



CONFERENCE STUDIES BAT RABIES CONTROL

The Bat Rabies Conference, held at NIH July 10 and 11, brought together investigators from various disciplines to define and assess problems and to determine the needs for future work.

The conference, first of its kind, was sponsored by DRG's Tropical Medicine and Parasitology Study Section, and Virology and Rickettsiology Study Section.

The conference covered the ecology, mammalogy, and physiology of bats; the virology and the enzootiology of bat rabies; and the problem of control and management of the disease.

Panel members agreed that there is a serious lack of knowledge concerning the reproduction of bats; the seasonal, ecological, and geographical distribution of bats outside the U. S.; and the transmission of rabies between bats and from them to other mammals. There is little knowledge of the mechanism of immunity either in terms of antibody titer or at the cellular level.

The conference recommended more study on variations in host resistance and in the virulence and the methods of transmission of rabies.

Conference members agreed that control of bat rabies could best be accomplished through public education, immunization for persons occupationally or otherwise exposed, and improved post-exposure treatment for infected persons.

Participants of the Conference included representatives of PHS, Army, Navy, Department of the Interior, State Health Departments, pharmaceutical houses, universities, the Pan American Sanitary Bureau, Rockefeller Foundation, the Ministries of Health and Agriculture of Trinidad, and the Institute of Biology, of Mexico.

SURGICAL WING CONSTRUCTION STARTED



Gathered at the surgical wing site at the southwest side of the CC, as machinery moved in, are some of those closely concerned with the building's planning. Looking at architect's drawings are (front row, l. to r.) Alfred E. Williamson, Chief, Research Facilities Planning Branch, DRS; Dr. Jordan J. Baruch, of Bolt, Beranek and Newman Co.; William B. Page, Asst. Chief, DRS; Dr. Andrew G. Morrow, Chief, Surgery Branch, NHI; Dr. Jack Masur, CC Director. Looking on is Cecil C. Driskell, RFPB, DRS; and in the steamshovel cab is Dr. Maitland Baldwin, Chief, Surgical Neurology Branch, NINDB.

DRS NAMES EXPERT ON COMPUTER SERVICES

Dr. Norman Z. Shapiro, a mathematician with wide experience in the use of electronic computer systems, was recently appointed to a key position in the Biometrics Branch, DRS, with major responsibility for data processing and computation.

Dr. Shapiro is currently familiarizing himself with the NIH computational and data processing activities. Persons who have current or envisioned needs in these areas are welcome to discuss them with him. Dr. Shapiro is located in Bg. 12, Rm. G-727, ext. 2282. He hopes to focus his concern on the application of computer techniques to medical and biological research.

(See *Computer Services*, Page 2)

DR. SMADEL HEADS CHOLERA PROJECT

A team of six U. S. scientists, headed by Dr. Joseph E. Smadel, Associate Director of NIH, left August 1 for the Far East and South Asia to aid in developing a cholera research project in nations of the Southeast Asia Treaty Organization (SEATO).

The group will visit three SEATO nations--Thailand, Pakistan, and the Philippines--and other countries where cholera and diarrheal diseases are public health problems, such as India and Iran.

The U. S. has allocated \$400,000 for the cholera project from the President's Fund for Asian Economic Development, a part of

(See *Cholera Project*, Page 2)

SINGING IN THE RAIN



Summer employees and COSTEP personnel moved their festivities into Top Cottage one evening last month when rain threatened the picnic held in their honor. More than 90 people attended this third annual R&W-sponsored picnic. Pictured singing after (not for) their supper are, from left, Duffy McBrayer, Edward Titus, Peter Messitte, and Diane Canby.

TRANSFER, APPOINTMENT ANNOUNCED BY DRG

Within the past month DRG designated a new executive secretary for the Radiation Study Section and received, by transfer, the Psychopharmacology Review Committee.

Dr. Samuel S. Herman, a dental officer in the PHS Commissioned Corps, has been appointed Executive Secretary to the Radiation Study Section. Prior to his assignment here, Dr. Herman headed the Division of Medical Services and Facilities in the Office of Vocational Rehabilitation.

Dr. Herman replaces Dr. Clinton C. Powell, who has been appointed Assistant Branch Chief of the Clinical Research Group, one of the four major sections into which the DRG study sections are divided.

The Psychopharmacology Review Committee, headed by Dr. Irving Simos, was transferred to DRG from NIMH, where the group participated in the program of the Psychopharmacology Service Center.

Under DRG, the review committee will function as a part of the Biochemical and Physical Sciences Research Group, headed by Dr. Elsa O. Keiles. It will review all research grant applications relating to psychopharmacologic drugs and compounds.

CHOLERA PROJECT Contd.

Mutual Security appropriations. The project is designed to bring American research scientists into working cooperation with their Asian counterparts. This sum has been assigned to NIH, which will in turn make further grants and contracts to carry out various phases of the project.

A research laboratory is to be organized at an established institution in Southeast Asia, and is to be closely linked with research laboratories and institutions of other countries. Activities will include epidemiological studies, and studies of the type, distribution, and prevalence of other diarrheal diseases. This field laboratory will have a director and assistant director selected by NIH.

Asian citizens will be trained in investigative techniques in the field laboratory and in three laboratories in the U. S., where basic research studies will be conducted. These are laboratories of the University of Chicago, whose project focuses on responses to vaccine and to the disease in immunized and nonimmunized persons; Jefferson Medical College, which is to make a fundamental investigation on the cholera organism, its growth forms and other characteristics; and the University of Pittsburgh, which will study viral agents that may be associated with, or involved in, susceptibility or resistance to cholera.

Accompanying Dr. Smadel on the one-month trip are the following: Dr. John H. Dingle, Western Reserve Univ.; Dr. Kenneth Goodner, Jefferson Medical College; Dr. Colin M. MacLeod, Univ. of Pennsylvania; Col. Richard P. Mason, Walter Reed Army Institute of Research; and Dr. Theodore E. Woodward, Univ. of Maryland School of Medicine.

COMPUTER SERVICES Contd.

Dr. Shapiro came to NIH from the Rand Corporation, Santa Monica, California, where he supervised the development of programs involving electronic computers. During 1958 he was detailed to the Strategic Air Command, Omaha, to prepare computer programs concerning the optimal use of weapons systems.

Publication Preview

The following manuscripts were received by the SRB Editorial Section between April 1 and April 7.

DRS

Hickey, J. L. S. A comparison of current types of germfree research apparatus.
Snow, D. L., and Hickey, J. L. S. Organizing for germfree research.

NCI

Blum, H. F. On the mechanism of cancer induction by ultraviolet radiation. II. A quantitative description and its consequences.

Blum, H. F. On the mechanism of cancer induction by ultraviolet radiation. III. The growth curve.

Blum, H. F. On the mechanism of cancer induction by ultraviolet radiation. IV. The size of the replicated unit.

Harris, A. H. Operative wound seeding with tumor cells: Its role in recurrences of head and neck cancer.

Longenbaugh, G. N.; Malmgren, R. A.; and Potter, J. F. A report on the circulating tumor cell study at Baltimore PHS Hospital with case reports.

Narrod, S. A.; Langan, T. A., Jr.; Kaplan, N. O.; and Goldin, A. Effect of azaserine (o-diazoacetyl-L-serine) on the pyridine nucleotide levels of mouse liver.

Potter, M. Biologic studies on the development of DON resistance in a mast cell neoplasm of the mouse.

NHI

Davis, J. O.; Bahn, R. C.; and Ball, W. C., Jr. Subacute and chronic effects of hypothalamic lesions on aldosterone and sodium excretion in dogs with chronic experimental ascites.

Davis, J. O.; Bahn, R. C.; Yankopoulos, N. A.; Kliman, B.; and Peterson, R. E. Acute effects of hypophysectomy and subsequent diencephalic lesions on aldosterone secretion in dogs with chronic experimental ascites.

Goodwin, S.; Smith, A. F.; Velasquez, A. A.; and Horning, E. C. Alkaloids of *Lunasia amara* Blanco. Isolation studies.

Strehler, B. L. Some optical properties of luminous bacteria.

Strehler, B. L., and Gee, M. V. Spectrophotometry of highly scattering biological materials: A simple device permitting automatic recording of organs, tissues, particulates and cells.

NIAD

Abinanti, F. R., and Huebner, R. J. The serological relationships of strains of para-influenza 3 virus isolated from humans and cattle with respiratory disease.

Rowe, W. P., and Brodsky, I. A graded response assay for the Friend mouse leukemia virus.

NIAMD

Bobbitt, J. M.; Weiss, U.; and Hanessian, D. Anomalous optical rotatory dispersion in the morphine series.

Carroll, W. R.; Callanan, M. J.; and Saroff, H. A. Physical and chemical properties of protamine from the sperm of salmon (*Oncorhynchus tshawytscha*). II. Anion binding characteristics.

Miles, H. T., Jr. Infrared spectra and tautomeric structure of polyinosinic and polycytidylic acids.

Mortimore, G. E., and Tietze, F. Studies on the fate of insulin-131 in the perfused rat liver.

von Oettingen, W. F. The aliphatic acids and their esters, toxicity, and potential dangers. The saturated monobasic aliphatic acids and their esters. I. Formic acid and esters.

von Oettingen, W. F. The aliphatic acids and their esters, toxicity and potential dangers. The

saturated monobasic aliphatic acids and their esters. II. Acetic acid and esters.

von Oettingen, W. F. The aliphatic acids and their esters, toxicity and potential dangers. The saturated monobasic acids and their esters. III. Aliphatic acids with three to eighteen carbons and their esters.

von Oettingen, W. F. The aliphatic acids and their esters, toxicity and potential dangers. IV. The relation between the physical-chemical properties and the pharmacological effects of saturated, monobasic, aliphatic acids.

NIMH

Axelrod, J.; Albers, W.; and Clemente, C. D. Distribution of catechol-O-methyl transferase in the nervous system and other tissues of the monkey.

Coelho, G. V. A guide to literature on friendship: A selectively annotated bibliography.

Dittmann, A. T. The need for ongoing research in the general function of the orthopsychiatric team.

Dysinger, R. H., and Bowen, M. Problems for medical practice presented by families with a schizophrenic member.

Felix, R. H. Mental health and mental illness in the world today.

Fisher, S. The use of hypnosis in interrogation and related military situations.

Hamburg, D. A. Trends in psychiatric research training.

Katz, M. M. Projective techniques and drug research.

Kety, S. S. Stellate ganglion blockade and the cerebral circulation.

Kety, S. S. Research training in the biological sciences for psychiatric residents.

Lewis, B. M.; Sokoloff, L.; Wechsler, R. L.; Wentz, W. B.; and Kety, S. S. A method for the continuous quantitative determination of cerebral blood flow in man by means of radioactive Krypton (Kr^{79}).

Mirsky, A. F.; Primac, D. W.; Marson, C. A.; Resvold, H. E.; and Stevens, J. R. A comparison of the psychological test performance of patients with focal and non-focal epilepsy.

Shakow, D. The place of the behavioral sciences in the research training of psychiatric residents.

NINDB

Brady, R. O. Enzymatic aspects of neurological and mental diseases.

Chang, J. J. Electrophysiological studies of the dinoflagellate *Noctiluca miliaris*.

Gemandt, B. E.; Ironyi, M.; and Livingston, R. B. Vestibular influences on spinal mechanisms.

Irwin, R. L.; Wells, J. B.; and Smith, H. J. III. The effect of the selective inhibition of muscle and plasma cholinesterase on neuromuscular block.

Miquel, J.; Horvath, B.; and Klatzo, I. A chromatographic technique for the quantitative study of the precipitin reaction.

Paton, D., and Thomas, L. B. Simultaneous occurrence of primary malignant melanomas of the eye and the skin.

von Sallmann, L.; Reid, M. E.; Grimes, P. A.; and Collins, E. M. Tryptophane deficiency cataract in guinea pigs.

NIH Spotlight



Windsor S. Day

Cabinet-maker Windsor S. Day is one man who doesn't worry about what he'll do when he retires next spring after 15 years in Government service. He's already doing it—raising a flock of 65 sheep, looking after more than a dozen head of cattle and horses, and tending a good-sized vegetable plot, among other chores on his 116-acre Maryland farm.

Nearing his 72d birthday, Mr. Day is tanned and vigorous. For years he did all the farmwork himself, but recently has had help from a neighbor's boy with his corn and wheat crops.

"Never had a vacation in my life," he claims with a smile. Instead, he prefers to use his annual leave to do odd jobs at home. "There's always something that needs fixing on a farm," he points out.

On the job, Mr. Day awes some of his younger shopmates by his attendance record. When asked about it, he replied: "I've worked hard all my life, and as long as my health is good I intend to go on putting in a full day's work for a full day's pay." He is proud of being a member of the 1000-Hour-Club, with 1,280 hours of accumulated sick leave to his credit.

Mr. Day rises early each morning to feed and water his stock before breakfast. Then, on weekdays he joins his car pool for the 20-mile drive down Route 28 through Rockville to NIH and his job in the Plant Engineering Branch carpenter shop. Long rated a skilled woodworker, he turns out all kinds of laboratory and office furnishings, besides making special display cases like the ones used in the medical exhibit at the Brussels World's Fair last summer.

USDA Grad School Offers Science, Math Courses

Among the 23 courses being offered at NIH by the Department of Agriculture Graduate School for the fall semester are subjects ranging through the biological and physical sciences to mathematics and statistics.

Nine courses have been scheduled in the biological sciences. They include: introductory and general bacteriology, general virology, human physiology, biochemical genetics, general pathology, and history of medicine and medical research.

The 12 physical science courses include: organic chemistry, introductory biochemistry, enzyme chemistry, physical chemistry, chemical quantum mechanics, chromatography, and protein chemistry.

Two courses will be given in mathematics and statistics: introduction to calculus and introduction to determinants and matrices.

Registration will be held during the week of September 12-19 at the Agriculture Administration Building, 14th Street and Independence Avenue, S.W. A special registration will be held at the Clinical Center, NIH, September 21-26.

Classes will begin at NIH on Monday, September 28.

Carpenter-farmer Day was born in Ridgeville, Md., in 1887, the same year the Hygienic Laboratory, ancestor of today's NIH, was opened for business. Except for two years when he worked in Ohio, Mr. Day and his wife have spent their lives in Maryland.

The Days live in a 200-year-old house whose two-foot-thick walls were built from facing stone cut in a colonial stone-sawing mill. Their house overlooks two watering ponds stocked with bass and bluegill. Since he bought the farm 41 years ago, Mr. Day has had many offers to sell the property, but he always turns them down.

"My wife and I like being in the country," he explains. "We can live much more cheaply on the farm than in the city. We grow our own food here and in bad times the farm could support us."

Windsor Day has one retirement project scheduled that he considers long overdue. He plans to repair and strengthen the fencing on his farm. "It's tight enough to hold my other stock," he says, "but as it is, I can't run hogs . . ."

NIH RECORD

Published by
Scientific Reports Branch
Division of Research Services
National Institutes of Health
Room 117, Building T-19
Bethesda 14, Maryland
Oliver 6-4000 Ext. 2125

NEW PROJECTS STUDY STRESS AND SUICIDE

One study involving college-bound students and another dealing with potential suicides have been launched recently, one conducted by NIMH, and the other supported by grant funds from that Institute.

Twenty Montgomery County high school graduates have been selected from among 100 volunteers for the study of pre-college and college stress situations. Under the direction of Drs. David A. Hamburg and Earle Silber, of Clinical Investigations, NIMH, students will be studied in an attempt to determine why the same difficult experiences are damaging to some individuals and strengthening to others.

The research includes psychological tests and exploration of the students' special achievements, work habits, study techniques, dating habits, and the attitudes of students' parents toward them and their problems. In addition, the relation of endocrine function to psychological stress will be studied by measurement of hormones in the blood and urine during naturally occurring periods of stress.

In Los Angeles, a suicide referral service, supported by Mental Health Project Grant funds, has been established to study causes of suicide and treatment for suicidal patients. Information will be obtained from these patients, and they will be referred for treatment to various resources in the community. Treatment data will be correlated, and the effectiveness of treatment methods studied.

This five-year project has grown out of a number of previous studies and has the full support of municipal, medical, and social agencies in the community.

New Tennis Courts Being Constructed

Six new tennis courts, financed by the NIH Recreation and Welfare Association, will be built at the southwest corner of the reservation in the former Glenbrook golf course area. The present courts are being demolished to provide space for the National Library of Medicine.

The new courts, which will be clay with greenstone top dressing, are expected to be completed by next spring. They will be available for use by Clinical Center patients and by members of the R&W Tennis Club.

VETERINARIANS VISIT



Visiting graduates of the École Nationale Veterinaire, Toulouse, France, look on as an interpreter (right) explains Roland R. Faulkner's (left) demonstration of a routine staining method used in the histopathology laboratory of the Comparative Pathology Section, Lab Aids Branch, DRS.

PUBLICATIONS ISSUED

New publications dealing with gerontology and psychopharmacology have been distributed recently by DGMS and NIMH.

The NIH Center for Aging Research, of DGMS, has published a third annual report, "Activities of the National Institutes of Health in the Field of Gerontology." Research grant and training projects that were active on January 31, 1959, are listed, as well as intramural research projects carried on during calendar year 1958.

"Psychopharmacology," PHS Pub. No. 581, covers the literature on psychopharmacology from 1952-57 and includes a drug index, a subject list of drugs by generic drug name, an ancillary subject list of special conditions, and an author list. The bibliography was prepared by Anne E. Caldwell, M.D., of the National Library of Medicine for the Psychopharmacology Service Center of NIMH.

In addition, the third in a series of ten publications has been issued by the Joint Commission on Mental Illness and Health. Called "Mental Health Manpower Trends," the monograph is part of a national mental health survey that will culminate in a final report and recommendations for a national mental health program. The total study is financed by grants from NIMH.

NIH Softball Team Beats Vitro for Championship

NIH softballers held on to their sixth straight Montgomery County championship August 3d by defeating the Vitro Engineering Co. team, 6-2, in an extra-inning game.

George Duval led the way for NIH with a homer in the sixth inning and a crucial put-out in the third at home plate.

The Engineers scored in the 2d and 3d innings and were ahead 2 to 1 when Duval homered to tie up the game. In the extra inning, NIH rallied with four more runs to win.

The NIH team will go into the Class "A" Tournament for the District championship.

NEWS BRIEFS

Dr. Evelyn Anderson of the Laboratory of Nutrition and Endocrinology, NIAMD, goes to Buenos Aires this month to give a paper on "Factors Influencing the Secretion of Insulin" at the International Physiological Congress. She will also act as chairman of a Session on Metabolism of Nervous Tissue.

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Dr. Harold L. Raush of the Child Research Branch, NIMH, leaves August 21 for a year's work at the University of Oslo. Recipient of a Fulbright program advanced research fellowship and a Social Science Research Council grant, Dr. Raush will study the social behavior of children as related to NIMH research findings.

Exhibit to Feature Historic Equipment

Laboratory equipment and material used by Dr. Joseph Goldberger in the early days of the PHS Hygienic Laboratory--forerunner of NIH--will be displayed in a "Pioneers in Medicine" exhibit this fall by the B'nai B'rith Henry Monksy Foundation of Washington.

Dr. Goldberger, one of the country's outstanding medical scientists, discovered the dietary cause of pellagra in 1915. His equipment, much of it still in the possession of NIAMD's Laboratory of Nutrition and Endocrinology, was loaned to the foundation. The exhibit will be displayed at the B'nai B'rith building, Washington, for one year.