

A SUMMARY OF RCAS

Rutgers Center of Alcohol Studies

December 1, 1979

General

The Center of Alcohol Studies has a history of almost 40 years, with a "pre-history" dating from the early 30's when Howard Haggard (physician) and Leon Greenberg (Physiologist) began basic studies of the way in which the organism deals with ingested alcohol. Realizing that any such single research focus would not provide answers to questions concerning alcohol use and its problems, the founders of the Center gathered around themselves individuals of different disciplines and successfully developed working relations of mutual appreciation and cooperation. The social as well as the biological sciences thus became prominent fields of interest at the Center.

The Center has had an unbroken chain of researchers and scholars from its earliest days. Selden Bacon, David Lester, Mark Keller, Vera Efron, John Carpenter, to name a few, joined the Center at its initiation in the 40's and thereafter. Haggard retired in the early 50's; Efron and Greenberg in the early 70's; Mark Keller and Selden Bacon in the late 70's. Lester and Carpenter are still at the Center and active in a number of capacities, including research. Jellinek, McCarthy, Henderson, Straus, Lolli, Lisansky-Gomberg, Snyder, Park, Rubington, all made contributions to the field and influenced the character of the Center from the early 40's into the 60's. Straus, Gomberg, Snyder and Rubington continue their work at other locations.

Although the Center's origin was in research, the need for communication among scientists and the need to reach people who worked directly with alcoholics became apparent. The Quarterly Journal of Studies on Alcohol and the Summer School of Alcohol Studies were started. In 1979 the Journal, now the Journal of

Studies on Alcohol, published its 40th volume and the Summer School held its 37th annual session.

In 1962 when the Center moved from Yale to Rutgers it brought with it a nucleus of people, a tradition and a mission. In 1962 it was the only center of its kind in the U.S. The Addiction Research Foundation of Ontario (ARF) had come into existence and was patterned after the Yale Center. H. David Archibald, the moving force behind ARF, was a graduate of the Yale Summer School of Alcohol Studies.

There are now many centers in the U.S., all established since 1970, but none with the breadth or size of the Rutgers Center. For example, there are 8 other National Alcohol Research Centers---devoted exclusively to research. There are some 60 summer schools of alcohol studies, not related to the research centers; there are no journals of national or international prominence produced by the other centers in the U.S., there are no scientific information services associated with these centers or summer schools.

The Rutgers Center today has more than 80 people, about 60 of whom are professionals. It consists of 6 divisions, four of which perform line functions: Applied Research, Basic Research, Documentation and Publications, and Education and Training. The strength of the Center lies in the interdigitating activities of its line divisions. For example, the quality of its documentation function is affected not only by its internal activities but by the research that goes on in the two research divisions. Its summer schools and other educational activities are positively affected by the Center's research, information and publications activities. In other words, much of the Center's strength and uniqueness comes from the strong relationship among its divisions that have quite diverse functions. It is the only center in the U.S. so constituted.

Basic Research at RCAS

A number of things makes research at RCAS different and of high quality.

(1) The National Alcohol Research Center, referred to in Washington as an ARC, is the only one of the nine that is interdisciplinary in a broad sense. It consists of biomedical, psychological and sociological disciplines focussed on two issues: the determination of the antecedents of alcoholism and the developmental patterns of alcoholism, the normal use of alcohol and abstinence. Others of the nine ARCs are interdisciplinary in a narrow sense: composed of a number of coordinated biological disciplines such as genetics, pharmacology and neurochemistry. The ARC at RCAS is designed to follow the course of development of normal and abnormal use of alcohol and abstinence through a major portion of an individual's life, from age 12-13 into the 40s. Above all, it is prospective: subjects are observed before they manifest the problem, many even before they use alcohol, and are followed throughout a significant portion of their lives. It is one of the few longitudinal studies of such magnitude and duration in any area based on the principles of life-span developmental psychology, the discipline that supplies the theoretical base for longitudinal studies.

(2) The RCAS has two scientists who received Research Scientist and Career Scientist Awards this year. These awards are given to individuals whose peers believe them to have established outstanding careers in research or who show promise of doing so. It is rare for an institution to have even one of these awards.

(3) We are engaged in determining how alcohol produces the fetal alcohol syndrome (FAS): for example, does it act on the central nervous system? Or interrupt protein synthesis? Work at other laboratories merely describes the

anatomical and intellectual deficits that characterize the FAS. Obviously, a knowledge of the mechanism by which alcohol acts would be of great value to prevention and treatment of the FAS.

(4) Selective breeding studies in animals have been in progress for years, their purposes to develop animal lines reacting differently to alcohol, usually on the basis of whether the animals chose to drink an alcohol solution or water ("alcohol preference"). RCAS has been breeding rats that differ in their motor responses to alcohol: after many generations of breeding, one line of rats is hardly affected by alcohol, whereas the other reacts conventionally to doses of alcohol. The next step is to determine whether these behavioral differences are related to genetic differences in brain chemistry (e.g., neurotransmitters).

(5) RCAS has the first research being conducted in the social history of issues related to the use and abuse of alcohol in the U.S., an area of importance for both public policy and science.

(6) RCAS has an NRSA Grant: National Research Service Award. The program is designed to train social scientists in alcohol research with the aim of equipping them for careers in alcohol research. The program consists of the broad spectrum of academic specialties represented by members of the RCAS faculty as well as an introduction to the clinical side of alcohol problems, through its intern program conducted at a local hospital.

(7) The interdisciplinary nature of the total research effort must be stressed. The following areas are represented on the Center's research faculty: enzymology, neuropharmacology, psychopharmacology, nutritional biochemistry, sociology, social history, epidemiology, life span developmental psychology, experimental psychology. This interdisciplinary thrust provides the Center's

researcher with a broad over-all sense of alcohol problems that he would not experience in a standard university department devoted to a single discipline. In addition, the interdisciplinary character allows us to take recent discoveries in one area and use them in others. For example, the presence of aldehyde dehydrogenase (an enzyme whose characteristics are known as the result of much basic enzymological work at RCAS) in hair roots may prove to have a role in identifying constitutional characteristics related to alcohol ingestion. For this reason, we are soon to start taking hair root samples from the participants of the longitudinal study. We believe that the expertise, knowledge and skills of the Rutgers interdisciplinary researchers give them a unique ability to recognize important research questions in many disciplines and to conduct meaningful studies in many relevant areas.

Applied Research at RCAS

The Applied Research Division of RCAS is designed to carry out studies in several broad areas in the alcohol and drug studies field including: epidemiology, policy analysis, program design and program evaluation. The mission of the unit is to solve real world problems that require the rigors of behavioral science techniques. The staff has expertise in experimental psychology, developmental psychology, sociology, education, political science and computer science.

The strength of the Division is its ability to mobilize an interdisciplinary team of researchers and to focus the team's combined expertise on a range of applied problems. In the past five years the division has completed a variety of projects including: evaluation of adolescent alcohol and drug abuse treatment

programs, development of State-wide management information systems for alcohol and drug abuse treatment clinics, development of evaluation models for treatment clinics, epidemiological studies of adolescent and adult alcohol and drug use.

Documentation and Publications

Documentation

The Center Library. The Center Library is the oldest and most comprehensive library dedicated to scholarly and scientific works on alcohol and alcohol problems in North America (and probably the world). Its holdings include extensive collections of books, reports, dissertations and periodicals; the Master Catalog (about 130,000 classified references to works on alcohol studies published since 1471); the Classified Abstract Archive of the Alcohol Literature (abstracts of the 20th-century literature on alcohol studies); and other special collections (e.g. the McCarthy and the O'Connor Collections) available nowhere else.

Acquisitions, Abstracting and Indexing. The Library attempts to acquire every document on alcohol studies published in all languages throughout the world (over 5000 documents per year). This is the most systematic and complete acquisitions program in the country and, in its acquisition of foreign materials, exceeds even that of the National Library of Medicine. Every current, relevant and important document is abstracted and indexed in depth, and made available to scholars and scientists throughout the world.

Information Systems. The Center provides organized information on alcohol and alcohol problems to all who seek it. The services and products include specially prepared bibliographies, copies of abstracts and documents and the Alcohol Information Retrieval System--the only on-line, computerized retrieval system on alcohol studies, now available to researchers throughout the continent.

Publications

The Journal of Studies on Alcohol. Now in its 40th year of publication, the Journal is internationally recognized as the leading periodical in its field. Alternate monthly issues contain Original Articles reporting research in biochemistry, physiology, medicine, psychology, sociology, anthropology, history and economics; and Current Literature abstracts, indexes and bibliography.

Monographs of the Center of Alcohol Studies. A series of scholarly books on all aspects of alcohol and alcohol problems.

Other Books and Reports. These include A Dictionary of Words about Alcohol, Alcohol Education Materials---an Annotated Bibliography, a series of books on alcoholism treatment and rehabilitation, and other books, reports and pamphlets.

The Education and Training Division

The Education and Training Division engages in non-degree programs for a wide range of audiences. Its major activities include the Rutgers Summer School of Alcohol Studies (SSAS), the New Jersey Summer School of Alcohol and Drug Abuse Studies (NJSSADAS), the Alumni Institute, the Title XX project for the training of professionals in the human services system of New Jersey, workshops for professionals in the alcohol field, alcoholism awareness programs for all levels of business and industry.

Of these functions, RCAS is best known for the SSAS. The NJSSADAS is only 4 years old; the Alumni Institute occurs on alternate years (starting in 1980; prior to which it was a triennial meeting); Title XX began operation in July 1979 and the business and industrial programs occur on demand.

The Rutgers Summer School of Alcohol Studies (SSAS) is notable for a number of reasons and will be described in detail.

SSAS held its first meeting in 1943 and has met annually without interruption since that time. Not only is it the first school of its kind, but in

recent years it has served as the model for over 60 other schools. In its 37 years it has had more than 10,500 students and applications far exceed the capacity of the School. Seventy percent of the students in the last 10 years have attended one or more of the other schools. The evaluations of SSAS consistently include remarks such as "best school I have ever attended."

Additional facts about SSAS are: students have come from each of the 50 states, 10 Canadian provinces, and 40 other countries; SSAS clearly has an international reputation. The ability to draw students has resulted in alumni being found on the staffs of NIAAA, most state agencies and many voluntary agencies including the WCTU, the Distilled Spirits Council of the United States, the National Council on Alcoholism, the Alcohol and Drug Problems Association of North America, etc. In 1979 the director of NIAAA publicly announced that he would send 25 members of his staff to the 1980 Rutgers Summer School of Alcohol Studies.

The SSAS is the only 3-week course in the country and is the most costly (\$600 in 1980), but the quality of instruction is very high with instructors of national reputations and the highest qualifications coming from all over the country. The prestige of the SSAS is indicated by the fact that many instructors can obtain considerably higher fees in their regular capacities but choose to teach at Rutgers for 3 weeks despite the low honoraria.

The School is considered to be the most innovative, having been the first to offer courses about alcohol and blacks, alcohol and women, children of alcoholics, sexuality issues, and many others. In 1979 it offered 29 formal courses, lectures on special topics and a wide range of informal special interest seminars. Special interest seminars are provided by any faculty member with

expertise on any topic no matter how arcane; the seminars are scheduled and students simply walk in if they are interested.

Most leading colleges and universities grant graduate and undergraduate credit for attending the School.