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The Rockefeller University

news & notes

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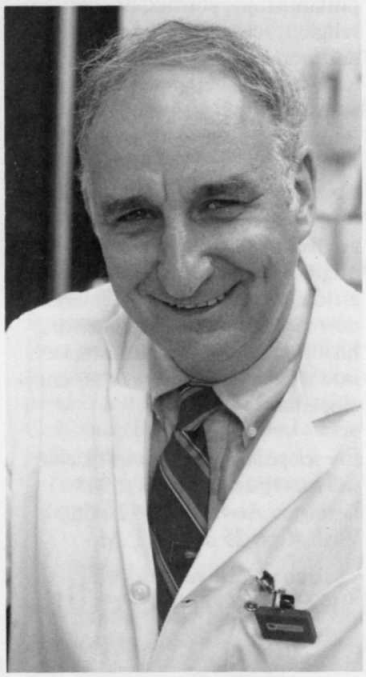
Cohn forum hosts RU colleague, to speak on science advocacy



Courtesy of Samuel Silverstein

President of the Federation of American Societies for Experimental Biology in 1994-1995, Samuel Silverstein now chairs its Public Affairs Advisory Committee.

Samuel Silverstein, chair of the Department of Physiology and Cellular Biophysics at Columbia University College of Physicians and Surgeons, will speak on "Scientists as Advocates for Biomedical Research" at the second Zanvil A. Cohn Forum on Health Affairs of the academic year Tues., Oct. 24 at 5:30 P.M. in the Abby Aldrich Rockefeller dining room.

"Sam believes scientists should increase public understanding of science, and he is something of a crusader," said Alexander Bearn, chair of the forum's program committee. "It is always a pleasure to hear him excoriate his audiences and exhort them to do more. He gives a lively, persuasive presentation, and I am pleased that he has agreed to come back to Rockefeller to speak to us."

President of the Federation of American Societies for Experimental Biology in 1994-1995, Silverstein now chairs its Public Affairs Advisory Committee. His career began with a medical degree from Albert Einstein College of Medicine, earned in 1963. Silverstein interned at the University of Colorado Medical Center and completed his residency at Massachusetts General Hospital.

From 1964 to 1967, Silverstein was a Helen Hay Whitney Fellow in the Laboratory of Cell Biology at Rockefeller, working with George Palade and Samuel Dales. He later worked in the lab of the late Professors Zanvil Cohn, who established the forum, and James Hirsch. He moved to Columbia University in 1984, where he is John C. Dalton Professor and professor of medicine, in addition to chair of the Department of Physiology and Cellular

See ***Silverstein****, page 2*

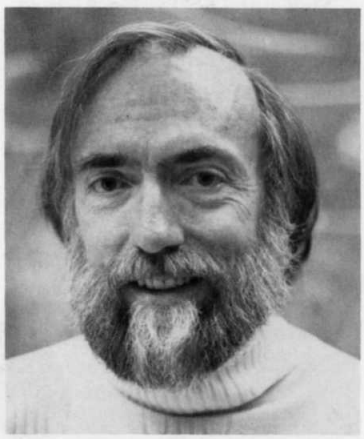
At the Friday lecture

Physicist rides gravitational waves to survey spacetime

Kip S. Thorne, Richard P. Feynman Professor of Theoretical Physics at the California Institute of Technology, discusses "Gravitational Waves: A New Window onto the Universe" at the Friday lecture today (Oct. 20).

Thorne's research focuses on gravitational physics and astrophysics, with an emphasis on black holes and gravitational waves, ripples in the fabric of spacetime predicted by Einstein's relativity theory. His work in the late 1960s and early 1970s laid the groundwork for the theory of pulsations of relativistic stars and their emission of gravitational waves. During the 1970s and 1980s he developed much of the mathematical formalism by which astrophysicists analyze the generation of gravitational waves.

Measurements of gravitational waves by a network of earth- and space-based detectors now under construction promise to test some of the predictions of general relativity theory. Among the findings that astrophysicists hope to uncover are the dynamical behavior of colliding black holes, the spin and rest mass of the graviton, and the initial conditions and dynamical expansion of the very early universe.



Courtesy of Kip Thorne3

Kip Thorne, Richard P. Feynman Professor at Caltech, has won awards for his science writing.

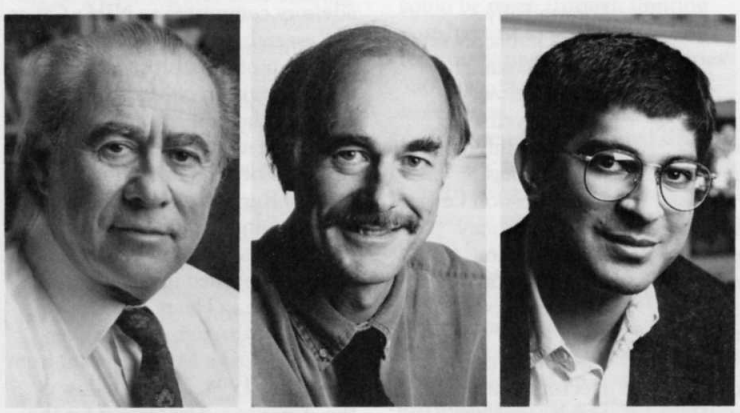
"Kip Thorne has made major contributions to our understanding of black holes, making them credible and plausible," said Professor Nicola Khuri, who introduces Thorne today. "He is also the expert on the related subjects of wormholes and time travel."

Thorne received his doctoral

See ***Thorne****, page 4*

Zinder assumes new role as special assistant to Wiesel, Cross and Kuriyan to lead graduate program

President Torsten Wiesel announced this week that Professor Norton Zinder, dean of graduate studies, will become special assistant to the president on Nov. 1, as he relinquishes his role as dean, and that Professors George Cross and John Kuriyan will assume leadership of the graduate program. Cross has agreed to serve as dean and Kuriyan, as associate dean.



Professor Norton Zinder (*left*) is stepping down as dean of graduate studies. Professor George A.M. Cross (*center*) will assume deanship of the program, and Professor John Kuriyan will be associate dean.

Wiesel said, "Norton took on and carried out the direction of our graduate program for two years with extraordinary vision and energy. I respect his sense that he now would prefer to continue to serve the university but to do so in a less arduous and structured way."

In announcing the appointments of Cross, professor and head of the Laboratory of Molecular Parasitology, and Kuriyan, professor, head of the Laboratory of Molecular Biophysics, and a Howard Hughes Medical Institute

See ***Graduate****, page 4*

Concise and useful: Creed of the archivist who writes encyclopedia entries

A-B-C-D imposes an arbitrary order on knowledge in the just-published *Encyclopedia of New York City*. In listings of all things great and small in the five boroughs, the entry on early Rockefeller scientist Jacques Loeb is followed by one on Loehmann's, the venerable bargain-basement shop. Rockefeller University precedes the Rockettes, the glitzy dance troupe.

Staff at the Rockefeller Archive Center, a division of the university, penned for 10 cents per word the entries on Loeb and the university as well as 25 others, from scientists to sewing machines, from foundations to engineer Robert Fulton of steamboat fame.

"We are pleased to lay claim to more than 0.5 percent of the encyclopedia's entries," said Darwin Stapleton, center director. "We have written for other encyclopedias. We see it as a kind of service to researchers."

Edited by Kenneth T. Jackson, a historian at Columbia University, and published this week by Yale University Press and the New York Historical Society, the encyclopedia contains 4,600 entries, the product of a decade of labor. Professor Emeritus Joshua Lederberg is among the 680 authors, contributing the entry on Stuyvesant High School, the Manhattan school for teens gifted in math and science he attended. Lederberg also advised editorial staff on historical figures in the local science scene.

Archivist Renee D. Mastrocco, who works on campus, co-wrote the 78-line entry on the university with Lee R. Hiltzik, who works in the archive's main repository in Tarrytown. Rockefeller scientists in the encyclopedia are René J. Dubos, Karl Landsteiner, and Loeb. Other archive staff who contributed are Erwin Levold, Kenneth W. Rose, Melissa A. Smith, and Stapleton.

Favoring "data over drama, fact over fancy," as the *New York Times Book Review* opined, the encyclopedia is earning substantial press, though reviewers carp and cavil about what the behemoth tome—which rivals the Manhattan phone book in size—does and does not cover.

"It's a real challenge to condense history into the number of words allocated," said Stapleton. "We cared most about giving readers enough information so they can find more about subjects they are interested in."

The Rockefeller Archive Center opened in 1974 to assemble, process, and make available for research the papers of the Rockefeller family and Rockefeller-funded philanthropies. The center also collects other philanthropic records. Its 56 million pages of documents, 250,000 photographs, and 2,000 films cover 19th and 20th century developments and issues in agriculture, the arts, African-American history, education, international relations and economic development, labor, medicine, philanthropy, politics, population, religion, science, social welfare, and women's history.

"We have a large, well-organized archive, which we plumbed for information not easily available," said Stapleton. "For the foundations, many of which do not have histories or even organized records, archivist Ken Rose did extensive original research. Even the shortest article was challenging, demanding new research, rethinking existing histories, and putting information into a form appropriate to an encyclopedia."

Encyclopedia editor Kenneth Jackson will lecture at Bookberries, 983 Lexington Avenue near 71st St., Wed., Oct. 25 at 7:30 P.M.

Rockefeller Archive Center

Archivist Erwin Levold, who wrote about the Commonwealth Fund for the new encyclopedia, pores through records at the Rockefeller Archive Center.

RU to honor 63 employees in November

At the Anniversary-Retirement Dinner Thurs., Nov. 16 and the Employee Recognition Program, Wed., Nov. 29, the following people will be honored for the longevity of their commitment to RU.

Anniversary and Retirement Honorees

55 Years
Reginald M. Archibald
Vincent P. Dole

45 Years
Alexander G. Bearn

25 Years
Judy Adams
Hiroshi Asanuma
Cassilda Ashmeade
Josue Charles
David Lyons
Esmeralda Party
George Reeke
Aquiles Sosa
Ralph Steinman

Retirees
Martha Bodden
Carol Calmer
Rosalio Castro
Antoinette Denisi
Violet Gass
Teruko Hanafusa
Joshua Lederberg
Norma Lumsden
Violeta Matthew
Lillian McDuffie
Grace Silvestri
Nuton Stewart
Lessie Stone

***

Employee Recognition Honorees

20 Year Recipients
Florence Arwade
Floresta Chapman
Joel Cohen
Raymond Fastiggi
Neville Fleming
David Gadsby
Jeanne Holcomb
Atsuko Horiuchi
Elizabeth Jabbour
Clifford Norton
Maria Pospischil
Louise Verbsky

10 Year Recipients
Caroline Bady
Robin Bruckenstein
David Callaway
Steven Cancellieri
Helen Chao
Marilyn Chung
Herbert Cohen
Orrin Crockwell
Lisa Dailey
Tracy Ann Davis
Loretta Fahy
Luba Garbaczewski
Nikos Giokaris
Ann Bigelow Hallowell
Veronica Ifill
James Krueger
Edgar Gordon Lewis
Robin Maloney
Lois Manning
Claire Mason
Stephen Morse
Ellen Paley
Samuel Rivera
Hector Rosario
Stephanie Mary Ryall
David Wesolowski
Lawrence Yuan

Silverstein to emphasize giving credit to federal funding

(continued from page 1)

Biophysics.

Silverstein is deeply appreciative of Rockefeller and his experiences in the laboratory of Cellular Physiology and Immunology. He said, "Zan and Jim were thoughtful mentors, inspiring colleagues, and very special friends. I can think of no greater good fortune for a young scientist than to work in close daily contact with mentors like them in a vibrant intellectual community like Rockefeller."

His professional services and honors are many. At present he is a member of the council of the National Institute of Allergy and Infectious Diseases (NIAID), of the advisory committee to NIH's Office of Research on Minority Health, and chair of the visiting committee for the Division of Medical Sciences at Harvard Medical School. He served as chairman of the scientific advisory committee of the Damon Runyon-Walter Winchell Cancer Fund and is a member of the fund's board of directors.

An established investigator of the American Heart Association from 1972 through 1977, Silverstein received a MERIT award from NIAID in 1994. He is a fellow of the American Association for the Advancement of Science and of the American Society for Microbiology.

Professor Ralph Steinman will introduce Silverstein to the forum, which Cohn established in 1992 as a venue for discussion of important issues in health research and policy. The forum begins with a half hour presentation, followed by a half hour discussion.

Sherry at 5:00 P.M. in the Abby Aldrich Rockefeller Lounge precedes the talk. All are welcome.

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Environmental gadfly alights at RU to discuss the stork and the plow

Eminent population biologist Paul Ehrlich spoke at Rockefeller Tues., Oct. 10 on "The Stork vs. the Plow—Defusing the Population Bomb" as part of the year-long Wildlife Conservation Society Centennial Lecture series, which is co-sponsored by the Conservation Foundation/ World Wildlife Fund and Rockefeller. Caspary Auditorium was packed for the lecture, based on The Stork and the Plow: The Equity Answer to the Human Dilemma, *the new book authored by Ehrlich, Anne H. Ehrlich, and Gretchen Daily.*

The Ehrlichs, a husband and wife team at Stanford University, have won numerous awards and honors for their longstanding commitment to population problems, most recently the 1994 United Nations Environment Programme Sasakawa Environment Prize and the 1995 Heinz Award for Environmental Achievement. Daily, a postdoctoral fellow at the University of California, Berkeley, received a Pew Fellowship in 1994.

Here, News&Notes *reprints excerpts from the book.*

The human juggernaut

The human enterprise has become a true juggernaut: an inexorable force that consumes and crushes everything in its path. It is now in the process of crushing its own life-support systems, especially those that underpin agricultural production. This represents not just a future threat. Hundreds of millions of people have perished of starvation and hunger-related disease in this century. While their misery can be attributed largely to maldistribution of food, recent trends suggest that the world may soon be faced with absolute shortages.

A hungry world

An assessment by Robert Kates, Robert Chen, and colleagues of the Alan Shawn Feinstein World Hunger Program at Brown University indicated that recent world harvest, if equitably distributed and with no grain diverted to feeding livestock, could supply a vegetarian diet to about 6 billion people. A diet more typical of South America, with some 15 percent of its calories derived from animal sources, could be supplied to about 4 billion people. A . . . [diet] . . . of the sort enjoyed by many people in rich countries could be supplied to only 2.6 billion people.

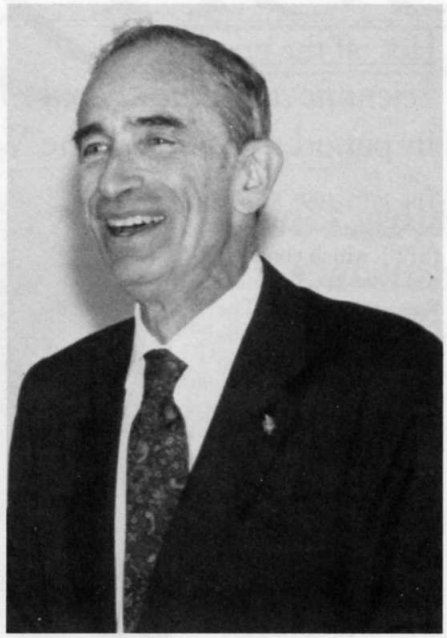
Slowing the stork

Of all the harmful interventions by Western powers into the affairs of less developed nations, it is ironic that the one most heavily laden with good intentions has, in retrospect, spawned the most horrifying consequences. How much human misery today traces to the Western introduction of the means to lower mortality, with hardly a thought to satisfying the need that would thus be created—to lower fertility commensurately? The intervention to save lives helped to curse the developing world with the all-engulfing, self-reinforcing problem of rapid population growth, poverty, and environmental deterioration.

. . . The developing world is too diverse culturally, economically, and politically for any single measure to remove the curse. There is, however, one generality so obvious that not seeing it may reflect willful blindness. Increasing socioeconomic equity at all levels—between genders, families, social classes, and nations—has by far the greatest potential for improving the human condition. Today, the rich nations are perpetuating and exacerbating inequity in a million often subtle but powerful ways. Improving the behavior of the rich would be much more effective than simply telling the poor how to change theirs.

Government in the bedroom

The most successful government policy on population in a large poor country is that of China, which may soon have the most powerful economy in the world. Although China's one-child family policy has been highly criticized as draconian, it was designed and implemented to prevent millions of deaths from hunger, and serious steps have been taken to discourage abuses. The world's rich nations need to follow China's example in adopting explicit policies to encourage population shrinkage and implementing them in a manner tailored to their varied cultural contexts.



Paul Ehrlich, Bing Professor of population studies at Stanford University, authored the bestselling 1968 book, *The Population Bomb*.

Expanding food availability

The greatest potential gains could be achieved through restoration of productivity to degraded lands and the development of "alternative" agriculture, including improvement of traditional crops and farming techniques. A substantial increase in food supplies could be gained by reducing the portion of crops devoured by pests. Losses in the field could probably be lessened by spreading the use of integrated pest management. At the very least, that change would lighten the collateral environmental damage from agricultural chemicals. But the greatest gains, especially in the short term, could be made through limiting post-harvest losses by providing better storage and transport facilities and protection against pests of stored food.

The increasingly dismal situation in oceanic fisheries cries out for more effective regulation of harvests, with moratoria on fishing to allow valued stocks to regenerate. Aquaculture holds considerable promise, but is very sensitive to environmental degradation, such as pesticide runoff. The net contribution of aquaculture will also depend on controlling its environmental side effects such as the destruction of coastal mangroves, which can decrease fisheries production elsewhere.

Toward global security

[M]any of the needed actions kill two or more birds with one stone. Teaching women to read helps counteract sexist repression, makes women more receptive to new ideas in agriculture and elsewhere, and gives them opportunities to make positive contributions to their societies and their families' well-being, as well as reducing family sizes. It's also a moral thing to do. Giving local people more control over their resources expands Earth's carrying capacity, reduces poverty, and makes rich people less likely to be killed by rioters. It's also a moral thing to do. Saving biodiversity increases the possibilities for expanding agricultural production, preserves valuable renewable resources, protects against flood and droughts, enriches peoples' lives with beauty, and enhances their chances of staying well. It's also a moral thing to do.

Equity

One of the main elements of the solution to the human predicament clearly goes along with our personal moral values; the need for greater equity in human affairs. Yet, morals aside, humanity's only chance of creating a sustainable civilization depends on global cooperation to adjust the scale of the human enterprise so that the size of the human populations falls once again within Earth's carrying capacity. . . . A sustainable world would require that nations cooperate in regulating the rate of utilization of both natural resources and the natural sinks that absorb effluents. Each nation also should accept limits on the resource flows that it can command—so many gallons of water will be extracted from rivers with international basins, so many cubic meters of lumber and tons of oil imported, etc. All trade agreements should be designed to allow for differences in environmental and workers' welfare regulations without penalizing nations that have higher standards and strong controls. . . .

Much of this may seem an impossibility today, and it may be impossible in the future. But in our view, the only alternatives to making and complying with such agreements is to court disaster by permitting a continuation of the present headlong race to destroy Earth's life-support system and exhaust civilization's natural capital.

RU professor to speak on Earth's carrying capacity next week

Rockefeller Professor Joel Cohen will discuss the question "How Many People Can the Earth Support?" at the Friday lecture next week (Oct. 27). Cohen, who received a 1981 "genius" award from the John D. and Catherine T. MacArthur Foundation, will publish a book of the same title in November. The lecture will take place in Caspary Auditorium at 3:45 P.M. Look for more information in next week's *News&Notes*.

Potpourri

Fly meeting
The New York Area Fly Meeting takes place tomorrow (Oct. 21) from 10:30 A.M. to 4:00 P.M. in Caspary Auditorium. For further information contact Claude Desplan, x7965, or Ulrike Gaul, x7621.

Boiler plant shutdown
The university's power plant will be shut down for upgrading from 8:00 A.M. Mon., Oct. 23 through approximately Sun., Oct. 29. The shutdown should not affect any equipment in offices or laboratories because low and medium pressure steam will be available from Con Edison. In the unlikely event that Con Edison experiences problems during this shutdown, fluctuations in the medium pressure steam supply might affect such laboratory equipment as autoclaves, washing machines, and sterilizers. Call Brendan Bolger, x8425, with any questions.

Protein folding lectures
The protein folding lecture series continues next week. Reuben Abagyan, professor at the New York University Medical Center, will speak on "Predicting Protein Structure and Association by Global Free Energy Optimization" Mon., Oct. 23 at 2:00 P.M. Michael Levitt, professor at Stanford University, discusses "Protein Folding at Low Resolution: Sequence Space and Conformational Spaces" Wed., Oct. 25 at 1:30 P.M. Both lectures will be held in Weiss 305. For further information contact E.G.D. Cohen, x8855.

Clinical Research Seminar
Camille L. Bedrosian, assistant professor of medicine at Duke University Medical Center, will discuss "Molecular Aspects of Head and Neck" at the Clinical Research Seminar Wed., Oct. 25 at noon in Nurses Residence 110B.

Benefits fair
Members of the university community will have the opportunity to change their health insurance plans at an open enrollment benefits fair Wed., Oct. 25. Representatives from the university's health insurance companies will be on hand to answer questions. Also, representatives from TIAA-CREF will discuss retirement annuities and long-term care plans.

The fair begins the annual open enrollment period for health insurance, flexible spending account, and voluntary accidental death and dismemberment plan. The event, organized by the Personnel Office, will take place in the Weiss lobby from 11:00 A.M. to 2:00 P.M. For further information, contact Kristin Gross, x8297, or Ginny Hansen, x8299.

RU concert
Camerata Bern performs at the Rockefeller University Concert Thurs., Oct. 26 at 8:00 P.M. in Caspary Auditorium. Both the concert and the buffet supper are sold out.

Lecture
Philippe J. Sansonetti, head of the Unite de Pathogenie Microbienne Moleculaire, Institut Pasteur, France, will speak on "Molecular and Cellular Mechanisms of Invasion of the Intestinal Epithelial Barrier by Enteric Pathogens: *Shigella flexneri* and Others" Tues., Oct. 31 at 3:45 P.M. in Caspary Auditorium. Hosted by Assistant Professor Robert Masure, Sansonetti is Burroughs Wellcome Visiting Professor in Microbiological Sciences and will stay at RU from Mon., Oct. 31 through Fri., Nov. 3.

Honor
Two members of the Kappas laboratory were guest speakers at the Karolinska Institute in Stockholm earlier this month. Visiting Professor Michal Schwartzman presented a seminar on "Cytochrome P450-derived Eiconasoids in Inflammation and Neovascularization." Visiting Professor Nader Abraham discussed the lab's research on "Human Heme Oxygenase Gene Transfection of Coronary Epithelial Cells as a Protective Mechanism against Oxidative Damage by Free Hemoglobin."

Book
Yvonne S. Thornton, formerly a visiting associate physician in the Carter lab, has written a book with Jo Coudert entitled *The Ditchdigger's Daughters: A Black Family's Astonishing Success Story*.The book is available from Birch Lane Press.

Hot off the press

Scientific and Educational Programs published in paperback and on the World Wide Web

The *1995-1996 Scientific and Educational Programs* (SEP), which contains the 1994-1995 Annual Report, is printed. The Office of Public Affairs is mailing copies to lab and department heads. Each member of the university is entitled to a copy of the catalog. To obtain multiple copies, contact Helen Call, x8967.

SEP is posted on Rockefeller's World Wide Web home page (http://www.rockefeller.edu/sep/), containing links to individual labs and programs with university-based home pages.

Thorne

(continued from page 1)

degree from Princeton University in 1965. After two years of postdoctoral study, he returned to Caltech, where he received a bachelor's degree in 1962, to become associate professor. He was promoted to professor in 1970, was named William R. Kenan, Jr., Professor in 1981, and became Feynman Professor of Theoretical Physics in 1991.

Co-author of three books on gravitation theory and the sole author of a fourth, Thorne received the American Institute of Physics Science Writing Award in Physics and Astronomy in 1969. In 1994 he won the AIP award and the Phi Beta Kappa Science Writing Award for his book *Black Holes and Time Warps: Einstein's Outrageous Legacy*, which was praised by astrophysicist Stephen Hawking as "...a fascinating account...of the struggles and eventual success in a search for our understanding of what are possibly the most mysterious objects in the universe."

Thorne is a member of the American Academy of Arts and Sciences and the National Academy of Sciences (NAS). He served on the NAS Space Science Board, the International Committee on General Relativity and Gravitation, and the Committee on US–USSR Cooperation in Physics. He has been a Woodrow Wilson fellow, a Danforth Foundation fellow, a Fulbright fellow, and a Guggenheim fellow.

The lecture will be held in Caspary Auditorium at 3:45 P.M. and preceded by tea at 3:15 P.M. in Abby Aldrich Rockefeller Lounge. All are welcome.

Graduate studies gets new leadership

(continued from page 1)

investigator, Wiesel said, "George and John are both fully committed to and deeply involved in a range of important matters related to our graduate program. I am very appreciative of their willingness to work together and to join with other faculty members to ensure the quality and distinction of the Rockefeller graduate experience."

Commenting on Zinder's new role, he said "I look forward to working with Norton in his new role and plan to draw on his highly regarded scientific expertise, his wide-reaching sense of the world of science and its public policy context, and deep knowledge of and commitment to Rockefeller."

Wiesel noted that he will work with the new deans on the membership of the committees related to the program, to be announced in the next several weeks.

He also acknowledged the excellent support for the program provided by assistant dean Marguerite Mangin and the staff of the office of graduate studies—Susanna Ander, Kristin Cullen, and Marta Delgado—who will continue to work with the new deans.