MAKING HISTORY IN SLOW MOTION; that describes MAPS these days. Most MAPS projects take years to develop, but eventually, some of them cross a threshold and become approved. On February 7, 2000, the Spanish Ministry of Health officially approved Jose Carlos Bouso's MAPS-supported study of the use of MDMA in the treatment of women suffering from post-traumatic stress disorder (PTSD) as a result of sexual assault (p. 2). This experiment will be the first controlled, scientific study of the safety and efficacy of MDMA in a patient population ever conducted. MAPS and Bouso have worked together since 1997 to obtain approval for this project. MAPS has pledged $54,000 for it, half of which must still be raised. The approval of this protocol has transformed

Letter from Rick Doblin, MAPS President

the goal of developing MDMA into a prescription medicine from a tantalizing mirage into a real possibility, a hard-won and profoundly satisfying transition. ■ The three year period that MAPS and Jose Carlos Bouso have worked together to obtain approval for his study is short, comparatively. MAPS' effort to initiate MDMA psychotherapy research began fourteen years ago when MAPS was founded in 1986. We have worked since 1991 with Dr. Charles Grob, Harbor-UCLA, in the effort to obtain US permission to study the use of MDMA-assisted psychotherapy in the psychotherapeutic treatment of cancer patients. Protocol development is currently in process for Dr. Grob's project, as well as for the MDMA/PTSD project in Israel that MAPS has been working to start since early 1998, in association with Dr. Moshe Kotler and Dr. Adam Darnell, Ben-Gurion University of the Negev. MAPS is now developing a Clinical Plan that outlines the sequence of studies that will be needed to evaluate whether MDMA can be proven safe and beneficial for one clinical indication. MAPS is preparing to embark on a major fund-raising effort since this plan will cost $2 million to implement. As always, we will move slowly in small steps, as funding and permission allow. ■ From an historical perspective, MAPS' effort to seek permission from the Drug Enforcement Administration (DEA) to establish a medical marijuana production facility will, if successful, become the first non-governmental source of marijuana for legal research since marijuana was removed from the US Formulary in 1941. Needless to say, it may take a few years to obtain permission for the facility. Plans are for it to be managed under contract from MAPS by the Department of Plant and Soil Sciences, University of Massachusetts, Amherst (p. 5). ■ In mid-2000, Dr. Donald Abrams, UC San Francisco, will complete his NIDA-funded research into the effects of the use of marijuana in AIDS patients. MAPS and Dr. Abrams worked together for six years to start this project, the first FDA-approved study of marijuana in a patient population since the early 1980s (see www.maps.org/mmj/). ■ These milestones are simply punctuation marks in longer-term efforts that span years and careers, decades and lifetimes. As a result of the continued partnership between MAPS' staff, members, pioneering scientists, courageous educators, and responsible regulators, there are tentative but vital signs that scientific exploration with psychedelics and marijuana will be permitted to flower. Through this research, we will learn more of the nature and possibilities of the human mind, body and spirit. In 2000, physicists around the world are exploring the inner workings of matter with ever more expensive and effective tools. Astronomers are searching the outer limits of space with billion dollar orbiting space telescopes. Join with us as we struggle to support psychedelic and marijuana research in order to make our small but unique contribution to the understanding of the mysteries at the center of us all. ■ Rick Doblin, MAPS President
MDMA Research News

**MDMA/PTSD therapy study approved in Spain**

SPAIN HAS JOINED SWITZERLAND AND GERMANY as a European country where studies with psychedelics are actively developed by a small group of researchers. On December 20, 1999, Jose Carlos Bousso, Dr. Pedro Sopelana and Dr. Maria Angeles Corral met with the Spanish Ministry of Health to discuss their MDMA/Post Traumatic Stress Disorder (PTSD) protocol. The Ministry requested several changes, most notably lower doses (high dose is now 150 mg, not 175 mg) and the elimination of the use of a booster dose several hours after the initial dose. A revised protocol for the initial dose-finding study was submitted to the Ministry on December 27, 1999. The Ministry approved the study February 7, 2000. This will be the first controlled study of the therapeutic use of MDMA ever conducted. It is a dose-finding study that will hopefully lead to a larger trial.

The subject group will be women survivors of sexual assault. The authorized experimental design's outline is as following:

- **Group 1:** 50 mg of MDMA (3 subjects), placebo (1 subject)
- **Group 2:** 75 mg of MDMA (5 subjects), placebo (2 subjects)
- **Group 3:** 100 mg of MDMA (5 subjects), placebo (2 subjects)
- **Group 4:** 125 mg of MDMA (5 subjects), placebo (2 subjects)
- **Group 5:** 150 mg of MDMA (3 subjects), placebo (1 subject)

MAPS has pledged $54,000 over two years for the investigators to complete this study. Half of this sum has been raised; we are looking for additional support for this effort. Donors will be contributing to the first controlled study of the therapeutic use of MDMA ever conducted. See MAPS 9(3) 1999, maps.org/news-letters/v09n3/09311bou.html

**Over 700 scientific papers on MDMA reviewed and summarized**

A major review of over 700 papers comprising all peer-reviewed articles reporting on basic and clinical research with MDMA will soon be completed by Matthew Baggott, Research Associate, Drug Dependence Research Center, UCSF. Baggott has been working under contract to MAPS to prepare this review, which is formatted according to FDA guidelines. The review will be submitted to the FDA in conjunction with the MDMA research protocol being planned at Harbor-UCLA Hospital under the supervision of Dr. Charles Grob. The review will also be submitted to the Israeli Ministry of Health as part of the application for the MDMA/PTSD study in Israel.

**MAPS grant goes to Swiss MDMA researcher**

MAPS has awarded an $11,000 grant to PhD candidate Alex Gamma to write up the data for several MDMA studies completed at the University of Zürich. The first of these has been published:


Three additional studies of Ecstasy users vs. controls will be completed over the next year: differences in memory performance using an Auditory Verbal Learning Test, differences in acoustic startle reflex and prepulse inhibition (PPI) of the startle reflex, and differences in selective attention as measured by the Stroop task.

**The interaction of MDMA and alcohol**

A clinical pharmacology study looking at the interaction of MDMA (100 mg) and alcohol (8 g/kg) has been completed. The results have been published in Life Sciences:


The research team is continuing research into the interaction of MDMA and alcohol.
An Exchange of Views About MDMA Neurotoxicity and MDMA Research

Commentary by Matthew Baggott
Research Associate, Drug Dependence Research Center, UCSF

A RECENT PAIR OF LETTERS and an accompanying editorial in Neuropsychopharmacology highlight the controversy over clinical research with MDMA, and over extrapolating from nonhuman animal neurotoxicity studies to human MDMA use. An initial letter by Harm Gijsman and colleagues (1999) argued that the risk of long-term neurotoxicity was so great that MDMA should not be administered to human volunteers. Because this letter was in response to a study by Vollenweider and colleagues (1998), those authors were given the opportunity to discuss the risk that a single oral dose of 1.7 mg/kg MDMA might be neurotoxic. The relationship between possible serotonin neurotoxicity and any functional consequences, which is the crucial issue, was not the subject of these articles.

The ethics of research

These publications come at a time when there is increasing focus on the ethics of research with human volunteers. As the accompanying editorial (Lieberman and Aghajanian, 1999) points out, even studies which obtained all the appropriate permissions from ethics committees and government agencies may be subsequently criticized. A number of studies using schizophrenic volunteers have been criticized for employing protocols designed to increase symptoms of the illness without offering any possible benefits to the volunteers. A recent issue of Biological Psychiatry (Vol. 46, No. 8, Oct 15, 1999) is mostly dedicated to presenting views and information on the issue of deciding what risks are acceptable in a research context. Of course, risks must always be balanced against possible benefits. However, recent human MDMA work consists of basic science research; none of the published studies are designed to produce or measure possible benefits to volunteers. Instead, the studies attempt to provide additional knowledge to science and society. Although it is accepted that ethics can be different in different locations, it is generally accepted that possible benefits to society cannot justify risks to individuals. Therefore, basic science studies using human volunteers can only be justified if the risks to volunteers are low.

Which measures to use?

In order to determine the risks of MDMA-induced neurotoxicity in human volunteers, it is necessary to extrapolate from the complex and extensive nonhuman animal literature. Deciding which measures of serotonergic functioning are good indicators of damage is one important task. In their letter, Vollenweider and colleagues (1999) argue that changes in serotonin reuptake transporter density (which can be measured using [3H]-paroxetine binding) is a better index of serotonergic damage than levels of the neurotransmitter serotonin (5-HT) or its metabolite 5-HIAA. I think that one of the more important aspects of this letter is the clarity with which the authors argue this point. There is disappointingly little discussion in the neurotoxicity literature concerning the degree to which different indices of serotonergic functioning are sensitive or selective for neurodegenerative changes. Because serotonin transporter density is a measure of a structural feature on the serotonin axon, it is likely a better indicator of whether the axons are damaged or absent than serotonin levels, which are dependent on diet and enzyme activity and can be depleted by nondamaging drugs. However, as Vollenweider and colleagues point out, changes in serotonin transporter density may also indicate adaptive changes, although evidence for this is limited (Benmansour et al., 1999; Qian et al., 1997; Ramamoorthy and Blakely, 1999).

Is neurotoxicity dose-dependent?

Having argued that serotonin transporter density be used as a marker of neurodegeneration, Vollenweider and colleagues discuss the relationship between dose and toxicity. Animal studies indicate that neurotoxicity is dose-dependent. That is, higher doses produce greater damage. Vollenweider and colleagues point out that there are currently no studies reporting decreased serotonin transporter density at doses close to 1.7 mg/kg in any species. The strength of this point is limited as it is not clear how much we need to consider the faster metabolisms of nonhuman animals when comparing doses between species. Because of their higher metabolisms, smaller animals often clear drugs from their bodies faster and therefore frequently experience less toxicity than humans. However, since we do not thoroughly understand the causes of MDMA-induced neurotoxicity, we cannot predict the magnitude of these species differences.

The importance of human studies

Studies in human users are therefore important. Vollenweider and colleagues discuss the recent PET study of MDMA users conducted by McCann and colleagues (1998). McCann and colleagues reported that human volunteers who had taken MDMA an average of 228 times had serotonin transporter densities which were approximately 25 percent lower than those of control volunteers. McCann and colleagues concluded that there was a linear dose-response relationship between the estimated amount of MDMA used and average reductions in serotonin transporter density. If this linear relationship applies to lower dose and less frequent MDMA use, then the risk of neurotoxicity after a
few administrations of 1.7 mg/kg MDMA in a clinical setting appears low. Further research using the volunteers with less MDMA experience would be necessary to test whether this linear relationship extends to lower, less frequent doses.

Of course, there are limitations to arguments which extrapolate human doses from those of nonhuman animals or which use a group of very experienced illicit MDMA users to draw conclusions about the effects of single doses in clinical settings. Ultimately, prospective studies which examine serotonergic and neurocognitive functioning before and after MDMA administration to humans will be necessary if we are to settle the question asked in the title of one of the letters: is a single dose of MDMA harmless?

Commentary by Rick Doblin

THE EDITORIAL by Jeffrey Lieberman and George Aghajanian in Neuropsychopharmacology (Caveat Emptor: Researcher Beware, 21(4), (1999) 471-472) supports the ethics of Franz Vollenweider's research in MDMA-naive subjects over the strong objections of the Dutch doctors who raise the issue of MDMA neurotoxicity. The views of the authors of the editorial are even more important than I realized at first.

I have been reviewing new Federal policies that govern research in patients with mental illnesses, just the sorts of patients we hope to be treating with psychedelics (patients with depression, PTSD, OCD, etc.). There has been a backlash against ketamine research in schizophrenics, with lawsuits, investigations, and lots of bad press. New, tighter standards for acceptable risk and informed consent procedures have been proposed by the National Bioethics Advisory Committee (NBAC) for research on people with impaired decision-making ability due to mental illness. NIMH has also developed new tougher standards for research that exacerbates symptoms, like psychedelics certainly can during a difficult (but potentially productive) psychedelic session.

At the end of 1998, Dr. Steve Hyman, Director of NIMH, convened an Ad Hoc Committee of 20 outside psychiatric researchers to review all of NIMH's intramural research. More than a few projects were halted due to ethical concerns, lack of sufficiently important knowledge generated that didn't outweigh the risk to subjects, too high a risk, etc. The co-chair of the committee that reviewed NIMH's intramural projects and recommended that some be halted or changed was Dr. Jeffrey Lieberman, the co-author of the editorial in Neuropsychopharmacology. In the Neuropsychopharmacology editorial, Dr. Lieberman expressed the view that MDMA research was ethical and appropriate, and that the evidence does not show that 1.7 mg/kg of MDMA is likely to produce damage to serotonin terminals. In light of Dr. Lieberman's expertise in reviewing psychiatric research protocols, his support of the ethics of MDMA research is promising.

An additional perspective on the Neuropsychopharmacology editorial comes from Mark A. Geyer, PhD, Professor of Psychiatry and Neurosciences, University of California, San Diego. He says:

I can add to Rick's comments that it appears that Neuropsychopharmacology is taking the position that the journal should continue to publish high-quality scientific work and not avoid politically sensitive issues for only political reasons. The publishers have reported that one of the two most cited papers in the journal in 1995 was the study by Lahti in which ketamine was administered to patients with schizophrenia.

The exchange of views in Neuropsychopharmacology about the risks of MDMA neurotoxicity and MDMA research provide an additional reason for FDA officials to feel comfortable approving Dr. Charles Grob's MAPS-supported MDMA cancer patient project. Protocol development for that study is still underway.
Medical Marijuana News

Following up on Orphan Drug designation

THERE IS VERY GOOD NEWS to report regarding MAPS’s efforts to obtain permission from the DEA to establish a medical marijuana production facility.

During the week of January 21, 2000, Rick Doblin had a series of meetings with Lyle Craker, PhD, Professor of Plant and Soil Science at the University of Massachusetts at Amherst and a specialist in medicinal plants; Peter Hutt, JD, among the most respected FDA regulatory lawyers in the country (Hutt is also a professor of FDA law at Harvard Law School during the January interterm and is a partner in a major DC law firm, Covington and Burling); and Dr. Lester Grinspoon, Harvard Medical School, foremost academic on the medical uses of marijuana.

The outcome of the meetings was that Peter Hutt has agreed to have his firm represent MAPS pro-bono in its efforts to request permission from the DEA for MAPS to contract with U-Mass Amherst to establish a medical marijuana production facility under the direction of Professor Craker. This effort could easily take years and not be successful, but at least we are going forward with a team that has about the best possible chance of obtaining approval from the DEA. It has taken many months to build a team to act upon MAPS’ Orphan Drug designation for marijuana for AIDS wasting syndrome but it has been well worth the wait. The next several months will be spent obtaining information from NIDA and the DEA about issues and obstacles that need to be addressed in obtaining permission for the facility.

If the facility is eventually permitted, MAPS will need to raise additional funds for the contract with U-Mass Amherst. Current efforts are being conducted under a grant to MAPS from Peter Lewis’ PLACE Fund. For more about the Orphan Drug Designation success, see MAPS Bulletin 9(3) or www.maps.org/mmj.

New grant for vaporizer study

MAPS and California-NORML have each agreed to contribute $12,500 for additional research into the ability of a vaporizer to filter marijuana smoke. This research will build upon a previous study of the effectiveness of water pipes and vaporizers in filtering marijuana smoke, also sponsored by MAPS and California-NORML. See MAPS Bulletin 6(3) or www.maps.org/mmj for the previous study.

NIDA rejects medical marijuana research

FRUSTRATING NEWS. On December 6, 1999, Dr. Ethan Russo, University of Montana, learned that NIDA’s special review committee rejected his MAPS-supported, IRB- and FDA-approved protocol, and that he will not be permitted to purchase marijuana from NIDA for his study. Dr. Russo was told nothing about why the protocol was rejected and was also told he should expect to wait a month or longer before receiving any formal notification from NIDA. The FDA gave its final approval for the study in September 1999.

On February 2, 2000, Dr. Russo received the formal explanation detailing why NIDA rejected his request to purchase marijuana for his research. The over 40 pages of correspondence with NIDA and NIH regarding Dr. Russo’s study are online at www.maps.org/mmj/mjrusso.html.

Health and Human Services guidelines for medical marijuana research permit NIDA to create its own special review committee to review protocols that have already been approved by the FDA and Institutional Review Boards. All that Dr. Russo and MAPS have been seeking is the ability to purchase low quality marijuana from NIDA at a price that has not yet been made public. Unfortunately, NIDA is still successfully blocking medical marijuana research. We are currently reassessing how to proceed with efforts to conduct privately funded medical marijuana research. NIDA’s monopoly control over the supply of marijuana that can be used in FDA-approved research projects highlights the important of MAPS’ long-term effort to obtain permission from the DEA to establish an independent facility to produce marijuana for FDA-approved research.

MAPS has given a grant of $1000 to Dr. Russo to continue his efforts to seek approval for a study of marijuana in the treatment of migraine. To date, MAPS has contributed a total of $3800 to Russo’s research efforts to initiate the second study in the last several decades into the medical use of marijuana in a patient population. The first study is underway at the University of San Francisco under the supervision of Dr. Donald Abrams (see www.maps.org/mmj).

A commercial vaporizer that was tested in the 1996 MAPS/CA-NORML study.
Ketamine research continues in Russia
Evgeny Krupitsky, MD, has completed the data analysis for the one year follow-up to his study of ketamine psychedelic therapy (KPT) in the treatment of heroin addiction. (The six-month follow-up was published in the last MAPS Bulletin, 9(4), 1999) Results are as positive as for the first six months. The differences in the rate of abstinence and the rate of relapse between the high dose of ketamine and low dose of ketamine groups are statistically significant. Research is continuing with a two year follow-up for those patients who have not relapsed.

Krupitsky also submitted a new protocol for a study of KPT to MAPS and Heffter Research Institute. The aim of this new project is to compare the efficacy of the multiple vs. single session approach to KPT ketamine psychedelic therapy in heroin addicts. The protocol is currently under review.

Psilocybin in the treatment of OCD
A manufacturer has been found to produce the material for the first FDA-approved study in more than 25 years to examine the use of psilocybin in a patient population. The two principal investigators, Dr. Pedro Delgado and Dr. Francisco Moreno, University of Arizona, plan to study the use of psilocybin in ten patients suffering from obsessive-compulsive disorder (OCD). Negotiations are in progress between the university lawyers and the manufacturer because the manufacturer needs a guarantee that it will not be sued in case someone has a bad experience in the study.

The researchers still need financial support for hospital and laboratory costs and for an approved supply of psilocybin. These costs amount to $30,000. MAPS is assisting the researchers to raise $30,000 for their study. If you would like to make a tax-deductible contribution to this historic study or would like more information, please contact MAPS.

References

DanceSafe receives new grant
Early this year DanceSafe received a grant from the Promind Foundation to be put towards our ecstasy laboratory pill analysis program. This funding has enabled us to provide our adulterant screening services free to ecstasy users around the country (voluntary co-payment requested but not required). In February we received 18 tablets from a dozen different states including Arkansas, Illinois, Rhode Island, New York, California, Georgia, Connecticut, Maryland, Louisiana, Michigan, and Pennsylvania. Eleven of the tablets contained pure MDMA, two contained MDA only, and three contained DXM. Two others contained mixtures of caffeine, ephedrine, and/or aspirin.

The adulterated market and the adverse reactions resulting particularly from DXM-laced tablets are finally starting to get media attention. On Sunday, March 5th, 2000 the Boston Herald ran a front page story about ecstasy adulterants, mentioning DanceSafe and correctly reporting that many of the recent rave-related medical emergencies attributed to "ecstasy" are actually resulting from DXM-laced tablets, as well as GHB, which is often deceptively sold as "liquid ecstasy." Hopefully this article indicates a turning point in the generally confused press coverage surrounding "club drugs" and the causes of adverse drug reactions.

In other news, we have moved into a new office in downtown Oakland. It's 500 square feet with lots of natural light. We have hired a Bay Area director and will likely be adding four or five more local chapters to our national network this Spring and Summer. As raves and the use of ecstasy, GHB and other club drugs continues to grow, DanceSafe is expanding as well, offering fact-based drug information and harm reduction services to users across the US and Canada.

Emanuel Sferios
emanuel@dancesafe.org

This Winter DXM-laced "white clovers" littered the ecstasy market across the entire country and were responsible for numerous medical emergencies.
**Salvia Divinorum with Meditation Study**

This amateur research project has progressed quite smoothly without the usual bureaucratic and approval delays that are the rule with professional studies. With proper guidance a project such as this can be carried out in a scientific and methodical way and deliver valuable data to other researchers. MAPS has purchased the materials and paid for the chemical analysis. Continuing assistance is being offered at no charge, in the spirit of amateur research, by MAPS (professional) members. Thanks to all who are currently contributing their knowledge to this project.

**Establishing the dose**

Preliminary sessions with .25 to 1.0 gram showed that the effects at this dosage level cannot be detected except when the subject sits quietly with eyes closed. This quantity is about one-half to one-tenth of the amount normally used to induce psychedelic states. The effects include alertness, unusual clarity of mind and an enhanced ability to concentrate. Some subjects are reporting space and time distortion effects. One unusual result that has been observed is headache relief. One subject who suffers from migraine found his headache completely eliminated over 30 minutes. Another observed the same effect with a minor headache. If informal results look promising we may do a follow up study to see if *Salvia divinorum* might have some merit for headache treatment. We have been contacted by another researcher who wants to start his own project to evaluate *Salvia divinorum* for headache relief.

**Placebo challenges**

Herbal double-blind studies are hard to do because it is difficult to duplicate a plant material. We had trouble coming up with a placebo. Dried Comfrey leaves are a close duplicate, but they lack the bitterness of *Salvia divinorum*. We had a breakthrough in July 1999 when we found that if you wash dried and crumbled *Salvia divinorum* leaves in two full glasses of water per gram, the bitterness of the *Salvia* dissipated (the active chemical, Salvinorin-A, is insoluble in water). However, the water washing method has not worked perfectly and some people can still detect the bitterness of the *Salvia divinorum* as compared to the Comfrey placebo material. We will need to add a small quantity of quinine (the bitter component of the Italian soft drink Brio or german "bitters") to match the bitterness.

**Dose effects**

In the non-blind dose establishment phase of this study we tested subjects on .5 gram, 1.0 gram, 1.5 grams and 2.0 grams of dried and crumbled *Salvia divinorum* leaves chewed and administered sublingually. At 0.5 grams, half of the subjects noticed a slight effect, a clearer than normal mind that is free from distractions. The other half noticed nothing at all. All subjects noticed 1.0 gram when they were in a quiet room with no distractions. The mind remained clear and meditation was unusually easy with few distracting thoughts. This dose was only detected by subjects when they were trying to meditate. However, if they listened to music or did some activity they could not notice any effect at all. At 1.5 grams, half the subjects notice a trance-like state beginning. The effect was slight but it inhibited meditation for some. Generally subjects found 2.0 grams too strong for meditation. For some, this dose produced a slight trance-like effect with time distortion. The effect was enjoyable.

**Starting out the year**

We are starting in the new year with a meeting to taste test the placebo vs. the real thing. Two women in the group are nurses with experience in statistics and drug testing; they will be a great resource. We decided that 1.5 grams of dried herb is the maximum dose to use because some people experience gagging with 2.0 grams. We are setting the very low dose at 0.5 grams and the low dose as 1.5 grams. We plan to use group meditations where everyone follows a specific technique such as breath awareness. In addition, some subjects will do private meditation.

During the double-blind phase of the study, volunteers in each session will meditate as a group while holding a small quantity of the herb (or placebo) under the tongue. After the session each person will answer a questionnaire to evaluate the effects of the herb and to determine whether it enhanced their ability to meditate. The questionnaire is a customized version of the HRS (Hallucinogen Rating Scale) developed by Rick Strassman.

*Ian Soutar*

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*Ian Soutar with Salvia divinorum plant*
Psychedelic Mindview College Seminar

During the summer of 2000 Northern Illinois University will offer entirely online EPSY 492/592 Seminar in Educational Psychology: Psychedelic Mindview. Psychedelic research may be the field with the greatest gap between the information scholars and scientists have discovered and what the general public knows. This course helps bridge that gap by surveying psychedelics' history from archaeological times to the present and by examining their implications for psychotherapy and mental health and various academic disciplines and professional interests. Students will select a topic for individual study such as archeology, anthropology, history, psychology, sociology, botany, chemistry, religion, philosophy, one of the arts, literature and language, or implications for professional practices such as health, law, education, and similar fields. Instructor: Thomas B. Roberts, Professor. Registration begins March 2000. See www.maps.org/news for a link to this course’s website.

NIDA's Club Drug Initiative

On December 2, 1999 the National Institute on Drug Abuse and community-based partners announced a national research and education initiative about club drugs, lumping together MDMA, methamphetamines, GHB, ketamine and rohypnol. NIDA launched a website, www.clubdrugs.org, in conjunction with its public education campaign about club drugs. MAPS has serious concerns about the accuracy of information on this site, but feel it is important to notify readers of its existence.

No deaths from Ecstasy reported in 1997

According to medical examiner reports compiled by the Substance Abuse and Mental Health Services Administration (SAMHSA), there were zero deaths from Ecstasy in 1997, the most recent year for which data is available. The SAMSHA database is the US government's primary database for emergency room visits and deaths associated with both legal and illegal drugs. The data from 1998 should be out in the Spring.

Reliable, Balanced Information about Psychoactive Plants and Drugs

A free online library of information about psychoactive plants and chemicals, medicinal herbs, pharmaceuticals and nootropics, focusing on healthy, responsible, beneficial use.

Since 1996, Erowid has collected thousands of pages of up-to-date information to help people learn about the complex relationship between humans and psychoactive drugs: from the basics of safe use to common problems and contra-indications, legal information, chemical compositions, images, journal articles, histories, media coverage, spiritual and cultural use, and suggestions for where to get further information.

You can help support this non-commercial community resource by contributing towards future projects. Erowid T-shirts are now available as incentives for donations of $40 or higher. The shirt displays a list of the most interesting substances in each federal schedule: definitely a conversation starter.

Tax deductible donations can be made through MAPS. See http://www.erowid.org/donations/ or contact donations@erowid.org for more information.

erowid.org

T-shirts are good quality, grey, 90% cotton with a maroon logo. Be sure to specify size (M, L, XL, XXL). Donations can be sent to:
Erowid, P.O. Box 620939, Woodside, CA 94062
Unfortunately, the dominant materialistic and reductionistic psychosocial climate of contemporary science (what sociologists long ago named scientism, an attitude different from the essential process of science), rejects and suppresses a priori both having and sharing transcendent, transpersonal and altered states (or "spiritual" and "psychic," to use common words, in spite of their too vague connotations) experiences.

From my perspective as a psychologist, though, this prejudicial suppression and rejection psychologically harms and distorts both scientists' and laypersons' transcendent (and other) potentials, and also inhibits the development of a genuine scientific understanding of the full spectrum of consciousness. Denial of any aspects of our nature, whatever their ultimate ontological status, is never psychologically or socially healthy.

The Archives of Scientists' Transcendent Experiences (TASTE), that I have just opened, is intended to help change this restricted and pathological climate through the operation of a website in a journal format which will allow scientists from all fields—from anthropology through botany through mathematics through physics through psychology through zoology, to name just a few—to share their personal transcendent experiences in a safe, anonymous, but quality controlled space that almost all scientists and the general public have ready access to. Specifically TASTE will, to various degrees:

- allow individual psychological growth in the contributing scientists by providing a safe means of expression of vital experiences;
- lead toward a more receptive climate to the full range of our humanity in the scientific professions which, in turn, would benefit our world culture at large;

- provide research data on transcendent experiences in a highly articulate and conscientious population, scientists;
- facilitate the development of a full spectrum science of consciousness by providing both data and support for the study of transcendent experiences.

• help bridge the unfortunate gaps between science and the rest of culture by illustrating the humanity of scientists.

Please take a look at the TASTE site, whose URL is psychology.ucdavis.edu/tart/taste (if the Psychology server is off line you can use www.issc-taste.org). If you find it valuable, please pass this information on to friends and colleagues. I have no budget for advertising, so must depend on word of mouth to get this information around. If you have a website of your own that it would be suitable to link from to TASTE, thank you! Feel free to copy one of the TASTE experiences as an example on your website, if you like.

Thank you!

Charles T. Tart, Ph.D., Editor Professor Emeritus, Psychology, University of California at Davis Professor, Core Faculty, Institute of Transpersonal Psychology, Palo Alto, California
Paper to be presented at Tucson IV 2000 “Toward a Science of Consciousness” Conference:

**An extended non-drug MDMA-like experience evoked through hypnotic suggestion**

Institute of Transpersonal Psychology, Palo Alto, California, USA

**Description:** This research explored whether hypnotic suggestion could produce a mind-body experience similar to that caused by the psychoactive drug 3,4-methylenedioxy-n-methylamphetamine (also known as Ecstasy and Adam), in individuals who had taken the drug at some prior time. This drug is now illegal, but was used in psychotherapy in the past decade with some positive reports. Initial human studies are currently being conducted on its physiological effects.

Eight volunteer participants, who had taken MDMA at some previous time, were hypnotized and given post-hypnotic suggestions that they would re-experience the mental and physical qualities of an MDMA state for one hour. This was without taking the drug.

The participants’ reports showed that the post-hypnotic suggestions effectively reproduced an MDMA-like state, lasting an hour at a stable level. Participant ratings in real time and in retrospect ranged from 60% to 100% equivalence to a drug-induced experience. The subjective characteristics of the hypnotic experience corresponded with the phenomenology of a drug experience. The participants successfully carried out various intentional activities during this time (e.g., self-reflection, talking with partners about relationships, walking in natural settings).

High correlations were found for the Similarity rating of the experience compared with scores on the Tellegen Absorption Scale (Spearman, .90, p = .002). The Harvard Group Scale of Hypnotic Susceptibility was not significantly correlated.

**Conclusions:** Post-hypnotic suggestion can successfully evoke an experience that has the qualities of the MDMA drug-induced experience for at least some persons who have had the drug experience one or more times.

This level of the state is stable, and can probably be used for the same purposes as an MDMA drug produced experience, such as therapy, personal exploration, transcendence, and interpersonal communication.

**Implications:** Hypnotic suggestions appear to verbally produce the same effects on the mind-body state as the drug does through chemical influence. Does the hypnotic suggestion actually manipulate the physical substrates (as does MDMA) to reproduce an MDMA experience, or are the phenomena being simulated in consciousness (“hallucinated”) at a higher cortical level? Several participants reported the two states to be identical. If so, is it meaningful to say the drug state is different from the hypnotic state, just because one is caused “physically” and the other “mentally”? Would a blood test show traces of MDMA in the hypnotic condition (I would think not) or an increase of serotonin (possibly), which is triggered by MDMA?

Could the MDMA experience (or other discrete non-volitional and identifiable ASCs) be constructed by putting together the subjective qualia of the state via hypnotic suggestion? Some pilot trials suggest this is possible even without prior experience with the drug.

Practically, the post-hypnotic technique could be explored for use after initial MDMA sessions, to enable therapy, pain control, personal exploration, transcendent experiences, and problem solving. It may also be that pharmaceutical drugs could be enhanced and their pharmacokinetic effects influenced using this hypnotic technique, consistent with conditioning effects reported by Ader and Olness.

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The Literature of Psychedelics

Bob Wallace

New Books

Synthetic Panics
The Symbolic Politics of Designer Drugs

History of media and political hysteria over various synthetic drugs, including MDMA, PCP, meth, cat, and GHB. How scapegoating works, blaming various social problems on particular drugs and their use by particular minorities and subcultures. How these media "demon drug" stories grow, and their common elements. Well referenced, with chapter notes and index. Philip Jenkins 1999; New York Univ. Press (Ingram) 0-8147-4244-0, 258 page paperback, $18.95

Amazon Magic
The Life and Story of Ayahuasquero and Shaman
Don Agustín Rivas Vasquez

Well-written and interesting account of a Peruvian ayahuasca shaman, from his birth in 1933 to the present. Includes much about the ayahuasca plants and their uses, other healing plants, training to be a shaman, indigenous life in the Amazon jungle, and Rivas' path to also becoming a sculptor. Photos. Jaya Bear 2000; Colibri Publishing 0-9674255-0-6, 230 page paperback, $15.95

Psychedelics Reimagined

Chapters on Carlos Castaneda, Fitz Hugh Ludlow, benefits of marijuana, Ganesh Baba, datura realms, legality of neurochemistry, MDMA, shamanism and the house movement, cannabis in the Bible, Magic Mushrooms in Third World Countries, hemp, alchemy and ego death, plus book reviews and resources. Introduction by Timothy Leary; forward by Hakim Bey. An eclectic collection. Thomas Lyttle (editor) 1999; Autonomedia 1-57027-065-1, 255 page paperback, $13.95

The Mystery of Manna
The Psychedelic Sacrament of the Bible

What was the "manna from heaven" that Moses fed to the Israelites? With biblical and other references, the author suggests it was a bread made from ergot, containing psychedelic lysergic acid compounds which lead to visions of Yahveh. Then he shows references in later church writings, suggesting this secret was passed down by gnostics, masons, and kabbalists. Chapter notes, biblical and general indices. Dan Merkur 2000; Inner Traditions 0-89281-772-0, 191 page paperback, $16.95

Blue Tide
The Search for Soma

Those who drink Soma "surf blue tide" to the realms of the gods. Here the author investigates the identity of Soma, using his travel, ethnographic, scientific, detective, and personal entheogenic experiences. He mentions Wasson's Amanita theory, but spends more time on Peganum harmala, with an ayahuasca and even a Psilocybe mushroom with harmala investigation. Bibliography. Very readable. Mike Jay 1999; Autonomedia 1-57022-088-0, 189 page paperback, $13.95

Trout's Notes on Cactus Chemistry

Basic listing of interesting compounds reported to be in cacti, by species. K. Trout 1999; Better Days [no isbn], 74 page large paperback, $19.95

The Little Book of Ketamine

Much-needed introduction to this strange "dissociative psychedelic" which can isolate the mind from the body. History of the drug and its explorers; descriptions of experiences; dose and use tips; addiction potential; legal issues. Kit Kelly 1999; Ronin Publishing 1-914171-97-6, 110 page paperback, $12.95
Green Psychology
Cultivating a Spiritual Connection with the Natural World

How the ecological crisis evolved from the historical shift from living with nature to the domination over nature; and how modern, shamanic role models can help us create a worldview in which the mind of humanity and the health of the earth are harmoniously intertwined. Ralph Metzner 1999; Inner Traditions 0-89281-798-4, 192 page paperback, $14.95

Magical Mushrooms,
Mischievous Molds

The impact of fungi on human history. Chapter on ergot, with comments on its use for LSD and the Eleusin Mysteries; chapter on hallucinogenic mushrooms, the Psilocybe and Amanita families. Also chapters on fungi as pathogens, medicines, food, and other uses. Color photos, chapter notes, index. Accurate and well-written. George W. Hudler 1998; Princeton Univ. Press 0-691-02873-7, 264 page hardback, $29.95

Yearbook for Ethnomedicine
Issue 5, 1996

Metzner’s memoriam for Timothy Leary; Torres on the status of psychoactive snuff research, and on A. colombiana use by shamans of Argentina; Schaefer on peyote and pregnancy among the Huichol; Hamid on drug legalization; Valencic on salamander brandy; Ott on snakes and stones and pigges’ bones; Meyer on Ganesh Baba. Christian Rätsch & J. Baker (editors) 1998; VWR 3-86135-032-7, 317 page paperback, $39.95

Eleusis, from the Italian Society for the Study of the States of Consciousness, is a great journal of psychedelic plants and compounds. This is their new series.

Eleusis #2

Mistletoe, centaurs, and Datura; Perseus, mushroom picker; Experiences with rare mushroom Inocybe haemacta; the Passiflora genus; Gアルバのmima belgraveana; Psychoactive plants of Madagascar; Mushroom mycelia on mulch. Giorgio Samorini & Jonathan Ott (editors), $21.95

Trout’s Notes on Sacred Cacti
Botany, Chemistry, Cultivation, and Utilization

Definitive book on mescaline and its plant sources. Cultivation of peyote and San Pedro, extensive listing of mescaline cacti and their alkaloids, the chemistry and pharmacology of mescaline with synthesis, extraction, purification, and analysis. Also material on selected succulents. Much unique material. Many references. Index. Photos and illustrations. Recommended. K. Trout 1999 (2nd edition); Better Days [no isbn], 422 page large paperback, $39.95

The Entheogen Review

One of the best practical periodicals; includes updates to the Psychedelic Resource List. Volume VIII, Number 3. Fly Agaric new hypothesis, Velada with Salvia divinorum, Hyperspatial Maps, 5-MeO-DIPT report, Claviceps p. and Kykeon, Daniel Siebert, Valdes on Wasson, Salvia divinorum from seed, Sources update, feedback, events, books, more. David Aardvark (editor), $4.95

All books are available from Mind Books, the author’s company; of course most are available from other good sources as well.

Mind Books
321 S. Main St. PMB 543, Sebastopol, CA 95472. Phone: 800-829-8127 (or 707-829-8127); fax: 707-829-8100. Email: books@promind.com, Website: www.promind.com
Toward a Science of Consciousness
University of Arizona, Tucson
April 10-15, 2000
General topics included: philosophy, neuroscience, cognitive science, psychology, physical and biological sciences, cultural phenomenology. At least two concurrent session will address the topic of psychedelics.

Thanks to a grant from Tim Butcher, MAPS is sponsoring one speaker to this event. Alex Gamma, PhD(c) will speak on the use of psychoactive drugs in consciousness studies. Another speaker, Arthur Hastings, will present on "An extended non-drug MDMA-like experience evoked through hypnotic suggestion." (see page 10)

Confirmed speakers include: Francisco Varela, Gerald Edelman, Stephen Kosslyn, Susan Hurley, Christof Koch, Nancy Kanwisher, Roger Penrose, Knut Nordby, John Searle among many others.

Plenary program, pre-conference workshop and registration details are online at www.consciousness.arizona.edu/Tucson2000. However, if you would like to receive a registration brochure, please contact extuniv@u.arizona.edu or call 520-621-7724. Please include your full postal address.

Entheogenic Substances, Art and Creativity
April 29-30, 2000
Barcelona — Spain
Guests include: Richard Yensen, Ph.D. (psychologist; U.S.), Mati Klarwein (painter), Dr. Joan Carles Usó (Historian, author of the book History of Psychedelics in Spain), Dr. Manuel Torres (archeologist, U.S.), Dr. Michael Schlichting (psychiatrist; Germany), Dokush Villalba (Zen Monk), Stacy Schaefer, PhD (anthropologist specializing in the Huichols; U.S.), Alex Grey (painter; U.S.), Andrés Paschal Sanchez (translator and specialist in the work of German writer Ernst Jünger), Luis Paniagua (musician), Ana Eva Iribas (specialist in the work of Henri Michaux).

Website: www.etnopsico.org.
For more information, please contact info@etnopsico.org

Recent Developments with Hallucinogens and Schizophrenia
Regional conference of the British Association of Psychopharmacology (BAP)
Liverpool — United Kingdom
May 3, 2000

Findings from some of the earliest psychopharmacological studies, conducted in Germany using mescaline nearly a century ago, made it clear that there were similarities between the acute stages of schizophrenic psychoses and hallucinogen-induced states of altered consciousness. These led directly to the model psychosis paradigm, whereby hallucinogen-induced states are considered to be models of schizophrenia, which held sway for nearly 50 years. While this view lost popularity in the 50s and 60s, interest has recently been revived in the hallucinogen-induced model of psychosis paradigm in view of the discovery of the NMDA antagonist action of phencyclidine and related dissociative anaesthetics. This conference aims to bring together researchers from several fields in order to re-examine the validity of the hallucinogen-induced model of schizophrenia in the light of these exciting new advances.

Speakers will include: Dr David Healy, Professor Bill Deakin, Dr. Jon Cole, Dr. Euphrosyne Gouzoulis-Mayfrank, Dr. Andrew Goudie, Professor Franz Vollenweider.
Conference details can be found on the BAP website, www.bap.org.uk.
Contact: Mrs. Susan Chandler, susan@bap.org.uk

Psychointegrator Plants, Art, Ethnobotany and Psychotherapy
July 23 to August 1, 2000

An experiential seminar in the Brazilian Amazon with: Luis Eduardo Luna, PhD anthropologist; Dennis MacKenna, PhD ethnopharmacologist; Silvia Polivoy, psychologist; Pablo Amaringo, artist; Kathleen Harrison, artist; Ivan Padilla, Kundalini Yoga teacher. For more information contact Silvia Polivoy in Argentina: (54-11) 4774-3892, E-mail: silviap@house.com.ar, http://users.lycaen.org/entheos
Telluride Mushroom Festival
August 24-27, 2000 — Telluride, CO
The Telluride Conference is designed for persons interested in mushroom identification, edible and psychoactive mushrooms, and mushroom cultivation.
For more information contact:
Fungophile; P.O. Box 480503;
Denver, CO 80248-8503;
Tel: 303-296-9359, Fax: 303-297-1026;
E-mail: lodomyco@uswest.net

Shamanic Plant Science 2000
November 22-24, 2000
Whistler Mountain, B.C. — Canada
This year’s event (the next in the “Entheobotany” series) is organized by Jonathan Ott, Robert Montgomery and Christina St. Laurent. Contact:
P.O. Box 641047; San Francisco, CA 94164-1047; Phone: 415-345-8437;
Fax: 415-345-8438; E-mail: shamanicplantscience@yahoo.com

Reports on previous conferences and updates about future events are listed at www.maps.org/conferences.

ADDICTIONS 2000
Challenges & Opportunities for a New Millennium
International Scientific Conference and ISAM’s Annual Meeting
Laronne Hotel, Jerusalem, Israel
November 6 - 9, 2000
Sponsored and Organized by:
The International Society of Addiction Medicine (ISAM)
The Ministry of Health of the State of Israel
The Israel Anti-Drug Authority

MAPS is sponsoring several participants at the Addictions 2000 conference. They are: Evgeny Krupitsky, MD, Leningrad Regional Center for Alcoholism and Drug Addiction Therapy, to speak about the use of ketamine-assisted psychotherapy in the treatment of heroin addiction; John Halpern, MD, Harvard Medical School, to speak about Native American Church use of peyote, and Dr. Lester Grinspoon, Harvard Medical School, to speak about medical marijuana.

Dr. Gleser, organizer of the conference, participated in the MAPS MDMA conference in Israel in September 1999, at which time he extended an invitation to MAPS to make presentations at the ISAM conference.

Dear Colleague,
We are pleased to invite you to participate in the Second Annual Meeting of the International Society of Addiction Medicine (ISAM), November 5 - 6, 2000, as well as the International Scientific Conference, Addictions 2000, November 6 - 9, 2000, in Jerusalem, Israel.

These two events provide an excellent opportunity for scientists, clinicians and professionals from our field to meet, report and hear updates on the most recent developments, treatments and clinical trials conducted worldwide, and to discuss the challenges and opportunities for the new millennium.

We look forward to seeing you at the conference in Jerusalem.

Dr. Jorge Gleser Chairman;
Organizing Committee, Vice President ISAM

Yair Amikam, Deputy Director General;
Information & Foreign Relations, Ministry of Health

Shlomo Gal; Director General Antidrug Authority

For Conference details: www3.sympatico.ca/pmdoc/ISAM/details.html

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MAPS IS A MEMBERSHIP-BASED organization working to assist psychedelic researchers around the world design, obtain governmental approval, fund, conduct 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 1,800 members.

MAPS' founder and current president, Rick Doblin, is currently in the Ph.D. program in Public Policy at Harvard's Kennedy School of Government and has previously graduated from Stan and Christina Grof's Holotropic Breathwork 3-year training program.

Sylvia Thysen is responsible for editing the Bulletin and oversees MAPS' website and outreach efforts. She is a graduate of the University of North Carolina at Chapel Hill, where she majored in Art History and French.

Carla Higdon coordinates MAPS member services and the publicity, marketing and distribution of MAPS publications. She is a graduate of Western Carolina University where she majored in Art Education.

MAPS has previously funded basic scientific research in both humans and animals into the safety of MDMA (3,4-methylenedioxymethamphetamine, Ecstasy) and has opened a Drug Master File for MDMA at the U.S. Food and Drug Administration. MAPS is now 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 governmental approval for their medical uses.

ALBERT EINSTEIN WROTE: "Imagination is more important than knowledge."

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 individuals who care enough to take individual and collective action. In addition to supporting research, your contributions will return to you the following benefits:

The MAPS Bulletin:
Each Bulletin will report on MAPS research in progress. In addition to reporting on research both in the United States and abroad, the Bulletin can 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 usage.

General Members: $35
(If outside U.S. add $15 postage.)
General members will receive the MAPS Bulletin, which appears on a quarterly basis.

Supporting Members: $100
(If outside U.S. add $15 postage.)
Supporting members will receive the MAPS Bulletin plus a copy of the MAPS-published book The Secret Chief: conversations with a pioneer of the underground psychedelic therapy movement, by Myron Stolaroff.

Patron: $250 or more
Patrons members will receive the MAPS Bulletin plus a copy of The Secret Chief, by Myron Stolaroff. Patrons may also request copies of back issues and research updates on matters of personal interest.

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DIFFICULT as it is to uncover words to immortalize Nina Graboi, one of the great friends of the Aquarian age, this is an attempt to describe her grace, to envision her dancing. She often seemed moved by some unknown force, externally motivated and internally subtle, a dance of the immortal, the chi, the kundalini, the stuff that makes earthquakes.

As I watched the vapors rise from the crematorium I thought about the importance of Nina’s transcendence, and words my friend had spoken just days before she seemingly decided to take the leap, and jumped out of her “space suit,” as she had so often referred to her body. After a tripping session in my room she looked at me through kind, clear eyes and said that if she could no longer recreate the mystical, that transformative high, then she had little interest in living. Were it not for her uncanny ability to gently and unassumingly reach inside people, coupled with her hunger to guide young adults in the responsible use of mind altering drugs, she may well have ignored all allopathic attempts to combat her lung cancer.

After a few speedy months of tangle with the disease, and the work that arises during that process, she quietly and simply left, just as she had lived her remarkable life.

Nina spoke with a ruthless regard for the truth. Yet, she looked upon humanity ever hopeful of our spiritual evolution, encouraging us toward the divine. Our good fortune as her friends, was the deeply intimate manner in which she connected. Each of us has a touching Nina story to inspire us to open our hearts and fall into love. For the myriad ways that this remarkable lover of spirit has touched so many lives, one thing stands out, her unwavering commitment to her spiritual life.

Nina was a poet, an artist of life’s canvas, an exquisite philosopher, engaging the great minds of a restless age (Jean Houston, Robert Thurman, Abraham Maslow, Stanley Krippner, Timothy Leary, Alan Watts, Ram Dass, Ralph Abraham, among others) and always, always embracing the light. We have loved you, and as you have said will love you again and again in lives to come.

—Valerie Corral & Friends

Nina’s autobiography, One Foot in the Future: A Woman’s Spiritual Journey, (Aerial Press, Santa Cruz, 1991) bears witness to her extraordinary life.