

Rockefeller University

Digital Commons @ RU

News and Notes 2001

The Rockefeller University News and Notes

6-8-2001

NEWS AND NOTES 2001, JUNE 8

The Rockefeller University

Follow this and additional works at: https://digitalcommons.rockefeller.edu/news_and_notes_2001



news & notes

THE NEWSLETTER OF THE ROCKEFELLER UNIVERSITY

FRIDAY LECTURE

Shatz to discuss development of the brain today

Carla J. Shatz, chair of the Department of Neurobiology at Harvard Medical School, will present the Friday lecture today (June 8). Shatz's topic will be "Brain Waves and Immune Genes in Brain Wiring."

Research in Shatz's laboratory is directed at understanding how the adult pattern of precise and orderly connections in the central nervous system is achieved during development. The major subject under study is the development of the mammalian visual system, and in particular, the sets of connections between the retina, the lateral geniculate nucleus (LGN) and the primary visual cortex.

Since many of these connections are initially established during prenatal life, Shatz's team wishes to learn more about the sequence of early fetal events associated with the formation of connections in the visual system. In particular, the researchers want to determine the extent to which neural function during fetal life may play a role in the formation of the adult pattern of connections.

Shatz's lab has found that the adult pattern of connections in the visual system is not present initially during development, but instead emerges from an immature pattern. A major aim of research in the lab is to understand the cellular and molecular interactions responsible for the emergence of the adult pattern. One goal is to learn how neural function in utero, achieved via the spontaneous firing of neurons, can alter gene expression and the strength of synaptic connections.

continued on page 2

2 AROUND CAMPUS

3 IN THE LAB

4 ETCETERA

Record attendance for *Women & Science* luncheon

More than 400 women from New York's business and philanthropic communities attended the fourth annual *Women & Science* Lecture and Luncheon on Thurs., May 17.

At this year's event, President Arnold J. Levine and Assistant Professor Theresa Gaasterland presented a lecture entitled "Biology Enters the Information Age: Combating Illness with Personalized Medicine." Constance E. Lieber, president of the National Alliance for Research on Schizophrenia and Depression, was presented with the university's Brooke Astor Award.

The *Women & Science* program was established by The Rockefeller University in 1998 to provide a forum for women to learn about current scientific

research and to raise support for women scientists. Proceeds from the *Women & Science* Lecture and Luncheon will support fellowships for young women scientists.

To date, more than \$800,000—including a \$150,000 challenge grant from the Lita Annenberg Hazen Foundation—has been raised in the *Women & Science* initiative this year, a significant increase from the \$300,000 raised last year. The *Women & Science* fellowships reflect the university's commitment to expanding opportunities for women in science.

Please see page two for additional photographs of the luncheon.



Left to right: Assistant Professor Terry Gaasterland, W&S co-chairman Robin Neustein, Sydney Shuman, Nancy Kissinger and Gigi Mortimer.



Left to right: President Levine, W&S honoree Connie Lieber and W&S Honorary Chairmen Brooke Astor and David Rockefeller.

Outstanding Ph.D. class to enter Rockefeller in the fall

This fall The Rockefeller University will welcome 28 new Ph.D. students, its second-largest class ever. "Not only is it a large class, but the quality of the students is outstanding," says Sidney Strickland, dean of graduate and postgraduate studies.

The new class was selected from an applicant pool of more than 600. Strickland notes that The Rockefeller University is flourishing under the leadership of President Arnold J. Levine,

and applicants recognize that this is an exciting place to be doing science. In addition to the new Ph.D. students, several M.D.-Ph.D. students will begin their doctoral work here in the fall.

The entering Ph.D. class represents a broad range of backgrounds. Two of the incoming students, Mark Schroeder and Mark Levenstien, are already familiar with Rockefeller University—they are currently research assistants in the

Gaasterland and Ott labs, respectively. The youngest new graduate student, Fred Davis, will be 17 when he arrives (he entered Purdue at age 11). Another was an All American athlete on an NCAA championship team. And the foreign students this year hail from 14 different countries—a reflection of Rockefeller's international prominence.

Their range of scientific interests is broad as well. Strickland was pleased to note that many

of the incoming students were interested in the new interdisciplinary initiatives at Rockefeller, such as mathematical and chemical biology.

What the incoming students have in common is that "they are all interesting people," says Strickland, who has met with each of them individually, "and they have exceptional scientific potential."

Friedman receives Bristol-Myers Squibb Award

The Second Annual Bristol-Myers Squibb Award for Distinguished Achievement in Metabolic Research was presented to Professor Jeffrey M. Friedman for research explaining the mechanisms by which body weight and fat stores are regulated. Friedman received the \$50,000 cash award and a silver medallion at a dinner in New York City on Wed., June 6.

"Dr. Friedman and his colleagues at The Rockefeller University have applied scientific knowledge of appetite control from their successful cloning of the obese (*ob*) gene in mice to elucidate a molecular framework for understanding how information about

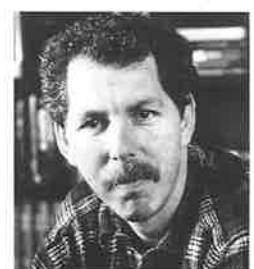
body fat and nutritional status is communicated to the satiety center of the brain," says Richard Gregg, vice president, Clinical Discovery, Bristol-Myers Squibb Pharmaceutical Research Institute. "Dr. Friedman richly deserves this award for work that is leading to therapies for controlling obesity and diabetes."

Friedman is the Marilyn M. Simpson Professor and director of the Starr Center for Human Genetics at The Rockefeller University, and an investigator of the Howard Hughes Medical Institute.

In the 1950s and '60s, researchers demonstrated the existence of at least five single genes that led to

obesity in various strains of mice. Among them—the *ob* gene (for obesity) and *db* gene (for diabetes)—appeared to be central players, with the *ob* gene coding for a signaling molecule and the *db* gene for its receptor. But before their roles could be tested, scientists had to have the genes in hand.

In 1994, Friedman and his research team at The Rockefeller University were the first to accomplish this scientific breakthrough, successfully cloning the obese (*ob*) gene in mice and in its corresponding human homologue. They showed that the *ob*



Friedman, the Marilyn M. Simpson Professor, is also director of the Starr Center for Human Genetics at The Rockefeller University, and an investigator of the Howard Hughes Medical Institute.

continued on page 3

Convocation 2001

The procession of graduates and marchers in cap and gown will take place at 2:30 p.m. on Thurs., June 14. The procession begins in the Peggy Rockefeller Plaza and crosses the campus along the marble sidewalk between the Graduate Students Residence and the Hospital to Caspary Auditorium. The entire Rockefeller University community is encouraged to gather along the walkway to watch the procession.

The ceremony begins at 3 p.m. in Caspary Auditorium. Fifteen students will receive their Ph.D.s. The David Rockefeller Award and six honorary doctorates also will be presented at Convocation.

For tickets, please call Jennifer Walling, x8072.

Convocation Sale at the Sweatshirt Shop

The Sweatshirt Shop is having a Convocation sale from Mon., June 11, to Fri., June 15, from 12 p.m. to 2 p.m. Customers will receive \$5 off every \$25 purchase.

Seen at the *Women & Science* luncheon

All photographs by Star Black.



Gigi Mortimer and Kristina Perkin Davison.



Rockefeller University Life Trustees David Rockefeller and Brooke Astor.



Barbara Walters, Jayne Wrightsman and Rockefeller Trustee Nancy Kissinger



Frederick P. Rose Professor Mary E. Hatten and Cynthia Hazen Polsky.



W&S fellows (top row, left to right): Esther Bell, Revati Masilamani, Rockefeller Trustee Robin Neustein, Veronique Haegeli and Jill Donigan. Seated: President Levine and Assistant Professor Terry Gaasterland.



Rockefeller Trustee Sydney Shuman and RU Council member Isabel Furlaud.



Left to right: Dorcas Dobie, Deborah Zoullas, Jeanne Donovan Fisher and Diane Volk.



Faye Wattleton.



Rockefeller Trustee Evelyn Lipper.



Corinne Greenberg and Brendalyn Stempel.

University to host centennial picnic for employees

Rockefeller University employees will be receiving invitations (including one adult guest ticket) to a picnic in celebration of the university's centennial on Fri., June 22, from 5 p.m. to 11 p.m. Each employee may bring his or her own young children.

In recognition of the university's 100 years, the campus will reflect the styles of different decades. Posters around campus

already hint at the varying themes of the picnic. In the spirit of the festivities, employees and guests are invited to come dressed in the fashion of their favorite decade.

There will be children's activities from 5 p.m. to 8 p.m.; babysitting services are also available from 6 p.m. to 9 p.m. for children ages one through eight. Pre-registration is

required. To register your child, please contact Kathy Burke, x7072, or e-mail burkek.

For safety reasons, guests may not enter the campus until 5 p.m., and they must present their tickets. All tickets must be clearly completed and signed by a Rockefeller University employee. Replacement tickets will not be issued.

Access to the campus will be

through the main entrance at 66th Street only. Employees will be requested to show ID cards.

For further information, contact Human Resources at: hr@rockefeller.edu.



News & Notes is published every other Friday throughout the academic year by **The Rockefeller University**, 1230 York Avenue, New York, New York 10021-6399. Phone: (212) 327-8967. www.rockefeller.edu/pubinfo/news_notes.html

Arnold J. Levine, President

Joseph Bonner, Director of Communications

Lisa Stillman, Assistant Director, Communications

Lynn Love, Science Writer

Whitney Clavin, Assistant Editor

Ideas and submissions can be sent interoffice (Box 68), by electronic mail (newsno) or by fax (212) 327-7876.

Copyright, 2001, The Rockefeller University

The Rockefeller University is an affirmative action/equal employment opportunity employer.

Shatz continued

Another goal is to learn how the nervous system can construct huge neural networks such as the cerebral cortex. The lab has discovered that the neurons of the adult cortex migrate and develop within a special scaffold of neurons that is present only in fetal and neonatal life, and then disappears by cell death. Shatz also wishes to understand the specific interactions subserved by this neural scaffold during development.

To address these questions, a variety of experimental approaches are being used to examine structural and physio-

logical development. Optical imaging and microelectrode recordings from fetal retina, LGN and slices of cortex are made in vitro in order to examine the functional status of visual system connections, to examine synaptic transmission and changes in synaptic strength produced by neural activity, and to fill cells with dye to study their morphological development.

Axonal growth and synapse formation are studied at the electron microscope level and by immunohistochemical means using antibodies against synaptic vesicle antigens, growth-

associated proteins and extracellular matrix molecules. New techniques of co-culture are being used to grow parts of the visual system in vitro so that as connections form, they are more amenable to study. In addition, molecular biological techniques such as analysis of mutant mice, differential screens, and gene chips are being used to study activity-dependent regulation of gene expression in the developing CNS.

Shatz received her B.A. in chemistry from Radcliffe College, her M.Phil. in physiology from University College Lon-

don, and her Ph.D. from Harvard, where her advisor was David Hubel. She was a post-doctoral fellow at Harvard University, where her advisor was Rockefeller University President Emeritus Torsten Wiesel.

Shatz'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.

Researchers use cloning technology to produce embryonic stem cell lines from adult mice

Study shows that these cells can be coaxed into becoming neurons

Embryonic stem cells can be derived from benign biopsies of adult mice and can become neurons and germ cells, report researchers from The Rockefeller University and Sloan-Kettering Institute in the April 27 issue of *Science*. The findings hint that perhaps any cell might be a source for therapeutic applications.

"We have shown that embryonic stem cell lines can be generated quite easily from adult somatic cells isolated from a harmless biopsy," says Assistant Professor Peter Mombaerts, head of the Laboratory of Developmental Biology and Neurogenetics. "These cell lines can be differentiated reliably into cells of potential therapeutic relevance, such as dopamine-producing neurons."

Embryonic stem (ES) cells are capable of developing into many—if not all—cell types. In 1999, the researchers reported the use of ES cells to clone mice using a technique called microinjection developed by Teruhiko Wakayama at the University of Hawaii.

The latest research extends and develops this technique to pro-

duce ES cells from the cells of a region of a preimplantation mouse embryo called the inner cell mass. These embryos, which are no more than a ball of cells called a blastocyst, can be grown in a laboratory dish.

Nuclear transfer (nt) was used to produce cloned blastocysts from which the ES cell lines were derived, and these lines are called ntES cell lines. When placed into another embryo, the

"We have shown that we can produce an essentially unlimited supply of highly differentiated cells with potential therapeutic interest."

ntES cells differentiated in the body of the resulting mouse to all somatic cell types, as well as gametes (sperm and eggs).

The Rockefeller team included Mombaerts, Postdoctoral Fellow Ivan Rodriguez, Wakayama and Anthony C. F. Perry (Wakayama and Perry recently

moved to Advanced Cell Technology in Worcester, Mass.) They collaborated with Viviane Tabar and Lorenz Studer, head of the Laboratory of Stem Cell and Tumor Biology at Sloan-Kettering Institute, who induced the ntES cells in a laboratory dish to become dopaminergic neurons, cells that produce the neurotransmitter dopamine, which affects brain processes that control

movement, emotional response and ability to experience pleasure and pain. Dopaminergic neurons are the cells that fail in sufferers of Parkinson's disease.

In future experiments, dopaminergic neurons derived from ntES cells will be used to alleviate experimentally induced Parkinson syndrome in mice.



Assistant Professor Peter Mombaerts is head of the Laboratory of Developmental Biology and Neurogenetics.

"We don't see that the relevance of this work is limited to any one condition, but believe that we have demonstrated the feasibility of the first steps of therapeutic cloning in general, albeit in mice," says Mombaerts. "Starting with a harmless tail biopsy of an adult mouse, we have shown that we can produce an essentially unlimited supply of highly differentiated cells with potential therapeutic interest. Importantly, the overall efficiency of this sequence of manipulations is quite good; the procedure is reproducible."

Friedman continued

gene codes for a protein secreted by adipose (fat) tissue and hypothesized that the protein regulates fat storage by signaling the brain to suppress appetite when the body's fat stores are sufficient. Their findings showed that when the gene is mutated in mice, the mice develop a syndrome resembling extreme obesity and Type II diabetes in humans.

By 1995, Friedman and co-investigators had identified the protein hormone in the blood of mice and humans, which they named leptin. Leptin regulates body weight by signaling to the brain the amount of fat stored by the body. They discovered that synthetic versions of mouse and human leptin markedly reduced the body weight of obese (*ob*) mice by reducing food intake and increasing energy expenditure.

Normal mice also lost weight and most of their body fat. But leptin had no effect on diabetic (*db*) mice, consistent with earlier suggestions that they lack the leptin receptor.

In the same year, the researchers

released data from their first human studies investigating leptin. The studies suggested that differences in the fat's production rate of leptin, resistance to leptin at its site of action, or a combination of these factors, could influence eating behaviors and energy use to cause obesity or other nutritional abnormalities, such as diabetes.

The investigators postulated that reduced sensitivity to leptin in some patients could explain why more leptin is found in obese people. They reported that leptin's signaling ability may help explain the high rates of regaining weight found among dieters because after dieting, the levels of leptin drop, suggesting that less leptin is made and available to signal the brain, possibly contributing to increased hunger and slower metabolism.

In 1996, Friedman's team showed that the weight-reducing effects of leptin result from an interaction with a receptor in the brain's hypothalamus, known to regulate food intake and body weight.

In 1997, the researchers announced that insensitivity, or resistance, contributes to obesity in mice. In April 2000, they announced that at least half a dozen distinct clusters of genes were specifically regulated by leptin, but not in the same way by food intake restriction. The researchers uncovered evidence of a protein called SREBP-1, which regulates many of the genes that control the synthesis of fatty acids. In a new study, Sagit Zolotov, of the Rockefeller University Hospital, will assess whether leptin "replacement therapy" accelerates weight loss during a low-calorie diet.

Recently, Friedman, Postdoctoral Associate Jeff De Falco, and colleagues at Rockefeller used a new technique—administering to mice a virus tagged with a green fluorescent protein marker activated only in specific cell types—to show that key neurons that play a role in regulating food intake and that respond to the hormone leptin also receive input from neurons in a number of other brain regions. These other sites play a role in modu-

lating emotion, olfaction and higher brain functions.

"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 Friedman. "This new method allows us for the first time to directly visualize some of the composition of this neural system."

The Bristol-Myers Squibb Unrestricted Biomedical Research Grants Program that provides the Metabolic Award was initiated in 1977. The Program currently provides no-strings-attached funding in seven biomedical research areas, including cancer, cardiovascular, infectious diseases, metabolic, neuroscience, nutrition and orthopedic research. The Distinguished Achievement Award of \$50,000 is awarded annually in each of the seven categories.

Professor Jan Breslow received the award for cardiovascular research in 2000.

Honorary degree symposium

On Fri., June 15, the Centennial honorary degree recipients will present a symposium entitled "Launching a New Century of Discovery." The recipients are Michael S. Brown, of the University of Texas Southwestern Medical Center; Freeman J. Dyson, of the Institute for Advanced Study; Joseph L. Goldstein, of the University of Texas Southwestern Medical Center; H. Gobind Khorana, of the Massachusetts Institute of Technology; David B. Mumford, of Brown University; and Christiane Nüsslein-Volhard, of the Max Planck Institute for Developmental Biology. Their presentations will take place in Caspary Auditorium from 9 a.m. to 3:15 p.m. All are welcome. Please see the Calendar of Events (page 4) for the titles and times of the talks.

Awards corner

Matthew Albert, a postdoctoral fellow in Robert Darnell's Laboratory of Molecular Neurooncology, has been awarded the Burroughs Wellcome Fund's Career Award in the Biomedical Sciences, intended to foster the development and productivity of biomedical researchers who are early in their careers and to help them make the critical transition to becoming independent investigators. Since the program began in 1995, BWF has awarded more than \$70 million to support 149 U.S. and Canadian scientists.

Xin Yu, a postdoctoral fellow in Robert Roeder's Laboratory of Biochemistry and Molecular Biology, has been awarded \$118,000 in new grant funding from the American Cancer Society. The purpose of such grants is to make possible cancer research and training for the next generation of researchers and cancer control experts.

Awards and papers

If you are receiving an award or are about to publish a paper, *News & Notes* would like to know about it. Please send your information by campus mail to Box 68, by E-mail to newsno or by fax to x7876.



calendar

JUNE EIGHTH THROUGH JUNE TWENTY-SEVENTH

Friday Lectures

THIS EVENT IS 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.

FRIDAY, JUNE 8

Brain Waves and Immune Genes in Brain Wiring.

Carla Shatz, Nathan Marsh Pusey Professor of Neurobiology and Head, Department of Neurobiology, Harvard Medical School.

FRIDAY, JUNE 8

11:30 A.M. **The Do's and Don'ts of Presenting a Research Seminar.** William Lennarz, Chair, Department of Biochemistry, SUNY Stony Brook. Lecture on how to give a seminar (students and postdocs invited). 301 WEISS. OPEN TO RU COMMUNITY AND GUESTS.

12:00 P.M. **Dynamic Visualization of Biochemical Networks in Living Cells.** Stephen Michnick, Associate Professor, Department of Biochemistry, University of Montreal. Cellular Biochemistry and Biophysics Seminar. 116 ROCKEFELLER RESEARCH LABORATORIES, MSKCC, 430 EAST 67TH ST.

MONDAY, JUNE 11

4:30 P.M. **Molecular Genetic Analysis of Exocytosis and Cell Polarity.** Patrick J. Brenwald, Associate Professor, Department of Cell Biology, WMCCU. Cell Biology and Genetics Seminar. PAPANICOLAOU LIBRARY, A106 WMCCU, 1300 YORK AVE. REFRESHMENTS WILL BE SERVED.

TUESDAY, JUNE 12

12:00 P.M. **Mammalian Thioredoxin and Selenium-dependent Thioredoxin Reductase: Structure and Function in Cellular Redox Regulation.** Arne Holmgren, Professor, Medical Nobel Institute for Biochemistry, Department of Biochemistry and Biophysics, Scheele Laboratory, Karolinska Institute, Stockholm, Sweden. Cell Biology Seminar. 116 ROCKEFELLER RESEARCH LABORATORIES, MSKCC, 430 EAST 67TH ST.

4:00 P.M. **Quantum Information Theory.** Charles Bennett, IBM Research. Center for Studies in Physics and Biology Seminar. B LEVEL CONFERENCE ROOM, SMITH HALL ANNEX. CONTACT ERIK VAN NIMWEGEN, 327-8184.

4:00 P.M. **Regulation of Cell Death by the ABI Tyrosine Kinase.** Jean Y. J. Wang, Professor of Biology, Associate Director of Basic Research, University of California. Molecular Pharmacology and Therapeutics Seminar. 116 ROCKEFELLER RESEARCH LABORATORIES, MSKCC, 430 EAST 67TH ST. TEA AT 3:45 P.M.

WEDNESDAY, JUNE 13

4:30 P.M. **Delineating the Genetic Basis for Susceptibility to Systemic Autoimmunity.** Edward K. Wakeland, Edwin L. Cox Distinguished Chair and Director, Center for Immunology, University of Texas Southwestern Medical Center at Dallas. MSKCC PRESIDENT'S

RESEARCH SEMINAR. AUDITORIUM, ROCKEFELLER RESEARCH LABORATORIES, MSKCC, 430 EAST 67TH ST. TEA AT 4:00 P.M.

THURSDAY, JUNE 14

12:00 P.M. **Evolution of the Programmed Cell Death System.** Eugene V. Koonin, Senior Investigator, National Center for Biotechnology Information, National Library of Medicine, NIH. Biochemistry Lecture. E-115 WMCCU, 1300 YORK AVE. COFFEE AT 11:45 A.M.

12:00 P.M. **Molecular Determinants for Cell-specific Actions of the Human Glucocorticoid Receptor.** John A. Cidlowski, Chief, Laboratory of Signal Transduction, National Institute of Environmental Health Sciences, Research Triangle Park, N.C. Endocrinology and Reproductive Biology Seminar. 110B NURSES RESIDENCE.

3:00 P.M. **Possible Role of Connexon Interactions in Determining the pH Sensitivity of Gap Junction Channels.** David G. Francis, Resident in Anesthesia and Critical Care, Massachusetts General Hospital. Anesthesiology Research Seminar. M-309 WMCCU, 1300 YORK AVE. CONTACT LISA FERRER, 746-2744.

4:00 P.M. **Pathogenetic Implications of HCV Interaction with CD81.** Sergio Abrignani, Head, Immunology Department, Chiron Corporation, Emeryville, 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, 327-3357.

FRIDAY, JUNE 15

8:00 A.M. **Launching a New Century of Discovery.** Centennial Honorary Degree Symposium. CASPARY AUDITORIUM. (SEE SCHEDULE AT RIGHT.)

11:00 A.M. **Folding@home: Simulating the Folding of Small Proteins in Atomistic Detail Using Distributed Computing.** Vijay Pande, Professor, Chemistry Department, Structural Biology Department, and SSRL, Stanford University. Seminar. 110B NURSES RESIDENCE. CONTACT ROSER BUSQUETS, 327 7050.

11:00 A.M. **Immunopathogenesis of HTLV-I: Significance of HTLV-I Seroindeterminate Profiles.** Steven Jacobson, Chief, Viral Immunology Section, National Institute of Neurological Diseases and Stroke, NIH. LFKRI Research Seminar. LOWER LEVEL CONFERENCE

ROOM, NEW YORK BLOOD CENTER, 310 EAST 67TH ST. TEA AT 10:45 A.M. CONTACT ROSANNA MARTINEZ, 570-3357.

WEDNESDAY, JUNE 20

4:30 P.M. **Cancer Therapy Based on Ras and p53.** Frank McCormick, Director, Comprehensive Cancer Center, 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.

WEDNESDAY, JUNE 27

12:00 P.M. **Elaine Fuchs Seminar.** Elaine Fuchs, University of Chicago. CASPARY AUDITORIUM.

3:00 P.M. **Human Genome Sequence Variation and the Genetics of Common Disease.** David Altshuler, Whitehead Institute. Starr Center for Human Genetics Seminar. 301 WEISS. CONTACT EMILY HUFFMAN, 327-7387.

4:30 P.M. **Integrating the Cell Death Pathway.** Stanley J. Korsmeyer, Investigator, Howard Hughes Medical Institute; Sidney Farber Professor of Pathology, Department of Cancer Immunology and AIDS, Dana-Farber Cancer Institute; and Professor of Medicine, Harvard Medical School. 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.

The Arts and Other Events

FRIDAY, JUNE 8

12:00 P.M. **Tri-Institutional Noon Recitals.** Misha and Cipa Dichter, piano 4-hands and piano solo. Performing Schubert, Schumann, Scriabin, Prokofiev and Rachmaninoff. Caspary Auditorium. Open to RU/WMCCU/NYPH/MSKCC community and guests.

A Symposium Featuring the Centennial Honorary Degree Recipients

Launching a New Century of Discovery

Friday, June 15, 2001
Caspary Auditorium

9:30 A.M. - 9:35 A.M.

Welcoming Remarks

Arnold J. Levine
President, RU

9:35 A.M. - 9:40 A.M.

Introduction

Stephen K. Burley
Deputy for Academic Affairs,
RU, and Investigator, Howard
Hughes Medical Institute

9:40 A.M. - 10:25 A.M.

Genetic Analysis of Migrating Cells in the Zebrafish.

Christiane Nüsslein-Volhard
Max Planck Institute for
Developmental Biology,
Tübingen, Germany

10:25 A.M. - 11:10 A.M.

The Brain as a Computer:

A Flawed Metaphor
David B. Mumford
Brown University

11:10 A.M. - 11:30 A.M.

Coffee Break

11:30 A.M. - 12:15 P.M.

Molecular Biology of Light Transduction by the Mammalian Photoreceptor, Rhodopsin

Har Gobind Khorana
Massachusetts Institute
of Technology

12:15 P.M. - 1:00 P.M.

Is Life Analog or Digital?

Freeman J. Dyson
Institute for Advanced Study

1:00 P.M. - 2:00 P.M.

Break for Lunch

2:00 P.M. - 3:00 P.M.

A Century of Cholesterol Part I

Joseph L. Goldstein
University of Texas Southwestern
Medical Center at Dallas

A Century of Cholesterol Part II

Michael S. Brown
University of Texas Southwestern
Medical Center at Dallas

3:00 P.M. - 3:15 P.M.

Closing Remarks

Arnold J. Levine

FIRST-CLASS
U.S. POSTAGE
PAID
NEW YORK, NY
PERMIT NO. 7619

newsnotes

The Rockefeller University
Box 68, 1230 York Avenue, New York, NY 10021
Address Service Requested