

Record

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NATIONAL INSTITUTES OF HEALTH

Otis Ducker Appointed Administrative Services Director; Replaces Davis

Otis Ducker has been named Director of the Division of Administrative Services replacing James B. Davis.

Mr. Ducker will provide administrative direction and develop policy for three areas: General Services Management, Protection and Safety Management, and Materiel Management.

He came to NIH in 1953 as a storekeeper in the Supply Unit of the Supply Management Branch.

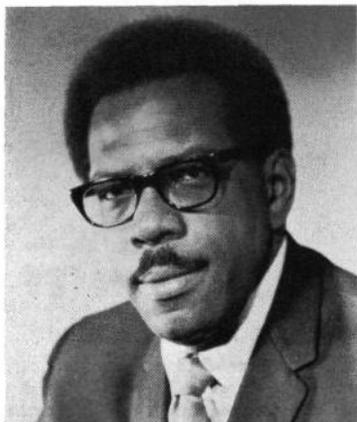
After serving in several positions—involving stock control, inventory, and storage and supply management—Mr. Ducker was named chief of the Supply Operations Branch in 1969.

Three years later he was appointed assistant director for Materiel Management, a post he held until his recent appointment.

An accomplished musician, Mr. Ducker likes to teach music in his spare time—he plays the saxophone, oboe, clarinet, and other reed instruments.

He joined the U.S. Army's 75th Army Band stationed at Ft. Belvoir, Va., in 1949 after 2 years as an orchestra leader in his home town of New Orleans.

Recalling his introduction to
(See MR. DUCKER, Page 5)



Mr. Ducker attended Snowhill Institute in Alabama and the Modern School of Music in Washington, D.C., to further his avocation—music. He "shifted gears while in the Army" and took up supply management.

Scientists Known for Studies of Genetic Disorders Address Seminar on Mongolism



During the question-and-answer period, Drs. Kaback, Nadler, and Stein (l to r) discussed with the press the ethical aspects of prenatal diagnosis and other issues related to mongolism.

A campaign to reduce by one-third the incidence of the births of babies with mongolism—Down's Syndrome—was launched by the National Institute of Child Health and Human Development at the NIH Science Writers' Seminar held here earlier this month.

Dr. Ronald Lamont-Havers, NIH Deputy Director, welcomed the science writers and other guests. Dr. Gilbert Woodside, NICHD's Acting Director, asked the aid of the press "in bringing to the general public the awareness of our conviction that the incidence of Down's Syndrome can be dramatically reduced . . . that, in fact, prevention may be possible."

Excerpts from Dr. Woodside's speech are carried on page 7.

Three scientists, known for their studies of genetic disorders, were among those who participated in the seminar.

Dr. Michael Kaback, associate professor at the UCLA School of Medicine, stated that mongolism is one of the most common chromosomal abnormalities in newborns. He stressed that these abnormalities may occur more often than expected, but most fetuses with a defect are probably aborted naturally.

Dr. Kaback explained that, although scientists do not yet know why, the incidence of several chromosomal defects, including mongolism, increases dramatically with advancing maternal age.

Dr. Zena Stein, director of the New York State Department of Mental Hygiene, Epidemiology of

Mental Retardation Research Unit, stated that because of medical advances, children with mongolism now live longer and are healthier than children with mongolism born in the past.

She said that scientists have known that women over 35 face an increasing risk of bearing children with mongolism, but until now no one had concentrated on
(See MONGOLISM, Page 6)

Dr. Cardon Named CC Asso. Director

Dr. Philippe V. Cardon has been appointed associate director of the Clinical Center. He has been chief of the Unit of Psychosomatics, National Institute of Mental Health, and a PHS Commissioned Corps medical officer since 1953.

As associate director, he will assist Dr. Robert S. Gordon, Jr., CC Director and NIH Associate Director for Clinical Care, in directing the hospital's activities.

Dr. Cardon will also share the day-to-day administrative responsibilities of providing specialized forms of hospital care needed by NIH research patients with Dr. Roger L. Black, CC associate director.

During his tenure with NIMH, he investigated the effects of life stress on body function, and the application of psychiatric knowledge to the general practice of medicine, with emphasis on psychosomatic disorders, hypertension, cardiovascular problems, and metabolism.

Dr. Cardon has participated in conferences and on committees involving research ethics and human beings as subjects. In addition, he has served on the CC Medical Board and chaired its clinical research committee for 2 years.

He was also NIMH Equal Em-
(See DR. CARDON, Page 5)

NICHD Study May Explain Production Of Antibodies by Fusion of Genes

Recent research findings at NIH may help explain how a normal human body can produce an almost infinite number of custom-fitted antibodies to protect against hundreds of thousands of bacteria, viruses and other foreign agents.

Dr. Philip Leder, head of a research team at the National Institute of Child Health and Human Development, estimated that a human being requires a million or more antibodies, or immunoglobulins, to achieve and maintain normal immune status.

He and his colleagues are interested in ways in which a person's finite number of genes, located in the 23 chromosomes inherited from each parent, might direct this enormous yet exacting production
(See GENE FUSION, Page 7)

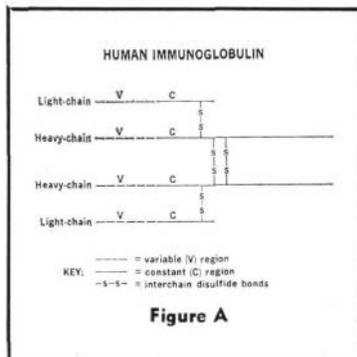


Figure A

the NIH Record

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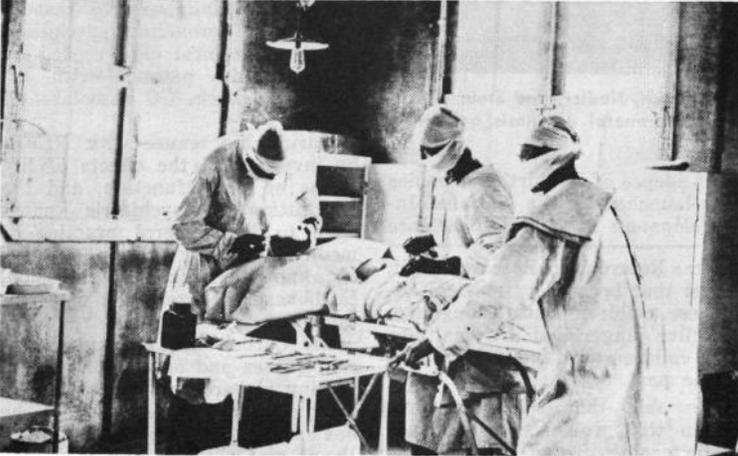
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World War I Medicine Exhibit Will Open Sept. 3



Operating Room at Camp Hospital No. 5 in Genicort, France, during World War I—one of many pictures that will be exhibited by NLM.

"Medicine of World War I," a new presentation in the National Library of Medicine's ongoing exhibit series, will open Sept. 3 in the Library lobby.

The exhibit—composed of photographs, posters, books, and manuscripts from the Library's extensive historical collection—focuses on the state of military medicine in the first World War.

Events shown include a devastating influenza epidemic, the effect of phosgene and mustard gas used during battle, the operation of a newly motorized ambulance corps, and battlefield surgery and sanitation methods.

Artifacts on loan from the Museum of the Armed Forces Institute of Pathology will also be on display.

The exhibit may be seen from 8:30 a.m. to 9 p.m. weekdays, and 8:30 a.m. to 5 p.m. Saturdays until Jan. 17, 1975.

Veterinary Ass'n Honors Dr. Dodds, NIH Grantee

Dr. W. Jean Dodds, a National Heart and Lung Institute grantee with the New York State Department of Health, has been named Outstanding Women Veterinarian of the Year by the National Women's Veterinary Medical Association.

She received the award at the Association's annual meeting held recently in Denver.

Over the past 10 years, Dr. Dodds has developed one of the Nation's largest colony of dogs with hereditary bleeding disorders for her research on hemophilia and related hemorrhagic diseases.

In addition to her research work, Dr. Dodds serves on a number of national committees, including the Council on Thrombosis of the American Heart Association.

NIAID Awards Grant to Harvard School Of Public Health for Research on VD

A program project grant for venereal disease research has been awarded to the Harvard School of Public Health by the National Institute of Allergy and Infectious Diseases.

The \$152,057 grant will support the first year of a Center for the Study of Sexually Transmitted Diseases under the direction of Dr. Roger L. Nichols, professor and head of the department of microbiology.

In 1972, faced with alarming increases in venereal disease cases, NIAID initiated a special research effort directed toward the eventual development of preventive measures, such as vaccines for syphilis and gonorrhea—the two most important venereally transmitted diseases.

In most minds, "venereal disease" is equated solely with syphilis and gonorrhea. The Harvard project grant is symbolic, however, of the growing recognition of other venereally transmitted diseases caused by such agents as cytomegalovirus, herpes simplex virus, mycoplasma, and chlamydia.

Dr. Nichols' studies will focus on some of these, although his primary interest will be *Neisseria gonorrhoeae* (the bacteria causing gonorrhea).

As a result of this award, six new projects will supplement studies on venereal disease already underway at the school. Three of these projects concern gonorrhea.

Project Explained

One involves the maintenance and expansion of a serum bank for storing frozen samples of *N. gonorrhoeae* obtained in the venereal disease clinics at Peter Bent Brigham and Boston City Hospitals. Such a source will ensure the availability of samples for studies of the immune response and the microorganism.

A second project on gonorrhea will study specific fractions of the bacterium's cell wall. Employed in a vaccine, the fractions (known as antigens) might stimulate sufficient antibody to fight and destroy the gonococcus and, thus, prevent the spread of gonorrhea.

The last of the gonorrhea studies is aimed at standardizing antibiotic disk susceptibility tests, used to determine the level of resistance of gonococci to various antimicrobial agents. Uniformity in this area would allow more effective comparison of the gonococcus' reactions to different antibiotics.

The second microorganism of interest to the Harvard investigators is cytomegalovirus (CMV). One study, directed by Nobel Laureate Dr. Thomas H. Weller, will concern itself with the role of CMV in venereal diseases.

Using blood and cervical secretion samples from women, Dr. Weller and his associates will investigate how the virus is spread,

(See RESEARCH ON VD, Page 4)

Recycle Paper—Dial 64247

A service for collecting paper to be recycled is available by calling Ext. 64247.

Package all paper in cardboard boxes and tape the tops closed.

Staples, paper clips, and carbons cannot be recycled—remove them.

Ann Lindsay, NLM, Dies; Former 'News' Editor

Ann R. Lindsay, National Library of Medicine, died Aug. 11 at her home in Bethesda.

A long-time member of the Library staff, Mrs. Lindsay was a former editor of the *NLM News*. Most recently she had been employed in NLM's Index Section.

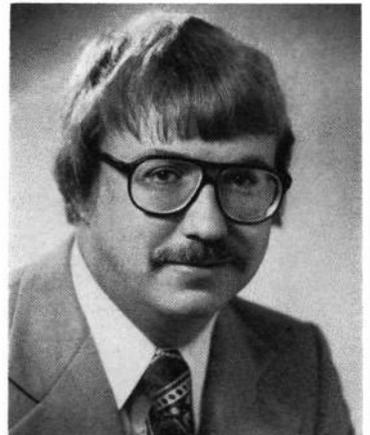
Bryn Mawr Graduate

Following her graduation from Bryn Mawr College in 1941, she became a public information officer with the Port of Embarkation, San Francisco.

In 1946 she moved to Washington, and served with the Public Health Service in a similar post until she joined NLM.

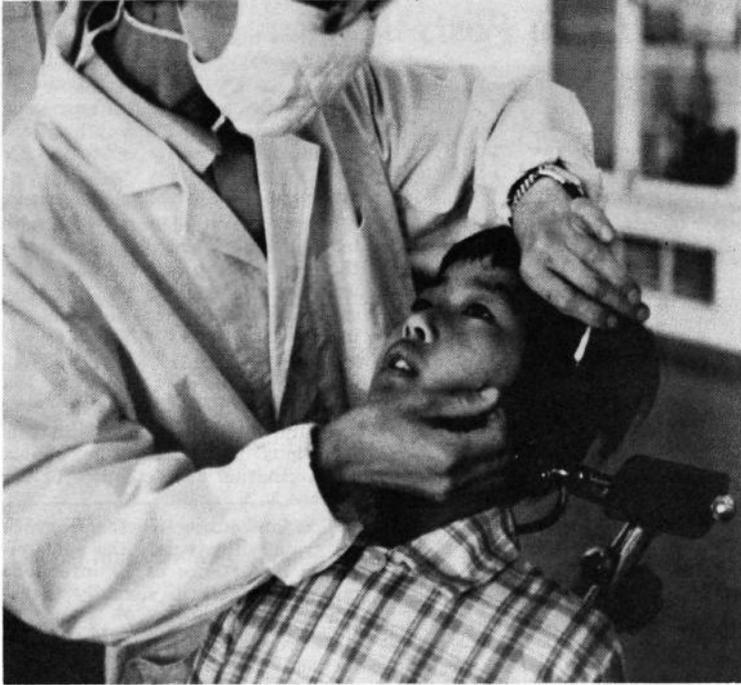
Mrs. Lindsay had also been a very active member of the Medical Library Association, and closely associated with its various publications.

She is survived by a daughter, Elizabeth Lindsay Deschenes of Fitchburg, Mass.



Richard Oliver, DRS personnel officer, has been assigned to the University of California, Berkeley, for 12 months under the authority of the Intergovernmental Personnel Act. Mr. Oliver will aid the assistant vice chancellor for employee affairs in dealing with management problems of a large university in such areas as salary, promotion, and tenure.

NIDR's Dr. Ronald Dubner Visits Hospitals in China; Sees Acupuncture Anesthesia



For extracting an upper bicuspid of a 14-year-old girl, the needle is placed locally and hand manipulated for 10 minutes before extraction.

Dr. Ronald Dubner, National Institute of Dental Research, recently visited China as a member of an Acupuncture-Anesthesia Study Group. The visit was sponsored by the Committee on Scholarly Communication with the People's Republic of China.

The group toured 15 hospitals in Communist China, and witnessed 48 operations conducted under acupuncture anesthesia.

Dr. Dubner, who is chief of NIDR's Neurobiology and Anesthesiology Branch, agreed with other researchers that acupuncture was a relatively effective means of anesthetizing patients for many types of surgery—notably chest, throat, and head operations.

In routine dental procedures, including extractions, Dr. Dubner saw no advantage in using acupuncture—except in some rather unusual and rare conditions. He

said that when acupuncture anesthesia is used other methods of pain control may also be indicated.

Dr. Dubner explained that the American Dental Association had only recently reaffirmed its policy that acupuncture in dentistry should be considered, at this time, an experimental procedure.

Research at NIDR has shown that operations in the oral cavity, including the teeth, can serve as an excellent model, not only for the study of acupuncture, but for basic investigations of some of the many enigmas of the pain phenomenon itself.

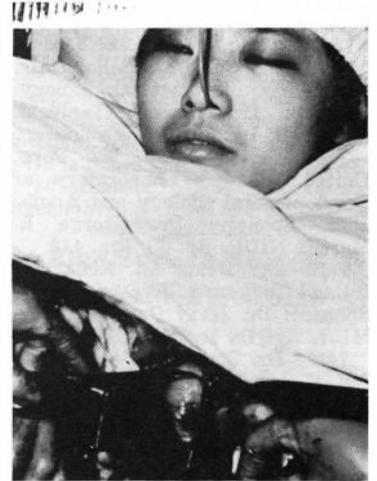
Dr. Dubner stated that NIDR recently funded a grant for studies on this subject to a team of researchers at the Harvard University Medical School who are working at Massachusetts General Hospital.



Acupuncture needles are placed for the extraction of a partially impacted lower right molar. These needles are electrically stimulated.



The initial incision and exposure of the sternum before resection is demonstrated on a 21-year-old woman who is undergoing open heart surgery with acupuncture anesthesia.



The same patient responds verbally to questions that are asked during the surgical procedure.

Dr. Henry W. Scherp Dies; Former Dental Scientist

Dr. Henry W. Scherp, 66, noted microbiologist who retired from the National Institute of Dental Research in 1972, died suddenly of a heart attack on Aug. 16 at his home in Birmingham, Ala.

Dr. Scherp had served as chief of the Laboratory of Microbiology from 1958 to 1969. Later, he established and directed the Institute's National Caries Program.

In 1965, Dr. Scherp received HEW's Superior Service Award "for his exemplary leadership in basic and disease-oriented research involving the role of microorganisms and search for control of dental diseases."

Following his retirement, he be-

came visiting professor of microbiology and consultant at the Institute of Dental Research, School of Dentistry, University of Alabama. Last April he was elected honorary member of Omicron Kappa Upsilon, the honorary dental society.

Dr. Scherp was co-author of *Oral Microbiology and Infectious Disease, A Textbook for Students and Practitioners of Dentistry*, now in its third edition, and has written other scientific publications.

Dr. Scherp is survived by his wife, Lilian Morgan, of Birmingham. Memorial offerings will be used to donate a set of books to the NIH Library.

Suzanne R. Rosenthal Appointed To Term on NIAMDD Council

Suzanne R. Rosenthal, executive vice-president of the National Foundation for Ileitis and Colitis, Inc., has been appointed to the National Arthritis, Metabolism, and Digestive Diseases Advisory Council through Sept. 30, 1977.

She will participate in the evaluation and recommendation procedures concerning the NIAMDD grants and awards program.

Mrs. Rosenthal, a victim of ileitis, is co-founder and director of NFIC—an organization established in 1966 to bolster the research effort in finding causes and cures for these gastrointestinal disorders which affect over 2 million Americans.

New Booklet Discusses Serious Lung Disorders

A 16-page illustrated booklet, *Chronic Obstructive Lung Diseases: Emphysema and Chronic Bronchitis*, has been published by the National Heart and Lung Institute.

These two potentially serious lung disorders afflict an estimated 7.8 million Americans, more than half of them under age 65.

Single copies of the booklet, DHEW Publication No. (NIH) 74-614, may be ordered free of charge from the NHLI Public Inquiries and Reports Branch.

Multiple copies may be purchased at 40 cents per copy from the Superintendent of Documents, GPO, Washington, D.C. 20402.

NIH Visiting Scientists Program Participants

7/7—Dr. Samuel T. Coker, U.S.A., Toxicology Branch. Sponsor: Dr. Robert L. Dixon, NIEHS, Research Triangle Park, N.C.

7/7—Dr. Herbert Weingartner, U.S.A., Adult Psychiatry Branch. Sponsor: Dr. William E. Bunney, NIMH, Bg. 10, Rm. 3N212.

7/7—Dr. Michio Yamaguchi, Japan, Laboratory of Perinatal Physiology. Sponsor: Dr. Ronald Myers, NINDS, Auburn Bg., Rm. 106.

7/7—Dr. Pon-Nyon Yi, Korea, Laboratory of Pathophysiology. Sponsor: Dr. P. M. Gullino, NCI, Bg. 37, Rm. 4B03.

7/8—Dr. Vamanmurti G. Mudgal, India, Environmental Biology and Chemistry Branch. Sponsor: Dr. Phillip W. Albro, NIEHS, Research Triangle Park, N.C.

7/8—Dr. George A. Saviolakis, Greece, Viral Oncology. Sponsor: Dr. Alfred Hellman, NCI, Bg. 41, Rm. A103.

7/10—Dr. Maurice Rouleau, Canada, Laboratory of Pathophysiology. Sponsor: Dr. P. M. Gullino, NCI, Bg. 37, Rm. 4B03.

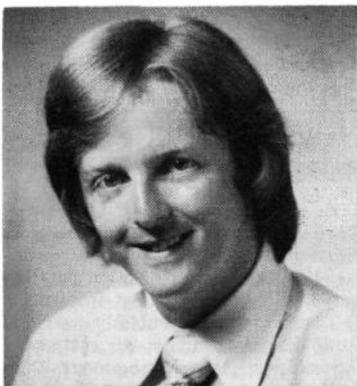
7/10—Dr. Meir Wilchek, Israel, Clinical Endocrinology Branch. Sponsor: Dr. Harold Edelho, NIAMDD, Bg. 10, Rm. 8N310.

7/12—Dr. Carlo Di Bello, Italy, Laboratory of Chemical Biology. Sponsor: Dr. Hiroshi Taniuchi, NIAMDD, Bg. 10, Rm. 9N308.

7/14—Dr. Francis M. Pope, United Kingdom, Laboratory of Developmental Biology and Anomalies. Sponsor: Dr. George R. Martin, NIDR, Bg. 30, Rm. 412.

7/14—Dr. Denis M. McCarthy, Ireland, Digestive Diseases Branch. Sponsor: Dr. Jerry Gardner, NIAMDD, Bg. 10, Rm. 9D15.

7/19—Dr. Sten F. Nilsson, Sweden, Laboratory of Immunology. Sponsor: Dr. Myron J. Waxdal, NIAID, Bg. 10, Rm. 11N260.



Gregory K. Bryce has been appointed personnel officer for the National Institute of Dental Research. He previously has served with the National Eye Institute, the Office of the HEW Secretary, the Bureau of Health Resources Development, and the National Oceanic and Atmospheric Administration.

6 NIH Management Interns Graduate; Ready to Assume Administrative Posts



Former management interns (l to r): Mr. Slevin, Mr. Brand, Mr. Machesko, Mr. Press, and Ms. Topalian compare notes about their year's internship.

Six participants in the NIH Management Intern Program recently completed their year's internship: Robert Slevin, Michael Machesko, Gilbert Press, Sherman Hatchett, Joan Topalian, and David Brand.

All six graduates, whose ages range from 27 to 44, have had varied experience prior to joining the Program, but five have now accepted permanent positions within the Public Health Service.

Mr. Slevin is working as a management analyst with the Division of Management Policy, OD.

A former social science analyst

7/22—Dr. Chungming Chang, Taiwan, Macromolecular Biology Section. Sponsor: Dr. Samuel W. Luborsky, NCI, Bg. 8, Rm. 109.

7/22—Dr. Leena M. Sederlof, Finland, Connective Tissue Section. Sponsor: Dr. Kenneth Brown, NIDR, Bg. 30, Rm. 106.

7/29—Dr. Asis K. Das, India, Laboratory of Molecular Biology. Sponsor: Dr. Sankar Adhya, NCI, Bg. 37, Rm. 4B15.

7/30—Dr. Mitsuaki Moriguchi, Japan, Laboratory of Biochemical Pharmacology. Sponsor: Dr. Edith Miles, NIAMDD, Bg. 4, Rm. 109.

8/1—Dr. Jacques Frot-Coutaz, France, Lung Cancer Branch. Sponsor: Dr. Luigi De Luca, NCI, Bg. 37, Rm. 3C06.

8/1—Dr. Feng-te Chou, Taiwan, Drug Development Branch. Sponsor: Dr. Harry B. Wood, NCI, Bg. 37, Rm. 6E26.

8/1—Dr. Motiram R. Dhawale, India, Laboratory of Biochemistry. Sponsor: Dr. R. Raymond Gantt, NCI, Bg. 37, Rm. 4D14.

8/1—Dr. Tsukasa Fujimoto, Japan, Laboratory of Neuropathology and Neuroanatomical Sciences. Sponsor: Dr. Igor Klatzo, NINDS, Bg. 36, Rm. 4B22.

8/1—Dr. Herman Schut, Canada, Pregnancy Research Branch. Sponsor: Dr. John D. Townsley, NICHD, Bg. 10, Rm. 5B04.

for DRG, Mr. Slevin received his B.A. degree from Long Island University and a masters degree in political science from the New School for Social Research in New York.

Mr. Machesko has a new position as assistant to the associate director for science, Bureau of Foods, Food and Drug Administration.

After graduating from Duke University, he worked as a chemist for the National Institute of Environmental Health Sciences in Research Triangle Park, N.C.

Mr. Press has joined the National Institute of Dental Research as an administrative officer, dealing primarily with budget matters.

Formerly NICHD Chemist

A graduate of Morgan State College, Mr. Press was formerly a chemist with the National Institute of Child Health and Human Development in Baltimore.

Mr. Hatchett has a personnel position with the National Cancer Institute.

For 10 years prior to becoming a management intern, he was a research biologist with the National Institute of Arthritis, Metabolism, and Digestive Diseases. He studied chemistry and biology at the Trinity University's Graduate School in San Antonio, Tex.

Ms. Topalian has accepted an administrative assistant position with the National Institute of Mental Health.

She has done graduate work in fine arts at the American University, and was employed as a grants technical assistant with the National Institute of Neurological Diseases and Stroke before joining

RESEARCH ON VD

(Continued from Page 2)

the significance of antigenic variations among CMV strains, and the role of antibody in the infections.

In addition, the scientists hope to determine whether any antigenic similarities exist between CMV and herpes simplex type 2, another venereally transmitted virus.

In their studies of sexually transmitted chlamydial infections, the Harvard group will test the usefulness of guinea pig inclusion conjunctivitis (gp-ic)—a model for infections in man.

Dr. Nichols and his associates will study how chlamydia are transmitted in the guinea pig, the animal's immune response to this infectious agent, and the effects of vaccination on the course of the disease.

The final project in the Harvard program will compare the epidemiologic importance of 10 infectious microorganisms in sexually transmitted diseases.

The agents which will be pursued include *N. gonorrhoeae*, herpes simplex virus, CMV, chlamydia, *Trichomonas vaginalis*, Group B streptococci, *Corynebacterium vaginale*, *Mycoplasma hominis*, T-strain mycoplasmas, and certain fungi.

Volunteers of both sexes will be studied in order to determine the importance of the different microorganisms in the genital tract and to relate sexual experience to their prevalence.

With the awarding of this grant and 8 new research grants at the end of fiscal year 1974, NIAID's current level of support for venereal disease research and training totals almost \$3 million.

the program.

Mr. Brand is interested in a position in contracts, grants, or general administration.

He worked as a microbiologist with the National Institute of Allergy and Infectious Diseases after completing 2 years at the George Washington University Medical School.

The NIH Management Intern Program was established in 1956 to develop men and women for responsible administrative jobs.

Individuals selected to participate receive a year of on-the-job training coupled with courses in management and public administration.

Internship Described

The internship consists of four 3-month assignments in general management in the research program area of an Institute or Division, and in such administrative areas as personnel, budget, management analysis, data processing, or contracts.

After successful completion of the program, MI graduates are eligible for permanent jobs at the GS 9 or 11 levels.

MR. DUCKER

(Continued from Page 1)

supply management, Mr. Ducker explained that an inspector general was reviewing the base when he noticed the band had no means of controlling supplies.

"I was sitting on my bunk in the barracks when a warrant officer came in asking for a volunteer to go to Fort Lee, Va., to take supply management courses," he said.

Started as Volunteer

"I said I would go," Mr. Ducker continued. "It was the first time I ever volunteered for anything. After 16 weeks of schooling, I returned to Ft. Belvoir as a supply sergeant for the band—now I have been at it for 24 years."

M. Frye Replaces O. Ducker, Heads Materiel Management

Melvin C. Frye, assistant director for Protection and Safety Management, DAS, has been named assistant director for Materiel Management replacing Otis Ducker.

With NIH since 1958, Mr. Frye has served as the Division's assistant director for Program Coordination, and has held several administrative posts in the Procurement Branch.

PHS Displays Prepared For Bicentennial Exhibit

A major new Smithsonian Bicentennial exhibit will include two Public Health Service segments which are being prepared by NIH.

The displays will include material on the development of a rubella (German measles) vaccine and on the extension of medical consultation to remote villages in Alaska through radio communication by satellite.

NIH is collecting materials to illustrate the steps from conception to widespread use of rubella vaccine which is credited with forestalling an expected rubella epidemic in the early 1970s.

Several Agencies Cooperate

The Food and Drug Administration and the Center for Disease Control, as well as the National Institute of Allergy and Infectious Diseases, are cooperating in this preparation.

The medical communications display will include materials and information provided by the National Library of Medicine's Lister Hill Biomedical Communications Center and the Indian Health Service.

The two segments will probably later become part of a permanent exhibit, according to Margaret Klaphor, a Smithsonian curator.

Studies Show Kidney Transplant Patients Usually Have Few Periodontal Problems

Kidney transplant patients have few periodontal problems because drugs which suppress their immune responses also suppress inflammation in their mouths.

This was the consensus of a workshop on the Immunology of Periodontal Disease at the Second International Congress of Immunology meeting last month at Brighton, England.

Dr. Stephan E. Mergenhagen, chief of the Laboratory of Microbiology and Immunology, National Institute of Dental Research, summarized the reports of the workshop in which 40 investigators participated.

Periodontal disease is a collective term for disorders of the tissues that support the teeth. Most tooth loss after age 35 is attributed to it.

The chronic inflammation associated with the disease is ascribed largely to immune reactions to bacterial products in the mouth.

Dr. Mergenhagen reviewed his laboratory's studies on circulating white blood cells taken from patients with well-established periodontal disease.

These cells are much more reactive than similar cells from healthy people or from patients whose immune systems are being depressed.

When activated cells are challenged in tissue culture by exposure to various products of particular oral bacteria, they enlarge and divide much more frequently than unactivated cells. These cells also produce biologically active lymphokines, substances which stimulate other cells to behave in specific ways.

Some of these lymphokine ef-

fects are: destruction of bone; production of an enzyme that destroys collagen, the chief protein in connective tissue, and the killing of cells with specific antigens on their surfaces.

Some bacterial products which are antigenic and activate white blood cells are the well-known endotoxins from the walls of gram-negative bacteria, and others are complex sugars (peptidoglycans) made by gram-positive *Actinomyces* organisms which are common in the mouths of patients with severe periodontal disease.

Still other unidentified antigens are soluble and occur in the bacterial film of plaque that forms on teeth.

Long-chain polysaccharides (dextrans and levans) from some bacteria will activate white cells derived from bone marrow, but not those derived from the thymus gland.

Observations Important

These observations are important because these polysaccharides can help distinguish which line of cells is involved in other human diseases.

The workshop recommended further research to learn whether normally defensive immune reactions can also increase the damage to periodontal tissues triggered by plaque antigens.

Dr. Mergenhagen served as co-chairman of the workshop with Dr. Thomas Lehner, a noted authority on oral immunology at Guy's Hospital, London.



Mergenhagen



Dr. Cardon is a member of the American Psychosomatic Society, Society for Psychophysiological Research, and the Society for Neuroscience.

DR. CARDON

(Continued from Page 1)

employment Opportunity officer during 1965-67, and NIH deputy EEO officer in 1962. Recently he completed a 2-year membership on the NIMH Research Task Force.

Dr. Cardon received his A.B. degree from Yale in 1942 and an M.D. from Columbia University in 1946.

Prior to joining NIH, he was a fellow in medicine at Cornell University Medical College for 2 years.

Later, Dr. Cardon became a clinical professor of medicine at Georgetown University, and a visiting scientist at the University of Zurich's Brain Research Institute.

He is the author of approximately 30 scientific papers relating to psychophysical research.

Dr. Blue Spruce Named Director of HEW Office Of Native Am. Programs

Dr. George Blue Spruce, Jr., has been named Director of the HEW Office of Native American Programs.

He will be responsible for the Department's program to assist Indians, Eskimos, Alaskan natives, and Aleuts in attaining self-sufficiency through a policy of self-determination.

ONAP Serves Many Areas

ONAP serves approximately 450,000 Native Americans on 154 reservations and in 52 off-reservation programs. These programs include such things as family planning, nutrition, training, economic development, and aid to tribal government.

Dr. Blue Spruce, the Nation's only full-blooded American Indian dentist, comes to his new post from the Health Resources Administration where he was liaison officer for Indian Concerns.

In 1970 he joined NIH where he held various positions, all primarily related to increasing the enrollment of American Indians and other minorities in the health professions.



Sitting in the interview area of the OD Audiovisual Branch's new recording studio, Norman Brown, deputy chief, records "Tips from NIH." Later, Mr. Brown edits the tapes which are sent to radio stations across the Nation as a public service. The studio, a 10-by-10-foot soundproof room, contains full-track and stereo tape recorders, microphones, speakers, an amplifier, and editing equipment. For information on studio availability, call Bowen Hosford, Ext. 65895.



NIH EEO Office Provides Redress for Discrimination

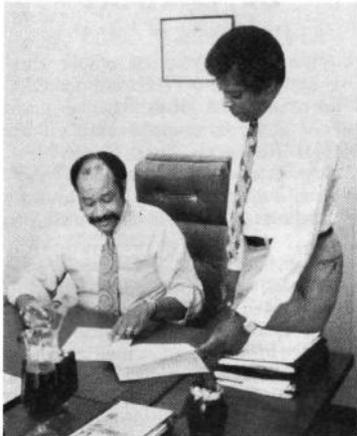
By Ed Driscoll

First of two articles

Do elevator doors close when you approach? Do green traffic signals turn yellow as you near the intersection? Does the telephone ring as you are about to leave the office? These forms of "discrimination" are humorous, but discrimination in any shape or form can be upsetting.

Specific areas of discrimination—based on race, color, religion, sex, or national origin—fall under the NIH Equal Employment Opportunity Office's jurisdiction which provides redress for complaints of alleged discrimination.

The Civil Rights Act of 1964, in response to a march on Washington a year earlier, provided a strong base for EEO and estab-



Mr. Jackson (l) and Otis Watts, deputy EEO officer, confer on a case's disposition before rendering a decision.

lished the EEO Commission. However, Federal employees were not covered under this law.

The EEO Act passed in 1972 included all areas of Government and set up the guidelines to insure equal opportunity in all business practices. The Act also provided the system under which EEO operates today.

The Civil Service Commission has formulated procedures to pro-

cess discrimination complaints—beginning at the counseling stage and ending in a U.S. District Court, if it is necessary to go that far.

Each B/I/D has one or more EEO counselors responsible for the first step of the complaint process. A person who feels discriminated against must consult an EEO counselor within 30 calendar days of the alleged discriminatory action.

At this level, complaints are handled informally, objectively, and in a fair and prompt manner. Some grievances do not involve race, color, religion, sex, or national origin. In these instances, the EEO counselor will refer the person to a more appropriate channel.

The counselor makes the necessary inquiries, advises the complainant, and tries to reach an informal agreement within 21 days. If this is accomplished, then the case goes no further.

If a satisfactory resolution cannot be reached, a formal complaint is filed with the EEO officer, Raymond Jackson.

During all stages, the complainant has the right to a legal representative of his or her choosing, and all persons involved in the inquiry are free from restraint or reprisal.

The second step is the formal investigation. A written complaint must be submitted to the EEO officer, or appropriate agency official, within 15 calendar days of the final interview with the counselor. An official receiving a complaint in-



Joyce Rivers, acting complaints manager, briefs John Gulka, a DHEW EEO investigator, at the beginning of a discrimination investigation.



Harvey J. Bullock, Jr., EEO counselor, takes notes as a complainant airs her problem.

forms the EEO officer.

An investigator from a jurisdiction other than that from which the complaint arose will be assigned to the case.

The EEO Act sets forth a 180-day period to complete the investigation and render a decision. If the case goes beyond 180 days, the complainant has the right to file a civil suit in a Federal District Court.

The EEO officer gives the investigator the authority to conduct an on-site investigation of all aspects of the complaint, to ask all employees involved to cooperate, and to require all parties who have knowledge of the matter to testify under oath or affirmation without a pledge of confidence.

An investigative file is compiled containing affidavits of the complainant, the alleged discriminating official, and witnesses, and other pertinent documents.

The investigator delivers the file to the agency which provides a copy to the complainant. After reviewing the document, the agency provides another opportunity to adjust the complaint on an informal basis.

If the complainant asks for a hearing, the agency requests the CSC to assign a Complaints Examiner from another Federal branch—which begins the third step. The agency also transmits the complaint and investigative files to the person assigned.

The CE reviews the file preparatory to scheduling a hearing. He will return the complaint if further investigation is required or will arrange for the appearance of necessary witnesses to supply the information at the hearing at which the examiner presides.

Attendance is limited to those who have a direct connection with the complaint. Witnesses who appear and testify may be cross-examined by the complainant, his representative, or agency officials.

Following the hearing, the CE forwards the complaint file (including a verbatim transcript), the CE's findings and analysis, and the

Safety Tips for NIH

Information on radiation safety practices, biohazard control, and industrial safety practices will be available at the safety exhibit in the main lobby of Bldg. 10 until Sept. 13 and in the Bldg. 31 lobby between Sept. 16 and 20.

The exhibit, jointly developed by the NIH Safety Office, the DRS Radiation Safety Office and Environmental Services Branch, and the NCI Office of Biohazards and Environmental Control, provides laboratory safety information to those involved in research.

If you have a safety problem, visit the exhibit and help yourself to the available literature.



MONGOLISM

(Continued from Page 1)

"turning this knowledge into prevention."

Dr. Henry L. Nadler, professor and chairman of pediatrics, Northwestern University School of Medicine, talked about the problems and benefits of amniocentesis.

Through this process, in which a small sample of fluid is obtained from the sac surrounding the fetus within the mother's uterus, scientists can diagnose a number of disorders, including mongolism.

All three speakers repeatedly emphasized the rights of each family to make decisions regarding the birth of their offspring.

A question-and-answer period moderated by Dr. Felix de la Cruz, NICHD Mental Retardation Program, followed the talks.

recommended decision on the case's merits, and any remedial action if necessary, to the agency head.

The CE also must notify the complainant when he submits his decision.

In a separate letter, the examiner notifies the EEO officer of the case's disposition.

Dr. Woodside Explains Campaign to Reduce Incidence of Mongolism

At the science writers' seminar, Dr. Gilbert Woodside explained NICHD's nationwide health education campaign to reduce by one-third the incidence of Down's Syndrome. Dr. Woodside, who is NICHD Acting Director, said:

... We ... roughed out a series of approaches that we might take to achieve this highly desirable social end.

These plans we lumped together under the word "campaign," although we had no banner, no money specifically earmarked to support it.

But so important was the aim we felt, that if we could enlist the support of the professional community and—through their science writers—the Nation's press, we might go far toward achieving our goal. And that is why—as Dr. Lamont-Havers observed—you and I are here today.

Wrote to Colleagues

Last fall I distributed a "Dear Colleague" letter to men and women in the medical and health-related fields who might be expected to lend their support to this effort.

I shared with them a new publication, designed for the physician or public health nurse, called *Antenatal Diagnosis and Down's Syndrome*...

The response to my letter was almost uniformly favorable.

We hope today ... to move into a new forum. We hope to enlist your assistance in bringing to the general public the awareness of our conviction that the incidence of Down's Syndrome can be reduced by one-third.

This ... is ... news of the most significant kind that you can possibly carry to potential parents of a mentally retarded child.

... Often if parents can accept the fact that their child is mentally retarded they can provide good,

loving homes as well as derive satisfaction from their child. There are, however, occasions when institutional care is in the best interests of both child and parent.

We know that lifetime custodial care for a person with mongolism can easily cost \$200,000. . . . despite this great economic burden to society, and despite the presence of mental retardation, many parents can love and care for a child with mongolism.

Many other parents, however, would want to prevent the birth of a retarded child if they could. That is the message you are asked to take to the parents of this Nation—that prevention may be possible.

Helps to Know 2 Things

It may be possible if parents know two things: Whether their risk of producing a child with mongolism is high, and how they can maximize their chances of bearing healthy children.

... We have designed a simply written pamphlet, *Facts About Mongolism for Women Over 35* . . . Our aim here today—and in our pamphlet—is to educate readers, all potential parents—in the course of action open to them.

We do not espouse any particular view except this one: that the public has every right to know the facts, and that the final use they make of them is their own responsibility.

But I believe that we as scientists and you as science writers have the inescapable responsibility of doing all in our power to help provide the public with the facts so that potential parents may properly evaluate the facts they face, the risks they take, in family planning.

Causes Still Unknown

I would like . . . to emphasize that much remains to be learned about genetic defects—for example, the ultimate cause or causes of many of the underlying processes leading to mongolism are still unknown.

The NICHD is one of the many organizations concerned with genetic diseases—indeed, the concern cuts across organizational lines here at the National Institutes of Health and leads into many of our laboratories . . .

... We must get the needed information to the targeted audiences—to the scientists and health professionals and to the general public.

We have had a measure of success educating the scientific community. Please help us reach the American people—help us reach all parents who may become unwitting victims of Down's Syndrome.

(For a copy of the pamphlet, *Facts About Mongolism for Women Over 35*, write to NICHD, NIH, Bethesda, Md. 20014.)



Dr. Woodside

GENE FUSION

(Continued from Page 1)

job.

Chemical and biologic evidence from animal specimens, he said, suggests that each antibody might be produced by a combination or fusion of several genes.

As has been known for many years, antibodies or immunoglobulins are composed of two light and two heavy chains of protein. Part of each chain is a constant (C) region, common to all antibodies.

Added to it are several variable (V) or custom-made regions, targeted specifically to an individual foreign agent.

The NICHD scientists have now demonstrated that a single gene or gene sequence directs the production of the C region and is used again and again in antibody production. Only the genetic instructions that direct the manufacture of the antibody's V regions are distinctive and require individual gene segments.

Drs. Leder, Tasuku Honjo, Seymour Packman, and David Swan, and Marian Nau and Barbara Norman described the findings in the newly published *Proceedings of the Third ICN-UCLA Symposium on Molecular Biology: the Immune System*.

Research Explained

In an article titled, *The Organization of Immunoglobulin Genes*, they reported that they purified RNA genetic material from specimens of a mouse tumor (MOPC-41) provided by Dr. Michael Potter of the National Cancer Institute.

Although DNA provides the master blueprint for making antibodies, this particular purified messenger-RNA was selected since it was known to be an intermediate step in the production of light chains of antibody against MOPC-41.

Previous studies at the University of Geneva, Switzerland, and in Dr. Leder's laboratory here at NIH had shown that adding a "primer" plus the enzyme reverse transcriptase to the light chain messenger-RNA would direct the manufacture of a very active, complementary DNA.

After making this DNA, the NICHD scientists used a hybridization technique to analyze it for C-region reiteration frequency, or the number of repetitive genetic instructions for making the C-region of the antibody's light chain.

Their analysis showed that there were only three C-regions in the entire genetic machinery of a reproductive cell of the mouse.

The economy and efficiency of such a biological-chemical arrangement was cited by Dr. Leder, who suggested that the arrangement in the mouse is undoubtedly mirrored in the human.

Dr. Leder added that the findings

'It Goes Like This . . .'



How does this poster relate to the NIH Equal Employment Opportunity program?

One morning, a chicken and a pig were strolling down a country lane when they chanced upon a bum lying in the road.

"That poor man," said the pig. "Let's do something for him," the chicken said.

They both thought for a while. Finally, the chicken's face lit up and with great excitement he cried, "Why don't we give him a good breakfast? That will make him feel better." The pig nodded in agreement.

"Yes," said the chicken, "I'll donate the eggs and you can contribute the bacon."

The pig eyed his friend sadly and said, "I agree with your concept of human kindness; but where you're concerned, you're talking about a donation—where I'm concerned, you're asking for a total commitment."

Proposed* Gene Model for Direction of IMMUNOGLOBULIN PRODUCTION

V₁ V₂ V₃ V₄ V_n C

*Evidence suggests that the C region is not repeated as in an earlier model: VCVCVCVC VCVCVCVCVCVCVC

Figure B

tend to support a hypothesis first proposed in 1965 by Drs. W.J. Dreyer and J.C. Bennett of the California Institute of Technology.

They suggest that some as yet undefined recombination mechanisms join the constant (C) and variable (V) region sequences of genes responsible for antibody production.

Prof. Hideo Nishimura Coming Here Aug. 29 As Fogarty Scholar



Professor Nishimura—a member of several prestigious scientific societies—is especially interested in a number of organizations concerned with research on congenital malformations.

Prof. Hideo Nishimura of the department of anatomy, faculty of medicine at Kyoto University in Japan, is coming to NIH on Aug. 29 as a Fogarty Scholar.

Professor Nishimura, who was last in the United States during 1971 as a visiting professor at New York University, has continued to collaborate with his colleagues at the Medical Center there.

Will Prepare Manuscript

Previously, in 1958, he was a fellow of the Rockefeller Foundation and, during 1962-63, he was a visiting scientist at the Jackson Laboratory in Bar Harbor, Maine.

Professor Nishimura received his medical degree from Kyoto Imperial University, and some 10 years later was awarded a doctorate in medical science from Kyoto University.

While here, he will prepare a manuscript on Early Prenatal Medicine—Present Status and Future Perspectives in addition to writing other scientific articles.

Professor and Mrs. Nishimura will reside in Stone House through December 1974.

NINDS's Research Advances Explained to Mass. Audience

Dr. Donald B. Tower, Director of the NINDS, recently discussed his Institute's research advances with Representative Silvio O. Conte of Massachusetts on Mr. Conte's radio and television programs, which are broadcast weekly to his home state.

As a result of hearing Dr. Tower's testimony before the House Labor-HEW appropriations subcommittee this spring, Mr. Conte wanted his constituents in western Massachusetts to hear first-hand about the work NINDS is supporting.

Bicentennial Plans for Health Screening, Other NIH Exhibits Now Shaping Up

Plans are shaping up for NIH participation in the HEW Bicentennial exhibition called BI-CENT-EX.

The exhibition will be located on the first floor of HEW's South Portal Building now under construction at Third Street and Independence Avenue, S.W., across the street from the North Building.

The BI-CENT-EX exhibition area—scheduled for completion next June, with the opening tentatively set for July 4, 1975—will probably attract many of the more than 40 million visitors expected to visit other tourist sites in the Mall area during the Bicentennial celebration.

Visitors will be able to actively participate in several exhibits covering program areas of the entire Department. These will include health screening, computers answering social security questions, and teen and children's centers.

The general nationwide Bicentennial theme is "Improving the Quality of Life." HEW Secretary Caspar W. Weinberger has chosen HEW's theme, "Freedom from Dependence," and has asked that, to the extent possible, the exhibits focus on the future.

Health Screening Planned

NIH has been assigned several booths and a health screening area in BI-CENT-EX. Plans call for a hypertension information education program and taking visitors' blood pressures.

Another area which may lend itself to a similar education and screening program may include

Charles Leasure Named Exec. Officer of NIAID

Charles E. Leasure, Jr., has been appointed executive officer of the National Institute of Allergy and Infectious Diseases.

Mr. Leasure, administrative officer of the Division of Cancer Treatment, National Cancer Institute, will join NIAID in September.

He received the B.A. degree from Georgetown University in 1960, and also studied law there for a year. He then served as an officer in the U.S. Navy for 4 years.

Mr. Leasure's entire professional career has been with NIH. In 1965, he came to the Office of Personnel Management as an employee management relations assistant.

The following year, he joined NCI as an administrative assistant, and held various positions there until his present appointment.

Mr. Leasure is succeeding Walter H. Magruder who is retiring.



Mr. Leasure

testing for visual defects and acuity.

Under present plans, one booth will contain information portraying NIH's general mission of research into the causes, cure, and prevention of disease, and a second booth will highlight the special effort against cancer.

NLM Has Booth

A third booth will cover activities conducted by the National Library of Medicine.

These include the Lister Hill National Center for Biomedical Communications, the National Medical Audiovisual Center, and NLM's experimental satellite activity for patient care and medical training in remote areas of Alaska.

BI-CENT-EX plans also call for a theater where HEW films will be catalogued and shown through 1976 as well as a permanent history room.

NIH to Participate

Projects for NIH "on campus" Bicentennial activity will be reported soon, according to Huly Bray, OD, NIH Bicentennial coordinator.

Assistant Secretary for Administration John Ottina, HEW, is official Bicentennial director for the Department. He has designated Anne Russell, editor of the *HEW Newsletter*, and Martin T. Walsh, director of Administration's Special Projects, as co-coordinators for all internal projects and events.



BICENTENNIAL project managers from HEW's Health and constituent agencies look over a scale model of the new South Portal Building with exhibits in place during a BI-CENT-EX meeting.



New Rules to Prevent Abuse of Special Groups In Research Proposed

Proposed rules to prevent abuses in research on special categories of human subjects have been published in the Aug. 23 *Federal Register*.

These rules would augment more general regulations issued on May 30, 1974, by HEW Secretary Caspar W. Weinberger providing procedural protection for all human subjects in HEW-supported research.

The new regulations provide special protection for pregnant women, fetuses, abortuses, prisoners, and the institutionalized mentally disabled.

Secretary Weinberger noted that these special measures were originally described in an NIH staff paper published in the *Federal Register* on Nov. 16, 1973.

Safeguards Supported

"While there was criticism of certain details in the draft," he said, "most of the comments supported the idea that we should provide additional safeguards for those groups who have limited or no ability to provide informed consent on their own."

Additional safeguards to be required include the establishment of special review groups to assure the reasonableness and validity of consent and to consider the ethical issues involved.

In calling for views on the proposed rules, Secretary Weinberger said that comments should be particularly useful to the National Commission for the Protection of Human Subjects in Biomedical and Behavioral Research.

Interested persons have 90 days to comment on the rules proposed.

Comments should be addressed to the Chief, Institutional Relations Branch, Division of Research Grants, NIH, 9000 Rockville Pike, Bethesda, Md. 20014.