4-6-2001

NEWS AND NOTES 2001, APRIL 6

The Rockefeller University

APRIL 6, 2001

news & notes

THE NEWSLETTER OF THE ROCKEFELLER UNIVERSITY

FRIDAY LECTURE

Schreiber to give the Furlaud Lecture today

Rockefeller University Trustee Stuart L. Schreiber, a professor at Harvard University, will present the Richard M. Furlaud Distinguished Lecture today (April 6). His topic will be "Toward a Chemical Genetics."

Genetics has been a primary contributor to the understanding of biology. Both forward and reverse genetics rely upon mutant alleles to gain insights into pathways or processes of interest. Small molecules have also been used to gain insights into biology in ways that are analogous to either forward or reverse genetics. Many of these advances (for example, Arvid Carlsson's use of chlorpromazine to explore the dopamine receptor and Gary Borisy's use of colchicine to discover tubulin) have been brought to light on a case-by-case basis. In his lecture, Schreiber will discuss research aimed at the development of chemical genetics, where small molecules are used in a systematic way to explore biology.

Schreiber is an investigator at the Howard Hughes Medical Institute and a Morris Loeb Professor at Harvard University, where he is a member of the Department of Chemistry and Chemical Biology and an associate member of the Department of Molecular and Cellular Biology. He is also an affiliate of the Department of

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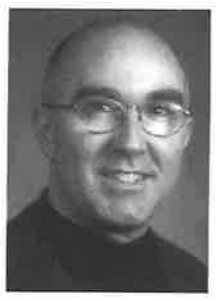


Trustee Stuart Schreiber is a Morris Loeb Professor at Harvard University and an HHMI investigator.

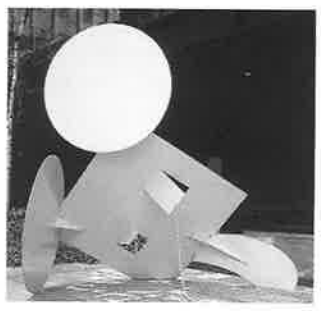
Sculptures from MoMA to be on exhibit at Rockefeller

Spring always brings changes to the Rockefeller campus. This year, in addition to blooms of many kinds, the campus community will welcome the installation of a dozen sculptures on loan from the Museum of Modern Art (MoMA). The special exhibition, entitled "Sculpture from the Abby Aldrich Rockefeller Sculpture Garden of the Museum of Modern Art," includes works by Scott Burton, Alexander Calder, Ettore Colla, Herbert Ferber, Bryan Hunt, Henry Moore, Claes Oldenburg, Eduardo Paolozzi, George Rickey, David Smith, Tony Smith and Mark di Suvero.

"It's wonderful in our centennial year to have the museum's sculptures here on campus," says Rockefeller University President Arnold J. Levine. "From early on, the leaders of this institution understood the importance of creating an environment that would inspire scientists to think creatively. The presence of art on campus has always been a very important part of of expanding and enriching the intellectual and aesthetic life at Rockefeller."

The works on loan will be familiar from their previous installation in MoMA's Abby Aldrich Rockefeller Sculpture Garden, which currently is under construction as part of the museum's major expansion and renovation program.

The idea for the new exhibition, which will be installed in the next few weeks, grew out of discussions in the mid-1990s between then-President Torsten Wiesel, Life Trustee and Chairman Emeritus David Rockefeller, and MoMA Director Glenn Lowry about how the campus could be a setting for sculpture to expand the university's long tradition of integrating the arts into the scientific community.



Among the sculptures that will be on campus are Claes Oldenburg's *Geometric Mouse, Scale A* (top left) and Henry Moore's *Large Torso: Arch* (top right).

"I am delighted that this project, which Torsten and I have talked about for so many years, is finally being realized and in time to celebrate the centennial of the university's founding,"

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Ploegh to give Levine Memorial Lecture next week

Hidde L. Ploegh, Edward Mallinckrodt Jr. Professor of Immunopathology in the Department of Pathology and the director of the Graduate Program in Immunology at Harvard Medical School, will present the Philip Levine Memorial lecture next Fri., April 13. His topic will be "Cell Biology of Antigen Presentation."

Ploegh studies the biochemistry of antigen presentation, or the MHC Class I or II molecules that present short peptides to T lymphocytes. Since viruses are capable of a large range of evasive maneuvers when MHC-activated T cells exert selective pressure on virus-infected cells, Ploegh's laboratory studies the steps that lead from the production of cytosolic peptides to the assembly of a peptide-loaded MHC molecule. This work focuses in particular on the various mechanisms by which viruses manage to elude this presentation pathway.

Ploegh's laboratory has observed the human cytomegalovirus (HCMV) in two HCMV-encoded gene products, US2 and US11, targeting newly synthesized MHC Class I molecules for extraction from the endoplasmic reticulum and delivery to the cytosol, where the MHC Class I heavy chains are destroyed by the proteasome. Other strategies are used by pathogens to elude MHC Class II molecules since those essentially rely on endosomal/lysosomal proteolysis to accomplish peptide loading, and hence are distinct from the cell biological mechanisms used by MHC Class I products.

Ploegh received his B.Sc. in biology and M.Sc. in biology and chemistry from the State University of Groningen, The Netherlands. He received his Ph.D. in biochemistry from the State University of Leiden, The Netherlands, in 1981 after conducting his thesis work at Harvard University in the laboratory of J.L. Strominger. From 1981 to 1992, Ploegh held scientific posts in Europe, including head of the Department of Cellular Biochemistry at the Netherlands Cancer Institute in Amsterdam. In 1992, Ploegh moved to the Massachusetts Institute of Technology as a professor of biology, and in 1997 accepted his current position at Harvard Medical School.

Hidde L. Ploegh will discuss the cell biology of antigen presentation next week.

Ploegh's talk begins at 3:45 p.m. in Caspary Auditorium and is preceded by a tea in Abby Aldrich Rockefeller Lounge at 3:15 p.m. All are welcome.

University hosts "brain/body" symposium

On Tues., April 17, the university will host a symposium entitled "The Brain-Body Connection: An Exploration of the Relationship between Stress Hormones and Immune Function." Scientists from the Rockefeller University and other institutions will present a day-long series of talks.

Stress is an intrinsic part of life, and a physiological stress response is fundamental for survival. However, stress is thought to play a role in the etiology of many diseases. On the one hand, stress is known to suppress immune function and increase susceptibility to infections and cancer. On the other hand, paradoxically, stress is thought to exacerbate autoimmune and pro-inflammatory diseases-which by rights should be ameliorated by a suppression of immune function. This symposium explores the mind-body connection by examining the relationship between stress, stress hormones, and immune function.

Contrary to the popular belief that stress hormones are "harmful" and detrimental to health, studies will be presented to show that there exist reciprocal, dynamic, and modulatory relationships between stress hormones and immune function.

Speakers will examine these relationships at various levels of behavioral, organismal, cellular, and molecular detail. Time for audience questions and discussion will be allotted after every presentation and at the end of the symposium.

The event begins with a coffee reception at 8 a.m., followed at

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AROUND CAMPUS

Take Your Child to Work Day

Human Resources will host the annual Take Your Child to Work Day on Thurs., April 26, from 9 a.m. to 3 p.m. Children must be between the ages of 7 and 14 and be accompanied by an adult to attend. To register your child, please contact Mary O'Donnell, x8300, or E-mail her at odonnem by Tues., April 17. Registration is limited, so please sign up early.

Retirement and Annuity seminar

TIAA-CREF will be on campus to discuss the (Group) Supplemental Retirement Annuity and Retirement Annuity on Wed., April 18. The seminar will cover the benefit of tax deferral, investment options, and other investment vehicles that you can take advantage of through TIAA-CREF. The seminars take place from 11:45 a.m. to 12:45 p.m. or from 1 p.m. to 2 p.m. in Weiss 305. Brown bags are welcome, and beverages will be served. If you have any questions, please call Human Resources, x8300.

Flexible Spending Accounts Reimbursement Request Deadline

Mon., April 16, is the 2000 Flexible Spending Accounts (FSA) reimbursement request deadline for dependent care and health care expenses. Please submit all your 2000 FSA eligible expenses to 21st Century for reimbursement by this date. Any unclaimed balance after this date will be forfeited. FSA Reimbursement Claim forms are located in Human Resources, 103 Founders Hall. If you have any questions, please call 21st Century at (800) 686-0685, or Human Resources, x8300.

Khitrov is new director of the Gene Array Facility

The Stoffel lab's recent discovery of a link between diabetes and cholesterol (see story on next page) would not have been possible without the powerful new DNA microarray technology. All laboratories at Rockefeller will be able to use this technology at the new Gene Array Facility, directed by Gregory Khitrov.

Khitrov, who has built up the facility from scratch since he arrived at Rockefeller last June, will produce high-quality microarrays as well as oversee a variety of other services offered by the facility, including scanning, data analysis, data archiving and technical support.

DNA microarrays are extremely effective tools for observing the behavior of thousands of genes in a single experiment. Their role in biology is becoming increasingly important as the number of sequenced genomes continues to rise. The Gene Array Facility will provide Rockefeller researchers with a rapid and inexpensive way to analyze this growing mass of genetic information.

"This is a wonderful tool for studying the function of known genes as well as new ones," says Khitrov. "The facility will give researchers at Rockefeller a chance to use microarrays without having to worry about the cost."

At the present time, the facility is equipped with several high-precision robots and already is capable of producing high-quality microarrays. Khitrov says that mouse microarrays, consisting of approximately 10,000 genes, are currently available. Furthermore, he is in the process of purchasing genes for human microarrays, which he estimates should be ready by July. Custom-designed microarrays and protein chips also will be available.

"Gregory is doing a wonderful job of setting up the technology. He's got a good science mind and an excellent sense of business," says Professor Ali Hemmati Brivanlou, head of the Laboratory of Molecular Vertebrate Embryology. Hemmati Brivanlou, who implements microarrays in his own studies of frog development, played a role in establishing the facility.

Researchers use microarrays to observe the changing patterns of gene expression as cells are placed under different conditions. The microarray itself is constructed by spotting genes from a specific organism onto a glass slide with the aid of a high-precision robot. The spotted array then is covered with messenger RNA (mRNA) molecules from cells in two different states. For each state, the mRNA has been tagged with differently colored fluorescent dyes, usually red or green. Those mRNA probes that have complementary genes on the microarray will stick, while the others will be washed off. Finally, a laser scanner detects the remaining red and green fluorescently tagged mRNAs, and a computer program indicates which genes they bound to.

Born and raised in Russia, Khitrov immigrated to the United States with his family in 1990. He received his B.S. in biology from the State University of New York at Stony Brook in 1997 and his M.S. in biological sciences from New York University in 2000.

In his spare time, Khitrov tries to squeeze in as much swimming as he can. Though he prefers to swim in the ocean—he was a lifeguard at Coney Island from 1990 to 1994—he has spent quite a bit of time swimming in pools: In 1996 he qualified to go to the Olympics in Atlanta as a member of the U.S. Swimming Team, but declined the offer because he didn't want to interrupt his studies.

While a graduate student, Khitrov used Affymetrix DNA chips—a patented version of microarrays, which employs short pieces of DNA in place of whole genes—to characterize the effects of UV light on gene expression. Amazed by the power of the then brand-new technology, Khitrov knew that he wanted to further explore the technique. Directing the Gene Array Facility, he says, is exactly the kind of opportunity he was looking for.

Professor Jeffrey Friedman is chairman of the Gene Array Committee, and Richard Pearson is the facility's full-time technician. Equipment includes the Microgrid II robot from BioRobotics for making microarrays; a laser confocal scanner from GSI Lumonics for detecting fluorescent probes; a CCD-based scanner from Applied Precision, also for detecting probes, and an Affymetrix DNA chip fluidic station and scanner. The Gene Array Facility will be moving from its temporary location on the 8th floor of the Rockefeller Research Building to the 7th floor of Weiss in June.

For more information on the facility, including an animated movie depicting how microarrays work, see the Web site at http://www.rockefeller.edu/genearray/.

Khitrov heads a new facility that will give researchers at Rockefeller a chance to use microarrays without having to worry about the cost.

Diamond Center to celebrate 10th anniversary

The Aaron Diamond AIDS Research Center, the largest private HIV/AIDS research center in the world, celebrates its 10th anniversary on April 17 with a special symposium entitled "AIDS Research: Progress and Promise." Since 1996, the center, led by Rockefeller University Professor David Ho, has been an integral component of the university's clinical research program.

The one-day symposium starts at 9 a.m. in Caspary Auditorium, and includes presentations by Ho and his colleagues Michael Louie, Leonidas Stamatatos, Sarah Tuttleton Arron, Janet Harouse, Mark Muesing, and Paul Beiniasz from the Diamond Center. Invited speakers Don Wiley, Norman Letvin and Jeffrey Sachs of Harvard University and Bette Korber of Los Alamos National Laboratory also will give lectures during the event. Registration and coffee begin at 8:00, and there will be a lunch break at 12 p.m.

Ho and his colleagues investigate the infection process of the human immunodeficiency virus (HIV), which causes AIDS. The Diamond Center's research has helped demonstrate the rapid rate of HIV replication in the body, a finding that has been used as the foundation for new treatment strategies. A study headed by Ho and conducted at the Rockefeller University Hospital led to the design of the so-called AIDS "cocktail" of therapeutic drugs that has significantly reduced the death rate from AIDS in the United States.

Ho received the Presidential Citizen's Award in January from President Bill Clinton in a ceremony at The White House. He was among 28 recipients of that honor, recognized for "remarkable service and accomplishments" that "inspire others to do the same." Ho's other awards include the Hoechst Roussel Award in 1999 for outstanding accomplishment in basic research, or the development, clinical use, or action of

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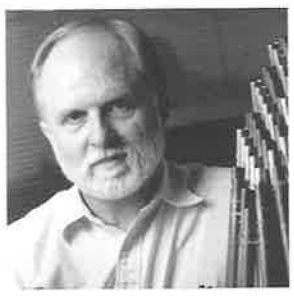
Upcoming events

As is their custom, the Guarneri Quartet will perform at the final Peggy Rockefeller concert of the season.

Peggy Rockefeller Concert

On Wed., May 2, the Guarneri Quartet returns for probably the 39th time (the university has lost count) to close our centennial concert season. This time they will perform with new cellist Peter Wiley. The concert will take place in Caspary Auditorium at 8 p.m. Please call x8437 for more information.



Professor A. James Hudspeth will give a 92nd St. Y talk on Tues., April 10.

92nd St. Y talk

On Tues., April 10, F.M. Kirby Professor A. James Hudspeth, an HHMI investigator, will discuss "Senses and Sensitivity." Hudspeth is head of the university's Laboratory of Sensory Neuroscience. His lecture will take place at 7 p.m. in Caspary Auditorium. Call x8073 for tickets.

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calendar

APRIL SIXTH THROUGH MAY SIXTH

EVENTS

Friday Lectures and Thesis Presentations

These events are held in Caspary Auditorium at 3:45 p.m. and preceded by tea at 3:15 p.m. in Abby Aldrich Rockefeller Lounge, unless otherwise indicated. All are welcome.

FRIDAY, APRIL 6

Second Annual Richard M. Furlaud Distinguished Lecture: Toward a Chemical Genetics. Stuart Schreiber, Investigator, Howard Hughes Medical Institute, and Morris Loeb Professor, Harvard University.

MONDAY, APRIL 9

Thesis Presentation: Trypanosome Telomeres: In the Loop. Jorge Munoz, Graduate Fellow, RU.

TUESDAY, APRIL 10

Thesis Presentation: The Charm Factor in Diffraction. Andrew Solodsky, Graduate Fellow, RU.

FRIDAY, APRIL 13

Philip Levine Memorial Lecture: Cell Biology of Antigen Presentation. Hidde Ploegh, Harvard Medical School Department of Pathology.

WEDNESDAY, APRIL 18

Thesis Presentation: Structural and Functional Analysis of Type I TGF-β Receptor Regulation. Morgan Huse, Graduate Fellow, RU.

FRIDAY, APRIL 20

Daniel E. Kahne, Professor of Chemistry, Princeton University.

WEDNESDAY, APRIL 25

1:00 p.m. **Thesis Presentation: Traffic of Transcription Factors and Lorenzo's Oil on DNA Chips: Studies on Nuclear Import and Peroxisomal Biogenesis.** Anton Titov, Graduate Fellow, RU. Tea at 12:30 p.m.

FRIDAY, APRIL 27

Ernst A.H. Friedheim Memorial Lecture: The Mechanism of Uridine Insertion/Deletion RNA Editing in Trypanosome Mitochondria. Larry Simpson, Howard Hughes Medical Institute, University of California, Los Angeles.

FRIDAY, APRIL 6

11:00 a.m. **Molecular Mechanisms of TH1-type Cytokine Gene Expression in Microbial Infections.** Ilkka Julkunen, Head, Laboratory of Viral and Molecular Immunology, Department of Virology, National Public Health Institute, Helsinki, Finland. Seminar. 301 Weiss. Contact Pat Holst, 327-7047. Open to RU/WMCCU/NYPH/MSKCC community and guests.

12:00 p.m. **Chimeras for Dissecting Complex Phenotypes.** Andras Nagy, Senior Staff Scientist, Samuel Lunenfeld Research Institute, Mount Sinai Hospital. Molecular Biology Seminar. 116 Rockefeller Research Laboratories, MSKCC, 430 East 67th St. Tea at 11:45 a.m. Contact Linda Smith, 639-7655. Open to RU/WMCCU/NYPH/MSKCC community and guests.

12:00 p.m. National Library Week Open House. Christine Fleming, Beilstein. Scott Bard, Institute for Scientific Information. Kevin Monaco, Chemical Abstract Services. Vendor Demonstration. Welch Hall. Refreshments at 12:00 p.m. Open to RU community and guests.

MONDAY, APRIL 9

12:00 p.m. **HIV Vaccines: From DNA to Protein.** Shan Lu, University of Massachusetts Medical Center. CFAR Seminar. Sixth Floor Conference Room, ADARC, 455 First Ave.

TUESDAY, APRIL 10

10:00 a.m. **Novel Fluorescent Probes for Studying Protein Dynamics and Electrostatics.** Bruce Cohen, Howard Hughes Medical Institute, Departments of Biochemistry and Physiology, University of California School of Medicine, San Francisco. Chemical Biology Seminar. 302 Weiss. Coffee at 9:45 a.m. Open to RU community and guests.

11:00 a.m. **Optical Imaging of Microstimulation Evoked Activity in Frontal and Visual Cortical Areas of Behaving Monkeys.** Eyal Seidemann, Weizmann Institute of Science. Systems Neuroscience Seminar. 305 Weiss. Open to RU/WMCCU/NYPH/MSKCC community and guests.

1:00 p.m. **The Biology of Stem Cells: Heterogeneity or Plasticity.** Malcom A.S. Moore, Enid A. Haupt Professor of Cell Biology, MSKCC. Pathology Seminar. C-405 WMCCU, 1300 York Ave. Refreshments will be served. Contact Beatrice Knudsen, 746-6402.

4:00 p.m. **Dynamics of the Vocal Imitation Process: How a Zebra Finch Learns to Sing.** Ofer Tchernichovski, Rockefeller University. Center for Studies in Physics and Biology Seminar. B Level Conference Room, Smith Hall Annex. Tea at 3:30 p.m. Contact Erik van Nimwegen, 327-8184.

7:00 p.m. **Senses and Sensitivity.** A. James Hudspeth, Professor, RU, and Investigator, Howard Hughes Medical Institute. Genes, DNA and You: The Impact of the Human Genome Project. Caspary Auditorium. A public lecture sponsored with the 92nd Street Y. Tickets are available from the 92nd Street Y at 996-1100.

WEDNESDAY, APRIL 11

12:00 p.m. **Aging and Cancer: Are Telomeres and Telomerase the Connection?** Jerry Shay, Professor, Department of Cell Biology, University of Texas Southwestern Medical Center. Seminars in Clinical Research. 110B Nurses Residence. Contact Dale Miller, 327-8411.

12:00 p.m. **Applications of Statistics to Functional Genomics.** Wing Wong, Professor of Statistics, Faculty of Arts and Sciences, and Professor of Computational Biology, School of Public Health, Harvard University. Starr Center for Human Genetics Seminar. 305 Weiss. Contact Emily Huffman, 327-7387.

2:00 p.m. **Chromosome 13 Dementias (BRI) as Models of Neurodegeneration.** George Ghiso, New York University. **Mechanisms of Amyloid Accumulation and Pathogenesis in Alzheimer's Disease.** Charlie Glabe, University of California, Irvine. **Cholesterol and Alzheimer's Disease.** Lorenzo Refolo, Nathan Kline Institute. NY Alzheimer Disease Research Symposium. 301 Weiss. Refreshments at 5:30 p.m. Contact Huaxi Xu, 327-7567.

4:30 p.m. **Molecular Mechanisms of Lineage Choice and Development.** Stuart H. Orkin, Investigator, Howard Hughes Medical Institute, Professor of Pediatrics, Harvard Medical School, and Chairman, Department of Pediatric Oncology, Dana-Farber Cancer Institute. MSKCC President's Research Seminar. Auditorium, Rockefeller Research Laboratories, MSKCC, 430 East 67th St. Tea at 4:00 p.m.

THURSDAY, APRIL 12

3:00 p.m. **Studies of Dyslexia.** Guinevere Eden, Assistant Professor, Department of Neuroscience, Georgetown University. Systems Neuroscience Seminar. 305 Weiss. Open to RU/WMCCU/NYPH/MSKCC community and guests.

4:00 p.m. **Estrogen Regulation of Pituitary Function: A Dynamic Regulatory System.** Margaret Shupnik, Professor of Medicine, Division of Endocrinology, University of Virginia Medical Center, Charlottesville. Endocrinology and Reproductive Biology Seminar. 301 Weiss.

4:00 p.m. **Seeing the CpGs in DNA: Activation of Innate and Acquired Immunity by Pathogen DNA.** Arthur M. Krieg, Professor, Department of Internal Medicine, University of Iowa, Iowa City. LFKRI Research Seminar. Lower Level Conference Room, New York Blood Center, 310 East 67th St. Tea at 3:45 p.m. Contact Rosanna Martinez, 570-3357.

FRIDAY, APRIL 13

12:00 p.m. **Cell Division in Fission Yeast—A Model For All Eukaryotes?** Kathleen Gould, Howard Hughes Medical Institute and Department of Cell Biology, Vanderbilt University School of Medicine. Cell Biology Seminar. 116 Rockefeller Research Laboratories, MSKCC, 430 East 67th St.

MONDAY, APRIL 16

1:30 p.m. **Dendritic Cells and the Control of Immunity.** Ralph M Steinman, Professor, RU. Immunology Seminar. Weill Auditorium, WMCCU, 1300 York Ave.

4:00 p.m. **Bacteriophages and Their Use in Treating Infections in Man: Current Status and Perspectives.** Andrzej Gorski, Polish Academy. Seminar. B-307 WMCCU, 1300 York Ave. Contact Sonia Chin, 746-6505.

4:00 p.m. **RGS Proteins—Unveiling New Frontiers in G Protein-coupled Receptor Signaling.** David Siderovski, Department of Pharmacology, University of North Carolina Neuroscience Center, and Lineberger Comprehensive Cancer Center, UNC, Chapel Hill, School of Medicine. Research Seminar. Weill Auditorium, WMCCU, 1300 York Ave. Coffee at 3:45 p.m. Contact Lissett Checo, 746-6250.

TUESDAY, APRIL 17

8:00 a.m.–5:00 p.m. **Mind-Body Interactions: An Exploration of the Relationship Between Stress Hormones and Immune Function. Viral Infection and HPA Axis Activation.** Christine Biron, Brown University. **Immune Activation and Glucocorticoid Receptor Function: Relevance to Immune-based Depression.** Andy Miller, Emory University. **Stress Hormones, Leukocyte Trafficking and the Augmentation of Immune Function.** Firdaus Dhabhar, The Ohio State University. **Stress and Immunosuppression.** Ron Glaser, The Ohio State University. **Stress, Viral Infection and Wound Healing.** John Sheridan, The Ohio State University. **HPA Axis and Autoimmune Disease.** Esther Sternberg, National Institute of Mental Health, NIH. **Catecholamine Hormones and Inflammatory Disease.** Cobi Heijn, Universitiet Utrecht. Symposium. Weiss 17th Floor. Admission is free. Pre-registration is required; electronic registration is preferred. To register, please E-mail your name, institution, phone and fax numbers to dhabhar@mail.rockefeller.edu or fax to (614) 247-6945. Open to RU/WMCCU/NYPH/MSKCC community and guests.

9:00 a.m.–5:00 p.m. **AIDS Research: Progress and Promise. Welcome and ADARC History and Accomplishments.** David Ho, ADARC and RU. **Structure/Function of HIV gp41 and Fusion Inhibitors.** Don Wiley, Harvard University. **Enhancing the Potency of Antiviral Therapy.** Michael Louie, ADARC and RU. **HIV Vaccine Development.** Norman Letvin, Harvard University. **Induction of HIV Neutralizing Antibodies.** Leonidas Stamatatos, ADARC and RU. **The Role of Thymus in SIV/HIV Pathogenesis.** Sarah Tuttleton Arron, ADARC and RU. **Diversity of HIV/SIV and Origin of the Epidemic.** Better Korber, Los Alamos National Laboratory. **SHIV Transmission Studies.** Janet Harouse, ADARC and RU. **HIV Integrase.** Mark Muesing, ADARC and RU. **HIV Virion Assembly.** Paul Bieniasz, ADARC and RU.

Continued on other side with Arts and Other Events.

news & notes
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calendar-2

APRIL SIXTH THROUGH MAY SIXTH

Fighting HIV/AIDS in Developing Countries. Jeffrey Sachs, Harvard University. **Concluding Remarks.** David Ho. Aaron Diamond AIDS Research Center 10th Anniversary Symposium. Caspary Auditorium. Coffee breaks at 10:20 a.m. and 2:50 p.m. Lunch break from 12:00 p.m. to 1:00 p.m.

4:00 p.m. **Mechanisms of Camptothecin Induced Cell Killing.** Mary-Ann Bjornsti, Associate Member, Department of Molecular Pharmacology, St. Jude Children's Research Hospital. Molecular Pharmacology and Therapeutics Seminar. 116 Rockefeller Research Laboratories, MSKCC, 430 East 67th St. Tea at 3:45 p.m.

4:00 p.m. **Probabilistic Sequence Alignments with Universal Statistics.** Yi-Kuo Yu, Florida Atlantic University. Center for Studies in Physics and Biology Seminar. B Level Conference Room, Smith Hall Annex. Tea at 3:30 p.m. Contact Erik van Nimwegen, 327-8184.

WEDNESDAY, APRIL 18

11:00 a.m. **Alphavirus Bone/Joint Tropism and Determinants of Neurovirulence.** Mark Heise, Department of Microbiology and Immunology, University of North Carolina, Chapel Hill, School of Medicine. Infectious Disease/Immunology Seminar. 301 Weiss. Open to RU community and guests.

11:00 a.m. **TIAA-Cref Seminars.** 305 Weiss. Refreshments at 11:15 a.m. Open to RU community and guests.

12:00 p.m. **Molecular Genetic Analysis of Pneumococcal Virulence.** Andrew Camilli, Assistant Professor, Tufts University School of Medicine. Seminars in Clinical Research. 110B Nurses Residence. Contact Dale Miller, 327-8411.

4:30 p.m. **Charting Pathways of Tumorigenesis in Mice: Mechanisms and Targeted Therapeutics.** Douglas Hanahan, Professor, Department of Biochemistry and Biophysics, Diabetes and Comprehensive Cancer Centers, University of California, San Francisco. MSKCC President's Research Seminar. Auditorium, Rockefeller Research Laboratories, MSKCC, 430 East 67th St. Tea at 4:00 p.m.

THURSDAY, APRIL 19

1:00 p.m. **Sir2 Proteins Regulate Aging in Yeast and Animals.** Leonard Guarente, Massachusetts Institute of Technology. Seminar. Weill Auditorium, WMCCU, 1300 York Ave. Contact Sonia Chin, 746-6505.

4:00 p.m. **The Cellular Immune Responses to the Hepatitis C Virus and Its Role in Viral Clearance and Disease Pathogenesis.** Barbara Rehermann, Liver Diseases Section, National Institute of Diabetes and Digestive and Kidney Diseases, NIH. Center for the Study of Hepatitis C Seminar. 301 Weiss. Contact Patricia Holst, 327-7047. Open to RU/WMCCU/NYPH/MSKCC community and guests.

4:00 p.m. **Therapy for the New Millennium: Using Genetic Medicine to Regenerate Diseased Organs.** Ronald Crystal, Professor of Internal Medicine and Genetic Medicine, WMCCU. LFKRI Research Seminar. Lower Level Conference Room, New York Blood Center, 310 East 67th St. Tea at 3:45 p.m. Contact Rosanna Martinez, 570-3357.

5:00 p.m. **Hormonal Doping and Criminal Androgenization of Athletes: Global but Secret Governmental Programs: Protocoled in East German Stasi-Files.** Werner F. Franke, Professor Doctor, Division of Cell Biology, German Cancer Research Center, Heidelberg, Germany. Roy C. Swan Lecture in Biomedical Sciences. Weill Auditorium, WMCCU, 1300 York Ave.

8:00 p.m. **Genes, Behavior, and the Sense of Smell.** Cornelia I. Bargmann, Professor and Vice Chairman, Department of Anatomy and Department of Biochemistry and Biophysics, University of California, and Investigator, Howard Hughes Medical Institute. Harvey Society Lecture. Caspary Auditorium.

FRIDAY, APRIL 20

9:00 a.m. Minority Career Fair. Mary O'Donnell, Human Resources Associate, Human Resources. Minority Career Fair. Weiss 17th Floor and Cohn Library. Contact Mary O'Donnell, 327-8300.

12:00 p.m. **Genetic Regulation of Mammalian Development.** Richard Behringer, Professor, Department of Molecular Genetics, M.D. Anderson Cancer Center, Houston, Texas. Molecular Biology Seminar. 116 Rockefeller Research Laboratories, MSKCC, 430 East 67th St. Tea at 11:45 a.m. Contact Linda Smith, 639-7655. Open to RU/WMCCU/NYPH/MSKCC community and guests.

MONDAY, APRIL 23

1:30 p.m. **Signaling and Lineage Commitment in Developing T Cells.** Harald von Boehmer, Professor of Pathology, Dana-Farber Cancer Institute. Immunology Seminar. 116 Rockefeller Research Laboratories, MSKCC, 430 East 67th St. Tea at 3:45 p.m.

4:00 p.m. **A Novel Adapter Molecule BARP (BLINK-associated Raft Protein) Is Involved in Pre-B Cell Receptor Signaling.** Hajime Karasuyama, Professor, Department of Immune Regulation, Tokyo Medical and Dental University. Seminar. 301 Weiss. Contact Virginia Menendez, 327-8076. Open to RU/WMCCU/NYPH/MSKCC community and guests.

4:30 p.m. **Cytoplasmic Dynein-mediated Vectorial Trafficking in Polarized Epithelial Cells and Neurons.** Ching-Hwa Sung, Associate Professor, Departments of Ophthalmology and Cell Biology, WMCCU. Cell Biology and Genetics Seminar. Papanicolau Library, A-106 WMCCU, 1300 York Ave. Coffee will be served.

TUESDAY, APRIL 24

11:00 a.m. **The Structural Biology of Signaling: X-ray Structures of Multiprotein Complexes Involved in Receptor Activation and Signal Transduction.** Tom Blundell, Professor, University of Cambridge. Pels Family Center for Biochemistry and Structural Biology Seminar. 305 Weiss. Coffee and cookies at 10:45 a.m. Contact Roser Busquets, 327-7050.

4:00 p.m. **Biological Fluid Dynamics from Centimeters to Nanometers by the Immersed Boundary Method.** Charles S. Peskin, Courant Institute of Mathematical Sciences, New York University. Center for Studies in Physics and Biology Seminar. B Level Conference Room, Smith Hall Annex. Tea at 3:30 p.m. Contact Erik van Nimwegen, 327-8184.

4:00 p.m. **New Pathways in the Molecular Regulation of Endothelial Nitric Oxide Synthase.** Thomas Michel, Associate Professor of Medicine, Harvard Medical School, Chief, Cardiology Section, VA Boston Healthcare System, and Physician, Brigham and Women's Hospital. Pharmacology Seminar. Weill Auditorium, WMCCU, 1300 York Ave. Coffee at 3:45 p.m. Contact Lissett Checo, 746-6250.

4:00 p.m. **Synthesis of Heterocyclic Natural Products.** Steven M Wienreb, Professor, Department of Chemistry, Pennsylvania State University. Bio-Organic Chemistry Seminar. 116 Rockefeller Research Laboratories, MSKCC, 430 East 67th St. Tea at 3:45 p.m.

WEDNESDAY, APRIL 25

11:00 a.m. **Modulation of Host Signaling by a Bacterial Mimic.** Erec Stebbins, Section of Microbial Pathogenesis, Boyer Center for Molecular Medicine, Yale School of Medicine. Infectious Disease/Immunology Seminar. 301 Weiss. Contact Bobbie Larraga, 327-7240. Open to RU/WMCCU/NYPH/MSKCC community and guests.

4:30 p.m. **Removing the Brakes on T-Cell Costimulation: Application to Tumor Immunotherapy and Identification of a Novel Prostate Cancer Antigen.** James P. Allison, Investigator, Howard Hughes Medical Institute, and Professor of Immunology, University of California, Berkeley. MSKCC President's Research Seminar. Auditorium, Rockefeller Research Laboratories, MSKCC, 430 East 67th St. Tea at 4:00 p.m.

7:30 p.m. **Psoriasis Support Group.** Meeting. 110B Nurses Residence. Contact Patricia Gilleaudeau, 327-8333.

THURSDAY, APRIL 26

1:00 p.m. **Global Analysis of Gene Expression Profiles in *C. elegans*.** Stuart Kim, Associate Professor, Department of Developmental Biology, Stanford University Medical Center. 116 Rockefeller Research Laboratories, MSKCC, 430 East 67th St. Tea at 12:45 p.m.

4:00 p.m. **Smart Mice, Dumb Dogs: Venture Capital War Stories.** Charles Hsu, General Partner, Walden International, San Francisco, Calif. LFKRI Research Seminar. Lower Level Conference Room, New York Blood Center, 310 East 67th St. Tea at 3:45 p.m. Contact Rosanna Martinez, 570-3357.

FRIDAY, APRIL 27

12:00 p.m. **Receptor Localization in *C. elegans* Epithelial Cells.** Stuart Kim, Department of Developmental Biology, Stanford University Medical Center. Cellular Biochemistry and Biophysics Seminar. 116 Rockefeller Research Laboratories, MSKCC, 430 East 67th St.

MONDAY, APRIL 30

10:00 a.m. **Regulation of the Cell Cycle at the G1-S Transition by Ubiquitin-mediated Proteolysis.** Kei-ichi Nakayama, Professor, Department of Molecular and Cellular Biology, Graduate School of Medicine, Medical Institute of Bioregulation, Kyushu University, Japan. Seminar. 305 Weiss. Coffee at 9:45 a.m.

10:30 a.m. **Structural Genomics and Genomic Medicine.** Chris Sander, Genome Center, Massachusetts Institute of Technology. Seminar. 116 Rockefeller Research Laboratories, MSKCC, 430 East 67th St.

1:30 p.m. **CD40 Signaling in B Cells and Its Control of B Cell Differentiation in Vivo.** Randolph Noelle, Professor, Department of Microbiology, Dartmouth Medical College. Immunology Seminar. Second Floor Conference Room, HSS, 535 East 70th St.

4:00 p.m. **Calcium, a Signal for Life and Death.** Joachim Krebs, Institute of Biochemistry, Swiss Federal Institute of Technology (ETH), Switzerland. LFKRI Research Seminar. Lower Level Conference Room, New York Blood Center, 310 East 67th St. Tea at 3:45 p.m. Contact Rosanna Martinez, 570-3357.

WEDNESDAY, MAY 2

4:30 p.m. **Intracellular Signaling from the Endoplasmic Reticulum to the Nucleus.** Peter Walter, Investigator, Howard Hughes Medical Institute, and Professor and Chairman, Department of Biochemistry and Biophysics, University of California, San Francisco. MSKCC President's Research Seminar. Auditorium, Rockefeller Research Laboratories, MSKCC, 430 East 67th St. Tea at 4:00 p.m.

THURSDAY, MAY 3

7:45 a.m. **The Henry G. Kunkel Society Centennial Symposium: Immunology in the 21st Century.** Caspary Auditorium.

The Arts and Other Events

FRIDAY, APRIL 6

12:00 p.m. **Tri-Institutional Noon Recitals.** Common Ground. Jolle Greenleaf and Martha Sullivan, sopranos; Lucas Harris, theorbo; Keri Mikkelson, chamber organ; Carlene Stober, bass viol. Performing François Couperin's Leçons de Ténèbres. Caspary Auditorium. Open to RU/WMCCU/NYPH/MSKCC community and guests.

THURSDAY, APRIL 26

8:00 a.m. **Take Your Child to Work Day.** Caspary Auditorium and Weiss 17th Floor. Contact Mary O'Donnell, 327-8300.

WEDNESDAY, MAY 2

8:00 p.m. **Peggy Rockefeller Concerts.** Guarneri Quartet. Caspary Auditorium. Contact Jennifer Goldschlag, 327-8437.

Diabetes researchers find that a regulator of insulin also regulates cholesterol levels

While studying diabetes, researchers in Markus Stoffel's Laboratory of Metabolic Diseases made an important discovery about high cholesterol. In a paper published in the April issue of *Nature Genetics*, Stoffel's team shows that a transcription factor called TCF1 not only regulates insulin production in the pancreas but also controls the regulation of cholesterol by the liver. When TRF1 doesn't function properly, both diabetes and high cholesterol result.

Stoffel's lab studies the genetic causes of type 2 diabetes mellitus. One subtype of this disease is called maturity-onset diabetes of the young, or MODY, and it is characterized by an early-age of onset. This form of MODY can be caused by a defect in the gene TCF1. TCF1 is a key target of the lab's study because it is critical to a number of metabolic functions. Mice that have been genetically altered to lack TCF1 will develop severe diabetes. What puzzled Stoffel's team was that these mice also develop high blood cholesterol levels.

"This was a completely unexplored question," Stoffel says. "It was interesting to us medically because high cholesterol is the major risk of heart disease and stroke." David Shih, a biomedical fellow and lead author, says: "Furthermore, we were interested to study the molecular mechanisms by which a single gene can control two different pathways that are absolutely essential for our well-being."

The lab began looking for answers by studying the liver, the major organ that regulates cholesterol levels in the blood. In one set of experiments, they used DNA-chip analysis to compare the liver gene expression levels of normal and TCF1-deficient, diabetic mice. This technique enabled them to study more than 25,000 genes at the same time and identify the genetic differences between the different strains of mice.

The results were surprising.

Normally the body gets rid of cholesterol by converting it into bile acid in the liver. Bile acids have an important role in the digestive process and are necessary for the absorption of fat and certain vitamins from the gut into the body. In a healthy animal, bile acids are reabsorbed by the liver and reused. In the mice without functioning TCF1, however, this reabsorption process was impaired and, as a consequence, bile acids were lost in the urine and stool. TCF1 not only affected bile acid reabsorption, but also bile acid and cholesterol production in the liver. In the absence of TCF1, proteins that make bile acids and cholesterol were increased, leading to increased rates of bile acid synthesis and cholesterol concentrations in the blood.

> "We were interested to study the molecular mechanisms by which a single gene can control two different pathways that are absolutely essential for our well-being."

TCF1 is thus a very central regulator in more than one metabolic disease. "If TCF1 activity could be altered pharmacologically," Stoffel says, "this would be a novel approach to treat diabetes and its complications."

Stoffel's coauthors on the paper are David Shih, Markus Bussen of the Laboratory of Metabolic Diseases; Ephraim Sehayek and Jan Breslow of the Laboratory of Biochemical Genetics and Metabolism at Rockefeller; Meenakshisundaram Ananthanayayanan, Benjamin Shneider and Frederick Suchy at the Mount Sinai School of Medicine; Sarah Shefer and Jaya Bollileni at the University of Medicine and Dentistry of New Jersey; and Frank Gonzales of the National Cancer Institute.

Markus Stoffel is the Robert and Harriet Heilbrunn Professor at The Rockefeller University.

This research was funded by the National Institutes of Health, the American Diabetes Association and the Emerald Foundation. The study also was generously supported by Robert and Harriet Heilbrunn and Allen and Frances Adler.

Researchers light the path of the brain's feeding circuit in mice

A novel technique that uses a virus tagged with a green-glowing jellyfish protein has enabled scientists to visualize the feeding circuit in mice. The method may be useful in studies of other complex circuits in the brain. The findings are reported in the March 30 issue of *Science* by a team of researchers from The Rockefeller University, the Howard Hughes Medical Institute, Princeton University and the University of California at San Diego.

The scientists have shown that key neurons that play a role in regulating food intake and that respond to the hormone leptin also receive inputs from neurons in a number of other brain regions.

"Gross connections between neurons in the hypothalamus have been known for decades," says lead author Jeff DeFalco, a postdoctoral researcher in the Laboratory of Molecular Genetics at Rockefeller. "This new technique is exciting because, for the first time, we can identify circuits involving specific classes of neurons."

Leptin, a hormone that plays an important role in regulating food intake and body weight, is produced mainly by fat cells and signals nutritional information to the brain. In general, an increased amount of fat leads to the production of more leptin and a decreased amount of fat leads to a decreased amount of leptin. An increase or decrease in the level of leptin elicits a set of responses that act to return weight to the starting point. Studies in animals have shown that increased leptin reduces food intake and decreased leptin increases food intake. Leptin exerts these effects by changing the activity of a neural circuit in the brain.

> "This new technique is exciting because, for the first time, we can identify circuits involving specific classes of neurons."

To trace the brain's feeding circuit, the scientists inserted a green fluorescent protein (GFP) marker, which normally glows green, into a Pseudorabies virus. Pseudorabies virus is an animal virus that will spread from one nerve cell to the next only if the cells are in synaptic contact with one another. In the past, this virus has been used to trace neural circuits. However, the virus normally infects cells indiscriminately and has thus been of limited value for tracing the neural connections of specific nerve cells. In this paper, the authors created a viral strain that would be activated in specific cell types but remain inactive in others. This new strain is activated when it infects a cell that expresses another gene known as the Cre recombinase.

The researchers generated two strains of mice in which the Cre recombinase enzyme was co-expressed in nerve cells that express either NPY or the leptin receptor. These two cell types are known to play an important role in regulating feeding behavior.

The leptin receptor is the molecule that receives leptin's signal, while injections of NPY increase food intake in mice.

The researchers next injected the Cre-dependent, GFP-tagged virus directly into a region of the hypothalamus called the arcuate nucleus. This is a brain region where NPY and the leptin receptor are expressed. After injection, the virus first spread throughout the cells of the arcuate nucleus itself, causing the neurons containing the Cre recombinase gene to glow green (from the GFP). The virus then spread from these cells to other cells that were in contact with it, and so on. As the virus infects each neuron, it amplifies itself, allowing the researchers to trace the pathway of neurons leaving the hypothalamus.

By looking at sections of the mouse brain taken at various times after infection, DeFalco and his colleagues were able to establish a hierarchy of neuronal signaling. They found that, in addition to sensing leptin levels, the nerve cells in the hypothalamus receive inputs from other brain regions, including sites that play a role in modulating emotion, olfaction and higher brain functions. Further studies of the molecular mechanisms by which these neurons alter the activity of the cells that express NPY and the leptin receptor could lead to the identification of new molecules that regulate feeding.

"The precise delineation of the architecture of the neural system that controls feeding behavior is necessary if we are to understand the molecular mechanisms that control weight," says co-author Jeffrey M. Friedman, Marilyn M. Simpson Professor and head of the Laboratory of Molecular Genetics at Rockefeller and an investigator at the Howard Hughes Medical Institute. "This new method allows us for the first time to directly visualize some of the components of this neural system."

Jeffrey Friedman is the Marilyn M. Simpson Professor and director of the Starr Center for Human Genetics at The Rockefeller University.

DeFalco's and Friedman's coauthors are Hongyan Liu and Xiaoli Cai at Rockefeller; Mark Tomishima and Lynn Enquist at Princeton; and Jamey D. Marth at the University of California at San Diego.

This research was supported by the National Institute of Diabetes and Digestive and Kidney Diseases, part of the federal government's National Institutes of Health. Friedman is the Marilyn M. Simpson Professor and director of the Starr Center for Human Genetics at Rockefeller.

ETCETERA

Gym schedule

To accommodate the expansion of the Child and Family Center, the campus gym has moved into the Northeast and Southeast Conference Rooms on the 17th floor of Weiss. Alex Kogan, director of Plant Operations, estimates that the equipment will remain in this interim location through June 11, when structural improvements to the gym's new permanent location (on the sixth floor of Founder's) should be completed. In the meantime, please note that the gym will be closed on the following dates and times to accommodate events scheduled prior to the announcement that the gym would be moving to Weiss 17:

From Fri., April 20, at 7 a.m. to Fri., April 20, 7 p.m.

From Thurs., April 26, at 7 a.m to Tues., May 8, at 5 p.m.

From Weds., May 9, at 11 a.m. to Weds., May 9, at 4 p.m.

From Mon., May 21, at 9 a.m. to Mon., May 28, at 5 p.m.

Construction updates

Construction alerts and project updates are now available on the Planning and Construction Office Web site. The site is found on the Rockefeller University homepage, under "Administration and Services." The office welcomes your comments.

Campus spraying

The spraying of trees and shrubs throughout campus will take place on Sat., April 14, from 3 a.m. until 9 a.m. In case of inclement weather, the alternate date for spraying will be Sun., April 15, at the same time. It is recommended you close windows, shut off air conditioners, stay out of direct contact of the drift and keep pets inside. Please call James Sullivan, x8001, if you have questions.

Sculptures continued

Rockefeller says. "Creative thinking and the arts have been central to the university community. I am proud that two institutions that have been so important to me and my family have collaborated on this exciting exhibition."

Over his 55-year association with the university, David Rockefeller not only has given numerous works of art (including the Frank Stella in Weiss and, more recently, a Joel Shapiro sculpture and a Chuck Close print) but he also has played a key role in developing and guiding the university's art collections. With MoMA's Alfred Barr and Dorothy Miller, David Rockefeller began to assemble an important collection of Abstract Impressionist paintings for the opening of Abby Aldrich Rockefeller Hall, designed by Wallace Harrison in 1958. This collection—which includes works by Bradley Walker Tomlin, James Brooks, Joan Mitchell and Jack Tworkov—will be complemented by the exhibition of the MoMA sculptures.

In selecting which pieces to send to the university, Kynaston McShine, senior curator in the Department of Painting and Sculpture at MoMA, carefully considered the campus landscape, which was designed by renowned American landscape architect Dan Kiley.

"With our garden being closed, it allowed for the happy circumstance that very important works, especially of postwar American sculpture, could be loaned," says McShine. "Some of these reflect the university's distinguished collection of American painting of that period. Other works have been chosen that indirectly connect to the fundamental endeavors of the university as well as doing justice to the extraordinary contemplative surroundings of the main university buildings."

Lowry adds: "This is a modest and timely gesture of The Museum of Modern Art to honor the centennial of another internationally renowned New York institution whose chairman emeritus, David Rockefeller, we happily share."

On Sat., May 19, at the university's Spring Neighborhood Day event, Lowry will give a public lecture about the MoMA sculptures, which will remain on campus for 18 months. The day will also include docent-led art tours for the public and campus community. *News&Notes* will provide more information about Spring Neighborhood Day and the art tours in a future issue.

Diamond continued

antimicrobial agents, as well as the Ernst Young Prize in Medicine. In 1996, Ho was selected as *Time* magazine's "Man of the Year."

A native of Taiwan, Ho attended the Massachusetts Institute of Technology and received a B.S. from the California Institute of Technology in 1974 and an M.D. from Harvard Medical School in 1978. His early professional affiliations include the University of California at Los Angeles, Cedars-Sinai Medical Center, Harvard University and Massachusetts General Hospital, and New York University. He became scientific director of the Diamond Center in 1989, playing a key role in the design of the laboratory; he now also serves as CEO of the center.

The Aaron Diamond Foundation provided $11 million to create an independent nonprofit HIV/AIDS research corporation in 1989, and, in collaboration with several New York City institutions, opened the center in 1991.

In June 1996, the Diamond Center became affiliated with Rockefeller University and Ho was appointed to a Rockefeller professorship. In addition to support from the Aaron Diamond Foundation and its successor, the Irene Diamond Fund, Inc., the Diamond Center has received funding from the National Institutes of Health (NIH), the Elizabeth Glaser Pediatric AIDS Foundation, and the American Foundation for AIDS Research (AmFAR) and other sources.

Schreiber continued

Cell Biology at the Harvard Medical School, as well as a member of the graduate programs in biophysics at Harvard University and immunology at the Harvard Medical School. He is the founder and director (with Timothy Mitchison) of the Harvard Institute of Chemistry and Cell Biology and the scientific director (with Douglas A. Melton) of the Harvard Center for Genomics and Proteomics. He also is a founder and editor of *Chemistry & Biology.*

Schreiber received his B.A. from the University of Virginia in 1977, then carried out graduate studies at Harvard University under the supervision of R.B. Woodward and Y. Kishi. After completing his doctoral studies, he joined the faculty at Yale University in 1981. He was promoted to associate professor with tenure in 1984 and to professor in 1986. In 1988 he returned to Harvard, where he has remained since.

Schreiber has received several awards for his work and was elected to both the National Academy of Sciences and the American Academy of Arts and Sciences.

The Richard M. Furlaud Distinguished Lecture is named in honor of the university's chairman of the board emeritus. This year's lecture takes place in Caspary Auditorium at 3:45 p.m. and is preceded by at tea at 3:15 p.m. All are welcome.

Brain/body continued

8:30 a.m. by introductory remarks from Bruce McEwen, Alfred E. Mirsky Professor and head of the Laboratory of Neuroendocrinology at Rockefeller.

At 9 a.m., Christine Biron, chairperson of the Department of Molecular Microbiology and Immunology at Brown University, will discuss "Viral Infection and HPA Axis Activation." Her talk will be followed at 10 a.m. by a discussion of "Immune Activation and Glucocorticoid Receptor Function: Relevance to Immune-based Depression" by Andy Miller, a professor in Department of Psychiatry and Behavioral Sciences at Emory University School of Medicine. The next talk, at 11 a.m., will be presented by Firdaus Dhabhar, assistant professor at the Health Sciences Center of The Ohio State University and an adjunct faculty member of the Laboratory Of Neuroendocrinology at Rockefeller. Dhabhar's topic will be "Stress Hormones, Leukocyte Trafficking and the Augmentation of Immune Function."

After an hour lunch break, the symposium will resume with a 1 p.m. talk, entitled "Stress and Immunosuppression" presented by Ron Glaser, a professor in the Department of Molecular Virology, Immunology and Medical Genetics at The Ohio State University. His talk will be followed by "Stress, Viral Infection and Wound Healing" by John Sheridan, a professor at the Health Sciences Center of The Ohio State University.

At 3 p.m., Esther Sternberg, director of the Integrated Neural Immune Program at the National Institute of Mental Health, will discuss "HPA Axis and Autoimmune Disease." Then at 4 p.m., Cobi Heijnen, a professor in the Laboratory of Pediatric Immunology at Universitiet Utrecht will speak about "Catecholamine Hormones and Inflammatory Disease."

At 5:00 p.m., McEwen and President Emeritus Torsten Wiesel (who is also Vincent and Brooke Astor Professor Emeritus and director of the Shelby White and Leon Levy Center for Mind, Brain and Behavior) will moderate a discussion.

The symposium will take place on the 17th floor of the Benjamin and Irma G. Weiss Research Building. Admission is free. Pre-registration is required, and electronic registration is preferred. To register, E-mail dhabhar@mail.rockefeller.edu.

For additional information, please call Adelaide Acquaviva, x8624.

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