OUR CLINICAL CENTER'S ROLE

DETAILED INFORMATION IS RELEASED TO PUBLIC

The leading part that our Clinical Center will play in the battle against the long-term chronic diseases was stressed in a recent press release prepared by the Office of Scientific Reports.

Detailed information about the Center was contained in the release, a summary of which follows:-

Purpose of the Clinical Center will be to study and treat selected patients with chronic disease such as mental illness, cancer, heart and circulatory ailments, diseases of metabolism, and some types of infectious and tropical sickness. There will also be facilities for dental patients.

The center will provide not only top medical care but every facility for the patients' comfort, including a chapel suitable for worship by all faiths. Such conveniences as a small barber shop, a beauty parlor, and a circulating library will be provided.

One reason for the emphasis on the patients' comfort is that the average stay will be considerably longer than in a general hospital treating acute, short-term illnesses.

Patients will be selected from all parts of the country, according to (See Clinical Center, Page 4)
Microslide Dryer

In just seven minutes a batch of slides can be completely dried in a microslide dryer now commercially available.

Filtered air currents keep the slides clean and dust-free. Though the air is warm, it is sufficiently below the paraffin melting point to prevent distortion. A blotter-lined sliding tray catches drips and keeps the inside clean.

New Antibiotics

In a comparative study of eight antibiotics, two new ones—polymixin (types B and D) and cirulin—proved more effective than the others in controlling an experimental Klebsiella pneumoniae infection in mice.

According to Drs. E. A. Bliss and H. P. Todd of Johns Hopkins University, the two antibiotics are particularly lethal for gram-negative bacilli. At present, streptomycin is the antibiotic most widely used for the treatment of infections caused by gram-negative organisms.

This study, reported in the July issue of the Journal of Bacteriology, was supported by a grant from the National Institutes of Health.

DR. SEBRELLS' ARTICLE TO GUIDE SALT DRIVE

An article by Dr. William H. Sebrell, Director of the Experimental Biology and Medicine Institute, will serve as a guide in the preparation of advertising and publicity materials for an educational campaign to encourage the nutritional use of iodized table salt.

The campaign is being planned by the major producers of table salt, with the advice and cooperation of the medical profession and of government nutrition and health experts.

Dr. Sebrell's article, which appeared in the August 26 issue of Public Health Reports, summarizes medical views of the relationships between iodine and health.

Studies in Oral & Biological Chemistry

One of the major approaches of the National Institute of Dental Research to the prevention of dental caries in man is found in the fluoride studies being conducted by Dr. F. J. McClure and his co-workers.

Continuing studies on the prolonged ingestion of small quantities of fluoride by laboratory animals have already paved the way to a better understanding of the physiological aspects of fluoride intake.

Studies of people living in areas where the drinking water has been found to contain fluorides have afforded investigators an opportunity to obtain an abundance of clinical data. In one of these areas the calcification of children's carpal bones has been investigated by Drs. H. B. McCauley and McClure.

Accumulation of fluoride in skeletal and dental tissues of laboratory animals, as influenced by suboptimal dietary conditions, is presently being studied by Dr. I. Zipkin and Dr. McClure.

The fluoride content of foods has been recently surveyed, and current fluoride analyses of various substances continue to add valuable information in this field.

Since it is now known that the teeth (dentin and enamel) accumulate fluoride, it is most important in dental research to determine just how much of this chemical is added to the teeth by drinking water that contains fluoride. Data to date suggest: (1) Sound and carious teeth do not vary significantly in fluoride content, and (2) all the teeth in the mouth will accumulate fluorine somewhat uniformly if water that contains fluoride is drunk daily.

Early chemical studies of the teeth have shown that dental enamel is a phosphatic apatite mineral, with the property of adsorbing fluoride. This finding has been the basis for the topical treatment of tooth surfaces with a fluoride solution to reduce dental caries.

Dr. R. C. Likins has found that different fluorides are adsorbed in varying quantities by enamel and has made interesting observations regarding the unstable bond of the fluoride ion with the enamel. The effect of the fluoride on the physical and chemical properties of enamel is currently under study by Dr. Likins.

Several years ago Dr. McClure startled the consumers of soft drinks and certain other beverages by demonstrating their destructive action on the surfaces of rats' teeth. It was subsequently shown that the citrate ion in a neutral solution will attack rats' tooth surfaces presumably by forming a soluble citrate complex with the calcium of the enamel.

Dr. Zipkin has found citrate to be a normal constituent of saliva and teeth, but the amount seems unrelated to dental decay. He has further demonstrated that fluoride incorporated in fluids that contain citrate will inhibit their corrosive-like action.

Samples of teeth, urine, water, and foods obtained from various localities throughout the world are continually being analyzed for fluoride by these investigators.

HUDSON WINS AWARD FOR ACCOMPLISHMENT

In recognition of his brilliant and original research work in the field of carbohydrate chemistry Dr. Claude S. Hudson, Chief of the Laboratory of Chemistry and Chemotherapy, Experimental Biology and Medicine Institute, has been awarded a salary increase "for superior accomplishment."

The award is based on "sustained work performance of an exceptionally high degree of efficiency" beginning with Dr. Hudson's employment at the National Institutes of Health in 1928.

More than 70 scientific papers of the highest order have been published by Dr. Hudson during his period of employment.
Continued...

SCHISTOSOMIASIS
CONTROL STUDIES

Preliminary field trials for controlling aquatic snails that serve as intermediate hosts for schistosomes, trematode parasites of man, were conducted early this year in Texas by Mrs. M. O. Nolan and Dr. E. G. Berry of the Laboratory of Tropical Diseases, Microbiological Institute.

Ten organic compounds of the more than 400 chemicals screened in the laboratory were used in the trials.

The vicinity of Brownsville, Texas, was chosen because T. obstrictus donbili, a species related to the intermediate host of Schistosoma mansonii, is common in most of the fresh waters there.

Pentabromophenol and pentachlorophenol were the only compounds that showed promise of lethal activity against the snails. Since both are caustic and irritating to the mucous membrane of the respiratory tract in humans, additional studies are needed to determine whether these chemicals can be safely used in the control of intermediate hosts of schistosomes.

The field trials were reported in the July 29 issue of Public Health Reports.

NEW ANTIMALARIALS
SYNTHESIZED HERE

The synthesis of three new compounds possessing strong antimalarial properties is reported in the Journal of Organic Chemistry, July issue, by Mr. Theodore D. Perrine and Dr. Lewis J. Sargent of the Laboratory of Chemistry and Chemotherapy, Experimental Biology and Medicine Institute.

Antimalarial activity of the compounds, anil carbamols derived from various 9-formylacridines, was noted in treating chicks infected with Plasmodium gallinaceum.

Please send your news items for the NIH Record to the Office of Scientific Reports, 107 Bldg. 1.

Calendar of Events

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<tr>
<th>Date</th>
<th>Meeting</th>
<th>Time</th>
<th>Place</th>
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<tr>
<td>Sept. 16</td>
<td>NCI Staff Seminar -- Drs. A. J. Dalton, T. B. Dunn, and H. P. Morris*</td>
<td>3:00 p.m.</td>
<td>Top Cottage</td>
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<td>Sept. 19</td>
<td>Symposium on the Adrenal Cortex</td>
<td>9:30 a.m.</td>
<td>Hotel New Yorker, New York, N. Y.</td>
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<td>Sept. 22-23</td>
<td>Symposium on Brucellosis*</td>
<td>9:30 a.m.</td>
<td>Wilson Hall</td>
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<td>Sept. 23</td>
<td>&quot;Bacteriology in Dentistry.&quot; Dr. H. T. Knighton of Washington University*</td>
<td>2:00 p.m.</td>
<td>202 Bldg. 122, Naval Medical Center</td>
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<td>Sept. 29</td>
<td>NCI General Staff Meeting --Drs. A. V. Deibert, J. E. Dunn, J. R. Heller, W. C. Hueper, and R. F. Kaiser, and Miss Rosalie Peterson*</td>
<td>3:00 p.m.</td>
<td>Wilson Hall</td>
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<tr>
<td>Sept. 30</td>
<td>&quot;The Relationship and Reactions of Host Cells to Viruses and Rickettsiae.&quot;* Dr. Thomas M. Rivers of Rockefeller Institute for Medical Research</td>
<td>8:15 p.m.</td>
<td>Auditorium, Naval Medical Center</td>
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*Open Meeting.

DR. DAVIS CO-AUTHOR
OF TRYPANOSOME PAPER

Studies on the incidence of Trypanosoma cruzi, found in certain blood-sucking insects (Tratinoma), show that slightly over 33 percent of the insects examined in Texas were naturally infected with the trypanosome.

T. cruzi is the causative organism of Chagas' disease, which is widely distributed in Central and South America.

Dr. Dorland J. Davis of the Laboratory of Infectious Diseases, Microbiological Institute, is co-author (with Drs. T. D. Sullivan, T. McGregor, and R. B. Eads) of the paper reporting on these studies, published in the July issue of the American Journal of Tropical Medicine. The studies were conducted at the Texas State Bureau of Laboratories.

Despite the presence of infected insects and their frequent contact with man, indigenous human cases of American trypanosomiasis have not yet been reported in the United States.

DR. RALPH R. PARKER

Dr. Ralph R. Parker, 61, Director of the Rocky Mountain Laboratory of the Microbiological Institute, died September 4 at Hamilton, Montana. He was co-discoverer with Dr. R. R. Spencer of a vaccine for Rocky Mountain spotted fever that continues, in slightly modified form, to be the standard method of protection against the disease throughout the country.

In 1943 Dr. Davis succeeded in infecting monkeys by ocular inoculation, and in the same year it was proved by Dr. A. Packchanian (formerly with the National Institutes of Health) that typical cases of Chagas' disease can be induced by a Texas strain of T. cruzi.

According to the authors, a lack of virulence in the trypanosome can not explain the failure to find Chagas' disease in this country, and it may be possible that the disease does exist in human beings in the United States but is unrecognized as such.
the nature of their illness. Diagnosis will be the sole ticket of admission. Only patients with the particular type of disease under study at the Center can be accepted.

The concentrated power of scientific men and machines will be aimed at the group of long-term patients. Scientific men and machines will be supplied from central sources. Two patients will be assigned to each room.

A radiation laboratory occupying three floors underground and five above will provide facilities for the application of discoveries in the new field of nuclear energy, including the radioactive isotopes. This wing will contain 20 beds for patients needing short-term radiation treatment.

The Center will be exceptionally well equipped to conduct nuclear energy research. Equipment will include a 12-million-volt electrostatic generator, a synchrotron, and a two-million-volt radiotherapy machine. A staff thoroughly trained in the use of radiation under strictly controlled conditions will use this and other equipment for laboratory research, treatment of patients, and preparation of radioactive substances to be used both for treatment and research.

A 500-seat scientific auditorium will be equipped for television of operations and laboratory procedures. A few seats will be specially wired for the hard-of-hearing.

There will be an eight-room surgical suite with recovery room and a television control room. All anesthesia will be done by physicians.

Mr. George M. Azpell, purchasing assistant in the Purchase & Supply Branch of the National Institutes of Health, has been awarded $90 for a meritorious suggestion by the Board on Employee Awards of the Federal Security Agency.

On his own initiative and entirely through his own efforts Mr. Azpell enabled the Federal Government to save $2700. He accomplished this by negotiating with the several holders of Bureau of Federal Supply contracts, who voluntarily agreed to reduce their prices below the contract price.

The item involved was 30,000 grams of dihydrostreptomycin hydrochloride. The Bureau of Federal Supply contract price was 64 cents per gram. As a result of Mr. Azpell's negotiations the price for which the purchase order was eventually issued was 55 cents per gram.

Normally a purchase clerk, arranging to buy material available from Bureau of Federal Supply contract sources, checks the prices and other pertinent data and issues a purchase order on that basis. This employee, in the course of his routine checking of the contract data, decided that the amount of the transaction involved merited at least an effort on his part to obtain a better price.

It is not unusual for Mr. Azpell to "shop around" in order to secure better prices on supplies requisitioned for the National Institutes of Health. On several previous occasions he has been able to save small amounts of money. Mr. Azpell takes a personal interest in these purchases, spending Government funds as carefully as he would spend his own money in a personal business transaction.

JUST IN CASE YOU WANT TO SWING YOUR PARTNER

Around pumpkin time, when the frost keeps us stepping, a lot of us hanker for an old-time square dance.

Before any definite dates can be set for a series of NIH square dances, the Welfare and Recreation Association has to know how many of us would like to take part, beginning sometime next month.

Call Miss Harriet F. Hungstiger on Ext. 455.

THOSE HAMSTERS AGAIN

"The Hamsters" have resigned themselves to being called "The Hamsters."

No more appropriate name was submitted in the recent title contest conducted by the NIH drama group.

If you want to join the group, by the way, tell Mrs. Louis Dauberman -- Ext. 408.

Selected Reading

Recent additions to the Library:

The adrenal cortex. N.Y., N.Y. Acad. of Sciences, 1949. (Annals of the N.Y. Acad. of Sciences, v. 50, art. 6)


Baer, Jean. Le parasitisme. Lausanne, Switzerland, Rouge, 1946.