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Attorneys for Plaintiffs

IN THE UNITED STATES DISTRICT COURT
DISTRICT OF OREGON
(Medford Division)

**THE CHURCH OF THE HOLY LIGHT OF
THE QUEEN**, a/k/a The Santo Daima Church,
an Oregon religious corporation, on its own
behalf and on behalf of all of its members,
JONATHAN GOLDMAN, individually and as

Civil No. 08-cv-03095-PA

**AMENDED EXPERT WITNESS
STATEMENT OF MICHAEL
WINKELMAN M.P.H., Ph.D.**

Spiritual Leader of the "Santo Daime Church,"
**JACQUELYN PRESTIDGE, MARY ROW,
M.D., MIRIAM RAMSEY, ALEXANDRA
BLISS YEAGER and SCOTT FERGUSON,**
members of the Santo Daime Church,

**(School of Human Evolution and
Social Change; Arizona State
University; Tempe, Arizona 85287)**

Plaintiffs,

v.

MICHAEL B. MUKASEY, Attorney General
of the United States; **KARIN J. IMMERGUT**,
United States Attorney, District of Oregon;
HENRY M. PAULSON, Secretary of the U.S.
Department of the Treasury,

Defendants.

**"Daime," the Sacrament of the Santo Daime Church:
Social, and Psychological Effects of Ritual (Religious) Ayahuasca Use**

**Submitted at the Request of
Law Offices of
Roy S. Haber
Attorney at Law**

I have been retained to provide a report regarding the origins and practices of the Santo Daime religion, as well as to characterize the social, cultural, behavioral, and spiritual processes engendered by the ingestion of the sacred "Daime" (ayahuasca) and assess evidence of the health consequences. In order to illustrate the validity of the central tenets and claims of this religion regarding their sacrament, I have reviewed scores of publications cited below that deal with these issues and participated in ceremonies of the Santo Daime church and Uniao do Vegetal (UDV) religions. In order to assess the health effects of ayahuasca, I have provided a synthesis of a data from a variety of studies to illustrate that there are no negative effects found for religious users of ayahuasca.

The Religious Freedom Restoration Act requires that any government action that burdens religious freedom can only be justified by the government demonstrating that there is a compelling government interest in the restriction that cannot be satisfied in some

less intrusive manner than total prohibition. This report establishes that threatening to prosecute people for using the Daimé imposes an intolerant burden on this religious practice and that there are no compelling reasons to prevent the practice of this religion in the United States. The available evidence indicates that sacramental ayahuasca use poses no threats to health, and instead appears to enhance health and well-being.

My qualifications are as follows: I received a B.A. in Psychology, Rice University, Houston, Texas 1976; B.A. Behavioral Science, Rice University, Houston, Texas 1976; a Ph.D. in Social Sciences, emphasis Anthropology, School of Social Sciences, University of California, Irvine 1985; and a Master's of Public Health in Community Health Practice from the University of Arizona (2002). I am currently an Associate Professor in the School of Human Evolution and Social Change, Department of Anthropology, Arizona State University, Tempe, Arizona, where I have been employed since August 1988. I also hold teaching appointments in the School of Nursing and Innovative Health Care at Arizona State University Downtown Phoenix Biomedical campus, and have previously held appointments as the Concentration Director, University of Arizona Graduate Program in Public Health; and in the California Statewide Nursing Program, California State University. The topics of my master's and doctoral theses involved the cross-cultural and psychophysiological study of religions and religious healing practices, particularly the effects of shamanic practices and sacraments called "hallucinogens" on health, well-being, and drug addictions. I have published dozens of peer-reviewed articles and books on the topics of religious healing practices, including co-edited books on *Psychedelic Medicine* and *Sacred Plants, Consciousness, and Healing*.

I have held a variety of administrative positions at Arizona State University and in my professional organizations, particularly in the fields of health and religion. I served as the Director M.P.H. in Cultural and Behavioral Dimensions of Public Health in the ASU –University of Arizona Graduate Program in Public Health 1996-1998. I served as an

Executive Committee Member Arizona Graduate Program in Public Health, University of Arizona Health Sciences Center 1996-98. I was the Director of the Ensenada, Mexico Ethnographic Field School for the International Programs of Arizona State University 1988 - 2004. I most recently served as the Subdiscipline Head for Sociocultural Anthropology at ASU. I have also served at the national level in my field as a Member of the Executive Board of the American Anthropological Association (AAA), and in national organizations such as the founding president of the Society for the Anthropology of Religion and the president of the Society for the Anthropological Study of Consciousness. I currently hold a national elected position as chair of the AAA Committee on Minority Issues in Anthropology. I have served as an expert witness for cases in federal courts in Arizona and California, where I have testified in capital cases and provided evaluations of emotional and psychological health of foreign defendants.

My specialties involve medical anthropology and particularly the study of physiological, psychological and emotional aspects of religious behaviors and healing practices. I have received national honors and research awards for my cross-cultural research and studies of the effects of these sacred plants on health. I have received grants from the National Science Foundation for the cross-cultural study of religious healing practices and the effects of religion on violence. I am an internationally recognized expert on shamanistic healing practices and the effects of shamanic altered states of consciousness on health and have published this research in journals such as the *International Journal of Drug Policy* and the *American Journal of Public Health* (Winkelman 2001, 2003). I am considered to be one of the leading anthropological experts regarding plant sacraments such as ayahuasca, and have edited several books on this topic. I have published a number of reference books, trade books and texts with major academic presses on the study of religious healing practices, including Praeger, Prentice-Hall, University of Arizona Press, and Jossey-Bass/Wiley. My international stature as an educator and research in this field was recognized in my recent

appointment as a Fulbright Fellow to study the health of ayahuasca on Santo Daime Church members in Brazil.

My knowledge about the Santo Daime church and other ayahuasca religions come from many sources. I have as an anthropologist studied these traditions both as a cross-cultural scholar as well as through ethnographic studies in Brazil and other countries. I have participated in religious ceremonies of both the Santo Daime and Uniao do Vegetal churches in Brazil and partaken of their sacrament in religious rituals. I have read many studies of the use of these substances, including the accounts of dozens of psychologists, anthropologists, physicians and other scholars. I have commissioned and published assessments of the relative safety of these classes of substances in ritual settings, contributing to an interdisciplinary understanding of the nature of the sacred plants, their religious use, and their impacts on health. I have also reviewed the expert reports of Dr. Cozzi and the UDV toxicologist Dr. Nichols, Dr. Grob's report in the UDV case, and Dr. Halpern's report and study of Santo Daime members. My report conveys these understandings of the nature of ayahuasca as a sacrament and its positive effects on the health of the group members.

I. THE HISTORY OF THE SANTO DAIME CHURCH

The Santo Daime religion was founded in the 1920s through a syncretic blending of ancient ayahuasca traditions with Western influence. A rubber tapper of African descent named Raimundo Irineu Serra, who was living in the state of Acre, Brazil, came into contact with indigenous groups who used ayahuasca, a Quechua term meaning "vine of the souls," for healing and for contacting the spirit world. This indigenous use was strongly focused on community rituals, where ayahuasca was seen as enhancing community bonding and the resolution of conflict.

The indigenous ayahuasca traditions were combined by Serra with the influences of Catholicism and Spiritism which were prevalent in Brazil at the time (Couto,

1989). While participating in an indigenous ayahuasca ceremony, Serra had a visionary encounter with a personage who called herself the Queen of the Forest, a white woman clad in blue whom he came to identify as the Virgin Mary (MacRae, 1992). The Queen of the Forest told "Mestre Irineu," as he became known, to found a new religion using the ayahuasca tea as its main sacrament. He wrote down many of the hymns he received during his visionary experiences.

This visionary experience of "Mestre Irineu" after taking the ayahuasca tea was his inspiration for the creation of the Santo Daime church. This vision-induced foundation of a new religion is a textbook example of cross-cultural phenomena involving the combination of prehistoric and more modern religious traditions, producing a religious syncretism. The ancient religion's visionary plant ceremony was modified by the migration of European beliefs and missionaries to the Americas in the course of Europeans seeking to convert the indigenous people to Christianity. This is known as religious syncretism.

"Religious syncretism is a feature of all Latin American countries with large Indian and/or African populations." (McManners 1990: 453).

During one of the visions, Mestre Irineu was instructed to rename the "ayahuasca" tea to "Daime," which in Portuguese means the imperative "give me." This appeal for divine illumination appears so much in Serra's liturgy that it has become synonymous with the religious doctrine and the plant itself, which is sometimes simply called Daime. "Santo Daime" literally means "the holy give me" and for its followers, it is a petition to the sacred teacher that inhabits the tea to "give me strength, give me light and give me love." Its hymns and rituals are focused on the use of the Daime for enlightenment and healing, for what it "gives" in the ceremonies, the central internal spiritual learning and experiences. The liturgy embodies a deep ecological concern with the forest and indigenous beliefs combined with very traditional Christian prayer and the belief that Jesus Christ is the savior.

II. ENTHEOGENS/ SACRAMENTAL PLANTS

In order to understand the historical fact that Daime is a sacrament, not a drug, one must recognize the misnomers associated with visionary and psychoactive plants that resulted from their being grouped together with synthetic chemicals that are called "hallucinogens." Labeling the visionary experiences engendered by these plants as hallucinations, and therefore false perceptions, is misleading and ignores the profound significance and truth which religious users have experienced. The use of ayahuasca and similar plant sacraments cross-culturally reveals a very different perspective—where the spiritual being dwelling within the plants enter humans to give religious experiences. Cross-culturally, the use of ayahuasca brews and related sacred plants in a religious context is consistently associated with a sacred evaluation of their nature, leading to spiritual, religious and therapeutic applications that produce a profound personal and spiritual transformation that allows one to commune with the Divine (Dobkin De Rios 1984; Schultes and Hofmann 1979; Winkelman 1996).

In contrast to these prevalent cross-cultural uses and interpretations, modern societies have demonized these sacraments as "witches brews" and had little interest in these substances until they raised concerns during the cultural crises in the 1960s. Psychedelic drugs, typified in LSD, came into public consciousness as a counter-cultural movement that challenged mainstream cultural values. In a dramatic social reaction against these substances and their perceived threats, many in government, science and medicine condemned them. The chemicals found in these sacred plants were outlawed around the world, with international treaties leading to a virtual total ban. Although exceptions were recognized for religious use of these sacred plants, until recently, there was little research on their use in human therapeutics or serious scientific research into their constituent qualities and their psychological and physical effects. While early psychiatrists thought these substances might produce mental illness, such effects were the consequence of naïve subjects, often receiving

the substance without knowledge of their effects. This is unlike the Santo Daime church activities-where there is a ceremonial control of the experiences. However, since psychiatry was not prepared to engage in religious participation, it treated the visionary experiences as delusional, reflecting a descent into psychosis. This Western ethnocentrism ignores what is known by anthropologists and religious scholars alike of the significance of the visions as valid religious experiences that are the products of the religious sacrament which engendered the experience.

Throughout human history there have been religions that have viewed these sacred plants as sacraments, as central sources of spiritual inspiration, mystical participation and psychotherapeutic transformation. The famous Harvard botanist, Richard Evans Shultes called these "plants of the Gods" (Shultes and Hofmann 1992). Many religions throughout history and prehistory and throughout the world have viewed their practices as inspired by the indwelling spiritual influences of certain sacred plants, hence the term "entheogens" from the Greek *entheos*, referring to "the god within," and *gen*, "action of becoming." The word "entheogen" was introduced by Wasson et al. (1986) reflecting the often reported experiences of contact with the spiritual world when plants such as peyote and ayahuasca have been used in appropriate settings. Scholar Huston Smith concluded that "entheogens" is the appropriate word for mind-changing substances when they are taken sacramentally (Smith, 2000). The core effects of these entheogens are further broadly captured by Stafford's (1992) characterization of them as eliciting spiritual experiences, promoting healing, and facilitating solving of problems without toxic or addictive effects. The founding of the Santo Daime Church on the use of ayahuasca tea is consistent with the ancient role that visionary plants have had in religious formation and practice.

The professional literature thoroughly demonstrates that visionary plants have central roles in cultural and religious institutions. Such usage stretches far back into human prehistory. *Sophora secundiflora* (mescal bean), with properties similar to those in the

peyote utilized as a sacrament of the Native American Church, was employed by groups of Western North America as long as 10,000 years ago in vision quests and other shamanic practices (Furst 1976) dating to thousands of years ago (Ratsch 2005), attesting to the universal human process of incorporating these sacred substances into religious practices.

As La Barre (1972) pointed out, the pharmacological effects of these plants is central to understanding their roles in many cultures as a sacrament and in inspiring the development of indigenous religious and spiritual traditions. Anthropologists and psychologists have long recognized the potentials of these sacraments is to stimulate the visions that are part of what both gives rise to new religious traditions and validates traditional religious perspectives by pharmacologically producing spiritual experiences. Most religions of the world, including Eastern and Western traditions, have a visionary component similar to the experiences reported in the Santo Daime tradition. Such plants, used as sacraments, have played important roles in ancient indigenous and contemporary societies throughout the Americas and around the world, evoking powerful spiritual, emotional, social and cognitive reactions.

The visionary experience of Raimundo Serra (the founder of the Santo Daime Church) after taking the ayahuasca tea, reflects the prehistoric and cross-cultural phenomenon associated with this sacrament, modified by the Christian influences of the frontier areas of Brazil. Modern transportation and communication have contributed to a cross-fertilization of religious ideas that is typical of Brazilian religions (*see* Groisman and de Rios, 2007). These have further facilitated the cross cultural diffusion of religious traditions and influences across borders and nationalities. Consequently, ancient spiritual traditions such as those associated with the Santo Daime Church have become a legitimate spiritual path for persons who are seeking spiritual inspiration outside of their local religious traditions. Indeed, it is that search for spiritual contact, enlightenment, and blessing that brings people to the sacramental Daime tea.

In the following sections we will review evidence regarding the pharmacological, social, and clinical effects of this sacrament. The overall psychological effects are derived from an activation of emotional and cognitive "reframing" processes that produce feelings of community integration that contribute to psychological and physical health. As explained further below, when used in an appropriate setting, such as when taken as a sacrament by members of the Santo Daime religion, the Daime tea can enhance psychological integration, personal cultural identity, interpersonal and social bonding, emotional stability, positive spiritual beliefs and enhanced religious commitment.

III. THE PHARMACOLOGY AND TOXICOLOGY OF THE SACRAMENT AYAHUASCA

Daime, the sacrament of the Santo Daime Church, is broadly referred to as "ayahuasca," which refers to both to the beverage itself and to one of the source-plants used in its preparation. Ayahuasca is prepared by boiling the bark and stems of *Banisteriopsis caapi* with plants of the genus *Psychotria*, particularly *P. viridis*. This is done in a ritual manner for an extended period of time (many hours) after the bark and stems themselves have been ritually prepared by separate groups of men and women. The leaves of *P. viridis* contain alkaloids which produce psychoactive effects. Ayahuasca is unique in that its pharmacological activity is dependent on a synergistic interaction between the active alkaloids in both plants utilized. One of the components, the bark of *Banisteriopsis caapi*, contains harmine, the major β -carboline alkaloid which is a potent MAO-A inhibitor, plus harmaline and tetrahydroharmine (THH), also MAO inhibitors, with the latter (THH) also being a serotonin uptake inhibitor. The other ayahuasca component, the leaves of *Psychotria viridis* or related species, contains the potent short-acting psychoactive agent N,N-dimethyltryptamine (DMT). This DMT source is not orally active when ingested by itself, as the DMT is metabolized in the digestive system (via the monamine oxidation process) and never reaches either the bloodstream or the brain. It can, however, be rendered orally active

in the presence of a peripheral MAO inhibitor provided by *Banisteriopsis*. This interaction is the basis of the psychoactive action of ayahuasca (McKenna, Callaway and Grob, 1998).

In the 1990s, an international team of investigators traveled to Brazil to carry out biochemical and psychological studies on long-term ritual users of ayahuasca who belong to the religious group Uniao de Vegetal (UDV). (See "The Scientific Investigation of Ayahuasca: A Review of Past and Current Research", by Dennis J. McKenna, Ph.D., J.C. Callaway, Ph.D., & Charles S. Grob, M.D., in *The Heffter Review of Psychedelic Research*, Vol.1, 1998, pp.66-68; and other publications cited below). The UDV is a relatively new religion that was founded in the 1960s that is similar in a number of ways to the Santo Daime, having historically derived from the same roots as the Santo Daime church.

This "Hoasca Project" examined fifteen controls and fifteen long-term members of the UDV, who regularly imbibe their ayahuasca sacrament, "hoasca," which contains the same plants as the Daime tea. The control group of fifteen age-matched males was recruited from friends and siblings of the volunteers; they had similar diets and socio-economic status but had never ingested ayahuasca. Both groups were studied along a number of physiological, neuropsychological, and personality parameters, and the effects of ayahuasca assessed from biochemical (Callaway et al., 1994), pharmacological (Callaway, et al., 1996), physiological (Callaway, et al., 1999) and psychiatric (Grob, et al., 1996) perspectives. The primary objective of these investigations was to establish a core of qualitative and quantitative data on the psychopharmacology of ayahuasca and the relative safety profiles for human consumption (McKenna, et al., 1998).

IV. THE SOCIAL EXPERIENCE OF INGESTING ENTHEOGENS: THE PEYOTE AND DAIME (AYAHUASCA) RELIGIONS

The value of entheogens as sacraments and vehicles to facilitate more profound religious experiences and psychosocial integration is illustrated in both the adoption of the Native American Church (peyote religion) by Native Americans and the use

of *Daime* in the Santo Daime religion.

A. PEYOTE RELIGION OR NATIVE AMERICAN CHURCH

One of the most widely studied entheogens is the use of peyote (*Lophophora williamsii*) within the Native American Church (NAC, the "Peyote Religion" or "Peyote Way"; see *Aberle, 1966*). While the NAC is a recent merger of peyote ritual consumption with Christian beliefs, there is great antiquity to the ceremonial use of peyote and plants with similar properties in Mexico and southern Texas for at least 8000 years. Peyote was one of the earliest sacred plants known to the Spanish conquerors of Mexico. In the mid-19th century, Native Americans of the U.S. adopted peyote as a sacramental element in a new hybrid Christian and aboriginal religious practice. It rapidly spread amongst other groups in the United States and even into Canada. This syncretic peyote/Christian practice encountered fierce opposition from missionary groups, but eventually it was legally organized and is today recognized as the Native American Church.

The United States Drug Enforcement Administration lists peyote, whose active substance is mescaline, as a Schedule 1 controlled "drug". However in granting an exemption from this general prohibition against taking peyote, the DEA has acknowledged the importance of set and setting in entheogen ingestion by permitting the "non drug use of peyote" in Native American Church services. Indeed it might be better characterized as medicinal use of peyote: Calabrese points out that these non-drug uses have recognized therapeutic effects. Many addictions professionals consider the NAC the only effective treatment of alcoholism among Native Americans, and the U.S. Indian Health Service provides reimbursement for the treatment of Native American alcoholics by "road men," the peyote ritual leaders (Calabrese 1997, 2007).

Aberle (1966) analyzes peyotism as an adaptation to conditions created by the contact situation and the degraded status which resulted. "It is an effort at personal integration, achieved through a ritual and symbol system which is self-consciously not that of

the dominant culture, and not that of the peyotist's native culture" (Aberle 1966: 340). These personal experiences involve the "revelations of the utmost importance for the individual... a feeling of personal significance ... one's self, one's aims, one's relationships, and one's ethics have become matters for reflection and have somehow taken on a new dimension of meaning" (Aberle 1966: 8; *see* similar conclusion about other entheogenic traditions from Andritzky 1989; Dobkin De Rios 1971, 1984; Harner, 1973; Luna 1984; and Groisman & Sell 1996). Aberle characterized the Peyote Religion as a blending of White/Christian and Indian aspects in a new ethical code which fosters adjustment between Indian values of collectivism and those of individualism of the broader society.

Peyotism provides Native Americans with religious healing, transcendence, release from guilt, and guidance and a sense of purpose. Jilek (1994) The peyotists' perspective is that the Peyote ritual combats alcoholism through reducing physical and mental stress and enhancing mental and physical strength through contact with the supernatural. The significance of spiritual experiences for rehabilitation of the addicted self has been noted in many therapeutic traditions, and also apparently operative in ritual ayahuasca use as well (*see* Mabit 2007).

B. THE SANTO DAIME CEREMONIES

In examining the many ways in which the NAC safely uses peyote, we see a model of safe controlled use that also applies to Santo Daime. In many respects the Santo Daime ceremonies are like those of the Peyote Church and the UDV.

Daimista ceremonies involve the repetitive ingestion of Santo Daime, or Daime, in a structured ritual, in regular settings that are considered to be churches. The typical elements of the Daimista rituals are a sequential mix of prayers spoken in unison, and music (including the singing of hymns), combined with the ingestion of Daime. The hymns and their lyrics are central part of the transmission of the beliefs of Santo Daime. During the *mirações*, or visions, inspired by Daime, the followers may "receive hymns" from the

spiritual realm. They contain important symbolic messages to be comprehended and used to guide daily life. The tradition of "receiving" hymns was established through the experiences of Raimundo Irineu Serra, the founder of Santo Daime. When taking Daime, he noted the messages he received in his hymnal, and later incorporated them into Daime rituals. With time, other important leaders received hymns and also produced hymnals. Individual followers may also receive hymns and submit them to the leader for approval and possible incorporation in the group ritual. The hymns evoke rather traditional Christian beliefs, values and ideals.

Taking the tea often initially produces vomiting or diarrhea, making the plant widely known as a purgative. The vomiting is not considered in either social or medical terms as a toxic effect. This "cleansing" and "purifying" property attributed to Daime is derived from alkaloids characteristic of many of these plant species. (Concerning the psychic effects of vomiting, *see* MacRae, 1992:58). In the Santo Daime Church services, the use of prayer, music, rhythmic movement and hymns with personal spiritual healing messages offer a very positive impetus towards holistic healing. These and other factors (such as the rhythmic drumming often associated with transformative rituals) contribute to the powerful positive effects which characterize experiences that occur during the Daime ceremonies.

The use of Daime in the strict religious services of the Santo Daime Church represents the quintessential positive value which such plants can have for the members of this and similar religious groups. The sacramental use of Daime serves as a key element in the religious world view which sustains and integrates this particular religious community. It espouses community, social values and ecological consciousness as part of the religious doctrine and incorporates and promotes positive mental states as being central to the Daime religious belief in personal healing. Many researchers have reported on the value to the individual and the community from regular use of ayahuasca, which has played a central role in cultural life of many indigenous tribes in the Amazon (*e.g.*, Andritzky 1989; Dobkin de

Rios 1984; Harner, 1973; Luna 1984; Naranjo 1983; Schultes & Hofmann 1979).

The Santo Daime Church illustrates a very powerful and apparently effective group religious ceremonial use of Daime tea to reinforce numerous aspects of spiritual, personal and social life created within a religious community focused around its use for healing and personal transformation (Groisman and Sell, 1996). MacRae emphasizes the role of the Daimista rites as a structuring mechanism which "converts the obligatory into the desirable, placing society's ethical and legal norms in contact with strong emotional stimuli." Regular participation in Santo Daime rituals frequently causes notable positive changes among adherents which have included the socially stigmatized and/or poor, such as (for example) Amazonians and prior drug users. "In all cases, the rituals value and inspire self-discipline, enabling them to direct their lives." (MacRae 1992:56)

In a recent unpublished evaluation by Halpern, et. al. of the Santo Daime members in Oregon, medical researchers used a wide range of interview assessments of psychiatric and other disorders. They found that the church members' health scores were above normative values, showing a reduced level of symptoms, complaints and problems. They also found that many church members reported remission of a range of physical and psychophysiological disorders since they joined the church, and found many noted the effects of the church in overcoming their addictions to alcohol and other drugs. Respondents noted no drug problems, but enhanced physical health, mental clarity, improvements in relations and outlooks in life and greater spirituality.

There is good reason to believe that the Daime tea does not produce harm, nor lead to increases in the use of more dangerous licit and illicit drugs. The use of these substances is associated with enhanced health in societies around the world (Schultes and Hofmann, 1979; Winkelman 1996, 2001, Winkelman and Roberts, 2007). Anthropological evidence indicates that the ritual-religious use of these plants does not cause the social and psychological problems associated with hallucinogen abuse in the Western world

(Winkelman, 1996).

The general health applications of these classes of substances are widespread and the evidence for their efficacy is substantial (*see* Winkelman and Roberts, eds., 2007); although the full range of ideal clinical assessments are still lacking. While there is clearly a need for studies to ascertain whether religious participation is associated with enhanced health, the use of a similar sacrament (peyote in the Native Americans in the U.S.), illustrate that such ritual use of sacraments can have powerful protective effects in terms of interrupting alcohol use and establishing sobriety (*See* Halpern, 1996, 2007, Calabrese 2007). There are also similar spiritual applications of ayahuasca in treating drug abuse that indicate powerful preventive effects in terms of drug use, abuse, and relapse (*see* Mabit, et al. 1996; Mabit, 2007).

V. SUMMARY

I have served as the lead co-editor of a two-volume reference book published in 2007 by Praeger Publishers, entitled *Psychedelic Medicine New Evidence for Hallucinogenic Substances as Treatments*. The 30 articles in this book are written by psychiatrists, physicians, professors, laboratory directors, addiction specialists and center directors, hospital chiefs, and medical deans from medical schools and universities across the U.S. and Europe. Their opinions consistently voiced the professional perspective that these substances have little if any permanent negative health effects. In contrast to well-documented health effects of the many known legal and illicit drugs of abuse, the evidence for morbidity or mortality effects of the hallucinogenic sacraments indicate that they are virtually without public health risks (*see* Frescka, 2007).

I have participated in international conferences on the use of ayahuasca and similar plants on the effects of ayahuasca on health. I am in a unique position to know about developments in this area of science, having contacts with scores of healing professionals and

medical anthropologists around the world who routinely seek out this type of information and data as part of their professional responsibilities. As a public health expert, I can state with confidence that there are no reports, in this country or any others to my knowledge, of any violent or antisocial behavior associated with the Santo Daime religious services, or of any toxic or other serious-negative side effects attributed to ayahuasca, either on a short or long term basis.

The medical anthropological literature and my own investigation and discussion with experts establishes that the Santo Daime Church, which utilizes the Daime tea as its sacrament, stands out as a very positive model of a religious culture which has the capacity and means to elicit and societally integrate positive behavioral standards, codes of conduct and social relations. The Santo Daime ceremonies, visionary experience, and life style create opportunities and motivation for that Church's followers to examine previous experience and to reconstruct their consciousness of the world through spiritual, social and emotional visionary transformations.

There are several reasons why we can expect that the Daime tea will not become a source of drugs of abuse. First, the foul taste of the tea and the vomiting which often accompanies its ingestion are good reasons why, from a public health perspective, we can be confident that the Daime tea will not become a recreational drug. Furthermore, the ritual administration of the Daime tea is carefully controlled, where only special members have access to it. I have spoken with members and leaders of the Daime church in Brazil, and have been informed that the tea is brewed under conditions of ritual control, and that the tea produced is maintained under the security of the elders. When individual portions of the tea are released to a specific church or unit, a record of that is maintained by the leadership to provide control over the distribution of the sacrament. I have noted the care with which the ayahuasca Daime tea is distributed with the church elders carefully administering each dose of the sacrament.

Based on my observations of the Santo Daime and UDV rituals, the churches make efforts to assure safe use of the sacrament through maintaining strict control over its handling and distribution. The sacrament is not taken at the whim of individuals, but at a time, manner and dosage controlled by the church leaders. This helps assure safety and minimizes the likelihood of inappropriate usage or diversion to non-religious use. For the Santo Daime Church, procedures include an interview process for screening new church members for relevant medical history, including the use of psychiatric medications that might interact with the sacrament. At all of the ceremonies there are selected church elders to act as guardians who observe the serving of the sacrament to individual congregants and stay alert to meet any needs of those partaking of the sacrament. The Santo Daime church exercises close control over distribution of the sacrament by physically limiting access to it. There is a designated church elder, usually the church leader, who is responsible for serving the sacrament, generally in a segregated space. This person makes judgments about the appropriate individual serving based, among other things, on the individual's previous experience with the sacrament. Information from Jonathan Goldman, leader of the Santo Daime Church in Oregon, confirms his church's conformance with these policies and practices for maintaining strict control over the sacrament from the time it is transported from Brazil to storage and use in Oregon.

I have been informed that the Oregon Santo Daime church counts among its members at least three physicians and two registered nurses who are regular members of the church; consequently there are generally medically trained person at all Daime ceremonies. I have been advised that the physicians have never had the need to examine or treat any Church members for untoward effects during or after a service. This is of great comfort to

me as a person whose professional career has included promoting policies which protect public health.

My professional experience as a medical anthropologist and my experiences in the study of public health issues of drug dependence, and combined with my experiences in various capacities in evaluating the public health significance of the use of these sacraments and writing various journal articles and editing books and reports written on the subject, allows me to advise the court about the public health issues surrounding the sacred Daime tea. Based on the above, I can confidently conclude that there is no public health threat associated with importation, distribution, and ingestion of the sacred Daime tea in religious settings.

I have not testified in the past four years in any litigation. The writings I have produced during the past ten years are listed in my attached VITA, which accurately sets forth my educational and professional background.

Pursuant to 28 USC § 1746, I declare under penalty of perjury that the foregoing is true and correct.

DATED: November 24, 2008.


Michael Winkelman

**CURRICULUM VITAE
OF
MICHAEL WINKELMAN**

**ATTACHED TO
AMENDED EXPERT WITNESS
STATEMENT OF
MICHAEL WINKELMAN**

Case No. 08-cv-03095-PA

E-filed 12/1/08

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CERTIFICATE OF SERVICE

I hereby certify that I served the foregoing AMENDED EXPERT WITNESS STATEMENT OF MICHAEL WINKELMAN M.P.H., Ph.D. on:

Eric Joseph Beane / Brigham J. Bowen / Julie Straus / Lily Farel
Civil Division, Federal Programs Branch
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by mailing a copy thereof in a sealed, first-class postage prepaid envelope, addressed to each attorney's last-known address and depositing in the U.S. mail at Portland, Oregon on the date set forth below;

by causing a copy thereof to be hand-delivered to said attorneys at each attorney's last-known office address on the date set forth below;

by sending a copy thereof via overnight courier in a sealed, prepaid envelope, addressed to each attorney's last-known address on the date set forth below;

by faxing a copy thereof to each attorney's last-known facsimile number on the date set forth below; or

by filing electronically via the court's CM/ECF system.

DATED this 1st day of December, 2008.

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