be promising, we will submit the data to the FDA along with a request for approval of a multisite Phase 3 trial. Upon the study's completion, we will also submit an article for publication in a peer reviewed journal. The long-term follow-up research will be treated as an additional study and will be reported and published separately when it is complete.

We are also in the early design stages of a Phase I safety study in psychologically healthy subjects with controlled hypertension, Hep-C, or who are HIV-positive, all medical conditions that currently exclude people from participating in the MDMA/PTSD study but which we believe do not pose unacceptable risks. We want to explore the use of MDMA in people with these conditions to see if we can safely enroll a wider range of subjects as we move into our Phase 3 studies. •



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With the recent recruiting success we are in a position to finish the study by the end of 2007.

MAPS-Sponsored Swiss MDMA/PTSD Study: Discussion and Analysis



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The therapist's role is to be a midwife. He or she facilitates the experience as it unfolds while being encouraging and supporting in a nondirective manner.

SINCE the last *MAPS Bulletin* (Winter 2006-7), the first subject has completed the treatment phase of the protocol in my ongoing MAPS-sponsored study evaluating MDMA-assisted psychotherapy for subjects with treatment-resistant post-traumatic stress disorder (PTSD). The first subject also had two post-treatment outcome measurements with the independent assessor three weeks and two months after the third MDMA session. In terms of outcome measurements – the patient's subjective reports and our psychotherapeutic evaluation – she has made substantial progress on her way to healing from PTSD.

The journey is not over, though. The process of integrating the experiences from the MDMA sessions and adjusting to the changes induced by the MDMA-assisted psychotherapy - such as experiencing feelings more intensely, gaining a new life perspective after many years of suffering from PTSD or being able to forgive the perpetrator - takes a long time and continuing conventional psychotherapy. We will be conducting one-year follow-up research with each subject who completes the experimental treatment to evaluate the subject's long-term reduction in PTSD symptoms in relation to the short-term data.

We have now enrolled the second and third subjects, and both are currently undergoing treatment. Two more patients have passed the initial screening and will qualify for the study but will have to wait for their treatment to begin until the current two patients have terminated the treatment phase of the protocol. In total, we have screened 11 patients by telephone and have had several inquiries from psychiatrists and psychotherapists after sending a letter to all Swiss German psychiatrists asking for referrals.

In January 2007, the MAPS clinical research team visited the investigation site and monitored the study documents and procedures. MAPS has also submitted the Swiss protocol to the US Food and Drug Administration (FDA) under MAPS' Investigational New Drug (IND) application for MDMA in the treatment of PTSD.

In late January, it was also exciting to learn that Vanja Palmers, a Swiss Zen priest, would donate \$50,000 to MAPS exclusively for the Swiss MDMA/PTSD study. Vanja is motivated to donate to

psychedelic research by his interest in the relationship between psychedelic drugs and spirituality. Thank you, Vanja! Since Vanja is a Swiss citizen, MAPS even arranged for the donation to be made directly to the Swiss Medical Association for Psycholytic Therapy (SAePT), a group to which I belong. SAePT is co-sponsoring the Swiss MDMA/PTSD study along with MAPS and has obtained nonprofit status with the Swiss government, allowing for future donations from other Swiss supporters.

My wife and co-therapist, Verena Widmer, and I are often asked questions about how and why MDMA-assisted psychotherapy works, why it is different from conventional psychotherapy, what kind of experiences and changes a prospective patient with a certain condition (such as PTSD) can expect from MDMA-assisted psychotherapy, and so on. I will attempt to reflect on these questions, knowing that the theory of MDMA-assisted psychotherapy is yet evolving, and illustrate my points with a short case report from the first patient treated in our study.

The Interdependence of Subjectivity and Objectivity

First of all, we have to differentiate between the chemical agent MDMA (its effect on the brain, the changes it induces in terms of neurobiology and observable behaviour) and the subjective psychological-psychotherapeutic process going on “inside” the person who is experiencing the effects of the MDMA. Both dimensions are crucial when it comes to developing a comprehensive theory of MDMA-assisted psychotherapy. These two dimensions or perspectives - the “inside” view or conscious-subjective experience and the “outside” view or neurobiological-behavioural perspective - are interdependent but cannot be reduced to each other.

There are several characteristics of the MDMA-induced neurobiological effects that are responsible for the consistent changes in observable behaviour of humans under the influence of MDMA and which at the same time constitute the basis for successful psychotherapeutic interventions. MDMA leads to a transient and distinctive stimulation of the serotonergic, dopaminergic, noradrenergic, and other neurotransmitter systems of the brain with a massive release of the respective neurotransmitters, primarily serotonin. It also increases levels of hormones like oxytocin and prolactin. On the functional level, MDMA reduces fear by reducing the activity of the amygdala, which are responsible for the regulation of the stress-fear reaction. Other consistent findings are the elevation of mood, enhancement of predominately

positive feelings and emotions, empathy, closeness and bonding, and a better recollection of memories. All of these effects wear off after a certain amount of time when the brain has returned to the baseline functioning level. There are many anecdotal reports, however, that even a single dose of MDMA can lead to long-lasting psychological changes that cannot be explained just by the aforementioned acute effects of MDMA.

One possible explanation is that if brain cells called neurons or whole assemblies of such cells are stimulated for a longer period - more than roughly 10 minutes - they begin to show internal cell changes that eventually lead to a complicated cascade of molecular reactions. This reinforces the involved neuronal circuits and stimulates neurons to reconnect with other neurons with the possibility of building new neuronal circuits. This is reflected in the rule of thumb: “neurons that fire together, wire together.” MDMA can intensify this stimulation on an intensely positive scale for much longer than just 10 minutes, possibly explaining the long-lasting neuronal changes.

These are some of the “ingredients” or the prerequisites on the brain level for MDMA-assisted psychotherapy. It is the psychotherapist’s duty to utilize these MDMA-induced neurobiological changes in a manner to serve the goals of psychotherapy.

With cases of PTSD, the goal is to help patients integrate troublesome and painful traumatic memories that are “stuck” in the implicit memory structures – to be pictured as sort of temporary memory storage structure – which are not able to move on to the explicit memory structures that can be pictured as a “photo album” kind of memory structure. This means that a person suffering from PTSD relives the traumatic memories as soon as he is reminded of the trauma. Usually, specific cues related to the trauma such as noises, smells, seeing similar events on TV, or being asked about the trauma trigger the immediate and uncontrollable recollection of the traumatic memories. Subjectively this feels as if the past traumatic events are happening right now and is accompanied by intense fear and other negative, unpleasant emotions. The person inevitably tries to avoid such cues and feelings. This will ultimately lead to a very restricted lifestyle, affecting all major areas of everyday life. Memories that have been transferred to the explicit memory structures cease to acutely and constantly disturb the subject. At the same time he or she experiences a greater amount of control over the recollection of such memories and their associated emotions.

The “inside” view
or conscious-subjective
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to each other.

From the “inside” perspective, some of the most important factors for successful treatments are the motivation, the intentions, and treatment goals of the patient. Not only do these factors generally influence the psychotherapeutic process, they also determine the content of the MDMA experience. The therapist should take great care to clarify these points in the preparatory phase of MDMA-assisted psychotherapy.

We assume that the key elements of MDMA’s psycho-

facilitates the experience as it unfolds while being encouraging and supporting in a nondirective manner. He or she also must be attentive to possible pitfalls, such as when the experience becomes so overwhelming that the patient becomes anxious, suppressing and avoiding dealing with the trauma. The therapist has to be comfortable with going through such very intense and distressing moments together with the patient, re-establishing again and again the basic positive cognitive-emotional state of

As many traumas are inflicted on humans by other humans, the core issues of openness, trust, closeness, and love are goals in the psychotherapy of PTSD.

therapeutic effect are the reduction of fear and release of tension in combination with the induction of a positive mental-emotional state. This shift includes positive self-awareness, increased self-worth and self-acceptance, approachable behavior, and enhanced social bonding. This altered state of mind and behavior facilitates emotional processing in the therapeutic setting. Usually the traumatic memories spontaneously emerge in a very different and more positively constructive manner, thus helping the patients gain new perspectives on their symptoms and previous problems with a greater sense of safety and control.

Recent findings in psychotherapeutic research show that psychotherapists should do everything to let patients experience themselves from a positive perspective. This includes helping patients to satisfy basic psychological needs such as the sense of control, the increase in self-worth, the experiencing of positive feelings, and the need for emotional bonding and relationships. This positive cognitive-emotional state is the basis out of which patients gather the courage and the energy to initiate change. This is also called the resource-oriented approach. The MDMA-induced behavioural effects and subjective experiences are very much in line with this understanding of the psychotherapeutic process.

The previous description of the effect of MDMA could lead to the notion that MDMA does the job on its own and the patient can lean back and wait for the miracle cure. This is usually not so. Sometimes breakthroughs happen but mostly patients are required to do their share of very hard work. The more a person is psychologically injured, the more psychotherapeutic work has to be done. Although MDMA enhances predominately positive mood and emotions, patients with a complex or severe psychological disorder risk terrifying, painful, and unpleasant experiences. They must learn to endure difficult and distressing emotions, to understand what happened to them, to trust again, to relate to other people again, and to rebuild their lives. MDMA helps them face this challenge.

The therapist’s role is to be a midwife. He or she

mind. This does not mean not having negative feelings but rather implies allowing them to come and go in what we call the cascade of feelings.

There is an intrinsic movement and direction in the structure of feelings. Aggressive feelings like hatred, anger, envy, jealousy, and the like are usually based on fear and associated with feelings like helplessness, loneliness, powerlessness, pain, and so on. Once these feelings are no longer suppressed and can be endured and accepted, they lead over into sadness. When somebody first surrenders into sadness they associate it with a reason or cause. The second phase of sadness is “depersonalized” or “detached” from its cause. At this point someone experiencing the sadness does not know any more why he or she is sad and crying, there is just sadness. Sadness without a personal cause is an expression or symptom of love.

The movement from sadness with a personal cause to love is the ultimate letting go. It is in a way the same process as in dying, meaning no more avoidance, no more fighting anything or reasoning with fate, just an acceptance of what is. When all the inner commotion has subsided there is awareness, stillness, and love. The inherent movement in feelings is always toward love, and can often be easily observed during therapeutic MDMA-sessions. MDMA may take you directly to the state of love but eventually does not save anybody from going through the previously mentioned steps. It often goes back and forth in the cascade until a problem causing these difficult feelings has been completely understood, accepted, and resolved by going to its deepest root. As many traumas are inflicted on humans by other humans, the core issues of openness, trust, closeness, and love are goals in the psychotherapy of PTSD. Here again it is a challenge for the therapist to be compassionate and respectful of boundaries, allowing trust to grow again. The therapist has to ensure that the patient stays in contact with difficult feelings as he or she and moves toward the state of love.

One of the advantages of MDMA-assisted psychotherapy over conventional treatments is that MDMA

induces changes on the neurobiological level. This helps patients overcome deep-rooted neuronal fixations not otherwise accessible to psychotherapeutic and psychopharmacologic interventions, reinitiating the normal healing process. Both the MDMA as the catalyzing drug and the psychotherapy are needed to ensure the effectiveness of this method.

The following case vignette of the first patient treated in our study exemplifies the aforementioned elements of MDMA-assisted psychotherapy:

Anna (sic), a 40-year-old woman, had been sexually abused by her alcoholic step-father from the age of 8 to 16. She developed PTSD symptoms already during adolescence but increasingly after her husband unexpectedly left her at the age of 29. She has also suffered from recurrent depression since then. She went through several psychotherapeutic treatments, none of which helped her overcome the symptoms of PTSD.

The first MDMA session began with a half-hour state of bliss, release of tension and the feeling of being completely safe and at peace with everything. Then for another half hour she was absorbed with thinking about her beloved, younger half-sister and her son who still lived with Anna's parents. As expected, this state was just the steppingstone to the confrontation with the traumatic events in her childhood. This happened as she began to worry about her young nephew, thinking that he could possibly be in danger of being abused by her step-father. She then vividly relived several abusive scenes from her childhood. At this point she needed reassurance and support from the therapists to bear the difficult memories and feelings and we encouraged her to just stay with what

The second MDMA session started again in an emotionally positive state with a feeling of being happy and secure. She proceeded to remember the good times she had had with her husband and then the shock and pain felt when he unexpectedly left her. She realized that she had since forced herself to be overly autonomous, suppressing her needs for close and intimate relationships. She relived the pain of the separation and intense feelings of abandonment. As the session went on, further details of the sexual abuse emerged, but were less disturbing than the first time.

The third MDMA session again began with a positive and soothing memory of Anna's foster parents, whom she had grown up with, happy and protected until the age of six. At this time her mother took her back and married shortly afterward. For a long time, Anna was completely preoccupied with the role of her mother in the sexual abuse. She felt the lack of love, bonding and care in the relationship to her mother. She then remembered several previously unconscious scenes when her mother witnessed the abuse and failed to intervene and stop it. She now understood why her mother also began to abuse alcohol, frequently being completely drunk while the step-father abused Anna. Again, several abusive situations with her step-father came up. This time she relived the scenes in the form of very realistic bodily sensations. Although distressing, they did not have approximately the same emotional impact compared to her expression of the feeling of having been betrayed by her mother. Until the supplemental dose of MDMA at 2.5 hours after the beginning of the session, Anna could keep some emotional distance to these insights and memories. Then,

In spite of this psychologically demanding and ongoing process,

Anna's PTSD symptoms showed a significant reduction.

she was experiencing. After some time she began to relax again and the disturbing memories faded away. During the rest of the session she talked a lot about her family, trying to put the pieces of the puzzle together. The following night and days she repeatedly felt sad and had to cry when remembering and feeling the horror of her childhood: the injuries, the pain and the loneliness. Since this first session she completely gave up her avoidance of the issue of the abuse. She was able to talk about it in the subsequent non-drug integrative psychotherapy sessions, and also for the first time to her boyfriend and to her half-sister. The therapeutic relationship had also changed: she was very much more committed and motivated to face all these difficult issues. From time to time, new, previously suppressed insights and memories related to the abuse surfaced to consciousness.

after the supplemental dose she surrendered to the full intensity of the pain and the negative feelings, going into the sadness and weeping like a small child. This process of dealing with the core injuries preoccupied her for the rest of the session and most of the following day. During the following weeks Anna had a very hard time integrating this third MDMA session, with many more details surfacing into consciousness. Anna required intense support during this time. In spite of this psychologically demanding and ongoing process, Anna's PTSD symptoms showed a significant reduction.

We are now also looking forward to the initiation of the Israeli MDMA/PTSD study, the Harvard MDMA/cancer anxiety study. These studies will extend our knowledge and deepen the understanding of the potential of this fascinating chemical compound. •

Developing a Program for Training Therapists to Conduct **MDMA-Assisted Therapy**



Ilsa Jerome, PhD,
(digital self-portrait), ilsa@maps.org
and Rick Doblin, PhD

Such large studies will require training many mental health professionals to conduct MDMA-assisted therapy. This is a situation for which we know of no precedent.

MAPS IS ASSISTING RESEARCHERS to design, fund, and conduct the clinical trials necessary to develop MDMA-assisted psychotherapy into a recognized treatment for posttraumatic stress disorder (PTSD) and/or clinically diagnosed anxiety secondary to life-threatening illness. Currently, MAPS is sponsoring several Food and Drug Administration (FDA) Phase 2 studies of MDMA-assisted psychotherapy in people with PTSD and anxiety secondary to a life-threatening illness. Studies of MDMA-assisted psychotherapy in people with PTSD are taking place in the United States and Switzerland, with a study in Israel to be initiated this year, and a study of MDMA-assisted psychotherapy in people with anxiety associated with an illness is under way in the United States. If findings from these small pilot studies continue to be promising and indicate that MDMA-assisted therapy is safe and possibly efficacious, then MAPS must develop and conduct two large-scale multi-site Phase 3 studies if we wish to apply to FDA for approval and recognition of this treatment. Each of these studies will involve approximately eight teams of psychotherapists, and approximately 280 participants. Each therapeutic team will treat as many as 18 participants per year for two years. One Phase 3 study will be conducted throughout the United States and the other throughout Europe and Israel.

Such large studies will require training many mental health professionals to conduct MDMA-assisted therapy in people with PTSD in accordance with the treatment method developed by Michael Mithoefer, MD, and Annie Mithoefer, RN, as described in the treatment manual developed by Ruse et al. (2005).¹

The MAPS team is in the process of developing such a training program, to be led by Michael Mithoefer, principal investigator for the first study of MDMA-assisted therapy for people with PTSD. The training program will provide therapists interested in conducting MAPS-sponsored MDMA-assisted psychotherapy research with the experience, education, and information needed to perform this therapy.

Currently, under the training program we envision, we will enroll pairs of therapists in male-female co-therapist teams, matching MAPS' treatment method for MDMA-assisted therapy, which requires a pair of therapists and strongly encourages the pair to consist of a man and a woman. Right now, the most likely design will have one or two teams of therapists-in-training visit Charleston, SC, on two separate occasions to meet with Michael and Annie for a four or five day training event. During this time, the trainees will each experience one session of MDMA-assisted therapy as the designated patient, with their partner as the therapist, and one session as the designated therapist, with the partner in the patient's role.

The second visit to Charleston will be scheduled at least three months after the first so that the trainees have the time and opportunity to observe and learn not just about the MDMA experience itself but also how to integrate it into their daily lives.

The training program might involve bringing as many as 10 teams of therapists together for a week-long educational seminar about the use of MDMA-assisted psychotherapy for PTSD after they have all completed two training sessions, allowing for greater learning and sharing of experi-

Update: **LSD-Assisted Psychotherapy** in Persons Suffering from Anxiety Associated with Advanced-Stage Life-Threatening Illness: A Phase 2, Double-Blind, Placebo-Controlled Dose-Response Pilot Study

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ences between teams. During this seminar, inner experiences would be catalyzed by holotropic breathwork rather than MDMA.

By creating this formal training program, therapists will be able to undergo two personal experiences with MDMA in a controlled, therapeutic setting. We'll encourage therapists to work on their own issues so they can be as supportive as possible for their research subjects. The goal of the program is for trainees to understand how to collaborate with research participants in creating a set and setting that maximizes the effects of MDMA-assisted therapy and how to deal with emotional and physiological problems that might arise during treatment.

We are presently searching for measures to evaluate the effectiveness of the training program on the trainees. With this data, MAPS will then be able to select from among the training program participants those most likely to successfully conduct the Phase 3 multi-site studies evaluating the safety and efficacy of MDMA-assisted therapy.

Since MDMA is a controlled substance, the only way that MAPS can legally conduct a training program that includes trainees having personal experiences with MDMA is under the auspices of an FDA-approved clinical study. This is a situation for which we know of no precedent. In several months, MAPS will request a meeting with FDA staff to discuss the most appropriate contexts for moving forward. •

I. Ruse J, Jerome L, Mithoefer M, Doblin R (2005). MDMA-Assisted Psychotherapy for the Treatment of Posttraumatic Stress Disorder (PTSD): A Treatment Manual Draft. MAPS

ON MARCH 19, 2007, during a long phone call with the president of the Ethics Committee (EC) (the Swiss equivalent to an institutional review board), which is responsible for the approval of my proposed MAPS-sponsored study, she announced that the committee had granted conditional approval.

So we have reached a milestone. I am convinced that the approval by the EC is the most difficult step in the entire approval process. Ethical decisions are judgments. Four years ago I was a member of a group of researchers from the Swiss Medical Society for Psycholytic Therapy (SaePT) that had a frustrating experience with a psilocybin/depression project that was not allowed to proceed following rejection by the EC.

During the recent EC meeting, although the committee was critical and posed detailed questions, in general they were not overcome by prejudice. In the end, the committee was convinced that the potential benefits of LSD-assisted therapy outweigh the risks.

Now, how to continue? First, before receiving unconditional approval, I have to wait for the written report of the EC and fulfill their requirements. Then, I will submit my papers to Swissmedic (Swiss Food and Drug Administration equivalent) and finally to the BAG (Swiss Drug Enforcement Administration equivalent). After all three of these groups grant approval, I will have full regulatory approval for the study.

In the end, the committee was convinced
that the potential benefits of LSD-assisted therapy
outweigh the risks.

I am happy and relieved to have reached this step. I'd like to thank everybody who supported me until now. As a researcher in private practice I depend on a network of people who are able to support this work. I'd like to thank Rick Doblin for his enthusiasm and financial support; Ilsa Jerome for busy and patient support in scientific literature research; Valerie Mojeiko, Amy Emerson, and Josh Sonstroem for their methodological support; John Halpern and Matt Bagott for permission to use their protocols; Rudolf Brenneisen for his support in accessing and handling the LSD; and, finally, I thank Albert Hofmann for the opportunity to consult with him about this study.

This was a big step in the right direction, although it's still a long climb to the mountain top. I'll keep you up to date! •

Long-Term **Ibogaine** Efficacy Study Initiated



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MONDAY, FEBRUARY 23 was not the beginning of just any old workweek, but an exciting and long-awaited day. On that day we facilitated the introduction of the first participant into an observational case series of the long-term efficacy of ibogaine-assisted therapy and associated interventions in participants with opiate addiction treated at the Iboga Therapy House (ITH) in Vancouver, Canada.

This MAPS-sponsored study is intended to gather information to evaluate whether ibogaine-assisted therapy helps opiate-dependent people stop using opiates, use less, or practice moderated use after the therapy. For one year after therapy we will be collecting data from participants in the study, enabling us to examine whether ibogaine-assisted therapy facilitates positive changes or improvements in quality of life that result in decreased harms associated with chronic or mismanaged opiate use.

The road to getting this study approved and started was a long one. The protocol was originally designed as an outcome study, but it was later changed to an observational case study when the institutional review board expressed concerns that the initial design was too similar to a clinical trial. After three years, enduring numerous setbacks, the study is finally under way.

The conception of the study began in 2003, when MAPS Clinical Research Associate Valerie Mojeiko visited the ITH facility in Vancouver. At that time, the ITH was providing free ibogaine therapy to substance-dependent individuals as a response to the general lack of detoxification and treatment options. The five-day residential program provided an alternative to largely ineffective standard treatment models and provided a therapy based on the principles of harm reduction, health promotion, and psychedelic

therapy. MAPS recognized the unique opportunity to study the outcomes of such a therapy as a potentially important contribution to the data available on the therapeutic uses of ibogaine. Thus, we began the process of developing a protocol for a study that would examine ibogaine-assisted therapy's potential in reducing harm and facilitating positive, healthy lifestyle changes.

The protocol design for the study is based on two primary and five secondary hypotheses. The primary hypotheses are that: 1) the ITH treatment program will result in changes in substance use, including decreases in average post-treatment scores on the Addiction Severity Index, with scores averaged over a one-year period; 2) the ITH treatment program will result in extended periods of abstinence post-treatment as quantified by average number of days post-treatment without use of opiates, and also by average

...Vancouver has a
uniquely innovative
approach to drug policy

...

time to first relapse.

The secondary hypotheses are that: 1) decreases in the Addiction Severity Index post-treatment will be correlated with high scores in both nadir and spiritual experiences as measured by the Peak Experience Profile; 2) the ITH treatment program will result in decreases in the Objective Opiate Withdrawal Scale and Subjective Opiate Withdrawal Scale immediately after treatment; 3) the ITH treatment program will result in extended periods of abstinence and/or extended periods of controlled drug use as quantified by amount of drugs used, and method and schedule of administration relevant to baseline; 4) average post-treatment scores of Addict Identity measured by the Social Identity Questionnaire-Substance Recovery (SIQ-SR) will be lower than pretreatment scores; 5) average post-treatment scores of Work, Recovery, Family and Religious Identity measured by the SIQ-SR will be higher than pretreatment scores.

Baseline data will be gathered prior to treatment at the ITH, with follow-up data gathered for one year following treatment. Most follow-up data will be gathered by telephone, since clients of the ITH program come from all over the United States and Canada. To verify participants' self-reports, data from one or more of the participants' significant others will also be gathered by telephone.

Participants will be compensated \$10 for each study visit or phone interview, up to a maximum of \$160 for all 16 visits or interviews, to be paid at quarterly intervals throughout the course of the study and in payments valued at up to \$40 per quarterly payment, equaling the form of a gift certificate to a grocery store or restaurant of their choice.

It's worth noting that Vancouver has a uniquely innovative approach to drug policy, outlined in the Four Pillars Drug Strategy. This strategy is focused on developing humane approaches to drug use through prevention, treatment, harm reduction, and law enforcement. Ibogaine-assisted therapy fits within the pillars of both harm reduction and treatment. It has the potential to provide an alternative method of rapid detoxification from substance withdrawal, particularly for those resistant to standard 12-step-based treatment options or those seeking to detoxify more rapidly from substitution-based pharmacotherapies such as methadone. Aside from providing symptomatic relief from withdrawal symptoms, ibogaine-assisted therapy can also provide psychothera-

peutic benefits when used with proper intention in a safe and supportive environment.

In 2003 and 2004, the ITH collected preliminary anecdotal data from 20 people who received therapy at the facility. Though the outcome data was promising, the ITH was forced to end this preliminary research and the offering of free therapies in fall 2004 following the loss of program funding when Canadian philanthropist Marc Emery was extradited to the United States for the sale of cannabis seeds.

In early 2005, the ITH sought funding by writing a grant proposal to a new Canadian federal fund, the Drug Strategy Community Initiatives Fund (DSCIF), in hopes of reopening the facility and continuing the research. Although the submission was intriguing to the grant review board, the scope of the project was considered to be more than what the DSCIF could support at that time. In the meantime, the protocol development for the MAPS study continued, and the ITH began working to reopen the ITH as a nonprofit business.

These were challenging times, yet MAPS considered the study's potential too great to give up. In early 2006, MAPS submitted the first version of the study protocol to the institutional review board of IRB Services in Canada. Finally, on Aug. 11, 2006, the protocol received unconditional approval from the IRB.

The ITH reopened its doors in March 2006 to continue offering ibogaine-assisted therapy in a beautiful new setting near the ocean and forest. It has made numerous improvements to its program and hired a new staff that includes a nurse, emergency medical techni-

cians, a physician, facilitators, an art therapist, a substance counselor, and bodyworkers skilled in various healing modalities.

After more than three-and-a-half years of preparation, patience, and diligence, we are excitedly under way with the implementation of this groundbreaking study! Stay tuned for updates. •

For more information about the study, see the protocol on the MAPS Web site: maps.org/ibogaine. For more information about the Iboga Therapy House: see, ibogatherapyhouse.net.

Aside from providing symptomatic relief from withdrawal symptoms, ibogaine-assisted therapy can also provide psychotherapeutic benefits when used with proper intention in a safe and supportive environment.

LSD in Prague: A Long-Term Follow-Up Study



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IN the Czech language, the city of Prague is *Praha*. Derived from *prah*, the word for “threshold,” the name fits. This legendary capital is not just a gateway between Eastern and Western Europe, but also a historic entry point into the exploration of the mind: between 1956 and 1974, some of the largest clinical use of LSD anywhere took place in Prague, involving as many as 700 psychiatric patients and volunteers in more than 6,000 sessions.

Long-term follow-up studies are crucial to establishing the safety and efficacy of psychedelic compounds. For that reason, MAPS recently provided me a \$2,000 grant to track down these Czech patients. Last fall and this spring, I found and interviewed a dozen of them - and it turned out that nearly all said they had been helped by LSD psychotherapy, more than 30 years after they experienced it.

Soon,
the gateway
of Prague
may reopen
to wider
psychedelic
research.

Some of these patients responded to classified ads MAPS placed in newspapers, and others were located by interviewing some of the approximately 40 Czech doctors who worked with LSD. The research material was first provided by Sandoz, and after 1966 produced in then-communist Czechoslovakia by a state pharmaceutical company. Unfortunately, MAPS has not (yet) found any former patients of Dr. Stanislav Grof, who introduced the Czech experience with LSD to English readers in such books as *Realms of The Human Unconscious* (1970). Still, it did find others who were transformed by the type of high-dose, mystical psychedelic therapy that Grof helped pioneer.

The most dramatic story was that of Miroslava S., a cheerful 69-year-old grandmother, and devout Catholic. She told MAPS that in 1967 she was catatonic with depression and terrified of making love with her husband, until she had three psychedelic sessions with Dr. Boris Merhaut:

The third session, the last, was in Dr. Merhaut’s apartment. Before he gave me the drug, he made me recite a prayer, many times, until I knew it by heart.

“Come sacred almighty God, fill my heart with your love, let me dissolve in my life, let not my will but your will to become.” I don’t know where the prayer came from, perhaps it was his own. But he knew exactly what he was doing. He was a very spiritual man.

Then they gave me the drug. ... [A]fter they injected it, it was very strong. I was paralyzed. I could hear everything, but I couldn’t speak. They were worried that they gave me too much. I could hear them having lunch, the knives and forks on the plates, but I couldn’t say anything, for four hours.

After a while, I started to move. For some reason, I really wanted to go to the door. So I crawled across the floor, and onto a space between the doors of the apartment, onto



The Czech LSD program was primarily conducted at a sanatorium in Sadská (a small town east of Prague) and directed by Dr. Milan Hausner (pictured center). As many as 30 psychiatrists and psychologists received training in LSD therapy at Sadská, and many of them still speak positively about its effectiveness.

the threshold. I sat there for a while, curled up like a fetus, and Dr. Merhaut understood that I felt like I was about to be born. He got a blanket and put it around me. And then I laid down flat on the floor, and ran my hands along the length of my body. I felt like I was shedding my skin, like a caterpillar becoming a butterfly. Everything bad left me. Dr. Merhaut's wife looked like an angel. I felt new, completely free, full of love for my children, my husband, the whole world. The pain in my legs was gone, my hands were no longer dead. It was as if a rope that had always been wrapped around my body had been cut and thrown away.

Generally, Czechs are among the most atheistic peoples in Europe, so it is perhaps not surprising that much of the LSD work in their country was more psychological, involving low-dose psycholytic therapy. The Czech LSD program was primarily conducted at a sanatorium in Sadská (a small town east of Prague) and directed by Dr. Milan Hausner. As many as 30 psychiatrists and psychologists received training in LSD therapy at Sadská, and many of them still speak positively about its effectiveness. "It's very good for addictive personalities," said Dr. Jan Sikora, who currently practices addiction medicine. In the early 1970s he treated

five severe alcoholics with LSD - all of whom participated only because they wanted to prove the drug was "useless" - "and they were the only patients who abstained from alcoholism for many years."

Hausner himself principally used LSD to treat neurosis and depression in more than 300 patients, in more than 3,000 sessions. In 1970 he did a follow-up study with 42 Sadská inpatients from 1967. Sixty percent reported their general health had improved, and 91 percent had at least one symptom "very improved permanently." He did not follow up with his outpatients, but MAPS was able to locate four of them. All participated in Hausner's "weekend therapy," in which pairs of patients took turns guiding each other through LSD sessions on alternating Saturdays, followed by group discussions. Their reviews of this therapy were mixed. Several said it was unpredictable (perhaps due to the guides' inexperience) and scheduled too frequently; one female patient said she experienced disturbing flashbacks for several years afterward. Nevertheless, all four reported benefits from examining the suppressed memories and feelings the drug unleashed.

"I think it's a wonderful method, because it really is like a concentrated psychoanalysis," says Pavel C., a 57-year-old TV director who says Hausner's

"I felt new, completely free, full of love for my children, my husband, the whole world. The pain in my legs was gone, my hands were no longer dead. It was as if a rope that had always been wrapped around my body had been cut and thrown away."

therapy helped him resolve sexual “confusion” he suffered in 1971. “I tried analysis later when I came to America, and I was unable to talk and I was blocked all the time. [At Sadská] they gave you that shot, and 15, 20 minutes later you were talking for the next five, six hours.”

The communist regime ceased production of LSD and stopped such therapy in 1974, during the strict “normalization” that followed the 1968 Soviet invasion.



Dr. Boris Merhaut (pictured here in 2007) facilitated many of the LSD-assisted psychotherapy sessions in communist Czechoslovakia. Between 1956 and 1974, more than 420 patients underwent at least 5,100 LSD-assisted psychotherapy sessions with LSD produced at a state-owned pharmaceutical company.

Long-term
follow-up studies
are crucial
to establishing
the safety
and efficacy of
psychedelic
compounds.

Hausner died in 2000, but his work lives on: Czech national television recently screened *Man Is Not Dying of Thirst*, a stylish 1970 documentary film about LSD therapy on which Hausner served as a consultant, and in 2002 and 2005 galleries in Prague displayed his patients’ artworks, which are stored in the archives of the Czech Academy of Sciences, along with his personal files.

Czech scientists also conducted dozens of LSD experiments during the ’60s and ’70s, and an entire book, *Personality and Creation* (1973), is devoted to the effects of the drug on a famous group of Prague artists. The Czech military was also interested in the drug. In 1967, doctors tested the abilities of officers to plan a response to a military attack under LSD – they sat around laughing instead – in case it was used as a weapon by the United States. (A film of this experiment is on YouTube.) Other experiments involving civilians were conducted at Prague’s Stresovice military hospital. The filmmaker, Jan Svankmajer, has written that he was traumatized by his experience there, but MAPS also spoke with Jirina S.,

a feminist scholar who said her experience was positive: “It invoked in me a greater respect for all people, even politicians.” Rumor has it that prominent dissidents – and an anti-drug crusader – also participated in these experiments, which MAPS is currently investigating.

Considering the rich history of LSD therapy in the Czech Republic, is it likely to be renewed? Unfortunately a majority of Czechs have told surveys that they

consider all illegal compounds to be inherently dangerous, and the Czech medical establishment has placed its faith in tranquilizers and antidepressants instead of psychodynamic treatments. However, a graduate student in Charles University’s school of social work plans to build on MAPS’ research with a formal LSD patient follow-up study to present to the Czech government. Doctors at the Prague Psychiatric Center are already conducting experiments using ketamine, and another physician there, Dr. Tomas Palenicek, is negotiating with the Czech FDA to develop a study with 2-CB. Soon, the gateway of Prague may reopen to wider psychedelic research. •

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Ketamine: Peril and Promise



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Those following science news will have noticed some recent buzz about ketamine. What's going on?

Carlos Zarate Jr., MD, of the National Institute of Mental Health (NIMH) recently injected 18 patients who had treatment-resistant depression with ketamine and found that their depression significantly improved within hours - an improvement that lasted for up to a week after a single dose.¹ This is in striking contrast to conventional antidepressants, which have to be taken every day and need weeks to months to have any therapeutic effect. The importance of these findings was articulated by the NIMH director, Thomas Insel, MD: "To my knowledge, this is the first report of any medication or other treatment that results in such a pronounced, rapid, prolonged response with a single dose." This study corroborates earlier findings by researchers in 2000 who gave ketamine to seven depressed patients and noted a remarkable and lasting remission of depression in all of them.²

Veterans began to return to the United States with unusual stories about psychedelic experiences they had experienced while on the operating table...

By coincidence, Zarate was an attending physician at the medical center where I did my training, and I remember well the dismay everyone expressed when he left for bigger challenges at NIMH, as he was renowned for his excellent clinical skills and teaching ability. Strangely enough, I don't remember his ever expressing an interest in psychedelic drugs!

Given that this is a major positive news story related to psychedelic drugs, it is perhaps worthwhile to step back and see what work has been done with this unusual psychedelic and where we might see ketamine research leading.

What Is Ketamine?

Ketamine is an arylcyclohexylamine, the same class of drugs as dextromethorphan (DXM, "robo") and phencyclidine (PCP, "angel dust") (Figure

1). It was invented in 1962 by the pharmacist Calvin Stevens and patented in 1966 by Parke-Davis for use as an anesthetic in humans and animals. It is a neurotransmitter antagonist that blocks excitatory glutamate from reaching the N-methyl-D-aspartate (NMDA) receptor. In higher doses, it also stimulates the mu and sigma opiate receptors and increases epinephrine and endorphin levels. It affects primarily the hippocampal formation (responsible for memory) and the prefrontal cortex (responsible for abstract thought), explaining its profound effects on both.

Ketamine saw initial use in army field hospitals in Vietnam - where it was considered useful because it acts quickly, allows rapid recovery, and depresses consciousness without disrupting breathing or circulation, unlike most

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anaesthetics. This means that monitoring and support by an anaesthesiologist is not necessary, and a single surgeon can in theory perform an operation unaided.³ Veterans began to return to the United States with unusual stories about psychedelic experiences they had experienced while on the operating table, however. Similar to LSD, ketamine induces vibrant hallucinations, but unlike LSD, ketamine lasts only an hour or so and induces an “out-of-body” state similar to that of a near-death experience. In 1965, professor Edward Domino coined the term “dissociative anaesthesia” to describe ketamine’s trancelike effects.⁴ Interest in the psychological effects of the new drug spread rapidly. Karl Jansen, MD, PhD, who devoted his entire career to understanding ketamine from the receptor to the social level, came to believe that ketamine had potent healing powers (see *Ketamine: Dreams and Realities*, published by MAPS). By the mid-1970s ketamine was being used in Argentina to regress clients “back to the womb,”⁵ and psychotherapeutic use continues to this day. This use is even reflected in popular culture. An *X-Files* episode in 1993 (“Demons”) featured Agent Mulder being given ketamine by a rogue doctor in order to help him recover his lost memory.

However, recreational use of ketamine also mushroomed over the same period, together with scare stories in the media. It was immediately dubbed a “date-rape” drug, just as MDMA and GHB had been in turn, despite the fact that the drug most overwhelmingly implicated in rapes is alcohol. Alarm started to grow within the psychedelic community as well, for different reasons. Although psychedelic drugs are generally considered to be nonaddictive, ketamine seemed to be the exception. The American researcher Dr. John Lilly, well versed in other psychedelics such as LSD, found his ketamine use spiralling beyond his control, and he nearly drowned once while under its influence. D.M. Turner, author of *The Essential Psychedelics Guide* and *Salvinorin - the Psychedelic Essence of Salvia Divinorum*, also became addicted and was finally found drowned in a bathtub at the age of 34, having succumbed during a ketamine trip. Marcia

Moore, who penned one of the first descriptions of the effects of ketamine in her autobiography *Journeys Into the Bright World*, vanished one night under the influence of ketamine in 1979, and her skeleton was found in a tree two years later.⁶ Ketamine slowly acquired a reputation for insidiously trapping those who really knew better. The psychedelic was added to the Drug Enforcement Administration’s “emerging drugs” list in 1995, then moved to Schedule III – the same class as buprenorphine and anabolic steroids – in 1999.

Medical Use of Ketamine

Why, given ketamine’s evident dangers, was it not put into Schedule I instead? Schedule I is reserved for drugs with “no currently accepted medical use,” and the medical uses for ketamine are plentiful. Aside from applications on the battlefield and in veterinary medicine, lower doses also appear to be helpful in managing chronic pain conditions. When pain fibers from an injury site activate, they trigger a chain reaction that changes the structure of the pain neurons themselves. These changes can sometimes provoke the neurons to fire even more, in an out-of-control feedback loop called spinal sensitization, or the “wind-up” phenomenon, that creates even more pain. Unlike most anaesthetics, ketamine’s NMDA-receptor (and thus long-term potentiation) blocking effects prevent this sensitization. At doses of 0.1 to 0.5 mg/kg/h, ketamine is useful as a local anaesthetic and as a treatment for chronic pain. It acts synergistically with opioids to further improve pain relief and is particularly useful in treatment of pain that is caused by cancer.⁷

One form of pain resulting from sensitization is called complex regional pain syndrome (CRPS), in which a seemingly minor trauma becomes more painful with time rather than less and is accompanied by changes in the skin and autonomic response in the affected limb. The pain can be severe and is often both chronic and resistant to conventional therapy. In 2002, a team in Germany led by Ralph-Thomas Kiefer, MD, kept six patients with CRPS unconscious with a continuous ketamine infusion for a week and found that four were cured and two

were relieved of their pain for one and three months respectively.⁸ Mindful that a week of intensive monitoring in the ICU is seldom a practical treatment for anything, G.E. Correll's group at Penn State Hershey Medical Center reviewed the medical records of 33 patients given low-dose (subhallucinogenic) ketamine for CRPS instead and found that three-quarters had experienced complete pain relief and 31 percent were still pain-free six months later.⁹ This was enough to prompt a prospective trial in which 40 patients with CRPS were given subhallucinogenic doses of ketamine. They reported significant pain relief that lasted for weeks in most of the patients and caused a permanent remission in three.¹⁰

There are also suggestions that ketamine might be useful in the treatment of heroin withdrawal. In one recent study, 58 opiate-dependent patients were given "ultra-rapid detox" under general anaesthesia with either ketamine or placebo saline infusion.¹¹ The ketamine group had noticeably better control of withdrawal symptoms, although there was no difference in abstinence between the two groups four months later.

More recently, the Department of Defense has become interested in developing an intranasal ketamine spray for battlefield use.¹² Presumably an injured soldier on ketamine is more able to guide a tank to safety than one sedated with morphine!

Finally, a remarkable case of rabies survival mediated by ketamine was reported two years ago in the *New England Journal of Medicine*.¹³ A 15-year-old girl did not report that she had been bitten by a bat until it was already too late. Reasoning that the virus could not multiply in nonfunctioning neurons, Willoughby and his team flatlined her on ketamine for over a week, halting the spread of the virus and giving the girl's immune system time to activate and eliminate the disease, thus saving her life. Initial enthusiasm for this method has been tempered by four subsequent attempts that have not been such resounding successes, however.¹⁴

Psychotherapeutic Use of Ketamine

During the late 1960s, Lilly conducted initial research with ketamine as an agent to induce nonordinary states of consciousness. He was the first to characterize the relationship between dosage and the nature of the ketamine experience.¹⁵ Jansen has since argued that rather than using ketamine as an adjunct to psychotherapy, in the way that MDMA is typically useful, the altered state induced by ketamine is in itself therapeutic. Its resemblance to a near-death experience can have a similar effect as an actual near-death experience. For example, it can supposedly reduce anxiety about death, increase altruism, and make people less concerned with material goals.

In 1973, the Iranian psychiatrist E. Khorramzadeh, MD, published the first report on the use of ketamine as an adjunct to psychotherapy.¹⁶ His patients reported a number of different effects. Many vividly recalled painful childhood events. "I always desired to make nasty remarks but dared not," said one. "The injection took away the discomfort in my chest," reported another. "My heavy burden of sin is gone now," "I now feel care-free, with no worries," and "As a child I always wanted to shout but they did not let me," were other responses. Ninety-one percent of the patients were still doing well six months later. A later study by the same researcher attempted to predict response to ketamine based on personality type (as measured by an Iranian version of the Eysenck Personality Inventory) and found that pleasant experiences were well-correlated with high "Extraversion" scores, whereas unpleasant trips were had by those with low scores.¹⁷ A decade later, Hanscarl Leuner, MD, one of the earliest pioneers of LSD therapy in Europe and author of the encyclopedic volume *Hallucinogens*, was using ketamine as a psychotherapeutic agent at his psycholytic treatment center at the University of Gottingen.

Later still, across the Atlantic, a British team found that by combining ketamine (to block long-term potentiation and stimulation of compulsive behavior) with an opioid blocker (to prevent loss of consciousness), patients with refractory

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anorexia nervosa completely lost their compulsive thoughts with repeated doses.¹⁸ “The speed with which a person changed from the high arousal, compulsive state to the more normal state was occasionally fast enough to resemble a change in personality,” they noted. “This was particularly so with patient 8, whose husband described her as changing back to the personality he knew when he first married her. The patient found the speed of change difficult to adapt to in the first week.” More than half of the patients showed a return to normal eating behavior that persisted long after discharge from the hospital.

Ketamine's effects on depression were first noticed by a team led by psychiatrist John Krystal at Yale, who was studying ketamine as a way of understanding schizophrenia by deliberately inducing psychosis. “For many, it was a huge, obvious effect,” said Krystal. “One of the patients said, ‘Don’t give me those old medications, I want this again’.” At the time, this was just an incidental finding, however. Because the behavioral effects of ketamine resemble those of schizophrenia and dissociative states, Krystal reasoned that ketamine administration would be an ideal way to study such states, which he then proceeded to do, in both normal controls and schizophrenics, unwittingly illustrating one of the hazards of psychedelic research. Following a blistering expose in the *Boston Globe* in 1998 alleging irresponsible Nazilike administration of psychedelics to helpless mental patients,¹⁹ some advocacy groups, such as Citizens for Responsible Care in Psychiatry and Research, called for a complete moratorium on such “challenge” studies, and two months later the NIMH responded with a shutdown of Krystal's ketamine research for “lack of scientific merit.” Although the subsequent, more sober debate among the scientific community ultimately concluded that his studies were in fact conducted ethically,²⁰ and they were permitted to continue, albeit in a more cautious fashion, the episode is a sobering reminder of the potential risks of psychedelic research to the researchers themselves, if not the subjects! Krystal's work ultimately led to Zarate's study, which could potentially lead to the world's

first rapid-acting antidepressant. Scientific merit is clearly in the eye of the beholder.

But the giant in the field of ketamine psychotherapy is surely Evgeny Krupitsky, MD, PhD, chief of the research laboratory at St. Petersburg Regional Center of Addictions and Psychopharmacology, who has been researching the treatment of alcoholism and addiction with ketamine since the 1980s and hopes to extend his research to encompass post-traumatic stress disorder in the near future.

In 1985, he developed ketamine psychedelic therapy - which was initially merely a method for increasing suggestibility and enhancing aversive treatment for alcoholism - publishing his first report on the method in 1992.²¹ He found that ketamine induced total abstinence in 66 percent of his alcoholic patients (versus 24 percent of the nonpsychedelic control group) for as long as a year. He observed improvement in personality profile, positive transformation of self-concept and emotional attitudes to various aspects of self, positive changes in life values, and improved spiritual development in the ketamine group.

What is the contribution of the psychedelic experience to this improvement? Krupitsky posited nine factors:²²

1. Stable, positive psychological changes.
2. Personality growth and self-cognition.
3. Important insights into existential problems and the meaning of life.
4. Transformation of one's “life value system.”
5. A change of view of one's self and the world around.
6. Insight into life and death.
7. A rise of creative energies.
8. Broadening of spiritual horizons.
9. Harmonization of a person's relationships with the world and with other people.

In 1991, another Soviet psychiatrist, Igor Kungurtsev MD, who had initially worked with Krupitsky and later immigrated to the United States, published a summary of his own experiences treating alcoholism with ketamine.²³ Although, like Krupitsky, he initially felt that ketamine simply made alcohol aversive in a purely behavioral way, he radically changed his approach following a series of ketamine self-administrations and instead

adopted a transpersonal model for therapy in order to better utilize the profound mystical experiences induced by ketamine. He found that successful treatment of alcoholism with ketamine was correlated with a changed spiritual outlook in the same way that 12-step programs also achieve success by changing addicts' spiritual outlook, albeit in a nonpsychedelic manner.

MAPS' Support for Ketamine Research

It is gratifying to see that NIMH is following MAPS' lead in supporting the treatment of psychiatric disorders with psychedelic drugs. MAPS has long been a supporter of Krupitsky's work, co-funding (with the Heffter Institute) his recently published study on the treatment of heroin addiction with ketamine.²⁴ Krupitsky and his team found that heroin-dependent subjects receiving three sessions of ketamine-assisted psycho-

therapy had over twice the rate of abstinence of those receiving only a single session. This contradicts the notion that psychedelic drugs somehow represent a "magic bullet" or "instant miracle cure" by showing that a single administration of a psychedelic drug is often not fully effective.

Like any powerful drug, ketamine carries with it considerable danger as well as profound potential for benefit. Unlike most of the other psychedelic drugs, society never really lost sight of the benefits of ketamine because its applications in anaesthesia were so obvious. Now the psychological benefits of ketamine at lower doses are becoming apparent also, we can hope to see a renaissance in ketamine research that will translate into increased acceptance for other research with psychedelic drugs as well. •

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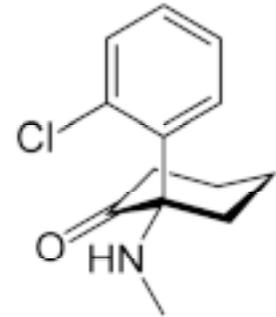


Figure 1: The structure of ketamine

Bibliography of the Brazilian **Ayahuasca** Religions



OVER the past decade, we have observed an enormous increase in the number of studies on the so-called “Brazilian ayahuasca religions.” This category refers to religious movements originating in Brazil that incorporate the use of ayahuasca in their ritual practices: Santo Daime (with its two denominations: Alto Santo and Cefluris), União do Vegetal (UDV), and Barquinha.

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Because of this increase and the difficulty of accessing research materials, we have compiled a bibliography on this topic that aims to be as exhaustive as possible, to provide a panoramic view of the current state of the literature, and to serve as an useful guide to researchers in the area. The bibliography is posted on the MAPS web site at: maps.org/ayahuasca/ayahuascabibliography.pdf

As recently as 30 years ago in Brazil, ayahuasca was an almost unknown drink, wrapped in an aura of mystery and associated with “exotic cults” of the distant Amazon rainforest. Starting in the 1970s, these religions were “discovered” by hippies, artists, intellectuals, people in search of healing, and the merely curious. In the early 1980s they found adherents among segments of the middle class in Brazil’s large urban centers. It was not long before this unpleasant tasting vine caught the attention of intellectuals, who soon baptized the plant as a “sacrament” and categorized these folk practices as “religious.” In a similar fashion, these groups were rapidly sensationalized by the mass media. Starting in the 1990s, Santo Daime and the UDV began to cross the ocean in the direction of the Old World. Today, Santo Daime has centers in at least 21 countries on four continents while the UDV has official affiliates in the United States and Spain, and a small, incipient group in Italy. Thus, the Brazilian ayahuasca religions have competed for space with other religions and have traversed various symbolic, economic, and

cultural boundaries, thereby contributing to ayahuasca’s status as a truly transnational “pan-entheogen.”

The pioneering work on the Brazilian ayahuasca religions was done in Brazil in the 1980s (Monteiro da Silva 1983; Alverga 1984; Fernandes 1986; Henman 1986; Couto 1989; Fernandes 1989). The 1990s also saw the production of texts that became important references (Groisman 1991; Alverga 1992; Dias Jr. 1992; MacRae 1992; Goulart 1996; Araújo 1997; Groisman 1999). Since then, there has been a steady expansion of studies in this area. According to our survey, 36 such academic works currently exist in Brazil. This includes 26 masters’ theses and six doctoral dissertations on Santo Daime, Barquinha, the UDV and their descendants.

The topic of the ayahuasca religions has also gained academic attention outside of Brazil. We have found 20 masters’ theses and doctoral dissertations on Santo Daime, the UDV and Barquinha, eight of which are in English, six in German, three in Italian, two in French and one in Spanish. In Brazil, as well as in other countries, studies of these religions tend to fall within the realm of anthropology. However, the range of publications currently spans 11 different disciplines, especially psychology, psychotherapy, religious studies, and medicine.

Outside of Brazil, a large portion of the publications on the ayahuasca religions comes from the United States. Many of these publications differ from their

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counterparts from other countries because of their pharmacological emphasis. Therefore, despite the existence of many works written in English, there is still a major gap in that language, especially in the area of anthropology, where not a single good book has been published on the subject. The exceptions, like the works of Groisman (2000) and MacRae (2006), do not exist in book form. We also note that almost all the literature in English fails to recognize the corresponding Portuguese-language literature. This most likely is a result of foreign researchers' lack of proficiency in Portuguese. According to our survey, the European country that produces the most on the topic is Germany, with 23 publications and an emerging group of researchers at the University of Heidelberg. This fact is interesting considering that in Germany Santo Daime holds an unfavorable legal status and is fairly disorganized, especially in comparison to its branches in Spain and Holland. In Holland, Cefluris has a significant presence and has overcome challenging legal processes in defense of its religious freedoms. Holland has an impressive production of 16 publications, despite the fact that there are no theses written in Dutch on the topic. In Spain there are about 25 publications, a large part of these being translations of texts by Brazilian researchers. Besides the countries already mentioned, there are also publications in Italian, Japanese, Danish, and Norwegian.

The large increase in studies on Santo Daime, the UDV, and Barquinha is related to the national and international expansion of these groups. At first, the Brazilian ayahuasca religions were studied mainly in terms of their historical, cultural, and symbolic aspects. With the recent expansion of these groups and the insertion of ayahuasca into a "market logic" of religious goods, the theme of the religious use of ayahuasca has become ever more closely linked to contemporary debates about "drugs." The national and international negotiations of the legality of consuming this drink and the legal status of these religious groups have drawn the attention of civil society, the government, and the media. This phenomenon has amplified the discussion of this topic and given

momentum to new academic studies. These studies have played a fundamental role in the process of social legitimization for these groups.

The studies of the ayahuasca religions have attempted to reflect the proliferating modalities of ayahuasca consumption, thus requiring the studies to increase in number and diversify their approaches. The survey that we present here shows how this field of study is shaping up in Brazil and gives an indication of the field's international potential. The current state of the literature and the present boom in studies demonstrate the contemporary relevance of this discussion and the urgency for publications in English on this topic. •

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With...
the insertion of
ayahuasca into
a "market logic"
of religious goods...
ayahuasca has become
ever more closely
linked to
contemporary debates
about "drugs."

Heffter Research Institute

Spring 2007 Update



WE ARE CONTINUING to make steady progress toward our goal of “medical psilocybin” in our multipronged approach.

At the Heffter Research Center, Zürich, our research team has developed a positron-emitting tracer molecule to image brain serotonin receptors using PET scanning technology. Since last July, they have been using this imaging molecule while administering different doses of psilocybin, and major effects are being observed. This study will provide information on the potential brain receptor changes induced by psilocybin. The effects of psilocybin on subjective mystical experience and cognitive tasks are also correlated to the PET data. We believe this work will be the first published study correlating visual illusions/hallucinations with neuroreceptor mechanisms.

This essential work will provide a foundation for the next planned study: to make similar measurements using psilocybin in patients with eating and obsessive-compulsive disorders. We then can observe how the treatment may have restored or altered the receptor maps obtained from the PET scans and how that correlates with improvements in their symptoms.

Our Zürich research center also has nearly completed a study into the experiential and neurophysiological effects of meditation. Sophisticated 3-D electroencephalogram (EEG) recordings have been made with both novice and experienced meditators under various conditions designed to tease out how Buddhist meditation practices affect the brain, including the experience of self, cognition, and visual perception. Eventually, the data will be compared to similar measurements of the effects of psilocybin, so that a comparison can be made between the effects on the brain of meditation and psilocybin.

The results of Dr. Francisco Moreno’s study at the University of Arizona, which was partly supported by MAPS, have now appeared in print in the *Journal of Clinical Psychiatry*, Vol 67, pp 1735-1740, 2006, “Safety, tolerability, and efficacy of psilocybin in 9 patients with obsessive-compulsive disorder.” Francisco tells us that the results were sufficiently positive that he is now seeking additional funding for an expanded study through a grant proposal to the National Institutes of Health. Other than the Russian research using ketamine for addiction treatment, which was also supported by Heffter and MAPS, the Arizona project was the first psychedelic treatment study in the world in more than 30 years.

Eight subjects have now participated in the Harbor-UCLA cancer study directed by Heffter board member Charles Grob, MD. Each subject received one psilocybin session and one placebo session. Grob says they “haven’t crunched the data yet, but our impression has been from staying in touch with our subjects that they all seem

to have benefited from the experience, particularly regarding mood regulation, anxiety control, and quality of life." Eight subjects have completed their psilocybin sessions, and Grob and his team are actively seeking four additional subjects. Inclusion and exclusion criteria and contact information can be obtained at www.canceranxietystudy.org.

In addition to the planned psilocybin treatment study in Zürich, we are busy raising funds to support a proposed study led by Roland Griffiths, MD, using psilocybin to treat 44 cancer patients at Johns Hopkins School of Medicine. As many of you know, Griffiths recently published a study showing that when psilocybin is given to normal subjects, a high percentage of them experience mystical states with lasting positive changes in their lives. The new study will include early stage cancer patients, which will accelerate subject recruitment. Also, testing psilocy-

bin moved into legitimate medical practice. It should also be of sufficient statistical power to apply for grants from the NIH to fund expanded efficacy studies of psilocybin treatment.

Other news is that Peter Gasser, MD, and MAPS recently submitted their LSD treatment protocol to the Heffter Institute for scientific review. Our scientist-advisors provided technical comments to help the study prepare for the intense scientific scrutiny it is sure to receive due to the controversy over the beneficial use of LSD.

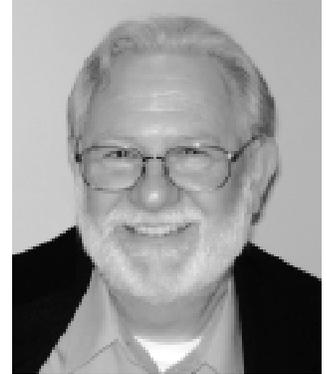
We continue to support a mix of both clinical and basic science applications to promote interest in psychedelic research and medicine among both the public and the scientific and medical establishments. Our approach involves not only the development of practical medical treatments, but also understanding the effects of psychedelics on human consciousness.

Our approach involves not only
the development of practical medical treatments,
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bin for anxiety and depression treatment in nonterminal cancer patients could later be expanded to patient populations battling other types of nonterminal illnesses.

We believe that the statistical sample from these psilocybin treatment studies will be large enough to provide some proof of efficacy of psilocybin for emotional problems. It is too soon to know how many subjects with a specific problem we will need before the Food and Drug Administration actually approves psilocybin for medical use, but the results of these studies should be sufficient to allow us to initiate the dialogue with FDA that will ultimately result in psilocybin being

Although our immediate goal is developing new treatments for unmet medical needs, we believe the perennial questions of who we are and why we are here are also highly worthy of support. MAPS members can consult our Web site heffter.org for the extensive list of research publications supported by the Heffter Research Institute. •



Dave Nichols, PhD

drdave@pharmacy.purdue.edu

The Beckley Foundation: Working at the Frontiers of Research



www.beckleyfoundation.org

SINCE NITROUS OXIDE WAS FIRST DISCOVERED by the Englishman Joseph Priestley in 1773 the United Kingdom has had a knack for producing explorers at the frontiers of consciousness. It comes as no surprise then that Aldous Huxley and Humphrey Osmond, who pitted their poetic wits against each other to coin the term 'psychedelic,' likewise hailed from England. In keeping with this tradition the U.K. is also home to Amanda Feilding, whose brainchild is the Beckley Foundation, which she directs from its headquarters at Beckley Park in Oxford. The foundation's two main aims reflect its founder's interests, namely to investigate consciousness and its altered states and simultaneously to tackle the growing dissatisfaction with the inadequacies of global drug policies.

As a charitable trust the Beckley Foundation promotes the scientific investigation of the physiological and neural correlates underlying consciousness and its altered states. Feilding feels that since we live in a scientific age it is essential to have a scientific explanation of what underpins changing states of awareness; only then can we better integrate the use of altered states responsibly into our social fabric. The study of consciousness is still in its infancy – however the 21st century is being heralded as the century of neuroscience. LSD and other psychedelics provide invaluable tools with which to study the brain and the mind, and it has long been Feilding's wish to overcome the invisible barriers formed by the current international drug policies, which obstruct the use of such potentially valuable molecules in the advancement of neuroscience.

The study of psychedelics forms only a part of the foundation's wider remit of promoting research into different states of awareness, whether brought about by meditation or breath control; chanting; or the ingestion of psychoactive substances. The research carefully measures changes in subjective experience and also utilizes state-of-the-art monitoring technology, from neuroimaging with EEG and MEG, to measuring changes in cerebral fluid dynamics and neurotransmitter activity with Transcranial Doppler and MRI.

After years of hard work the efforts of the foundation are beginning to reap rewards on both fronts - consciousness research and drug policy. Most significantly, the first study of LSD with human subjects since prohibition blocked all research in the 1970s has recently been granted full ethical approval and now has the green light to proceed. This resumption of LSD research after such a long hiatus is an enormous landmark in both psychedelic neuroscience and the foundation's achievements, opening the doors for much fruitful research in the future.

Other research programs being undertaken by the foundation include a cannabis study to investigate changes in the cerebral blood supply and in neurotransmitter and electrical activity that underlie the "high" experienced when smoking cannabis. In a different vein, the neural correlates of advanced meditative states are also being investigated. A pilot study that has already been conducted was the first to use MEG to study the effects of meditation on brain function. The study found a marked increase in synchronous power within the gamma frequency range, particularly in the right cerebellum, during the same period as the meditator had the experience of "oneness" and light. The gamma increase in the cerebellum was of a magnitude greater than had ever been reported in any other MEG study. Several other research projects are also in development, including work with the renowned Russian scientist, Academician Yuri E. Moskalenko, a pioneer in the investigation of cerebral blood and cerebrospinal fluid dynamics. Among other things, this program is investigating the diminution

of the blood supply to the brain and loss of cerebrospinal fluid mobility, which occurs in the process of ageing, and methods to counteract it.

The Beckley Foundation has a highly distinguished board of scientific advisors. This includes Professor-Doctor Albert Hofmann, Professors Colin Blakemore (chief executive of the Medical Research Council), David Nutt (professor of psychopharmacology at the University of Bristol), and David Nichols (professor of medicinal chemistry and pharmacology at Purdue University), among other notable scientists.

Aside from its consciousness research the foundation has also had recent successes with the other arm of its operations in helping to guide drug policy toward a more rational, evidenced-based approach. One such outcome was the recent publication of the "scale of harm" article in the *Lancet* (beckleyfoundation.org/bib/doc/bf/2007_David_211305_1.pdf). The groundbreaking article ranks 20 commonly used psychoactive drugs, both illegal and legal, along a scale of relative harms, based upon ratings by an array of experts. Out of these, alcohol was ranked the fifth most dangerous, tobacco ninth, cannabis 11th, LSD 14th, and ecstasy 18th. The report also highlights the surprising statistic that alcohol and tobacco together are responsible for 90 percent of all drug-related deaths in the U.K.

One catalyst for this rational, harm-based approach to classification began with discussions at Beckley Park between Feilding and Blakemore, who co-authored the *Lancet* paper with Nutt. Blakemore gave his initial presentation of the new scale of harm at a conference organised by the Beckley Foundation in collaboration with the U.K. Cabinet Office Strategy Unit in July 2003. The paper was updated and re-presented at the Beckley Foundation seminar: *Global Drug Policy – Future Directions*, which was held in 2004 at the House of Lords, Westminster Palace. It has since had a considerable influence in guiding a new approach to the vast ongoing problem of what is the best way to control and regulate society's growing appetite for psychoactive substances. This led the way for a U.K. Parliamentary Select Committee to conclude in 2006 that, "the



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current classification system is not fit for purpose and should be replaced with a more scientifically-based scale of harm” (beckleyfoundation.org/bib/doc/bf/2006_House_211226_1.pdf). Other European Union governments are following this lead.

For the last six years the Beckley Foundation has brought together top international experts from the fields of neuroscience, health, education, law enforcement, and policy-making to analyse and explore the scientific, social, health, and political implications of the latest evidence, in an atmosphere congenial to free communication. These seminars are attended by U.K. government ministers, top representatives of the EU and the United Nations, and individuals such as the chairman of the Russian Federation Drugs Commission and the chairman of the European Union Chiefs of Police. Such forums have considerably opened up the discussion on drug policy and have enabled the Beckley Foundation to catalyze the adoption of a more realistic approach to drug use and classification by the British government.

As an extension of the Beckley Foundation’s aim to help governments rationally evaluate drug policy, it has also founded two independent bodies: the International Society for the Study of Drug Policy (issdp.org), which creates a forum for influential academics from around the world to collaborate and evaluate the effectiveness of different drug policies, and the International Drug Policy Consortium (idpc.info), which provides a platform for nongovernmental organiza-

tions and professional networks to assist policy-makers in making better-informed decisions. Through this network the Beckley is associated with more than 25 national governments as well as international bodies such as the EU and the UN.

Further to its unique role in hosting top-level policy seminars and forums, the Beckley Foundation Drug Policy Programme also recognizes the need for credible reference materials. In response to this, it has so far produced more than 20 much-cited academic reports and briefing papers, which are disseminated to academics and policy-makers around the world (beckleyfoundation.org/policy/reports.html).

The real strength of Beckley’s approach is that it works with the establishment in bringing together the highest calibre of scientists, policy analysts, policy-makers, and other academics to combine their expertise both in research into a better understanding of consciousness and its altered states, and on careful analysis of how society might more successfully regulate and control those substances that alter consciousness - substances for which society appears to have an unappeasable appetite. The foundation aims to continue working toward these important goals and hopes that others will come to share in its future successes in extending the frontiers of research and policy. •

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REMEMBERING DUNCAN BLEWETT

ON February 24, psychedelic research pioneer Duncan Blewett passed away at Nanaimo Hospital, British Columbia, after two years of loving post-stroke care at his home on Gabriola Island. Dr. Blewett was an athlete, husband, father, PHD from University of London (UK), WWII veteran, founding chairman of University of Saskatchewan's department of Psychology, and one of the earliest western scientists to study the effects and therapeutic applications of psychedelics. Blewett published numerous books, such as *Handbook for the Use of Lysergic Acid Diethylamide-25: Individual and Group Procedures and The Frontiers of Being*.

Handbook for the Use of LSD-25... is available in electronic format in the Free Books section of the MAPS website: maps.org/freebooks

Blewett and a team of forward-thinking research psychologists were recruited to work at the U. of Saskatchewan's (later known as the U. of Regina's) Weyburn Hospital by Dr. Humphrey Osmond in the early 1950s, where they conducted a wide variety of patient studies and



observations. Osmond, who passed away in 2004, is known for introducing Aldous Huxley to psychedelics (as described in *The Doors of Perception*) and for coining the term "psychedelic," in addition to his myriad research.

According to the *Gabriola Sounder*, Duncan "lived his life fabulously in the moment to the very end: the power of his joy will resonate on for many lifetimes... The afterlife just got a little lighter."

Following Duncan's death, longtime friend and associate, University of West Georgia Professor of Psychology Larry Schor wrote:

"Duncan was a trickster, a magician, an alchemist. In his company and under his spell, you could almost witness reality and imagination dancing together on the head of a pin. With Duncan by your side, you were always capable of more. More love. More compassion. More courage.

One of his favorite quotes was of the Chinese philosopher Mencius, who said, 'The ways are but two, love and want of love.' For Duncan, the only path was love."

New Face in the MAPS Office: **Troy Dayton**

MAPS' new (and first-ever) director of development, Troy Dayton, began work at MAPS this past January. With MAPS' increasing success in obtaining approval for psychedelic research, the amount of money needed to fund that research has increased dramatically.

Troy's primary role is to help raise that money. He will be meeting with MAPS' top few hundred donors to communicate MAPS' plans and gather feedback. He is also reaching out to new supporters who can consider making significant charitable gifts to this historic effort. In addition, he is helping MAPS increase revenue through product sales and membership growth. Troy is splitting his time 50-50 with our friends at the Marijuana Policy Project (MPP), also in a development capacity.

Troy is a longtime friend of MAPS and drug policy reform. He spent the last three years as the associate



director of the Interfaith Drug Policy Initiative (IDPI), mobilizing religious leaders behind ending the War on Drugs. He helped found and currently serves on the board of Students for Sensible Drug Policy (SSDP), which has more than 100 chapters. He was the promotional director, fund-raiser, and a script consultant for Flex Your Rights' film, *BUSTED: The Citizen's Guide to Surviving Police Encounters*, now seen by more than 1 million

people. Troy also helped start Renewable Choice Energy, which recently made national headlines for making the largest sale of wind power in U.S. history. CNN recently profiled Troy in a special on the science of happiness where he explained that his occasional use of MDMA helps maximize his mental health.

We are excited to have Troy's passion and expertise at MAPS. I hope you get the chance to visit with him soon.

Educating the Multistate Mind – A Review of ***Psychedelic Horizons***

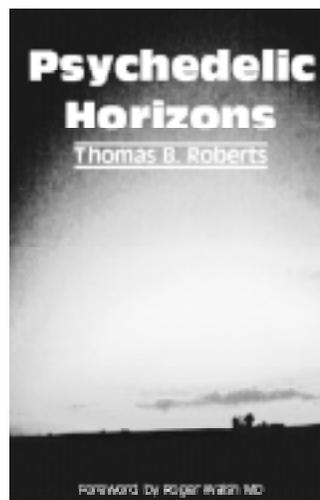
By Thomas B. Roberts, PhD
Foreword by Roger Walsh



David Jay Brown
dajabr@well.com

...our educational system ...has largely ignored our species' ability to learn and solve problems in any state of consciousness other than our normal, unaltered waking state.

During the 1960s Timothy Leary predicted that college students would soon be routinely taking classes in psychedelics and that "Psychedelics 101" would become an essential part of everyone's university education (instead of just being a clandestine extracurricular activity for particularly precocious students). Although Leary may have been a bit overly optimistic about the time-scale on which these educational upgrades would be implemented, psychedelics have become a legitimate subject for college students to study. In fact, educational psychologist Thomas Roberts, PhD, has been teaching a class on the psychedelic mindview at Northern Illinois University since 1975. His newly published book, *Psychedelic Horizons*, summarizes the material that he has been teaching in his popular class – as well as what he has learned from teaching this course for more than 30 years – and explores the possible role of psychedelic mind states in future scientific research, creative problem-solving, and education.



Published by Imprint Academic, 2006
Softcover, 255 pages, \$34.90

The central thesis of Roberts' fascinating book revolves around the notion that our educational system, as well as psychology in general, has largely ignored our species' ability to learn and solve problems in any state of consciousness other than our normal, unaltered waking state. Roberts suspects that many types of intelligence and untapped mental abilities become accessible in different states of consciousness - or through the use of different "mindbody psychotechnologies," such as psychedelics - and that a well-educated person should have the ability to choose which type of mindbody state would be most appropriate for solving a particular type of problem. Roberts offers some compelling examples of how psychedelic mind states have played essential roles in important scientific discoveries in genetics and critical developments in computer science.

Roberts offers a paradigm-shifting view of our educational system and suggests a vast array of mind-expanding research possibilities. The ideas touched upon in this book could serve as the seeds for a vast array of new research projects, dissertation topics, books, and late-night philosophical discussions. Roberts certainly knows how to ask lots of good questions. *Psychedelic Horizons* brings together a wonderful collection of fascinating ideas that can't be found easily elsewhere. The book is a bit unusual in that the writing style seems to shift between casual reflections, informal speculation, and a more academic development of ideas, which appears to be suggestive of the psychedelic mind state itself, and makes the book a great deal of fun to read.

Roberts opens the book with a delightfully insightful chapter on Stanislav Grof's interpretation of the classic "children's" story *Snow White and the Seven Dwarfs*, pointing out the relationship between the psychedelic experience and this cryptic archetypal tale of self-

discovery. Throughout the book Roberts touches on the notion of utilizing the spiritual aspects of the psychedelic experience as an avenue toward developing a discipline of experimental theology, that, he says, will be explored more in a future book. One of the most interesting ideas in the book, I thought, was Roberts' discussion about how positive emotions are known to enhance the strength of the immune system, and how this might help us to understand the spontaneous remissions and unexplained healings that are sometimes reported after powerful psychedelic, mystical, or shamanic experiences that are accompanied by strong positive emotions.

I really enjoyed *Psychedelic Horizons*. The book contains a bounty of wonderfully creative ideas that, I think, deserve serious consideration, and are an important contribution to our understanding of how psychedelic mind states might lead to practical applications in our future. I highly recommend this book to anyone who is interested in improving our educational system or exploring the new and exciting research possibilities that psychedelics and other mindbody states have to offer. •

David Jay Brown is the author of four bestselling volumes of interviews with leading-edge thinkers, Mavericks of the Mind, Voices from the Edge, Conversations on the Edge of the Apocalypse, and Mavericks of Medicine. He holds a master's degree in psychobiology from New York University and was responsible for the California-based research in two of British biologist Rupert Sheldrake's books on unexplained phenomena in science: Dogs That Know When Their Owners Are Coming Home and The Sense of Being Stared At. David is also the author of two science fiction novels, Brainchild and Virus. To find out more about David's work, visit his award-winning Web site: mavericksofthemind.com.

...positive emotions are known to enhance the strength of the immune system, and... this might help us to understand the spontaneous remissions and unexplained healings that are sometimes reported after powerful psychedelic, mystical, or shamanic experiences...

The Women's Visionary Congress Gathers at Wilbur Hot Springs

By Annie Harrison, on behalf of
The Women's Entheogen Fund

WOMEN have a long history of gathering together to discuss and motivate social and political reform. The Seneca Falls Convention of 1848 was the first women's rights convention held in the United States. Its delegates signed a Declaration of Rights and Sentiments asserting the then-radical notion that men and women are created equal and that women should have the right to vote.



The Visionary Congress
will...continue
the long tradition
of women
exercising their rights
to shape effective
social policies.

This summer, another gathering of women will take place in northern California to consider pressing questions of public policy and social justice. The Women's Visionary Congress will convene at Wilbur Hot Springs on the weekend of July 27-29 to discuss the historical and contemporary use of entheogens. This Congress will offer a rare opportunity for women doing critical work in the entheogenic, medical cannabis, and harm reduction communities to meet and exchange ideas. The event will feature presentations by 25 mostly women healers, activists, researchers, and artists. At its conclusion, the V Congress will issue its own Declaration of Rights and Sentiments.

More details about the V Congress can be found at visionarycongress.org.

Like the Seneca Falls Convention of 1848, the V Congress is open to both men and women. Co-sponsored by the Sibyl Society and MAPS, the V Congress is a benefit for the Women's Entheogen Fund (WEF), which was created in 2002 to support the work of women who spend a significant portion of their professional lives researching psychoactive plants and chemicals. The WEF was founded by a woman philanthropist, and MAPS is the WEF's nonprofit sponsor.

The V Congress is intended to continue the pivotal role of women in the prohibition debate. When women

organized to secure their political rights in the late 19th century, their top concern was the question of prohibition. The Woman's Christian Temperance Union (WCTU) was organized in 1874 by women seeking to address the violence and family problems caused by alcohol.

The WCTU successfully lobbied for passage of alcohol prohibition in 1919. Ten years later, it became clear to many women that prohibition was causing widespread crime, corruption, health problems, and other harms that affected their families. The Women's Organization for National Prohibition Reform (WONPR) was founded in 1929 and had an estimated membership of 1.5 million by 1931. The WONPR organized a pivotal bloc of women voters and activists who campaigned successfully to overturn prohibition.

Seventy-four years later, women are now concerned about the violence, corruption, racially biased enforcement, and broken homes caused by the War on Drugs. Many women see that the consequences of drug prohibition mirror and even exceed the harms caused by alcohol prohibition. The Women's Visionary Congress will encourage discussion of these issues and continue the long tradition of women exercising their rights to shape effective social policies. •



Rick Doblin, MAPS founder and President, earned his Ph.D. in Public Policy from the Kennedy School of Government at Harvard University. Doblin was also in Stan and Christina Grof's first training group to receive certification as a Holotropic Breathwork practitioner.



Valerie Mojeiko, Director of Operations and Clinical Research Associate, coordinates projects at MAPS' Love Creek office and facilitates psychedelic research around the globe. She is currently a student at the California Institute of Integral Studies.



Josh Sonstroem, Technology Specialist and Events Coordinator, earned his B.A. in Philosophy and Religion from New College of Florida and is a chef, musician, poet, technologist, and masseuse. He immensely enjoys the depths of existential experience.



Jag Davies, Director of Communications, has been working at MAPS since 2003, where he coordinates outreach projects, research advocacy, and educational materials, including the *MAPS Bulletin*, monthly email news, and website content.



Sarah Hufford, Membership and Sales Manager, joined the MAPS staff in the Fall of 2005, after receiving her bachelor's degree in psychology from New College of Florida. She values psychedelics and marijuana as powerful medicines, and hopes to help integrate their safe and conscientious use into our society.



Troy Dayton has worked in the drug policy reform movement for over 12 years. He is committed to removing coercion from society and views the Drug War as the most insidious example of government force. Troy's mission is to help people who agree with drug policy reform find their individual capacity to make a difference.

MAPS: Who We Are

MAPS IS A MEMBERSHIP-BASED ORGANIZATION working to assist researchers worldwide to design, fund, conduct, obtain governmental approval for, and report on psychedelic research in humans. Founded in 1986, MAPS is an IRS approved 501 (c)(3) non-profit corporation funded by tax-deductible donations from members.

"Most of the things worth doing in the world
had been declared impossible

before they were done."

— Louis D. Brandeis

If you can even faintly imagine a cultural reintegration of the use of psychedelics and the states of mind they engender, please join MAPS in supporting the expansion of scientific knowledge in this area. Progress is possible with the support of those who care enough to take individual and collective action.

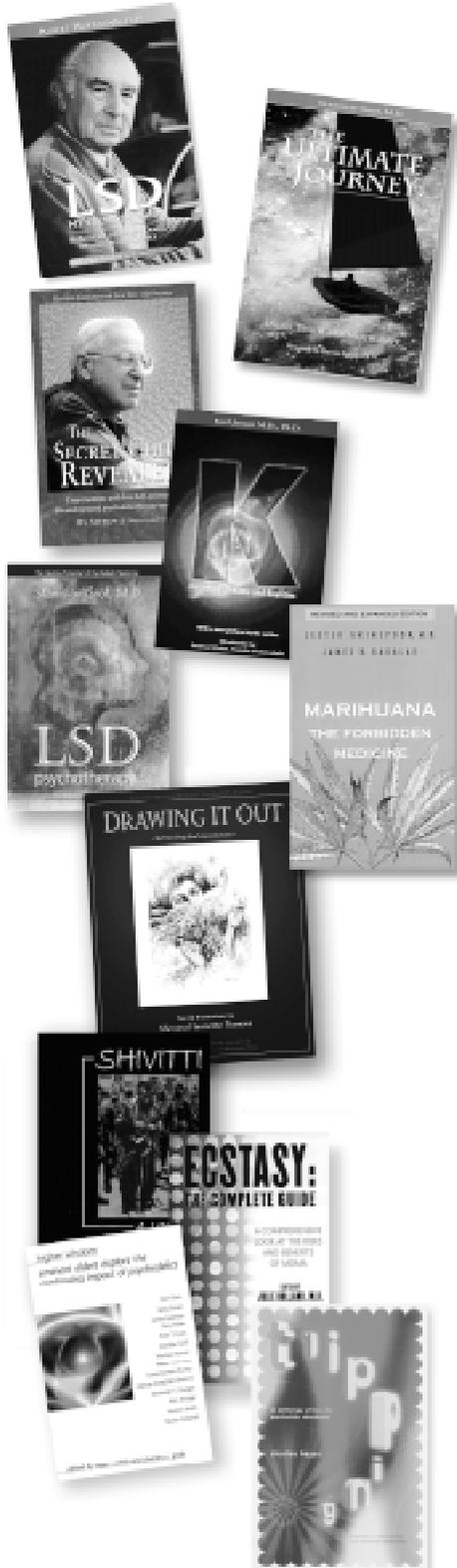
THE MAPS BULLETIN

Each *Bulletin* reports on MAPS research in progress. In addition to reporting on research both in the United States and abroad, the Bulletin may include feature articles, reports on conferences, book reviews, Heffter Research Institute updates, and the Hofmann Report. Issues raised in letters, calls, and e-mail from MAPS members may also be addressed, as may political developments that affect psychedelic research and use.



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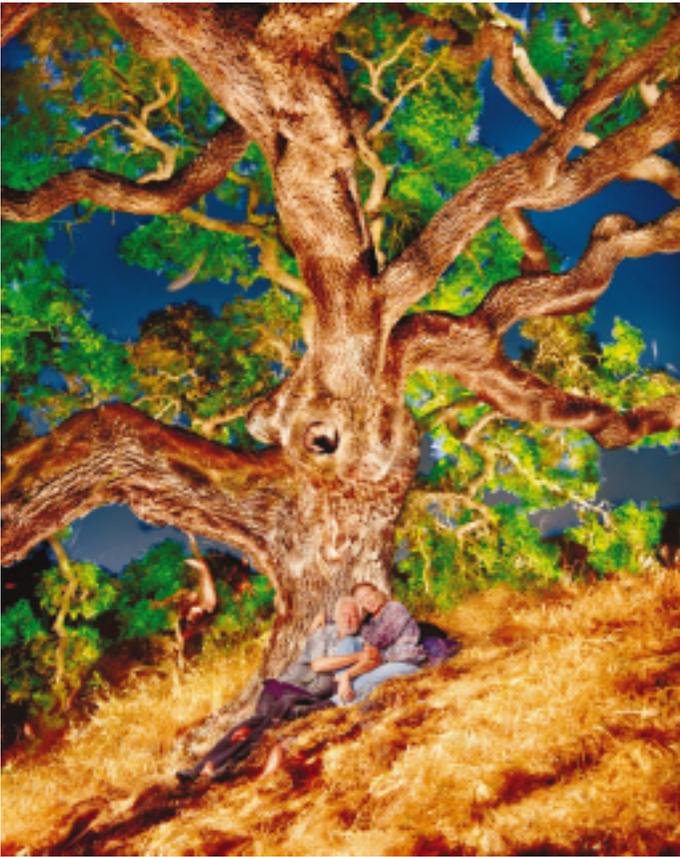
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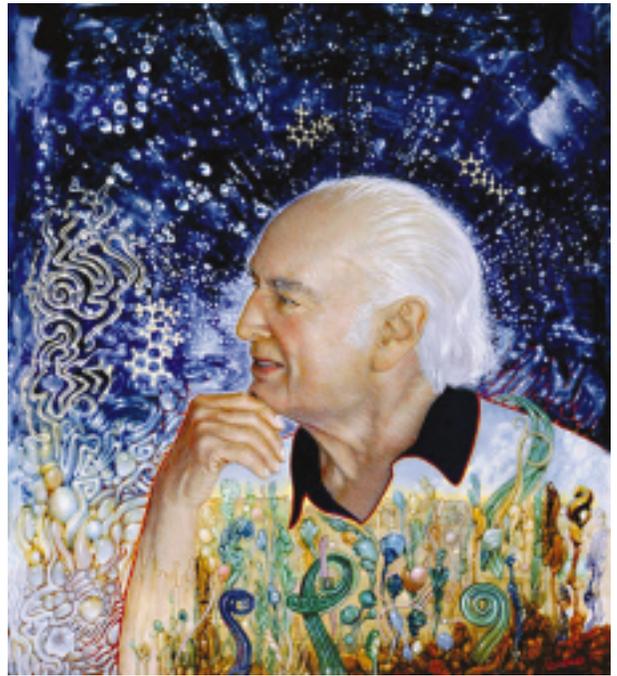
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Ann & Sasha Shulgin Portrait by Dean Chamberlain, 11x14" Archival Pigment Print



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Laura Huxley Portrait by Dean Chamberlain, 11x14" Archival Pigment Print



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Photo ©Brendan Hoffman

At a press conference at DEA Headquarters on May 23, 2007, MAPS President Rick Doblin, PhD (center), explains the wide reaching implications of Judge Bittner's historic decision (see below). Joining Rick in this photo are (from left to right) Denis Petro, M.D., medical marijuana patient Angel Raich and Prof. Lyle Craker, PhD.

I CONCLUDE that the Respondent's (Prof. Lyle Craker's) application would not be inconsistent with the Single Convention, that there would be minimal risk of diversion of marijuana resulting from Respondent's registration, that there is currently an inadequate supply of marijuana available for research purposes, that competition in the provision of marijuana for such purposes is inadequate, and that Respondent has complied with applicable laws and has never been convicted of any violation of any law pertaining to controlled substances. I therefore find that Respondent's registration to cultivate marijuana would be in the public interest... I recommend that Respondent's application be granted."

Mary Ellen Bittner, DEA Administrative Law Judge
From the "Opinion and Recommended Ruling,
Findings of Fact, Conclusions of Law, and
Decision of the Administrative Law Judge"
February 12, 2007