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Annual Dinner A Time For Pride



Left to right: Charles Fuhrman, Rollin B. Hotchkiss, James G. Hirsch, Salvatore Gueli, Margeris A. Jesaitis, Lillian R. Gregg, Nina C. Casciano, Reynard Biemiller, Merrill W. Chase, and John B. Nelson at anniversary and retirement dinner.

Professor John B. Nelson, celebrating 50 years with the University, and Professor Merrill W. Chase, who becomes emeritus this year after 43 years, were among those honored by friends and family at the anniversary and retirement dinner on April 8.

Sharing the spotlight with them were Professor Rollin B. Hotchkiss, marking four decades, and 25-year veterans Nina C. Casciano, stalwart of the Pharmacy, Dean James G. Hirsch, and Professor Margeris A. Jesaitis. Honored *in absentia* for their quarter-century of service were Laboratory Helper Cora J. Fields and Assistant for Research Irene S. Slizys.

The dinner was also the occasion to say a formal farewell to those retiring after 15 years or more: Lillian R. Gregg, who joined the Princeton lab 36 years ago, went on to become a research assistant to Herbert C. Gasser, and later took charge of histological section cutting; Charles Fuhrman of the Machine Shop and Salvatore Gueli, assistant foreman of the Cabinetmakers Shop, both 22 years with the University; and Reynard Biemiller, assistant director of The Rockefeller University Press and doyen of design

Trager Reports Malaria Research Advance

The first continuous cultivation in a test tube of the parasite responsible for human malaria—the first such cultivation of any species of malaria parasite—has been reported by Professor William Trager. The way is now open, according to Dr. Trager, for the development of a vaccine against the disease which claims 90 million victims a year in Africa alone resulting in a million deaths mostly of children.

The announcement was made by Dr. Trager on the occasion of the Theobald Smith Memorial Lecture, presented on May 13 in Caspary Auditorium. In discussing the significance of this achievement, Dr. Trager explained that research into many aspects of malaria is now free from

previous dependence on human infections or on the availability of owl monkeys, the only suitable laboratory hosts. Cultivation of *Plasmodium falciparum*, the human malaria parasite, can be achieved using normal human red blood cells in a readily available medium.

Working with Dr. Trager on this area of his parasitology research are Research Associate James B. Jensen and Assistant for Research Renate Klatt. A paper coauthored by Doctors Trager and Jensen detailing the work will be published at a later date.

The Theobald Smith Memorial Lecture is presented annually by the New York Society of Tropical Medicine. It is named for the distinguished bacteriologist who was the first director of the University's former Department of Animal and Plant Pathology in Princeton where Dr. Trager began his association with this institution in 1933.

*

for 16 years. Ruth Hechinger, retiring as assistant for research in Professor Neal E. Miller's lab, was unable to attend.

President Seitz officiated as presenter of gifts and certificates to the guests of honor.

The May issue of *The Journal of Protozoology* contains a festschrift in honor of Dr. Trager.

Cancer Institute Grant for Hanafusa

A five-year, \$734,225 grant in support of the viral oncology research of Professor Hidesaburo Hanafusa has been awarded by the National Cancer Institute. Dr. Hanafusa's work is concerned with cellular alteration induced by Rous sarcoma virus. (The virus is named after Peyton Rous, the Rockefeller researcher who in 1910 made the pioneering discovery that some animal cancers are caused by viruses.)

The basic objective of Dr. Hanafusa's laboratory is to elucidate the mechanism of the malignant transfor-

mation induced in animal cells by invading RNA tumor virus. His research includes a broad range of biological and biochemical studies on oncogenic (tumor-forming) viruses, on infected cells, and on the genetics of viruses.

Dr. Hanafusa joined the University in 1973. From 1966 until his present appointment, he was chief of the department of viral oncology of The Public Health Research Institute of the City of New York, Inc., and held a joint appointment as research associate professor at New York University.

This Sporting Life

As the days grow balmy, some on campus take to the tennis court, others join in late afternoon basketball behind Flexner Hall. There are ardent sailors and canoeists among the University's people, and a number of mountaineers. But for Graduate Fellow Gwyn Ballard, this is the season for a bike, the open road, and "the joy of solitude."

A native of the English Midlands, he has clocked over 15,000 miles in Europe, including 1,200 miles along the coast of Ireland, and shortly before coming to the University in 1973, crisscrossed Canada from Vancouver to St. John's, Newfoundland, covering 5,300 miles in 50 days. Last summer, he took on Alaska, across the Kenai Peninsula, through the Chugach and Alaska Mountains, and down the Alcan highway—3,200 miles, of which 1,200 were on dirt roads. On his back and in a saddlebag he carries a 40-pound "life-support system" for eating

and sleeping by the roadside for there are no luxury motels at the end of his hundred-mile days, and he never takes his eyes off his customized English Condor with Italian Campagnolo fittings.

This summer Gwyn will be concentrating on lab work, the photochemistry research he pursues as a member of Professor David Mauzerall's group, and there won't be much time for biking. But next year, with his degree in hand he hopes, he wants to cross the United States as a graduation present to himself.

STILL UNBEATEN

The invincible Rockefeller University Chess Club scored a resounding victory over the New York Yale Club on April 21, winning eight games to two before a gallery of home fans.

Dubos Shares \$150,000

Ecology Prize

Professor René J. Dubos was one of three recipients of the third annual Tyler Ecology Award, presented by Pepperdine University on April 8 in Los Angeles. Dr. Dubos, cited for his work in "humanizing ecology," shared the \$150,000 prize with Dr. Charles Elton of Oxford University and Dr. Abel Wolman of The Johns Hopkins University.

First Ultramicrotome Added to Exhibition

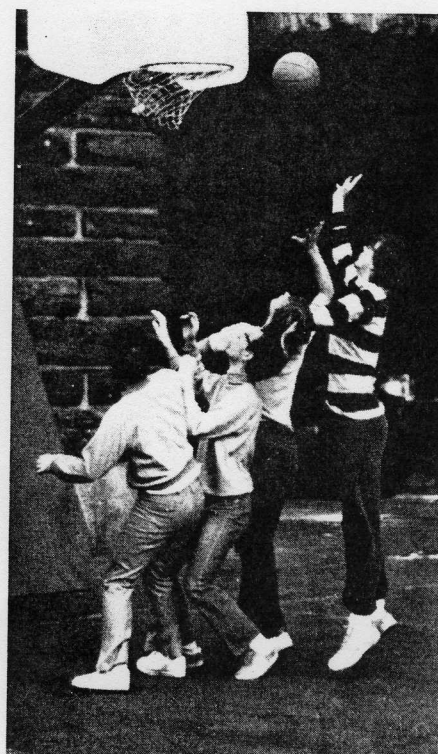
The original Porter-Blum ultramicrotome, an instrument that opened a new era in electron microscopy, has been added to the exhibition of historic scientific instruments currently on view in Caspary Gallery. It was designed at the University in 1951 by Dr. Keith Porter and Josef Blum, and built by Mr. Blum, who was head of the instrument shop from 1939 to 1954. In order to study tissues with an electron microscope, it was necessary to be able to cut extremely fine sections. The Porter-Blum ultramicrotome can cut tissue sections, imbedded in plastic, as thin as 50-100 millimicrons (5-10 thousandths of a millimeter) and, for the first time, made possible the cutting of ribbons of serial sections. (A model typical of later versions of the ultramicrotome, on loan from Dr. Porter, has also been added to the exhibition.)

FASEB Reports

Reports by Rockefeller scientists at the 60th Annual Meeting of the Federation of American Societies for Experimental Biology (FASEB), held April 11-16 in Anaheim, California, ranged in subject from immunology to pharmacology, obesity, biotransformation, nucleotides, macrophages, and cerebral cortex studies.

Among those whose papers were presented were: Vincent G. Allfrey, Alvito P. Alvares, Karl Anderson, Arthur P. Arnold, Hiroshi Asanuma, Celso Bianco, Zanvil A. Cohn, John Coligan, Allan H. Conney, Aline Eden, Blair Fraser, Mary Rita Greenwood, Jules Hirsch, Akira Inoue, Edward M. Johnson, Patricia R. Johnson, Attallah Kappas, Thomas J. Kindt, David H. Live, Robert J. Milner, Eugene Pantuck, Paul Schreiber, Yoshikazu Shinoda, John A. Sogn, Robert J. Winchester, and Peter Zarzecki.

Below: Gwyn Ballard at foot of Mt. Eisenhower in Canadian Rockies. Right: Richard Furie (back to camera), George Barany, Richard Mitchell, Kirk Manogue.



Happy (65th) Anniversary, Barney

In the early days of the Rockefeller Institute for Medical Research, neighborhood children played baseball on its grounds in the spring and in winter sledged down the hill above York Avenue where Caspary Hall stands now. One of those youngsters was Bernard Lupinek, later to become the Institute's first superintendent of buildings and grounds. Barney will turn 80 in July. Last month, he celebrated his 65th year as a member of the University's ranks.

At 7:30 A.M., on April 3, 1911, Barney reported for his first day of

founder had pledged a "huge sum" to the Institute. The conference took place in the office of Business Manager Edric Smith where Rockefeller had sat in Smith's chair. Immediately after, Smith returned to his office. As he sat down, the shaft of the chair snapped and the chair collapsed under him.

The construction of Flexner Hall and the new Power House, begun in 1914, was the event that "inspired" Barney to enroll in courses in the New York Trade School. With Flexner's encouragement, he went on to courses in architecture, physics, and electron-



work as office boy. From the beginning, he proved an able, if sometimes overzealous, employee. When, for example, Alexis Carrel was expecting an important letter, Barney raced with it, the moment it came, up to Carrel's operating room, took one inadvertent look at the operating table, and keeled over. Each day for the next month, Carrel, who was shortly to receive the Nobel Prize, examined the bump on the office boy's head.

Barney laughs now when he remembers another event which "could have turned into a calamity." John D. Rockefeller, Sr. came to the Institute one day to confer with Director Simon Flexner. Barney was given "the privilege of greeting Mr. Rockefeller at his car and escorting him to meet Dr. Flexner." Barney was disappointed not to receive one of the dimes Mr. Rockefeller was famous for dispensing, but his disappointment softened when he learned that during the meeting the

ics at Mechanic's Institute; building management at Columbia University; and corporation law at New York University.

Barney Lupinek has been a leader and innovator in the field of laboratory maintenance and construction. In the 1940s, a visitor from abroad, after viewing laboratories across the country, reported: "If I were to work in any of the institutions we visited, I would have no hesitation in selecting The Rockefeller Institute. Mr. Lupinek has spared no pain in his efforts to alter, adapt, and equip each laboratory unit to meet the wishes, and even the whims, of the user . . . to meet him was almost enough in itself to make our visit to America worthwhile, as he is a mine of information as regards the materials and equipment required in laboratories. . . ."

In 1959, the University celebrated its first convocation and the simultaneous dedication of its newest buildings

New Finding

Cell biologist Walther Stoeckenius who was a member of the University's faculty from 1959 to 1967, has reported that the purple pigment contained in the cell membrane of a marine bacterium can convert sunlight into chemical energy. This is the only system known, other than photosynthesis in green plants, in which cells use light energy to maintain life. Dr. Stoeckenius discovered the purple pigment—in the bacterium *Halobacterium halobium*—while at Rockefeller. He is currently at the Cardiovascular Research Institute of the University of California, San Francisco. Under his direction, a research team working in collaboration with NASA's Ames Research Center has built a simple model of the newly discovered system to store light energy in electrical form.

DOBZHANSKY MEMORIAL

A memorial Symposium on Evolution in honor of Theodosius Dobzhansky was held at Columbia University on April 9 and 10. A giant in genetics research and evolutionary theory, Dr. Dobzhansky was a member of the Columbia faculty for 20 years. He was appointed professor at Rockefeller in 1962. From 1971 until his death last December, he had been working at the University of California at Davis as an adjunct professor.

—Abby Aldrich Rockefeller Hall, Caspary Hall and Auditorium, the Graduate Students Residence, and South Lab. At the ceremonies, Trustee Barklie McKee Henry, chairman of the board's buildings and grounds committee, paid tribute to a "prime mover," Barney Lupinek, a sentiment echoed by President Detlev W. Bronk as he praised the man "with just one interest in his heart, and that has been the Institute to which he has given his whole life."

Barney retired as superintendent of buildings and grounds in 1967 but, at Dr. Bronk's insistence, remained with the University as a consultant, a position in which he still serves.

BENEFITS INFORMATION

Booklets containing information regarding benefit plans for both faculty and staff members are now available and may be obtained through the Personnel Office.

IN PRINT

Professors **Mahin D. Maines** and **Attallah Kappas**, Metabolism-Pharmacology, report in the April 2 issue of *Science* on recent experiments which show that the trace metal tin acts as a powerful enzyme-inducer in the kidney for accelerating heme breakdown and impairing heme-dependent cellular activity such as drug biotransformation and cell respiration and cytochrome-dependent energy generation. This newly recognized biological action of this trace metal may, they explain, have potential toxicological significance and warrants further investigation, especially since "the extent of human exposure to tin is most likely greater than previously recognized."

In an article, "On Animal Aggression: The Roles of Strangeness and Familiarity," published in the March issue of *American Psychologist*, Professor **Peter Marler** reviews recent research, with a wide variety of species, concerning such questions as dominance and territoriality and the situations and stimuli that provoke or inhibit aggression. In comparing the relative violence of animals and men, Dr. Marler offers evidence to indicate that animal violence has been generally underestimated.

William W. Lowrance, 1970 Rockefeller graduate, has written a book, *Of Acceptable Risk: Science and the Determination of Safety* (William Kaufmann, Inc., Los Altos, California). X-rays, lead, pharmaceuticals, toys, saccharin, IUDs, air pollutants, and noise are some of the problems with which it deals. "How do we determine how hazardous these things are?" asks Dr. Lowrance, who describes his purpose as an exploration of these problems and "the underlying concept of safety itself." The book is the result of two years' work, from 1973 to 1975, by Dr. Lowrance as a Sloan Foundation Resident Fellow at the National Academy of Sciences, working with the Academy's Committee on Science and Public Policy, with additional support from the National Science Foundation. He is currently a research fellow with Harvard University's Program for Science and International Affairs.

Knowledge in Search of Understanding: The Frensham Papers, edited by Professor **Paul A. Weiss** (Futura Publishing Company), is a collection of es-

says by H. B. G. Casimir, André F. Cournand, W. De Coster, Dominique Dubarle, Sir John C. Eccles, Yehuda Elkana, Caryl P. Haskins, Piet Hein, Konrad Lorenz, Robert K. Merton, Gert Heinz Müller, Pierre Piganiol, Michael Polányi, A. van Dantzig, Oscar J. van Leer, Dr. Weiss, and Harriet Zuckerman, who were members of the Frensham group. Initiated by Oscar van Leer and Dr. Weiss and named for its first meeting place in England, the Frensham group was an informal association of about 20 scholars and men of affairs, representing a wide spectrum of disciplines, who met biannually in European retreats to explore, as Dr. Weiss explains, whether unprogrammed discourse could yield common mutual understanding of major sources of worldwide "human predicaments."

NEUTRINO REPORT

Professor Orrin D. Fackler, Experimental Physics, was a member of a team of physicists which has reported the first direct measurement of the neutrino's velocity. Their results were announced in the April 5 issue of *Physical Review Letters*. (The neutrino is a massless or nearly massless particle without electrical charge, first described by Pauli in 1931 and first observed experimentally in 1953.) Other members of the group were from Brookhaven National Laboratory, Purdue University, California Institute of Technology, and Fermi National Accelerator Laboratory where the measurement was made.

PERSONAL

Born, February 6, to **Edward G. Pelle**, an assistant for research in the genetics laboratory of Professors Rollin D. Hotchkiss and Norton Zinder, and his wife, Evangeline, a graduate student in education at Fordham University, a son, Edward Gerard, their first child.

Born, February 10, to **Adam Alberico**, manager of accounting services, and his wife, Grace, a son, Adam Charles, their third child.

John Brick, an assistant for research in the physiological psychology laboratory of Professor Neal E. Miller, was married on May 1 to Laurie Stockton Krulish, a textile analyst formerly with the Brooklyn Museum.

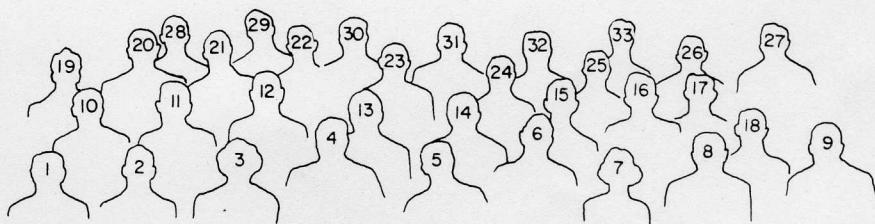
HENRIK DAM DIES

Henrik Dam, discoverer of vitamin K and of the role it plays in blood coagulation, died last month in Copenhagen. Professor Dam, who was in the United States at the time of the outbreak of World War II, served as an associate member of The Rockefeller Institute for Medical Research from 1945 until 1946 when he was able to return to his native Denmark. He received the Nobel Prize in 1943. He named vitamin K from the German word "koagulation."

CORRECTION

We report with consternation that we inadvertently rewrote history in the April issue. Some members of the Princeton laboratory group were incorrectly identified in the caption accompanying the photograph. Please accept our apologies. The correct identifications are given below.

- | | | |
|-------------------------|----------------------|------------------------|
| 1 John B. Nelson | 12 Louis O. Kunkel | 23 Ralph B. Little |
| 2 W. Conway Price | 13 Rudolf W. Glaser | 24 Philip R. White |
| 3 Louise Pearce | 14 Mortimer L. Anson | 25 Claude A. Knight |
| 4 John H. Northrop | 15 Francis O. Holmes | 26 S. S. Cohen |
| 5 Wade H. Brown | 16 Ernest W. Smillie | 27 Roger M. Herriott |
| 6 Richard E. Shope | 17 Moses Kunitz | 28 Malcolm S. Ferguson |
| 7 Margaret R. MacDonald | 18 William Trager | 29 Frederik B. Bang |
| 8 Wendell M. Stanley | 19 T. Laskaris | 30 R. P. Elrod |
| 9 Carl TenBroeck | 20 Max A. Lauffer | 31 Armin C. Braun |
| 10 Lindsay McL. Black | 21 James A. Baker | 32 Bjorn Sigurdssen |
| 11 Norman R. Stoll | 22 George L. Graham | 33 Gail L. Miller |



Convocation Calendar June 6-9

The word convocation means, literally, a calling together, and during this 75th anniversary year, the University's 18th convocation will be truly that. Beginning Sunday, June 6, hundreds of alumni, former faculty members, and friends and associates of the University will be returning to the campus to take part in a series of social, scientific, and commemorative events that will culminate with the degree presentation ceremonies on Wednesday, June 9. On Tuesday, June 8, South Laboratory will become Detlev W. Bronk Laboratory.

At a reception on Sunday evening, faculty and students will welcome visiting colleagues. The following day has been reserved for laboratory visits, discussion groups, and a series of colloquia organized in different subject areas. Colloquia topics and chairmen are: biochemistry, Professor Bruce Merrifield; cell biology, Professor Vincent Allfrey; clinical medicine, Professor Attallah Kappas; ethology-psychology, Professors Peter Marler and Carl Pfaffmann; molecular genetics-biology, Professor Norton Zinder; neurophysiology-biophysics, Professors H. Keffer Hartline and Floyd

Ratliff; mathematics-physics, Professor Nicola N. Khuri; and virology, Professors Purnell Choppin and Igor Tamm.

On Tuesday, June 8, the entire campus will join in a celebration of "History Day," beginning with a son's memories of a famous father and ending with a party. The plenary sessions will be held in Caspary Auditorium, with closed-circuit television receivers set up in the Graduate Students Residence to accommodate those who cannot be seated in the auditorium.

During the first half of the morning session, Simon Flexner, first director of The Rockefeller Institute for Medical Research, will be recalled by historian James Thomas Flexner, who will be speaking on *A Child's View of the Institute and My Father*. Professor Saul Benison of the University of Cincinnati will discuss Flexner: the Evolution of His Scientific Career and the Institute. The second half of the morning will be devoted to Oswald Avery and the Evolution of Modern Biomedical Science. Vice President Maclyn McCarty will present *A View of "Fess"* in the Laboratory. ("Fess," short for Professor, was the nickname given

Avery by his junior colleagues.) Professor René J. Dubos will speak on *The Professor, The Institute, and DNA*.

The afternoon session, to be led by Patrick E. Haggerty, chairman of the University's board of trustees, will be devoted to Detlev Bronk and the Transition from Institute to University. Professor H. Keffer Hartline will speak on the topic Herbert Gasser and Detlev Bronk. Professor Frank Brink, Jr. will talk about Detlev Bronk and the Development of the Graduate Education Program, after which South Laboratory will be dedicated in Dr. Bronk's honor.

The final speakers on the day's program will be David Rockefeller, chairman of the executive committee and former chairman of the board of trustees, who will talk about *The University: Climate of Excellence*; and President Seitz, on *The University: Commitment and Change*. A reception for guests, faculty, and staff will follow.

The degree ceremonies, on Wednesday, June 9, will be held from 2 to 4 P.M. in Caspary Auditorium. As in previous years, admission, by ticket, is reserved for faculty and students, but these proceedings too will be carried on closed-circuit television in the Graduate Students Residence. The Convocation Ball will be held that evening.

Looking Back: The Institute Becomes A University

The newest addition to the Library's series of anniversary exhibits contains photographs and documents relating to the quarter century in which The Rockefeller Institute for Medical Research became The Rockefeller University.

In 1951, in anticipation of the retirement of Institute Director Herbert S. Gasser, a Committee on Nomination and Review was established with Detlev W. Bronk, Alphonse Raymond Dochez, George H. Whipple, Donald K. David, Barklie McKee Henry, and Lindsley Kimball as its members, and David Rockefeller serving *ex officio*. On June 23, 1953, the committee made public the results of its deliberations. New bylaws were established and a reorganization of the Institute was begun.

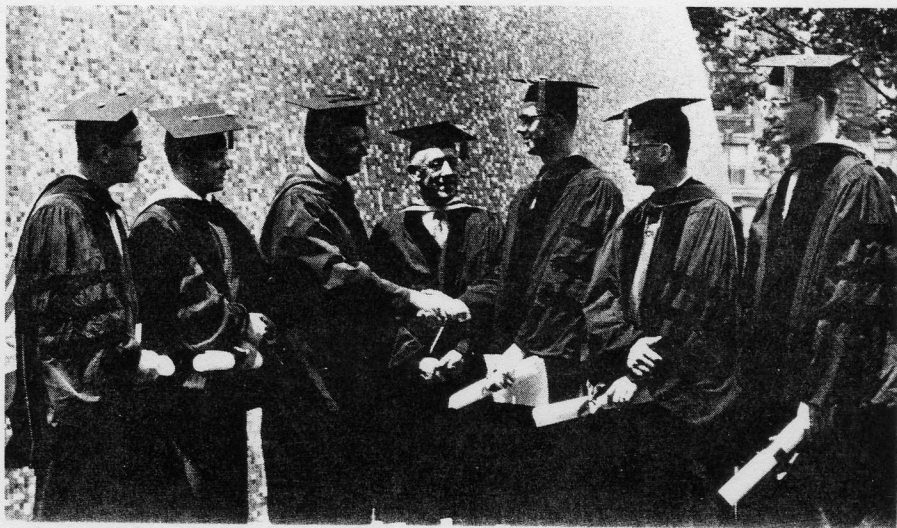
The existing two boards—the board of trustees and the board of scientific directors—were merged into one board of trustees, with the chairman to serve as chief policy officer of the corporation and the president as chief executive officer.

David Rockefeller was named chairman and Detlev Bronk president. (In 1968 Frederick Seitz succeeded Dr. Bronk, and in 1975 Patrick E. Haggerty succeeded Mr. Rockefeller.)

On November 19, 1954, the Corporation of The Rockefeller Institute

for Medical Research became part of the University of the State of New York with the power to grant specified graduate degrees, the first of which were awarded in 1959. In 1958, the corporate name was changed to The Rockefeller Institute. In 1965, the Charter of the Institute was amended in its entirety and the name was changed to The Rockefeller University.

First graduating class, 1959. Left to right: William F. Arnt, Jr., Suydam Osterhout, Board Chairman David Rockefeller, President Detlev Bronk, Lee D. Peachey, Harold J. Simon, and Howard Rasmussen.



Professor **Stanford Moore**, Biochemistry, gave the opening lecture at a Seminar on Protein Chemistry in Taipei on March 22 and lectured on methods of protein chemistry in Peking and Shanghai on April 5 and 12. He also delivered the first Georgi-Miltzer Lecture at the University of Nebraska on April 23 and the Otto Mitchell Smith Lecture at Oklahoma State University on April 26.

Professors **Vincent G. Allfrey**, **James E. Darnell, Jr.**, and **Paul M. Lizardi** spoke at the 29th annual Biology Research Symposium, on mRNA: The Relation of Structure to Function, held April 5-8 at Gatlinburg, Tennessee, under the sponsorship of Oak Ridge National Laboratory. Dr. Allfrey chaired a session, and Dr. Darnell served on the conference organizing committee and presented the summary of the symposium.

Adjunct Professor **Oswald A. Roels** has been named director of the Port Aransas Marine Laboratory of the University of Texas Marine Science Institute.

Professor **Walther F. Goebel** reports that he is working at the Walker Laboratory of the Sloan-Kettering Institute for Cancer Research in Rye, New York, as a volunteer in the department of chemical immunology of Dr. Yo Kim.

Professor **Neal E. Miller**, Physiological Psychology, served as chairman of a Seminar for Science Writers, sponsored by the Society for Neuroscience, held in Virginia May 3-6. Also participating was 1972 Rockefeller alumnus **David S. Forman** of the National Naval Medical Center, Bethesda.

Professor **Henry G. Kunkel**, Immunology, was chairman of the session on lymphocytes at the William Osler Symposium on Hematology, held May 15 at The Johns Hopkins University, one of a series of events in celebration of the 100th anniversary of Johns Hopkins.

This large and belated issue of *news and notes* will be followed by a combined June-July issue which will cover the gala and extended convocation events listed on page 5.

An exhibit of photomurals in the corridor of the Plaza Building shows the University as it has looked at various stages during its 75 years. In one of the early pictures the scene is dominated by a number of low, wooden structures. They were erected on the grounds in 1917 to serve as a war demonstration hospital. In it, medical officers were trained in the Carrel-Dakin method for treating war wounds. Alexis Carrel, serving on the front in France, had developed, with the English biochemist Henry B. Dakin, a combined chemical and surgical method for combating the complications of bacterial infection in lacerations. Although somewhat cumbersome and difficult, the method helped to save lives in the days before antibiotics.

The war demonstration hospital was the most visible example of the Institute's participation in World War I. There were many other examples, in that war and in World War II. A few highlights from those years bear mentioning during this month when Americans, celebrating Memorial Day, honor their wartime heroes.

During World War I, the Institute and Hospital were commissioned U.S. Auxiliary Laboratory No. 1 and U.S. Auxiliary Hospital No. 1. Rockefeller scientists trained hundreds of medical officers and technicians in advanced techniques of bacteriology, clinical chemistry, and pathology, and prepared sera for military use in treating or diagnosing meningitis, dysentery, and pneumonia.

The most far-reaching and medically significant accomplishment of that period, specifically related to the war effort, was the development by Peyton Rous and his associates of a means for preserving whole blood for transfusion.

Well before Pearl Harbor, Thomas M. Rivers, director of the Rockefeller Hospital, organized a Naval reserve unit at the Hospital, which was acti-

Professor **William K. Estes**, Mathematical Psychology, was awarded an honorary doctor of science degree by Indiana University at Bloomington, on May 9.

Professor **Larissa A. Pohorecky**, Physiological Psychology, gave a talk on Locomotor and Thermoregulatory Disturbances in Rats during Ethanol Withdrawal, at the National Forum on Alcoholism, held May 7 in Washington, D.C.

vated early in 1942 as a Naval Medical Research Unit. It served as a treatment center for Naval personnel, especially those stricken with viral pneumonia, streptococcal infections, and hepatitis. Among the Institute's scientists working in the unit, Rivers, Frank Horsfall, Vincent P. Dole, Rollin D. Hotchkiss, and Maclyn McCarty held commissions in the Navy. In 1943, Captain Rivers and an Institute team set up U.S. Naval Medical Research Unit No. 2 on Guam for tropical disease study. Among that group were Richard E. Shope, who made a landing under fire to survey health conditions on Okinawa in advance of the troops, Norman Stoll, who studied hookworm conditions on Guam, and Lewis Thomas, a visiting investigator, who worked on the problem of encephalitis.

At the Institute, Donald D. Van Slyke, Reginald M. Archibald, and Vincent Dole were studying acute kidney failure following trauma; Oswald Avery's group, including Maclyn McCarty, were at work on pneumonia; Rebecca C. Lancefield, a leader in streptococcal classification, prepared vast quantities of sera for the armed forces and collaborated on studies with the Naval Medical Center at Bethesda; and Lyman C. Craig, W. A. Jacobs, Van Slyke—and Frederick B. Bang and William Trager in Australia and New Guinea—aided in malaria treatment. Among those working on the dysentery problem were Bang, René J. Dubos, Walther F. Goebel, John B. Nelson, and Carl TenBroeck. (Nelson and TenBroeck undertook a secret mission to study dysentery conditions among American troops stationed in India.) Peter Olitsky worked on encephalomyelitis, Albert Sabin on dengue fever, and Wendell M. Stanley on influenza. Armin C. Braun served with the Army Sanitation Corps in the European theater.

In anticipation of a problem that, fortunately, did not arise, Institute Director Herbert C. Gasser along with Karl Landsteiner, Philip McMaster, Stanford Moore, John Northrop, Winthrop J. V. Osterhout, William Stein, and others studied chemical warfare agents. Theodore Shedlovsky, a physical chemist with a keen knowledge of engineering, exemplified the virtuosity of the Institute's scientists by devising, with the help of Institute craftsmen, an instrument requested by the Navy Bureau of Aerodynamics for determining the temperature of the atmosphere surrounding planes.