

Mind-body researchers meet at Big Sur 'summit'



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A recent gathering on brain-mind-body interactions in Big Sur, Calif., may become known as the other historic "summit" in 1987.

Thirty-eight medical researchers, including four eminent Soviet scientists, met at Esalen Institute Sept. 27-Oct. 2 as part of the Health Promotion Project of Esalen's Soviet-American Exchange Program.

They focused on psychoneuroimmunology, endocrinology and other frontiers in research related to human health. (See *B/MB*, Jan. 19.)

Aron Belkin, director of the National Center for Psychoneuroendocrinology Research in Moscow (see interview, page 5),



led the Soviet delegation. Robert Gale, the bone-marrow expert who treated Chernobyl victims; Candace Pert, co-discoverer of the opiate

receptors, and physician-author Andrew Weil were among the participants.

Issues included global perspectives on behavioral medicine, AIDS, the growing importance of neuropeptides, computer-assisted diagnosis and treatment, hypnosis and immunity, therapeutic touch, spontaneous remissions, expanded use of placebo, lifestyle and disease, and the promise of botanical medicine.

Pert discussed her theory on how the AIDS virus gains entry to cells. She and her husband, Michael Ruff, talked about how their NIMH peptide studies led them to think of consciousness as being "located in every cell of the body."

Weil talked about mushrooms used in the Orient for their immune modulating effects and plants used by healers in Siberia. He stressed the importance of the placebo as a treatment and research tool.

"All treatments, including major surgery, produce placebo effects," he said.

Other key presentations were given by Dean Ornish, author of *Stress, Diet and Your Heart*, psychiatrist Kenneth Pelletier on corporate applications and Brendan O'Regan of the Institute of Noetic Sciences on researching cases of spontaneous remission. Psychiatric researcher George Solomon of UC-San Francisco spoke about brain-immune interactions.

Conferees also had direct experience

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MDMA: Federal court decides that DEA used improper criteria

The First Circuit U.S. Court of Appeals in Boston has ruled that the Drug Enforcement Agency (DEA) should remove MDMA (popularly known as Adam or Ecstasy) from Schedule I of its controlled substances categories. The decision was in response to a petition brought by Harvard researcher and psychiatrist Lester Grinspoon.

The court said that the DEA criterion for safe medical use—approval by the Food and Drug Administration—was too limited. It reviewed the testimony of psychiatrists and other health-care professionals who had used MDMA in clinical settings before the drug was scheduled.

Psychiatrist Rick Ingrasci had testified that "MDMA reduces the fear response to a perceived emotional threat." David Nichols, professor of medical chemistry at Purdue, called MDMA "the harbinger of a whole new series of medically viable substances that will revolutionize the field of mental health."

"Confusion reigns at the moment," Grinspoon told *B/MB*. The Reagan administration, he said, may: 1) appeal to the Supreme Court; 2) ask Congress to further define "accepted medical use"; or 3) simply move the substance to Schedule II or III.

Last year (*B/MB*, June 16, 1986) Administrative Law Judge Francis Young recommended that the DEA move MDMA to the more lenient Schedule III to allow for research and clinical use. The DEA chose to keep the drug in Schedule I.

The issue of "accepted medical use" is particularly important to the administration because of litigation being brought by NORML (National Organization for the Repeal of Marijuana Laws) asking that marijuana be removed from Schedule I based on a long history of legitimate medical use, including use by cancer pa-



tients undergoing chemotherapy. Hearings by Judge Young on the marijuana case are under way.

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The criminalization of MDMA use in 1985 has curtailed any serious research with human subjects.

The substance was patented in 1914 by the German pharmaceutical giant E. Merck while searching for an appetite suppress-

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Stanford study

Shy folk may be shy of dopamine

Shyness may reflect a biochemical condition.

Stanford researcher Roy King found lower than normal levels of the neurotransmitter dopamine in 11 subjects who were clinically identified as shy. On the other hand, five extroverts had normal or slightly higher than normal dopamine levels.

The study may be the first to have linked a normal personality trait to a neurochemical. Prior animal studies had shown a correlation in increased dopamine levels (which can be induced by cocaine and amphetamines) and heightened social ac-

tivity.

In investigating a possible human correlation, he noticed a link between social withdrawal and lower dopamine levels.

The discovery has practical, if potentially controversial, implications, King said.

"Creating a drug to change personality is do-able," he told *B/MB*. "A drug designed to release dopamine in key areas of the brain could turn a shy person into an extrovert."

Is there a trend in medicine to "biologize" all aspects of human personality? King said the biological approach "is not so limited as it may appear. It needn't be associated with a mechanistic, reductionist perspective."

King: Psychiatry Dept., Stanford U., Stanford, Calif. 94305.



Belkin reports Soviet interest in peptides, alternative therapies

(B/MB interviewed Aron Belkin, director of the giant National Center for Psychoneuroendocrinology in Moscow, which has branches in 16 Soviet republics. He is a specialist in addiction research.)

What impressed you most about the recent Health Promotion Conference at Esalen?

The rich diversity of participants, from highly technical experts such as Candace Pert to non-conventional practitioners such as Michael Harner. Someone in the middle may be Andrew Weil, whose work resonates with many of us in the USSR.

What did you feel was the key issue?

The mind/body connection and the expanding field of psychoneuroimmunology itself. To say mind and body are one is almost a platitude. . . . The ancient Greeks knew as much. The key is the interaction. We are investigating how an immaterial thought creates such dramatic repercussions in the body.

What about the perception of the brain in the USSR?

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We're starting to regard the brain as a large endocrine gland, secreting hormones and regulating itself with peptides. In fact, I have proposed renaming the discipline "psychocrinology"—the study of the brain and its interaction with its own hormones. We are particularly interested in how the peptides relate to emotional states.

What about the therapeutic possibilities in altered states?

Yoga therapy, meditation and psychedelics are all being studied. We're interested in alternative approaches because of our focus on diabetes and alcohol addiction.

Soviets are interested in breathing practices in general, Stanislav Grof's work in particular. There may be some philosophical and methodological differences, but the techniques and empirical content are very appealing. Many of us will be promoting this kind of work in the USSR.

Belkin: Vernadscogo 89-1-68, 117526 Moscow.

Blood-brain barrier: a literal breakthrough

Researchers have discovered a variety of ways to penetrate the protective lining of endothelial cells, known as the blood-brain barrier. By first infusing it with a sugar solution that draws water from the cells, Edward Neuwelt of the Oregon Health Sciences Center said he got anti-cancer medication past the barrier to treat tumors.

The barrier was discovered at the turn of the century. It protects delicate brain tissue from many substances circulating in the blood, including medication. Unfortunately, it also fails to block nicotine, fat-soluble heroin, cancer cells and the AIDS virus.

Recent breakthroughs have resulted from research advances like radioactive isotopes and methods that can keep capillaries alive post-mortem.

Transporting drugs through the barrier may become the dominant biological technology of the 1990's for pain control and safer birth control. William Partridge of UCLA Medical School said he is investigating the possibility of linking drugs to organic brain peptides like beta-endorphin for pain reduction.

Nicholas Bodor of the University of Florida, Gainesville, has discovered a tiny organic molecule that, linked with a drug, will cross the barrier. A pharmaceutical firm, Pharmatec Inc., is testing drugs using Bodor's technique for possible use in prostate and uterine cancer and for the brain inflammation encephalitis.

Health promotion. .

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with non-traditional therapeutic approaches:

- Anthropologist Michael Harner led the group through a shamanic percussion ritual. Most people can learn shamanic healing practices very rapidly, he said. "It's an ancient human capacity." Harner suggested that people often heal themselves by focusing their attention on healing others.

- Stanislav Grof, scholar-in-residence at Esalen, introduced a "holotropic breathing" technique for producing expanded awareness through hyperventilation, focused bodywork and evocative music. ("At this point there ceased to be Soviets or Americans," one participant observed. "Cultural barriers melted away and there were just human beings, sharing energy.")

American scientists will reciprocate with a visit to Suzdal, USSR, next September.

Audio and videotapes of the conference will be available from Esalen Health Promotion Project: 3105 Washington St., San Francisco 94115.

Court rules on MDMA. . .

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sant. Because the patent was allowed to expire, it is now in the public domain. Drug firms, therefore, have no incentive to engage in the lengthy and expensive protocols required for potentially marketable drugs.

George Ricaurte, a neuroscientist known for his research related to Parkinson's disease, is seeking formerly frequent users of MDMA to participate in a proposed Stanford study. He will examine their spinal fluid for lowered levels of a metabolite called SHIAA, shown in primates to correlate with reduced amounts of the neurotransmitter serotonin and for possible damage to nerve terminals.

Frequency of use proved to be a major factor in the animal studies. Below a certain threshold of use, MDMA appears to have no negative effects. Above this level, it begins to inflict degrees of neuronal damage.

Because of MDMA's powerful effects on the serotonin system, Ricaurte said, it may be a key to understanding more about the specific functions of serotonin itself.

Rick Doblin, known for his advocacy of MDMA research in the media, is a study participant. Ricaurte noted that volunteers who have used MDMA more than 10 times are still needed for the study, which involves a spinal tap, PET scan and a full psychiatric work-up. Subjects will go to San Francisco for the laboratory work.

Ricaurte: Institute for Medical Research, 2260 Clove Dr., San Jose 95128, (408) 998-2722.