Medical Students to Practice on Dental Training Robot With Built-in Disorders

The 1971-model android, a dental training robot, is coming off the drawing boards.

Researchers at the Dental Health Center, San Francisco, the applied research and training center of the Division of Dental Health, Bureau of Health Professions Education and Manpower Training, are developing a new approach to the training of dental students.

For the first time, students will enjoy the services of a permanent, reliable, and extremely responsive dental "patient."

The computerized "patient" simulator will assume the role of many different patients through replacement of individual teeth or complete oral structures, with built-in dental disorders.

The simulator will react as any average dental patient. Before the student begins to work, he will have to inject an anesthetic correctly, or the simulator will react with symptoms of pain such as a wrinkled brow and perhaps even an "ouch."

If the student makes a mistake, the robot will respond accordingly — perhaps his head will jerk or, in some cases, he will bleed.

During a normal dental operation the student will have to handle the simulator with all the care that

The 1971 dental training robot will be similar to the head of Sim I, a medical simulator used for teaching anesthesiology.

DRS Sponsors Courses On Amino Acid Analyzer

Interested employees may enroll in one of two identical one-week training courses on the Model 120 Amino Acid Analyzer offered by the Division of Research Services.

The courses, sponsored by the Systems Maintenance Section of the Biomedical Engineering and Instrumentation Branch, DRS, and the Beckman/Spinco Company, are scheduled Oct. 27-31 and Nov. 3-7.

Classes, consisting of lectures and laboratory sessions, will be held from 8:30 a.m. to 4 p.m.

Course Described

Instruction will be given in preparation of the reagents and ninhydrin operation of the analyzer, column preparation, sample application, and stream divider and peptide analysis.

Also covered in each course will be utilization and interpretation of chromatograms for correct analysis and isolation of problem areas, physiological analysis, operation and maintenance of the colorimeter and pumps, and expanded scale high sensitivity operation.

Wherever feasible, requests for areas of particular interest will be included.

Contact Mrs. Louise Christy, Ext. 64131, for applications. Only a limited number can be accepted.


Social consequences of biomedical research will be discussed at an NIH Symposium, "Research in Neuro- and Psycho-Biology: Prospects and Social Implications," to be held Oct. 17-18 at the Clinical Center.

The symposium program is designed to enable NIH scientists and physicians to consider consequences of their research and their own social responsibilities.

Seek Better Understanding

As a result, they may better help the public understand the revolution in biomedical science and technology.

Research in genetics and reproductive physiology is providing ideas and techniques that increase the ability to manipulate, within limits, human heredity and reproduction.

Studies in neurobiology and the behavioral sciences promise similar potential for the control of human behavior.

Investigations in toxicology and bacteriology may, at times, influence international relations through the development of chemical and biological weapons.

These technological developments, and the complicated attendant social issues, indicate the need for further exploration of the relationships of the life sciences and the social sciences to society.

Focusing on specific areas of research concerned with the human nervous system and with human behavior, the formal program of lectures and discussion by invited speakers on Oct. 17 in the Jack Masur Auditorium will be followed.

(See SYMPOSIUM, Page 8)
Hu s tl e rs' Win Champion ship sing 1 e elimination tournament.

Last year they were runners-up. This year they are the champion of this DHEW Baseball Tournament.

The Hustlers, an NIH baseball league team, along with some other NIH league players, represented NIH in a DHEW Invitational Tournament downtown.

The team won 3 games in a row to win the championship of this single elimination tournament.

Gov’t Franked Envelopes Illegal for Personal Use, C. S. Commission Warns

All NIH employees are again cautioned against the illegal use of postage paid envelopes—frequently referred to as "franked" envelopes.

The submission of an application in a competitive examination by an individual is considered to be a personal matter, not official Government business, whether or not the applicant is a Federal employee.

Many of these applications contain bulky attachments requiring the use of large envelopes, and many are sent by air mail or air mail special delivery.

The U.S. Civil Service Commission recently became aware of the widespread practice by Federal employees of using postage paid envelopes to mail applications to the Commission.

Dr. H. Richman, Former Social Worker at CC, Is Dean at University

A former Clinical Center social worker, Dr. Harold A. Richman, has been appointed Dean of the School of Social Services Administration at the University of Chicago.

Dr. Richman was a member of the Social Work Department staff from 1961 to 1968. He will head the third largest of the 80 graduate schools of social work in the United States.

Dr. Richman left the CC to return to the University of Chicago to work on his doctorate, which he received this past June.

In 1965 he returned to the Washington area as a White House Fellow.

For the past 3 years he has been a consultant to the DHEW on Social Welfare during this period.

Printing, Reproduction Section Votes Oct. 28 On Union Proposal

An election to determine the question of exclusive representation for non-supervisory employees of the Printing and Reproduction Section, Plant and Office Services Branch, Office of Administrative Services, has been scheduled for Tuesday, Oct. 28, at the request of Lodge 2419, American Federation of Government Employees.

Day shift employees of the CC Environmental Sanitation Control Department were cited in one of two ceremonies (see NIH Record, Sept. 16, 1969), during which 21 awards were presented for superior performance and length of service. Dr. Robert M. Parrie, CC Acting Director, told them, "The Clinical Center has a good reputation among its patients. It is what you do that helps make that reputation."
Dr. Gee Receives Award From U. of Minnesota

The Outstanding Achievement Award of the University of Minnesota was recently presented to Dr. Helen Hofer Gee, executive secretary of the Computer Research Study Section, Division of Research Grants.

The award, reserved for former students who have attained eminence, was given to Dr. Gee at the Annual Honors Meeting lunch of the Minnesota Alumni Club in Minneapolis.

She was a scientific administrator in the National Institute of Child Health and Human Development before joining DRG in 1965.

Three candidates for postgraduate training in the National Library of Medicine Associate Program for 1969-70 will visit other area medical research libraries and information centers. The candidates (1 to r), Barbara Louise Greeney, Cecile Charlotte Quintal, and William Frazier, discuss their program with Carol Long, NLIN training officer.

Dr. Gee

Lonnie Magruder, Skilled Animal Caretaker, Dies

Lonnie Magruder, senior animal caretaker in the Reproduction Research Branch, National Institute of Child Health and Human Development, died recently.

He served almost 19 years at NIH, starting with the National Cancer Institute.

Mr. Magruder was called "Happy" by his fellow workers and friends because of his congeniality. He was known also for his special skill in handling monkeys and other animals.

Friends recall that he rarely missed the opening game of the Washington Senators, the Gaithersburg Fair, and the World Series.

New ways to keep unauthorized lights should be installed. A temporary lighting system expanding present facilities has been set up in the Clinical Center parking lots. A survey of parking lots on the reservation just completed will indicate where any vapor lights should be installed.

Because many CC employees work at night, parking arrangements for the A and F entrances have been changed. These will allow employees on night shifts safer access to the building.

After-Hours Control Essential

Control of entrances to NIH after normal working hours, as now done at the Bldg. 15 complex, is essential for effective protection. New ways to keep unauthorized people off the reservation and from the buildings are being discussed. The PSMB is also trying to improve and tighten building regulations.

PSMB Planning New Devices, Measures To Ensure Security of NIH Employees

Growing city crime problems are adding to the facets of hospital protection which range from parking tickets to regulations for areas using radioactive materials.

In recognition of this fact, the Branch, OAS, has recently instituted several improvements for employee safety, one aspect of hospital protection.

A temporary lighting system expanding present facilities has been set up in the Clinical Center parking lots. A survey of parking lots on the reservation just completed will indicate where any vapor lights should be installed.

Because many CC employees work at night, parking arrangements for the A and F entrances have been changed. These will allow employees on night shifts safer access to the building.

After-Hours Control Essential

Control of entrances to NIH after normal working hours, as is now done at the Bldg. 15 complex, is essential for effective protection. New ways to keep unauthorized people off the reservation and from the buildings are being discussed. The PSMB is also trying to improve and tighten building regulations.

George P. Morse, chief, PSMB, stated that, in the near future, an experimental closed circuit TV system will be set up in four locations on the reservation. This will be used to determine both NIH protection problems and the capability of closed circuit TV to combat them.

Such a guard-monitored TV system has been successfully used by other agencies and private firms to effectively control access to buildings, while still providing the maximum amount of user convenience.

It can identify, and the read-

Three candidates for postgraduate training in the National Library of Medicine Associate Program for 1969-70 will visit other area medical research libraries and information centers. The candidates (1 to r), Barbara Louise Greeney, Cecile Charlotte Quintal, and William Frazier, discuss their program with Carol Long, NLIN training officer.

Psmb Planning New Devices, Measures To Ensure Security of NIH Employees

Growing city crime problems are adding to the facets of hospital protection which range from parking tickets to regulations for areas using radioactive materials.

In recognition of this fact, the Branch, OAS, has recently instituted several improvements for employee safety, one aspect of hospital protection.

A temporary lighting system expanding present facilities has been set up in the Clinical Center parking lots. A survey of parking lots on the reservation just completed will indicate where any vapor lights should be installed.

Because many CC employees work at night, parking arrangements for the A and F entrances have been changed. These will allow employees on night shifts safer access to the building.

After-Hours Control Essential

Control of entrances to NIH after normal working hours, as is now done at the Bldg. 15 complex, is essential for effective protection. New ways to keep unauthorized people off the reservation and from the buildings are being discussed. The PSMB is also trying to improve and tighten building regulations.

George P. Morse, chief, PSMB, stated that, in the near future, an experimental closed circuit TV system will be set up in four locations on the reservation. This will be used to determine both NIH protection problems and the capability of closed circuit TV to combat them.

Such a guard-monitored TV system has been successfully used by other agencies and private firms to effectively control access to buildings, while still providing the maximum amount of user convenience.

It can identify, and the read-

Three candidates for postgraduate training in the National Library of Medicine Associate Program for 1969-70 will visit other area medical research libraries and information centers. The candidates (1 to r), Barbara Louise Greeney, Cecile Charlotte Quintal, and William Frazier, discuss their program with Carol Long, NLIN training officer.

Psmb Planning New Devices, Measures To Ensure Security of NIH Employees

Growing city crime problems are adding to the facets of hospital protection which range from parking tickets to regulations for areas using radioactive materials.

In recognition of this fact, the Branch, OAS, has recently instituted several improvements for employee safety, one aspect of hospital protection.

A temporary lighting system expanding present facilities has been set up in the Clinical Center parking lots. A survey of parking lots on the reservation just completed will indicate where any vapor lights should be installed.

Because many CC employees work at night, parking arrangements for the A and F entrances have been changed. These will allow employees on night shifts safer access to the building.

After-Hours Control Essential

Control of entrances to NIH after normal working hours, as is now done at the Bldg. 15 complex, is essential for effective protection. New ways to keep unauthorized people off the reservation and from the buildings are being discussed. The PSMB is also trying to improve and tighten building regulations.

George P. Morse, chief, PSMB, stated that, in the near future, an experimental closed circuit TV system will be set up in four locations on the reservation. This will be used to determine both NIH protection problems and the capability of closed circuit TV to combat them.

Such a guard-monitored TV system has been successfully used by other agencies and private firms to effectively control access to buildings, while still providing the maximum amount of user convenience.

It can identify, and the read-

First Group of Eminent Fogarty Scholars Named By Dr. Leavitt, FIC Dir.

The appointment of the first group of six Scholars-In-Residence has been announced by Dr. Milo D. Leavitt, Jr., Director, Fogarty International Center.

Scholars Listed

The group, to be known as Fogarty Scholars, includes the following outstanding scientists: Sir Harold Himsworth, formerly Secretary of the British Medical Research Council; Prof. Torsten A. Theorell, University of Uppsala, Sweden; Prof. John Edsall, Harvard University.

Also, Dr. Ernest Singer, formerly Director of Microbiology, Queensland Institute of Research, Brisbane, Australia; Prof. P. C. C. Garnham, formerly professor at the London School of Hygiene and Tropical Medicine, and Prof. Uriel Z. Littauer, professor of Biochemistry, Weizmann Institute of Science, Israel.

Pursue Individual Course

The Fogarty Scholars will pursue their individual research and consider the philosophical, social, economic, or legal issues raised by cur-
Rev. Kerney Contributes to Book, Tells How Research Setting Affects Grief

How does a medical research setting such as the Clinical Center affect the grief experience? That is one of the questions posed by Chaplain LeRoy Kerney, chief of the CC Department of Spiritual Ministry in But Not to Lose: A Book of Comfort for Those Bereaved, edited by Austin H. Kutschker.

In Chaplain Kerney’s chapter, “A New Choice: Medical Research Hospitals,” he gives a number of reasons for the experience of grief and its meaning to the sufferer.

The degree of grief is affected by the hopes and expectations that patients and their families place in clinical research programs, and by their participation in decisions that sometimes lead to feelings of guilt.

The unfamiliar setting, equipment, methods, and doctors at a medical research center also influence emotion.

The question of an autopsy, which is especially important in this setting, is another factor in the grief experience. The doctor must ask permission for an autopsy while the family is still in a state of shock.

Autopsies Essential

Yet, autopsies are essential to gain all possible knowledge about a disease and to evaluate new surgical techniques, new drugs, and the effects of radiation therapy. For this reason, Chaplain Kerney explains, the rate of postmortem in a medical research hospital may be as high as 95 percent.

There are also positive factors affecting grief in a medical research environment. Patients and their families often feel themselves to be a part of a significant endeavor that goes beyond their immediate needs and involvement.

Chaplain Kerney often points out to grieving families that the final contribution of an individual to his world and society is not fully known to us.

It is a piece of a medical jigsaw puzzle that in time will be fitted in with other fragments of knowledge to create new patterns of treatment and cure.

Winifred Sewell, NLM, President-Elect of DIA

Winifred Sewell, chief of the National Library of Medicine’s Drug Literature Program, Specialized Information Services, is president-elect of the Drug Information Association for 1969-70.

She is a graduate of the State College of Washington, received her B.S. degree in Library Science from Columbia University.

From 1949 to 1959 and from 1962 to 1964, she was editor of Unlisted Drugs.

Before assuming her present position, from 1962 Miss Sewell served as deputy chief of the Bibliographic Services Division, NLM.

She is also an adjunct lecturer, University of Maryland School of Library and Information Service.

With Donald F. Walker, Jr., an NLM drug literature specialist, she co-authored a paper on “Computer-Assisted Identification of Medical Subject Headings for Chemicals,” which she presented at the 158th National Meeting of the American Chemical Society.

CFC

(Continued from Page 1)

those in need.

The three agencies are the United Givers Fund, the National Health Agencies, and the International Service Agencies.

The NIH campaign will last for 6 weeks. NIH keymen are in the process of contacting all employees for contributions, which may be made in one lump sum or deducted from paychecks.

In addressing the CFC keymen at the kick-off meeting, Dr. Cooper emphasized that while NIH has a quota to meet, the important thing to stress in this campaign is the good that can be accomplished.

“We at NIH strive daily to improve the health of the nation,” he said, “now we have another opportunity through CFC to alleviate human suffering.”

He went on to say that “CFC-supported nurseries and day centers have made it possible for mothers with pre-school children to go to work.

“CFC has helped to keep families together, and to return drug abusers and alcoholics to the community as productive human beings.”

CFC offers its help to all and needs help from all in continuing to give intensive care.”
A visual aid has cut the daily preparation time for the CC Neurology Nursing Unit blood cart by as much as one-third. Patsy McCabe (left), supervisory clinical nurse, and Miriam Peterson, research nurse, who conceived the idea, each received a cash award and achievement certificate. Using the "Guide for Blood Tubes," a list of blood tests and data on tube types and amounts of blood for each test can be seen at a glance. The exhibit can also be used to train new personnel.

Teenagers Learn Computer Operations During Summer YOC Jobs at DCRT

Computers are providing a future for underprivileged teenagers working at the Computer Center Branch of the Division of Computer Research and Technology. For 3 years this Division has been training many summer employees in the computer operations area. At first, these employees were college students or high school students bound for college.

More recently, however, the training effort has been expanded to include underprivileged teenagers, hired as Summer Aids under the Youth Opportunity Campaign. These students would probably not have an opportunity to receive similar training and experience in an area which offers such great potential for employment.

Selection criteria are minimal. Teenagers who qualify for the Youth Opportunity Campaign are interviewed and screened for their interest in learning to operate a computer.

Applications Available For Scientific Exhibits At Joint PHS Meeting

The Scientific Exhibits Committee is now accepting applications for exhibit space for scientific exhibits during the Fifth Joint Annual Meeting of the Commissions Officers Association and the Clinical Society of the U.S. Public Health Service.

The 4-day meeting will take place March 31 through April 3, 1970 at the Washington Hilton Hotel.

More than 1,000 health professionals are expected to attend the sessions and visit the exhibits area.

Application forms may be obtained from Dr. John M. Lynch, chairman of the Scientific Exhibits Committee, National Institute of General Medical Sciences, NIDR, Building 38, Room 3A-60.

Pamphlet Reveals Danger Of Quacks Who Dispense Worthless Cancer Cures

Cancer quacks are "Big Business." Every year they take in many millions of dollars dispensing worthless cures. Even worse, a cancer patient may throw away his chance to live by wasting valuable time with unproven remedies.

"Danger, the Cancer Quack," a new pamphlet issued recently by the DBEW, discusses various aspects of quackery. It was prepared by the National Cancer Institute.

Quack Easily Identified

The pamphlet reveals several earmarks which identify a quack. For example, a quack's remedy is usually secret and available only from him.

He also claims that his remedy is the only one that really works and that no other method of treating cancer is of any value. He may advertise his cure in magazines, on television, in newspapers, or in other self-teaching materials.

Quack treatments are dispensed at so-called "clinics" and "laboratories." The phony medical device or, NIH, and an administrative officer for the Office of the Director, NIAID, and as assistant to the Division Director.

A graduate of the University of Virginia, Mr. Howell received his M.A. degree in public administration from the American University in 1967.

Mr. Howell has served in a number of administrative positions since he joined NIH in 1959 as a management intern.

NLM Device Records After-Hours Requests

An automatic answering and recording instrument is now part of the National Library of Medicine's reference information telephone service.

The device, used when the Library is closed, transmits a one-minute recorded message on Read-Only-Memory hours and instructions on how a patron may leave a recorded reference request. The request will then be answered during subsequent working hours.

The reference information number is (301) 496-2002.

The Library's regular hours are 8:30 a.m. to 9 p.m., Monday through Friday, and 8:30 a.m. to 5 p.m. on Saturday.
NIH Researchers Favor Steroid Therapy Given On Alternate Schedule

Scientists at two NIH Institutes recently reported their findings on corticosteroid drugs, one of the most useful of medications. However, their side effects include increased susceptibility to infection, pituitary-adrenal suppression, diabetes, and osteoporosis.

The scientists, Drs. Rob Roy MacGregor, John N. Sheagren, and Sheldon M. Wolff, National Institute of Allergy and Infectious Diseases, and Dr. Mortimer Lipsett, National Cancer Institute, cited these effects as almost as striking as the therapeutic properties of the drugs.

Lower Dose Ineffective

Lowering steroid dose in an effort to avoid side effects has often resulted in poor control of the disease under treatment. However, certain schedules of administration—in particular, alternate-day therapy—have proven capable of minimizing side effects while achieving satisfactory therapeutic results.

In the present study, the investigators observed patients on alternate-day corticosteroid (prednisone) therapy to determine whether immune reactions of the delayed hypersensitivity type were suppressed in these individuals as they generally are in patients receiving steroids daily.

Many physicians believe that the increased susceptibility to infection shown by patients on steroids is related to this impairment of immune response.

Patients' Disorders Varied

Patients in the study group had a variety of non-infections febrile inflammatory disorders, including granulomatous hepatitis, chronic hepatitis, sarcoidosis, and juvenile rheumatoid arthritis.

Five patients were begun on the alternate-day prednisone regimen without having received any steroids previously, while 7 were switched in a gradual fashion from daily steroids to the alternate-day schedule.

Clinical control of disease on the alternate-day regimen was excellent. Fever was abolished in 11 of 12 patients, and weight loss and malaise significantly decreased.

Side Effects Diminished

This high degree of therapeutic success was accomplished by a marked blunting of side effects commonly encountered with steroid treatment.

In contrast to patients still on daily steroids, all patients tested while on the alternate-day schedule proved capable of manifesting delayed immune responses both to new antigens and to antigens to which they had previously been sensitized.

In view of the relative intactness of delayed hypersensitivity responses found in this study, it is of interest to note that granulomatous lesions in several of the patients regressed and disappeared.

It has been widely believed until now that lesions of this type develop on the basis of delayed hypersensitivity reactions, and that suppression of delayed hypersensitivity might be essential to the improvement afforded by steroids.

These findings were reported in the New England Journal of Medicine.

ROBOT

(Continued from Page 1)

Max Brodel's drawing of anatomic relations of structures relative to a surgical approach to the pituitary gland is on display.

While differing in temperament and background, and employing individual techniques of illustration, each artist was a master of his profession.

The work of both men, and that of their students, has been featured in important medical texts and journals. Each contributed significantly to medical research and education through the excellence, clarity, and volume of their illustrations.

The exhibit will remain at NLM until Dec. 19. It is open to the public Monday through Friday, 8:30 a.m. to 9 p.m., and Saturday, 8:30 a.m. to 5 p.m.

Asbestos Induces Cancer, Study at NCI Reveals

A study, undertaken by scientists at the National Cancer Institute, to find the most effective methods of inducing experimental cancers of the pulmonary epithelium or pleura with asbestos was reported in the American Industrial Hygiene Association Journal.

The scientists, Dr. Meari F. Stanton, Robert Blackwell, and Eliza Miller, Laboratory of Pathology, NCI, used female rats 8 to 12 weeks old for their research. A causal relationship between lung cancer and asbestos in man has long been suspected.

Recent studies have shown that pleural mesotheliomas (tumors of the lining of the pleura) can be induced by several types of asbestos in both rats and hamsters.

In one of the techniques evaluated at NCI, fibrous glass compresses saturated with crocidolite asbestos were placed over the left lung and pericardium of each rat.

Three quarters of the rats developed mesothelioma sarcomas at the site of the compresses, confirming previous observations that asbestos is a potent carcinogen at these sites.

The high incidence of resulting neoplasms makes the new method effective for quantitative studies.

The current exhibit at NLM includes a photograph of Tom Jones and his illustration of the anatomy of the large intestine.
Infant Mortality Report Discusses Respiratory Distress Syndrome

The idiopathic respiratory distress syndrome, which is said to account for some 25,000 infant deaths each year in the United States, is the subject of a new publication prepared by the National Institute of Child Health and Human Development.

The booklet, The Idiopathic Respiratory Distress Syndrome, is the report of three NICHD-sponsored conferences to assess knowledge about the disorder and to encourage further research into its causes and possible cures.

Susceptible Infants Noted

The syndrome is a condition of the newborn characterized by difficulty in breathing. It occurs mostly in premature infants, children of diabetic mothers, or infants delivered by cesarean section.

A high number of infants exhibiting signs of respiratory distress die shortly after birth.

In the preface, Dr. Gerald D. Lakeveck, NICHD Director, said, "We hope that this report will stimulate additional support and scientific effort in this field and in this way will ultimately play a significant role in the reduction of this country's burden of infant mortality."


Albert Bedell Chosen To Head ASIS Chapter

Albert P. Bedell, assistant chief of the Scientific Information Centers Branch, National Institute of Child Health and Human Development, has been chosen Chairman-elect of the Chesapeake Bay Chapter of the American Society for Information Science.

Mr. Bedell will begin his term in 1970. He is currently completing a 3-year term as membership chairman and executive board member of the Special Interest Group in the behavioral and social sciences of ASIS.

Mr. Bedell designed the computerized information retrieval and publication system now employed by NICHD. The system is considered innovative in its design and responsive to the needs of researchers who use it.

Mr. Bedell came to NICHD from Documentation, Inc., where he developed the world's first fully computerized book catalog, which is now employed by the Baltimore County Public Library.


McCUTCHEON AND GERRING DETAILED TO SECRETARY'S COMMISSION ON PESTICIDES

Two executive secretaries from the Division of Research Grants have been detailed to the DHEW Secretary's Commission on Pesticides and Their Relationship to Environmental Health.

They are Dr. Rob McCutcheon and Irving Gerring, both are with the Research Grants Review Board, DGR.

Dr. McCutcheon is in the Toxicology Study Section, and Mr. Gerring is with the Special Studies Section.

Those serving on the Commission on Pesticides include Dr. G. Burroughs Mider, Acting Deputy Director of the National Library of Medicine.

Detrimental Aspect Recognized

Despite the beneficial effects of pesticides on the growth of food crops and control of insects, the detrimental side of DDT in the environment is also recognized. DDT has been found in the tissues of animals in all parts of the world. FDA studies have shown that Americans have an average of 12 parts per million of DDT in the fatty tissues of their bodies.

DHEW Secretary Finch has declared that it is time to question their continued use.

With this in view, the Commission will consider the public health and ecological ramifications of the use of pesticides.

Booklet on Aging Reveals Medical, Social Problems

Medical and social problems of the increasing over-age-65 population are discussed in a recently issued pamphlet, A Full Measure of Life.

The 16-page booklet was prepared by the Adult Development and Aging Branch of the National Institute of Child Health and Human Development.

Topics Listed

This Branch is responsible for the support of research and research training in biological, psychological, medical, and social aspects of aging.

Topics considered in the publication include: The Biology of Aging, Medical Aspects of Aging, Neuroscience and Psychology of Aging, Aging and Society, and the

MANPOWER

(Continued from Page 1)

grants, and contracts and grants for studies of new educational methods.

The scope of the Bureau's responsibilities covers schools of medicine, dentistry, and other health professions; education schools, schools of public health, schools of nursing, and schools and other institutions training allied health manpower.

The Bureau has seven divisions and a budget aggregating more than $400 million in this fiscal year.

Dr. Endicott, who has the rank of Assistant Surgeon General, has been Director of the National Cancer Institute since July 1, 1960. Prior to that he was Associate Director for Training, NIH.

Dr. Baker, who will become NCI Acting Director, is currently Associate Director of Etiology.

3rd Deadline, Review Cycle Set To Aid Research Career Plans

For the first time, a third deadline, Dec. 1, has been established for receipt of new and renewal applications for research career development awards.

Applicants will normally receive notification of action by the following July under this new deadline.

The additional deadline and review cycle will permit more flexibility to new applicants in scheduling their program plans, allow renewal applicants more time to report progress on the initial award, and provide a better basis for review of renewal applications.

Mechanisms for Support of Research and Training.

The pamphlet is available in limited quantity through the Public Information Office, NICHD, Bethesda, Md. 20014.
NCI-Supported Project Seeks Identification of Human Cancer Virus

The National Cancer Institute has embarked on a worldwide search for isolated groups of people with special genetic constitutions from whom scientists can obtain tissue specimens to aid in the identification of viruses that may cause human cancer.

Dr. Albert B. Sabin, one of the scientists responsible for the eradication of poliomyelitis, is now studying the virus-cancer problem, is directing an institute-supported project to detect a human sarcoma virus.

Tries New Approach

The noted virologist, for more than 30 years at the Children's Hospital Research Foundation, University of Cincinnati, is trying a new and unique approach in the search for a human virus that might be comparable to the sarcoma viruses of chickens, mice and cats.

Dr. Sabin plans to develop about 100 tissue culture cell lines derived from population groups that are highly isolated, either socially or geographically, in the hope of finding cells that are both genetically receptive to and at the same time free of cancer viruses.

Extracts of 80 human sarcoma specimens of bone and soft tissue obtained from surgical patients are concentrated by centrifugation, then placed on the cell cultures.

Each culture is watched for a "focus," or an outgrowth of a small number of transformed cells into little tumors, the presence of which would indicate the existence of a human sarcoma virus transmitted from the tumor extract to the cell culture.

Subcultures Procedure Explained

If no "focus" appears, all the cells are subcultured to detect any outgrowth of transformed cells that may have been missed in the cultures initially exposed to the sarcoma extract. It is this procedure of subcultures that adds a tremendous amount of labor to the project.

The tissue specimens for starting the culture cell lines are pieces of skin, each smaller than a pea, obtained by biopsy. The biopsy procedure is painless and easily accomplished with the aid of a punch device and a local anesthetic.

It is important, NCI scientists point out, to obtain the skin from isolated peoples who hopefully may not have been exposed to special viruses that are the target of the studies.

Several specimens have been obtained from a few population groups, but it is expected that many more will be collected in the near future.

NIDR is looking for ways to keep this grinning smile. Meanwhile 8-month-old Jayme Todd Wachter is starting to enjoy his car seat recently acquired by biopsy. His mother, Sharond, works in the Office of Financial Management, ODA.

SYMPOSIUM (Continued from Page 1)

by small group discussion seminars the next morning in CC conference rooms.

At the first session on Friday, Oct. 17, from 9 a.m. to 12:15 p.m., the symposium will feature "Ideas and Techniques in Neuro- and Psychobiology, Present and Future."

Development Reviewed

Scientific and technological developments in molecular biology, psychopharmacology, and neurophysiology will be reviewed with special emphasis on implications of these developments in possibly modifying human behavior.

Speakers at this session will be Dr. Samuel Barondes, Department of Psychiatry, Albert Einstein College of Medicine, and Dr. Jerome Letvin, Department of Biological and Electrical Engineering, Massachusetts Institute of Technology.

Ethical and social problems will be explored at the afternoon sessions. On Oct. 17, from 2 to 5:30 p.m., on "Purposes of, and Problems in, the Modification of Human Behavior."

Speakers Noted

Speakers will include: Dr. Gardner Quarton, Mental Health Research Institute, University of Michigan; Prof. B. F. Skinner, Department of Psychology, Harvard University; and Prof. George Anastaplo, Departments of Political Science and Philosophy, Rosary College, and lecturer in Liberal Arts, University of Chicago.

At the Oct. 17 evening session, from 8 to 10:30 p.m., "Public Policy and Control of Human Behavior" will be the topic under consideration.

MAPB Exhibit Features Examples of Its Services

Medical and general illustration, photography, and motion pictures—the four interrelated services of the Medical Arts and Photography Branch, Division of Basic Services—are depicted in MAPB's newest exhibit, which tells the NIH story visually.

Examples of the various services available from MAPB are featured. There is also a 2-minute color movie relating these services.

Two rotating panels are an important part of the exhibit. Later, when the exhibit is on permanent display in MAPB's new location, these panels will be changed frequently to display the latest work of the Branch.

This exhibit is in the Clinical Center lobby for the month of October after several weeks in Building 31. It will also be sent to the Westwood Building, and tentative plans include Buildings 36 and 37.

Potential Lab Hazards Stressed in NCI Booklet

Potential hazards and preventive measures in virus-cancer research are stressed in a new National Cancer Institute brochure for the use of scientists and others concerned with this field.

The historical and causes of laboratory-acquired infections are discussed. Also, a number of preventive measures available to minimize the risk of contamination are reviewed and guideline rules are given.

Single copies of Biohazard Control and Containment in Oncogenic Virus Research, prepared by the Biological Control and Containment Section of NCI's Special Virus-Cancer Program, are available free from the NCI Information Office.

The booklet may be bought in quantity at 50 cents per copy from the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402.

86 Million Wear Lenses

Approximately 86 million persons—about one-half of the nation's population—have corrective lenses. A recent study of the civilian population indicates that the proportion of the population with lenses increased with age, from 15 percent of those 9-18 years of age to 25 percent of those 45 years and over. National Center for Health Statistics.