Karl Habel Named Dyer Lecturer Here Apr. 27

Dr. Karl Habel, Chief of the Laboratory of Biology of Viruses, National Institute of Allergy and Infectious Diseases, will give the 15th annual Dyer Lecture at NIH on Wednesday, April 27. The lecture is scheduled for 8:15 p.m. in the Clinical Center auditorium.

An eminent virologist, Dr. Habel has directed his research in recent years to the role of viruses, particularly polyoma virus, in producing tumors. He will discuss the biochemical events in cells transformed by tumor viruses in his lecture, "Viral Oncogenesis or Subversion at the Cellular Level."

He will explain that "viruses cause tumors because of a dynamic molecular interaction with the single cell. Both the type of virus and the type of cell involved are important determinants of the outcome." (See DYER LECTURE, Page 8)

New Studies May Lead to Revision of Accepted Beliefs on Epidemic Typhus

By Martha Mader

Studies which may ultimately lead to revision of the belief that epidemic typhus is transmitted only by lice and harbored only by man between epidemics are being supported by the National Institute of Allergy and Infectious Diseases.

Two projects financed with Public Health Service funds in the United Arab Republic are being conducted in a cooperative search for evidence to confirm discoveries in Ethiopia in the 1960s of epidemic typhus rickettsiae in ticks and domestic animals, and of antibodies to the rickettsiae in animals brought to the Addis Ababa abattoir.

Scientists Visit NIH

Two of the scientists engaged in the current studies visited NIH recently. Dr. Richard A. Ormsbee of the NIAID Rocky Mountain Laboratory at Hamilton, Mont., is Project Officer in residence at Cairo, U.A.R., for one study being made in cooperation with the Naval Medical Research Unit No. 3 (NAMRU-3). He was in Washington to attend a meeting at Walter Reed Army Institute of Research of the Armed Forces Epidemiological Board Commission on Rickettsial Diseases, of which he is a member.

Also here to present a paper on his findings to the commission was Dr. Imam E. Z. Imam, Director of the Virus Research Center, Serum and Vaccine Institute of the U.A.R., who is chief investigator of the

Dr. Shannon Heads List of 20 at NIH Receiving DHEW Honor Awards Apr. 11

Fourteen of the 20 NIH staff members honored at the DHEW Honor Awards Ceremony April 11 are shown with Surg. Gen. William H. Stewart. From left: Dr. Harold Stewart, Chief, Laboratory of Pathology, NCI; Dr. James A. Shannon, Director, NIH; Dr. Eli A. Rubinstein, Assoc. Director for Extramural Programs, NIMH; Dr. Robert A. Cohen, Director of Clinical Investigations, NIMH; Dr. Nathanial I. Berlin, Clinical Director, NCI; Dr. Robert J. Huebner, Chief, Laboratory of Infectious Diseases, NIAID; Dr. Leon Jacobs (retired), formerly Acting Director, Intramural Research, NIAID; Dr. Karl A. Picoz, Chief, Protein Chemistry Section, NIDR; Dr. Stewart; George A. Brandner, Supervisory Contract Administrator, NCI; Dr. Carl Habel, Chief, Laboratory of Viruses, NIAID; Karl D. Yardy, formerly Chief, Legislative Reference & Liaison Branch, OD; Dr. G. Robert Cooney, Chief, Laboratory of Parasitic Chemotherapy, NIAID; Howard E. Kettle, Assist. Exec. Officer, NIH; and Dr. Gerald D. La Vock, Mental Retardation Program Director, NICHD.—Photo by Jerry Hecht.

Dr. James A. Shannon, Director of NIH, and 19 NIH staff members were among Public Health Service personnel honored at the 15th Annual DHEW Honor Awards Ceremony April 11. The presentations were made by John W. Gardner, Secretary of Health, Education, and Welfare, in the Departmental auditorium.

In addition to Dr. Shannon, the Distinguished Service Medal was awarded to Dr. G. Robert Cooney, Chief, Laboratory of Parasitic Chemotherapy, National Institute of Allergy and Infectious Diseases; Dr. Karl Habel, Chief, Laboratory of Biology of Viruses, NIAID; Dr. Robert J. Huebner, Chief, Laboratory of Infectious Diseases, NIAID; and Dr. Leon Jacobs, Acting Director of Intramural Research, NIAID (since retired).

Dr. Shannon received his award "for his notable personal accomplishments as a scientific investigator, teacher and administrator; and for his vision and leadership." (See TYPHUS, Page 4)

OIR Names 3 to New Positions in Nutrition Section

Dr. Heinz Specht, Chief of the Office of International Research, recently announced three appointments to OIR.

They are Drs. Gerald F. Combs, Jacques M. May and John I. McKigney.

Dr. Combs was named Assistant Head of the Nutrition Section. Dr. May is serving as Medical Officer and Scientific Adviser on Nutrition to the Section and Dr. McKigney is Nutrition Adviser to Dr. Arnold E. Schaefer, Head of the Nutrition Section.

Experience Noted

An eminent researcher in the field of poultry science, Dr. Combs has also had extensive experience in human nutrition programs and surveys. Since 1948 he has taught and engaged in nutrition research at the University of Maryland, from which he is presently on leave of absence.

As a consultant to the Nutrition Section (formerly the Interdepartmental Committee on Nutrition for National Defense), Dr. Combs made a number of trips to Latin America to assess nutrition programs, and also served on ICNND's

CC Attracts Volunteers From Around the World

The international flavor of the NIH Clinical Center is noticeable in recent admissions of normal volunteers.

Four such volunteers admitted during the past 6 weeks came from four countries. They are Timothy Hindley, England; Isaac Klassen, Canada; Vyvete Neal, France, and Reginald Paulus, Indonesia.

A fifth normal volunteer, Rudolph Loweyball, who now calls Houston, Tex., home, was born in the Netherlands of Dutch parents who now live in India.
List of Latest Arrivals
Of Visiting Scientists

3/14—Dr. Tatsuhisa Yamashita, Japan, Section on Cellular Physiology. Sponsor: Dr. W. Kielley, NHI, Bldg. 3, Rm. 4.

3/28—Dr. David Rutterford, Great Britain, Laboratory of Chemistry. Sponsor: Dr. N. K. Richtmyer, NIAMD, Bldg. 4, Rm. 214.

4/1—Dr. Jorgen Fax, Sweden, Laboratory of Neurobiology. Sponsor: Dr. Ichiji Tasaki, NIH, Bldg. 10, Rm. B2A25.

PHS Commissioned Officers’ Club, Now 6 Years Old, Is Seeking New Members

Social activities are among the purposes of the PHS Commissioned Officers’ Club. Celebrating St. Patrick’s Day in appropriate garb are, from left: Dr. Thomas E. O’Brien of DRG, Robert Johnston of the PHS Office of Personnel, Dr. William O. Engler and Dr. James E. Hamner, both of the NIDR.

The PHS Commissioned Officers’ Club, a private organization designed to meet the leisure-time needs of commissioned officers and other PHS employees, is currently conducting a membership drive.

Now 6 years old, the club has headquarters near NIH at 9109 Old Georgetown Road. It was formed to provide recreational, social, athletic, welfare, dining, housing, and socializing facilities and services for its members and their families.

The club’s varied program is largely family-centered, with special activities such as socials and bridge parties for wives, a teenage club and seasonal parties for the entire family. Special dinners or other events are held once a month.

“Any Commissioned Officer of the Public Health Service is eligible for membership, together with such persons (Civil Service) as may be deemed by the Board of Directors to be eligible,” according to the club by-laws.

Anyone interested in joining the club is invited to write to Ruth A. Shvedoff, Membership Committee Chairman, Bldg. 7, Rm. 23, here at NIH.

PAYROLL NOTES

Financial Management Branch calls attention to the following:

Federal Tax Withholding

The Tax Adjustement Act of 1966 increases the amount of Federal income tax withholding from salaries effective with checks issued after May 1. This is not a tax increase but a change in the withholding rate which will cause total annual withholdings to more nearly equal tax liability on salary received.

Civilian employees received special notices concerning this change with their April 5 paychecks. Employees who should carefully review the information provided and take appropriate action where indicated. Commissioned officers will not be affected by the change until May 30 paychecks. They will receive a separate notice advising them of action to be taken prior to that time.

State Tax Withholding

Employees are responsible for initiating action to authorize or change State tax withholdings. If you move to another State or D.C., don’t forget to submit a new State tax withholding certificate to change your pay record. See your timekeeper for the necessary forms.

Timekeepers

Your timekeeper is the person to see on any matters concerning payroll, including retirement benefits (Federal or State Tax Exemption Certificates and Notifications of Savings Bonds Actions, etc.) affecting payroll through, and discuss any problems with, the timekeeper. Failure to follow this channel of communication can cause payroll problems.

Advance Timepieces 1 Hour

Next Sunday (April 24) at 2 a.m. most of the Nation, including the Washington Metropolitan Area, will go on Daylight Saving Time. All employees are reminded to set their clocks ahead one hour to compensate for the time change.

NIH personnel working the tour of duty extending from 12 midnight to 8 a.m. will work one hour less that day as a result of the change and should be charged one hour’s annual leave. With the return of Eastern Standard Time in the fall, employees working this tour will be compensated for one hour’s overtime.

The net result is that these employees will be ahead one-half hour’s pay.
Dr. Fred Stone, NIGMS Director, Wins HEW Award

Dr. Frederick L. Stone, Director of the National Institute of General Medical Sciences, has been awarded the Secretary's Special Citation for outstanding administrative accomplishment.

In presenting the award, Wilbur J. Cohen, Under Secretary of the Department of Health, Education, and Welfare, commented Dr. Stone for the "dedication, unswerving purpose, and consummate executive skill" demonstrated when he directed concurrently for 11 months the Division of Research Facilities and Resources and the National Institute of General Medical Sciences.

In 1964, two years after launching the Division, Dr. Stone was appointed Director of the Institute, rather than risk any possibility of the programs' losing ground at that critical period in the Division's development, Mr. Cohen said, Dr. Stone was asked and agreed to continue to administer the Division until his replacement as chief could be found.

Domains Heavv

Mr. Cohen called attention to the demands of the dual assignment, pointing out the sizes of the two organizations involved.

"Each organization has a staff of more than 130 persons; the combined programs require four separate budgets totaling more than $265 million," he said. "To prevent and defer budget requests for both the Institute and the Division's progress, Dr. Stone made eight presentations to the Senate and House Appropriations Committees."

Guests at the presentation ceremony were members of the Secretary's staff, Surg. Gen. William H. Stewart; members of his staff, and staff members of the Institute and the Division.

DRS Requests PHS Air Pollution Study To Insure Clean, Healthful Air at NIH

By Tony Anastasi

To maintain a healthful environment for Clinical Center patients and NIH employees, the Division of Research Services is planning to insure that the air breathed here is as clean as possible.

In accordance with this plan, the Environmental Services Branch of DRS recently requested a meteorological study of air pollution here by the PHS Division of Air Pollution.

According to Edwin Lamphere, Chief of ESB, "Air pollution authorities consider NIH operations among the most hazardous for current standards and say that the power plant is very well run."

NIH actions to maintain a clear atmosphere are also in accordance with the Clean Air Act, amended by Congress in 1963 to include a section on "Cooperation by Federal Agencies To Control Air Pollution From Federal Facilities."

\textit{Smoke' Is Vapor}

The "smoke" seen around the NIH reservation comes from the power plant (Bldg. 11), which is the central source for NIH heating and cooling operations.

Much of what appears to be smoke from the incinerator is actually vapor, formed when the saturated flue gas enters the atmosphere after leaving the "water spray type" flue gas cleaners.

In Building 11, there are three steam boilers and one central incinerator.

NIH has been dealing with clean air problems now for more than a decade. Initial problems arose from the unsatisfactory incineration units in the individual laboratory buildings (2, 3, 4 and 6) and the discharge of sulphur dioxide (SO\textsubscript{2}) from the power plant. This problem has now been lessened by transfer of all incineration to the main incinerator.

\textit{Smoke Stacks a Problem}

DRS is concerned about the relatively low smoke stacks on top of the Power Plant Building. Under certain wind conditions, these low stacks permit a downward flow of plumes of smoke or vapor which frequently are annoying.

The basis of air pollution concern is the fuel oil used in the three main steam boilers in the power plant. This fuel oil contains sulphur which changes to sulphur dioxide when burned and accounts for the sometimes annoying sulphur smell passersby notice near the power plant.

Between 1954 and 1965 the Secretary's Special Citation was awarded to one of three NIH staff members: Dr. Robert A. Aldrich, National Institute of Child Health and Human Development; Gerald Sparer, now with the Federal Drug Administration; and Dr. Harold Dorn, National Heart Institute.

Russell Brown, assistant watch supervisor, DRS, Plant Engineering Branch, makes a chart for proper operation of the combustion control board for one of the three steam boilers in the Power Plant. The instrument records relative smoke density.—Photos by Jerry Hecht.

SO\textsubscript{2} emitted into the atmosphere, but both the initial capital outlays and annual operation expenses would be relatively costly.

Meanwhile, the ESB is continuing to monitor the air on NIH grounds with the objective of operating a model Federal facility insofar as air pollution is concerned. Air is sampled periodically at various locations on the reservation.

The air-samplers used have a suction device which draws air through a sampling liquid. A series of 10-minute samples are taken and then returned to the laboratory for chemical analysis.

Fuel Conversion Studied

While the study of converting fuels is underway, certain steps are being taken to further reduce the frequency and intensity of smoke. The oil burners on all boilers are currently being modified to improve combustion. The new burners use steam to improve atomization of the oil pumped into the combustion chambers.

The present incinerator is being operated to full capacity and major repairs and improvements are planned to increase capacity and improve flue gas cleaning, so that the incinerators will meet NIH needs for three to four more years.

Preliminary studies indicate the need for significant expansion of

Murray Diamond Wins Meritorious Service Medal

Assistant Surg. Gen. Murray A. Diamond was awarded the Meritorious Service Medal of the U.S. Public Health Service on April 7. Presented by Surg. Gen. William H. Stewart, the citation read:

"In recognition of his dynamic and far-sighted leadership in organizing Public Health Service personnel systems to provide efficient and responsive personnel services to operating programs; in establishing career development programs for effective personnel utilization and assignment of personnel and in recognition of his personal integrity and loyalty which reflect the highest standards of public service in his performance of duties."

Duties Listed

Under the Surgeon General, Dr. Diamond is Chief of Personnel of the Public Health Service. His duties include:

1. Developing and administering overall personnel policies and programs of the Public Health Service;
2. Serving as consultant with the Civil Service Commission and other federal agencies on personnel matters;
3. Testifying before Congressional committees on personnel legislation; and
4. Handling other personnel matters of the Service.

NCI Symposia Papers Updated and Published

The National Advisory Cancer Council is sponsoring publication of Primary Hepatosiasis, Carcinoma of the Alimentary Tract, and Viruses Inducing Cancer.

The new publications contain updated and revised papers presented in abbreviated form at three workshops held by the Council's Carcinogenesis and Prevention Subcommittees at the National Cancer Institute in November 1963, June 1964, and July 1965.

More than 30 cancer authorities participated in each of the workshops, which were called to assess current knowledge and stimulate further investigation in selected areas.

Copies are available upon request from Miss Pauline Stephenson, Executive Secretary of the Carcinogenesis and Prevention Subcommittees, Bldg. 21, Rm. 10A35.
Approval Given First Union Agreement
Covering DRS’s Eligible W-B Employees

The first Employee-Management Cooperation Negotiated Agreement between NIH and an employee organization—the Washington Area Metals Trades Council, AFL-CIO—was signed and approved by the U.S. Department of Health, Education, and Welfare recently.

It covers working conditions of all eligible non-supervisory wage-earning employees of the Grounds Maintenance and Landscaping Section, Plant Engineering Branch, Division of Research Services.

Recognition Exclusive

The Council has exclusive recognition for that Section and, therefore, has the right, under the Federal Employee-Management Cooperation Program, to negotiate an agreement on behalf of Federal employees in the unit.

Chief negotiator of the agreement for NIH was Ross Holliday, Chief of the Plant Engineering Branch. Others were Charles Hayes, Employee Relations Officer, Personnel Management Branch, OI, and Milford D. Myers, Chief of the Grounds Maintenance and Landscaping Section.

Negotiators Named

Washington Area Metal Trades Council’s negotiators were chief negotiators George Lima (International Representative), Sylvan Sawed (local representative), and Leon Gardner, an NIH employee. Other member negotiators were Sype Painter and John Fitzgerald, both NIH employees.

The agreement was signed for NIH by Dr. James A. Shannon, Director, and Messrs. Holliday, Hayes, and Myers.

Signing for the Council were Raymond Searles, President; William Wiggins, President, Local 960, International Hod Carriers, Building and Common Laborers Union, and Messrs. Gardner and Painter.

DHEW Approves

DHEW approval was given on March 15, and the agreement was signed by James C. O’Brien, DHEW Director of Personnel.

The recent agreement covers such items as rights of employer, rights of employee, hours of work, overtime, holidays, various types of leave, promotions, training, grievance procedures, safety and others.

The agreement emphasizes the right of employees to join or not to join a union, as they desire, without encouragement or interference from management. It also reserves the right of employees to bring matters of personal concern to the attention of appropriate officials.

This agreement went into effect March 15, 1966, and will terminate two years from that date.

261 Units of Blood Donated

In March; 10 in Gallon Club

The Clinical Center Blood Bank reports that 261 units of blood were received from NIH donors in March. During the same period CC patients received 2,117 units of blood.

Ten NIH staff members joined the “gallon-donor club.” They are J. Sherman Mason Jr., NIAMD; Franklyn D. Gray, CC; Glenn R. Maynard, DBR; Mitchell S. Hatton, OD; Robert J. Blackburn Jr., DBS; Joel R. Heddleini, NIMH; Alexander R. Orban, DBS; Harold Landis, NIMH; Anthony R. Gray, DCRT, and Leonard B. May, OD.

TYPHUS

(Continued from Page 1)

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TYPHUS

(Continued from Page 1)

companion study on typhus.

Dr. Imam, a recognized expert on rickettsial diseases in the U.A.R., has concentrated on typhus investigations in domestic animals. These studies have reinforced the Egyptian findings, which were the first solid suggestion that epidemic typhus might have an animal reservoir. Antibodies to typhus have been demonstrated in camels, donkeys, sheep, goats and pigs.

Dr. Ormsbee and the NAMRU-3 scientists have worked with wild animals, chiefly rodents and foxes, but to date they have reported no success in isolating strains of rickettsiae in the animals or in ticks.

In Egypt, Dr. Ormsbee explained, wild animals live in proximity to man because of the limited amount of inhabitable land.

“It is important to learn whether animals do play a role in epidemic typhus,” Dr. Ormsbee added, “because it could direct our attention to a new area in control programs.”

Epidemic typhus, known primarily as a disease of war and famine, is an acute fever caused by bacteria-like microorganisms—rickettsiae—and transmitted by the human louse.

Diseased, lice-infested populations have been thought to be the only reservoir of the disease, which has been largely brought under control through use of insecticides and an effective vaccine.

Disease Declines

The last epidemic in Egypt occurred in 1942-43, with 16,000 cases and 10,000 deaths. The disease has now declined to negligible proportions in that country. “But,” Dr. Imam points out, “the important thing is that we have no way of knowing whether or when typhus may become a problem again.”

Dr. Ormsbee, whose work with the NAMRU-3 project will end this summer, spent some time at the Rocky Mountain Laboratory before returning to Cairo.

Dr. Imam also returned to the U.A.R. late in March after a 2-week tour of medical centers, including the University of Pittsburgh and the University of Maryland Schools of Medicine, Harvard University, the Communicable Disease Center at Atlanta, and the Rocky Mountain Laboratory.

CDC in Atlanta to Hold Lab Refresher Courses

The Laboratory Branch of the Communicable Disease Center, U.S. Public Health Service, Atlanta, Ga., is presenting a series of laboratory refresher courses in special subdivisions of microbiology from August 1, 1966 through June 30, 1967.

The 28 courses vary in length from 3 days to 4 weeks, depending upon the subject matter.

Information and application forms may be obtained by writing to the Training Office, Laboratory Branch, Communicable Disease Center, Atlanta, Ga. 30333.

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Teens Read Stories, Play Variety of Roles in Helping Patients Here

Once a week, a group of service-minded teenagers play big-brother-and-sister for children who are patients at the NIH Clinical Center.

The group, members of the Walter Johnson High School Service Corps, come to the CC on Monday evenings to read bedtime stories.

Some of the students read to various age groups in the Patients’ Library, while others go to the rooms of patients who are unable to come to the library.

In addition to providing bedtime story reading, the Service Corps, part of the school’s student council, participates in several other volunteer projects. These include visits and activities at area nursing homes and schools for mentally retarded children.

Mrs. Mildred Casgrain, in charge of the Patients’ Library, reports that the bedtime story hour has been well received by many children who come back each week to hear their favorite stories. She has also observed that some youngsters usually fall asleep before the story is finished, just as they would do at home.
Training Program Increases Efficiency, Saves Time of CC Housekeeping Staff

John Summerrour, labor foreman in the Environmental Sanitation Control Department, right, gives instruction in the use and maintenance of hand tools to supervisors who, in turn, will teach other employees. The supervisors, from left, are Lillian Wells, Charlie Chandler, Fred Whitaker and Mrs. Ruie Turner.

By Bowen Hosford

Last year employees in the NIH Clinical Center's Department of Environmental Sanitation spent 63,000 hours—equal to 25 man-years—in classroom and on-the-job training. And they saved time doing it. Howard W. Spence, Chief of the Department, points out that the training program leads to such efficiency that workers can clean many areas more frequently. Besides a $1,000 divided as a sustained superior work performance award (See NIH Record, Jan. 12).

Each supervisor is, at first, a trainee and, afterwards, a teacher. Before he is designated a teacher, he learns to maintain his equipment like a Marine learns to maintain his rifle.

Necessary as Worker

Then one of the officials of the department poses as a new worker who needs to be taught by the supervisor.

Training is a joint endeavor of the Development and Training Section, and the Operations Section, headed by Mrs. Inge Sander.

The training must go on continually because of new equipment, new procedures or modifications of old ones.

For example, sanitarians made bacteriological tests that showed that drinking fountain heads had crevices in which bacteria could successfully hide. This led to the installation of a new type of fountain head throughout the CC and mechanical floor scrubbers.

John Summerrour, labor foreman in the Environmental Sanitation Control Department (right), gives instruction in the use and maintenance of hand tools to supervisors who, in turn, will teach other employees. The supervisors, from left, are Lillian Wells, Charlie Chandler, Fred Whitaker and Mrs. Ruie Turner. —Photos by Ralph Fernandez.

Alexander G. Davis, another labor foreman (right), is being tested on disassembly and maintenance of a floor scrubber. Gordon Gamble (center) conducts the test, while John A. Stanmore is the observer.

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HONOR AWARDS

(Continued from Page 1)

in fostering an unprecedented pro-
gram of excellence for the de-
velopment of new knowledge aimed
at improving the health of man-
kind.

Dr. Costrey was honored “for his
exceptional ability in the de-
sign, organization, direction and
counsel of broad medical research
programs, particularly in malaria
chemotherapy.”

Dr. Habel’s award was “in rec-
ognition of the excellence of his
achievements and his eminence in
the field of viral research through-
out his career and for the develop-
ment of a vaccine that has resulted in
an incalculable saving in both hu-
man resources and economic ex-
pedience.”

Dr. Jacobs won recognition “for
his exceptional ability in biomed-
ical research administration, in sci-
entific writing and editing, and in
basic research on parasitic dis-
cases, particularly toxoplasmosis. Dr.
Jacobs’ studies on toxoplasmosis
have reflected great credit on him-
self and the Service and have
marked him as a world authority
on that disease.”

Receiving the Department’s
highest civilian honor—the Dis-
tinguished Service Award—were
Dr. Harold L. Stewart, Chief, Lab-
oratory of Pathology, National
Cancer Institute, and Chief, Pat-
htaglogic Anatomy Branch, Clinical
Center; Dr. Sidney Udenfriend,
Chief, Laboratory of Clinical Bio-
chemistry, National Heart Insti-
tute; and Dr. J. Franklin Yager,
Associate Director, Extramu-
ral Programs, NIH (since re-
tired).

Dr. Stewart was honored “for his
outstanding contributions over
many years to the scientific and
administrative progress of the Na-
tional Cancer Institute and his in-
spirational leadership of Interna-
tional cancer research.”

Others Honored

Dr. Udenfriend’s award was
“for fundamental contributions to
the biochemistry of neurotrans-
mitter substances and a uniquely
successful collaboration with clini-
cal groups in advancing the defini-
tion and treatment of diseases.”

Dr. Yeager received his citation
“for his notable contributions to
the program of Federally-support-
ed research and training in the
causes, prevention, diagnosis and
treatment of diseases of the heart
and circulation.”

NIH researchers and adminis-
trators who received the DHEW
Superior Service Award were Dr.
Nathaniel I. Berlin, Clinical Direc-
tor, NCI; Dr. Roscoe O. Brady Jr.,
Head, Section on Lipid Chemistry,
Laboratory of Neurochemistry,
National Institute of Neurological
Diseases and Blindness; George A.
Brander, Supervisory Contract
Administrator, NCI; Dr. Robert
A. Cohen, Director of Clinical In-
vestigations, Intramural Research,
National Institute of Mental
Health; Dr. Eugene A. Confrey,
Chief, Division of Research
Grants; Howard E. Rettel, Asso-
ciate Executive Officer, Office of
the Director, NIH.

Further Awards

Also Dr. Paul Kotin, Scientific
Director for Etiology, NCI; Dr.
Gerald D. La Veck, Mental Retar-
dation Program Director, National
Institute of Child Health and Hu-
man Development; Dr. Maurice
Landy, Chief, Laboratory of Im-
munology, NIAID; Dr. Karl Anton
Pies, Chief, Protein Chemistry
Section, Laboratory of Biochem-
istry, National Institute of Dental
Research; Dr. Eli A. Ruhinstein,
Associate Director for Extramural
Programs, NIMH; and Karl D.
Yord, formerly Chief, Legislative
Reference and Liaison Branch, Of-
fice of the Director, NIH.

The awards ceremony were
preceded by a reception given by Sur-
geon General, William H. Stewart.
In addition to recipients of awards
this was attended by NIH Institute
Directors and Richard L. Seggel,
Executive Officer, Office of the Di-
rector.

Secretary Gardner’s reception
for all DHEW awardees followed
the ceremony.

Brain Injury Restitution
Discussed at Conference

A conference on “Mechanisms in
Restitution of Function After
Brain Damage,” held in San Fran-
sisco recently, was sponsored by
the National Institute of Neuro-
logical Diseases and Blindness.

Approximately 40 scientists rep-
resenting the basic disciplines of
neuroanatomy, neurochemistry,
neurophysiology, and neuro-
physiology, and the clinical disci-
plines of neurology, neurosurgery,
and psychiatry participated.
NIDR Researchers Report on Studies At Miami Meeting

About 150 papers were presented by representatives of organizations supported by the National Institute of Dental Research at the combined spring meeting of the International Association of Dental Research and its North American Division, March 24-27, in Miami, Fla.

The following summaries represent a few of the 18 papers presented by NIDR staff scientists.

Dr. Harold R. Stanley and Herbert Sverdlow reported on their collaborative study to find an appropriate filling material which will permanently bond to the teeth without producing harmful secondary effects.

Problems Cited

Problems of toxicity may occur when certain experimental epoxide resins contact newly cut tooth structure. Some materials possess the desired clinical properties, but unfortunately produce irritation and irreversible lesions of the tooth pulp when used without adequate protective liners.

Until the ideal restorative material is found, the investigators recommend that an effective cavity liner should be applied to cavities preparations before the insertion of the epoxide resins presently available to prevent the penetration of irritating substances into the pulp.

Experimental evidence supports the possibility that amonia, a waste product of bacteria, may contribute to the development of periodontal disease, Dr. Anthony R. Rizzo reported at the meeting. Periodontal disease is the greatest cause of loss of teeth after age 35.

Bacteria Suspected

Dr. Rizzo explained that bacteria have been suspect for a long time as a causative factor in periodontal disease, but the exact mechanisms have not been known. Studies were carried out on the rabbit corneas, a tissue which has a number of unique experimental advantages. Similar investigations on the rabbit gum tissue are currently underway.

The researchers irrigated corneal tissues of anesthetized rabbits with neutral solutions containing ammonia. These non-alkaline ammonia solutions caused the normally clear corneas to become cloudy in appearance. High concentrations produced opacity in a short test period; low concentrations required longer exposure periods. Control solutions not containing ammonia caused no tissue damage, even when the tissues were exposed for long periods.

Microscopic studies of corneal and periodontal tissues exposed to the ammonia solutions revealed cell destruction and loss of carbohydrate material, Dr. Rizzo said.

Recent studies by Drs. E. J. Miller and G. G. Martinez throw new light on the structure of the organic portion of bone. Collagen, a protein, is the major organic component of bone and is found in almost all tissues. Its predominant function is to resist mechanical stresses and strains.

Findings Vary

Bone collagen is highly insoluble in the solutions normally used to extract collagen from other tissues. For this reason, it had been generally thought that bone collagen was different from collagen of other tissues.

Previous work carried out by NIDR investigators indicates that skin collagen undergoes a maturation process similar to the tanning of leather. During this maturation, crosslinks form, and the collagen becomes progressively less soluble.

In the current study, analyses indicate that bone collagen has a structure similar to other collagens but that it is usually more highly crosslinked. The investigators were able to extract the bone collagen by blocking the formation of crosslinks in laboratory animals through chemical treatment.

Conclusions Drawn

According to Drs. Miller and Martin, these findings indicate that the collagens found in various tissues are quite similar, but that the rate and extent of crosslinking vary. Mechanically, the maturation process is an important factor regulating the functioning of tissue collagens.

The first laboratory evidence that fluoride enhances the perfection of crystals in tooth enamel has been obtained by Dr. P. D. Fraizer. This finding suggests how fluoride reduces caries, since many scientists believe that more perfect crystals are less susceptible to dental decay.

April 24-30 is Designated NIH Spring Clean-Up Week

April 24-30 has been designated by the Safety Office of NIH as Spring Clean-Up Week. This will be an employee-action campaign to improve safety conditions here by the removal of trash, unneeded chemicals and gas cylinders, and unused equipment.

A time-table type of brochure will be distributed on an office-to-office basis. It will offer suggestions on what to look for and recommend actions in (1) discarding unneeded material and (2) proper storage of those things that are not discarded.

CC Blood Bank Guards Against Errors By Intricate System of Double Checks

The staff of the Clinical Center Blood Bank handles more than 20,000 transfusions a year, and has a remarkable safety record in transfusing blood that matches that of a patient. The Blood Bank achieved this record by identifying chances for human error and developing check-and-double-check methods.

If the wrong group or type of blood were transfused to a patient, antibodies in his blood would swarm to meet the invader. The antibodies would clump the red cells in the transfused blood, and these clumps would gather in the kidneys and elsewhere.

All blood banks guard against transfusing incompatible blood.

Mrs. Florentina Deperalta tests blood samples in the CC Blood Bank laboratory while Mrs. Kathleen Moss, laboratory supervisor, observes.—Photo by Thomas Joy.

Teeth from persons residing in six different communities with varying levels of fluoride in the drinking water were used in the study. It was found that, as the fluoride content of the enamel increases, the enamel crystals exhibit corresponding increases in perfection.

Fluoride Stressed

In addition, data obtained suggests that adults continue to incorporate fluoride in their enamel, past the period of tooth development. Tooth enamel from a group of adults 30 to 39 years of age, who had fluoride in their drinking water, exhibited considerably more fluoride than did enamel from a group less than 20 years of age having the same water supply. The X-ray diffraction findings indicate that crystal perfection increases in relation to the fluoride content, even in the older age group.

1930 Act Renames NIH

On May 26, 1930, the Randall Act reorganized the Hygienic Laboratory as the National Institute of Health, authorizing $750,000 for construction of two buildings for NIH and creating a system of fellowships.—NII Almanac.
Eleven Gray Ladies graduated following a 6-month course at the NIH Clinical Center. They are now the AEC professional staff in patient care one or more days a week. Pictured (1 to 3): Mrs. Patricia Morell, Mrs. Carol Pollok, Miss Carol Reid, Miss Margaret Jordan, Mrs. Dorothy Howard, Mrs. Pearl Mason and Mrs. Verla Rightmyer. Other graduates, not shown, are Mrs. Carol Poland, Miss Carol Reid, Miss Margaret Jordan, Mrs. Mary Berkey, Miss Lois Renter and Miss Catherine Clifford. The next CC Red Cross volunteer class starts in June. Candidates are asked to call the Montgomery County Red Cross Chapter, JU 8-2515. —Photo by Thomas Joy.

Breast Cancer’ to Be On WAMU Saturday

“Breast Cancer,” the 12th radio program of the NCI Research Report Series, is scheduled to be broadcast locally over WAMU-FM (88.5 m) Saturday, April 23, at 4:30 p.m.

Scientists will discuss epidemiological studies of this type of cancer — the major cause of cancer deaths in American women — and review research on the causes, detection and treatment of breast cancer by surgery, radiation and drugs.

Dr. Geo. Brecher, CC, Will Retire April 30, Goes to California U.

Dr. George Brecher, Deputy Chief of the Clinical Center’s Clinical Pathology Department and chief of that department’s Hematology Service, will retire from the Public Health Service on April 30. He has accepted a position as Professor and Chairman of the Division of Clinical Pathology and Laboratory Medicine at the University of California School of Medicine, San Francisco.

He came to NIH in 1947 in what is now the Laboratory of Experi-

mental Pathology of NIAMD. He joined the CC staff when the research hospital opened in 1953. Dr. Brecher was the first to show that it is feasible to transfuse separated blood platelets to animals to control bleeding after irradiation. Platelets are corpuscles that help in blood clotting.

This work led to worldwide use of such transfusions to control hemorrhage in humans.

It was also the first to demonstrate the feasibility of transfusions of granulocytes, a type of white blood cell. This has aided in treatment of leukemic and aplastic patients.

Investigations Lauded

Other pioneer work includes studies of irradiation injury to bone marrow cells and the lymphoid tissues, and research into the basic mechanism of marrow cell generation. Dr. Brecher has conducted unique investigations on erythropoietin, a hormone that stimulates production of red blood cells.

Dr. George Z. Williams, Chief of the CC Clinical Pathology Department, said, “Dr. Brecher’s insight into clinical and laboratory problems is equaled by his analytical intelligence. This stimulates his students and associates, contributes to our basic knowledge in laboratory medicine and human physiology and will benefit generations of patients.”

Dr. Habel is an editor of Virology, and a member of the Board of Governors of the American Academy of Microbiology, the Board of Managers of the Wistar Institute, the World Health Organization Expert Committee on Rabies, and the Board of Trustees and Advisory Committee of the Federated American Societies for Experimental Biology.

He is a graduate of the University of Pennsylvania, where he is an associate member of the Board of Trustees. He received his M.D. from Jefferson Medical College.