**Big Final Effort Needed to Reach Bond Drive Goal**

Top-level concern was expressed this week over the limited progress of the NIH 1966 U.S. Savings Bond Campaign.

To reach our goal, three out of four NIH employees must participate in the Campaign, Dr. Eugene A. Confrey, Campaign Chairman, reported. Only eight institutes and divisions have reached 80 percent participation, and some show only 20 percent.

As an indication of the Secretary's personal interest, Assistant Secretary for Administration Donald F. Simpson met May 20 with institute and division executive officers and chief keymen. Assistant Secretary Simpson expressed concern over NIH employees' lack of response to President Johnson's request that Federal employees buy bonds in the interest of the Nation's economy.

For 25 years, the Minute Man has been the symbol of the U.S. Savings Bond program and, since the beginning of our country, the symbol of readiness of every American.

(See BOND, Page 1)

---

**New 'Home' for NIH Library Will Include Facilities for Twice as Many Patrons**

Artist's sketch of the spacious reading room in the new NIH Library. Completion date of the facility is fall 1967.

By Kathleen Douglas

Construction recently began on an annex to the Clinical Center to house the NIH Library. This new facility will accommodate approximately twice as many patrons as the present library.

Bounded by the C and D wings on the south side of the building, the annex will provide two floors of space for the Library, which is now in crowded quarters on the 5th and 11th floors of the Clinical Center.

"When the new facility is completed in the fall of 1967, the user will find he has easier access to library materials and a more comfortable setting for their use than now exists," says Jess A. Martin, Chief, Library Branch, Division of Research Services. "This is due in part to the square shape of the new library. Patrons will have to walk only a few steps from the reading areas to obtain library materials, and the Library staff will be better able to maintain the collection."

The first floor features a large reading room containing a 5-to-10-year file of the most frequently used journals, a collection of reference books, and an information desk manned by a professional librarian. Reference librarians, too, will be stationed in the readers' area. Nearby will be the circulation desk and bibliographic services.

The Translating Unit, now on the first floor—near library users—will be better able to maintain the collection.

---

**Surg. Gen. Moves To NIH: NIMH to Barlow Building**

The move of the Immediate Office of the Surgeon General from the HEW Building to the NIH campus was completed May 23.

Dr. Stewart and his immediate staff, together with the Division of Public Health Methods, now occupy the second and third floors of Bldg. 31's A-Wing.

Also involved in the space realignment is the National Institute of Mental Health. Institute offices formerly in Bldg. 31's A-Wing have been relocated in the new high-rise Barlow Office Building, Chevy Chase, Md.

At a later date the Budget Branch, Division of Finance, Office of the Surgeon General, will move into that part of the fourth floor of Bldg. 31's A-Wing now occupied by the staff of the National Institute of Child Health and Human Development. The NICHD offices will move to Bldg. 12-A.

In addition, those Mental Health offices now at NBOC will move to the Barlow Building as soon as the space they are to occupy is ready.

Moving to NBOC will be the Mathematical Statistics and Applied Mathematics Section of the

---

**Dr. Bleuler, Son of Man Who Coined Word, 'Schizophrenia,' Speaks at NIMH**

One of the world's most highly respected authorities on schizophrenia, the most prevalent form of mental illness, told an NIMH Seminar recently that contrary to earlier beliefs, the disease is not degenerative, the possibilities of recovery are greater than commonly supposed, and isolation worsens the disorder.

These were among the "Thoughts and Experiences with Schizophrenia," reported by Dr. Manfred Bleuler, Professor of Psychiatry, University of Zurich, Switzerland, in one of his rare appearances before an American professional group.

Bleuler's 40 years of clinical experience and research in schizophrenia culminated in a long-term study of 200 schizophrenics and their families. The patients were admitted to the Burgholzli Hospital in Zurich in 1942-43, and the study was completed in 1963-64.

As yet unpublished, Bleuler's observations sustain the theory that both heredity and environment are factors in the etiology of the disease. However, he advances the possibility that inherited dispositions or personality traits, albeit healthy in one parent, or healthy when considered as a single trait, may clash when combined in the offspring who becomes schizophrenic.

No formula is yet known that accounts for all the data being collected concerning schizophrenia, Dr. Bleuler said, but his evidence points to the interaction of unfavorable inherited traits with unfavorable experience and environment.

(See MOVE, Page 5)
Published bi-weekly at Bethesda, Md., by the Public Information Section, Office of Research Information, for the information of employees of the National Institutes of Health, principal research center of the Public Health Service, U.S. Department of Health, Education, and Welfare, and circulated by request to all news media and interested members of the medical- and science-related fields. The NIH Record content is reprintable without permission and its pictures are available on request.

NIH Record Office
Bldg. 31, Rm. 4B13. Phone: 49-62123

Staff Correspondents
Georgiana Brimijoin, NCI; Tony Anastasi, DRS; Bowen Hosford, CC; Mary Anne Gates, NIAMD; Marie Norris, NIDR; Ed Long, NIMH; Frances Dearman, NINDB; Martha Mader, NIAID; Faye Peterson, DBS; Warda Warddell, NIGMS; Beverly Warran, DRFR; Dick Turlington, DRG; Gary Goldsmith, NIH; Frances Mills, OAM; Dan Rogers, NICHD.

The NIH Record reserves the right to make corrections, changes or deletions in submitted copy in conformity with the policy of the paper and the Department of Health, Education, and Welfare.

NEWS from
PERSONNEL

EQUAL OPPORTUNITIES
Four area fair housing groups are working to establish an open housing market in which members of any group may freely purchase or rent in the neighborhood in which they want to live.

They assist incoming personnel by supplying information about housing opportunities offered on a non-discriminatory basis in metropolitan Washington.

Northern Virginia Fair Housing Inc., 4444 Arlington Boulevard, Arlington, Va., 22204, telephone 524-4452, 10 a.m. to 1 p.m. weekdays.


Prince Georges Fair Housing, 8001 Annapolis Road, Lanham, Md. 20706, telephone 577-9258, 10 a.m. to 1 p.m. weekdays.

Suburban Maryland Fair Housing, 2601 Cedar Lane, Bethesda, Md. 20014, telephone 549-9040, 9 a.m. to 3 p.m. weekdays.

NIH cooperation with these fair housing groups is in keeping with the Director's stated policy of non-discrimination and fair and equitable consideration for all persons, with no restrictions involved as to race, color, creed, or national origin.

CONDUCT REGULATIONS
In keeping with the intent of EO 41222, concerning standards of conduct for Federal employees, the Director of Personnel Specifies that certain employees are required to file statements of employment and financial interests. This includes regular employees, under both Civil Service and the commissioned Corps, who occupy positions in which they are able to affect the awarding of a grant or contract, or in some other way have an economic influence on a non-Federal organization.

Such employees are now being contacted and the statements which they file will be reviewed only by their Institute Director or Division Chief to determine that there is no real conflict of interest or the appearance of any conflict. Subsequently, the statements will be maintained in a confidential file for this purpose only.

PUBLIC INTEREST PARAMOUNT
Some staff members may consider this new requirement an invasion of their privacy. However, the public interest is the paramount concern and this requirement is to our mutual benefit in that it strengthens efforts to avoid any conflict of interest.

Manuel B. Hiller, Assistant General Counsel, Office of the Secretary, DHEW, has been named as the Department Counselor to advise and guide employees on conflict of interest. He serves in this capacity for all Department employees in the Washington Metropolitan Area.

A list of Deputy Counselors who will serve employees in regional offices is posted on all NIH bulletin boards.

COS NEED NEW W-4'S, TOO
The Financial Management Branch notes, with concern, that many Commissioned Officers have not executed new Forms W-4, Employee's Withholding Tax Exemption Certificates, recently requested in connection with the change in withholding of a grant or contract.

DHEW Central Payroll Division asks that all Commissioned Officers submit a new W-4, whether they wish to make any changes in tax withholding or not. This is especially important for married officers, whose tax withholding will automatically be computed at the single rate based on exemptions previously claimed if no new W-4 is submitted.

information explaining the changes in rates was sent to each Commissioned Officer. A careful reading of this information will clarify the new requirements and aid Officers in completing their W-4's properly. No change will be made retroactively, so it is doubly important that desired changes be submitted promptly.

26 Employees of DRS Plant Engineering Branch Receive Service Awards
Service awards were presented recently to 25 employees in the Plant Engineering Research, Division of Research Services.

Thirty-year awards were given to Joseph M. Fisher and Charles T. Ruzum, both of the Planning and Control Section.

Recipients of 20-year awards in the Maintenance Engineering Section were Albert L. Wimerly, Charles T. Reed, James L. Dickson, James H. Terry, George M. Fickrell III, Earl R. Hottinger, Richard C. Jackson, and Anthony J. Hoff.

Shops Section recipients of 20-year awards were Marion R. Wach, Ross Holliday (left), Chief of the Plant Engineering Branch, Division of Research Services, presents a 20-year service award certificate to Joseph Fisher of the Shop Stores Unit, Planning & Control Section. Charles T. Ruzum, another 20-year winner, of the Maintenance Inspection Unit, PCS, was absent for the picture.

Photo by Thomas Joy.

Ross Holliday (left), Chief of the Plant Engineering Branch, Division of Research Services, presents a 20-year service award certificate to Joseph Fisher of the Shop Stores Unit, Planning & Control Section. Charles T. Ruzum, another 20-year winner, of the Maintenance Inspection Unit, PCS, was absent for the picture.

Photo by Thomas Joy.

List of Latest Arrival
Of Visiting Scientists
4/7—Dr. Heywood Molyv Ty, Great Britain, Laboratory of Biophysical Chemistry. Sponsor: K. Laki, NIAMD, Bldg. 4, Room B-24.
4/25—Dr. Makoto Niva, Japan, Molecular Biology Section. Sponsor: Dr. Edgar Ribl, NIAID, Rock Mountain Laboratory, Hamilton, Mont.

4/26—Dr. Frederick B. Mosing, Czechoslovakia, Laboratory of Nutrition. Sponsor: Dr. Malcolm MacDonald, NIH, Bldg. 10, Room 631.
5/2—Dr. Cesar Roberto Uma Guatamala, Human Genetics Branch. Sponsor: Dr. C. J. Wibold Jr., NIDR, Bldg. 30, Room 106.
5/6—Dr. Teinosuke Kobayasi, Japan, Laboratory of Chemistry. Sponsor: Dr. Bernard Witos, NIAMD, Bldg. 4, Room 309.

Herbert L. Rooney Cited For Civic Achievement
Herbert L. Rooney, National Institute of Mental Health, recently received a Civic Award from the Rotary Club of College Park for recognition of the outstanding civil contributions and achievements made by him in his work with the Mental Health Study Center.

From 1948 to 1960 Mr. Rooney was Chief of Psychiatric So., work for the Center. From 1960 to 1965 he served as Assistant Director, and until February 1966 was Acting Director of the Center.

Mr. Rooney presently is NIH Advisor on Citizen Participation.

Matthews, Technician
Pathology Lab, Retires
Joseph O. Matthews, Division of Biologics Standards biological cryostat technician, retired on 13 years more than 10 years service with NIH.

Mr. Matthews joined the DSH Section on Virus Vaccines and Basic Studies in September 1955.

At the time of his retirement he was performing observations on the DSH's Animal Test Section of the DSH's Laboratory of Pathology.

During his 10 years of service he participated in the Divi­ poliovirus vaccine testing progr.

After retirement Mr. Math­ expects to continue his favor­

hearing. He may take this opportunity to visit daughter in France, where older son, Joseph Jr., is pre vacan­

it. Other son, Commander John R. Matthews, serving aboard the USS Shri-La.

THE NIH RECORD

June 1, 1966

Page 2
Newcomers and Oldtimers Alike Find All the Answers in Latest NIH T&SD

Changes at NIH are reflected in the telephone directory which has grown from 9 pages and 209 personnel listings in 1938 to 177 pages and 11,534 personnel listings in 1966. James B. Davis (right), Chief, Supply Management Branch, and Patricia Davis (no relation), a brand new employee of the Research Contracts Section, compare the two. The 1938 directory, the only one known to exist, is a prize possession of Mr. Davis. It dates back to the move of the National Institute of Health to Bethesda and to Mr. Davis’ own employment here. —Photo by Thomas Joy.

By Patricia Gabbett
NIH Information Trainee

My first day as an NIH employee was a strange one. When I overheard someone getting what I thought were the following instructions, I was puzzled:

“Go to the MP office to check on your way to LA, and look at the babies in the PR Branch on the way.”

Were they sending him to the military police to check on public schools for Rhode Island, and to see the guided missile on his way to Los Angeles, and to look at the babies in the Puerto Rico Branch on the way?

Directory is Guide

A quick look through the Abbreviations section of the new NIH Telephone and Service Directory saved my sanity. To a newcomer, the esoteric abbreviations used daily at the NIH are a real obstacle to comprehension. I guess my supervisor realized this when he gave me the Directory to guide me through the confusion of my first few days.

Glancing through it, I saw that this was no ordinary directory. It not only gave names, addresses and phone numbers; it carried its service a lot further. Even an old-timer at the complex NIH bureau has trouble figuring out who’s who and what’s what at times. But, luckily, everyone has a Directory. And in it, I found organizational listings that told me who is who.

Then I turned to the yellow pages. Even these were out of the ordinary. I found a directory of buildings, floor plans, and a map of the reservation. Now I not only knew who was who, but what was where!

I stopped studying the parking regulations and shuttle bus schedule to see who could be transported where and how.

Further and further I dug into the Central Services section, coming across cafeteria and library hours and feeling very smug to have discovered where one could read and eat.

Even personal services—banking, beauty and barber shops, and counseling—announced who they were on these exciting pages.

And for subjects I didn’t run into head-on, I looked in the handy Classified Index in the back.

So, feeling very well oriented, I marched proudly into my supervisor’s office to announce that I had mastered the NIH T&S&D, and told him that this was one abbreviation he couldn’t find in the Directory. He’d have to figure it out for himself.

Report Outlines Growth Of R & D Personnel in Pharmaceutical Industry

Prescription pharmaceutical manufacturers—the largest industrial employer of health-related research workers in the United States—anticipate adding another 2,500 scientists and supporting personnel by the end of 1968. By that year, 19,000 scientists and technicians will be engaged in research and development in the industry, according to an analytical report “Trends in R & D Manpower in the Pharmaceutical Industry, 1959-65 and 1968.”

Report Released

The report was recently released jointly by the National Institutes of Health, Public Health Service, and the Pharmaceutical Manufacturers Association.

The major findings of this analysis, based upon data obtained by the Association from 100 of its member firms are as follows:

• Employment of R & D personnel in the industry increased by 5,000 from 11,100 to 16,400 in the six-year period 1959-65; the 1968 projections indicate an annual growth rate of six percent for the entire period, 1959-68.

• During the last five years the industry has maintained a high degree of stability in the make-up of its R & D staff.

• Women scientists comprise about one-sixth of the industry’s R & D professional staff, and are working chiefly as biochemists or chemists.

• Three of every 10 R & D employees hired by the industry in 1964 had a doctoral degree.

1965 Figures Given

In 1965 the pharmaceutical industry accounted for about one-fifth of the $1,9 billion national total for the conduct of medical R & D by all performers.


Spectacles Found in Bldg. 1

A pair of spectacles, tan frames, was found in the Cafeteria of Bldg. 1, Apr. 27, may be claimed by owner at reception desk, Bldg. 1.
N.Y. Union, Management Help Workers Keep Jobs by 'On-the-Spot' Psychiatry

A quiet, hard-working employee in a New York clothing factory suddenly turns into a troublemaker. He relates his fear of losing his sanity to a union social worker, who arranges a diagnostic interview the same day. The psychiatrist confirms the onset of mental illness. The employee responds satisfactorily to treatment and is again a valuable employee.

The success of this experiment in on-the-spot psychiatry offers hope for keeping mentally disturbed workers on the job. A similar program was in operation at the New York City Lysman, who has been Chief of the Oral Medicine and Surgery Branch, assumes the post of Clinical Director.

Grant Awarded Kansas Mental Health Center

The Prairie View Mental Health Center in Newton, Kan., has received a $300,000 Federal construction grant under the Community Mental Health Centers Act of 1963, it was announced recently by the National Institute of Mental Health.

The first psychiatric facility in the State to obtain Federal aid for a construction project, Prairie View serves a 3-county, largely rural area of about 65,000 population.

Dr. Stanley P. Yolles, Director of the National Institutes of Mental Health, which administers the center's construction aid with the Division of Hospital and Medical Facilities, said that Prairie View is an outstanding example of how a good basic inpatient service can expand into a comprehensive mental health service program, with the support of State, County and citizen interest.

There are 1,400,000 Americans, alive today, cured of cancer, the American Cancer Society says.
Surgeon General Creates Committee on Epilepsies

In recognition of a critical need, Surg. Gen. William H. Stewart announced recently the creation of a Public Health Service Advisory Committee on the Epilepsies.

"The purpose of this Committee will be to recommend actions at the national level to prevent and control the epilepsies," Dr. Stewart said. It has been estimated that this neurological problem involves one to two million Americans.

Dr. Stewart selected Dr. H. Houston Merritt, Dean of Columbia University's College of Physicians and Surgeons, as chairman of the Committee. Dr. Merritt is the discoverer of the well-known antiepileptic drug Dilantin (Diphenylhydantoin).

Cavness Named

Dr. William F. Cavness, Associate Director for Collaborative and Field Research, National Institute of Neurological Diseases and Blindness, will serve as the Committee's executive secretary.

The Committee consists of two Subcommittees, one for service, the other for research. The whole Committee will meet at least once a year to consider recommendations of the Subcommittees and to review the total program.

The Service and Service Training Subcommittee for Epilepsy will consist of scientists and future total service needs of epilepsy patients and the training of sufficient health manpower to carry out these services. In fulfilling its mission, this Subcommittee will work closely with Dr. William H. Cope, Deputy Chief of the Neurological and Sensory Diseases Service Program within the PHS's Bureau of State Services.

PHS Publication Lists

65 Extramural Grants

Publication of a book of statistical tables summarizing research grants programs to complete a five-part series for fiscal year 1965 data was announced recently by the Public Health Service.

An itemized accounting of more than $1 billion in PHS grant and award funds, the new publication is entitled "Public Health Service Grants and Awards, Fiscal Year 1965 Funds, Part V, Summary Tables for the Extramural Programs."


'Year Later' Study of Schizophrenics Points Up Value of Proper Treatment

A study of 299 schizophrenic patients from nine hospitals one year after discharge reveals that many have made surprisingly good adjustments to community life.

The results of the study were reported to the annual meeting of the American Psychiatric Association May 13 by Dr. David M. Hall, member of the National Institute of Mental Health who compiled results of the investigation.

Results Promising

Of the patients studied, 85 percent were living in the community although 78 patients had been hospitalized during the interim and had been discharged a second time. A total of 69 percent avoided readmission during the year.

While only 11 percent of the former mental patients were deemed to be functioning as well as the average person in the community, a large majority had returned to their own best previous level of social functioning.

At study time, 85 percent of the subjects were employed. Only 45 percent were classified as wage earners working during the year and 51 percent were self-supporting. Investigators reported that 68 percent of the employed patients were working at a level compatible with their education and training at followup time. Of the wage earners, 64 percent were getting along adequately with co-workers, but only 47 percent of the housewives were compatible with neighbors.

Adjustment Factors

Investigators noted very little deviation from symptoms in the patients. Fully 68 percent showed no general psychopathology symptoms.

Besides assessing the expectation of adjustment in the community, the study also sought to establish relationship between the patient's pre-illness history and the course of his illness and subsequent community adjustment.

Investigators found the following factors seemed to have a bearing on community adjustment at followup time:

- The more rapid the onset of illness, the more likely the expectation to be self-supporting and the better his adjustment.
- Good improvement under active drug treatment presaged good community adjustment after discharge.
- Those who received drugs and/or psychotherapy after discharge were less likely to be rehospitalized than those who did not receive such treatment.
- The married and those from conjugal homes were more likely to have had only one job in the course of the year after discharge as opposed to more than one or none.
- Ex-patients who lived alone or in conjugal homes were more likely to be self-supporting than those from parental homes.

Data for the study were collected by research social workers at each of the nine collaborating hospitals on the basis of clinical interviews with family members and/or the patient at the time of initial hospital admission and one year after discharge. Subjects were newly-admitted acutely ill schizophrenic patients who had participated in a larger study to assess effects of drug treatment on such patients.

Neurological Information To Be More Accessible

Medical literature in the area of brain research has been made accessible to physicians and research scientists through a new arrangement between the U.S. Public Health Service and Columbia University.

The cooperative project links the indexing activities of the Public Health Service's National Library of Medicine here, with Columbia University's Parkinson Institute in New York City.

The latter is supported by a contract from a research arm of the Public Health Service, the National Institute of Neurological Diseases and Blindness.

The arrangement will utilize the expertise of a specialized information center to index a portion of the literature for the NLM. This information gathered by the Institute of Neurological Diseases and Blindness Information Center will be made available to the 7,000 subscribers of Index Medicus.

MOVE

(Continued from Page 3)

National Cancer Institute, from the Weizmann Building; the Epidemiology and Biometry Branch, National Institute of Dental Research, from Blgd. 12-A; a part of the Heart Information Section, from Blgd. 12-A; and the Nutrition Section, Office of International Research, and the Contract Finance and Analysis Section, Financial Management Branch, from Blgd. 31's B- Wing.

NBCC will be occupied by the Division of Finance, the Office of Personnel and Public Health Reports, all part of the Office of the Surgeon General.

Delays and postponements of moves incident to the arrival of the Surgeon General here have been caused by a carpenters' strike that has held up completion of the Barlow Building.

H. Wexler Develops New Method for Pinpointing Tumors in Mice Lungs

A method for staining lungs of experimental mice with India ink, so that small, lightly pigmented tumor growths may be quickly counted and sized, has been developed by Hilda Wexler, Biologist of the Surgery Branch, National Cancer Institute.

This technique has enabled scientists to broaden the range of animal tumor model systems used to study lung metastases, or secondary growths of a tumor originating elsewhere in the body.

Since the color of normal lung tissue and tumor metastases is often similar, it has been difficult, if not impossible, to differentiate between the two without microscopic examination, an expensive and time-consuming procedure.

In the new technique, the lungs of the killed animal are filled with a 15 percent solution of India ink which stains the lobes a deep black but does not penetrate the thicker cells of the tumors.

The lungs are then removed from the animal, washed in tap water, and quickly immersed in Pekate's solution. This solution bleaches the tumors white while setting the black dye in the normal lung tissue, creating a marked and permanent contrast between the two.

The accuracy of the method, described in a paper published in the April issue of the Journal of the National Cancer Institute, has been consistently supported by microscopic examination.

NIGMS Appoints Lincoln

Dr. Thomas L. Lincoln was appointed recently to the staff of the National Institute of General Medical Sciences, assigned to the Training Grants Branch. He was formerly an Instructor in Pathology at Johns Hopkins Medical School.
Walter Magruder Named NIAID Executive Officer

Walter H. Magruder has been named Executive Officer of the National Institute of Allergy and Infectious Diseases by Dr. Dorland J. Davis, Director.

Formerly Administrative Officer for Chemotherapy Research in the National Institute of Allergy and Infectious Diseases, Mr. Magruder succeeding Kenneth Brown, who retired in December 1955. Mr. Magruder joined the Federal Government in 1934 as an employee of the National Recovery Administration. He was an auditor in the General Accounting Office from 1938-40, and a project auditor with the U.S. Army Corps of Engineers from 1940-43. He served in the Pacific theater with a U.S. Navy construction battalion from 1943-46, and in 1947 joined the Atomic Energy Commission.

In 1952 he joined NIH as a budget examiner in the Financial Management Branch, National Institutes of Health, and from 1955 had been with the National Cancer Institute.

New Psoriasis Therapy Shows Early Promise

Prolonged therapy with triacetly azauridine, an antimitabolite capable of blocking pyrimidine biosynthesis, has been found in preliminary studies to be a feasible and clinically effective therapeutic agent in patients with severe, disabling psoriasis.

Substantial improvement was seen in 14 of 16 patients, while a rapidly reversible, moderate anemia was the only significant toxic manifestation encountered.

Chemotherapeutic agents such as methotrexate and amphoterin have, for some time, been recognized as effective in psoriasis, but use of these have often been accompanied by marked hemotopoietic suppression, stomatitis, gastrointestinal ulceration, and loss of hair.

Although psoriasis is usually characterized by frequent remissions and exacerbations, consistent beneficial results obtained in the present studies of triacetly azauridine warrant more comprehensive clinical investigations.

Such long-term studies are planned by the present investigators, Dr. R. W. Turner, a grantee of the National Institute of Arthritis and Metabolic Diseases, and Dr. P. Calabresi of Yale University, a National Cancer Institute grantee. Their findings were reported in the Annals of Internal Medicine.

Booklet Outlines Needs, Test Methods Used for Ideal Dental Materials

As an aid to investigators who are searching for an improved dental restorative material, a booklet outlining the requirements and test methods peculiar to this field of dental research has recently been released by the Public Health Service.

Titled "Adhesive Restorative Dental Materials," the booklet was prepared by the National Institute of Dental Research Bio-Materials Research Advisory Committee.

Present restorative dental materials require that the excavation be made larger than the cavities to be filled, and that the materials be more cohesive, stronger, and less diluting. Adhesive materials would have to do the tooth itself, require less drilling, and eliminate much pain.

Strength Essential

In addition, an ideal filling material would be strong enough to withstand the thousands of pounds of force that occur during chewing or biting, yet elastic enough to expand and shrink under the extremes of hot and cold that occur during the eating of one meal.

"Dental restorative methodology could be simplified considerably if there were available an adequate adhesive filling material," said Dr. Seymour J. Kressover, Director of NIDR.

"It is hoped that this booklet will contribute to a better understanding of the diverse problems inherent in making dental restorations and will stimulate a broader research interest in adhesive restorative materials."

The booklet is divided into three sections that discuss the properties of tooth structure, the methods of testing dental materials, and recommend criteria for the selection of adhesive fillings.

Because of the limited supply, single copies of the 32-page booklet, PHS Publication No. 1438, will be available only to researchers in the field of restorative materials. Requests should be directed to the Collaborative Research Office, National Institute of Dental Research, Bethesda, Md. 20014.

Colloquia Scheduled at IBR

Interested NIH personnel are invited to attend two colloquia at the Institute for Behavioral Research, 2426 Linden Lane, Forest Glen.

On June 3 at 3:45 p.m. Dr. Howard Hoffman, Pennsylvania State University, will speak on "Behavioral Control by an Imprinted Stimulus in the Duckling."

On June 7 at 3:45 p.m. Harold Cohen of the IBR will give a talk on "Motivationally Oriented Designs for an Ecology of Learning—Educational Laboratory Using Extrinsic Reinforcement with Juvenile Delinquents."

Project Re-Ed Fills Important Need in Lives of Emotionally Disturbed Children

A demonstration program supported by the National Institute of Mental Health, called "Project Re-ed," is helping emotionally disturbed children assume their rightful place in home and community without years of psychotherapy or institutionalization.

Speaking at the first of an NIMH Colloquium Series, Dr. Nicholas Hobbs, Chairman of the Division of Human Development and Guidance, George Peabody College, Nashville, Tenn., described Project Re-ed as "a translation of psychotherapy into an experiment in living."

Problem Outlined

Children who are too emotionally disturbed to remain in public school or who need to be removed temporarily from an unstable home ideally should be placed in a residential treatment center that has a full range of psychiatric services, Dr. Hobbs said.

However, the cost of such centers is prohibitive, and adequate staffs are not now available. Project Re-Ed was created to fill the gap that exists between this ideal and the current practice of institutionalizing some children for lack of any suitable alternative.

Underway since 1961, Project Re-Ed now operates two schools—Cumberland House in Nashville and a school in Durgin Park. Here emotionally disturbed children receive education, recreation, care and training tailored to their individual needs.

Children in the project come from all over the United States and often are referred by mental health centers. When a child is accepted, social service agencies work with the family and school to effect a better, more stable environment.

Project Described

The children attending these schools are of normal or superior intelligence and generally are in serious trouble in school. They live at school during the week, returning home on weekends to maintain close contact with their families.

The emphasis of Re-Ed is on schoolwork and activities. Two teacher-counselors, who are at the heart of the program, are responsible for each group of eight children, for teaching them, playing with them, eating with them, and being on hand whenever a child needs them.

One common characteristic is a "commitment to children," and Dr. Hobbs has described them as "part of the task force with which Re-Ed will become." Psychiatric, pediatric, social work and educational consultants work through the teacher-counselors to help the children.

Care is not the goal of the project. Officials believe each child is an inseparable part of a small social system, and their goal is to make that system work when it threatens to collapse.

While many children improve greatly during their stay at a Re-ed school, a child does not have to improve to return home. If his family achieves greater stability or his school situation improves enough to alleviate some of the pressures bearing on him, the child returns to his home and community. The average stay at a Re-ed school is six to eight months.

Eight goals comprise the basis of Re-Ed theory and practice:

• Life is to be lived—each hour is of great importance and is never neglected or just allowed to pass.

• Trust is essential and its development is the first step toward growth.

• Competence brings confidence and self-respect.

Additional Goals

• Symptoms can and should be tolerated; Re-Ed attacks them through reconditioning to permit the child to make effective contact with others.

• Cognitive control can be taught, through immediate experience and specific events, to broaden the limited responses these children have.

• Communities are important and exist for people.

• The body or visible self is an arrangement around which the psychological self is built.

• A child should know some joy each day.

The Project is supported by an NIMH grant for training and research.

The name "Antisha" (NIMH, a true sailing association) won the "Name the Boat" contest (NIH Record, May 3) for Henry E. Lutterloh, National Heart Institute. He stands by R&W Sailing Association's boat with his award-winning name inscribed on the stern.—Photo by Ralph Fernandez.

ANTISHA
9 NCI Scientists Give Cancer Research Papers

Nine NCI scientists presented papers at the 57th Annual Meeting of the American Association for Cancer Research, Inc., in Denver, Colo. From May 26 to 28, about 1,000 cancer researchers attended the meeting, which included a special session on cell kinetics and synergism on radiobiology and chemotherapy.

More than 175 research reports were given at the scientific sessions, which were devoted to cancer research in the areas of biochemistry, biology, carcinogenesis, chemotherapy, clinical investigations, endocrinology, immunology and genetics, and viral studies.

Speakers Listed

The NCI scientists who presented papers were: Drs. Edward S. Henderson and William R. Bell, of the Medicine Branch; Drs. John H. Welsburger and Mihir Ranjan Banarjee of the Biology Branch, Etiology Area; Drs. Michael B. Sporn and Creed W. Abell, of the Chemistry Branch, Etiology; Dr. Pietro M. Gullino, Laboratory of Biochemistry; Dr. Robert C. Rubin, Laboratory of Chemical Pharmacology; and Dr. Michael W. Johnson, former ly of the Laboratory of Viral Carcinogenesis.

Press Assisted

The NCI's Research Information Branch, represented by Margaret McElwain and Judy Rainier, made all press arrangements for the meeting, the seventh year in which the Branch has served the Association in this capacity.

A press conference on Thursday evening the newsmen heard five scientists who discussed the predicted highlights of the meeting and answered questions. Press summaries of all papers were also available for the newsmen's convenience.

Obesity . . . is admittedly the most persistent foible of all the deadly diseases, both microbic and metabolic, as well as the uncompromising enemy of recovery from accident and injury.—AMA Journal.

Mice and Japanese Quail Produced Germfree for Use in Cancer Research

Germfree mice and Japanese quail are among the essential components of a collaborative virus-cancer research program being carried out by scientists of the National Cancer Institute and the Germfree Tumor Virus Laboratory, Tampa, Fla.

At the Florida Center a Public Health Service contract in the amount of $255,000 is supporting a Germfree Tumor Virus Laboratory. Here tumors are artificially induced in laboratory animals free of detectable micro-organisms are being studied. In addition, tumor-bearing germfree animals are being used to evaluate specific factors, including additional scientific investigators, including those cooperating in NCI's Special Virus-Leukemia Program.

Dr. J. A. Reyniers, head of Germfree Life Research Center, and his associates induce primary tumors in the animals by single injections of a chemical, methylicholanthrene. Tumors which develop at the sites of inoculation are used to test other germfree animals by single injections of tumor homogenates or filtrates in the absence of any additional carcinogen.

Steps Given

After 5 or more serial passages in animals, a tumor line is considered established. It can then be used in experiments designed to elucidate the cause of cancer, the activation of latent tumor viruses, and factors which may be involved in the induction and growth of the tumor.

Germfree mammals produced at the Center are delivered by Caesarean section in specially designed isolators and are hand-fed. Japanese quail, because of their small size, are in many instances replacing chickens in germfree-type studies of fowl viruses. The quail are hatched within the germfree isolators where they are maintained in a carefully controlled environment.

Work is in progress to develop means for mechanization and standardizing the tedious techniques of hand feeding and to improve care routines for different species, principally hamsters, rats, and mice.

Animals are used for selectivity to cancer-inducing chemicals and viruses and are certified as germfree before being shipped to NCI and other laboratories for further characterization and experimental use.

Project officer for NCI is Dr. Frank J. Rauscher, Chief, Viral Leukemia and Lymphoma Branch.

Human Gingival Tissues May Produce Factor To Destroy Collagen

An enzyme may be involved in the tissue destruction associated with periodontal disease in man according to scientists from the National Institute of Dental Research. The production of a collagen-degrading factor by human gingival tissues has been demonstrated for the first time by Drs. Harold M. Fullmer and William Gibson of the Dental Institute's Laboratory of Histology and Pathology here.

Collagen, a major constituent of periodontal tissues, is lost in large quantities during the course of the disease.

Over 100 specimens of gingivae removed from patients during periodontal disease therapy, were prepared and cultured on a collagen gel in a test situation.

Observations Described

Drs. Fullmer and Gibson observed collagen destruction after 24 hours, and the destructive activity increased with time. On the other hand, collagen destruction was not seen in cultures of certain rat tissues incubated under comparable conditions for as long as one week.

The investigators found further support for the hypothesis that a cellular factor, produced by periodontal tissues of patients with the disease, is responsible for collagenolytic activity. They inhibited cellular activity by freezing and thawing tissues in one procedure and by adding puromycin to the gingival culture in the other. In neither case could collagenolytic activity be observed.

Specimens of the gingival tissues which had exhibited collagenolytic activity were cultured for microorganisms. No bacterial growth was observed after as long as one week.

In still another procedure, culture fluids from excised gingivae from patients with periodontal disease were shown to reduce the viscosity of collagen solutions 14 to 35 percent as compared with control solutions. The activity was markedly reduced by the use of boiled culture fluid.

The findings, according to Drs. Fullmer and Gibson, suggest that diseased gingival tissues, when cultured in vitro, produce a heat-stable collagenolytic factor, presumably an enzyme.

These findings were reported in Nature.

Grant Given Minneapolis Mental Health Center

A comprehensive community mental health center to be built and operated jointly by two hospitals in Minneapolis received a $27,968.50 Federal construction grant recently.

The 3-story $8.6 million structure, connected to both neighboring hospitals, will house a variety of services and facilities.

The two voluntary, non-profit hospitals, St. Barnabas and Swedish, are affiliated with the University of Minnesota. Experienced in running joint training programs, they qualified for the mental health center grant by planning mental health services in addition to a 32-bed inpatient psychiatric unit.

Dr. Stanley F. Yolles, Director of NIMH which administers the national mental health program, said that the joint project is an example of the collaboration that is possible when communities resolve to bring effective mental health services into their areas.
New Grant Programs Initiated to Meet Need For Biomedical Research

Two new grant programs, the Biomedical Sciences Support Grant and the Health Sciences Advancement Award, initiated by NIH to meet the nation's growing biomedical research needs, were announced recently by Surg. Gen. William H. Stewart of the Public Health Service.

The Biomedical Sciences Support Grant program extends to graduate institutions, such as schools of arts and sciences, engineering and agriculture, the type of general research support previously limited to health professions schools and non-academic research institutions.

Concept Given

The concept of the BSSG program, like that of the General Research Support program, is to enable institutions participating in the nation's biomedical research effort to have available funds which can be used flexibly for various health research activities.

For example, such funds could be used to meet new and unanticipated research opportunities, explore new research, make informal discoveries or more readily recognize and support scientific talent.

In the BSSG program a minimum of $200,000 in NIH research project awards for the Fiscal Year ending June 30, 1965, is the qualifying base requirement for applicant institutions. The minimum award is 15 percent of this amount. It provides a base grant of $20,000 for grantees institutions. There is no ceiling at present.

The Health Sciences Advancement Award program provides an opportunity for additional graduate academic institutions to raise the stature of their biomedical research programs. The program is also expected to increase both the number of biomedical health scientists and the quality of their training.

Program Competitive

A non-formula program, the HSAA will be made on a competitive, one-time basis to qualified institutions for a period of up to five years. Preference will be given to applicant institutions which show the greatest promise for advancing the excellence of their health science activities.

Eligible under this program are universities, colleges which grant higher degrees, and health professional schools not a part of a university.

Both programs, like the General Research Support grant program, implemented in 1962, are administered by the Division of Research Facilities and Resources.

Training investigators to meet dentistry's increasing need for the application of basic science research to clinical problems was the principal subject of the NIDR Training Directors' Conference held at NIH recently. Pictured (seated from left) are Dr. Fred A. Honny, Chairman, Dental Training Committee; Dr. Seymour J. Krohnke, NIDR's new Director, and Dr. Thomas J. Hill, Conference Chairman. Standing (from left) are Dr. Robert J. Isaacson, Training Director, University of Minnesota; a trainee, Richard R. Bevin, and Dr. Robert C. Caldwell, University of Alabama Training Director.—Photo by Thomas Joy.

Dr. BLEULER

(Continued from Page 1)

Bleuler's studies discounted the belief that once chronic deterioration sets in, it cannot be reversed. "Many decades of study are needed to show the true course of the disorder," he told the seminar. "Cases of schizophrenia with a sudden beginning and lifelong deterioration are becoming increasingly more rare, and chronic cases have diminished in number. Even in chronic cases, the condition frequently improves after many years of suffering. Full recovery after a long-standing schizophrenic psychosis is not very rare," he added.

Theory Given

One of the bases of Bleuler's work is the proposition that schizophrenia and the life experience are not alien to one another. "Sometimes the schizophrenic shows warm emotions like love, he shows responsibility, and complex intellectual achievements. This healthy part of the patient does not disappear as it does, for example, in cerebral atrophy," he said.

His picture of the essential character of the schizophrenic is that the patient lacks unity, order, and suffers from dissociation. "The schizophrenic lives in a world of imagination, emotions, and reminiscences. The healthy person can maintain this disharmony in his nature, while the schizophrenic treats the world as a projection of his nature," observed Bleuler.

While no specific effective therapy has yet evolved for the treatment of schizophrenia, Bleuler's clinical experience has suggested several approaches he termed primary. Among these is the maintenance of human contact with the patient because isolation worsens the disease.

"Active therapy between doctor and patient is needed," Bleuler said. Concerning shock treatment, he regards it as useful "to produce a suitable and abrupt change in the patient's environment."

"Shock therapy is not used as commonly in the United States as it was a decade ago before the advent of psychoactive drugs."

"Secondary importance in helping the schizophrenic are sedation and relaxation, Bleuler held. He prefers not to use drugs for his patients over a long period of time, and does so only when withdrawal of drugs causes relapse."

Whatever therapeutic measures are used to help the patient evolve a harmonious personality that is adapted to reality, to help him find his own unity and his own self are worthwhile and must be employed," said the Swiss psychiatrist. "But we do not yet know a therapy that can attack specific causes of the disease."

Bleuler's work has been focused on the genetic, endocrinological and psychological factors implicated in the etiology of schizophrenia. He is the famous son of a famous father, Dr. Eugen Bleuler, who coined the word 'schizophrenia,' provided psychiatry with its classic description of the disorder, and pioneered the study of this form of mental illness.

Dr. S. Fish, Walters Join Grants Associates Plan

Two new appointees, Drs. Melvin S. Fish and Charles F. Walters, have been named to participate in the Grants Associates Program at NIH.

Under this program, administered by the Division of Research Grants, participants receive a year of diversified professional experience. Upon completion of this tour, they are offered scientific or administrative posts within NIH or other bureaus of the Public Health Service.

This is a return assignment to NIH for Dr. Fish. He was a research scientist with the Laboratory of Chemistry of Natural Products at the National Heart Institute from 1951 to 1958.

Prior to his present position, Dr. Walters was technical assistant to the Chief of the Bureau of State Services' Basic and Applied Sciences Branch of the division that is now known as the Federal Water Pollution Control Administration.