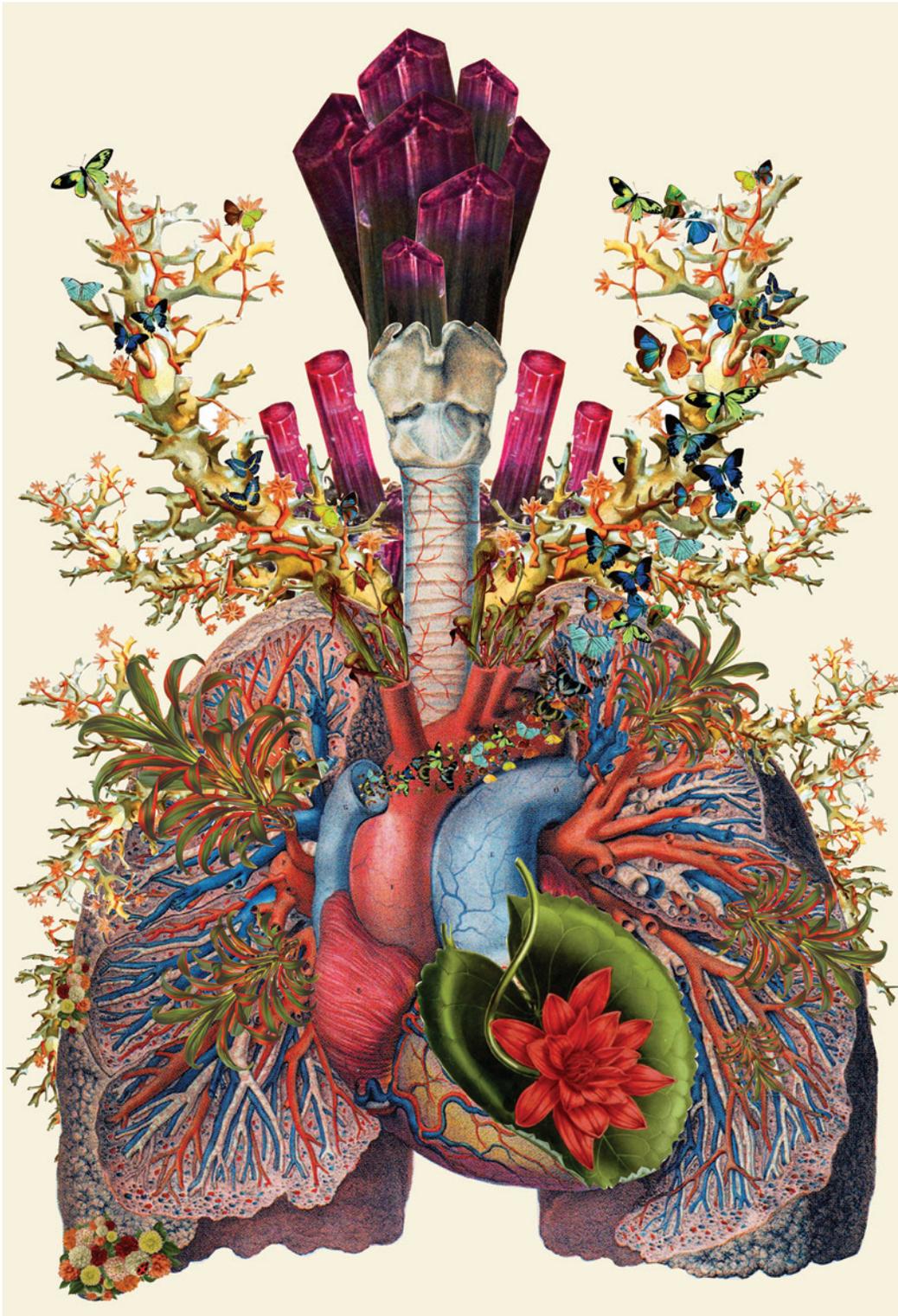


2014 Annual Report
BULLETIN



Key Research Milestones in Fiscal Year 2014



18th subject treated in ongoing study of MDMA-assisted psychotherapy for PTSD in U.S. veterans, firefighters, and police officers.

Eighth subject treated in ongoing Boulder, Colorado study of MDMA-assisted psychotherapy for PTSD; Study size increased to 23 subjects.

Fourth subject treated in ongoing Israeli study of MDMA-assisted psychotherapy for PTSD.

IRB approves protocol amendments for Canadian study of MDMA-assisted psychotherapy for PTSD.

Seventh therapist receives MDMA-assisted psychotherapy in therapist training study.



First three subjects enrolled in ongoing study of MDMA-assisted therapy for social anxiety in autistic adults.



LSD-assisted psychotherapy for anxiety study published in peer-reviewed journal; LSD Annual Report submitted to FDA.



Developed and obtained FDA and Public Health Service approval for a **pilot study of marijuana** for symptoms of PTSD in 70 U.S. veterans.



Fourteenth and final subject enrolled in New Zealand observational iboga study.

Data collection completed in Mexico observational iboga study.

COVER ARTISTS



Travis Bedel aka Bedelgeuse

Front cover: Adore
by Bedelgeuse
digital/paper hybrid collage
28 x 39 in

Travis Bedel aka Bedelgeuse currently resides in Phoenix, Arizona and has thoroughly studied audio engineering and sound design, but has received no formal visual arts training. His work as Bedelgeuse includes cut paper collage, digital collage, and mixed media sculptural collage all based around the human anatomy.

In the past year Bedelgeuse has had artwork in numerous group and solo exhibitions worldwide, including Tokyo, New York, and Greece. He has upcoming installations and exhibitions in Rio de Janeiro, Palm Beach, Brooklyn, Phoenix, and Boston. Bedelgeuse has had multiple features in various magazines and online globally including Juxtapoz and Culture Magazine. He has also done installation work in Brooklyn and Phoenix. His wheat paste collages can be found throughout the Phoenix area.

Artwork can be purchased at society6.com/bedelgeuse, etsy.com/shop/bedelgeuse, and bedelgeuse.bigcartel.com.



Eduardo Rodriguez Calzado

Back cover: The Dance
by Eduardo Rodriguez Calzado
acrylic on canvas
50 x 50 cm

Eduardo Rodriguez Calzado is originally from Torreon, Coahuila, Mexico. He started in the arts at a very early age, taking drawing and painting classes at several art schools around his home town. He studied Graphic Design at ISCYTAC-La Salle University in Gomez Palacio, Durango and later studied Illustration/Animation at the Academy of Art University.

Eduardo worked for many years in theater, where he was in charge of the set design and painting of many different plays and musicals. In 2010 he decided to start painting pictures and had his first exhibition "Reflejo de los Sueños" in December of that year. Since then he has participated in several individual and collective exhibitions in Mexico and in the United States.

"I am an artist obsessed with detail, expressing emotions through the fragmentation of color, capturing a great light in my artwork. In most of my paintings I represent the human form or some sort of human element and our connection to another plane of consciousness. My hope is that whoever sees my paintings will take something away with them, even if it's just the spark of a memory or a feeling."

For additional artwork, visit eduardorodriguezcalzado.com. Art prints may be purchased at eddicalz.deviantart.com.



MAPS
MULTIDISCIPLINARY ASSOCIATION FOR PSYCHEDELIC STUDIES

Founded in 1986, the Multidisciplinary Association for Psychedelic Studies (MAPS) is a **501(c)(3) non-profit** research and educational organization that develops medical, legal, and cultural contexts for people to benefit from the careful uses of psychedelics and marijuana.

MAPS furthers its mission by:

- Developing psychedelics and marijuana into prescription medicines.
- Training therapists and working to establish a network of treatment centers.
- Supporting scientific research into spirituality, creativity, and neuroscience.
- Educating the public honestly about the risks and benefits of psychedelics and marijuana.

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CONTENTS

2	From the Desk of Rick Doblin, Ph.D.
3	Annual Financial Report Rick Doblin, Ph.D.
14	Research News
19	MAPS in the Media
20	My Journey through PTSD: Healing with MDMA-Assisted Psychotherapy Elizabeth Matthews, M.A., L.P.C.
25	A Conversation with MDMA-Assisted Psychotherapy Researchers Annie Mithoefer, B.S.N., Shannon Clare Petitt, I.M.F., Saj Razvi, L.P.C., Ben Shechet, and Will Van Derveer, M.D.
30	Earthquakes and Rainbows an excerpt from <i>Acid Test: LSD, Ecstasy, and the Power to Heal</i> Tom Shroder
34	Trust, Let Go, Be Open: Psychedelic Harm Reduction in the Desert and Beyond Katherine MacLean, Ph.D.
39	Love: The Nature of Our True Self My Experience as a Guide in the Johns Hopkins Psilocybin Research Project Mary Cosimano, M.S.W.
42	Building Congressional Support for Psychedelic and Medical Marijuana Research in Washington, D.C. Tony Macie
44	The Journey to MAPS: A Supporter's Story Alex
46	Remembering Sasha Shulgin David Presti, Ph.D.
50	MAPS: Who We Are
52	MAPS Membership

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From the Desk of Rick Doblin, Ph.D.

TIME MARCHES ON. THIS YEAR-END issue of the Multidisciplinary Association for Psychedelic Studies (MAPS) *Bulletin* contains the Annual Report for our 28th year, marking a period of time that astonishes even me. Over this time our network of supporters has expanded remarkably. It is a pleasure to work with such an ever-broadening array of extraordinary people, including consultants who formerly worked for the U.S. Food and Drug Administration (FDA) and the Drug Enforcement Administration (DEA).

It is also a pleasure, and a profound relief, to witness our culture becoming increasingly disenchanted with prohibition and open to the healing and spiritual potential of non-ordinary states of consciousness. This change, which MAPS and many other organizations and people have worked to make possible, is evidenced by the November 2014 legalization of marijuana in Alaska, Oregon, and the District of Columbia; the approval of medical marijuana in Guam; the near-approval of medical marijuana in Florida (58% voted in favor, but 60% was required for passage of the constitutional amendment); and the passage of California's Prop. 47, which not only reduced many drug crimes from felonies to misdemeanors, but also retroactively reduced sentences of people convicted under prior laws.

As we glimpse 2015 on the near horizon, we can clearly see that opportunity abounds. Foremost among these opportunities is that MAPS is working to develop collaborative MDMA-assisted psychotherapy for posttraumatic stress disorder (PTSD) research with scientists affiliated with the U.S. Department of Veterans Affairs' National Center for PTSD. This collaboration is a legacy of Dr. Richard Rockefeller's work to open doors previously blocked to MAPS for over 25 years.

By the middle of 2015, MAPS will complete our Phase 2 MDMA-assisted psychotherapy for PTSD studies (maps.org/mdma), with about 90 subjects treated and enough data gathered to schedule our End of Phase 2 meeting with the FDA and plan our multisite Phase 3 studies. Additionally, next year we will complete our initial Phase 2 pilot study of MDMA-assisted therapy for autistic adults with social anxiety, and will begin our new Phase 2 study of MDMA-assisted psychotherapy for anxiety associated with life-threatening illness.

Next year, there is a good chance that we will even be able to start our study of marijuana for symptoms of PTSD in U.S. veterans (maps.org/mmj)! Our protocol has been approved by the FDA, and the Public Health Service (PHS) has approved our request to purchase marijuana from the monopoly supply of DEA-licensed marijuana held by the National Institute on Drug Abuse (NIDA). However, at the moment we are still waiting for

NIDA to grow marijuana with sufficient ratios of cannabidiol (CBD) and tetrahydrocannabinol (THC) as required for our protocol. This failure to provide marijuana for researchers on a timely basis is further evidence that NIDA is behind the curve by at least a decade when it comes to recognizing the scientific and medical importance of CBD. In 2015, we can expect that MAPS' efforts to end the obstructive PHS protocol review process for privately-funded medical marijuana drug development research—and to end the NIDA monopoly—will gain traction, though when those reforms will actually be implemented is still too difficult to tell.

We also have new opportunities to expand MAPS' psychedelic harm reduction program (maps.org/zendo). We're now helping to build a growing political coalition to amend the Rave Act, which criminalized harm reduction efforts by festival organizers and club owners, intentionally and perversely increasing risks for those choosing to use drugs at those venues and contributing to the tragic increase in recreational drug-related deaths in 2014.

MAPS' public education efforts are continuing to expand, as major media outlets are increasingly open to balanced reporting of psychedelics and to portraying the positive aspects of psychedelics and marijuana in popular entertainment. As I write today, *The Washington Post* is publishing a lengthy series of excerpts from Tom Shroder's *Acid Test: LSD, Ecstasy and the Power to Heal*, positively educating politicians and others in the heart of the establishment about the therapeutic and scientific potential of psychedelics. In other media, a recent episode of *Transparent*, a new dramatic series created by Amazon (whose founder owns *The Washington Post*), even includes a scene where a character mentions that the government is giving MDMA to soldiers to help cure PTSD!

Together, we can develop psychedelics and marijuana into prescription medicines approved by the FDA and European Medicines Agency, transforming our culture into a healthier, more spiritual, more sustainable one. All that is necessary is for each of us to do what we can to support MAPS' research. Onward to 2015!



Rick Doblin

Rick Doblin, Ph.D.
MAPS Founder and Executive Director

Annual Financial Report

Fiscal Year 2013–14 (June 1, 2013–May 31, 2014)

RICK DOBLIN, Ph.D.

THIS YEAR-END FINANCIAL REPORT from the Multidisciplinary Association for Psychedelic Studies (MAPS) is a key element of our commitment to transparency and clear communications. The report depicts our year-long focus on strategically leveraging resources that our donors have so generously empowered us to use towards realizing our shared purpose of transforming psychedelics and marijuana into FDA-approved prescription medications. The medicalization of psychedelics and marijuana is an essential part of our larger mission to facilitate the mainstreaming of psychedelics and marijuana into our culture for a wide range of beneficial uses.

As I write this report, we’ve just completed an independent audit of our financial information for the fourth consecutive year. MAPS’ financial reports, along with our audits, and tax forms can be found at maps.org/about/fiscal. If you have any questions about anything in this financial report, you are invited to inquire at askMAPS@maps.org.

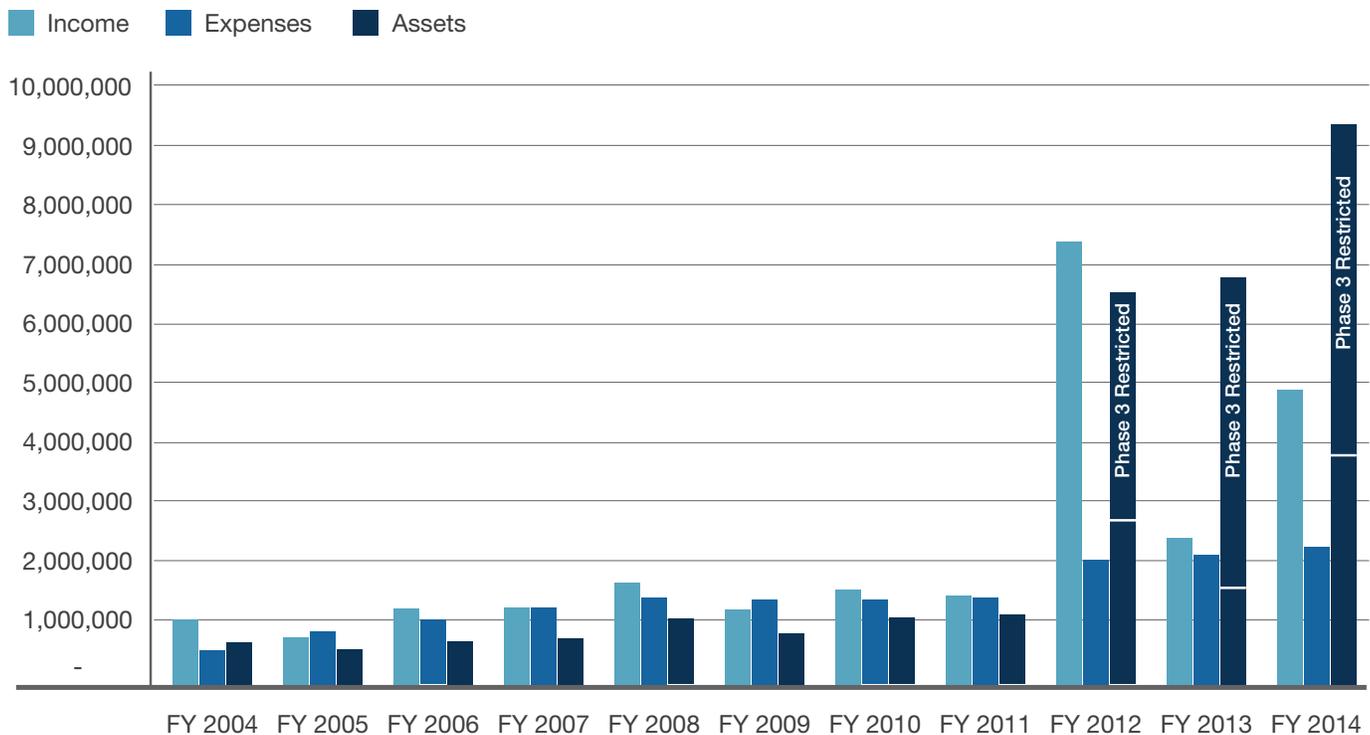
OVERVIEW

MAPS’ income in Fiscal Year 2014 (June 1, 2013–May 31, 2014) totaled \$4.9 million, and expenses were \$2.3 million, bringing our net assets to \$9.5 million. Because pledges are in-

cluded as revenue in the year they are made, just over \$840,000 of our fiscal year revenue, and year-end assets, are multi-year pledges.

Our year-end assets include \$5.4 million in the Board Restricted *Ashawna Hailey Fund*, with \$5.3 million reserved for our Phase 3 studies of MDMA-assisted psychotherapy for the treatment of PTSD, and \$102,041 for a study of MDMA for the treatment of social anxiety in adults on the autism spectrum. In the coming fiscal year, we estimate spending \$325,995 of our temporarily restricted assets on our research projects, leaving just over \$9 million in assets (including multi-year pledges) at the end of Fiscal Year 2015. Although this is substantial amount of money, it does not cover even half of the \$20 million we estimate we will need for completing our Phase 3 research required to transform MDMA-assisted psychotherapy into a prescription medicine for PTSD. In addition, MAPS has annual expenses of over \$1 million for our other research (MDMA-assisted therapy for autistic adults with social anxiety, MDMA-assisted psychotherapy for anxiety associated with life-threatening illnesses, marijuana for PTSD, and ibogaine and ayahuasca to treat drug addiction), our publishing and public education programs, as well as fundraising and administration.

Chart 1. MAPS FISCAL YEAR 2004–2014 INCOME, EXPENSES & ASSETS



REVENUE

Total contributed revenue was just over \$4 million in Fiscal Year 2014. The majority (93%) came from roughly 40 individuals and family foundations. Of the total, \$1.9 million was an unexpected bequest from Tim Butcher's estate, and \$1 million was a five-year pledge from Dr. Richard Rockefeller. In addition to these large gifts, MAPS saw increases in both revenue and the number of donors at all giving levels; the number of donors giving \$1,000 or more grew 21%; the renewal rate increased to 64%; and the number of donors grew 30% to 1,574.

Our crowdfunding campaigns in Fiscal Year 2014 exceeded expectations. After raising \$2,500 through Causes two years ago in our first campaign, this year we raised \$17,000 through Indiegogo for our Zendo Project psychedelic harm reduction program, followed by over \$44,000 for our study of MDMA-assisted psychotherapy for veterans with PTSD. Bitcoins added \$30,822 in revenue this year after we began to accept them in December 2013.

Grants revenue of (\$197,755) was received from family foundations and donor advised funds, all cases where we have a strong relationship with the foundation family. We hope that there may be a shift to more traditional foundation funding once our Phase 2 MDMA studies are complete, and we will continue to develop relationships with foundation staff until then. However, support from major foundations, like government funding, will come only after pioneering studies funded by courageous and visionary individuals and family foundations have helped us to overcome social resistance and stigma. I learned this lesson during a meeting several years ago in England with the Wellcome Trust, the largest foundation in England with a major focus on neuroscience, funded initially by pharmaceutical company stock. During our meeting, Wellcome Trust staff spoke about the "reputational risk" of supporting MDMA/PTSD research. I immediately countered that this was a "reputational opportunity" but that reframing fell on deaf ears. Still, hope springs eternal and maybe one day, MAPS will receive

Chart 2. STATEMENT OF ACTIVITIES

Fiscal Year 2013–14 (June 1, 2013–May 31, 2014)

Revenue	
Individual Contributions	1,855,525
Foundation Grants	197,775
Bequests	1,939,280
Event Registration	30,680
Product Sales	45,170
Donated Goods and Services	17,937
Fiscal Sponsorship Income	186,809
Net Investment and Other	628,615
Total Revenue and Support	\$ 4,901,791
Cost of Goods Sold	20,284
Net Revenue	\$ 4,881,506
Expenses	
Research	1,149,747
Education	640,765
Total Programs	1,790,512
Fundraising	227,779
Administration	306,467
Total Expenses	\$ 2,324,758
Change in Net Assets	\$ 2,556,748

Chart 3. STATEMENT OF FINANCIAL POSITION

Fiscal Year 2013–14 (at May 31, 2014)

Assets	
Cash and Equivalents	1,014,958
Pledges Receivable	847,306
Other Current Assets	7,628,931
Total Assets	\$ 9,491,194
Liabilities	
Accounts Payable & Accrued Expenses	128,020
Total Liabilities	\$ 128,020
Net Assets	
Unrestricted	3,018,251
Board Restricted ¹	5,433,654
Temporarily Restricted	911,269
Total Net Assets	\$ 9,363,175
Total Liabilities and Net Assets	\$ 9,491,194

1) These funds are restricted to Phase 3 drug development of MDMA-assisted psychotherapy for the treatment of PTSD, and anxiety related to adult autism.

support from major foundations and governments.

MAPS's long-term account, The Curing Fund, began the fiscal year with a balance of \$4,381,336. Contributions for the fiscal year came from the Hailey Bequest (\$1,142,389) and Butcher Bequest (\$1,000,000.) Total invested capital at fiscal year-end was \$6,523,725. During the fiscal year, The Curing Fund's investment activity, net of fees, resulted in a 9.6% or \$626,872 increase in net assets. The Curing Fund's closing balance for the fiscal year was \$7,150,597.

Our fiscal sponsorship program continues to grow, with revenue collected (\$186,908), an average 5% administrative fee charged, and the balance disbursed to projects in alignment with MAPS' vision and mission.

Product sales and event registrations are each less than 1% of our revenue, but remain important aspects of our work as the income offsets the costs of events and products, which serve to draw new supporters, strengthen our relationships to current donors, and promote our message.

FY2014 Revenue
\$ 4,881,506

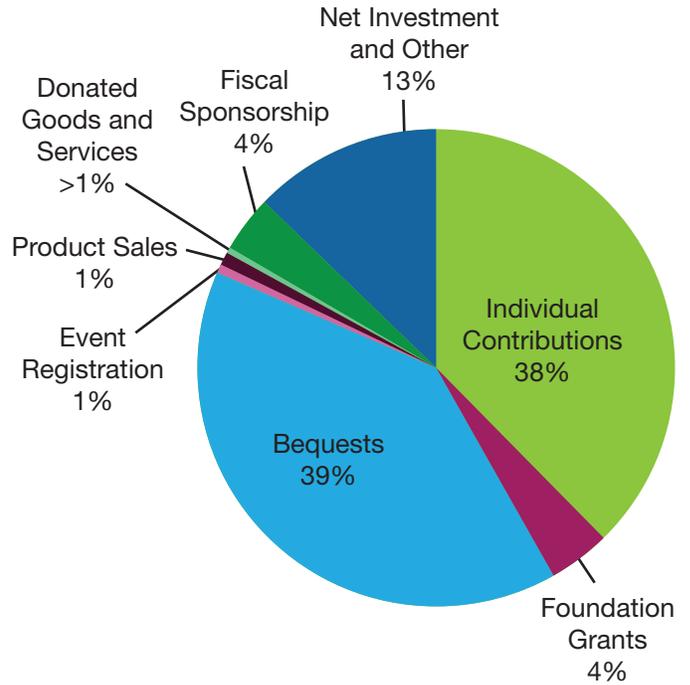
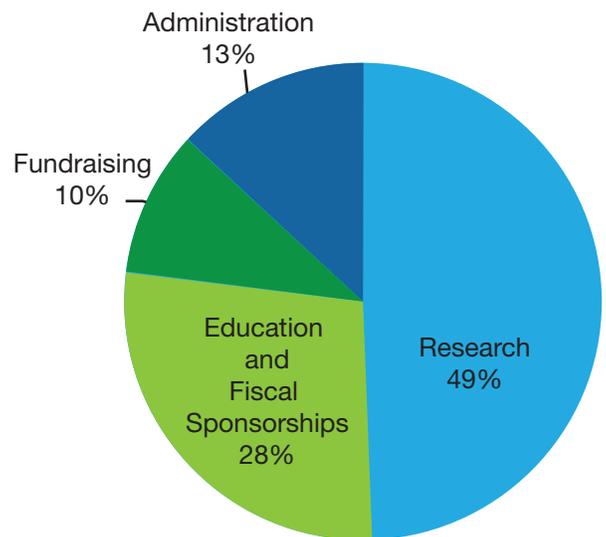


Chart 4. TEMPORARILY RESTRICTED, BOARD RESTRICTED, & OTHER RESTRICTED FUND DETAIL Fiscal Year 2013–14 (at May 31, 2014)

	Temporarily Restricted	Board Restricted
MDMA Studies		
MDMA General	800,000	-
US MDMA/PTSD Veterans	68,229	-
US MDMA/PTSD Phase 3	-	5,331,613
US MDMA/Anxiety Adult Autism	-	102,041
MDMA Tinnitus	10,000	-
US MDMA Qualitative	14,674	-
Total MDMA	\$ 892,903	\$ 5,433,654
Marijuana Studies		
Vaporizer Study	10,364	-
Total Marijuana	\$ 10,364	-
Other Studies		
LSD/Psilocybin General	7,002	-
Ketamine Research	1,000	-
Total Other Studies	\$ 8,002	-
Total Temporarily & Board Restricted Funds	\$ 911,269	\$ 5,433,654

FY 2014 Expenses
\$ 2,324,758



MAPS FY 2013–2014 DONORS

These pledges and donations were made between June 1, 2013 and May 31, 2014. Our gratitude goes to all those who made the work possible with your contributions. We show this list in part to share with you that a community has gathered together to make a difference. Totals include gifts made to our fiscally sponsored projects. For a list of these projects, see page 10.

\$50,000 & ABOVE

Tim Butcher \$1,900,000
Richard and Nancy Rockefeller \$1,000,000
David Bronner \$154,500
Anton Bilton \$105,000
The Libra Foundation \$90,000
Riverstyx Foundation \$86,000
Adam Wiggins \$60,000
Philip Payson \$53,899
Mental Insight Foundation \$50,000
Michael Moran \$50,000

\$10,000–\$49,999

Robert Barnhart \$41,218
Carey & Claudia Turnbull \$40,125
John Gilmore \$40,000
Steve Chapman \$28,170
George Goldsmith & Katya Malievskaja \$25,000
Threshold Foundation \$22,725
Anonymous \$22,200
Chris Rico \$13,269
Anonymous \$13,000
William Linton \$12,500
Lucas Jushinski \$10,060
Anonymous \$10,000
Ian Brown \$10,000
Shlomi Raz \$10,000
Rockefeller Brothers Fund \$10,000
René Ruiz & Dr. Susan Ruiz \$10,000
George Sarlo \$10,000

\$1,000–\$9,999

Anonymous \$8,029
Anonymous \$5,000
Max & Elena Talan \$5,680
Jeffrey C. Crawford \$5,000
Trammell Crow \$5,000
Carolyn Mary Kleefeld \$5,000
Aubrey Marcus \$5,000
Hilary Silver \$5,000
Sir Ivan Wilzig \$5,000
Alexander Haskell \$4,500
Michael & Anita Siegal Family Foundation \$4,000
Jeremy Tarcher \$3,500
Kolin Lymworth \$3,250
Anonymous \$3,200
Abby Sher \$3,000
Patricia Phillips, in Memory of Charles Phillips \$2,800
Julie Holland \$2,578
Florence Kuhlmann \$2,500
Hartmut Neven \$2,500
Joseph Pritzker \$2,500
Richard Dale Rodrigues \$2,500
Chris Twardowski \$2,500
Mary Waldner \$2,500
Devera & Michael Witkin \$2,500
Bicycle Day Parade \$2,420
Tahoe Wellness Cooperative \$2,180
Mack Fuhrer \$2,000
Anonymous \$2,000
Anthony Ralph \$2,000
Sahajia Sarkisian \$2,000

Philip Wolfson \$2,000
Impact Assets \$1,800
June & Lee Stein \$1,800
Terry Turner \$1,740
Santa Cruz Mountain Naturals \$1,500
Anita Susan Schindler \$1,500
Ben Warner \$1,500
William F. Harrison \$1,300
Derek Calder \$1,225
Jani Kajanoja \$1,162
Carl D. Luenser \$1,135
BitCoin 100 Foundation \$1,036
Robb Allan \$1,000
Alexander Banach \$1,000
Linda Chinn \$1,000
Daniel Todd Cohn \$1,000
Paul Eastham \$1,000
Prospect Espresso \$1,000
Highfield Foundation \$1,000
Jerry Greenfield \$1,000
Thomas Huntington \$1,000
Pam & Don Lichty \$1,000
Richard Louis Miller \$1,000
Lea Rauscher \$1,000
Anja Saunders \$1,000
Micah Elizabeth Scott \$1,000
Lars Skovlund \$1,000
Anne F St Goar \$1,000
Peter Taubkin \$1,000
Nicole Jade Ullmann \$1,000
Leigh Marz & Michael Ziegler \$1,000
Jacob Zien \$1,000

\$120–\$999

Andreas Åberg
Jolane Abrams
Mike Adams
James Adrig
Tom Aguirre
Joshua Amrhein
Sherri Anderson
Iris Andres
Joakim Arfvidsson
Pedro Attie
Gary Bacon
Allan Badiner
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Joe Bamberg
Leonard Bearne
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Lillian Eggers	Frank Kienast	Michael Montagne	Ronnie D. Robertson	Igor Stavnitser
Jim & Dorothy Fadiman	Steven & Kristine Klein	Michael Mooney	Tess Robins	Richard Steeb
Bill Fell	Barry Klein	Jeff Morley	Jean Rogers	John Stockberger
Leo Figgs	Tristan Kneschke	Laura Mosbacher	Steven Rooke	Andrew Tatarsky, Ph.D.
Mary Catherine Ford	Jeffery Kraus	Dan Mottsmann	Marsha Ruth Rosenbaum	Daniel Taub
Leander Fortmann	Paul Kuhn	Kathryn Mueller	Andrew Ross	Robert G. Teeter
Karl Fossum	Dean LaCoe	Andrew Murphy	Giorgio Rossi	Scott Teitsworth
Korvus Friend	James & Courtney Ladika	Sean Murray	Barry Rossinoff	John F. Tepley
John Fruth	Bob Lamonica	Frank Mylet	Shawn Rubin	The Anonymous PA-C
Shane Garrett	Barbara Lampert	Kelly Neff	Balázs Ruzsa	Holly Thomas
Yevgeniy Gelfand	John Lanphear	Marc Netterfield	Danna Kozerski & L. Peter Ryan	Timothy Thomas
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Philip Jensen	Chris McKulka			
Ryland Jones	Pedro Medina			
Andrew Jordan	Matthew Meyer			
David & Joann Joy	Scott Meyer			
Richard John Kay	Torrance Miller			
Aharon Keller	Zevic Mishor			
Thomas Kellerhoff				

Plus 1,044 donors who gave under \$120. We appreciate you all!

Many gifts were made anonymously, especially through the Indiegogo crowdfunding campaigns. If your name is not here, and you would like it to be, or you have any questions or corrections, please let us know!

Contact: Virginia Wright, Development Director
virginia@maps.org
831.429.6362 x107

EXPENSES

In Fiscal Year 2014, program costs totaled 77% of all expenses. Programs include Research (\$1,149,747), Education (\$447,332), and Fiscal Sponsorships (\$193,433). Our primary focus is research into MDMA-assisted psychotherapy, and especially Phase 2 research into MDMA-assisted psychotherapy for the treatment of PTSD. See Chart 7, MDMA/PTSD Phase 2 Research Projects, for multi-year study actuals and budgets.

In addition to our core clinical research, this fiscal year we began to prepare a series of studies in collaboration with researchers who work with the U.S. Department of Veterans Affairs' National Center for PTSD, using MDMA along with more traditional methods for treating PTSD including Cognitive-Behavioral Conjoint Therapy (CBCT), Cognitive Processing Therapy (CBT), and Prolonged Exposure Therapy (PET). In Fiscal Year 2014 we spent a total of \$4,721 on this project; this will increase to roughly \$27,000 in fiscal year 2015 as we develop protocols, and to \$500,000 in fiscal year 2016 as we start to conduct the studies.

We also began our study looking at the safety and efficacy of using MDMA-assisted therapy for anxiety in adults on the autism spectrum (\$44,720), and began preparations for a study of MDMA-assisted psychotherapy for end-of-life anxiety (\$9,033). Both studies will grow significantly in the coming year.

Over half our Clinical Research expenses are personnel costs. These include personnel at each study site, including the principal investigators, co-investigators, independent raters, overnight physicians, attendants, and study coordinators as well as MAPS internal staff, including the clinical director, research associates, information specialists, data coordinators, and statistical analysis.

MDMA research-related program expenses include costs of video data storage and streaming systems development, budgeting, contracting, and meetings (\$68,667); the costs of developing the treatment manual (\$694); training therapists (\$6,559); blinded therapist adherence training (\$6,716); and costs of reviewing and documenting all published MDMA literature (\$5,264). We also have the costs of MDMA-study related supervision of therapists, presentation of our data at conferences, and speaking to the media (\$53,003). There are costs to manage the MDMA purchased early in our work and to secure the drug for Phase 3 (\$6,782); we will need to purchase 1 kilogram of medical grade MDMA certified under

Chart 5. MAPS FY 2013–14 ACTUALS COMPARED TO FY 2014–15 PROJECTED DETAIL EXPENDITURES

Research	FY 2013–14 Actual	FY 2014–15 Projected
Ayahuasca		
Ayahuasca (Grob/McKenna)	-	1,000
Ayahuasca PTSD	-	4,300
Ayahuasca Addiction	-	15,000
Total Ibogaine	-	20,300
Ibogaine		
IOA-3: Mexico	3,816	-
IOA-4: New Zealand	6,329	-
Total Ibogaine	10,145	-
LSD		
LSDA1: End-of-Life Anxiety	11,319	-
LSD Creativity & General	866	-
Total LSD	12,185	-
Marijuana		
MJ Program General	2,664	-
MJP1: PTSD Veterans	9,490	50,000
MJ Israel	348	-
End the PHS review and NIDA Monopoly	2,403	3,000
Total Marijuana	14,905	53,000
MDMA/PTSD Key Research Studies		
MP1: Charleston, Pilot	10,864	-
MP1-E2: Charleston Relapse	6,665	7,000
MT1: Charleston, Therapist Training	25,850	21,300
MP4: Canada	84,152	194,408
MP8: Charleston, Veterans	264,194	247,676
MP9: Israel	77,201	168,832
MP10: UK	501	100,000
MP11: Australia	1,312	-
MP12: Boulder	198,303	277,861
MP14: Navy San Diego	2,656	-
MDMA Research Studies, other		
MAA1: Autism Anxiety, Los Angeles	44,720	147,480
MDA: End-of-Life Anxiety, San Francisco	9,033	193,326
MPVA1: PTSD, CBCT, Charleston	2,737	12,000
MPVA2: PTSD, CPT, Cincinnati	1,355	5,000
MPVA3: PTSD, PET, Charleston	-	2,000
MPVA4: PTSD, PET, Emory	302	5,000
MDMA/PTSD, Qualitative Research	326	3,100
MDMA Research Support		
Therapist Adherence	6,716	30,000
MDMA Therapist Training	6,559	20,000
MDMA Literature Review	5,264	5,000
Mithoefer Expert Advisory Time	53,003	25,000
Treatment Manual	694	7,000
MDMA Program General	68,667	103,628
End of Phase 2 Meeting	-	10,000
MDMA Supply	6,782	200,000
Total MDMA	877,858	1,785,611
Clinical Research General	234,654	173,553
Total MDMA	1,112,512	1,959,164
Total Research	\$ 1,149,747	\$ 2,032,464

Education	FY 2013–14 Actual	FY 2014–15 Projected
Conferences & Events		
Psychedelic Science 2013, Oakland, California	3,435	-
Bioneers, Marin, California	1,175	1,222
Breaking Convention, UK	2,429	2,483
Cannabis Cup: LA, SF, Seattle	1,508	1,739
Harm Reduction (Zendo Project), Various	63,725	50,000
Horizons, New York	1,327	1,327
Martin Lee Lecture, Santa Cruz	2,289	-
Reform Conference 2013 (Drug Policy Alliance), Colorado	8,629	-
Science and Nonduality, San Jose, California	193	200
Spirit, Plant, Medicine Conference, Vancouver, Canada	443	500
Commonwealth Club, San Francisco	7,007	-
World Ayahuasca Conference, Ibiza, Spain	2,731	3,000
Exploring Psychedelic Medicines, Vancouver, Canada	9,733	-
Women's Visionary Congress, California	849	1,825
Events Staff and General Expense	74,935	75,693
Total Conferences & Events	180,407	137,988
Communications		
Bulletins, Book Publishing, Prospectus	79,142	87,434
Email Newsletter	1,116	1,200
Communications, Management	47,711	48,673
Media	8,432	18,801
Social Media	18,545	33,411
Marketing	3,259	9,089
Web and Multimedia	59,531	54,313
Communications General Expense	49,191	37,759
Total Communications	266,926	290,680
Total Education	\$ 447,332	\$ 428,668
Fiscal Sponsorships (note 1, pg 10)	\$ 193,433	\$ 96,500
Total Programs (Research, Education, Fiscal Sponsorships)	\$ 1,790,512	\$ 2,557,632
Fundraising		
Events	31,983	32,632
Fundraising Staff and General Expense	195,796	174,615
Total Fundraising	\$ 227,779	\$ 207,247
Operations		
Business Expenses	18,025	18,082
Audit, Tax, and Legal	32,996	16,681
Accounting & Bookkeeping	82,009	73,640
Information Technology	19,119	20,000
Facilities and Equipment	7,859	6,992
Occupancy	8,452	6,261
Office Supplies, Utilities, Phones, Postage, Printing, Other	24,290	26,700
Staff Development	10,864	12,643
Travel	9,928	8,093
Operations Staff and General Expense	92,926	124,039
Total Operations (note 2)	\$ 306,467	\$ 313,129
Total Expenses	\$ 2,324,758	\$ 3,078,008

Note 2: Overhead expenses allocated pro rata by department.

Good Manufacturing Practices for our Phase 3 studies, at a cost of about \$400,000, over the next two fiscal years.

Clinical Research General (\$234,654) is primarily staff costs related to developing the infrastructure needed for our clinical trials, including work with communications and fundraising departments, staff professional development and conferences, and video streaming and statistical software. The clinical research general expenses are primarily related to our various MDMA studies.

Ibogaine research expenses in Fiscal Year 2014 were dedicated to completing our studies in Mexico (\$3,816), and New Zealand (\$6,329). LSD research expenses (\$12,185) were primarily used for the March 2014 publication our LSD end-of-life article in the *Journal of Nervous and Mental Disease*.

Marijuana research (\$14,905) covered the costs of MAPS staff working with Dr. Sue Sisley to develop the protocol for a pilot study in which marijuana will be tested to manage symptoms in 70 veterans with treatment-resistant PTSD, and our efforts to end the Public Health Service (PHS) review and the National Institute of Drug Abuse (NIDA) monopoly of the sale of marijuana for clinical research. We expect the new study to begin in mid-2015, as we wait for NIDA to grow the marijuana with the required CBD (cannabidiol) and THC (tetrahydrocannabinol) ratios.

Education (\$447,332) expenses include harm reduction, events, publications and communications programs. Our Zendo Project psychedelic harm reduction program (\$63,725) provided services at festivals in at five major events in Fiscal Year 2014: Burning Man (Black Rock City, NV), Envision (Costa Rica), AfrikaBurn (South Africa), Bicycle Day (San Francisco, CA), and Lightning in a Bottle (Bradley, CA).

In Fiscal Year 2014, in order to share recent findings and motivate and inspire existing and new support, MAPS produced events on psychedelic and marijuana research in Colorado, Vancouver and Santa Cruz; and attended more than 17 events that others produced, providing speakers, exhibits, sales of books and MAPS *Bulletins*, and free distribution of clinical protocols and articles from peer-reviewed journals. (\$69,404)

Communications (\$266,926) include publishing three MAPS *Bulletins* (the Spring 2013, Special Edition on Psychedelics and Education, the Summer 2013 Research Edition, and the Winter 2014 Annual Report) and 12 Email

Note 1: FY14 Fiscal Sponsorship Detail	Total Raised	Total Disbursed
Ayahuasca Foundation (Peru)	50,035	47,530
Neurons to Nirvana	50,000	50,000
Synthesis (Temple of Whollyness)	30,600	38,571
Beckley Foundation	10,000	10,000
Bluelight	10,524	7,699
CBD Project	7,943	7,943
Yawanana (includes Google Match)	4,835	10,000
Global Ibogaine Therapy Alliance	500	500
Woman's Alliance for Medical Marijuana	237	-
Ethnobotanical Stewardship Council	22,135	21,190
Total	\$186,809	\$ 193,433



Jeffrey Mark Jones, Daime I, highvoltageart.com

Newsletters. We also maintained maps.org, mdmmaptsd.org, mapscanada.org, psychedelicsscience.org, and launched mdma-autism.org. MAPS was a partner in publishing several books this fiscal year, working closely with North Atlantic Books to produce *Manifesting Minds: A Review of Psychedelics in Science, Medicine, Sex, and Spirituality*. We reprinted *LSD: My Problem Child* by Albert Hofmann, and began work with Stanislov Grof on his new book, *The Visionary World of H.R. Giger*. In Spring 2014, MAPS offered its first webinar, “Psychedelic Science: How To Apply What We’re Learning To Your Life,” a five course series in collaboration with Evolver Learning Labs.

MAPS saw significant growth in coverage of its work in social, online, and traditional media in Fiscal Year 2014. *Facebook*: New Likes increased 171% compared to the previous year; at the end of the fiscal year, MAPS had 89,282 Likes. *Twitter*: Followers increased 140%, to 17,099. *YouTube*: Subscriptions increased 256% to 5,313, with 286,160 views and 983 comments. *reddit*: MAPS organized two Ask Me Anything (AMA) sessions, with a goal to expand the number of reddit AMAs in the 2015 fiscal year. *Websites*: maps.org had 511,449 unique visits and 1,809,246 pageviews (a 54% increase from the prior year).

MAPS received 344 unique media mentions from online and print publications with significant reach in Fiscal Year 2014, up 42% from the prior year. Mentions do not include reprints of the same article in different media, and ranged from full stories to inclusion of MAPS’ name. Media outlets include the *Los Angeles Times*, *The New York Times*, *The San Francisco Chronicle*, *Reason*, *Scientific American*, CNN, *USA Today*, MSNBC, *Time*, Associated Press, FOX News, *Forbes*, NBC News, *Playboy*, *Santa Cruz Sentinel*, *Tricycle*, *Business Insider*, NPR, VICE, and Southern California Public Radio (KPCC). For a full media list see maps.org/media.

This year, MAPS operationalized its long-running Fiscal Sponsorship program (\$193,433), clarifying and updating contracts, process, and structure. This program supports projects that are in alignment with MAPS mission and vision by offering donors a way to give to a 501(c)3 nonprofit organization (see note 1, above). MAPS monitors the project budget, takes a small fee, and sends the donor a receipt for their contribution.

Fundraising expenses (\$233,162) are primarily for staff, mail and delivery, donor research and database costs, fundraising events, and travel and lodging for individual donor visits. Operations (\$350,124) are the unglamorous but necessary unallocated expenses of staffing, occupancy, taxes, fees, accounting, information technology, equipment, supplies and postage.

PHASE 2 AND PHASE 3 LONG TERM PLANNING

The charts on page 12–13 show the actual and projected expenses for each of our Phase 2 MDMA-assisted psychotherapy for the treatment of PTSD studies. Phase 2 costs will peak in fiscal year 2015, then decline as we begin our Phase 3 studies. The completion of our Phase 2 studies will provide us with the data from about 90 subjects with PTSD for an End-of-Phase 2 meeting with FDA in the first half of 2016. The purpose of this meeting is to come to an agreement about the design of our Phase 3 multi-site MDMA/PTSD studies. Once we have FDA approval for the design of Phase 3, our MDMA/PTSD Phase 3 Cost Projections will be updated and the path forward will be even clearer.

SUSTAINABLE BUSINESS DEVELOPMENT

We currently project that MDMA-assisted psychotherapy will be approved for prescription use in 2021. Because of our growing belief that we will be able to accomplish that objective, MAPS’ Board of Directors is engaged in a series of discussions with lawyers and accountants about how best to leverage the prescription use of MDMA-assisted psychotherapy and the potential income from the sales of MDMA into a source of support for further research and educational efforts consistent with MAPS’ mission. This vision of a sustainable non-profit is the new vision that we’re working to make possible, to provide a flow of resources for continued efforts to develop the healing, therapeutic, and spiritual potential of psychedelics and marijuana.

As always, every donation, no matter the size, brings us closer to realizing the dream of a transformed culture that values rather than suppresses catalysts of non-ordinary states of consciousness. As MAPS enters its 29th year, we present this financial report for your review along with an appeal to existing MAPS donors for continued support and an appeal for new support from those who feel ready to become part of this collaborative evolutionary process. 🌱

Chart 6. MAPS FY 2015 PROJECTED FINANCIALS

June 1, 2014–May 31, 2015

Revenue	FY 2015
Support from Individuals	1,742,999
Support from Foundations	513,300
Fiscal Sponsorships	100,000
Event Income	11,890
Sales	63,933
Investment and Other Income	338,711
Total Revenue	\$ 2,770,834
Cost of Goods Sold	18,811
Gross Revenue	\$ 2,752,023
Expenses	
Research	2,032,464
Education	428,668
Fiscal Sponsorships	96,500
Total Programs	2,557,632
Fundraising	207,247
Administration	313,129
Total Expenses	\$ 3,078,008
Change in Net Assets	(325,985)
Statement of Financial Position	
Temporarily Restricted Assets	619,575
Board Restricted Assets	5,111,613
Unrestricted Assets	3,299,897
Net Assets May 31, 2015	\$ 9,031,085

“**P**sychedelic drugs are poised to be the next major breakthrough in mental health care.”—Scientific American, August 14, 2014

Chart 7. MDMA/PTSD Phase 2 Research Projects

Key MDMA Research Projects	Actuals 2009–10	Actuals 2010–11	Actuals 2011–12	Actuals 2012–13	Actuals 2013–14	Projected 2014–15	Projected 2015–16	Projected 2016–17
MP1: US MDMA/PTSD Pilot	110,000	19,241	7,239	11,651	10,864	-	-	-
MP1-2: US MDMA/PTSD Relapse	-	5,845	19,567	15,741	6,665	7,000	6,500	-
MP2: Swiss MDMA/PTSD	33,500	30,666	25,544	4,218	-	-	-	-
MP4: Canadian MDMA/PTSD	9,814	8,615	2,433	13,604	84,152	194,408	76,508	25,234
MP7: Jordanian MDMA/PTSD	31,456	21,458	1,831	420	-	-	-	-
MP8: US MDMA/PTSD Veterans	35,806	147,600	202,867	262,555	264,194	247,676	50,252	23,723
MP9: Israel MDMA/PTSD	27,308	33,696	43,861	90,294	77,201	168,832	30,617	6,100
MP12: US MDMA/PTSD Intern	-	-	20,885	73,623	198,303	277,861	90,940	16,549
MT1: MDMA Therapist Training	15,038	19,244	14,335	8,166	25,850	21,300	-	-
MDMA Qualitative	-	-	-	-	326	3,100	5,300	3,500
MDMA NIMH	-	-	-	798	-	-	-	-
Overhead (10% Allocation for Projected)	26,292	28,636	33,856	48,027	66,756	92,018	26,012	7,511
Total Key MDMA/PTSD Research Projects	\$ 289,214	\$ 315,001	\$ 372,419	\$ 529,097	\$ 734,312	\$1,012,195	\$ 286,129	\$ 82,616
Associated Research Studies								
MP10: England MDMA/PTSD	-	-	-	-	501	100,000	-	-
MP11: Australia MDMA/PTSD	-	-	-	-	1,312	-	-	-
MPVA1: PTSD CBCT, Charleston	-	-	-	-	2,737	12,000	90,909	76,173
MPVA2: PTSD, CPT, Cincinnati	-	-	-	-	1,355	5,000	90,909	84,554
MPVA3: PTSD, PET, Charleston	-	-	-	-	-	2,000	90,909	88,909
MPVA4: PTSD, PET, Emory	-	-	-	-	302	5,000	100,000	94,698
MDMA PTSD-US Dept. Defense	-	-	-	14,768	2,656	-	-	-
Associated Research Projects								
End-of-Phase-2 Meeting w/ FDA	-	-	-	-	-	10,000	16,000	-
MDMA Literature Review	3,256	6,063	3,764	7,831	5,264	5,000	5,000	-
MDMA Therapist Adherence Criteria	-	-	-	4,829	6,716	30,000	10,000	-
MDMA Therapist Training	-	-	-	511	6,559	25,000	-	-
MDMA Treatment Manual	8,752	5,219	1,001	10,260	694	7,000	-	-
MDMA Researchers Retreats	27,067	2,092	-	-	-	-	-	-
MDMA Supply	-	-	-	3,987	6,782	-	-	-
Mithoefer Expert Advisory Time	27,951	33,975	49,701	68,859	53,003	25,000	26,250	27,563
MDMA Research General	11,404	55,311	32,365	49,625	68,667	103,628	122,373	-
Clinical Research General	38,036	38,885	40,583	89,448	234,654	173,553	96,591	101,430
Overhead (10% Allocation for Projected)	11,647	14,155	12,741	11,105	8,788	22,600	42,998	371,896
Total Associated MDMA/PTSD Projects	\$ 128,113	\$ 155,700	\$ 140,156	\$ 261,223	\$ 399,991	\$ 525,781	\$ 691,939	\$ 845,221
Total Phase 2 MDMA/PTSD Projects								
	\$ 417,327	\$ 470,701	\$ 512,574	\$ 790,321	\$1,134,302	\$1,537,976	\$ 978,068	\$ 927,837
FY 2009–2014 Actual MDMA/PTSD Costs	\$ 3,325,226 over past five years							
FY 2015–2017 Projected MDMA/PTSD Costs	\$ 3,443,881 over next three years							

Chart 8. MDMA/PTSD Phase 3 Cost Projections

Phase 3 MDMA/PTSD Research Projects	Projected 2014–15	Projected 2015–16	Projected 2016–17	Projected 2017–18	Projected 2018–19	Projected 2019–20	Projected 2020–21
MDMA Supply	200,000	200,000	-	-	-	-	-
MDMA Therapist Training-Protocol (MT-1)	-	102,059	137,862	68,651	-	-	-
MDMA Literature Review	-	-	4,000	4,000	4,000	4,000	4,000
MDMA Therapist Adherence Criteria	-	-	5,000	20,000	20,000	20,000	20,000
MDMA Therapist Training	-	20,000	20,000	10,000	-	-	-
Phase 3 Trial 1	-	9,091	1,818,182	1,818,182	1,818,182	909,091	-
Phase 3 Trial 2	-	9,091	4,545	1,818,182	1,818,182	1,818,182	909,091
NDA Process	-	-	-	-	-	-	250,000
MDMA Research General	-	-	110,310	115,825	121,616	127,697	134,082
Clinical Research General	-	-	-	106,502	111,826	117,418	122,835
Animal Toxicity Studies	-	-	-	-	-	500,000	500,000
Overhead (10% Allocation for Projected)	20,000	34,024	198,959	373,901	366,036	275,127	118,309

Total Phase 3

MDMA/PTSD Research **\$ 220,000** **\$ 374,265** **\$ 2,298,858** **\$ 4,335,243** **\$ 4,259,843** **\$ 3,771,515** **\$ 2,058,316**

Total Phase 3 Projected Costs **\$17,318,041** over seven years

Chart 9. MDMA/Other Projects Cost Projections

MDMA/Other Research Projects	Actual 2013–14	Projected 2014–15	Projected 2015–16	Projected 2016–17
MDMA End of Life Anxiety	9,033	193,326	178,909	40,874
MDMA Autism	44,720	147,480	71,760	11,715
Overhead (10% Allocation for Projected)	5,375	34,081	25,067	5,259

Total MDMA/Other

Research Projects **\$ 59,129** **\$ 374,887** **\$ 275,736** **\$ 57,848**

Total MDMA/Other Research Projects **\$ 767,599** over four years



*“F*or more than 30 years I have been working to make FDA approval of psychedelic psychotherapy more than a dream. Now that castle in the air has a foundation underneath it and is becoming an impending reality.”—Rick Doblin, Ph.D.,

The Washington Post, November 17, 2014

Research News

Treating PTSD with MDMA-Assisted Psychotherapy

mdmaptsd.org

20th Subject Treated in Ongoing Veterans Study; Study Fully Funded *Ongoing study*

Location: Charleston, South Carolina

Principal Investigator: Michael Mithoefer, M.D., with co-therapist Annie Mithoefer, B.S.N.

Estimated study budget: \$1,382,000

Already raised: \$1,382,000

This study has been fully funded.

On August 26, 2014, the 20th subject was treated in our ongoing study of MDMA-assisted psychotherapy for 24 U.S. veterans, firefighters, and police officers with service-related PTSD, led by Principal Investigator Michael Mithoefer, M.D., and Annie Mithoefer, B.S.N. This subject is the first police officer enrolled in the study.

In just 16 days, over 800 funders helped us reach our \$50,000 goal for our Legalizing Psychedelic Therapy crowdfunding campaign, completing our multi-year, \$1.38 million fundraising effort for this study. “I really did find the healing that I needed for the combat experiences that I went through during my very first session,” says Iraq veteran and study participant Nicholas Blackston. “It just helped me go so much deeper within my consciousness. I accepted that part of myself that I had cut off.”

Seven subjects have also enrolled in our ongoing sub-study of the physiological effects of MDMA-assisted psychotherapy, which will use heart rate variability (HRV) and functional magnetic resonance imaging (fMRI) to explore correlations with clinical outcomes.

Goals for this study include (1) gathering evidence for the safety and effectiveness of MDMA-assisted psychotherapy in people suffering from war-related trauma; (2) comparing the effectiveness of the treatment for people with war-related trauma versus for people with trauma related to sexual abuse, assault, and other causes; (2) comparing different doses of MDMA for therapeutic effectiveness and ability to create a successful double-blind; and (3) increasing awareness and support for our work by assisting a population with mainstream public recognition.



Our phase 2 studies are a step toward legalizing MDMA-assisted psychotherapy by 2021.

16th Subject Enrolled in Boulder Study; Protocol Amendment Approved by IRB *Ongoing study*

Location: Boulder, Colorado

Clinical Investigator: Marcela Ot'alora, M.A., L.P.C.

Estimated study budget: \$711,000

Already raised: \$309,000

Needed to complete this study: \$402,000

On September 30, 2014, the 16th subject was enrolled in our ongoing study of MDMA-assisted psychotherapy for PTSD in 23 subjects with PTSD from sexual assault, violent crime, war, natural disasters, or any other cause, taking place in Boulder, Colorado. Led by Clinical Investigator Marcela Ot'alora, this study is exploring the safety and effectiveness of MDMA-assisted psychotherapy when one member of the male/female co-therapist team is an experienced therapist and the other is an intern being trained in therapy, social work, or nursing.

As of November 12, 11 subjects have completed their primary endpoint interviews, including the Clinician Administered PTSD Scale (CAPS) and other assessments, after receiving two experimental sessions. “A good way to describe it is that I felt like I was in a cave, trying to get out, but I didn't have any light,” James, a study participant, recently told the CU Independent. “So I was just feeling around the walls, getting turned around, and getting even more lost. But with the MDMA sessions, it was like the therapist was my guide and the MDMA was a flashlight. With those resources, I could get out of the cave I'd been lost in for so long.”

Our Legalizing Psychedelic Therapy crowdfunding campaign raised \$141,888, with all funds raised above \$50,000 going towards costs associated with this study. These funds will pay for therapist training and supervision, MDMA storage and preparation, setting up the treatment room, plus all remaining experimental sessions in the Boulder study.

On August 28, the Institutional Review Board approved an amendment to the study protocol, adding greater variability in dosing options for subjects' unblinded sessions, giving subjects randomly assigned to the 100mg condition for their first two sessions the option of requesting either a 100mg or 125mg dose for their third experimental session. “The first two treatments with 100mg felt like I helped the medicine help me,” reported one participant. “With the 125mg, the medicine was right there to help and hold me. It held me and supported me doing my work.”

Goals for this study include (1) gathering evidence for the safety and effectiveness of MDMA-assisted psychotherapy for subjects with PTSD from a variety of causes, (2) comparing different doses of MDMA for therapeutic effectiveness and abil-

ity to create a successful double-blind, (3) exploring whether using intern co-therapists can reduce costs while maintaining treatment effectiveness, and (4) training the next generation of psychedelic psychotherapists.

“The Boulder study is at its halfway point and the results have been encouraging and significant,” reports study Principal Investigator Marcela Ot’alora. “We have witnessed people change in ways they did not think possible. I am continuously amazed by our participants’ willingness to embark on a journey they know little about, while having their world disrupted and ultimately doing tremendous work.”

Fourth Subject Treated in Israeli Study; Israeli TV to Fund Upcoming Documentary

Ongoing study

Location: Beer Yaakov, Israel

Clinical Investigator: Moshe Kotler, M.D.

Estimated study budget: \$493,000

Already raised: \$83,000

Needed to complete this study: \$410,000

On June 15, 2014, the fourth subject out of 10 was treated in our ongoing Israeli study of MDMA-assisted psychotherapy for chronic, treatment-resistant PTSD. On October 28, the quality monitoring visit was completed by Kamila Novak of Antaea Medical Services, our Israeli contract research organization, to check the quality of the study site, study forms and documents, and review the data collected from the first four subjects. Additionally, Israel’s Channel 1 has committed funding for an upcoming documentary on the study. Led by Clinical Investigator Moshe Kotler, M.D., this study is taking place at Beer Yaakov Mental Hospital.

Goals for this study include (1) gathering evidence for the safety and effectiveness of MDMA-assisted psychotherapy for subjects with PTSD mostly related to war and terrorism, (2) comparing different doses of MDMA for therapeutic effectiveness and ability to create a successful double-blind, (3) working in direct association with the Israeli Ministry of Health, and (4) exploring the use of MDMA-assisted psychotherapy in other cultural contexts.

Subject Screening Begins in Canadian Study; New Co-Investigators Participate in Therapist Training

Study pending initiation

Location: Vancouver, British Columbia, Canada

Principal Investigators: Ingrid Pacey, M.D.

Estimated study budget: \$419,000

Already raised: \$50,000 raised + \$3,500 raised by partners

Needed to complete this study: \$365,500

On September 2, 2014, the first potential subjects were screened for our Canadian study of MDMA-assisted psychotherapy for PTSD. Led by Principal Investigator Ingrid Pacey, M.D., in Vancouver, B.C., this study will treat up to 12 subjects with chronic, treatment-resistant PTSD from any cause. From

August 1–5, 2014, the study’s new co-investigators, Donna Dryer, M.D., and Richard Yensen, Ph.D. participated in a two-and-a-half day therapist training led by Michael Mithoefer, M.D., and Annie Mithoefer, B.S.N., in Vancouver.

MAPS is sponsoring this study in association with MAPS Canada, the first and only Canadian organization dedicated to psychedelic research and education, now able to receive tax-deductible contributions in Canada. “After an incredibly long process of study approval and start-up, it is wonderful to see all of our hard work come to fruition,” said Amy Emerson, MAPS Director of Clinical Research. “The addition of this study team will give us experience with a new therapy team and a chance to compare with results from our other studies.”

Goals for this study include (1) gathering evidence for the safety and effectiveness of MDMA-assisted psychotherapy for subjects with PTSD from a highly skilled co-therapist team, (2) comparing different doses of MDMA for therapeutic effectiveness and ability to create a successful double-blind, and (3) initiating the first Canadian research into the potential benefits of psychedelic psychotherapy in over 40 years.

MAPS and UK Researchers Plan Brain Imaging Study of MDMA and PTSD

Upcoming study

Location: Cardiff University, UK

Principal Investigator: Prof. Jon Bisson

Study Lead: Ben Sessa, M.D.

Funded in part by MAPS.

“Hooking up with the neuroimaging expertise of Robin Carhart-Harris, Ph.D., and Dr. David Nutt at Imperial College London and Richard Wisnes’ fMRI department at Cardiff University, we designed a study that looks primarily at the neurobiological mechanisms behind MDMA’s effects on the core features of PTSD. There have already been neuroimaging studies on patients with PTSD and on healthy people taking MDMA, but ours will be the first time fMRI has looked specifically at patients with PTSD under the direct effect of MDMA. This study will be funded by MAPS, Beckley Foundation, and an anonymous donor. There is no therapeutic component to the study, but subjects will be able to request therapeutic support if they feel it is necessary since for most of their MDMA experience they will not be in the scanner. This study will also explore MDMA’s potential beneficial effects without delivering formal therapy.” —Dr. Ben Sessa MBBS (MD) BSc MRCPsych, Consultant Child and Adolescent Psychiatrist in Substance Misuse and Psychedelic Researcher, Bristol and Cardiff, UK.

MDMA-Assisted Therapy for Social Anxiety in Autistic Adults

Fifth Subject Enrolled *Ongoing study*

Location: Los Angeles, California

Principal Investigators: Charles Grob, M.D., and Alicia Danforth, Ph.D.

Estimated study budget: \$320,000

Already raised: \$1,000 raised + \$15,000 raised by partners

Needed to complete this study: \$304,000

On October 24, 2014, the fifth subject of 12 was enrolled in our ongoing study of MDMA-assisted therapy for social anxiety in adults on the autism spectrum. This exploratory pilot study is exploring whether MDMA combined with therapy can enhance functional skills and quality of life in autistic adults with social anxiety, and is being conducted in affiliation with Harbor-UCLA Medical Center and the Los Angeles Biomedical Research Institute. Comparative studies suggest that autistic adults are at greater risk for lifetime and current psychological disorders, especially social anxiety.

“When the study began, we were optimistic that individuals with social phobias would find the courage to call the hotline, send an e-mail, or contact us through other means,” reports co-Principal Investigator Alicia Danforth, Ph.D. “We are happy to report that we already have received over 80 screening inquiries from men and women from all over the United States and several from overseas. We are on track to enroll at least one more participant by the end of the year, which will keep us on schedule.”

Goals for this study include (1) gathering evidence for the safety and effectiveness of MDMA-assisted therapy for autistic adults diagnosed with social anxiety, (2) determining if additional studies in this area are warranted, and (3) initiating a new program of research into a possible beneficial use of MDMA building on collected case accounts.



Alicia Danforth, Ph.D., and Charles Grob, M.D., in the treatment room at Harbor-UCLA Medical Center.

MDMA-Assisted Psychotherapy for Anxiety Associated with Life-Threatening Illness

FDA and IRB Approved Protocol *Upcoming study*

Location: Marin, California

Principal Investigators: Phil Wolfson, M.D.

Estimated study budget: \$582,000

Already raised: \$121,500

Needed to complete this study: \$460,500

On November 13, 2014, the U.S. Food and Drug Administration (FDA) approved the protocol for our upcoming study of MDMA-assisted psychotherapy for anxiety associated with life-threatening illness. This randomized, double-blind, placebo-controlled Phase 2 study, to be conducted in Marin, Calif., will gather preliminary data about the safety and efficacy of MDMA-assisted psychotherapy for anxiety in 18 subjects diagnosed with a life-threatening illness. Principal Investigator Phil Wolfson, M.D., brings to the study his substantial experience using MDMA in psychotherapy before MDMA was criminalized in 1985.

The study was approved by the Institutional Review Board (IRB) on September 16. On November 19, the Research Advisory Panel of California (RAP-C) is scheduled to review our responses to their request for several changes to the protocol and Informed Consent form, as California is the only U.S. state with a separate review process for Schedule I drug research. The study will also require approval from the U.S. Drug Enforcement Administration before we can begin screening subjects.

Anecdotal reports indicate that MDMA may be helpful in reducing social anxiety in autistic adults.

Learn more at mdma-autism.org



Please support our clinical study testing the safety and efficacy of MDMA-assisted therapy in the treatment of social anxiety in adults on the autism spectrum.

mdma-autism.org/donate

LSD-Assisted Psychotherapy for Anxiety Associated with Life-Threatening Illness

Switzerland: Qualitative Results Published, Showing Lasting Benefits

Study completed

Location: Solothurn, Switzerland

Principal Investigator: Peter Gasser, M.D.

This study is complete and has been fully funded.

On November 11, 2014, the peer-reviewed *Journal of Psychopharmacology* published a paper describing the results of a qualitative study of subjects in our completed Swiss Phase 2 pilot study of LSD-assisted psychotherapy for 12 subjects with anxiety associated with advanced-stage illness. A March 2014 paper in the *Journal of Mental and Nervous Disease* about our completed pilot study found positive trends in the reduction of anxiety following two LSD-assisted psychotherapy sessions, and indicated that LSD-assisted psychotherapy can be safely administered in these subjects. The long-term results, showed lasting reductions in anxiety and increases in quality life for participants one year after receiving two LSD-assisted psychotherapy sessions. "I was very very sad, I cried, never desperate, but a lot of sad things came up," one subject recalled of their experience in the study. "Quality of life changed extremely insofar as I became calmer, that I take things easier," wrote one study participant. "It makes a difference if I look upon death with stress or with equanimity. I believe that is an enormous difference in quality of life."

This is the first study of the therapeutic use of LSD in humans in over 40 years. The first subject was enrolled on April 23, 2008, and the last long-term follow-up interview was conducted on August 8, 2012. Eleven of the 12 subjects in the double-blind, placebo-controlled pilot study had never used LSD previously. Goals for this study were (1) gathering evidence for the safety and effectiveness of LSD-assisted psychotherapy for subjects with anxiety related to advanced-stage illness, and (2) completing the first study of LSD humans in over 40 years.



MAPS supports research into the safety and effectiveness of **ayahuasca-assisted treatment for drug addiction**. We also support conferences, meetings, and publications about the scientific, therapeutic, sustainable, and spiritual uses of ayahuasca. Learn more at maps.org/ayahuasca.

Ibogaine-Assisted Therapy for Drug Addiction

New Zealand Ibogaine Study

Ongoing study

Location: New Zealand

Principal Investigator: Geoff Noller, Ph.D.

Donations are needed to support ibogaine research.

Investigator Geoff Noller, Ph.D., has collected follow-up data from eight participants who underwent treatment at an independent ibogaine center in New Zealand. Data from this study, which is expected to be complete in Spring 2015, will be compared to the results of our completed observational study in Mexico.

Goals for this study include (1) gathering preliminary evidence about the safety and potential benefits of ibogaine-assisted therapy for opiate addiction, (2) supplementing the data from our completed observational ibogaine study in Mexico, and (3) initiating and encouraging psychedelic research in New Zealand.

Mexico Ibogaine Study

Study completed

Location: Mexico

Principal Investigator: Thomas Kingsley Brown, Ph.D.

This study is complete and has been fully funded.

Data cleanup has begun in preparation for submitting the results for publication in a peer-reviewed scientific journal. In this study, Principal Investigator Thomas Kingsley Brown, Ph.D., observed the long-term effects of ibogaine treatment for individuals undergoing treatment for opioid dependence at an independent clinic in Mexico.



Medical Marijuana Research

\$2 Million Grant Proposal Submitted to State of Colorado for Multi-Site Study

Research in Arizona *Study pending*

Location: Arizona and TBD

Clinical Investigator: Sue Sisley, M.D.

Estimated study budget: \$2,000,000

Already raised: \$33,000

Needed to complete this study: \$1,967,000

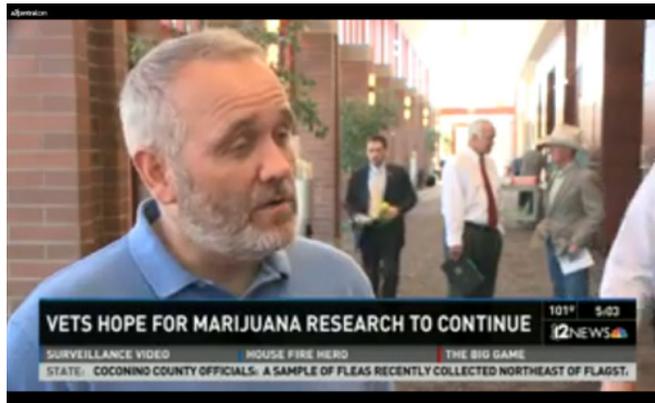
On October 14, 2014, MAPS submitted a proposal to the Colorado Department of Public Health and Environment requesting \$2 million for our planned study of marijuana for symptoms of PTSD in 76 U.S. veterans. The State of Colorado has \$9 million available for marijuana research, and the response to our submission is expected in late November or December. The National Institute on Drug Abuse (NIDA) estimates that they will be able to provide the marijuana for our study in January 2015. The study is the first randomized controlled trial (RCT) to test the therapeutic potential of smoked marijuana and its components as a treatment for PTSD.

This will be a two-site study led by Principal Investigator Sue Sisley, M.D., who will conduct her portion of the study in her private practice office in Arizona or at Arizona State University, and a second Principal Investigator, Ryan Vandrey, Ph.D., who will conduct his portion of the study at Johns Hopkins University in Baltimore, MD. On September 25, veterans and medical marijuana advocates spoke to the Arizona Board of Regents in favor of Dr. Sisley, encouraging ASU to host part of the study there. Dr. Sisley is currently in discussions with ASU about the possibility of hosting the study there.

Marcel Bonn-Miller, Ph.D., of the University of Pennsylvania will serve as Coordinating Principal Investigator, and Paula Riggs, M.D., of the University of Colorado, Denver will serve as Senior Scientific Advisor. Dr. Sisley has been working with MAPS since 2010 to initiate the study.

HHS Denies Request from 30 Members of Congress to End Obstructive Review Process

On September 22, 2014, U.S. Department of Health and Human Services Secretary Sylvia M. Burwell formally rejected a request from 30 members of Congress requesting that HHS end the obstructive Public Health Service (PHS) review process for privately funded medical marijuana research. A 1999 HHS Guidance requires an additional review process for federally regulated research with marijuana, but not for any other Schedule I drug. This additional review process makes it difficult or impossible for scientists in the U.S. to gain approval for whole-plant medical marijuana drug development research. On June 17, Rep. Earl Blumenauer (D-OR) and 29 other Congressional representatives sent a letter to HHS requesting that the PHS review process be eliminated. MAPS is now working with Rep. Blumenauer's office to prepare a letter to Sec. Burwell responding to her rejection letter, which ignores the substance of the 30 Congressional representatives' concerns and fails to justify the problematic PHS review process for medical marijuana research.



Arizona's Channel 12 News features coverage of the Arizona Board of Regents meeting on September 25, 2014, highlighting presentations from veterans and advocates who traveled from around the country to voice their support for MAPS and Dr. Sue Sisley's study of marijuana for PTSD.

Looking for more ways to get involved?

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maps.org/amara

MAPS in the Media



Psychedelic Medicine Gets a Closer Look
by Sanjay Gupta, M.D.
September 15, 2014



Medical Marijuana Research Hits Wall of U.S. Law
by Serge F. Kovaleski
August 9, 2014



MDMA-Assisted Therapy for PTSD
The Doctors
October 13, 2014



How the Drug War Blocked Research Into a Promising Experimental PTSD Therapy
by Max Ehrenfreund
November 11, 2014



Pot Researcher Firing Unleashes Rising Veteran Backlash
by Bill Briggs
July 29, 2014



UA Denies Appeal of Medical Pot Researcher's Firing
by Colton Shone and Steve Stout
July 29, 2014



Doctors Explore Psychedelics
by Douglas Main
October 14, 2014



Veterans Speak in Support of Medical Marijuana Researcher
by Krystle Henderson
September 25, 2014



How Psychedelic Drugs Could Help Treat Depression
by David Derbyshire
October 5, 2014



Local Marine Finds Healing From PTSD Using Controversial, Psychedelic Therapy
by Briana Conner and Chad Darnall
October 14, 2014



The Colossal Government Failure that Obstructed a Potentially Major Medical Breakthrough
by Tom Shroder
September 21, 2014



Psychedelics Could Change the Way We Die
by April M. Short
November 6, 2014



Fired Medical Marijuana Researcher Loses Appeal To Keep University Job
July 30, 2014



This Is Life With Lisa Ling: Jungle Fix
by Lisa Ling
October 27, 2014



The Illegal Drug That Could Help Ease Anxiety About Death
by April M. Short
October 31, 2014



Pot-for-PTSD Researcher Denied Reinstatement
by Patricia Kime
July 29, 2014



Psychedelic Science
by Kevin Franciotti
November 2, 2014

My Journey through PTSD: Healing with MDMA-Assisted Psychotherapy

ELIZABETH MATTHEWS, M.A., L.P.C.



Elizabeth Matthews, M.A., L.P.C.

I CAME TO MAPS HUMBLED by the demands of life and finished the program humbled by its mysteries.

I am the youngest of 8 kids, raised Catholic and schooled by nuns. As you can imagine, we didn't have much money to go around. What's harder to imagine is that the 10 of us shared one bathroom, one phone and one television set. Our car had no garage, our washing machine, no dryer. In the winter, my mom hung our clothes up in the basement.

Our neighborhood was violent. Houses on the block were torched, the sounds of yelling and breaking glass cut through the night. Some of my friend's parents wouldn't let them visit. Twice, I was made to get out of a car and walk two blocks home, alone, because somebody's mom was scared to drive on my street. I ran home in the dark, backwards. Poverty sucks, violence sucks more. My siblings and I were close, like soldiers in a war. Humor made it bearable.

I thought my PTSD [posttraumatic stress disorder] symptoms stemmed from the violent threats I experienced as a kid. Now I know sexual abuse was the main culprit. That's the thing about sexual abuse; you try to hide it, even from yourself. Once the abuse began, it built its own speed and traction. I could not voice my objections to unwanted touch. The guilt and shame remained shadowed for decades. When I found my voice and told my story the shame resurfaced on several fronts. The healing was brutal. One step forward, two steps back. The psychedelic-assisted psychotherapy changed that dynamic. The MDMA allowed me to communicate the truth of my experience while remaining connected to my therapist. Before MDMA, I couldn't tell my story without being rocked for days

by the shame that surfaced in the telling.

My life began to improve when I left my home town after graduating from college; I made a good life for myself. I worked in commercial real estate for a while and even had my own leasing and property management business for several years. I was making money and it was fun, but it wasn't enough.

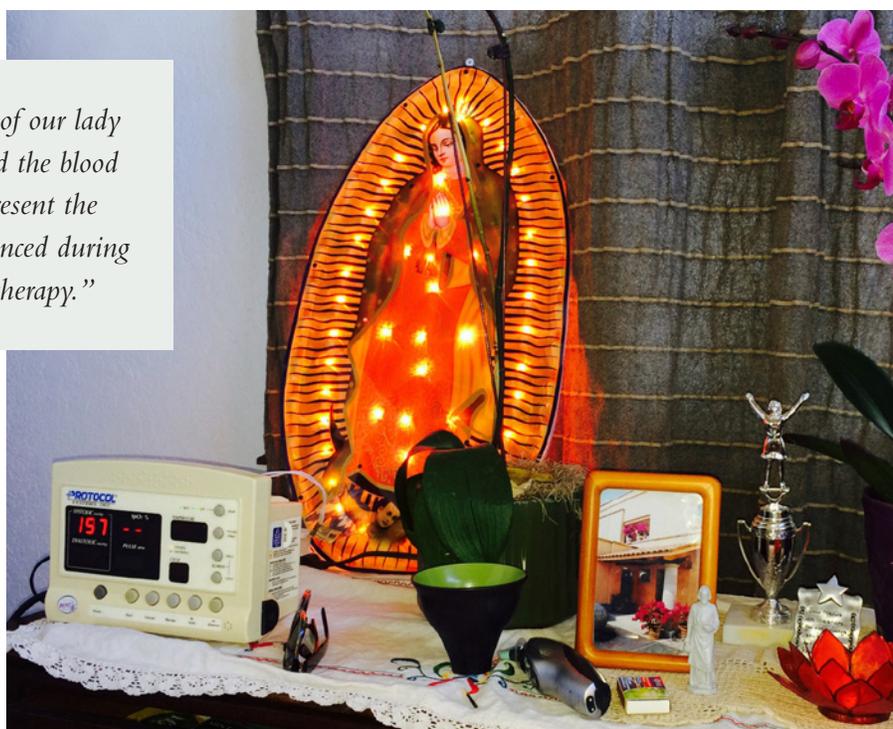
I wanted to be a therapist and so at the age of 35 I enrolled in a Jungian inspired program at Pacifica Graduate Institute in Carpinteria, California. It was a golden time for me. I thrived on learning about the evolution of soul and the power of ritual. My graduate work gave shape to my musings. It grounded the thoughts and feelings that had been swirling around me without an anchor or a compass.

Following graduate school I met the man who is now my husband. I love him and our life which includes two cats, one dog, and a very old house. We take trips, share chores and delight in each other's company. I have a well-established private practice. Being a therapist fulfills the calling I felt since high school. Sometimes when I am on the couch or on the porch I will raise my head and my life will stop for a moment in time, like a snapshot; and in that moment I realize that I have exactly what I want. I am living the life I was meant to live.

But something was separating me from the bounty of my life; worthiness. The shame of my youth barred me from appreciating the abundance of my current life. I didn't know how to love myself but I had enough self-esteem to keep trying.

I heard about MAPS and the use of MDMA for the treatment of PTSD while having coffee with some therapist friends. I knew and trusted Marcela, the woman associated with the

“I brought in the lighted image of our lady of Guadalupe. MAPS provided the blood pressure cuff. Together they represent the multiple layers of care I experienced during my psychedelic-assisted psychotherapy.”



study. I phoned, texted, and emailed her to ask to be put on the list and then I phoned again months later just to be sure that she knew I was serious. I wanted in. At the age of 55, I had been in therapy on and off for twenty years, on antidepressants for 15. When anxiety felt unmanageable I took xanax.

Medication was not my first choice to manage my symptoms of PTSD. I consulted with practitioners in Acupuncture, Reiki, Chiropractic, Cranial Sacral, EMDR, Brainspotting and more. I went on retreats, took pilates and yoga classes, learned to knit, quilt, make baskets, throw pottery, create vision boards, attended women's groups and learned to meditate from a Swami. I placed encouraging Post-it notes on my bathroom mirror, "I love and accept myself fully in this moment." I recycled, re-purposed and re-used. I volunteered time, donated money, and typically said please and thank you at the appropriate times. I had worked diligently to attain mental, emotional, and spiritual well-being and it still eluded me. I needed help; I couldn't do this by myself. The traditional methods were helping but not healing.

I decided to prepare for this journey with MAPS and prayed that I would be accepted. I already had a yoga practice and was adept with deep breathing. I decided to learn to meditate. It was tough at first but I persevered. My daily alone time began as a discipline and has become a respite.

Eighteen months following my request to be in the program, I received a message from the woman who coordinated the MAPS study and the physical, mental, and cognitive testing

began. I was accepted into the program and my anxiety spiked. These people wanted me to give up antidepressants. I really did not want to relinquish my medication but it was a requirement for the study so I called my acupuncturists and asked for help in stabilizing my mood and anxiety.

In January I met with my MAPS therapists. I walked into a room with two people who looked very young to me. I remember wondering if their combined ages would equal mine. I questioned if they had the life experience to support my process. They proved to be up to the task. After several weeks of 90 minute therapy sessions my first MDMA-assisted therapeutic journey was scheduled for a Friday.

I entered the room and it felt like a cathedral. The room was filled with natural light; there were fresh flowers and music.

My therapists were all smiles. Will, the program's psychiatrist, looked at me with the eyes of an inner sanctum. Marcela hugged me and told me she was "so excited for me," she "knew I would do great." It seemed strange that they were gathering just for me. Didn't they have better things to do? They checked

my urine and my attitude and determined I was good to go. I sat on the quilt covered couch to wait while Will placed the MDMA in a lovely ceramic bowl with golden symbols painted on the side. He asked if I had an intention for my journey. I told him "I want to learn to love myself." Then I lay on the couch, put on the eye shades and surrendered.

Early into my first session I saw myself standing tall near-

*I didn't know how to
love myself but I had enough
self-esteem to keep trying.*



“I was delighted to find this clock and image of Ganesha, a Hindu deity known as a remover of obstacles, at the hospice thrift store days prior to my final MDMA-assisted psychotherapy session. I brought them both to my last session on Easter Sunday 2014. The clock depicts various angels playing musical instruments, some ascending a staircase to a castle and others alternately rotating in rhythmic time. Their presence seemed serendipitous and lifted my spirits.”

ing a rock ledge that shadowed a cave. Then I saw the young me, scurrying into the shadow with the eyes and movement of Gollum. I couldn’t stand the light, couldn’t stand being seen, I was overcome by shame. The tall me stretched a Gumby like arm into the cave and extended the other arm towards the sun. “You can go as deep and dark as you want,” the tall me said to my little self, “I’m not going anywhere.” There I stood, patient, loving, stable; a force without an agenda or a judgment, a force that wouldn’t abandon me.

This theme, the interplay between my traumatized self, my resourced self, and a mystical presence repeated itself each time I took MDMA. Multiple times during my first and second sessions I would remove my eye shades to look at a large image of Our Lady of Guadalupe complete with flashing lights that I had propped against the wall. Her presence was crucial to my stability during the majority of the four months I was in treatment.

As a little girl I would kneel at the family altar and ask Jesus and Mary why they didn’t love me. I knew I had a good heart, why were my family and I being punished? Why was life so dif-

ficult for us? During repeated trips to Mexico as an adult, the Mexican people re-awakened my need for the divine feminine. By the time my MAPS program began I had come to rely on Our Lady of Guadalupe for spiritual direction and inspiration. The mystical connection I experienced on MDMA-assisted therapy was an answer to the prayers initiated 50 years ago at the family altar.

In each of my three sessions I experienced the embodiment of a great cat. In my second session I was pacing in a cage;

back-and-forth maniacally looking at the people looking at me, back-and-forth hoping to ease the pressure in my chest. I was thirsty but I wasn’t going to take my eyes off the people standing outside the cage, staring at my helplessness. Then the cage wall exploded open and I was running in tall grasses, I could feel the sun on my neck and the

soft ground under my feet. As I burst through the cage wall I increased in size and strength and I acquired a mane. “Run,” the caged lion said, “Run for me.” I knew my freedom made her captivity more bearable. So I ran for both of us, grateful for her encouragement and my freedom.

“You can go as deep and dark as you want,” the tall me said to my little self, “I’m not going anywhere.”



“During the months of treatment provided by MAPS, I became fascinated by the image of the spiral. I found this spiral candelabra on eBay and used it to create several art projects. This final rendition, brought to my last MDMA session, is of a child being tended to by a loving adult.”

Session number three was on April 20, 2014; which coincided with Easter Sunday, Hitler’s birthday and 4/20, the national day for celebrating cannabis. Christ, Hitler, cannabis? I was amused and intimidated by the strange gathering of events. I feared that the psychedelics would overpower me this time. They did not. This session began with a birthing session and ended with a calling forth of the energies that had harmed me. This session roared forth my voice with a resonating NO. I was not overwhelmed, I was empowered and the boundary born of that NO remains in my body and mind. I found my voice and it is loud.

In session number three I met two holy people, Frank and Marie, who adopted me as their own. They showed me around the farm and told me about seasons and storms. They assured me that, as a family we would ride the wave of feast and famine together. They brought me to an egg shaped cave with a crack in the ceiling that let in the light. There were jewels and other objects around the shadowy edge of the cave. In the center a fiery cauldron glowed; its edges shaped like golden crystals. We spent a lot of time there, enjoying stillness. This place of abundance and shad-

ows offered respite and protection.

Since finishing the MAPS program in May of 2014, life is not necessarily easier but it is more meaningful. The kindness of my therapists was awkward for me at first. They took my temperature and blood pressure regularly, and made sure I remained hydrated. They empathized with my despair, celebrated my joy, and stood witness to my process. Most of all, they honored my need to navigate the forest of recovery on my own terms; relying on my instincts and way of moving through the world.

The quality of our relationship was as important as the MDMA. Ultimately, I did not need to take this solitary trek alone as my therapists remained staunch supporters through the entire process.

The gift of such a journey should not be taken lightly. This is club with a very steep entry fee. During the 4 or 5 months of the program I was flooded

with memories and fears. My husband was often the recipient of my anger and mistrust. One night I woke him up, I couldn’t settle. He asked what I wanted; we walked the dog, went to breakfast at a late night diner and just drove, listening to late night radio until I felt ready for sleep. His steadfast presence

*“Run,” the caged lion said,
“Run for me.” I knew
my freedom made her
captivity more bearable.*



“I bought this figure of St. Francis years ago in Mexico, and acquired the woman at the local hospice thrift store. They became my parental figures during a MDMA session and remain very dear to me. I access the memories of the time spent with them when I pray or want to calm myself.”

in the face of my rage mocked the old voice that doubted my value. This is a love that humbles.

If you are considering entering into psychedelic-assisted therapy give yourself time to prepare. The medicine is only part of the process. An inventory of your personal history, strengths, and challenges will deepen your experience. Consider the needs of your mind, body, and soul. Establish rituals to help you sleep. Consider guided meditation as a way to learn to follow your inner voice. Do artwork before, during, and after. Bring items of value to the therapy sessions, bring it all, and let your therapist get to know you. Keep a journal the whole time, give voice to your heart; you’ll be glad you did. Most of all remember that this talented team is rallying around you because of your innate value.

I appreciate the tremendous amount of resources summoned by MAPS and donors for the treatment of mental illness. My psychedelic-assisted psychotherapy was a bridge to a new way of perceiving my world and myself. I feel connected to my heart in a way I couldn’t have imagined prior to my treatment. I utilize my ability to tap into sensations I experienced on

MDMA to settle my nerves, seek guidance, and communicate gratitude for the abundance of my life.

As a licensed psychotherapist and an individual who has struggled with clinical depression and PTSD I support and encourage the study of psychedelics for the treatment of mental health. Kahlil Gibran is credited with saying, “Many of us spend our whole lives running from feeling with the mistaken belief that you cannot bear the pain. But you have already borne the

pain. What you have not done is feel all you are beyond that pain.” Hopefully, in this millennium, veterans and survivors of abuse and trauma will have the option to choose psychedelic-assisted psychotherapy to support their process of healing and personal discovery. 🌱

I feel connected to my heart in a way I couldn’t have imagined.

Elizabeth Matthews is a licensed professional counselor with offices in Boulder and Louisville, Colorado. She enjoys yoga, reading, hot springs, and living in Colorado with her husband, dog, and two cats. She can be reached at elizabeth@elizamatt.com.

A Conversation with MDMA-Assisted Psychotherapy Researchers

ANNIE MITHOEFER, B.S.N., SHANNON CLARE PETITT, I.M.F., SAJ RAZVI, L.P.C., BEN SHECHET, AND WILL VAN DERVEER, M.D.



Annie Mithoefer, B.S.N., is a co-investigator for MAPS' study of MDMA-assisted psychotherapy for service-related PTSD in U.S. veterans, police officers, and firefighters in Charleston, SC. She is also a Registered Nurse, Grof-certified Holotropic Breathwork Practitioner and is trained in Hakomi Therapy and can be reached at amithoefer@me.com.



Shannon Clare Pettitt, I.M.F., is a co-therapist for MAPS' study of MDMA-assisted psychotherapy for anxiety associated with a life-threatening illness. Her clinical work has been with individuals and groups, of all ages, experiencing trauma, addiction, depression, and dual-diagnosis. She can be reached at shannon@maps.org.



Saj Razvi, L.P.C., is a clinical researcher in MAPS' study of MDMA-assisted psychotherapy for PTSD in Boulder, CO. He is Executive Director of the Trauma Recovery Institute in Denver, CO, and runs the trauma education program at the Univ. of Colorado Hospital's CeDAR addiction treatment center. He can be reached at saj.razvi@loveandtrauma.com.



Ben Shechet is a Clinical Research Associate at MAPS. He received his BA in Psychology from Princeton University in 2009. Following his graduation, Ben spent a year as a Clinical Research Coordinator at a private clinical trials site, working primarily on studies investigating potential treatments for Alzheimer's Disease. He can be reached at ben@maps.org.



Will Van Derveer, M.D., is a clinical researcher in MAPS' study of MDMA-assisted psychotherapy for PTSD in Boulder, CO. He is also part of the teaching faculty at the Love and Trauma Center. He is trained in EMDR, Somatic Experiencing and Containment and Resolution and is a long time meditator. He can be reached at will.vanderveer.md@gmail.com.

MAPS: WHAT EXCITES YOU MOST about the field of MDMA-assisted psychotherapy research right now?

Annie: Michael [Mithoefer] and I have just returned from a very fulfilling training last month where we had the opportunity to share ideas and experiences with a wonderful group of other therapists working on MAPS studies. Learning from each other and supporting each other in this community of committed therapists and researchers is part of what excites me about this work. The other exciting and rewarding aspect is the privilege of getting to know the people who volunteer to participate in the studies, bringing so much willingness and courage to their healing journeys, and allowing us to play a part in supporting their healing process.

Shannon: So many conversations are taking place right now about new applications, designing new protocols, adding more measurements, and developing new study sites. While Phase 2 researchers are busy and full of enthusiasm with the current research, they and others can't help but think about our expanse into Phase 3 in the coming years. What's most exciting is that the possibility of MDMA-assisted psychotherapy as a treatment option is becoming a reality.

MAPS: Can you share any examples from current research that are teaching us something new about how people can recover from posttraumatic stress disorder (PTSD)?

Ben: One thing that I think is deserving of further study are a few patients in the currently ongoing PTSD studies who are displaying a markedly different pattern of symptom improvement. In a couple of cases, individuals with very severe PTSD are seeing only modest improvements in their symptoms during their participation in the study, and then at some point eight or nine months later, something "clicks" and their symptoms drop precipitously. I find this absolutely fascinating, because it seems to be pointing to the operation of some very deep healing processes that might not even be apparent or conscious for the patient. We talk a lot in the Treatment Manual [maps.org/treatmentmanual] about the subject's "inner healing intelligence," and this looks like a very profound example of this in action.

Saj: This is a fascinating point, Ben. I've seen that slower, more nuanced background process you describe. My sense here is that if a person develops deeper trust with their own experience and towards other people and the world in general, their filters or their defense mechanisms start allowing in more new and corrective experiences that were blocked previously. Developing

this kind of trust in the live sessions is the gift that keeps on giving.

Shannon: Yes, this makes a lot of sense to me. During the MDMA psychotherapy session subjects often experience breakthroughs, profound realizations or new perspectives about their history or their behavior. The greatest part of healing is putting to action our breakthroughs. Subjects go home to familiar environments yet they are changed. It is a lot of work to adjust daily life to a new way, a lifestyle that supports being well.

MAPS: Why do you think some subjects experience improvements in their PTSD symptoms immediately after MDMA-assisted psychotherapy while for others it takes longer? What have you seen so far in the studies?

Will: We have certainly seen gradual and prolonged courses of recovery, which speaks to the need for long-term follow-up studies such as the one Michael and Annie published in 2013. Since our protocol is limited to three full-dose sessions, some people who have had several decades of PTSD symptoms have needed ongoing psychotherapy after the study. This raises an interesting question we have not yet addressed: for such people, would one or more additional sessions be useful? Some of our participants think so.

I also resonate with Saj's point that after living with PTSD for many years, it can be a process to rekindle trust in one's self and one's own "inner healing intelligence," a trust which is much easier to feel during the MDMA sessions. When one's sense of self, the world, and one's place in the world has mostly evolved through the lens of PTSD (as in the case of severe childhood trauma) it takes more effort to achieve a new way of seeing the self and the world. I have observed that each participant has a different course: Some are essentially "well" toward the end of the study, and others need more time to integrate the positive changes.

Annie: We have seen dramatic further improvements in the CAPS [Clinician-Administered PTSD Scale] over the one-year follow-up for at least three of our participants. Many others have reported ongoing improvements in other areas not captured by the CAPS; such as improved relationships, more trust in themselves, more creativity, and being more in the present moment. Some people have said the sessions changed their rela-

tionship to their emotions, so that even when painful emotions come up they are able to relate to them differently and move through them more easily. Each case is obviously very different, but I think there are a number of factors leading to continuing improvement. People have been able to reengage in activities they had stopped because of their PTSD symptoms, like going back to meaningful work, playing and writing music, singing, drawing, or painting again. These changes tend to build on each other and have a positive snowballing effect.

MAPS: Do you think that once MDMA-assisted psychotherapy is approved it has the potential to reach highly traumatized areas of the world that lack access to effective therapy? What do you hope to

see develop in the future as far as reaching across cultural barriers to deliver more widespread and effective healing?

Saj: It is fair to say that recovering from trauma takes a lot of resources—including time, money, and energy on the client's part and significant training and skill on the therapist's part. Psychotherapy has been an elite privilege and has not been available to people in the most traumatized nations on the planet. MDMA profoundly decreases the level of resources needed by the client, and the amount of time needed from the therapist, to resolve even complex childhood PTSD.

Shannon: I really hope for MDMA-assisted psychotherapy to be available around the world. It is quite challenging to adapt psychotherapy to diverse cultures as the entire theoretical

framework needs to be culturally attuned. Even translating our Treatment Manual into other languages has been difficult. We have been contacted by people around the world who want to research MDMA-assisted psychotherapy. One person emailed MAPS in the midst of war in his country and shared his anguish that

many thousands of people were having traumatic experiences in front of his eyes, and yet the therapy he believed would be able to help them—MDMA-assisted psychotherapy—isn't available.

Ben: It seems like at some level our whole culture is operating from a traumatized worldview. We have these fantastically technologically advanced systems, and more production capacity than we could ever possibly need, and yet there's still this undertone of "What if I can't secure enough resources to meet my needs?" and "I've got to get as much as I can for myself." What often seems to happen with MDMA-assisted psychotherapy is

"The greatest part of healing is putting to action our breakthroughs. Subjects go home to familiar environments yet they are changed."
—Shannon Clare Petitt, I.M.F.

"MDMA-assisted psychotherapy has the potential for wide-scale change, moving out of this mindset of struggling to stay alive, and more fully into the real dance of life."
—Ben Shechet

that people who have faced really atrocious experiences, and have every reason to feel untrusting about life, suddenly get to tap into this experience of profound support, of profound holding, and in that space this willingness to trust again can emerge. When that happens, I think people can become much more willing to give of themselves and not hold on so tight. So I think MDMA-assisted psychotherapy has the potential for really wide-scale change, moving out of this mindset of struggling to stay alive, and more fully into the real dance of life.

MAPS: How do other treatment modalities complement MDMA-assisted psychotherapy in the treatment of PTSD? How do somatic therapies, bodywork, or other approaches inform the treatment process?

Saj: One of my big curiosities in the study is about the difference between cognitive/talk based therapies and somatic therapies, and whether there is a difference in results. The modality I teach and use as a therapist focuses on the autonomic nervous system to process both physical trauma and the more complex PTSD and transference that comes from repeated familial relational traumas. All mammals have pretty much the same ability to become stressed and traumatized that we do, since we all have the same basic mammalian autonomic nervous system setup. What that means is that stress and trauma are based in our more primitive biology rather than in the more recently evolved areas of cognition and consciousness.

The good news is that the mammalian nervous system has an inherent homeostatic mechanism that has developed over millions of years of evolution which is designed to regulate our responses to stress and trauma. Just as when we overheat our bodies sweat to cool us down, when we become stressed the body turns to its innate pathways to regulate and release traumatic charge. I see this mechanism at work in non-drug therapy sessions, and it becomes powerfully active during drug sessions. I think this self-regulating trauma mechanism is what we are referring to when we talk about the inner healing intelligence.

Participants who are able to process somatically can release a great deal of the traumatic charge through their bodies. After a car accident, we are shaky and panicked until our minds kick in and inhibit the response. I've seen this type of "fight-or-flight" response to a trauma get thoroughly processed during drug session when participants have the ability to trust and allow it to flow through their body. The session videos of people processing in their minds versus those processing in their bodies look very different.

Will: This is an interesting question. My orientation to the body's essential role in PTSD recovery, from years of psycho-

therapy practice informed by Peter Levine's Somatic Experiencing, certainly informs my work in the MDMA sessions. But there is another aspect that this question uncovers: With MDMA on board, the participants do not need to rely so much on the therapist to find the missing resources they need to face their traumatic memories and rewrite them. Because the inner healing intelligence is so present and so active in the partici-

pants, we don't need to provide cues, suggestions, and structured therapeutic techniques which are so needed in ordinary therapy. Instead, the participant and the therapist both benefit from the massive resources provided by the MDMA, so that the splintered parts of the self can reintegrate.

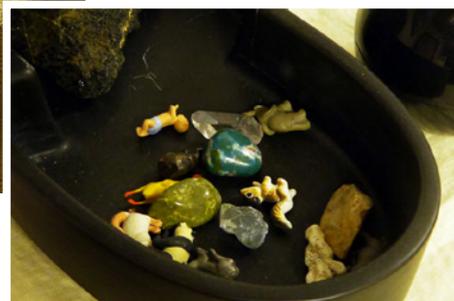
Shannon: My orientation is from transpersonal psychology, though I am also a massage therapist and a dancer, and I very much believe in the body as a therapeutic tool, as the others have elaborated. A transpersonal approach acknowledges and works with a force within, between, and beyond the people in the room. People call this various names: the inner healer, the Spirit, angels, God, Love, life-force. It boils down to faith, which is a powerful healer. I'm not talking about religious faith, per say; I mean any kind of faith. Subjects entering our studies are incredibly faithful. Faith got them through their traumatic experience and it's kept them alive. They are determined to heal and they hope there is a way to do so. The power of that belief alone is incredibly strong; the addition of MDMA in the therapy amplifies that power and helps it take root.

MAPS: Several of you are professional therapists in addition to being MDMA-assisted psychotherapy researchers. How does your work in the study inform your regular therapy practice, especially with regards to treating PTSD?

Shannon: The study sessions remind me to be creative with my clients. What sometimes happens in therapy is that it gets too comfortable: two people get into a rhythm and the process can stagnate. MDMA shakes loose routine and rigidity. It intensifies experiences, adds emphasis and humor, and brings up past events with new perspective. MDMA prompts both client and therapist to reevaluate the work, the story, their role, and ideas about what healing should look like. I enjoy finding new strategies to bring all of these elements into my regular therapy practice, without MDMA; it challenges me to bring my practice to a new level, to keep it alive.

Will: In my regular psychiatric practice, I continue to provide psychotherapy assisted by available medications and complementary treatments. My involvement in the study has changed my point of view on the available tools I have been using. Without MDMA, the patient and the therapist both have to work

“Our technique may change the practice of psychotherapy, on a scale akin to what has followed in medicine after the discovery of antibiotics.”
—Will Van Derveer, M.D.



A 75mg dose of MDMA (above left); the treatment room in Boulder, CO (above); a selection objects available during the therapeutic process (right).

harder and longer to cure PTSD. This translates into more suffering, more cost, and more time disabled by symptoms. Many of our volunteers have tried most or all available treatments without relief. It is possible that our technique may change the practice of psychotherapy, on a scale akin to what has followed in medicine after the discovery of antibiotics. It is a profound privilege to bear witness to and learn from our participants' healing journeys, each one of which is a lesson in human resilience and strength.

Saj: I am struck by how powerful corrective experiences can be in the processing of trauma. If you consider that trauma, especially during childhood, disrupts the attachment relationship we have to ourselves, to each other, and to the world, MDMA may work so well because it encourages nearly instant re-attachment at these levels. Once people have this corrective experience, they seem to have a natural impulse to engage and release traumatic charge. The study has fundamentally changed where I operate from as a therapist. I used to focus on being highly precise and technical with my interventions, now I operate from a much deeper experience of trust. It is not just me that holds the client; I've discovered an ocean that we all swim in that is profoundly supportive and loving.

“Each session is different just as each moment is different, and if we are flexible and curious it creates a setting in which the inner healing intelligence will provide what is needed.”

—Annie Mithoefer, B.S.N.

MAPS: How would you describe this “inner healing intelligence” that seems to play such a powerful role in the process of PTSD recovery in MDMA-assisted psychotherapy?

Ben: It's beyond me to get at the essence of it, but it's in a sense a very precise, intuitive understanding of suffering. If I pick up a hot pan from the stove, I don't engage in a cognitive process of “This pan is hot and it's hurting me so therefore I'd better put it down.” The pan just gets dropped! In the same way, this intelligence seems to really clearly see what's causing suffering, and in seeing it clearly, the attachment to it drops. I think it corresponds pretty closely to the phenomenon of “discriminating wisdom” described in Buddhism.

Will: The inner healing intelligence is the main character in the cast of inner parts in the unfolding of a session. I think the MDMA helps people unlock access to the inner healing intelligence. It is a “knowing beyond any doubt” as described by one participant. Because this knowing feels so trustworthy to the participant, there is no more questioning. It's a presence

akin to an inner divinity or soul, and it is recognized as self rather without question. Christians might call this “Christ consciousness,” and Buddhists might call it “Buddha nature.” The fragmented parts of the person are brought together by this

presence. People take varying degrees of time and effort to trust this inner healer.

Annie: The Inner Healer has been described in many ways. I like the way Tav Sparks describes it in *The Wide Open Door*. He writes: “In some schools, it is called the Higher Self or the soul. In others, it is simply referred to as a healing mechanism. No matter what it is called, all systems are referring to that mysterious, and ultimately nameless, force within us that is in charge of our transformation.”

In our preparatory sessions we often use the analogy of a person with a wound. The doctor or nurse can help by removing obstacles, such as gravel and debris, and can create favorable conditions but

it is always the person’s own healing intelligence that does the healing. In *Body-Centered Psychotherapy*, Ron Kurtz says that “psychotherapy is healing and healing only happens to living organisms...They don’t get fixed or repaired or anything like that. An M.D. can set a fracture, but he cannot heal it. He can help, but he cannot heal it.” Our trust in each participant’s inner healer allows us to be present as the healing process unfolds. Each session is different just as each moment is different, and if we are flexible and curious it creates a setting in which the inner healing intelligence will provide what is needed for healing. For instance, some people go directly to revisiting the trauma after the MDMA takes effect. Others may have a very affirming, even blissful, experience first, and report that’s what gave them the ability to process the trauma more effectively later on.

Saj: This is a great question. I appreciate what everyone has said about the inner healer because we seem to be naming different aspects of it. My sense is that the inner healer emanates from some aspect of our nature that exists underneath the trauma. It seems like most participants can touch a sense of themselves that feels unconditioned by their individual histories and trauma (it’s both egoic and transegoic at the same time), as well as tender, empathic, and yet very resilient. It feels both utterly familiar and yet forgotten. It is remarkable when people who don’t have any conscious experience of themselves as good see this quality emerge in their sessions as something they can touch in a deeply visceral way.

One quality of the inner healer that we’ve not talked about is its shadow side. It seems to me that inner healer shows up not just as the supportive element within the client’s experience, but also as the re-creator of the remembered trauma. Here’s what I mean: To process trauma, I think we need the traumatic foe or perpetrator to which we are responding to make an appearance. Even though we may find it vile and want nothing to do with that person, we internalize the entire scene of the crime (espe-

cially if it was within a family system), both the good and the bad. Although it is frightening for many of us as helpers to witness, allowing the inner healer to resurrect the trauma and allow it to express itself and ultimately be integrated is just another part of trusting the process.

Shannon: Yes, the Inner Healing Intelligence can be called many things: intuition, trust in self, deep knowing. We all dissociate at times, especially if there is a trauma response. The Inner Healing Intelligence is something that guides us even when we are disconnected. It’s like the body automatically breathing while you sleep. It is intrinsic to all people and operates with a level of wisdom often beyond our conscious thinking. Trusting the inner

healer to do its job and guide us on the path of healing and growth can be frightening and can be comforting. The concept of the Inner Healing Intelligence respects that you are the only master of your world. The therapists and the MDMA are supporting characters and their role is to encourage the Inner Healing Intelligence to speak up! 🗣️

“The inner healer [has] its shadow side. It shows up not just as the supportive element within the client’s experience, but also as the re-creator of the remembered trauma.”

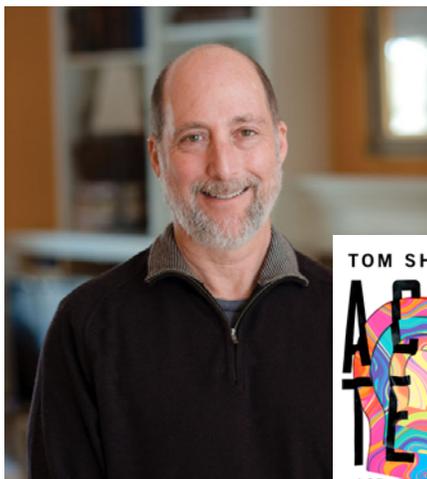
—Saj Razvi, L.P.C.



One out of three people suffering from posttraumatic stress disorder (PTSD) do not respond adequately to treatment.

Can MDMA-assisted psychotherapy help?

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Tom Shroder



Earthquakes and Rainbows

an excerpt from *Acid Test: LSD, Ecstasy, and the Power to Heal*

TOM SHRODER

NO ONE WAS MORE DISAPPOINTED than Rick Doblin that Strassman's breakthrough research on DMT hadn't been a trigger for the explosion of psychedelic research they had both hoped would follow. But Rick wasn't conceding anything. For him, the conflict between the irrational territory to which psychedelics sometimes seemed to point and the rational process of science was no conflict at all. That was the beauty of the reality test, the carefully controlled clinical trial, in which people with psychological issues—measurable deficits in their ability to lead happy, productive lives—would undergo psychedelic therapy and either get better... or not.

If only he could put it to the test.

From the moment the DEA overruled the administrative judge in 1985 and declared MDMA a poison with no redeeming value, he'd been trying to play the hand he'd been dealt, pursuing the painfully slow, measured course of the FDA process required to get approval for research with a Schedule I drug.

The problem was not just the background difficulty of getting psychedelic research approved. Since the idea that LSD damaged human genetic material had been discredited, few continued to claim that traditional psychedelics caused long-term harm to brain tissue. But MDMA was different. Even as Strassman was granted permission to study DMT and do a pilot study on psilocybin, MDMA stood out as a potential instigator of brain damage, the real problem child.

For Rick, that was a big problem. He had become convinced that MDMA's potential as a therapeutic drug exceeded any other psychedelic. For one thing, it tended not to induce the kinds of extreme experiences—machine-elf extreme—that had so upset Strassman. Plus the feelings of closeness, connectedness, and fearlessness it so often produced made it seem as if MDMA had been specifically engineered to work wonders in a therapeutic relationship, in which an alliance between patient and therapist was known to be an essential precursor to healing, and an ability to look at existentially threatening realities without turning away in fear preceded almost any significant breakthrough.

To Rick, this wasn't merely theoretical. He had seen it work before his eyes, watched as MDMA and talk had saved the life of his suicidal friend. What's more, he had taken it himself often enough, and with enough friends, that he had a strong intuitive sense that it had done neither them nor their brains any damage.

For the same reason, if it did cause damage, he definitely wanted to know.

What was lacking was any good science on the matter. Basing a judgment on toxicity from results with MDA, a related but entirely different drug, was pointless. The body could react to drugs that were even more similar than MDA and MDMA in radically different ways. (MDMA was also chemically similar to mescaline, and nobody was saying mescaline damaged brain neurons.)

Rick's typically, and somewhat counter intuitively, direct solution to the need for better science on the topic: make common cause with the man who had done the research that had instigated the whole brain damage idea to begin with.

Charles Schuster had since become director of the government's National Institute on Drug Abuse, but Schuster's protégé, the researcher who had done the hands-on work on the MDA rat studies, was the neurologist George Ricaurte, whose research had earlier been cited by the DEA during the court hearings on whether to add MDMA to Schedule I of the Controlled Substances Act. Ricaurte had gone on to do studies with MDMA itself, but still with rats, which were not always a reliable indicator of how humans react. Rick called him and offered to have MAPS buy Ricaurte some monkeys to do MDMA primate studies, the next best thing to testing on humans. Ricaurte was amenable, and the two, about the same age, entered a friendly partnership. Rick even attended Ricaurte's wedding to a research colleague and future collaborator in his MDMA studies, Una McCann.

Ricaurte took delivery of Rick's monkeys, then gave them 5 milligrams of MDMA per kilogram of body weight orally. This would be the rough equivalent of the upper range of what

a human heavy user might take recreationally. Tests conducted two weeks after the dose showed that while most brain regions had suffered no damage to serotonin receptors, in two specific areas, the thalamus and the hypothalamus, receptors had been reduced by about one-fifth, without any apparent functional or behavioral consequences.

Since the MDMA dosage Ricaurte had tested was about three times the average therapeutic dose equivalent—1.7 milligrams per kilogram—Rick urged him to do another test at a lower dosage to determine if, at any point above the therapeutic dosage, MDMA would show no long-lasting effect on serotonin neurons anywhere in the brain.

That point came at 2.5 milligrams per kilogram, still 50 percent above the usual therapeutic dosage. Eight doses of that size were administered over four months (one dose every two weeks), after which there was no detectable damage to neurons. Rick was greatly relieved, since that would be the key to persuading the FDA that it would be safe enough to conduct human therapeutic trials.

Unfortunately, Ricaurte had already published the results of the 5 milligram trials that did show some nerve damage, and they had gotten splashy coverage in the press and been incorporated aggressively in campaigns against illicit Ecstasy use—a giant red flag waving in the FDA's face.

Rick says he urged him to publish the new results showing no effect, but Ricaurte refused, saying a single new data point wasn't enough to justify a new publication. Rick says he ultimately persuaded Ricaurte to write a memo to the FDA informing them of the new result. He urged him to conclude the memo on a note he felt the data merited: that it would be safe to move on to human trials. Ricaurte wouldn't go that far.

Once again Rick refused to be discouraged. If they couldn't yet test MDMA on humans in a lab, they could bring humans who had done a lot of MDMA into a lab and test them. Rick happened to know people who had done a lot of MDMA, and he could try to recruit them for the study.

Not that that would be easy. At the time, in 1988, the only way to test brain serotonin levels in humans, short of an autopsy, was to remove spinal fluid through a scary spinal tap procedure. To assure himself that he could persuade his acquaintances in good faith, Rick offered himself as subject number one. As he sat on the examination table, his back open in one of those paper hospital gowns, waiting for a gigantic needle to be plunged between two vertebrae into his spinal column, he tried to think of himself as a soldier, a soldier in the War on Drugs, only on

the other side—or, rather, on the side of truth and rationality and individual liberty. To anyone who knew Rick, it wouldn't be a surprise to learn he actually thought in those terms. He was fighting for a cause, and soldiers took risks and accepted pain and discomfort. Then, as the needle went in and he felt a disorienting and uncomfortable sensation, he switched to imagining the pain that all mothers go through for the cause of bringing a life into the world; what he was bringing into the world was his spinal fluid so that someday people could legally seek therapy with MDMA.

Anyway, he got through it. Now it was time to persuade friends and acquaintances—heavy MDMA users all—to follow him. Instead of urging them to think of themselves as soldiers or mothers, he incentivized them by promising to fly them to San Francisco and put them up at the luxurious Red Victorian bed-and-breakfast on Haight Street. The procedure would be done at Stanford medical facilities, then they'd all go down to Esalen and sit in the clothing-optional hot tub as a reward.

It worked. About twenty people, mostly friends from New College, all braved the big needle and gave up their fluid for science. None expressed concern that the results would indicate brain damage; all felt in good mental and physical health after years of, in some cases, very heavy use of MDMA and other drugs. On average, each member of the group had taken MDMA ninety-five times.

Ricaurte compared their spinal fluid to levels in a control group that had never taken MDMA. He found that the average presence of serotonin metabolites—what was left after serotonin was excreted and broken down in the body—in the spinal fluid of the user group was 32 percent lower than in the control group.

That was less dramatic than it sounded. For one thing, individual serotonin levels in healthy individuals varied widely; the normal range varied by as much as 100 percent. Still, the 32 percent average was statistically significant:

it was very unlikely to be just a coincidence that the MDMA-taking group tested that much lower on average. But it wasn't necessarily due to the MDMA itself. Most of the subjects had also taken many other psychoactive drugs in their lives. So it could be due to one of the other drugs, or the combination.

Or none of the above: about this time, an unrelated study determined that people who had lower serotonin levels also tended to score on the high end of tests for risk-taking behavior. Since drug taking was generally perceived as risky behavior, it would follow that the low serotonin levels could have led to MDMA use rather than the other way around.

There was another factor that Ricaurte didn't explore.

Then, as the needle went in and he felt a disorienting and uncomfortable sensation, he switched to imagining the pain that all mothers go through for the cause of bringing a life into the world; what he was bringing into the world was his spinal fluid so that someday people could legally seek therapy with MDMA.

No serotonin decrease had yet been linked to any negative behavioral consequences in animal studies, and even years into their frequent MDMA use, Rick and his wide-ranging group of friends were all apparently high-functioning and physically healthy. Beyond that, in a decade of widespread abuse—millions upon millions of recreational doses of MDMA taken in uncontrolled circumstances—no epidemic of any serious brain dysfunction had appeared. Given all of the above, Rick thought looking strictly at serotonin levels would be a myopic waste of resources. As long as he'd recruited this group of willing test subjects, he wanted them to undergo cognitive testing as well to determine how they matched up against a normal baseline in broad measures of brain function.

Ricaurte was collaborating with a team from Yale on an analysis of how frequent MDMA users responded to a drug that challenged the serotonin system, so Rick hired a clinical psychologist from Yale named Charles Opsahl to test the volunteers who had agreed to make another long flight for that study, this time to New York. After suffering through the friendly skies and being injected with the challenge drug—which had a sedating effect—they underwent a battery of written, verbal, and tactile tests. The results were compared to a control group of local volunteers who had never taken MDMA. Opsahl reported the results in a letter to Rick dated July 5, 1988.

“By and large, these results are striking for the fact that most subjects evaluated had IQ scores in the above average range, or higher,” he wrote. Well, they were Rick's friends, so ... While there was some evidence of impairment in a test of short-term memory as well as a test in which the subjects had to assemble a block puzzle while blindfolded, Opsahl concluded, “It is quite possible [the slightly lower scores] are related to travel fatigue, being in a new environment, or being stressed in some way following the challenge testing that each subject performed.”

Rick breathed a sigh of relief. These were people who had been heavy MDMA users for years, and ultimately, regardless of serotonin levels, their cognitive testing results were no worse than what might be expected from people who had just flown across the continent to undergo a medical procedure with a sedating drug. It was another piece of evidence to help persuade the FDA to approve human MDMA studies.

But again Rick would be disappointed—“shocked” is how he remembers it—when Opsahl and his colleagues published their results, the first-ever assessment of MDMA and neurocognitive function. Although the authors concluded that, despite serotonin levels on the low side, none of the test subjects “reported depressed mood or met clinical criteria for an affective disorder at the time of testing,” it went on to emphasize the negative.

The cognitive test deficits—which, in his letter, Opsahl said could be no more than the result of travel and stress—instead became “a pattern of mild-to-moderate impairment” which “raise[s] concern about possible detrimental effects of MDMA use on neuropsychological function.” The letter contained no

mention of the adverse circumstances under which the tests were taken.

Rick struggled with his frustration: everything with MDMA seemed to be an uphill battle. What were basically positive results got reported as negative results, and even if you did take the most negative view, these were subtle dangers under discussion—potential subtle dangers—when drugs with far more certain and significant dangers sailed through FDA approval for clinical trials and became prescription medicines.

Rick had only one gear, and that was forward. If the cloud of potential neurotoxicity couldn't be dissipated, he had to focus on finding a way to test the benefits of MDMA that could be set against the hypothesized detriments. He knew from the therapeutic history of MDMA before it was criminalized that it had been found to effectively reduce depression and anxiety and could even make physical pain more tolerable in patients who were battling terminal disease. Of what concern would possible long-term serotonin depletion be to someone who had no long term to worry about?

Of course, he'd already tried that argument when attempting to treat his own grandmother who had been near death. And George Greer, a plaintiff named in the suit against DEA and one of the leading practitioners of MDMA psychotherapy before criminalization, had recently proposed a clinical study on terminal cancer patients and gotten nowhere. He had been told that “even dying people have the right to be protected against brain damage.”

But Rick thought it was time to try again. Of course, he was a political scientist, not a psychiatrist. He couldn't do medical research on his own. He needed someone with medical qualifications and credentials to work with, and just as he was struggling with the toxicity issue, he found one.

Rick noticed a letter in the Archives of General Psychiatry pointing out serious methodological flaws in one of Ricaurte's MDMA studies. The writer was Charles Grob, the University of California psychiatrist who would eventually conduct the study of sacramental ayahuasca users.

Grob had grown up in the sixties and, like so many of his cohorts, “had modest firsthand experience” in college with psychedelics—experiences at least impressive enough so that when, after leaving school, he found himself working as a late-shift technician in a dream research studies lab, he became fascinated with the library of psychedelic literature belonging to one of the researchers. He read to stay awake at night, and soon developed a passionate interest in psychedelic research—enough to motivate him to go to medical school and become a psychiatrist.

“Meanwhile,” Grob says in a familiar refrain, “all psychedelic research shut down.”

But Grob maintained his interest, and even published a speculative article on how to proceed “if the opportunity should arise to pursue sanctioned clinical research with these unique psychoactive substances.”

Of course, Rick Doblin noticed that article too. Rick decided to pay Grob a visit. When he suggested they develop a

protocol to present to the FDA on using MDMA to treat cancer anxiety in terminal patients, Grob felt he had come full circle.

The two labored on the protocol, a complex document describing the design of the proposed study that had to be rigorous and overwhelmingly persuasive, both scientifically and politically. It took a frustrating two years to complete; Grob struggled to find the time among his other responsibilities, which kept increasing. Finally, in the spring of 1992, after countless revisions, they submitted it to the FDA for approval.

Once again Rick's timing was impeccable.

Almost immediately, the National Institute on Drug Abuse scheduled a policy summit on the issue of psychedelic research for mid-July, just weeks after the submission of Grob's protocol. NIDA hadn't considered psychedelics (they were still referring to the drugs generally as "hallucinogens" despite the fact that the visual perceptions the drugs provoked were rarely true hallucinations) for fourteen years, largely because there had been little research to consider. Now four currents had converged to change that. First was the fact that, despite ever tougher drug laws, the illegal use of various psychedelics only seemed to increase. Meanwhile, interest in human psychedelic research among researchers—primarily Rick Strassman's DMT study and Grob's proposed MDMA study, both inspired directly or indirectly by Rick—had begun to build. Finally, amidst frustration with the failure to find an effective treatment for opiate drug addiction, impressive reports of offshore success in treatment of addicts with ibogaine were increasingly hard to ignore.

Synchronistically, the FDA, which had neither approved nor rejected Grob's MDMA study protocol, had forwarded it—with a critique and suggested changes—to an advisory committee scheduled to meet the day after the NIDA psychedelic policy review ended.

So, seven years after MDMA had been placed on Schedule I—seven years of unceasing effort on Rick's part—he and Grob boarded a plane to Washington for two meetings in three days that would either open the door to human psychedelic research or nail it shut.

The NIDA and FDA meetings would take place in immense federal office buildings within two miles of each other in North Bethesda, a half hour northwest of the Capitol. Grob and Rick got a hotel room within brisk walking distance of both headquarters. When the NIDA meeting began on July 13, Rick braced for a hostile or at least fiercely skeptical atmosphere.

So he was surprised when the opening speaker, Stephen Szara, the retired chief of NIDA's biomedical research branch, began with a detailed and nuanced review of the history of psychedelic research, including its promise as a therapeutic aid.

Szara pointed out that from 1953 to 1973, before the clamp-down, the federal government had funded—not even counting the secret military research—at least 116 studies of LSD involving more than 1,700 subjects at a cost of about \$4 million. He even spoke about the studies that suggested that psychedelics, given in large doses, produced transcendent, cathartic, and even mystical experiences in subjects ranging from prisoners to priests.

Rick felt as if he had slipped into an alternate universe when Szara reached his conclusion: careful research into the mysterious workings of the brain with these uniquely useful psychedelic tools could yield new discoveries of significant potential.

Rick Strassman, his DMT research still ongoing, made a presentation whose subtext was unmistakable: with caution and proper screening, hundreds of doses of a powerful psychedelic could be safely administered to humans in a research setting.

But the emotional high point for Rick came when Sasha Shulgin, the chemist who had rediscovered MDMA, made a passionate argument for restarting human research. Even as DEA agents looked on, Shulgin didn't shy away from

talking about the hundreds of novel psychoactive compounds he had tested on himself and a team of twelve research associates—and not always in a strictly legal manner. If there was one overriding lesson from his decades of research, Shulgin said, it was that the variance in the psychoactive effects of closely related chemical compounds were unpredictable and could be determined only by human testing. He gave specific instances of data from animal studies that had been directly contradicted by human subjects. He referred back to Stephen Szara's talk of psychedelics' ability to produce religious experiences. Did the assembled experts think rats could provide sufficient data on that?

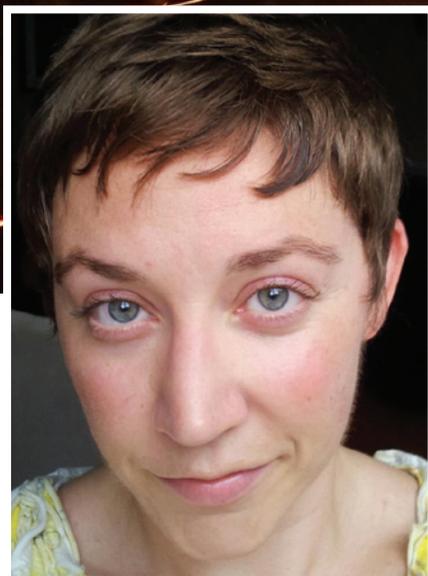
The laughter that followed felt to Rick like the beginning of a new era. ●

Tom Shroder, author of *Old Souls*, the classic study of the intersection between science and mysticism, is an award-winning journalist, writer and editor. As editor of *The Washington Post Magazine*, he conceived and edited two Pulitzer Prize winning feature stories. Shroder has edited humor columns by Dave Barry, Gene Weingarten and Tony Kornheiser, as well as conceived and launched the internationally syndicated comic strip, *Cul de Sac*, by Richard Thompson. His last book, written with former oil rig captain John Konrad, is *Fire on the Horizon: The Untold Story of the Gulf Oil Disaster*. His most recent editing project, *Overwhelmed: Work, Love, and Play When No One Has the Time* by Brigid Schulte was a New York Times bestseller.

If there was one overriding lesson from his decades of research, Shulgin said, it was that the variance in the psychoactive effects of closely related chemical compounds were unpredictable and could be determined only by human testing.

Trust, Let Go, Be Open: Psychedelic Harm Reduction in the Desert and Beyond

KATHERINE MACLEAN, PH.D.



Katherine MacLean, Ph.D.

“Once in a while you get shown the light, in the strangest of places if you look at it right.”

—Robert Hunter, “Scarlet Begonias” (1974)

I HAD JUST FINISHED THE graveyard shift and was resting in a back corner of the MASH-style Army tent, falling in and out of dreamy sleep as the morning light began to creep in. The incessant thumping of electronic music had finally given way to the familiar, happy sounds of our desert community waking up: light chatter and laughter, spoons in cereal bowls and boiling tea, a porta-potty door swinging open and shut. Then, suddenly, a scream ripped through the soft morning air.

I saw a small undulating mass of bodies appear at the opening of the tent, and it took me a few moments to realize that the young woman at the center of the mass was the one screaming. She was clawing at the air as her eyes darted toward things that no one else could see. She clearly had no interest entering this strange place, with these strange people who were so interested in her. Her friend explained that they had taken what they thought was Ecstasy around midnight, but the night had quickly gone downhill from there.

Slowly, we managed to get the young woman to lie down on the same air mattress where I had been napping. I sat on the floor next to her, one hand resting on her shoulder and the other holding her hand. Her friend sat at her feet and laid her arms over her lower legs. For the next hour or so, we remained in this awkward embrace, trying to stay as calm as possible while the young woman writhed and screamed. “It’s OK. You’re safe. Let it move through you.” Eventually, she began to relax and her grip on my hand loosened. Her breathing slowed and her eyes began to close. “You’re safe, we’re here with you.”

This kind of scenario wasn’t exactly what I had in mind when I first began my career in psychedelic science. After completing my Ph.D. in the fall of 2009, I had joined the psilocybin research team at Johns Hopkins University, one of the best (and only) academic research institutions in the world doing clinical trials with psychedelic medicines. Over the course of four years, I trained with two of the most experienced psychedelic therapists in the world: Bill Richards and Mary Cosimano.

I saw my fair share of full-blown mystical experiences and classic “bad trips.” I supported people as they revisited traumatic memories, and shared their joy as they raved about the beautiful music and the fascinating patterns on the ceiling tiles. I held hands with people as they cried, screamed, and even laughed their way through some of the most intense experiences of their lives. I did all of this in a comfortable, familiar environment, with people who were well prepared and trusted me to care for them. Harm reduction, on the other hand, is about sitting in uncomfortable and unpredictable environments with strangers who have usually taken large amounts of unknown substances. Even with all my professional training, I had a lot to learn out there in the desert.

My first opportunity to volunteer with the MAPS psychedelic harm reduction program came in the late summer of 2012. I had already made plans to return to Burning Man after a five-year hiatus when Rick Doblin (MAPS’ Founder and Executive Director) reached out to ask if I would be willing to help train volunteers for a new project that MAPS was launching. The Zendo Project would provide a safe space and trained sitters to help individuals who were having a difficult time as a result of ingesting psychedelic drugs. Although we agreed that there were differences between the methods used in controlled research studies and those used on the ground at festivals,



Photo credit: Katherine MacLean



AfrikaBurn 2014. Images by Katherine MacLean.

Rick thought it would be good to include my perspective as a scientist and therapist. I was inspired to have the opportunity to do some good work while I was at Burning Man, as a purely hedonistic approach to the event had lost some of its appeal for me. I was also excited to learn from other therapists, clinicians, psychonauts, and good Samaritans who would likely be volunteering.

Although I was prepared for an intense experience, my time in the Zendo ended up being quite calm and uneventful that year. I had signed up for morning shifts, so most of my volunteering energy was spent giving water, granola bars, and farewell hugs to people who were finally ready to head back to their camps after a long and harrowing night. But I will always remember one special interaction I had with a young man who arrived at the Zendo just after sunrise.

The young man was basically non-verbal, and the helpful stranger who dropped him off said she had found him wandering and confused. I sat next to him for quite a while, unsure of what drug he had taken, what help I could provide, or whether he was even aware of me. So, I just sat there. I meditated a bit. I breathed. He breathed. I waited patiently. We said nothing. (Note to the reader: Sometimes, sitting with people on drugs is actually quite boring!) When I offered him a glass of water, he held it in his hands and stared at it for quite some time until I gently asked, “What do you see?” “Everything. It’s all here,” he replied. “We’re all in there!”

The next six or so hours of his LSD-fueled ride were not all as positive or illuminating as his encounter with the water glass. Nevertheless, as the young man departed the Zendo around noon, he admitted that, despite being generally embarrassed and

slightly annoyed, he was really thankful that we had taken care of him. I was thankful, too.

“Everything. It’s all here.” This psychedelically-inspired kernel of cosmic wisdom sums up why I find the harm reduction work so important. We’re in this together, and we have much to learn from one another. Providing safe spaces at festivals is one of the easiest ways to turn intense, self-absorbed, potentially dangerous experiences into opportunities for shared insight and personal growth.

Fast-forward to the spring of 2014: I’m driving from Cape Town up to the Tankwa Karoo with Linnae Ponté (MAPS’ Director of Harm Reduction) to help coordinate and run “The Sanctuary” at AfrikaBurn. This was the second year that the Zendo Project had been invited to work directly with event organizers, rangers, and medical staff to provide psychedelic harm reduction and mental health support at the largest regional Burning Man event in the world. By the week’s end, we provided training in the principles and techniques of harm reduction to more than 30 volunteers, including medical staff, and our volunteers cared for 50 guests (51 if you count the infant left in our care for about 10 minutes one morning while her mom tried to locate their campmates).

The Sanctuary at AfrikaBurn is a model for harm reduction at its best. We were able to communicate and work directly with medical staff and rangers to comprehensively assess and meet the physical and mental needs of our guests. We often received and cared for individuals who had been cleared by the medical team, but who still needed a safe, warm place to spend the rest of the night. Sometimes, we would redirect individuals to the medical tent to receive close monitoring and physical care.



The most popular drug of choice at AfrikaBurn was alcohol (reported by 40% of Sanctuary guests), which too often leads to deadly consequences, especially when combined with other drugs. Sanctuary guests also reported use of MDMA or Ecstasy, LSD, psilocybin mushrooms, cocaine, cannabis, GHB, and methamphetamine. Nearly 70% of guests reported having taken multiple drugs. The reality of polydrug use, often combined with excessive alcohol intake, underscores the importance of coordinating psychedelic harm reduction efforts with emergency medical care in a festival environment.

Over the course of the week, we sat with many individuals who had gotten in over their heads and were struggling to regain a sense of safety and sanity. One night, Linnae Ponté and I took turns sitting with a frightened and confused young woman who had taken what she thought was a typical dose of LSD, but who continued to be plagued by intrusive and disturbing mental images more than 24 hours later. There were also playful moments, such as one young woman on Ecstasy who marveled at the “beautiful decorations” and “magical objects” on the meditation altar we had set up, and ultimately took it upon herself to visit with the other guests and offer words of encouragement: “Don’t worry. You’re in good hands. Two hours ago, I was where you are. But just look at me now! I’m doing great! These people really know what they’re doing!” She reminded me that it’s OK to play and laugh and not take things so seriously. There’s room for all of it. Trust, Let Go, Be Open—TLO.

TLO was the “mantra” that I had learned while training to be a psychedelic therapist at Johns Hopkins. The wonderful thing about TLO is that it applies to the person sitting as well as to the person journeying. I have silently repeated this mantra

countless times while sitting with people. I have uttered these phrases aloud when individuals become lost in their experience or seem to be stuck. Trust your own innate wisdom, that you have the skills and natural abilities to make it through this experience. Trust the safe space that has been provided and the people around you to help you if need it. Let go of expectations about what should or shouldn’t be happening. Let go of concerns and judgments, as well as the inevitable feelings of wanting to control the experience in a particular way. Open yourself up to the amazing events that are unfolding, even (especially) the difficult and scary parts. Stay open to the fundamental truth that everything that is happening is completely and utterly OK.

Amidst all of these entertaining anecdotes and kernels of wisdom, however, I am continually reminded that the most important (and often tedious) dimension of psychedelic therapy is integration, or continuing care. An experience can be wild and terrifying and profound and hilarious and beautiful, but what do you do with it once you re-enter your ordinary life? Or, as Buddhist teacher Jack Kornfield put it, “After the ecstasy, the laundry.” I actually love doing laundry, so it’s probably no surprise that my most memorable and rewarding experience at AfrikaBurn occurred while working with someone who was completely sober.

Early Sunday morning at AfrikaBurn, toward the end of an all-night shift, I was introduced to a young man who had spent the previous night in the medical tent. Although the full story had yet to be pieced together, one of the paramedics explained that the young man had apparently overdosed on a number of different substances and was dangerously close to death at various points in the night. The fact that he was standing in front of

us, lucid and physically healthy, was something of a medical miracle. But the young man didn't see it that way. He was confused and suspicious, and felt that no one really understood what he had been through. He had the strong conviction of having died and experienced a world free of suffering. He didn't remember being transported to the medical tent in the first place, and felt that he had been unfairly "brought back to life" by the medical team, without his consent. I knew from my research with psilocybin that a death-rebirth experience like this could be an important and healthy step on a person's spiritual path. And a number of the study volunteers I worked with at Johns Hopkins had reported a profound experience of their own death. But I had never worked with someone who wasn't thrilled about the "rebirth" part.

Throughout the morning, we took turns sitting with the young man, listening to his story and supporting him as he struggled to weave a meaningful narrative out of his experience. We made some progress, but he kept hanging onto the disconcerting feeling that he "wasn't supposed to be alive." Realizing that our words were offering limited comfort, I eventually offered to walk with him to the Temple, where offerings had been made throughout the week and would be burned in a ceremony later that night. We walked mostly in silence and when we arrived, I asked him to sit with me in front of the altar. We sat there for maybe 30 minutes, absorbing the full reality of the space. Among the various objects and drawings and inspirational phrases that people had added to the temple over the course of the week, what stood out were the photographs of people who had died. Young faces, old faces, beautiful faces, funny faces, along with pleas from their loved ones, asking for the fire to bring peace and help release the sadness and anger around their deaths. The Temple, of course, is about much more than death, but this was

its message to me, and to the young man, on that Sunday morning. Something clicked as he turned to me and said, "I get it. I'm lucky to be here. I'm ready to go find my friends."

I have no idea what happened to that young man after we managed to find his friends (another miracle, as anyone who has been to a Burning Man event can attest). Unlike with research volunteers, I have no way of contacting him, of following up to see how meaningful (or not) his experience turned out to be. But I can still see his face clearly in my mind. I'm happy that he survived his dark night and that I had the privilege of spending the first few hours of the rest of his life with him. I'm mostly thankful for that moment of simple illumination—"I'm lucky to be here"—and all of the moments I've shared with strangers while volunteering with the Zendo Project. These experiences remind me, again and again, that life is unpredictable and precious.

Everything. It's all here. We're in this together. TLO. 🌱

Katherine MacLean, Ph.D., is an academically trained research scientist and meditation practitioner with a long-standing interest in the brain, consciousness and the science of well-being. As a graduate student at the University of California, Davis, Katherine was supported by a prestigious National Science Foundation research fellowship to study the effects of intensive meditation training on concentration, emotional well-being and brain function. As a postdoctoral fellow and faculty member at the Johns Hopkins University School of Medicine, she was one of the only scientists in the world studying psilocybin—a psychedelic chemical found naturally in certain types of mushrooms. Her groundbreaking research on psilocybin and personality change suggests that psychedelic medicines may be the key to enhancing mental health and promoting openness and creativity throughout the lifespan. She can be reached at kmac10@gmail.com.



THE ZENDO PROJECT MISSION STATEMENT

It is our mission to:

- Provide a supportive space for individuals undergoing difficult psychedelic experiences or other psychological emergencies in order to help turn those experiences into opportunities for learning and personal growth, and to reduce the number of drug-related psychiatric hospitalizations.
- Create an environment where volunteers can work alongside one another to improve their harm reduction skills and receive training and feedback.
- Demonstrate that safe, productive psychedelic experiences are possible without the need for law enforcement-based policies.

zendoproject.org

Love: The Nature of Our True Self

My Experience as a Guide in the Johns Hopkins Psilocybin Research Project

MARY COSIMANO, M.S.W.



Mary Cosimano, M.S.W.

JOHNS HOPKINS UNIVERSITY INITIATED THEIR psilocybin studies in the year 2000. Since that time, I have been extensively involved with the research and clinical components of all six psilocybin and other hallucinogen studies that have taken place at Johns Hopkins. I have also personally guided over 300 study sessions and have participated in over 1,000 preparatory and integration meetings.

Based on my clinical perspective, I would like to share what I personally believe to be one of the most important outcomes of this work: that psilocybin can offer a means to reconnect to our true nature—our authentic self—and thereby help find meaning in our lives. The experiences recounted to me by study participants, as well as my concurrent personal journey, together with our study results, represent a large body of data from which I derive my conclusions.

When I have difficulty expressing myself, I remember what Ernest Hemingway wrote in *A Moveable Feast* about what he did when he had a hard time getting started writing. “All you have to do is write one true sentence. Write the truest sentence that you know.”

What comes to me now is a very short sentence—in fact, not a sentence but a word: love. I believe that what humans really want is to receive and to give love. I believe that love is what connects us to each other and that such a connection is brought

about by being intimate with each other, by sharing ourselves with others. I believe that the nature of our true self is love.

I believe this theme—love, the need to reconnect with our true selves—addresses the underlying outcome of our psilocybin studies. Yet very often we’re afraid to open ourselves to this connection so we put up barriers and wear masks. If we are able to remove the barriers, to let down our defenses, we can begin to know and accept ourselves, thus allowing ourselves to receive and to give love.

In her TED talk on “The Power of Vulnerability,” Brené Brown, Ph.D., helps us understand how important this sense of connection is on a deep level. Briefly, she states that connection is why we’re here. It’s what gives purpose and meaning to our lives. The way to connect is by being vulnerable, which means having the courage to face our fears—fears that we might fail, fears that others will realize that we aren’t perfect, fears that we are somehow unworthy of connection. Because this honesty could risk jeopardizing a connection, we shut down, cover up, or “fake it.” Dr. Brown’s answer for overcoming these fears is courage. She points out that courage comes from the Latin word *cor* (heart), and that the original meaning of courage was to tell your story with your whole heart.

How do we help psilocybin study participants achieve a state of mind wherein it is possible for them to reconnect to

their true self and face their fears? I believe it's a combination of our preparatory meetings with the effects of psilocybin itself.

In our preparatory meetings, we aim to create a space where participants feel secure and safe. We believe this peaceful, positive environment is necessary for them to have the courage to tell the story of who they are. We work to create a deep sense of trust so that the participants feel comfortable to share anything and everything—their fears, joys, disappointments, and shame—without fear of being rejected. Intimate conversation is one of the most important practices to assist in this self-disclosure, and some of our participants have shared that their session was the first time they felt they had been fully seen. Once they have opened up and shared, they are much more likely to let go and progress through their psilocybin experiences, managing difficult moments with more ease, and eventually restoring their deep and intrinsic connection to their true selves.

After their story has been told and trust established, the psilocybin session follows. In order to achieve maximum benefit from the psilocybin sessions and to access these states of a deep sense of love and connectedness, I believe it is necessary to be relaxed in both body and mind. When we are stressed, anxious, or afraid, we hold ourselves in and tense our bodies. These states of mind and postures keep us from being able to relax and expand our consciousness. In order to relax, a safe and trusting environment is necessary. Ideally, our preparation meetings have provided that, thus enabling participants to relax into a deeper and more expansive experience. This expansiveness often leads to a deep sense of love and connection for self and all; both this expansiveness and this sense of connection are recurrent themes in psilocybin experiences.

After their session one participant wrote: “I was reveling in the undeniable feelings of infinite love. I said [to myself], ‘I am love, and all I ever want to be is love.’ I repeated this several times and was overwhelmed with the intensity of the love. I was aware of tears flooding my eyes at this point. All the other goals in life

seemed completely stupid.”

In *Love 2.0*, Barbara Fredrickson, Ph.D., wrote: “Love is far more ubiquitous than you ever thought possible for the simple fact that *love is connection*.”

Another participant said: “Once I was past the darkness, I began to feel an increasing feeling of peace and connectedness...An intense feeling of love and joy emanated from all over my body and I can't imagine feeling any happier. I knew that the worries of everyday life were meaningless and that all that mattered were my connections with the wonderful people who are my family and friends.”

The first two psilocybin studies conducted at Johns Hopkins (Griffiths *et al.* 2008, 2011) showed that psilocybin occasions personally meaningful and spiritually significant mystical experiences producing positive changes in attitudes, mood, altruism, behavior, and life satisfaction. A further analysis (MacLean *et al.* 2011) found significant increases in openness following a high-dose psilocybin in participants who had mystical experiences.

I believe these findings suggest that increased personal meaning, a sense of spiritual significance, and an increase in openness are what allow humans to connect to their true selves—which is, at its core, love.

I observed how participants in our study of psilocybin-assisted therapy for cancer anxiety often came into the study feeling “disconnected”—not only from their place in the world but also more importantly from themselves, due to the fact that their lives had changed dramatically since their diagnosis. Many are too weak to continue to work, and many have lost their jobs. Outward appearances may also have changed, as they lose weight, muscle tone, and often their hair. Their thoughts and feelings of what had once defined them are no longer accurate. What once gave purpose and meaning to their lives seems meaningless.

One participant said: “Once you have a cancer diagnosis you're like the ‘walking dead.’” Another told us that she was living like she'd already died.



The psilocybin study treatment room at Johns Hopkins University.

Our structured psychiatric interviews include two questions that target this sense of disconnection:

1. *Have you all of a sudden changed your sense of who you are and where you are headed?*
2. *Do you often feel empty inside?*

Among our cancer participants, there was a high positive response rate to both of these questions, which I believe was due to their loss of a sense of self and meaning in their lives. Our cancer study often enables our participants to get back that

connection to their true self, to believing that they are worthy of love and connection. One participant wrote in her six-month report that her “depression lifted completely” and that she was “able to get out of the ‘cancer world’ and back to myself...and able to connect with others and care better for [her partner].”

Two additional quotes from our volunteers nicely summarize my thoughts about the importance of love, true self, and meaning during and after the sessions:

“Everything is swept up into a climactic epiphany of love as the universal essence and meaning of all things. The journey of spirit coming to itself, revealing to itself its own inner mystery, is nothing but the self-realization of love.”

“The purpose of all of us here together is to be constant reminders to each other of Who We Really Are.”

It is interesting to reflect on the differences and similarities between our Johns Hopkins psilocybin studies and MAPS’ MDMA-assisted psychotherapy studies. The Johns Hopkins studies have characterized the phenomenology of psilocybin experience in healthy volunteers, and explored the therapeutic use of psilocybin in treating anxiety associated with life-threatening cancer diagnosis, and in treating cigarette smoking addiction. Although the therapeutic endpoints differ between the psilocybin (cancer anxiety and addiction) and MDMA (posttraumatic stress disorder or PTSD) studies, both approaches highlight the importance of trust and rapport between participant and guide/therapist. One notable difference is that the psilocybin studies have characterized mystical-type experiences, and have suggested that such experiences may underlie the therapeutic and other enduring positive effects of psilocybin session experiences. It would be productive and valuable to assess whether similar changes occur in response to guided MDMA sessions as well.

I’d like to acknowledge and thank the Johns Hopkins Psilocybin Research Team, our study participants, and our funders. 🌱

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Mary Cosimano, M.S.W., is currently with the Department of Psychiatry and Behavioral Sciences at the Johns Hopkins University School of Medicine and has served as study guide and research coordinator for the psilocybin studies for 15 years. During that time she has served as a session guide for the six psilocybin studies and other hallucinogen studies and has conducted over 300 sessions. She has worked as a clinician teaching individual and group meditation to breast cancer patients in research at Johns Hopkins, was a behavior modification counselor for weight loss, and has 15 years of experience with direct patient care as a hospice volunteer.

Some of our participants have shared that their session was the first time they felt they had been fully seen.

Building Congressional Support for Psychedelic and Medical Marijuana Research in Washington, D.C.

TONY MACIE



Tony Macie

MY EXPERIENCE IN MAPS' MDMA-ASSISTED psychotherapy study was a truly life-changing experience, not just because it opened me back up to myself and helped me conquer some demons, but also because it started me down the road of a different fight.

The reason I signed up for the military was my desire to help people and do what is right. Soon after going through MDMA-assisted psychotherapy, I stopped taking all my prescription medications, which I had been taking (unsuccessfully) for my post-traumatic stress disorder (PTSD) symptoms. I stopped taking them mostly due to my overwhelming sense that they were not healthy for my mind or body. This catapulted me into learning how to take care of myself without medications.

As I learned more about how to incorporate a healthier and more natural diet and lifestyle, something else kept coming up repeatedly. Other veterans kept telling me how marijuana was useful for a wide variety of things. I started to wonder why it is that I could receive MDMA-assisted psychotherapy through a government-approved trial while this plant that grows out of the ground is illegal. I learned how much harder it still is for scientists to research marijuana. In fact, it is even harder to research marijuana than it is to study MDMA, LSD, heroin, or any other Schedule I drug. The National Institute on Drug Abuse (NIDA) holds a monopoly of the supply, and requires scientists to go through an extra legal process when they want to research marijuana as a medicine. In fact, MAPS' study of marijuana for symptoms of PTSD in U.S. veterans is actually on hold because NIDA doesn't have the marijuana MAPS needs for the study.

My desire to level the playing field between marijuana and psychedelic research led me to fly to Washington, D.C., with a group of fellow veterans, including Michael Krawitz of Veterans for Medical Cannabis Access, and with support from MAPS, to exercise our rights. Beginning in March 2014, we have been lobbying Congressional representatives to add their signatures to a Congressional sign-on letter initiated by Rep. Earl Blumenauer (a Democrat from Oregon) urging the Public Health Service (PHS) to end the NIDA monopoly on marijuana for research. It was interesting to see the different responses we got from various Congressional offices when we approached them. One of the first things I realized was that people—even elected representatives—are extremely uneducated when it comes to the topic of medical marijuana research. Along with that, whenever the word “marijuana” comes up, you can see that it still has a fringe connotation, even in this day and age.

Through persistence and diligence, we successfully got a few key Republicans to sign the letter. The fact that Republicans were willing to sit down and listen to the issue, and then sign on to the letter was extremely relieving. It made me feel very optimistic that our country is finally going to come out of the closet and stop being so afraid to study marijuana's medical value. The turning point came when a fellow veteran and I sat down with Rep. Morgan Griffith, the Republican Congressman from Virginia. Since that day, Congressman Griffith has been an advocate for allowing proper medical marijuana research and having the federal government respect state



Tony makes frequent trips to Washington, D.C. to lobby for medical marijuana.

laws. It is true leadership that I witnessed in the Republicans who decided to take a stand and sign this letter. These are the types of leaders that we need: the ones who follow the facts and do what is best for the people.

Unfortunately, on September 22, 2014, U.S. Department of Health and Human Services (HHS) Secretary Sylvia M. Burwell responded to Congress's request and rejected their request to end the PHS protocol review process. This is extremely frustrating and disheartening, since this continues to delay proper research. This has not stopped me from joining MAPS in going down to D.C. and continuing to collect signatures from Senators to increase the pressure on HHS.

A few days after Veterans Day, I had the opportunity to meet with the Veteran Affairs Committee health liaisons. The conversation went extremely well, and I had the opportunity to share my MDMA-assisted psychotherapy experience with them. I was also able to bring up some crucial problems that veterans face when trying to access medical marijuana through the VA, including veteran patients not being able to seek guidance from their VA doctor. I also mentioned that it is unfair for veterans who need MDMA-assisted psychotherapy to be blown off by their politicians and the VA. If something works, they need to pay attention, and not blow it off because they believe it to be fringe. The meeting went extremely well, and I am proud to say that the staffers on the Veterans Affairs Committee do have very open minds to these treatments.

Working with others on this issue, especially fellow veterans, has been particularly motivating for me. With so many issues right now in the United States surrounding veterans'

health, more veterans need to stand up and let their voices be heard. I guarantee that you will not be ignored if you go to the capitol and try to talk with your Congressman or Senator. It is their duty and obligation to listen to their constituents, and they will pay even more attention if you are a veteran. I am not saying that they will necessarily follow through on every issue, but you have the right and the ability to grab their ear and plant that seed. 🌱

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The Congressional sign-on letter may be viewed at: blumenauer.house.gov/images/stories/2014/Medical_marijuana_research_letter.pdf

HHS Secretary Burwell's response may be viewed at: maps.org/research-archive/mmj/Marijuana-Research-Response-from-HHS-9-22-14.pdf

Tony Macie was a forward observer in the U.S. Army from 2005–2008. He served in Iraq during the “surge” of 2006–2007 for 15 months with a reconnaissance unit in southeast of Baghdad. After getting out of the army, he struggled with years of PTSD and ineffective treatments from the Veterans Administration. As a participant in MAPS' MDMA-assisted psychotherapy study, he found that one experimental therapy session changed his life for the better. He now advocates for the legal use of marijuana and MDMA-assisted psychotherapy. While he mainly focuses on veterans issues, he believes that these medicines should be available for all of humanity. He can be reached at tonymacie@gmail.com.

The Journey to MAPS: A Supporter's Story

ALEX

AS AN INFANT, ALEX MOVED with his family from St. Louis, Missouri, to Stanford University where his father, a scientist, had been invited to set up a new department. Alex grew up in the world of science and academia at the highest levels. His home life was active, loving, and based on science and knowable truths. There was no religion or spirituality; the household was devoid of any knowledge except that which could be proven.

At an early age, Alex was drawn to the edges of the knowable universe. He became fascinated with space and planets, especially Jupiter, and asked questions that stretched the imagination and science at the time: What is beyond space? What is the world made of? He played piano, joined the swim team, played water polo, took acting classes, painted, drew, and embraced chance, mystery, and the unknown.

As a teen he became a radio DJ. His new friends were mostly older, and he developed an interest in the music they listened to: Jimi Hendrix, the Doors, the Beatles. He began to experiment with drugs and had many excellent experiences. LSD completely changed who he was. It opened his consciousness, and gave him the experience that the human being is small, but always connected to the larger, infinite universe. He also had the experience of knowing beyond empiricism; he had knowledge in the realm of spirit and feeling.

He only had one difficult experience. One day in the station, a woman offered him an orange barrel-shaped pill. She said it came from ten-year-old Owsley stock. She didn't know if it was still good. So Alex waited until he had a show from midnight to 6 am, and took the pill at 11 that evening.

Nothing happened at midnight, or one, or two. At four AM the universe opened up around him powerfully. When he left the studio at 6 in the morning, he barely made it home. As he laid down in his bed and pulled up the covers, he thought he might be dying, and the worlds of hell—doubt, terror, and self-hatred—rose up around him. He got out of his bed, and made it to his parents' room. He told his very rational, traditionalist father not to be mad, but that he took LSD, and he was afraid. His father embraced him and talked with him for hours until Alex fell asleep. Later, his father had some critical words for his son, but those hours, which many might have called a "bad trip" was a time that cemented the bond between the two men. Even with all their differences, Alex knew that his father supported him and loved him deeply and fully. That bond kept their connection through other challenging times and is still with them.

After high school was Penn State, then graduating at Stan-

ford with degrees in drama and creative writing. Then back to the east coast to study theater at the Neighborhood Playhouse in New York City. There were years of "putting on the suit" of different careers: performing and touring with a rock 'n roll band, being a swim coach, acting in a variety of places, a "good job" in 3D computer graphics at Pixar, a marriage, and raising a wonderful daughter.

Then one day he found a lump. Lymphoma. "While I would never wish it on anyone, it was the best thing that ever happened to me. The healing completely shifted my orientation from "What can I get?" to "What and how can I give?" With that shift in awareness, yoga found him. Teachers of mediation and yoga appeared, encouraging him to become a teacher. Alex realized that as a teacher of yoga all his various skills could be used to help others. He learned and studied for many years with dedication and eventually opened a yoga studio.

After the studio was established, Alex began to feel a calling. He wondered what it would be like to experience psychedelics again, and he began to learn what others had said about them currently. In an internet search he found MAPS. "It was so very exciting! An organization that actually studies these substances seriously!" He found articles, links to other sites, and visionary artists he enjoyed. It excited him to find others who were talking about the legitimate potential power of these substances to change consciousness and the world.

He decided that LSD was not the way to go, as it is pretty impossible to ensure purity. As he learned more, about the dangers of analog drugs and "research chemicals," he decided that although there was a huge body of literature showing the benefits of these

substances, that it was not worth it to buy them on the street.

One day in talking with a friend, he mentioned his interest in learning about psychedelics and yoga. His friend said that she knew a psychotherapist who sometimes used psychedelics in the work. Introductions were made, therapy began, and Alex had his first experience with MDMA-assisted therapy.

"The experience is beyond words," Alex said. "But I will try to describe it. In the last seven months, I have felt like I am finally living. The substance, used in a ceremonial way, allowed me to begin working on the grieving, suffering and trauma that I have carried with me. There is no way to adequately describe the dimension of clarity it gave me. MDMA therapy seems to be an emotional "collator." Everything finds the perfect place. I was living in a toxic stew without clear boundaries regarding my feelings.

*Someday people will be
able to go to a therapist,
and have this experience.
Supporting MAPS seems
like some of the most
important work I can do.*

“With the medicine, I saw why I was connected to the pain and suffering, and I had the ability to decide that I was done with that. During the session, we looked at photographs of my life. When I found a picture that connected me to sadness or held any kind of emotional charge, I saw clearly that I was holding on, attached to feelings. It was my decision. It seems the chemical gives the ability to see clearly, to be reasonable, logical and communicative, while feeling profound love.

“The drug wears off, but the clarity remains. In one afternoon, I found freedom from torture, from self-torture. I found the grace and self-care to lift the burdens easily and magically.

“The work with MDMA is similar, but at a higher level, to the work with yoga and meditation. The destination is the same; there are many different vehicles. The profound session provides substance for yoga and meditation months, or years, afterward. It is a gift that someday the world will understand.”

Alex made the decision not to tell his parents about his MDMA therapy initially. But after he began to be happier, emotionally stronger, after his anxieties lessened, his parents began to ask questions, noticing profound changes in his attitudes, behavior, and tolerance, and he told them about the therapy.

In addition to significantly reducing his fears and anxieties, he found that the sessions changed his relationship to cannabis. He no longer finds it helpful. Alex said, “This MDMA therapy work, along with yoga and meditation, clears the window. Cannabis, for me, fogs the window.” It also changed his perception of relationships. “It is phenomenal that something can open us up to such love, such self-love, and with that the ability to love others. I now have the ability to enter into relationships without a need to be healed, but with the desire to share love with another.”

Alex feels sad that MDMA was abused recreationally, because now it is not available as a legal medicine. “I never tried it recreationally, and I can’t even imagine doing it that way. My experience was a ceremony, an offering, very reverential. It is not a chemical, it is a sacrament.”

“I support MAPS, because the work that MAPS does leads people to these realizations and healing. Someday people will be able to go to a therapist, and have this experience. Supporting MAPS seems like some of the most important work I can do.”

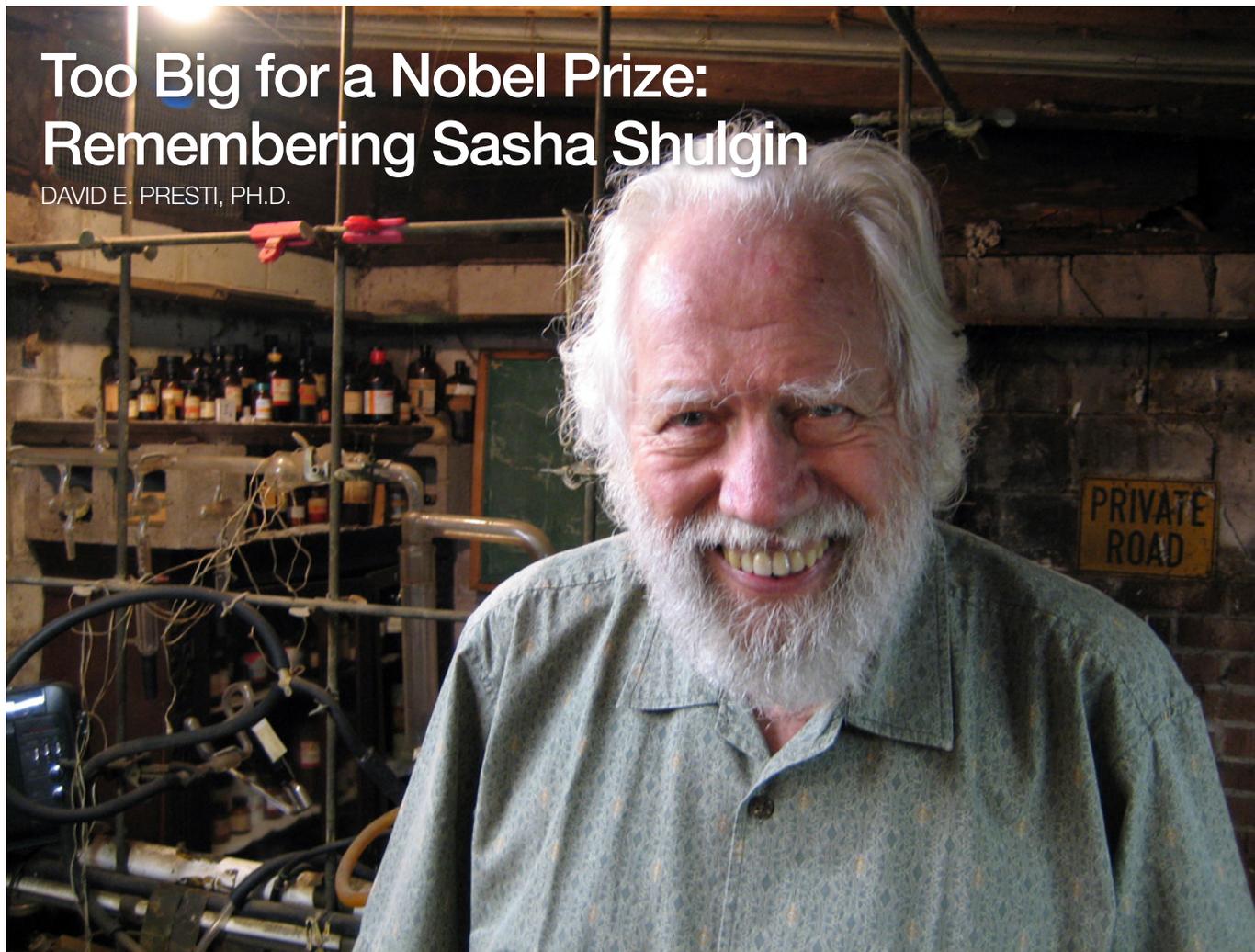
Begin with the end in mind
 then work backward to plan for reaching ambitious goals
 —Ashawna Hailey, who left \$5.5 million to MAPS in her will

Help create a world where psychedelics are integrated into society by including MAPS in your end of life plans. If you tell us about your plans, you can join our *Next Horizon Society*, and we will invite you to receptions, learning opportunities, and other special events.

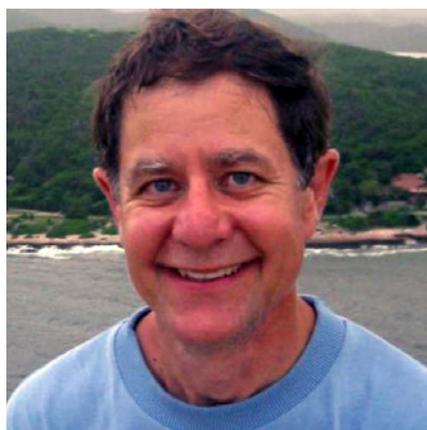
Please contact MAPS Development Director Virginia Wright to discuss your plans.
 (831) 429-6362 x107
 virginia@maps.org

Too Big for a Nobel Prize: Remembering Sasha Shulgin

DAVID E. PRESTI, PH.D.



Sasha Shulgin in his laboratory in 2005.



David E. Presti, Ph.D.

ALEXANDER “SASHA” SHULGIN WAS BORN in Berkeley on June 17, 1925, and received his bachelor’s (1949) and doctorate (1955) degrees from the local college, the University of California in Berkeley. Except for some time spent as an undergraduate at Harvard and a stint in the U.S. Navy during World War II, he lived his entire life either in Berkeley or nearby in the East Bay.

Sasha’s doctoral research in biochemistry at UC Berkeley developed methods for the synthesis of amino acids containing chemical isotopes of carbon and nitrogen. Isotopically labeled molecules like these are useful for investigating details of metabolic pathways, how the body manufactures this from that.

Although Sasha later wrote that his doctoral work was “un-inspired” and “dull” (*PiHKAL*, Chapter 2), adjectives like these are commonly applied to graduate-school projects. The primary goal of doctoral research in science is generally not to accomplish one’s best and most creative work, but to muck around and build intuition in the subject area. No doubt Sasha’s intuitions about molecular structure and chemical syntheses grew immensely during this period, and he was set on his way to becoming the artistic genius of pharmaceutical chemistry that

he was to be. To Sasha, molecules had personalities, and he related to their structures and properties with an intimacy that is reflected, for example, in his calling molecular-structure diagrams “dirty pictures.”

Following his Ph.D., Sasha pursued the study of pharmacology at UC San Francisco, and worked for more than a decade in industry, first at Bio-Rad Laboratories and then at Dow Chemical. While at Dow he synthesized a carbamate derivative that was marketed as an insecticide (mexacarbate, brand name Zectran®). He also began to read pretty much everything that had been written about mescaline, and became increasingly intrigued with the seemingly magical properties of this molecule that had been identified from the peyote cactus in 1897 by German pharmacologist Arthur Heffter. Then, in April 1960, in his 35th year, Sasha experienced the powerful psychoactive effects of mescaline, stating later that: “It was a day that will remain blazingly vivid in my memory, and one which unquestionably confirmed the entire direction of my life.” (*Pi-HKAL*, Chapter 2)

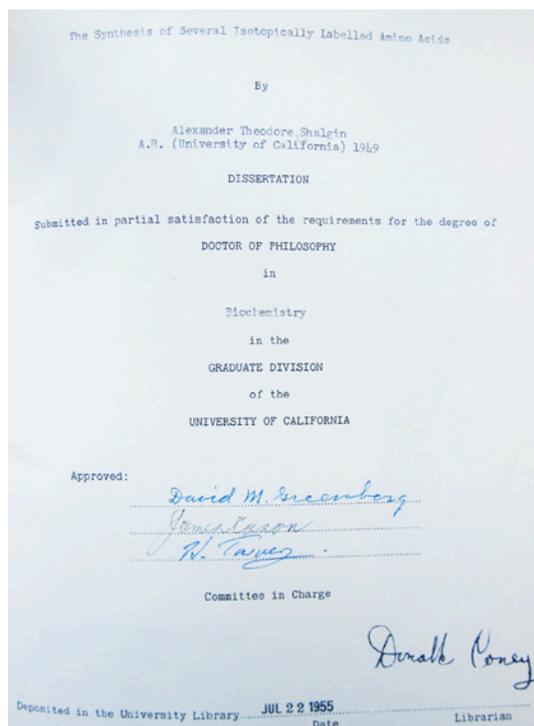
A century ago, mescaline was the only chemical substance known to science that today would unequivocally be called a psychedelic. By 1960, when Sasha experienced its effects, there were but a handful of additional psychedelic chemicals known: LSD (lysergic acid diethylamide) had been characterized by Albert Hofmann in 1943; psilocybin and psilocin were identified from *Psilocybe* mushrooms by Hofmann in 1958; lysergic acid amide had been identified, again by Hofmann, from the seeds of morning glories, used for shamanic healing ceremonies in Mexico; and DMT (dimethyltryptamine) had been characterized from several species of plants employed for their psychoactive effects by Amazonian shamans. Today, in the early 21st century, there are well over a hundred chemicals known to have psychedelic effects, some say over 200. The majority of these were discovered through chemical synthesis and testing by one man: Sasha Shulgin.

Being a chemist, Sasha was deeply intrigued by how a chemical could have such profound effects on one’s thoughts, feelings, and perceptions, and decided that the study of how molecular structure relates to a chemical’s effects on body and mind was a topic deserving rigorous scientific investigation. Taking the chemical structure of mescaline as his starting point, he made, over a period of years, numerous molecular modifications, and very carefully tested the effects of each one, using himself as research subject. He published the results of his investigations in scientific journals—several hundred chemically unique compounds that had never before been synthesized and investigated, or even imagined.

This was truly heroic work. For the most part Sasha worked alone, or with a very small number of close friends and colleagues. He used his own resources—supporting his work via lecturing and consulting—and did his chemical syntheses in a small laboratory he constructed behind his home. It is nearly impossible to do good science this way anymore: the old way—the way of Priestly, or Newton.

Neurochemists and psychopharmacologists recognize the pioneering nature of Sasha’s work. Practitioners of these disciplines in years to come are likely to have an even greater appreciation of his contributions. Work of this nature may never again be possible. Sasha so thoroughly explored such a vast array of chemical structures related to the neurotransmitters serotonin, dopamine, and norepinephrine, that the field is to a large extent fully cultivated.

Some of Sasha’s compounds are used in neurobiology to investigate the role of serotonin receptors in the brain. The chemicals DOM (2,5-dimethoxy-4-methylam-



Title page of Sasha's U.C. Berkeley doctoral dissertation.

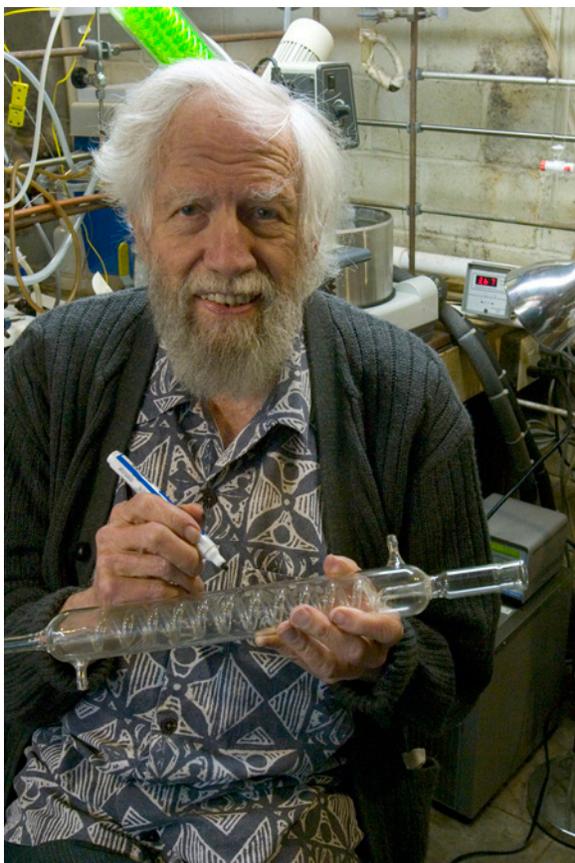
phetamine) and DOI (2,5-dimethoxy-4-iodoamphetamine), for example, are used to activate particular subtypes of serotonin receptors and study their relation to conditions like depression and psychosis, including exploration of mechanisms of action of antidepressant and antipsychotic medications. DOI has been shown to induce the rapid growth and reorganization of dendritic spines and synaptic connections with

other neurons, processes known to underlie what has come to be referred to as neuroplasticity. The power of these chemicals as tools to explore the complexities of the brain and the relationships between brain physiology and mental experience is only beginning to be tapped—not to mention their effectiveness as psychotherapeutic tools, long appreciated and now again being openly researched in mainstream clinical science.

Many discoveries in science happen when knowledge and technology make it ripe for them to happen. If such-and-such an individual or individuals had not made a particular discovery, then someone else likely would have sometime soon. Joseph Priestley and Antoine Lavoisier both appreciated around the same time that there must be a previously unrecognized elemental substance involved in combustion—the discovery of oxygen. Charles Darwin and Alfred Russel Wallace independently came up with the notion of evolution through natural selection. If a cadre of physicists working at Los Alamos in the 1940s had not built the world's first fission bomb, it would have been done elsewhere at some point. If Francis Crick and James Watson had not discovered the double-helical structure of DNA, someone else (Rosalind Franklin or Linus Pauling, for starters) soon would have.

For other discoveries it is not so clear. If Einstein had not come up with the general theory of relativity—the description of gravity in terms of a non-Euclidean geometry of spacetime—it's not at all clear that someone else would have thought of this. If Albert Hofmann had not synthesized and then tested on

himself the diethylamide derivative of lysergic acid obtained from an extract of ergot alkaloids, it is likely the world today would not know the effects of LSD. If Sasha had not shuffled methoxy groups around the phenethylamine ring of mescaline and then had the wit to place substituents like bromine, iodine, and alkylthios in what he called the “magical 4-position” of the 6-carbon ring, followed by careful focus of intention in the testing of these molecules, a vast landscape of pharmaceutical chemistry would



Sasha signing glass for MAPS (above); filming at camp during Burning Man, 2006 (below).



have gone uncharted. It is very possible no one else would have done these things in the way required to make the discoveries Sasha made.

These discoveries concerning relationships between specific chemical compounds, brain physiology, and mental experience are, by all objective criteria, worthy of the very highest academic kudos: National Academy of Sciences, Royal Society, Nobel Prize. A very well deserved Nobel Prize in Chemistry would have been one shared by Albert Hofmann and Sasha Shulgin: Hofmann for his discovery of LSD and its effects, contributing to kick-starting the field of biological psychiatry, and a whole lot of other things; and Sasha, for pioneering the study of chemical-structure relationships to biological activity and mental experience in humans. But such honors are not presently possible, as we continue to struggle as a society learning how to balance the complex issues stirred up by the power of psychedelics to open the psyche.

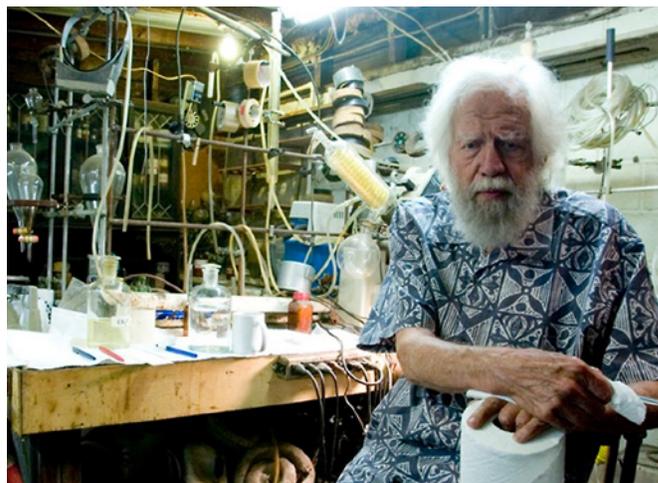
What's true is this: Some kinds of work are simply too big for universities, government research institutes, and industries, impressive as these institutions may be. Sasha's work was like this: too big for a multi-million dollar laboratory, instead requiring an alchemist's den, a courageous spirit, a careful focus of intention, and a goodly dose of mystical insight. Then the stuff of legend happened. Thank you, Sasha! 🍷

David E. Presti, Ph.D., teaches neurobiology and cognitive science at the University of California in Berkeley. His classes on "Drugs and the Brain," "Brain, Mind, and Behavior: An Introduction to Neuroscience," "Neurochemistry," and "Mind, Matter, Consciousness" reach more than 1,000 UC Berkeley students every year. For more than a decade, he worked in the clinical treatment of addiction and post-traumatic stress at the Veteran's Administration Medical Center in San Francisco. For the past 10 years, he has also been teaching neuroscience to Tibetan monastics in India.

"I first met Sasha in 1967 at a landmark NIMH-sponsored conference on the ethnobotany of psychoactive drugs held at UCSF Medical Center. We were both on the nutmeg portion of the program. I was a senior at Harvard, writing a thesis under the direction of Dick Schultes on the psychoactivity of nutmeg; he was working on phenethylamines and was interested in nutmeg's active principle, myristicin. We hit it off, and when I moved to San Francisco the following year to start a medical internship at Mt. Zion, began seeing him regularly. I introduced him to Schultes and my East Coast network. He introduced me to his circle on the West Coast. I have wonderful memories of time spent with Sasha and Ann at Esalen, Telluride, and other spots and of sharing knowledge and adventures with them. I will always remember Sasha's elfin twinkle."

—Andrew Weil, M.D.

Sasha with Roland Griffiths, Ph.D., and David Nichols, Ph.D. (below); and at the workbench in his lab (right).



MAPS: Who We Are



Rick Doblin, Ph.D., Founder and Executive Director, 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.



Michael Mithoefer, M.D., Clinical Investigator/Medical Monitor, is a psychiatrist practicing in Charleston, SC, where he divides his time between clinical research and outpatient clinical practice specializing in treating posttraumatic stress disorder (PTSD) with an emphasis on experiential methods of psychotherapy. He is a certified Holotropic Breathwork Facilitator and trained in EMDR and Internal Family Systems Therapy.



Annie Mithoefer, B.S.N., MDMA/PTSD Study Co-Investigator, is a Registered Nurse who lives in Charleston, SC where she divides her time between clinical research and outpatient clinical practice specializing in treating posttraumatic stress disorder (PTSD) with an emphasis on experiential methods of psychotherapy. She is a certified Grof Holotropic Breathwork Practitioner and is trained in Hakomi Therapy.



Brad Burge, Director of Communications and Marketing, earned his B.A. in Communication and Psychology from Stanford University in 2005 and his M.A. in Communication from the University of California, San Diego in 2009. His graduate work focused on the political, scientific, and cultural changes required to make illicit drugs into legitimate medicines..



Amy Emerson, Director of Clinical Research, earned her B.S. in genetics and cell biology from Washington State University. She has worked in clinical development and research for the last 15 years in the fields of immunology, oncology, and in vaccine development. Amy has worked with MAPS since 2003 facilitating the development of the MDMA clinical program.



Virginia Wright, Director of Development Prior to joining MAPS in 2011, Virginia was a marketing and fundraising consultant, and held management level positions at the Santa Cruz Symphony, KUSP Radio, The Global Fund for Women, and Soviet American Performing Arts Exchange. She earned her B.A. in International Relations from San Francisco State University, and her M.B.A. from Santa Clara University.



Brian Brown, Communications and Marketing Associate, studied medical anthropology and visual culture at the University of California, Santa Cruz where he researched social prospects for psychedelics using a community centered approach. Brian is now developing MAPS' membership base by assisting with education and outreach efforts.



Founded in 1986, the Multidisciplinary Association for Psychedelic Studies (MAPS) is a **501(c)(3) non-profit** research and educational organization that develops medical, legal, and cultural contexts for people to benefit from the careful uses of psychedelics and marijuana.

MAPS furthers its mission by:

- Developing psychedelics and marijuana into prescription medicines.
- Training therapists and working to establish a network of treatment centers.
- Supporting scientific research into spirituality, creativity, and neuroscience.
- Educating the public honestly about the risks and benefits of psychedelics and marijuana.

MAPS envisions a world where psychedelics and marijuana are safely and legally available for beneficial uses, and where research is governed by rigorous scientific evaluation of their risks and benefits.

MAPS relies on the generosity of individual donors to achieve our mission. Now that research into the beneficial potential of psychedelics is again being conducted under federal guidelines, the challenge has become one of funding. No funding is currently available for this research from governments, pharmaceutical companies, or major foundations. That means that the future of psychedelic and marijuana research is in the hands of individual donors. Please consider making a donation today.

maps.org/donate



Merete Christiansen, Office Assistant, received her BS in Biology at the State University of New York at Geneseo, where she developed her passion for community service and activism. She furthered these interests working with High Trails Outdoor Science School following her undergraduate studies. Merete is passionate about learning, reading, yoga, and the dissemination of information.



Natalie Lyla Ginsberg, Research and Advocacy Coordinator, earned her Master's in Social Work from Columbia University in 2014, and her Bachelor's in History from Yale University in 2011. At Columbia, Natalie served as a Policy Fellow at the Drug Policy Alliance, where she helped legalize medical marijuana in her home state of New York, and worked to end New York's racist marijuana arrests. At MAPS, Natalie advocates for unbiased research.



Tess Goodwin, Development Assistant, has a B.A. in Psychology from the University of California, Santa Cruz, where she focused most of her time on social psychology and newspaper production. She is a mycophile, artist, and language enthusiast.



Colin Hennigan, Clinical Data Coordinator, brings a background in research design methodology and database management to MAPS. He earned his B.A. in Political Science at the University of Chicago, and his M.A. in Political Science at University of California, Davis. He is currently working on the creation of MAPS' online clinical database and the implementation of the Therapist Adherence Program.



Ilsa Jerome, Ph.D., Research and Information Specialist, earned a Ph.D. in psychology from the University of Maryland. She helps design studies, gathers information on study drugs by keeping abreast of current literature and discussion with other researchers, manages documents related to MAPS-supported studies, and supports the MAPS psychedelic literature bibliography.



Sarah Jordan, Publications Associate, earned her B.A. in Environmental Policy with a minor in Journalism from the University of California at Santa Cruz. Prior to joining MAPS, she was Communications and Development Assistant at Firelight Foundation in Santa Cruz, CA.



Bryce Montgomery, Web and Multimedia Associate, studied film production at West Valley College, joining MAPS as Social Media Intern in the summer of 2011. Bryce now serves as Multimedia Associate, bringing his background in film production and social media to public education about psychedelics.



Shannon Clare Pettit, Executive Assistant, is a Marriage and Family Therapist Intern and received her Master's in Integral Counseling Psychology from the California Institute of Integral Studies. Her clinical work has been with individuals and groups, of all ages, experiencing trauma, addiction, depression, and dual-diagnosis. Shannon supports Founder and Executive Director Rick Doblin, and contributes to MAPS' harm reduction efforts.



Linnae Ponté, Director of Harm Reduction, earned her BA in Biological Psychology from New College of Florida. She's assisted data collection and analysis at University of South Florida's Cardiovascular Psychophysiology Laboratory, MOTE Marine Mammal Aquarium Psychophysical Laboratory, East-West College of Natural Medicine, and the West Mamprusi Civic Union in Ghana.



Ben Shechet, Clinical Research Associate, received his BA in Psychology from Princeton University, where his work included research on motor learning in children, investigation of flow state phenomena, and a thesis that developed a neuroeconomic framework for understanding the phenomenon of boredom. Prior to joining MAPS, he worked as a Clinical Research Coordinator at a private clinical trials site, investigating potential treatments for Alzheimer's Disease.



Allison Wilens, Clinical Study Assistant, earned her B.S. in Biopsychology in 2014 from Tufts University. She worked in the Tufts Psychopharmacology Lab, and was also co-president of the Tufts chapter of Students for Sensible Drug Policy (SSDP), where she helped to pass medical amnesty reform on campus and spread awareness of the harmful side effects of the War on Drugs.



Berra Yazar-Klosinski, Ph.D., Clinical Research Scientist, earned her Ph.D. in Molecular, Cell, and Developmental Biology from University of California Santa Cruz, where she also served as president of the Graduate Student Association. After attending Stanford University, she worked as a Research Associate with Geron Corporation and Millennium Pharmaceuticals.

MAPS Store

maps.org/store

Featuring books, DVDs, art prints, clothing and accessories, historical artifacts, and back issues of the *MAPS Bulletin*.

All proceeds support psychedelic and medical marijuana research and education.



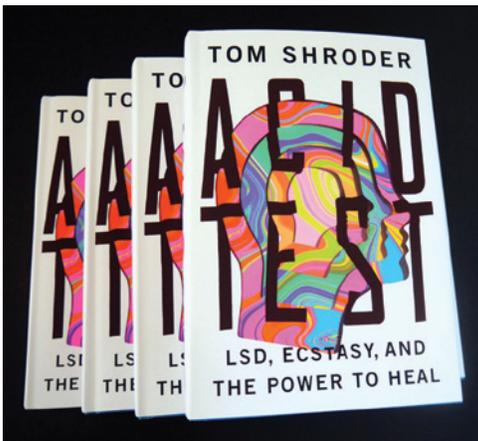
MAPS T-Shirt

100% organic cotton unisex T-shirt, made in the USA. Available in dark blue, in limited quantities. Screen printed by hand by Santa Cruz artist Clay Chollar. \$30



MAPS Silver Pin

These elegant treasures are handcrafted from .925 sterling silver. Made with love by Earthwing Designs. \$45



Acid Test: LSD, Ecstasy, and the Power to Heal by Tom Shroder
432 pgs., published by Blue Rider Press.
\$27.95



MAPS Thermos

20oz. insulated Kleen Kanteen thermos with MAPS logo. Keeps liquids hot for 6 hours and cold for 24 hours. \$30



Front cover: *Adore* by Travis Bedel

Back cover: *The Dance* by Eduardo Rodriguez Calzado

Artist information on inside cover