Yuletide Festivities at NIH—Focus on the Activities of Clinical Center Patients

By Bowen Hosford

If anyone thinks that Christmas has lost its traditional joy and music, he should observe activities at the Clinical Center these next two weeks. Arnold Sperling, Chief of the CC staff, together with community help, from just plain fun to the deeply religious.

Military musical groups are prominent in the schedule. The U.S. Marine Dance Band Combo will start the festivities Thursday (Dec. 16) at 8 p.m. with a Holly Hop.

The Air Force Singing Sergeants, under the direction of Capt. Franklin J. Lockwood, will present the annual Christmas concert next Tuesday (Dec. 21). The lucky officials who will hear this concert with the patients—and who will give them holiday greetings—are the Surgeon General, Dr. William H. Stewart, and Dr. Robert M. Farrier, CC Associate Director. Chaplain LeRoy Kerney will present the invocation and Father Armand J. Guichetoua, S.J., the benediction.

Community groups are also taking an active part. The Clifton Park Citizens Association will escort St. Nick himself to the Christmas party for child patients Saturday afternoon (Dec. 18).

Ringers Play 100 Bells

The Potomac English Handbell Ringers, numbering 14 persons under the direction of Mrs. Nancy Poore Tufts, on Monday evening (Dec. 20) will place 100 bells on tables, pick them up in sequence, and play them harmoniously.

This program is titled “Ringing in the Christmas Season.” On Wednesday evening (Dec. 22) the Millian Memorial Methodist Church choir will present a candlelight carol service. And on Christmas Eve, groups from the community will sing carols on all wards.

Two patients admire a Christmas tree at the Clinical Center.—Hecht Photo.

175 From 68 Colleges Attend MEND Immunology Symposium Here Dec. 13-15

About 175 faculty members from 68 medical colleges across the country are gathered at NIH this week (Dec. 13-15) to participate in a Medical Education for National Defense (MEND) Symposium on Immunology and Immuno-Proprophylaxis.

Dr. G. Burroughs Mider, NIH Director of Laboratories and Clinics, opened the meeting yesterday in the Clinical Center auditorium.

Organized by the National Institute of Allergy and Infectious Diseases at the request of the MEND Council, the 4-day symposium is being chaired jointly by Dr. Dorland J. Davis, Director of NIAID, and Dr. Maurice Landy, Chief of the Institute’s Laboratory of Immunology.

Participants heard physicians and scientists from NIH, the Armed Services, universities, State public health agencies, and hospitals discuss current developments in immunology and immuno-prophylaxis in relation to military and disaster medicine.

Among the 30 lecturers are Rear Adm. William N. New, Office of the Deputy Assistant Secretary of Defense and Chairman of the Federal MEND Committee; Col. Adam Rapslak, Office of the Army Surgeon General; Dr. Noyland A. Vedros, Naval Medical Research Institute; Dr. Samuel B. Forman, Walter Reed Army Institute of Research; Dr. Karl F. Meyer, the Hooper Foundation, University of California.

(See MEND SYMPOSIUM, Page 4)

Foreign Delegates Meet to Confer On Osteoporosis

Delegates from five foreign countries, the United States and Central America, held a preliminary conference here recently on “Epidemiology of Osteoporosis” sponsored by the National Institute of Arthritis and Metabolic Diseases. An overall planning meeting on Nov. 5 and 6 explored the opportunities for collaborative epidemiologic studies of osteoporosis in several countries.

Osteoporosis is a widespread affliction of advanced age, especially in women after the menopause, and one of the major causes of physical disability in old age. A “bone-thinning” disorder, it causes a gradual decrease in both the amount and strength of bone tissue. Recently, the World Health Organization sponsored a prevalence survey of osteoporosis in several countries. This preliminary study indicated a high prevalence of osteoporosis (See OSTEOPOROSIS, Page 4).

Christmas, New Year Issues Combined; See You Jan. 12

This issue of the NIH Record combines the pre-Christmas and New Year’s issues, as in former years. The next issue will be off the press Jan. 12.

The Record’s circulation now totals 14,000, of which 2,125 are now on its mailing list entirely by request. This list includes newspaper and magazine science writers and editors, universities and other research institutions, health associations and foundations, pharmaceutical firms engaged in research, PHS and DHFW scientists and administrators, and PHS field stations. To each of our readers a Merry Christmas and a Happy New Year from all of NIH!
NEWS from PERSONNEL

CHRISTMAS HOLIDAYS

Inasmuch as Christmas and New Year’s Days fall on Saturday this year, employees regularly scheduled were to have have holidays on the preceding Christmas and New Year’s Days. Employees with a different basic workweek should consult their supervisors or personnel offices to determine when their days-off will be.

HEALTH BENEFITS

For the contract term that begins January 1966, some changes in benefits and rates will be noted in health benefits plans. To inform NIH employees in detail about these changes a desk-to-desk distribution will be made within the next few weeks of a pamphlet (BRI 41-157) entitled “Information About Plan Changes Effective January 1966.”

It is suggested that you check the information in this pamphlet with the brochure of the plan you now have to determine what changes have been made in your present plan.

One Plan Increases

Of the three plans most generally carried by NIH employees—Service, Indemnity Benefit, and Group Health—an increase in rates is being made only in the high option of the Indemnity Benefit Plan. This increase will be effective at the NIH Jan. 2, 1966, and will be reflected in the paycheck received Jan. 25, whose regular scheduled was increased.

As of July 1, 1966, when Medicare becomes generally effective, all plans will adjust their benefits so that they do not duplicate benefits provided by Medicare for the same expense or service. In general, any additional benefits, including those paid by Medicare, will be paid by the plan, and will cover such expenses as are reimbursable under Medicare, but will not exceed 100 percent of allowable expenses. This applies whether or not a claim is filed for the Medicare benefits.

The Civil Service Commission has not yet set the dates for the next “open season.” This announcement will be made as soon as the “open season” is scheduled.

SUMMER JOBS IN ’66

NIH employees whose sons and daughters wish to apply for 1966 summer employment with the Federal Government will need to be informed that there will be one, and only one, examination given for summer jobs in all Federal agencies at GS-1 through 4.

Postions Listed

These will be classed as “office and science assistant” positions. Included are such jobs as clerks, stenographers, typists, office machine operators, students, and engineers, including medical, biological, and mathematical aid.

Eligibility from any examination previously taken cannot be used for summer employment in ’66. The examination for ’66 summer jobs will be held in late January or early February, but the application for the examination must be filed not later than January 3, 1966.

If further information is desired, the CSC examination announcement on the 1966 Summer Jobs Program is available in the D/2 Personnel offices.

The regulation is still in force

60 Authorities Exchange Speech, Language Data

More than 60 persons participated in a recent conference on “Brain Mechanisms Underlying Speech and Language” at the Nissau Inn, Princeton, N.J.

The conference was part of a series to be supported by the National Advisory Neurological Diseases and Blindness Council.

The aim of the conference was to bring together authorities from the relevant basic and clinical disciplines in order to stimulate interchange of information and planning.

Conference proceedings will be published early next year.

Appalachia Changes Sow Seeds of Mental Illness, Recent Report Shows

Technological and cultural changes sweeping through Appalachia carry the seeds of mental illness, but people of the region possess innate strengths to withstand periods of stress if given the proper help.

These are some conclusions of a group of educators, health professionals and governmental officials who visited Appalachia.

The conclusions and a discussion of mental health in Appalachia are contained in a report recently published by the Public Health Service—“Mental Health in Appalachia: Problems and Prospects in the Central Highlands.”

NIH sponsor Conference

The conference was sponsored by the National Institute of Mental Health.

Multiple copies may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, with quantity available for orders exceeding 100.

Section Name Change Announced by NIAMD

The National Institute of Arthritis and Metabolic Diseases recently announced a change in the name of its Section on Biochemistry of the Thyroid to the Section on Endocrine Biochemistry.

The change was made in order to better reflect the scope of the section’s functions and responsibilities within the Institute’s Clinical Endocrinology Branch.

Current studies of the section include biosynthesis of thyroxine, metabolism of amino acids, the mechanism of the action of insulin in the liver, and the regulation of carbohydrate metabolism in the thyroid.

Nov. Donors Give 182 Units; Six Join the ‘Gallon Club’

The Clinical Center Blood Bank reports that 182 units of blood were received from NIH donors in November. During the same period CC patients received 1,682 units of blood.

Six NIH staff members also joined the “gallon-donor club.” They are Robert L. Budgen, DRS; Sidney J. Cutler, Sc.D., NCI; Arthur McKay, OD; David L. Madden, NIAID; Milton R. Mulligan, OD; and LeRoy Shelnback, NIAID.
Scientists Stress Need
For More Personnel
in Pharmacology Research

The National Institute of Child Health and Human Development recently sponsored a Conference on Developmental Pharmacology to explore the concept of developmental pharmacology and to stimulate research in this field.

Meeting at Niagara Falls, N.Y., pharmacological and biomedical scientists attending the interdisciplinary conference emphasized the need for more people in developmental pharmacology—the effect of drugs on biological processes.

Support Available

The conferences agreed there is enough support available for training programs, and that the immediate needs are motivation and recruitment of personnel.

Approximately 58 conference participants, experts in a variety of related disciplines, defined developmental pharmacology and identified work that fits within the definition.

They also identified individuals who are working in developmental pharmacology or closely related work. Papers were presented on programs and topics of special interest.

Dr. Fouts Chairman

Dr. James Fouts, College of Medicine, State University of Iowa, was chairman of the conference. Dr. Sydney Segal, University of British Columbia, and Dr. Sumner Yaffe, Children’s Hospital, Buffalo, N.Y., were co-chairmen.

High Rate of Congenital Rubella With Purpura Since '64 Epidemic Revealed

A high incidence of congenital rubella with purpura since the rubella epidemic of 1964 has been reported in a study supported by the National Institute of Allergy and Infectious Diseases.

Until this report, neonatal thrombocytopenic purpura had not been considered a typical manifestation of the rubella syndrome. Up to 1964 only 11 cases had been reported.

It is now apparent that the condition will be found in many infants with congenital rubella, according to the researchers.

In the wake of the 1964 rubella epidemic, 200 infants born with rubella-associated defects in the New York City area were referred to the scientists for study. Seventy-five per cent (75%) had thrombocytopenic purpura.

Defects Evident

The 70 infants presented clinical evidence of congenital rubella, namely, a maternal history of rubella during the first month of pregnancy and the presence of multiple defects classically associated with the rubella syndrome.

Rubella virus was isolated from 58 (83%) of those 70 infants. Of the 58 infants, 17 (29%) died—four during the first week of life, the others during the second to the ninth month after birth.

The clinical picture showed a broad spectrum of illness ranging from healthy-looking infants with pinhead-size hemorrhagic spots in the skin to moribund infants with extensive purpuric lesions.

Other associated abnormalities included hepatomegaly (72%), splenomegaly (69%), congenital heart disease (67%), and eye defects (45%). The last included cataracts (42%), cloudy corneas (8%), and glaucoma (4%).

This group of infants also suffered from the following other newly recognized rubella-associated conditions: transient bone lesions (22%), hepatitis (22%), and anemia (17%).

The researchers—Louis L. Cooper, M.D., Saul Krugman, M.D., Joan P. Giles, M.D., and George S. Mirick, M.D., of the New York University School of Medicine—reported their findings in the American Journal of Diseases of Children.

Dr. DiPaolo Is Selected
As Fellow of AAAS

Dr. Joseph DiPaolo, Head of the Cytogenetics and Cytology Section, Carcinogenesis Studies Branch of the National Cancer Institute, has been selected as a Fellow of the American Association for the Advancement of Science.

Dr. DiPaolo, chosen "in recognition of his standing as a scientist," is a research pharmacologist with particular interest in genetics.

A graduate of Wesleyan University, he holds the Ph.D. degree from Northwestern University. He joined the Office of the Associate Director for Field Studies, NCI, in 1963.

Dr. Arthur Strauss of NIAID Wins Award for Immunobiology Research

Dr. Arthur J. L. Strauss, Head of the Autoimmunity Section, Laboratory of Immunology, National Institute of Allergy and Infectious Diseases, was one of five young Maryland scientists recently honored by the Maryland Academy of Sciences. The winners, all under 35, were selected from among nominees in many fields of science throughout the State. They received scrolls at a banquet in their honor held at the Sheraton-Belvedere Hotel in Baltimore, Friday evening, Nov. 19.

Cited for Thymus Studies

Dr. Strauss was cited for his "valuable contributions in the field of immunobiology." More specifically, the award was based on Dr. Strauss' studies of the role of the thymus in myasthenia gravis.

He demonstrated for the first time the presence of a muscle-binding, complement-fixing immunoglobulin in the sera of patients with this disease.

These original findings lent support to the concept that autoimmune processes may play an important role in myasthenia gravis and have stimulated investigations of this problem in a number of laboratories throughout the world.

Dr. Yolles to Report on Mental Health Problems
Next Monday on WETA

Dr. Stanley F. Yolles, Director of the National Institute of Mental Health, will discuss mental health needs and report on the Federal program and funds for community mental health centers next Monday, Dec. 26, on WETA (Channel 26) at 9 p.m.

Entitled "America's Crises: The Emotional Dilemma," the hour-long production explores mental health problems in this country today. It will be repeated Sunday, Dec. 26, at 8 p.m.

Among the leading psychiatrists and psychologists to be interviewed during the program in addition to Dr. Yolles, will be Dr. Nathan W. Ackerman, Clinical Director, the Family Institute, N.Y.C.; Dr. Jack R. Ewalt, Director, Massachusetts Mental Health Center, Boston; and Dr. Nathan S. Kline, honored for his development of tranquilizers and anti-depressant drugs.
Osteoporosis
(Continued from Page 1)

After the age of 45-50 years, especially in women, as well as a possible relationship between this disorder and the balance, in the individual, between dietary calcium intake, calcium absorption, and daily calcium loss through excretion.

In order to consider possible etiologies of this disease which may lead to a program of prevention and treatment, the Director of NIAMD, Dr. G. Donald Whedon, an active research worker in the field of osteoporosis and mineral metabolism, called together a small number of experts from the United States, United Kingdom, India, Switzerland, Japan, and Guatemala.

Experts Discuss Survey

They discussed ways of obtaining maximal basic data and etiological information from a proposed epidemiology survey, through the involvement of several disciplines, notably, pathology, radiology, nutrition and biochemistry.

Participates included, among others, Dr. V. N. Patwardhan, Chief of Nutrition of the World Health Organization; Dr. E. B. C. Nordin of Leeds, England; Dr. D. Mark Hegsted of the Harvard School of Public Health; Dr. Benjamin P. Burton, NIAMD Associate Director for Program Analysis and Scientific Communication; and Dr. Robert L. Vought, of NIAMD's Epidemiology and Field Studies Branch.

New Building 12-A Now Fully Occupied; Space Management Lists Its Tenants

Building 12-A, completed last September as a 4-story annex to Building 12 (See NIH Record, Sept. 8), is now fully occupied, according to the Space Management Section, OSB.

Eventually it will be completely occupied by the Division of Computer Research and Technology. A portion of this Division is now housed in Building 12 and will remain there. Meanwhile, however, 12-A's four floors will be occupied as follows:

First Floor: Three sections of the Division of Biologies Standards—the Biometrics, Administration and Contract, and Licensing and Investigations Sections; and one branch and part of another of the Office of Administrative Management—the Management Survey and Review Branch, and the Office of the Chief of the Plant Safety Branch.

Second Floor: To be occupied entirely by the Division of Computer Research and Technology.

Third Floor: Part of the Heart Information Center of the National Heart Institute; the Epidemiology and Biometry Branch of the National Institute of Dental Research; the Theoretical Statistics and Mathematics Section of the National Institute of Mental Health; two sections of the National Institute of Child Health and Human Development—the Mental Retardation and the Growth and Development Sections; the Graduate School Program of the Foundation for Advanced Education in the Sciences; and the Clinical and Professional Education Branch of the Clinical Center.

Fourth Floor: The Engineering and Sanitation Sections of the Environmental Services Branch, Division of Research Services; the Research Contracts Section, Office of the Chief, Supply Management Branch; and the Mathematical Statistics and Applied Mathematics Section of the National Cancer Institute's Biometry Branch.

Irene E. Kottler, presently a secretary in the Office of the Director, NIGMS, receives a cash award for a Special Act or Service from Dr. Frederick L. Stone, Institute Director, as Gordon Klovdahl, NIGMS Executive Officer, looks on. Mrs. Kottler's award is in recognition of her efficiency in managing three jobs at once early this year while officially employed as secretary to the Executive Officer, DFR. During this time, Mrs. Kottler also assumed the duties of secretary to the Associate Chief for Program Development and second secretary in the Office of the Chief, DFR.—Photo by Thomas Jay.

Dr. Robert Woodward, NIGMS Grantee, Is Nobel Prize Winner

Dr. Robert Burns Woodward, 48, Harvard University biology professor and one of the world's foremost authorities in the field of organic chemistry, was recently awarded the Nobel Prize in chemistry for his outstanding accomplishments in synthesizing complex compounds and developing original and imaginative research methods.

Dr. Woodward's work has been supported for the past 12 years by grants awarded through the National Institute of General Medical Sciences.

Third Nobel Recipient

He is the third NIH grantee to receive a Nobel Prize for 1965, Two French scientists, Dr. Jacques Monod and Dr. Francois Jacob, received the Nobel Prize in medicine and physiology (See NIH Record, Nov. 2). They are grantees of the National Institute of Allergy and Infectious Diseases.

At the age of 26 Dr. Woodward synthesized quinine, and has made in his laboratory an impressive list of compounds, including chlorophyll, cholesterol, cortisone, colchicine, strychnine, and magmamycin.

He is presently studying the structure of vitamins, polypeptides, and the intermediate products of chlorophyll essential for transferring energy in plants.

In recognition of his achievements Dr. Woodward last year received the National Medal of Science Award, a prize given annually by the President of the U.S.

Dr. Leiter Is Appointed NLM Assoc. Dir. for Intramural Programs

The appointment of Dr. Joseph Leiter as Associate Director for Intramural Programs of the National Library of Medicine was announced recently by Dr. Martin M. Cummings, NLM Director.

In his new position Dr. Leiter will be responsible for coordinating intramural activities among the various divisions of the Library. These activities include:

- The acquisition and dissemination of the world's largest specialized research collection of the published literature on biomedical research, clinical medicine, and health related scientific information;
- The operation of interlibrary loan and reference services; and
- Operates MEDLARS

The development and operation of the largest computer-based medical information storage and retrieval system, known as MEDLARS (Medical Literature Analysis and Retrieval System).

In particular, Dr. Leiter will be responsible for the development at the Library of a Drug Literature Program which will serve as the focal point for the DHEW program to provide rapid access to the world's literature on new drugs.

Prior to joining NLM, Dr. Leiter was Chief of the Cancer chemotherapy National Service Center of the National Cancer Institute. He also served as a member of the NCI Scientific Directorate.

As Chief of NCI's Drug Evaluation Branch, Dr. Leiter was instrumental in the development of major laboratory resources for carrying out large-scale screening of drugs and for the expansion of laboratory animal resources.

Date System Developed

In 1957 he developed one of the first large electronic data processing systems for processing more than one half million screening tests a year and for analyzing, reporting and publishing the results.

In 1938 Dr. Leiter was a member of one of the first NCI collaborative efforts in studying the role of atmospheric dusts in the production of lung cancer. He received a B.S. from Brooklyn College and his Ph.D. from Georgetown University. He is a member of the American Chemical Society, American Association for the Advancement of Science, American Association for Cancer Research, and the American Society for Pharmacology and Experimental Therapeutics.
Mycoplasma Can Inhibit Rous Sarcoma Virus Growth Undetectably

Two National Institute of Allergy and Infectious Diseases scientists have reported that a mycoplasma commonly found in the human oropharynx inhibits the growth of Rous sarcoma virus and can do so in a way that is not readily detectable.

Mycoplasmas have previously been reported to inhibit the growth of adenovirus and measles virus.

Dr. Norman L. Somerson and M. K. Cook, of NIAID's Laboratory of Infectious Diseases, are the first to report that a mycoplasma has a similar effect on Rous sarcoma virus.

Agent Is Isolated

An agent that produced the cytopathic effect (readily detectable cell destruction) in human embryo and chick embryo tissue cultures was isolated from a human tissue culture and shown to be a mycoplasma.

The growth of Rous sarcoma virus and Rous-associated virus was inhibited in another human tissue culture system and in a chick embryo culture infected with this mycoplasma isolate, called strain 941.

Mycoplasma strain 941 was shown to be closely related to \textit{M. orale} CH 19299, an isolate obtained from the human oral cavity.

The cytopathic effect (CPE) of mycoplasma strain 941 was eliminated by growing the mycoplasma on an artificial agar medium. But serial passage in tissue culture restored the ability of the agar-grown mycoplasma to produce CPE.

Growth Inhibited

However, growth of Rous sarcoma virus and Rous-associated virus was inhibited by both the tissue culture-grown and the agar-grown strain 941 strain, and also by the CH 19299 strain, which did not produce any CPE.

The NIAID scientists stress that researchers must be on the alert for mycoplasma contamination of tissue culture when this contamination cannot be readily detected, that is, when the mycoplasma does not produce CPE.

The agar-grown \textit{M. orale} strain produced a result that might be obtained with strain CH 19299 and with many other mycoplasmas—namely, the inapparent mycoplasma contamination of tissue culture.

These findings were reported in the \textit{Journal of Bacteriology}.

Scientists to Discuss Cancer Research On Radio Series Starting in Early '66

"Research Report," a 13-part series of 30-minute programs on which leading scientists talk about cancer research, will be broadcast weekly on March 5.

The series was produced by John P. Lewis for the Research Information Branch, National Cancer Institute, under contract with the National Association of Educational Broadcasters.

The portraits are scheduled to be heard in this area over WAMU-FM (88.5 m.c.) on Saturdays at 6:30 p.m., beginning Feb. 5.

The series is to be broadcast weekly until April 3.

They also explain how bits of progress made through different research approaches are fitted together to build the growing body of scientific knowledge of malignant diseases. And research administrators and others involved in cancer work explain how research is programmed and reported to scientists and the public.

Programs Scheduled


During the series, the \textit{NIH Record} will carry reminders of broadcast times and give data on program content and participants.
MEND SYMPOSIUM

(Continued from Page 1)

nia; Dr. Robert Oseasohn, Department of Preventive Medicine, Western Reserve University; Dr. Geoffrey Edsall, Superintendent, Institute of Laboratory, Massachusetts Department of Public Health, and some 20 senior scientists from several NIH Institutions.

The agenda includes selected topics ranging from the very origin of immunology—that is, the defense mechanisms by which the host acqui­
ses antimicrobial immunity to such contemporary subjects as the fine structure of gamma globulins. This review will be of sig-

ificant value to medical educators concerned with the application of current knowledge to practical problems in preventive medicine.

The MEND program was begun in 1962, at the request of the Association of American Medical Colleges and the American Medical Association, to improve and ex-

and the teaching of military and disaster medicine in the county’s undergraduate medical schools.

The Public Health Service is one of the four Government agencies responsible for administering the program. The others are the Army, Navy and Air Force.

To support its MEND activities, each participating school receives an annual grant financed jointly by the four cooperating agencies.

Several symposia are held each academic year, usually at large Federal medical installations, to ac-

quaint the faculty members of MEND-sponsored activities with current research developments appli-
cable to military and disaster medicine. The present MEND symposium is the first one developed entirely by an NIH Institute.

Annual Meeting of R&W

Set for Noon Tomorrow

The Recreation and Welfare As-

sociation of NIH will hold its an-
nual meeting tomorrow (Dec. 15) at 12 noon in Wilson Hall, Bldg. 1.

All R&W members are invited to attend the meeting and to bring their membership cards.

Inclined in the business conduct-
ed at the meeting will be the pre-
sentation of the slate of officers for 1966. Additional nominations may be made from the floor. The election will be conducted by mail.

Candidates for 1965 R&W offices

NIMH Reports Increase in Public Use of Community Outpatient Psychiatric Clinics

Community-based outpatient psychia-

tric clinics served 29 percent more persons with emotional dis-

order in the United States during the latest reporting period (1963) than in 1961, according to a report completed recently by the Public Health Service.

A report compiled by the Office of Biometry, National Institute of Mental Health, show that a total of 862,000 persons received services in these clinics during the 2-year reporting period.

Clinics increased from 1,568 to 1,758 or 11 percent. Clinic man-

hours supplied increased from 3,000 to 3,470,000, for an increase of 22 percent.

The report stated that outpatient clinic resources will double in the 1501-70 period if the current growth rate is maintained.

Many sections of the country will continue to suffer a serious shortage of outpatient resources however, unless a sharp increase in the number of such resources occurs, the report noted.

Construction Offers Hope

Construction of community mental health centers offers the best hope to ease the shortage, it added. Such centers must include outpa-
tient services in order to qualify for Federal aid.

Although the South and West re-

port the largest relative gains over the past two years in weekly clinic man-hours per 100,000 popu-

lation, these regions still have fewer clinic resources than other areas of the Nation.

The 12 States showing the few-
est man-hours averaged less than 73 man-hours per 100,000 population. The Northeastern United States was highest with 346 man-hours and the median was 122.

Six States showed a decrease in man-hours since 1961—Mississippi, Nebraska, Ohio, Vermont, Wash-

ington and West Virginia.

Rural areas in particular suffer from lack of resources, data show. Only four percent of the clinics were in rural areas, whereas 30 percent of the population lived in those areas.

Greatest increase in the number of patients served occurred in the 20- to 24-year age group. The total served in that group was 75,000—an increase of 47 percent over 1961. There was an increase in each age bracket except for children under five years.

Bulk of the professional man-

hours of clinic service was provided by psychiatrists, clinical psycholo-

gists and social workers. They pro-

vided 90 percent of all the man-

hours performed.

Studies Define Chemical and Structural Changes In Alzheimer’s Disease

Three recent studies have helped to explain the chemical and struc-

tural changes which occur in Alz-

heimer’s disease, a severe brain de-

generation characterized by premu-

nary senility.

In addition, changes similar to those of Alzheimer’s disease were produced experimentally and ana-

lyzed by both electron and light microscopy.

Chemical analysis of patient brain biopsies revealed a decrease in total protein content and altered concentrations of cerebrosides and gangliosides, both major com-

ponents of myelin and nerve cells.

Cerebrosides Very

Cerebrosides of the white matter were decreased, consistent with the demyelination present. In the gray matter, however, cerebrosides were markedly increased.

The investigators emphasized that further research is needed to determine whether this increase results from gliosis, neurofibrillary tangles, or degenerative changes (sclerosis) within neurons.

In animal experiments, research-

ers produced severe convulsions and striking nerve cell changes re-

sembling those of Alzheimer’s disease (degeneration and decay) by in-

jecting alum phosphate intracere-

brally into rabbits.

Electron microscopy demonstrated that these Alzheimer-like filamentous inclusions are less than 150 Ang-

strom units wide, have side branches, and are tube-like, and thus are similar to the filamentous inclusions found in the human disease.

Discovery of the effects of alum phosphate provides researchers

with a means of producing neurofibrillar decay and other Alzheimer-like changes in animals under experimental conditions characteristic of cerebral changes.

The chemical studies were re-

ported by Dr. K. Suzuki and asso-

ciates of the Albert Einstein Col-

lege of Medicine, N.Y.; the neuro-

pathology findings by Dr. Igor Klatzo and co-workers of NINDS’s Surgical Neurology Branch; and electron microscopic studies by Dr. Robert D. Terry and Carlos Pena, Albert Einstein College of Medicine. These findings were reported in the Journal of Neuropathology and Experimental Neurology.

Dr. Banta Is Assistant To OIR Section Head

Dr. James E. Banta, formerly Medical Director of the Peace Corps’ Medical Program Division, has been appointed Assistant Chief of the Foreign Grants and Awards Section of the Office of International Research.

In his new position Dr. Banta will assist Dr. Samuel Abramson, Chief of the section, in administering the international postdoctoral fellowships program and the companion program of research project grants to former internation postdoctoral fellows.

A native of Tucumcari, N. Mex., Dr. Banta received his M.D. from Marquette University and the M.P.H. degree from Johns Hopkins University. He interned at the Hospi-

tal of the Good Samaritan in Los Angeles.

Serves in Navy, Marines

On completion of his internship, he entered the U.S. Navy, gradua-

ting from the U.S. Naval Medical School in 1952. During his career in the Navy and Marine Corps, Dr. Banta served in various medical capacities here and abroad.

He joined the Public Health Service in 1960, serving as Chief of the Coronary Heart Disease Unit, Heart Disease Control Program; and as Director of the PHS Ecology Field Station at the Uni-

versity of Missouri. He holds the rank of Medical Director.

Dr. Banta is a Fellow of the American College of Preventive Medicine, American Association for the Advancement of Science, and the American Public Health Asso-

ciation.

Co-author of numerous scientific and research publications, Dr. Banta is Assistant Professor of Community Medicine and International Health at Georgetown University.
Dr. Trygve Tuve Named Chief of NIGMS Branch

Dr. Trygve W. Tuve has been named Chief of the Research Training Grants Branch, National Institute of General Medical Sciences, it was announced recently by Dr. Frederick L. Stone, Institute Director.

Dr. Tuve will be responsible for administering and evaluating the various NIGMS research training grant programs, as well as formulating program objectives and identifying research training needs.

In FY 1965 over 700 research training programs received almost $37 million of support from the Institute. These programs serve to meet the ever growing needs for manpower in the critical shortage areas of the basic biomedical sciences.

Award Received

Dr. Tuve previously served in the Research Grants Branch as Assistant Chief since 1958, and as Scientific Administrator from 1961 to 1963. During this time he received a superior performance award.

Before joining the Institute, Dr. Tuve was employed as a biochemist with the National Institute of Arthritis and Metabolic Diseases (1960-61), and served as a PHS Postdoctoral Research Fellow with the National Heart Institute (1958-60). From 1955 to 1957 he was a Teaching Assistant at the New York State College of Agriculture, Cornell University, Ithaca, N.Y.

A native of Chevy Chase, Md., Dr. Tuve received his B.A. degree from the University of Colorado in 1954, and the Ph.D. in biochemistry from Cornell University in 1958.

Memberships Noted

He is a member of the American Chemical Society, the American Association for the Advancement of Science, Phi Kappa Phi, Phi Beta Kappa, Sigma Xi, Phi Lambda Upsilon, Alpha Epsilon Delta, and Sigma Pi Sigma.

EHS to Present Movie on Mental Retardation

"Toymakers," the story of a mentally retarded teen-age boy, is the December health education film presented by the Employee Health Service.

The desirability of having the majority of the mentally retarded living with their families and working in the community is stressed. In the 30-minute film the institution for the retarded is regarded as responsible for developing the potential for self-reliance.

The movie will be shown at the Clinical Center auditorium tomorrow (Dec. 15) at 11:30 a.m. and 1 p.m.; at North Bethesda Office Center #2, Conference Room 115, Thursday (Dec. 16) at 1:30 and 2:30 p.m.; and at the Westwood Building, Conference Room A, Friday (Dec. 17) at 1:30 and 2:30 p.m.

Training Course Offered On Ultracentrifuge Use

The Biomedical Engineering and Instrumentation Branch of the Division of Research Services is sponsoring a series of training courses on the Model E Analytical Ultracentrifuge.

The first course is scheduled for January 1966. It will be of one-week duration. Future courses will be scheduled based upon interest.

Applicants Determine Courses

Material covered in these courses will be determined by the information supplied by applicants.

The general course will cover the applications, theory, and practical use of the Model E Ultracentrifuge.

Experiments will be conducted on two instruments by the participants so that experience may be obtained in the set-up, experimental procedures, and mathematical considerations utilizing current techniques.

Those interested are requested to contact Mr. Meyers, Ext. 61431, for applications and information at their earliest opportunity.

Dr. Butts Tour Points To Success of Others

Training is Rapid

Since embryonic development in this animal is rapid, the critical state of embryonic response to teratogenic influences falls within a very closely defined period.

The investigator found that the eighth day of pregnancy was optimal for chemical induction of developmental abnormalities and that these anomalies could be identified 24 hours later.

A comparable period of human development extends from about the 21st to the 30th day of gestation.

In the present study, hamsters were treated on the eighth day of pregnancy with various chemical and infectious agents, including colchicine, 5-bromodeoxyuridine (BUDR), or trypan blue or orally-administered vitamin A.

Twenty-four hours later the embryos were recovered by dissection. Clearly recognizable aberrations of development, including cranioschisis, spina bifida, microcephaly, hydrocephalus, and marked growth retardation, were observed.

Hamster Embryos Distorted

In general, hamsters receiving colchicine had embryos with the most severe malformations represented by marked distortion of the anterior neural tube and head.

Vitamin A anomalies were generally confined to the head and consisted of an open and flared neural tube in this region.

Trypan blue commonly induced exencephaly and spina bifida, while BUDR produced the greatest variety of morphological alterations.

This research, reported by V. H. Ferm of Dartmouth Medical School in Laboratory Investigation, was supported by the NIGMS.

Hamster Embryos Used To Detect Anomalies Caused by Teratogens

Recent studies indicate that golden hamster embryos may be used for rapid evaluation of the teratogenic potential of a particular agent, and also to give an indication of the degree and range of anomalies it causes in the early developmental period.

The teratogenic effect of an agent may be missed unless a search for malformations is made before the more seriously affected embryos are in utero and undergo resorption.

At present there is little information on the incidence of congenital abnormalities during early development.

The golden hamster has a short gestation period of 16 days, has large litters, and produces malformed offspring in response to known chemical teratogens, teratogenic viruses, hyperbaric oxygen, irradiation, and freezing. Also, timed matings are easily and accurately obtained.

Development Is Rapid

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Dr. Ernest M. Parrott,
OIR, to Retire Dec. 30
After 23 Yrs. Service

Dr. Ernest M. Parrott, Logistics Head, Nutrition Section, Office of International Research, will retire December 30 after 23 years of Federal service.

Dr. Parrott came to the National Institutes of Health in December 1957 as Deputy Director of the former Interdepartmental Committee on Nutrition for National Defense.

While with the Office of the Surgeon General, U.S. Army, as Chief, Nutrition Branch, Preventive Medicine Division, 1952-57, Dr. Parrott worked on formation of ICNND and served as the Army representative to the committee.


Born in Cordova, Tenn., Dr. Parrott received his B.S. degree, magna cum laude, from Union University, Jackson, Tenn. He also attended the University of Florida and received his Master's degree in organic chemistry from the Massachusetts Agricultural College (now University of Massachusetts).

He served on the faculty at Massachusetts and later at the University of Missouri, where he received his Ph.D. degree in 1938. Dr. Parrott was co-discoverer, with Dr. A. G. Hogan, Head of the Department of Agricultural Chemistry at Missouri, of vitamin Bc (later identified as folic acid).

Returning to the University of Massachusetts, he remained on the faculty there until 1942 when he was commissioned a 1st Lt. in the U.S. Army. From 1942-48 he served as Nutrition Officer for the Army in Virginia, Mississippi and New York. He was the Commanding Officer of the U.S. Army Medical Nutrition Laboratory in Chicago, Ill., 1948-52.

Dr. Parrott is a member of Phi Kappa Phi, Sigma Xi and the American Institute of Nutrition.

Pictured with Dr. James A. Shannon, NIH Director (right), are recent recipients of the PHS Meritorious Service Medal. From left: Dr. Ralph E. Knutti, former NIH Director, cited for "his outstanding service and achievement while on active duty in the Commissioned Corps"; Dr. John F. Sherman, NIH Associate Director, for "his outstanding contributions in recognition of his sustained superior performance... in the broad field of science administration"; and Dr. Robert M. Chanock, NIAID, for "his recognition of his excellent achievement in the development of vaccines for the control of acute respiratory diseases." Photo by Jerry Hecn.

COUNCIL
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Esther Nickerson, CC
Nurse, to Retire After 34 Years With PHS

Esther J. Nickerson, who will retire on Dec. 30 from her position as Staff Nurse in the Clinical Nursing Department's Cancer Nursing Service, is already looking out beyond the horizon "ready to go anywhere."

She plans a trip to Alaska next June and will probably do private duty nursing between adventures.

Mrs. Nickerson has been with the Public Health Service since 1951. She served in PHS hospitals in New Orleans, Ellis Island, and Baltimore before coming to the National Institute of Arthritis, Diabetes, Digestive, and Kidney Diseases in 1955.

Praised by Supervisors

For the past 25 years she has been assigned exclusively to cancer nursing units. Supervisors have praised her considerate manner with patients and their families.

Mrs. Nickerson attributes her own excellent health to physical work, and "always being ready for the next thing to come up." Born in Harmony, N. C. (pop. then 250), she worked on a farm as a child doing chores from feeding chickens to stacking hay and plowing.

She received a teacher's certificate at North Carolina College for Women in Greensboro, and taught in a rural school for two years. She received her nursing training at North Carolina Baptist Hospital in Winston-Salem.

He was certified in 1951 as Specialist in Human Nutrition by the American Board of Nutrition.

He retired from the U.S. Army Reserve Corps in 1963 with the rank of Lt. Col.

Central Storeroom Now Stocks HEW-65 Forms

Form HEW-65, "Receipt for U. S. A. Transportation Requests," is now stocked in the NIH Central Storeroom, it was announced recently by Forms and Records Management Section of the NIH Management Policy Branch. It was formerly stocked by the Travel Unit, Administrative Services Section, OMB.

The HEW-65 is used to request SF-1169, "Transportation Requests" (commonly known as TR's). Form HEW-65 may be ordered by submitting a "Stock Requisition," PHS-20. The Stock No. is 7-2229, unit of issue, "Each."

TR's, SF-1169, must be obtained from the Cashier, located in Bldg. 31, Room 3B-20. A Government Transportation Request is a blank check in duplicate issued by the Government to travelers to cover transportation costs in connection with official duties.