12-1989

NEWS AND NOTES 1989, VOL 21, NO.2

The Rockefeller University

The Rockefeller University News and Notes

November-December 1989
Volume 21, Number 2

David Baltimore Named University President

The Rockefeller University Board of Trustees has elected David Baltimore, Nobel laureate, director of the Whitehead Institute for Biomedical Research, and professor of biology at MIT to succeed Joshua Lederberg as president of the university. Dr. Baltimore will assume the office on July 1, 1990 when Dr. Lederberg takes his new post as university professor, following over a decade of service as the Rockefeller's chief administrator.

In a speech to the university faculty on October 17, following the announcement of his appointment, Dr. Baltimore called his election a "homecoming," recalling that he was born and brought up in New York, attended high school in the area, and received his doctoral degree from this university in 1964. Dr. Baltimore was a visiting professor at the Rockefeller in 1975, and was living on campus when he learned he had been awarded the Nobel Prize.

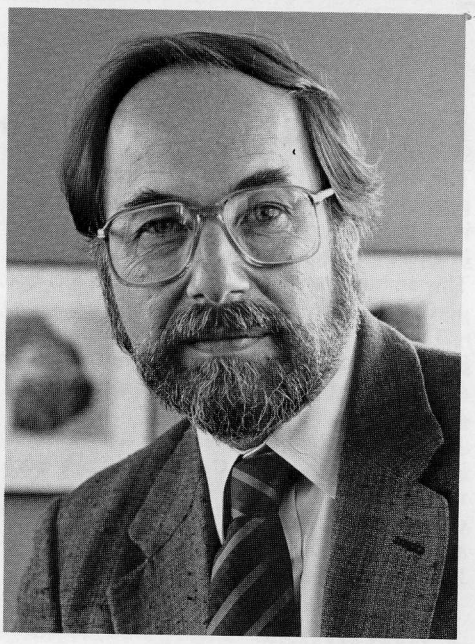
"Many of the landmark moments in my life have taken place here at The Rockefeller University," he said. "It is wonderful to come home again."

Although he remarked that it was too soon to determine any specific plans for the university, he emphasized his intention to preserve the hallmarks of the institution, including its "diversity of focus and style, flexibility of organization, remarkable legacy of achievement, and the resources to maintain a leadership position." He asked the faculty to join him in "continuing the task of building the greatness of this university."

In welcoming Dr. Baltimore to campus, William O. Baker, chairman of the university's board and retired head of Bell Laboratories, spoke on behalf of The Rockefeller University trustees saying, "We believe that Dr. Baltimore can provide the kind of leadership the university needs in the years ahead to address complex scientific, academic, financial, and managerial issues."

The Trustee Search Committee, co-chaired by Dr. Baker and trustee Richard M. Furlaud, president of the Bristol-Myers Squibb Company, identified and interviewed several qualified scientists for the position. To assist in this process, an advisory faculty committee was also convened. On September 29, the full board voted unanimously to offer Dr. Baltimore the presidency of the institution.

Born in 1938, Dr. Baltimore received his B.A. with high honors in chemistry from Swarthmore College, attended graduate courses at MIT, and received his Ph.D. degree in biology from the Rockefeller in 1964.



President-designate David Baltimore

After earning his Ph.D., he became a postdoctoral fellow at Albert Einstein College of Medicine, then a research associate at the Salk Institute. In 1968 he returned to MIT as associate professor, became professor of biology in 1972, and was appointed American Cancer Society Research Professor in 1973. In 1974 he joined the staff of the MIT Center for Cancer Research, and in 1982 he was named director of the Whitehead Institute.

Under Dr. Baltimore's direction, the Whitehead Institute has risen to a position of eminence in the international scientific community and has grown to approximately twenty individual laboratories with a staff of more than 300, including 235 scientists.

David Baltimore is married to Dr. Alice Huang, director of the Laboratories of Infectious Diseases, Children's Hospital, and professor of microbiology and molecular genetics, Harvard University School of Medicine. She, too, is well-acquainted with this university, having spent a year on campus in the laboratory of Professor Purnell Choppin (now director of the Howard Hughes Medical Institute) in 1975.

Dr. Baltimore has been recognized for the quality and influence of his scientific research and for his outspoken views on behalf of the scientific community regarding a number of compelling and often controversial issues. These issues have included genetic research, priorities for national research, biological warfare, and the regulation of science.

In 1975, he was an organizer of a now famous conference held at Asilomar, California, at which leaders of the American biology community first discussed collectively the role of genetic engineering. The conference led to the

(see Baltimore, page 4)

Cancer, Retroviruses, and the Nobel Prize

In 1975, at the age of 37, Dr. David Baltimore shared the Nobel Prize in Physiology or Medicine with Drs. Howard Temin and Renato Dulbecco for important achievements in the field of tumor virology. In the 1970s, Drs. Baltimore and Temin, working independently, discovered a class of enzymes called reverse transcriptases. These enzymes enable tumor viruses to commandeer the genetic reproductive machinery of the healthy cells they attack. In this way, these viruses, known as retroviruses, duplicate themselves and spread as their host cell divides.

Normally during cellular life, genetic information is transcribed from DNA to RNA. The RNA is then translated into protein, the major functional element of a living cell. A central tenet of molecular biology was that transcription always proceeds from DNA to RNA to proteins—never in the opposite direction.

However, this belief was contradicted by the behavior of RNA-containing viruses. These can transform normal cells into cancer cells in a permanent fashion, implying that the virus might integrate its genetic message permanently into the DNA of a target cell. How could an RNA virus insert a DNA copy of itself in among a host cell's genes if genetic information only flows from DNA to RNA?

Although Drs. Baltimore and Temin never collaborated to answer this question, both

(see Nobel Prize, page 5)

Trustee Norman Ramsey Wins Nobel Prize

Dr. Norman F. Ramsey, Rockefeller University Trustee since 1977 and professor of physics at Harvard University, has been awarded one of this year's three Nobel Prizes in Physics. He received the prize for research he conducted beginning in the 1940s that led to the development of the cesium atomic clock, an instrument that calculates the vibrations of cesium atoms in order to standardize the measurement of time.

Dr. Ramsey has long been recognized as an international leader in physics research and education. His cesium clock has had profound applications for the precise navigation of aircraft and spacecraft. Dr. Ramsey has received several honorary degrees during his 74 years, including an honorary doctor of science degree from The Rockefeller University in 1986.□

Trustee Norman Ramsey

Early Enrollment Opens for Children's School

Applications for admission to the Children's School for the 1990-91 school year are now being accepted at the school's office, located in the ground floor of Sophie Fricke Hall. Children must be at least two-years, nine-months old, but not more than six-years, three-months of age by September 30, 1990 to qualify. To receive priority enrollment, applications must be received by January 31, 1990. Additional information may be obtained from Barbara Adams, educational director, Box 50, ext. 8580.

Honors and Awards

Professor Emeritus **Christian de Duve** was awarded the E. B. Wilson Award at the annual meeting of the American Society for Cell Biology in Houston, Texas on November 6. His acceptance speech was entitled "Of Lysosomes and Peroxisomes."

President George Bush awarded University President **Joshua Lederberg** and Trustee **Philip Leder** the National Medal of Science at a ceremony October 18 at the White House. This medal is the nation's highest award for scientific achievement.

Dr. Lederberg received the award for "his work in bacterial genetics and immune cell single type antibody production, his seminal research in artificial intelligence in biochemistry and medicine, and his extensive advisory role in government, industry, and international organizations that address themselves to the societal role of science." Dr. Leder received the medal for his "innovative studies that have significantly advanced knowledge and provided new directions for research in molecular genetics, immunology, and cancer etiology."

Professor Emeritus **Floyd Ratliff** has been appointed the William James Fellow in the newly formed American Psychological Society in recognition of his distinguished contributions to science.

Dr. **Dennis Stark**, professor and director of the Laboratory Animal Research Center, has been presented with the 1989 Griffin Award, the highest honor given by the American Association for Laboratory Animal Science (AALAS). The Griffin Award is presented annually to an individual for outstanding accomplishments in the improvement of the care and quality of animals used in biologic and medical research.□

Fund-Raising at Record Level

The Rockefeller University's development program had the most successful fund-raising year in its history, receiving more than $22.9 million in gifts and pledges during the fiscal year 1989. This amount represents an 81 percent increase over funds raised the previous year.

The dramatic rise of support was a result of increased major gift endorsements by members of the board of trustees, foundations, and other private funding sources.

"Last year we put a greater focus on securing contributions of $100,000 and above from new foundations, corporate prospects, and individuals we identified and approached for support," said the university's Director of Development Marnie Imhoff.

During the 1989-90 fiscal year, which ended on June 30, the university received 41 gifts and pledges at the $100,000 level, totaling more than $21 million. Thirteen of these were made by trustees, totaling more than $9.8 million. Foundation grants to the university also rose sharply from $2.9 million last fiscal year to more than $10.1 million.

Commenting on the year's fund-raising success, President Joshua Lederberg said, "We are greatly encouraged by the remarkable results of the trustees' leadership and our development effort. We have every confidence that we can build on this success and secure the private funding so essential to significant scientific discovery."□

Footloose

It was a beautiful, sunny morning on September 11 when, with a snip of the scissors, the new 63rd Street pedestrian bridge, connecting York Avenue and the East River esplanade, became a welcome addition to the Upper East Side community. As the ribbon was cut, children from the university's Children's School, Faculty House, and the neighborhood streamed across the bridge, colored balloons in hand.

Among the many people attending the opening ceremonies were (left to right) Robert Dryfoos, city councilman; Henry Stern, commissioner of the Department of Parks and Recreation; Paul Marks, president of Memorial Sloan-Kettering Cancer Center; Sylvia Deutsch, chairperson of the New York City Planning Commission; Barbara Adams, Rockefeller Children's School educational director; and Joshua Lederberg, president of The Rockefeller University.

The cost of the bridge was underwritten by The Rockefeller University and Memorial Sloan-Kettering Cancer Center for the City of New York as part of the Scholars Residence project.

News and Notes is published five times a year from October through July. Suggestions for articles are welcome and may be sent to *News and Notes*, Box 68, or call extension 8967. Photographs: Media Resources Service Center, except page 1, M. Lampert/Boston; page 3, top and lower right, Ingbet Grüttner; and page 8, Rockefeller Archive Center.

New Blood Brings New Life

Bone marrow transplants are currently the best hope for ill patients whose own bone marrow no longer manufactures the kind and quantity of blood cell types that carry oxygen and fight infection. However, recent research by Associate Professor Arleen D. Auerbach of the laboratory of investigative dermatology indicates there may now be an alternative to the bone marrow transplant procedure.

Working with an international team of researchers, Dr. Auerbach recently provided the first clinical demonstration that umbilical cord blood can reconstitute bone marrow, making a bone marrow transplant unnecessary in some cases. The details of the study, which she coordinated with Dr. Hal Broxmeyer of the Walther Oncology Center at Indiana University School of Medicine, were recently published in *The New England Journal of Medicine.*

"Bone marrow transplants are often the treatment of choice for patients with Fanconi anemia, leukemia, and many other bone marrow disorders," Dr. Auerbach says. "Reconstituting the bone marrow of a patient with these kinds of disorders by using blood from the afterbirth of a newborn sibling could provide a painless way for a donor to help save a life."

In the *Journal* report, Dr. Auerbach describes the case history of a 5-year-old boy diagnosed as having Fanconi anemia, a relatively rare disease that Dr. Auerbach has been studying for many years. Fanconi anemia causes deficiencies of all blood elements, including red and white blood cells and platelets, and is fatal.

When the mother of the little boy became pregnant again, Dr. Auerbach used a prenatal test she developed to check the patient's unborn sibling for Fanconi anemia. The test found the unborn child to be healthy, and also determined that the child possessed the same tissue type as the patient. Thus, the younger sibling would be a compatible donor for a transplant.

Associate Professor Arleen D. Auerbach

Upon delivery of the child, a baby girl, blood was taken from the umbilical cord and placenta, with no harm to the newborn, and frozen for six months. It was then intravenously dripped to the Fanconi anemia patient, who had been treated with drugs and radiation to destroy his own bone marrow, at Hospital Saint-Louis in Paris.

Five months after the transplant, the little boy was discharged and the procedure pronounced a success. He showed no graft-versus-host disease and now leads a normal life.

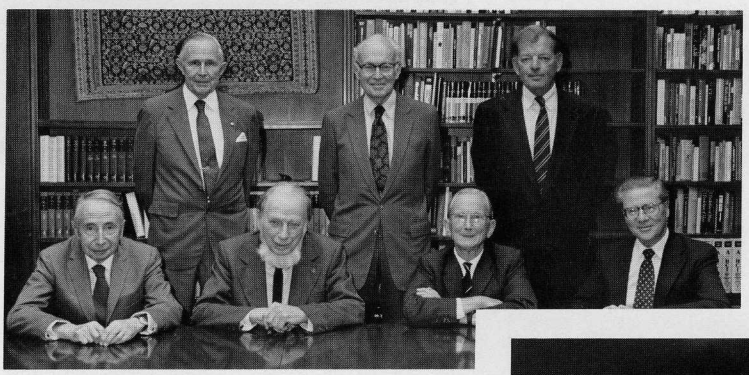
Dr. Auerbach points out that this is the first study to prove that umbilical cord blood is rich in transplantable stem and progenitor cells, which create new bone marrow. "We found that umbilical cord blood contains a higher number of progenitor cells per unit volume than adult blood," she notes. "The volume obtained is roughly equivalent to adult bone marrow, which would normally be used in transplants."

Nearly 200 milliliters (roughly half a pint) of blood can be taken from the cord and placenta, which are usually discarded. However, a successful transplant in a child only requires about 100 milliliters of cord blood. Dr. Auerbach believes umbilical cord blood may prove important as a reconstitutor of bone marrow and as a viable treatment for many diseases that destroy marrow function, including aplastic anemia, leukemia, and some immune deficiencies and genetic disorders. □

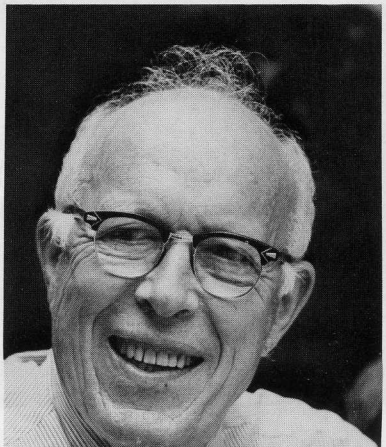
Launching the Antibiotic Era

Fifty years ago, the late René Dubos (below right) ushered in a new era in medicine when he discovered the first antibiotic, gramicidin, at the Rockefeller. His research marked the first complete study of an antibiotic, from its isolation and purification to an analysis of how it cures disease.

In honor of Dr. Dubos and his pioneering work, a landmark symposium was held October 23 in Caspary Auditorium. The conference was attended by over 350 people, including former colleagues, relatives of Dubos, medical historians, and scientists and physicians working in the field of infectious diseases.



Pictured at right are scientists who contributed to the beginning of the antibiotic era and who helped commemorate this special event. Standing, from left to right, are Dr. Theodore Woodward, who spoke on the first clinical trials of the antibiotic chloramphenicol; Dr. Bernard Davis, a former colleague of Dubos who explained the bactericidal action of streptomycin; and Rockefeller Professor Zanvil A. Cohn, who organized the symposium with Research Associate Carol Moberg. Sitting are Sir Edward Abraham, who worked on the purification of penicillin and discovered cephalosporin; Rockefeller Professor Emeritus Rollin D. Hotchkiss, who helped develop gramicidin; Dr. Norman Heatley, who reminisced on his collaborations on the isolation and production of penicillin; and Dr. George Mackaness, who studied the action of streptomycin and isoniazid against tuberculosis.



Baltimore *(continued from page 1)*

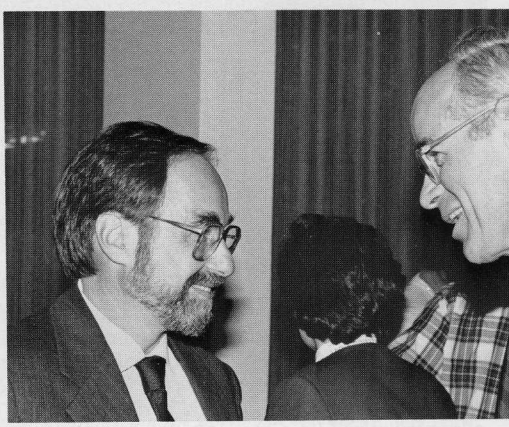
establishment of National Institutes of Health protocols which provide for the regulation of all biological experiments that utilize altered DNA.

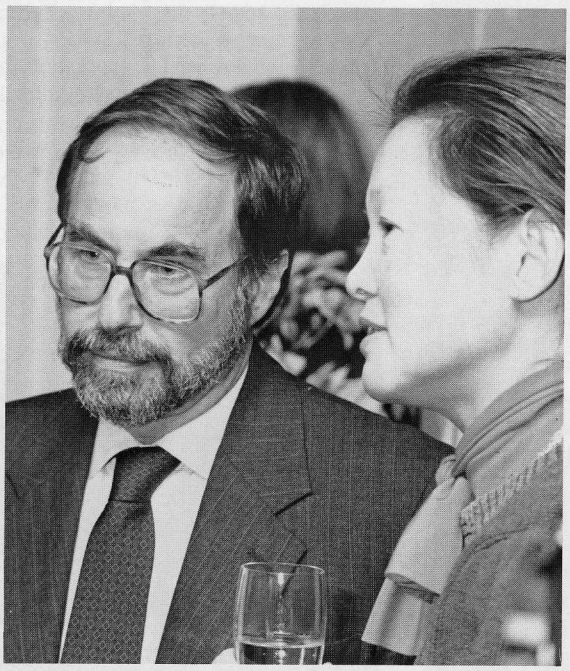
In 1986, Dr. Baltimore co-chaired one of the first major studies of the AIDS epidemic, helping to determine the formation of an AIDS public policy. More recently, he used the forum of a Congressional hearing to defend the independence of the scientific research community from the possible threat of over-regulation and unfair scrutiny.

Today, Dr. Baltimore studies the development of the immune system and the growth of disease-producing viruses. Over the last decade, he has been involved in numerous research projects, including helping identify an important internal messenger that acts in many different types of cells, participating in the description of two new families of DNA-binding proteins, and developing a new system for studying the life cycle of HIV (the virus responsible for AIDS).

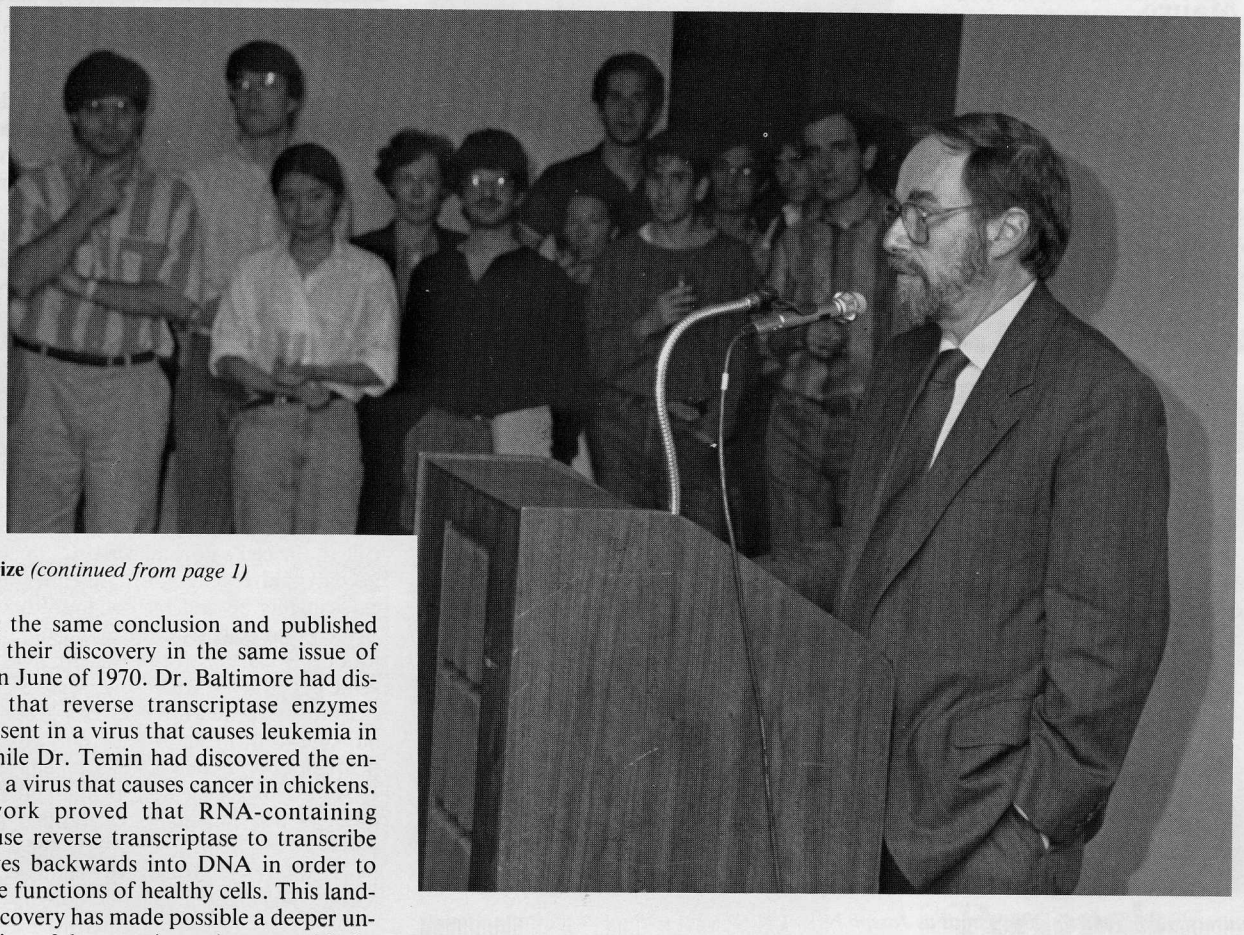
Among Dr. Baltimore's many honors and awards are his election to the National Academy of Sciences, the American Academy of Arts and Sciences, and the American Association for the Advancement of Science. In 1987 he was elected to the Royal Society, and in 1988 he was elected to membership in the Institute of Medicine.

Commenting on his successor as university president, Dr. Lederberg described Dr. Baltimore as "one of the strongest scientists of his generation. Since receiving the Nobel Prize in 1975, he has continued to produce an exciting stream of scientific discoveries. In his hands, and in many others', the reverse transcription reaction, which he and Howard Temin discovered, has become central to the pursuit of the oncogene basis of cancer, to AIDS, and to a wide range of important fundamental and applied studies. His leadership has been instrumental to the meteoric rise of the Whitehead Institute's reputation as an important new star in the constellation of premier research institutions. We look forward to his bringing those unique intellectual skills and experience to The Rockefeller University." □





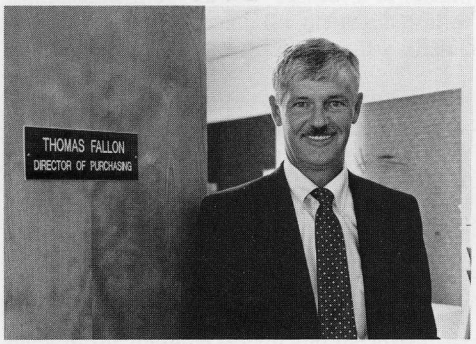
The Rockefeller community had a chance to meet Dr. David Baltimore at receptions held in his honor in October. Clockwise from top left, Dr. Baltimore is welcomed to the Rockefeller by President Lederberg; Dr. Baltimore and his wife, Dr. Alice Huang; Dr. Baltimore addresses a packed house at the reception in the Tower Building; Dr. Baltimore chats with Senior Research Associate Peter H. Sellers; Assistant Director of Security Lloyd Jones meets the next president; and Professor Emeritus Christian de Duve (left) welcomes Dr. Baltimore as Trustee David Rockefeller looks on.



Nobel Prize *(continued from page 1)*

came to the same conclusion and published news of their discovery in the same issue of *Nature* in June of 1970. Dr. Baltimore had discovered that reverse transcriptase enzymes were present in a virus that causes leukemia in mice, while Dr. Temin had discovered the enzymes in a virus that causes cancer in chickens. Their work proved that RNA-containing viruses use reverse transcriptase to transcribe themselves backwards into DNA in order to pirate the functions of healthy cells. This landmark discovery has made possible a deeper understanding of the way viruses interact with the genetic material of human cells to cause such diseases as cancer and AIDS. It has also become evident in recent years that a large fraction of the genetic material of mammals, including humans, arose through reverse transcription of RNA.□

Purchasing Receives New Director



Thomas J. Fallon (left), took over from the retiring James Stewart as director of purchasing on October 1. Before coming to the Rockefeller, Mr. Fallon was purchasing manager at General Electric, then director of purchasing at Emery Air Freight. He is enjoying his new position at the university and finds the atmosphere especially enticing. "There is a sense of commitment and loyalty at the university that I did not find in industry," he says. "I'm eager to become a part of it."

In Memoriam

Paul B. Hamilton

Former Rockefeller researcher Dr. Paul Hamilton died of cardiac arrest on October 10 at Cape Cod Hospital in Hyannis, Massachusetts.

A Canadian by birth, Dr. Hamilton was associated with this university from 1940 to 1946. During his tenure here he studied the presence of glutamine in blood and its role as a source of urinary ammonia. After leaving the Rockefeller, he became chief of biochemistry and eventually director of research at the Alfred I. duPont Institute in Delaware, where he served until his retirement in 1975. He is survived by his wife, Priscilla, three sons, and eight grandchildren.□

Alexander Mauro

Professor Alexander Mauro died October 6, following a long struggle with cancer. He was 68 years old.

Dr. Mauro's career began at the Yale University School of Medicine in 1951. As a consequence of his work on electrical stimulation of nerve and muscle, he collaborated with the cardiac surgeon William Glenn to develop the radio-frequency cardiac pacemaker in 1958, a device that aids patients with Stokes-Adams disease.

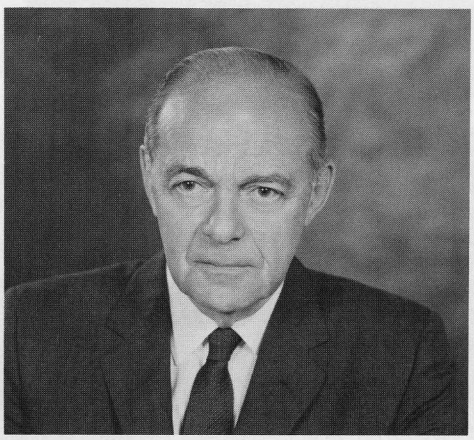
Dr. Mauro left Yale in 1959 to become a professor in biophysics at the Rockefeller. Much of his research here focused on the biophysics of cell membrane transport processes, the way specialized structures of a cell membrane allow some substances to move in and out of the cell at different rates than other substances.

Professor Alexander Mauro

In the early 1960s, Dr. Mauro discovered satellite cells in skeletal muscle and postulated that these cells were responsible for muscle regeneration, a hypothesis which has since been proven true. In 1976, working with Rockefeller Professor Emeritus Philip Siekevitz, Senior Research Associate W. P. Hurlbut and other colleagues, he identified one of the deadly proteins in black widow spider venom that causes muscle spasms in its victims. Recently, Dr. Mauro, together with colleagues, organized a special joint Soviet-U.S. workshop investigating the possibility that heart muscle cells can be made to regenerate.

Dr. Mauro is survived by his wife, Jean, a sister, and two brothers.□

Paul Weiss



Professor Emeritus Paul A. Weiss

Professor Emeritus Paul A. Weiss died September 8 at New York Hospital, Westchester Division, in White Plains. He was 91 years old and had been in failing health for several years.

Dr. Weiss was a pioneer in studies of tissue growth, differentiation, and regeneration. During World War II, he designed a sutureless technique for splicing severed nerves that opened the way to banks of frozen nerve tissue and corneas for surgical use.

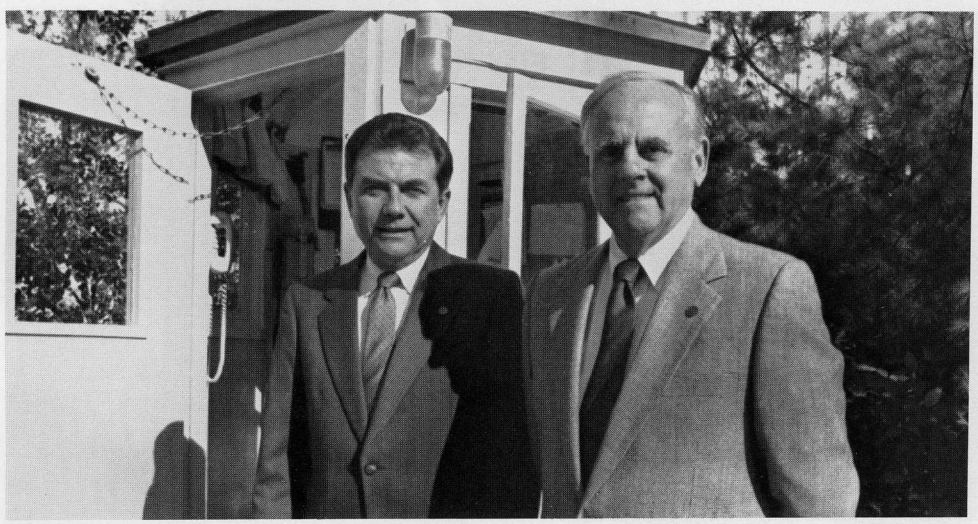
This research not only helped explain the mechanisms of wound healing and provide the basis for improved methods of peripheral nerve repair, it also led to the fundamental discovery of neuroplasmic flow. As he showed, this intensive, unceasing flow of cellular material within each nerve fiber plays an essential role in the cell's normal activities, including its growth and regeneration. In other landmark experiments he and his collaborators demonstrated that cells from different organs mixed randomly can reconstitute themselves into the same organ from which they were taken.

Born in Vienna in 1898, Dr. Weiss became an American citizen in 1939, and was named a professor at The Rockefeller University in 1954. He became emeritus in 1964, at which time he was invited to establish a graduate school of biomedical sciences at the University of Texas in Houston. He returned to the Rockefeller in 1967.

Dr. Weiss received numerous awards and honorary degrees, including the National Medal of Science, the government's highest award for scientific achievement, and an honorary doctor of science degree from this university, both in 1979.

He is survived by his wife, Maria Helene, and his brother, Hans George.□

Safe and Sound



Security at the university continues in good hands as Joseph Nekola (left) takes over as director of security from Edward G. Clarke (right), who retires after seven years of outstanding service. Mr. Nekola spent his last twenty-four years with the New York City Police Department, where he attained the rank of detective-captain.

"What first attracted me to the university is its purpose, prestige, and the beauty of its campus. I was particularly impressed with the calibre and dedication of the guards," states Mr. Nekola, who began commuting to the university from his home in Westchester County on October 10. "I am looking forward to the challenge of continuing the fine service established by Ed Clarke and responding to the future security needs of the university."

Yeast Cells—A Budding Model

Common baker's or brewer's yeast, *Saccharomyces cerevisiae*, has been indispensable to the human diet for centuries. Now, Assistant Professor and University Fellow Frederick R. Cross, by studying special strains of yeast, is exploring the value of this single-celled organism as an experimental model for the study of how genes regulate cell division.

Normal yeast cells, like all cells, reach an ideal size before dividing to form two or more cells. Some yeast cells, however, begin dividing before they reach this optimum size, generating a succession of stunted progeny. Others grow abnormally large before division, creating oversized offspring.

Dr. Cross isolated a number of these abnormally sized mutant yeast strains and discovered they contained aberrant genes. Using genetic and recombinant DNA techniques, he found that a specific gene, called DAF1, is linked to the control of cell size and the arrest of cell division.

Dr. Cross is one of three young scientists recently appointed to the faculty as university fellows. The others are Assistant Professor Maria M. Konarska, who is studying ribonucleic acid, and Assistant Professor Michel C. Nussenzweig, a Rockefeller alumnus, who is investigating the causes of cancer and the genetic control of antibody production in genetically altered mice.

The University Fellows program was established in the early 1970s to provide financial support for scientists in the early stages of their careers in specializations outside the university's established research groups. During the 1988-89 academic year, the Lucille P. Markey Charitable Trust, the W.M. Keck Foundation, and the Booth Ferris Foundation helped the university enhance and expand this innovative program by providing funds for laboratory renovation, equipment, and other essentials.

Assistant Professor Frederick R. Cross

"The University Fellows program provides excellent support and freedom to concentrate on getting scientific work started in an independent lab," comments Dr. Cross.

Through the University Fellows program, Dr. Cross now heads his own research group in a newly renovated fifth-floor laboratory in the Bronk building. A 1984 graduate of this university, he was most recently a postdoctoral fellow in genetics at the Fred Hutchinson Cancer Center in Seattle, Washington. It was there he decided to pursue molecular genetic studies of yeast in order to investigate a fundamental problem: What signals a cell to divide?

Asked about the broader implications of his research, the new university fellow offers a conservative response. "It seems likely that there are similar processes of cell growth and division happening in other cells in other organisms," he explains. "But exactly how they are similar is still unclear." He points out that the control of cell growth and division is a fundamental issue in cancer research. However, he isn't specifically seeking a connection between the strange behavior of these mutant yeasts and the reasons a cancer cell replicates. "When and how a cell duplicates itself in its life cycle is a very interesting research problem, which is worth pursuing independent of any clinical reference," Dr. Cross notes.□

Rockefeller Painters Retire

University painters Mario Perz (left) and Valcin Valme (right) celebrated their retirement at a party held in their honor on August 31. Together their work represents over 42 years of dedication to the university. Presently, Mr. Perz is enjoying his retirement by visiting Cuba, and Mr. Valme is visiting St. Louis.

Promotions

Vivian M. Bellofatto, Molecular Parasitology, to Assistant Professor.

Frederick R. Cross, to University Fellow and Assistant Professor.

Mark Evans, Theoretical Physics, to Assistant Professor.

Eric L. Gustafson, Molecular and Cellular Neuroscience, to Assistant Professor.

Maria M. Konarska, to University Fellow and Assistant Professor.

Anant K. Menon, Molecular Parasitology, to Assistant Professor.

Michel C. Nussenzweig, to University Fellow and Assistant Professor.□

Personals

Born September 22 to Systems Analyst **Douglas Many**, Library, and his wife, Susan, a son, Matthew Douglas.□

Rockefeller Retrospective

Rebecca Lancefield: Stalking Strep

During the 60 years following World War I, Rebecca Lancefield's determined figure could be seen bent over dozens of petri dishes in the university's laboratory of bacteriology and immunology. Her lifelong research was directed toward understanding the characteristics of the large and diverse family of bacteria called streptococci. "Strep," as this class of organism is commonly known, is responsible for a variety of ailments, including sore throats, scarlet fever, rheumatic fever, and heart and kidney disease.

After years of research on thousands of strains of strep bacteria, Dr. Lancefield discovered that most strep infections common to humans are caused by a single group of over 60 serotypes, which she termed Group A streptococci. The Lancefield system of classification of streptococci, developed between 1928 and 1933, is considered a tremendous contribution to the medical understanding of streptococcal disease and is still being expanded today.

Dr. Lancefield began her studies as a liberal arts major at Wellesley College. However, after watching her roommate "have much more fun" in a zoology course, she reassessed her goals and from that point on took science courses exclusively. In 1918, while studying full-time for her masters degree at Columbia University, she came to work for what was then The Rockefeller Institute for Medical Research, claiming "it was the only place that answered my job letters."

She began her career here with researchers Oswald Avery and Alphonse Dochez, who had been asked by the U.S. Surgeon General to conduct a study of strep, then rampant in the military camps. She left the university in 1919, but returned in 1922 to continue her research while completing her doctoral thesis at Columbia, carrying racks of test tubes back and forth between the two labs.

Rebecca Lancefield made substantial inroads into a field that at the time belonged almost exclusively to men. For her efforts, she received numerous prestigious awards and held several important positions, including serving as the first woman president of the American Association of Immunologists (1961) and the second woman president of the Society of American Bacteriologists (1943). In addition, she was presented honorary degrees from The Rockefeller University in 1973 and from Wellesley College in 1976.

Dr. Lancefield's legacy of systematically grouping and typing the streptococcal organisms paved the way for scientists to further study this bacteria. Since her death at the age of 86, in 1981, twenty-five more types of group A have been identified, and, presently, a vaccine for strep throat is under development by Rockefeller University Professor Vincent A. Fischetti and his colleagues.□

News and Notes

The Rockefeller University
Public Information Office
1230 York Avenue
New York, NY 10021-6399

Address correction requested
Forwarding and return postage guaranteed

Non-Profit
Organization
U.S. Postage
PAID
New York, N.Y.
Permit No. 7619

In This Issue