Newsletter on Drug and Alcohol Issues published by the University of Washington Alcoholism and Drug Abuse Institute and the Washington State University Alcoholism Training and Research Unit

ISSUE No. 23

JANUARY, 1979

SCHEDULE OF UPCOMING LECTURES

Jane Prather, Ph.D., Professor,
School of Social & Behavioral
Sciences, Calif. State Univ.
at Northridge

"The Mystique & Myths of Minor Tranquilizers"

Thursday, Jan. 25, 1979 3:30 p.m.
Health Sci. Bldg.
Room E-205

Peter L. Carlen, M.D., Addiction Research Foundation, Ontario

(Title to be announced) Dr. Carlen will speak on cerebral atrophy and its partial reversibility in chronic alcoholics.

Monday, Jan. 29, 1979 3:30 p.m. Health Sci. Bldg. Room E-205

Jonathan Ott & Jeremy Bigwood

"The History of Teonanacatl, Hallucinogenic Mushroom of the Aztecs"

Friday, Feb. 9, 1979 3:30 p.m. Health Sci. Bldg. Health Sci. Auditorium (Rm. A-420)

"EPIDEMIOLOGY OF ALCOHOLISM & DRUG ABUSE": A NEW CONTINUING EDUCATION COURSE

Beginning in the Spring Quarter, 1979, the Alcoholism & Drug Abuse Institute, in cooperation with the School of Public Health, will offer a new continuing education course in the chemical dependencies field. Titled "Epidemiology of Alcoholism & Drug Abuse," the course will have as its number, EPI 590X, and it will offer three credits to those who enroll. The course will focus on the special problems involved in the application of epidemiological thods and/or survey research techniques to the study of the prevalence of alcohol and drug use and chuse. Given existing

models of chronic diseases and available statistical techniques, current knowledge about alcoholism and drug abuse will be examined. Particular attention will be paid to conceptualization, operationalization of concepts, and measurement problems. Knowledge of experimental design, statistical inference and correlation and regression will be assumed. Lectures will be presented by researchers currently working in the fields of alcoholism and drug abuse.

The course instructor will be Elizabeth Morrissey, a research consultant at the Alcoholism & Drug Abuse Institute. Individuals interested in further information concerning this course should contact Ms. Morrissey at the Alcoholism & Drug Abuse Institute (543-0937).

SPRING QUARTER ALCOHOLISM & DRUG ABUSE COURSES

The following courses will be offered at the University of Washington during the Spring Quarter, 1979, for regularly matriculating undergraduate and graduate students:

Nursing 505

"Selected Topics of
Psychosocial Nursing:
Research Advances in

Drug Problems"

Kathleen Smith-DiJulio 2 credits

Nursing 490

"Practicum in Nursing of Alcohol and Other Drug-Dependent Persons: Prevention, Management & Rehabilitation of the Acutely Ill"

Kathleen Smith-DiJulio 2-6 credits

Nursing 491

"Practicum in Nursing of Alcohol and Other Drug-Dependent Persons During PostAcute Stages of Illness"

Nada Estes 2-6 credits

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Nepenthe (ni-pen-the), n. (1.Gr. nepenthes, removing sorrow; ne-, not + penthos, sorrow, \overline{grief}) 1. a drug supposed by the ancient Greeks to cause forgetfulness of sorrow, 2. anything causing this state.

Social Work 504

"Social Problems & Social Welfare: Drugs

& Alcohol"

Roger A. Roffman

3 credits

Pharmacy 310

"Drugs in Our Society"

Roy Hammarlund 3 credits

Pharmacy 311

"Drugs in Our Society: Special Projects"

Roy Hammarlund 2 credits

Social Work 433

"Community Resources in the Treatment of Alcohol and Other Drug Problems"

Roger A. Roffman 3 credits

Additional information concerning any of the above courses can be obtained by contacting the individual instructor.

ADAI FUNDS UNIVERSITY RESEARCH PROJECTS

Five research projects* recently received short-term (one year or less) funding from the Alcoholism & Drug Abuse Institute. These projects cover a cross-section of topics within psychology, clinical psychology, pharmaceutical chemistry, and pharmacology.

<u>Dose-Effect Curves & Learned</u> Tolerance to Drugs---

Tolerance to ethanol, pento barbital, and the cross-tolerance between them appear to be affected by learning. Based on this finding from earlier research, John B. Wenger, a predoctoral candidate in psychology, will now be expanding his study by examining the learned tolerance to a variety of drugs and the relationship of this tolerance to the dose-effect curves of those drugs.

Indication that tolerance is learned has resulted from Wenger's experiments with rats trained on a treadmill. Using three groups of rats, he exposes a "learning" group to 10 days practice following a daily drug injection. The "exposure" group is also given 10 days practice on the treadmill and exposed to a daily injection, but the drug is not administered before the practice. The third group, a control for un-intoxicated practice, practices for 10 days after receiving a saline injection.

When all three groups are subjected to identical test conditions of staying in the center of the treadmill while intoxicated from equal drug injections, the first group is significantly more successful than either the second or third (the test is comparable to the "walk a straight line" standard used for determining an individual's level of intoxication). The assumption that follows is that individuals can learn to compensate for the effects of intoxication, and that repeated exposure to a drug does not in itself create tolerance to a drug's effects.

Wenger's current research will expand upon the above model by subdividing each group of treadmill-trained animals into three challenge dose subgroups. When the animals are subjected to test conditions, they will be injected with three different drug dosages. This procedure will facilitate verification of previous findings and will answer whether those findings are true for a whole range of doses or just for the dosages in the first tests.

Brain Development and the Fetal Alcohol Syndrome---

Jaime Diaz, Ph.D., and Herman Samson, Ph.D., both assistant professors in the UW Department of Psychology, are using a new animal model in exploring the causal relationship between a mother's chronic ingestion of alcohol during pregnancy and brain damage to the fetus.

The Fetal Alcohol Syndrome (FAS), which refers to the frequent appearance of such symptoms as small body size, small eye openings, and moderate to severe mental retardation in the children of alcoholic mothers, has led to speculathat ethanol-induced brain damage to the fetus is the direct cause of mental retardation in these cases. Unfortunately, to date there are no data from controlled experiments to support this.

One reason for this lack of data is the difficulty of creating an animal model comparable to the human gestational period. In a human fetus, the most crucial time for the development of the brain is the last trimester before birth. Brain development in a rat pup, however, occurs during the first 10 days after birth.

To overcome this difficulty, Diaz and Samson will be combining two laboratory procedures. Their first step will be to expose female adult rats to an alcohol-containing liquid for nine weeks prior to impregnation and during the 21-day gestation period. This exposure will be induced by psychogenic polydipsia, a phenomenon in which compulsive and continual drinking occurs when feed pellets are released on regular into vals between 90 seconds and 2 minutes. Daily consumption will be comparable to 2 quarts of 80 proof alcohol by an adult human.

The second procedure will involve artificially rearing rat pups and exposing them to ethanol amounts comparable to the fetal blood ethanol level. This postnatal animal model has not been used in previous fetal ethanol studies. Following the total exposure time, the animal brains will be examined for malformation to determine the effect of alcohol upon brain development.

By exposing rat offspring to blood ethanol levels throughout a CNS developmental time comparable to the full human gestational period, this research study should establish a model for further detailed examination of FAS.

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Narcotic Agonists & Antagonists---

Narcotic agonists and antagonists will be the general area of study for Wendel Nelson's research. Nelson, a Professor of Pharmaceutical Chemistry, will be focusing specifically on the synthesis and preliminary evaluation of derivatives of narcotic binding agents (ligands).

The effect of an agonist (analgesics such as morphine, heroin, and methadone) is to relieve or reduce pain. Antagonists counteract the analgesics and block or reverse their effects. Antagonists are used in diagnosing tolerance and as pharmacological tools to study narcotic receptors.

The two parent narcotic ligands to be used in the experiments are oxymorphine, a potent narcotic analgesic, and naltrexone, a potent narcotic antagonist. Four compound series will be prepared from the parent ligands by use of chemical reactions which will vary the structural arrangement of the atoms in each compound.

These compounds will then be tested in two ways: in laboratory narcotic receptor preparations to determine relative agonist and antagonist effects, and in vivo (in live animal) for analgesic activity.

Nelson explains that the structural variations used in the experiment "could lead to the development of a new potent analgesic and/or narcotic antagonist, and that the preparation and testing of these compounds will provide greater understanding of the structural requirements involved in the relationships between narcotic agonist and antagonist molecules." Plans are to use the pilot data in an application for NIDA funding for further experiments.

Ethanol's Effects on Psychomotor Functions & Psychosis---

Henry Lai, Ph.D., postdoctoral fellow, and A. Horita, Ph.D., Professor of Pharmacology, will be studying the changes which occur in the dopamine receptors in the brain as a result of chronic ethanol consumption. The dopaminergic system is primarily associated with the motor functioning abilities of the body: Parkinson's disease, for example, is a manifestation of the destruction of dopaminergic functions. Dysfunctions in the dopaminergic system have also been linked with the development of schizophrenia and psychosis.

Previous behavioral experiments have shown that chronic consumption of ethyl alcohol leads to an enhancement of responses to dopaminergic drugs, such as apomorphine. This enhancement is noted in increased motor function activities, and in laboratory rats also appears in increased stereotypic behaviors such as gnawing, sniffing, and excessive head movements.

An explanation for this increased sensitivity to dopaminergic drugs is that chronic ethanol consumption either increases the number of dopamine receptors in the brain or changes the binding affinity of the receptors to dopamine.

The research by Lai and Horita will involve chronic ethanol administration to rats and will study over-time changes in dopamine receptors during this ethanol consumption period.

Since dopaminergic systems have been implicated in the etiology of psychosis and psychomotor dysfunctions, this research may provide insight into the neurochemical basis of alcoholic intoxication, addiction and withdrawal syndromes.

*An article concerning one of the five projects, Dennis Donovan's research on behavioral characteristics in relation to drunken driving, appeared in the November, 1978, issue of NEPENTHE.

PCP CONFERENCE

A national conference on the problems and prevention of PCP abuse will be held on November 3 and 4, 1979, at the San Francisco Sheraton Palace Hotel. Registration fee is \$45 (\$65 after August, 1979). Continuing Medical Education for physicians and nurses will be offered. For information contact Stephanie Ross, Haight Asbury Training and Education Project, 409 Clayton Street, San Francisco, California 94117. Telephone: (415) 626-6763.

SUMMER SCHOOL OF ALCOHOL STUDIES

The Rutgers University Summer School of Alcohol Studies has tentatively announced its 1979 session for the dates June 24 through July 13, 1979.

Further information (including cost and application forms) will be available in February. Contact Linda J. Allen/Summer School of Alcohol Studies/Smithers Hall/New Brunswick, New Jersey 08903.

ALCOHOLISM & ADVERTISING STIR CONTROVERSY

Alcohol advertising and its influence on rates of consumption and associated problems is becoming the issue of intense debate in the United States and many other Western countries. Some federal officials and various alcoholism constituencies, on one side, charge that current alcohol advertising practices entice people who do not drink to become drinkers, encourage people who already drink to drink more, and, through glamorization of "the good

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life," essentially compel young people to become regular drinkers. It has been suggested that current advertising policies have created a cultural atmosphere in which drinking is pervasively second nature to people over the age of 12. More stringent regulation of beverage alcohol advertising, including a ban aimed specifically at television advertising of beer and wine, is a proposed solution to these perceived problems.

The beverage alcohol industry, the broad-casting industry, and the advertising conglomerate, on the other side, claim that rather than influencing the decision to drink or not to drink, advertising affects beverage preference and reflects rather than creates current sociocultural values. Without conceding culpability, these groups also argue that increased government intervention in the communication media's freedom of speech poses a far more serious threat to society than any possible impact of alcohol advertising.

Unfortunately, there is a scarcity of empirical evidence supporting either of these emotion-packed claims and counterclaims. David Pittman and Dow Lambert (an ADAI postdoctoral fellow), in their recently published monograph entitled, "Alcohol, Alcoholism, and Advertising: A Preliminary Investigation of Asserted Associations," report that there is a wealth of position and opinion statements concerning alcohol advertising, but almost no empirical research. The authors review the literature, outline the major points in the advertising controversy, and examine this issue in relation to a number of alcohol control policies under current consideration by the federal government.

In their literature search, Pittman and Lambert surveyed over 2,800 items dealing with the relationship between television and human behavior, and revealed nothing related to alcohol consumption or abuse. They did, however, discover three relevant reports in the alcoholism and advertising literature: two concerning a 1971 British Columbia ban on alcohol and tobacco advertising and one involving the relationship between exposure to drug advertising on television and use of illicit drugs.

The British Columbia legislation prohibiting advertisement of alcohol and to-bacco products via newspapers, magazines, television, radio, billboards, notice-boards, and all other media was passed in September, 1971, and rescinded 14 months later. The stated purpose of the ban was to reduce consumption of alcohol and to-bacco, especially among young people, and thereby to reduce the chronic adverse effects of drinking and smoking.

Subsequent data analysis by Smart and Cutler, however, provided little evidence that the ban accomplished its purpose. No significant change was found in either yearly or monthly analyses of beer, wine, and liquor consumption. The only possible effect of the ban was a small but statistically insignificant reduction in the growth of wine consumption. However, since this trend continued for two years after the ban it cannot be clearly attributed to it. For several reasons, the

British Columbia study is considered a less-than-ideal experimental model for assessing the effects of alcohol advertising suspension. One major criticism is that the ban was too short to produce an observable impact on alcohol consumption. Possible support for this criticism can be found in Ackoff and Emshoff's research on advertising at Anheuser-Busch, They found that a total elimination of advertising in a market area did not affect sales until one and one-half years later. Then, after several months of small sales reductions, normal advertising was reinstituted and normal growth rate was established in about six months. findings, however, related only to Anheuser-Busch advertising and sales, and do not reflect the trends in total consumption of malt beverages in a specific market area.

The third relevant study reported in the literature is that of Milavsky, et al., who conclude from their research that there is no empirical support for the contention that drug advertising on television either directly or indirectly leads teenage boys to take illicit drugs. major finding was a negative relationship between exposure to drug advertising on television and use of illicit drugs, a finding which held up under numerous controls. Additional findings included:

1) a weak positive relationship between advertising exposure and use of proprietary drugs; 2) no relationship between use of proprietary drugs and use of illicit drugs; and, 3) some evidence that an attitude of readiness to take proprietary drugs may well be a small factor in the actual use of proprietary and illicit drugs. Television, however, did not seem to play a role in the formation of this attitude of readiness.

Even though the mass media have become common targets of criticism for such social problems as violence, sexual promiscuity, alcohol and drug abuse, the fact remains that the relationship between alcohol advertising and patterns of consumption and abuse by different populations is simply not known. In an effort to remedy this lack of data, the Interagency Committee on Federal Activities for Alcohol Abuse and Alcoholism has called for a study to: 1) develop a set of dimensions describing the messages conveyed by specif fic alcoholic beverage advertisements; and, 2) to test these dimensions in order to obtain useful predictions of the effect on consumers. Funding for the research, approximately \$100,000, is to be provided jointly by the National Institute on Alcohol Abuse and Alcoholism, the Bureau of Alcohol, Tobacco, and Firearms, the Federal Trade Commission, and the National Highway Traffic Safety Administration.

DR. TOR LØBERG --VISITING SCHOLAR FROM NORWAY

During the current academic year, Dr. Tor Løberg, an assistant professor with the Department of Clinical Neuropsychology, University of Bergen, Norway, is serving as a visiting scholar at the University of Washington's Alcoholism & Drug Abuse

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Institute. He holds the title of Visiting Assistant Professor and Consultant to the Seattle Veterans Administration Hospital. Dr. Løberg is a specialist in neuropsychology, publishing in recent years a series of papers based on his neuropsychological predictive measures in relationship to the prognosis of alcoholism treatment. While visiting at the University's Alcoholism & Drug Abuse Institute and Department of Psychology, Dr. Løberg is engaged in writing up a series of papers based on his research of personality characteristics of alcohol abusers, perceptual dependency, and different aspects of the neuropsychology of alcohol abuse, and a comparison of internal and organic findings with their possible neuropsychological concomitants. Dr. Løberg is also offering a seminar and practicum in clinical neuropsychological methods as a part of the Seattle Veterans Administration hospital internship program.

With Dr. Løberg during his visiting professorship at the University are his wife, Jorun, and children, Erik and Else-Marie.

ADAI SMALL GRANTS RESEARCH DEADLINE

The next deadline for U.W. faculty and/or graduate students seeking funding through the ADAI Small Grants Program is March 1, 1979. Guidelines for the submission of research proposals may be acquired from the Institute (543-0937).

"BORN WITH A HABIT" --A NEW FILM ACQUISITION

The University's Instructional Media Services, with funding assistance from the Alcoholism & Drug Abuse Institute, has purchased the film, "Born with a Habit." Dealing with the very important problem of neonatal narcotic addiction, the film was produced as part of the educational program of Project Care, Massachusetts Committee for Children and Youth. The film highlights the various symptoms of narcotic withdrawal as manifested in infants, the treatment procedures that are utilized, and methods of detection and diagnosis. An additional and important part of the film is dealing with the prenatal care of the addicted mother and the pertinence of appropriate social, psychological, and practical support for the family.

"Born with a Habit" is available for on and off campus use through the Instructional Media Services office. Alcoholism and drug abuse agencies which have been approved for use of University films for in-service training of staff may acquire the film for a rental fee of \$3.00. Other agencies are charged a fee of \$15.00. For further information contact Ms. Mary Nelson, Preview Consultant, Instructional Media Services, 543-9906.

NEW PUBLICATION: ALCOHOLISM: NEW DIRECTIONS IN BEHAVIORAL RESEARCH AND TREATMENT

Edited by Peter E. Nathan, G. A. Marlatt, & T. Løberg NATO Conference Series, Series III: Human Factors Volume ? New York: Plenum Publishing Corp., 1978

The behavioral approach to the prevention and treatment of alcoholism is now receiving the widespread attention of researchers. This work represents a major contribution to the literature of this field, bringing together a wealth of vital and up-to-date information, as reported by fifteen distinguished authorities.

This volume includes all major behavior therapy and behavior modification approaches to the treatment of problem drinking and alcoholism, together with discussions of etiology, epidemiological research, and the rapidly growing area of cognitive approaches to self-control and craving. In addition, the volume provides an extensive bibliography, listing every significant paper dealing with behavioral approaches to alcoholism.

ADAI TO OFFER ADVANCED TRAINING WORKSHOPS FOR DRUG ABUSE TREATMENT WORKERS

Under a contract with the Bureau of Alcohol and Substance Abuse, DSHS, the Alcoholism & Drug Abuse Institute will offer a series of 12 advanced training workshops for drug abuse treatment workers in the State of Washington. While there are no fees for any of the training sessions, only direct service staff members of drug abuse agencies under contract with DSHS are eligible to attend. The workshops will be held between February and June of 1979, with one-half of them being offered in Seattle and the remaining one-half in Spokane.

"Family Counseling" is the title of the workshop to be offered by Dr. Janice De Lange, Assistant Professor of Social Work at the University of Washington. Dr. De Lange's workshop will be geared towards developing skills in behavioral contracting with families and controlling behavioral problems through the management of contingencies.

"Group Counseling" will be a 2-day workshop focusing on the use of groups as tools for helping men and women to more effectively manage selected pieces of living. This workshop will be taught by Ted Teather, Associate Professor and Associate Dean, UW School of Social Work.

"Problem-Oriented Clinical Recordkeeping" is the title of a 2-day session to be taught by Associate Professor James Leigh of the University School of Social Work. This workshop will focus on two

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necessary skills for the practitioner: (1) maintaining clinical records in such a way that they are useful in case monitoring and treatment planning; and (2) case management.

"Advanced Counseling Techniques" will be taught by Dr. Cheryl Richey, Assistant Professor of Social Work at the University of Washington. Dr. Richey's workshop will help participants increase their ability to assess the nature and severity of clients' interpersonal skill problems that may relate to drug-abusive behaviors and disrupted social and familial relationships. Such problems as shyness, low selfesteem, nonassertiveness, and an inability to control anger will be addressed.

"Behavioral Management of Depression and Anxiety" will be taught by Dr. De Lange. At the end of this 2-day session, each participant should expect to have: (1) a broader knowledge of the causes and development of depression, anxiety and low selfesteem, and (2) a number of specific treatment techniques to prevent and alleviate anxiety and depression.

"Advanced Pharmacology--Health and Nutritional Problems" is the title of a 2day session to be taught by Dr. Janice Keller Phelps, the Medical Director of the Center for Addiction Services, and a private practitioner of medicine in Seattle. Dr. Phelps' workshop is designed to answer a wide variety of questions such as: what causes addiction? what drugs are truly addictive? what is the difference between dependence and addiction? are some addictive drugs more difficult to "kick" than others? vitamin C detox--does it really work with hard drugs? can vitamins make a difference? physical fitness programs vs. antidepressants--which is best? can you "diet to death"? Dr. Phelps is a Clinical Assistant Professor at the University of Washington Medical School and is also an Advisor at the Department of Family Medicine at the University.

The schedule of workshop dates and locations is as follows:

"Family Counseling" SeattleFeb. SpokaneApr.	•
"Group Counseling" SeattleMar. SpokaneApr.	-
"Problem-Oriented Clinical Recordkeeping" SeattleMar. SpokaneMay	
"Advanced Counseling Techniques" SeattleApr. SpokaneApr.	
"Behavioral Management of Depression & Anxiety" SeattleApr. SpokaneMay	

"Advanced Pharmacology--Health
& Nutritional Problems"
Seattle-----May 7,
Spokane------Jun. 4,

Individuals interested in further information concerning these workshops should complete the form at the back of this issue of NEPENTHE and mail it in as soon as possible.

NEW BOOKS RECEIVED AT ADAI LIBRARY

Liquor and Poverty: Skid Row as a Human Condition

by Leonard U. Blumberg; Thomas E. Shipley; Stephen F. Barsky New Brunswick: Rutgers Center of Alcohol Studies 1978.

Drug Dependence: Current Problems and Issues

Ed. by M.M. Glatt Baltimore: University Park Press 1977.

The Benzodiazepines: Use, Overuse, Misuse, Abuse

by John Marks
Baltimore: University
Park Press
1978.

Alcohol Abuse and Black America

Ed. by Frederick D. Harper Alexandria, VA: Douglass Publishers 1976.

Schizophrenia: Behavioral Aspects

by Kurt Salzinger New York: Wiley & Sons 1973.

<u>A Behavioristic Inter-</u> pretation

by Sheldon J. Lachman New York: Wiley & Sons 1972.

Research Methods in Psychopathology

by Theodore Millon; Herman I. Diesenhaus New York: Wiley & Sons 1972.

Concepts of Depression

by Joseph Mendels New York: Wiley & Sons 1970.

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Psychopathy: Theory and Research

by Robert D. Hare New York: Wiley & Sons 1970.

Anxiety and Neurotic Disorders

by Barclay Martin New York: Wiley & Sons 1971

Review of Inhalants: Euphoria to Dysfunction

Ed. by Charles Wm. Sharp;
Mary Lee Brehm
Rockville, MD: NIDA
(NIDA Research Monograph 15)
1977.

Behavioral Tolerance: Research and Treatment Implications

Ed. by Norman A. Krashegor Rockville, MD: NIDA (NIDA Research Monograph 18) 1978.

Cannabinoid Assays in Humans

Ed. by Robert E. Willette Rockville, MD: NIDA (NIDA Research Monograph 7) 1976.

Task Force on Women and Alcohol

Report to the Dept. of Social & Health Services Citizen's Advisory Council on Alcoholism August, 1978. Program Statements. Washington (State) Dept. of Social & Health Services. Office of Planning.

Olympia, WA May, 1978.

Liquor Laws of Washington, Revised

Washington State Liquor Control Board 1977.

Teonanactl, Hallucinogenic Mushroom of North America

Ed. by Jonathan Ott;
Jeremy Bigwood
Seattle: Madrona Publishers
1978.

Alcohol, Other Drugs, and Violent Death

by Paul W. Haberman;
Michael M. Baden
New York: Oxford University
Press
1978

For information concerning these or other Institute library holdings, please contact Nancy Sutherland, Institute librarian, at: 543-0937.

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ADVANCED TRAINING WORKSHOPS FOR DRUG ABUSE TREATMENT PERSONNEL (For direct service staff members of drug abuse agencies under contract with DSHS)

SCHEDULE

For a brochure and additional information, please fill out and mail the form below:

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DIRECTOR OF TRAINING
ALCOHOLISM & DRUG ABUSE INSTITUTE
UNIVERSITY OF WASHINGTON
3937 15th AVENUE NORTH EAST (NL-15)

SEATTLE.	SEATTLE, WASHINGTON 98195				
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PLEASE SEND ME ADDITIONAL	INFORMATION	CONCERNING '	THE FOLLOWI	NG WORKSHOPS:	
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