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The Rockefeller University News and Notes

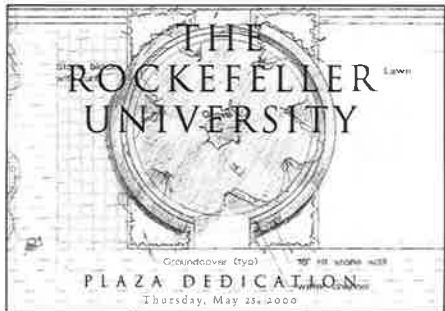
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NEWS AND NOTES 2000, VOL.10, NO.27

The Rockefeller University

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University will dedicate plaza on Thursday



The Rockefeller University community will dedicate the new plaza at the south end of the campus on Thurs., May 25, in a ceremony that begins at 5 p.m. and includes music from a brass band, remarks from President Arnold J. Levine and a reception with refreshments.

The official opening of the plaza concludes a major undertaking to link the north and south ends of the Rockefeller campus both physically and aesthetically. The university finished the first half of this process in November 1999, when it dedicated the Campus Community Bridge in Honor of Torsten N. Wiesel, a pedestrian bridge over 63rd St. that joins the residential and scientific areas of campus. Renovation of the plaza completes this effort by converting a barren, concrete area into a garden and courtyard.

The idea of transforming the plaza was first conceived in 1997 by Rockefeller's then-President Torsten Wiesel and two benefactors, trustee Robert Bass and his wife, RU Council member Anne Bass. They envisioned an appealing arrangement of grass, trees and water that encouraged relaxation and contemplation. To make such a courtyard possible,

the couple pledged a \$5 million gift.

The university sponsored a design competition and in early 1998 selected a plan proposed by Thomas Balsley Associates, an internationally renowned landscape architectural firm. Work on the plaza began in March 1999 and was overseen by the Office of Planning and Construction.

"The plaza brings into harmony the entrances to a set of buildings of vastly different scale, creates a new terrace and a much-needed sheltered walkway and creates a place that we hope will become a destination on the south part of the campus," says Balsley.

The plaza design incorporates plantings, lawn and trees in geometric patterns that import the "oasis" environment already inherent in the central campus, which was designed in 1958 by Daniel Kiley. The multilevel space has been organized to consist of outdoor rooms, each offering the visitor different levels of intimacy. At the center of the plaza is a grove of trees surrounded by a fountain composed of a low, circular granite wall with slots and channels through which water will flow. In addition to the aesthetic improvement, the new plaza, with canopies and trellises, also offers more seating and shelter from wind, rain, snow and sun.

"This was a very challenging project that involved construction in six university buildings," says George Candler, the university's director of planning and construction. "The new design addresses long unresolved problems with a vernacular appropriate to the urban scale and character of the space, using forms and materials associated with the Rockefeller University landscape."

Dan Kiley returns to campus for Spring Neighborhood Day



Upper East Side neighbors spent a sunny afternoon last Saturday (May 13) touring the campus escorted by docents from The New York Botanical Garden during Spring Neighborhood Day (left). Landscape architect Daniel Kiley discussed his work at a lecture and talked afterward with campus landscapers in Philosopher's Garden. Photos by Bruce Gilbert.



One morning in 1956, landscape architect Daniel Urban Kiley and Detlev Bronk, then president of The Rockefeller Institute, met on campus to discuss the board of trustees' plans for 15 acres of natural beauty in the crowded, frenetic city. Kiley, who was already occupied with various other projects, agreed to listen for 15 minutes. Fifteen minutes lengthened to five and a half hours of discussion, with Kiley exclaim-

ing at the end, "If I cannot participate in this great undertaking, I shall be one of the most disappointed men in America."

When asked about this story, Kiley laughs and says that he "was dying to do the job" from the beginning. "I was very young at the time, and this job got me into the field of landscape architecture."

In the nearly 50 years that have

see **Spring Neighborhood Day**, page 2

RU hosts Women & Science Gwen Grant Mellon receives Brooke Astor Award



President Arnold J. Levine (far left) and Professor Mary E. Hatten (second from left) gather with Hatten's mother, Mary Lou Hatten, and PBS host Charlie Rose at the Women & Science Lecture and Luncheon on Thurs., May 11. See page 3 for excerpts of the day's lecture and more photos. Photo by Star Black.

More than 400 prominent women from New York City's business and philanthropic communities attended Rockefeller University's third annual Women & Science Lecture and Luncheon on Thurs., May 11.

The event brought many guests to campus for the first time and, through an initiative called Partners in Discovery,

raised \$300,000 to support young women scientists at Rockefeller.

Before the luncheon, Professor Mary E. Hatten discussed recent discoveries about the developing brain (see page 3 for excerpts). This year's Brooke Astor Award was presented to humanitarian

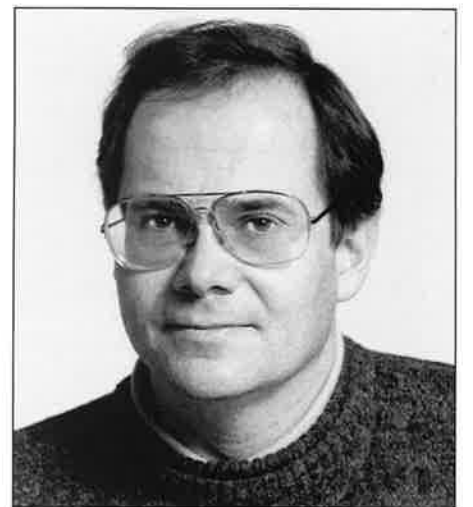
see **Women & Science**, page 3

William H. Stein Memorial Lecture: Petsko to discuss structural biology in 4 dimensions

Gregory A. Petsko, Gyula and Katica Tauber Professor of Biochemistry and Pharmacodynamics and director of the Rosenstiel Basic Medical Sciences Research Center at Brandeis University, will present the William H. Stein Memorial Lecture today (May 19). Petsko will discuss "Structural Biology in Four Dimensions: The Catalytic Pathways of Cytochrome P450 and Alkaline Phosphatase at Atomic Resolution." Petsko is widely known for his work in the development of protein crystallography and its application to fundamental studies of the dynamics of protein folding and mechanisms of drug action.

His research is concerned with the three-dimensional structures of proteins and the relationship of those structures to cellular and molecular biology. Using X-ray crystallography, genetic engineering and computer simulations, Petsko seeks to understand the structural base for the catalytic power of various enzymes. He is also working on a time-resolved X-ray crystallography technique, which can be used to see the biological effects of proteins in action. Another research interest is the structure and function of energy-driven membrane protein pumps. Some of the proteins in this class include those responsible for cystic fibrosis, multidrug resistance in tumor cells and malaria resistance to quinine drugs.

As a Rhodes Scholar, Petsko received his D.Phil. in molecular biophysics from Oxford University in 1973. After a brief sojourn at the Institut de Biologie Physico-Chimique in Paris, he joined the faculty of Wayne State University, moving to the Massachusetts Institute of Technology in



Gregory A. Petsko, director of the Rosenstiel Basic Medical Sciences Research Center at Brandeis University, will present the William H. Stein Memorial Lecture today (May 19). Photo courtesy of Gregory A. Petsko.

1978. In 1990 he joined the Brandeis faculty. Petsko is a member of the National Academy of Sciences and a recipient of numerous other awards and prizes. The lecture begins at 3:45 p.m. today in Caspary Auditorium. It is preceded by a tea in Abby Aldrich Rockefeller Lounge. All are welcome.

2	Campus architecture
3	Brain architecture
4	Calendar

Spring Neighborhood Day, from page 1

passed since that meeting, much has changed. The institute became a university. New buildings have arisen at the southern end of the campus that are much different from those designed by architect Wallace K. Harrison at the opposite end. Kiley's landscape still unites the Hospital and Smith, Flexner and Founder's halls, and his design of lines of trees, hedges and stone walks remains faithful to his original vision.

Last Saturday, Kiley returned to campus for the university's annual Spring Neighborhood Day to discuss the inspiration behind his now-classic designs, which in addition to The Rockefeller University include Lincoln Center and the interior atrium of the Ford Foundation building in New York City, the U.S. Air Force Academy in Colorado Springs, Colo., and the John F. Kennedy Library in Boston, Mass.

After the talk, Kiley met with President Arnold J. Levine and his wife, Linda Hirst Levine. Among Kiley's campus designs is the interior garden at the President's House. He was delighted to see that a favorite magnolia tree was thriving and offered advice on ground plantings to enhance the house, which is visited by students, faculty, guest lecturers and many others throughout the year.

After the talk, *New York Times* garden reporter Anne Raver interviewed Kiley about his work on the Rockefeller University landscape. Raver described the campus last fall as one of Manhattan's last oases, "a musical composition of light, shadow and shades of green." In fact, during his lecture Kiley said, "We strove to reinforce the idea of an urban oasis...to provide a sensory experience effective enough to envelope visitors."

Kiley says that his favorite scene on campus is the view from outside Caspary Auditorium overlooking the hedges that flank the south end of Philosopher's Garden. As he strolled through the area after his talk, Kiley noticed the bubble-like shape of the hedges (a combination of Japanese holly and azaleas), which gives the illusion of motion. Kiley marveled at the effect and congratulated the landscapers who take care of it.

Kiley also took the time to chat with some of the members of the university's landscape team. Frank Molina, assistant supervisor of horticulture, says Kiley was happy with the way the landscapers pruned the hedges. "He said it was very Japanese and very much in keeping with his original vision for Philosopher's Garden.

"It was very exciting and a great honor to talk to Dan Kiley," he says.

Take Your Child to Work Day is a success

Children watched "Science Circus" at this year's Take Your Child to Work Day on Thurs., April 27. Human Resources thanks all who participated for making the day a success. Artwork created by the children at the event and photographs of the day's activities are on display in Weiss Cafeteria. Photo courtesy of Mary O'Donnell.

An architect's view of the bridge

by Wendy Evans Joseph

Architecture is part science and part art. Similar to traditional scientific problem solving, architects confront diverse and often conflicting needs and conditions and synthesize them in a way that is aesthetically beautiful, texturally rich and technically innovative.

The design of the Campus Community Bridge in Honor of Torsten N. Wiesel was inspired by the urban conditions of the site and the views to and from the structure. Also considered were the engineering challenges and legal constraints imposed by the site. Overarching all of these issues was a fundamental desire to make the passage from work to home uplifting, as well as safe and convenient.

Architects often say "God is in the details." Each element of the bridge is considered and articulated from adjacent parts in order to emphasize the overall concept and form. Once the Y-shaped plan was determined, a V-shaped tower elegantly resolved gravitational and horizontal forces. The tower,

out Weiss lobby into the plaza, you will notice our effort to achieve consistency in materials, form and aesthetic. For example, we chose to hold the structure of the mezzanine away from the elevator core walls, thus maximizing the available light. The use of reflective glass was another intentional effort to amplify the "floating" effect.

While the bridge is the key element in linking together the campus and residential towers, it is also part of a new campus system, which includes links through Weiss, out into the south plaza, under sheltering canopies and windscreens connecting to the Rockefeller Research Building. To create a coherent aesthetic statement, all of these areas are designed with the same stainless-steel detailing for the supports and enclosure systems as in the bridge itself.

As an architect, I consider my projects as collaborations between the client and the design team. In this project there were several clients at The Rockefeller University. First and foremost, Torsten Wiesel, president emeritus, provided the inspiration

Potpourri**Speaking on neuroscience**

Professor A. James Hudspeth will co-chair the National Academy of Science Colloquium "Auditory Neuroscience: Development, Transduction and Integration" on Fri., May 19, through Sun., May 21, at the Arnold and Mabel Beckman Center in Irvine, Calif. Twenty-four auditory neuroscientists will participate in the conference. Their contributions will be presented in *Proceedings of the National Academy of Sciences*. The meeting also can be accessed at <http://www.nas.edu/nas/colloquia>.

Abby Aldrich Rockefeller Dining Room

The Abby Aldrich Rockefeller Dining Room will be closed on Thurs., June 1. It will reopen Fri., June 2.

Blood donors needed

The New York Blood Center is appealing to all members of The Rockefeller University community to participate in an on-campus blood drive Mon., May 22, from 10 a.m. to 3:30 p.m. on the 17th floor of Weiss Building. Certain health restrictions may apply. To register, contact the Employee Health Office, x8414. For more information call the New York Blood Center at (800) 933-2566 or visit their Web site at <http://www.nybloodcenter.org>.

News&Notes schedule

Due to the Memorial Day holiday, the next issue of *News&Notes* will be published Fri., June 2.

AwardsCorner

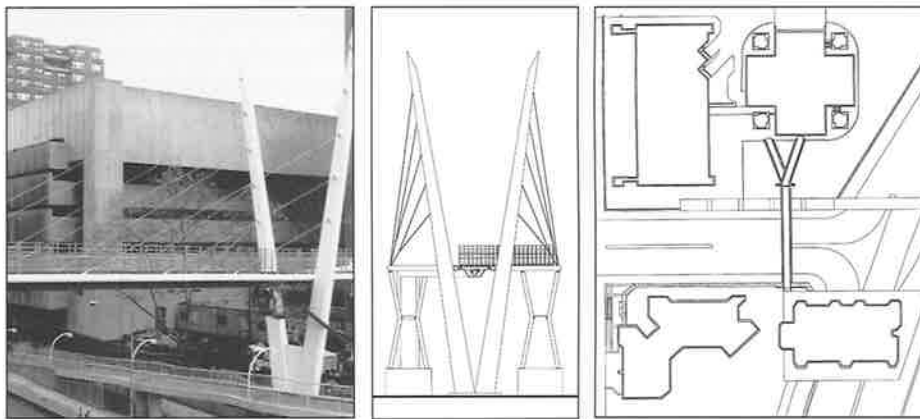
RU Science Outreach Director Bonnie Kaiser has been awarded the University of Chicago's Distinguished Service Award for creating and fostering precollege science education programs for students and teachers. More than 400 precollege students and 50 teachers have gained mentored research experience in the Science Outreach program.

Anthony D. Tramotin, postdoctoral fellow in the Alvarez-Buylla lab, has been awarded a Runyon-Winchell fellowship for his research on stem cell proliferation and development in the postnatal brain. Each year about 60 young scientists are awarded the three-year postdoctoral fellowship from a pool of more than 450 scientists who submit proposals.

Three Rockefeller researchers have been awarded the National Alliance for Research on Schizophrenia and Depression's (NARSAD's) Young Investigator grant. Research associate

James Bibb, postdoctoral fellow Karima Chergui and postdoctoral associate Barbara Porton will each receive a \$60,000 grant for their research on brain disorders. NARSAD provides early career support for scientists just starting out and continuing support for distinguished and independent investigators. Grant recipients are expected to play key roles in discovering the causes, new treatments and eventual cures for mental illness.

President Arnold J. Levine has been elected to the American Philosophical Society (APS). Currently, the APS consists of 711 resident members and 141 foreign members. Founded by Benjamin Franklin in 1743, it is the oldest learned society in the United States devoted to the advancement of scientific and scholarly inquiry. Among its earliest members were George Washington, John Adams, Thomas Jefferson, Thomas Paine, James Madison and John Marshall.



which is constructed of tubular steel, also provides an open, cradling or "floating" effect as one walks across. At its base, the tower is oval and at pathway level, it splits, becoming straight to the inside edge as the bridge cuts through it. Slicing the tubes at the skyline top of the V, a purely sculptural detail, reflects more daylight and enhances a soaring feeling.

By bringing the cables from two sides, the structure is stabilized, or triangulated, by its own weight. Of course, with high winds there can be some uplift on the bridge underside, but there are other catches in place to steady it. In addition, there is a slight bend in the outer horizontal spanning tube, approximately 25 feet from Scholars Residence, designed to accommodate movement. If you feel a bit of bounce at this point, don't worry. The liveliness of the structure is natural and part of the fun of the experience.

As you follow a path from the bridge through the suspended interior portion over Weiss Cafeteria, down the stairs and

and vision; forging a link between isolated parts of campus was always on his mind. Campus planners, staff and administrators all had input in the final decisions, generating the creative interchange that characterizes all exciting projects. But as I review the forces that shaped this project, I realize that perhaps the most influential one was the least visible, that of the scientific spirit of the university and the people who would be served by this project. Ultimately, it was this spirit that we hoped to address in our efforts.

Wendy Evans Joseph is the design architect of the Campus Community Bridge and the plaza with Weidlinger Associates. The bridge will open on Mon., May 22, at 1 p.m. Entry to the bridge is accessible to any member of the campus community from Weiss Cafeteria, but an electronic security system will allow only residents of Scholars Residence or Faculty House entry on the Scholars side. Visitors to the residential buildings must enter through the entrance on York Avenue.

Women & Science: RU neurobiologist describes architecture of the brain

At the Rockefeller University's third annual Women & Science Lecture and Luncheon, Professor Mary E. Hatten spoke to a capacity crowd in Caspary Auditorium about "Dynamic Architecture: Recent Thoughts on the Brain's Growth and Repair." Below are excerpts of her remarks.

What an exciting concurrence to have women and science together. I am thrilled to be speaking to an audience of women. All of my professional career has been spent speaking to audiences that were mostly male, and for you to be here for one of the most important causes in science, to bring young women into leadership roles, makes it all the more meaningful to me.

Today, I want to talk to you about building a brain, about the vast cell migrations that go into this process and about the remarkable structure that emerges.

As the last century dawned, our main view of the brain, and ourselves, was that of the phrenologists, who thought that complex traits such as consciousness, hope, spirituality and combativeness were controlled by bumps on the surface of the brain. They thought that these areas of the brain would enlarge, giving a person his or her character.

As this century dawns, we are all too familiar with a different view, that of the MRI scan, an image of the living brain. Let's look at two particular areas of the brain: the cortex, the area of our thoughts and memories; and the cerebellum, or little cortex, which controls fine details of movement—the *pianissimo* pedal of the cortex.

A six-story brain

As we look closer at these regions of the brain, we see a structure with layers. Layers are the hallmark of the cortex, something that arrived late in evolution to allow us to remember and plan and reason. Within these layers live 100 billion neurons—about the same number as stars in the Milky Way—and a trillion glial cells. If we look at a picture of the cerebellum, we see five kinds of cells—four neurons and a glial cell—and we see that they have elaborate arbors, like flowers in Gertrude Jekyll's garden, each with its own shape and requirements.

How are the layers of the brain formed? Begin with a sheet of cells that rolls into a tube. The cells that divide are on the inside. Divide is the understatement of the year, as they produce 250,000 new cells per minute, faster than any tumor on this earth. Once born, the cells do something amazing: they migrate through the tissue. It's as if everyone in New York picked up and headed for California on foot, that's how far they go. As they migrate, cells settle in different areas: western New York, Ohio, Chicago, the Plains and finally California, with the earliest-born cells staying closer to New York. This process of cell migration generates the architecture of the brain.

The architectural plan is one of layers, as I mentioned, so imagine a building with six stories. As the cells move, they construct the floors of the building. Although the floors all look the same, the floor plans for each differ, with different types of cells and wiring plans. Cells on the second floor, near the busy highways of axons, differ from the cells in the penthouse.

After the floors are constructed, connections grow between the cells. Between birth and six months, the number of connections in the visual area of the cortex, for example, increases from about 2,000 connections to 18,000 connections. Migration sets forth the architectural plan, with elaborate wiring diagrams for each floor.

As the cells migrate, they go through a treacherous environment. Alcohol, cocaine and viruses all kill migrating cells, randomly generating differences in the floors of the building. Many other deficits are now known to relate to migration. In a condition called micrencephaly, for example, the layers form but are smaller; 16-foot ceilings become eight-foot ceilings—it's not the same building at all. Other miswiring sets off electrical storms we recognize as epilepsy.

Building the scaffold

In my lab, we have focused on the process of migration, studying how migration affects which snips of DNA get expressed in cells.

By taking cells from mouse embryos, purifying them and placing them on glia, we were able to test our model for migration. We were able to prove that the basic form of migration, along glial fibers, is true. Moreover, we were able to show that if we took the cells out of the culture dish and put them into the brain,

Migration is the construction phase, when the scaffold of the brain is set forth, and the big principal nerve cells are set onto the correct "floors" of the building.

we could get proper migration. With this approach, we have discovered the molecular basis of migration, the glue that holds the neurons onto the glia.

In the migration phase, the scaffold of the brain is set forth, and the big principal nerve cells are set onto their floors of the building. The system follows the Bauhaus school of architecture, as stated by the great cell architect [Louis] Sullivan, "Form follows function."

Women & Science, from page 1

Gwen Grant Mellon, who in 1956, with her husband, William Larimer Mellon Jr., founded the Hôpital Albert Schweitzer in Deschappelles, Haiti. Gwen Grant Mellon has devoted her life to bringing medical care and self-sufficiency to this impoverished area, and today, at the age of 88, she continues to provide leadership for the hospital that serves 265,000 people.

The Brooke Astor Award was established in 1998 to honor Astor, a life trustee of the university, for her generosity and passionate advocacy on behalf of biomedical research and for her remarkable service to humankind.

President Arnold J. Levine, the program's host, presented this year's award

Once migration has established the plan, the stage is set for the growth of connections—16,000 new connections in any layer in the first six months of life, as I said earlier.

The growing child is busy elaborating these connections in a scheme that was discovered by [President Emeritus] Torsten Wiesel, in his Nobel work showing that there is a critical period when the experience of the child sculpts the cells in the brain and the connections between them. The cerebellum enters a critical period just after birth, as the child struggles to coordinate holding his head up, or getting his finger into his mouth, then sitting up and crawling and walking or performing fine motor movements with his fingers, and on and on.

A critical period

During these critical early periods, children need to be touched and held; the brains of abused children are 20 to 30 percent smaller than those of normal children. This knowledge leads us to a revolution in parenting, with hands-on, patient parents who understand that it is not a matter of will or bumps on the brain that make a child do something, but the growth of connections in his or her brain in concert with the environment that we are providing.

These periods don't end when the child is born or reaches the age of two or three. Recent evidence indicates that the brain is changing throughout childhood.

In this brain scan, we can see changes in an area that controls language function and associative thinking, for example. It changes dramatically between the ages of 6 and 13, with growth attenuating after puberty (ages 11 to 15). The temporal pattern coincides with the ending of the critical period for learning language—consistently noted in learning second languages or sign language and in isolated, wild children who have not learned any language.

Interestingly, this same area degenerates most quickly in Alzheimer's disease, suggesting that the processes that maintain the developed state suddenly lapse.

Studying the molecular basis for the plans of the brain and the connections between cells in the brain therefore offers hope not only for aiding children with disabilities, but also for providing key insights into how the brain ages. Understanding migration and how this critical process regulates cell functions will hopefully help us meet these challenges.



Gwen Grant Mellon (left), recipient of the Brooke Astor Award, with Women & Science Honorary Chairmen David Rockefeller and Brooke Astor, who are also Life Trustees. All photos by Star Black.



Duane Hampton (left) with two of the Women & Science co-chairs, RU Council member Sydney R. Shuman and Trustee Nancy M. Kissinger.



Professor Titia de Lange (left) and Isabel P. Furlaud, a member of the RU Council and co-chair of the Women & Science Committee.

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THE ROCKEFELLER UNIVERSITY—Please post

FRIDAY, MAY 19

12:00 p.m. **Centromere Function in *Drosophila***. Gary Karpen, Associate Professor, The Salk Institute. Molecular Biology Seminar. **116 Rockefeller Research Laboratories, MSKCC, 430 East 67th St. Refreshments at 11:45 a.m.**

12:00 p.m. **Immune-mediated Type I Diabetes: A Preventable Disease?** Noel K. MacLaren, Professor of Pediatrics, Director, Juvenile Diabetes Program, WMCCU. Immunology Seminar. **B-307, WMCCU, 1300 York Ave. Contact Michele Lavarde, 746-6452.**

MONDAY, MAY 22

12:00 p.m. **IL-7 Immune Reconstitution and T Cell Homeostasis**. Terry J. Fry, Pediatric Branch National Cancer Institute. CFAR Seminar. **Sixth Floor Conference Room, ADARC, 455 First Ave. Contact Gary Gailor, 448-5163.**

5:00 p.m. **Met-HGF/SF: Tumorigenesis, Invasion and Metastasis**. George F. Vande Woude, Director, Van Andel Research Institute. Pathology Seminar. **117 Whitney, WMCCU, 1300 York Ave. Contact Beatrice Knudsen, 746-6402.**

TUESDAY, MAY 23

1:00 p.m.–5:00 p.m. **Introduction to Advances in Stem Cell Technology**. Patricia L. Morris, Population Council. **Neural Stem Cells: Developmental Insights Suggest Novel Strategies for CNS Repair**. Evan Y. Snyder, Dept. of Neurology, Harvard Medical School, Children's Hospital, Boston, Mass. **The Primordial Germ Cell—The Mother of All Stem Cells**. Peter Donovan, Kimmel Cancer Center, Thomas Jefferson U. **Pluripotent Hematopoietic Stem Cells, Self Renewal, Bone Marrow Transplants and Gene Therapy**. David Bodine, Head, Hematopoiesis Section, National Human Genome Research Institute, Genetics and Molecular Biology Branch, NIH. **Making a Difference: The Asymmetric Division of Stem Cells in the Germline**. Haifan Lin, Dept. of Cell Biology, Duke U. Medical Center, Stem Cell Technology: Time to Achieve Its Therapeutic Potential Symposium. **New York Academy of Sciences, 2 East 63rd Street. Coffee at 2:50 to 3:15 p.m. Contact Patricia L. Morris, 327-8756.**

4:00 p.m. **Power-laws in the Rheology of Smectic Liquid Crystals: Explained by Defects**. Maurice Kléman, Professor, Université Paris 6. Center for Studies in Physics and Biology Seminar. **B Level Conference Room, Smith Hall Annex. Tea at 3:30 p.m.**

WEDNESDAY, MAY 24

11:00 a.m. **Axon Guidance Mechanisms in *Drosophila***. David Van Vactor, Assistant Professor, Dept. of Cell Biology and Program in Neuroscience, Harvard Medical School. Seminar. **305 Weiss. Contact Ulrich Unnerstall, 327-8677. Open to RU/WMCCU/NYPH/MSKCC community and guests.**

12:00 p.m. **Central Effects of Cytokines: Clinical Implications**. Julio Licinio, Visiting Professor of Psychiatry and Biobehavioral Sciences, UCLA School of Medicine. Seminars in Clinical Research. **110B Nurses Residence.**

THURSDAY, MAY 25

4:00 p.m. **The Special Requirements of Mammalian Meiotic Synapsis and Recombination vs. Mitotic DNA Repair**. Terry Ashley, Dept. of Genetics, Yale U. School of Medicine. LFKRI Research Seminar. **Lower Level Conference Room, New York Blood Center, 310 East 67th St. Tea at 3:45 p.m.**

FRIDAY, MAY 26

12:00 p.m. **Carbohydrate Cancer Vaccines**. Kenneth O. Lloyd, Professor, Immunology Program, MSKCC. Immunology Seminar. **117 Whitney, WMCCU, 1300 York Ave. Contact Michele Lavarde, 746-6452.**

TUESDAY, MAY 30

12:00 p.m. **Control of Cerebellar Growth and Tumorigenesis by Sonic Hedgehog**. Robert Wechsler-Reya, Research Associate, HHMI, Dept. of Developmental Biology, Stanford University. Neurology and Cell Biology Seminar. **116 Rockefeller Research Laboratories, MSKCC, 430 East 67th St.**

12:00 p.m. **Novel Interactions between Primate Immunodeficiency Viruses and the Host Cell**. Mario Stevenson, U. of Mass. Medical School. CFAR Seminar. **Sixth Floor Conference Room, ADARC, 455 First Ave. Contact Gary Gailor, 448-5163.**

4:00 p.m. **Ex Vivo Generation of Specific Neurons for Brain Repair**. Lorenz Studer, Laboratory of Stem Cell and Tumor Biology, Neuroscience and Cellular Biochemistry and Biophysics, WMCCU. Progress in Neuroscience Seminar. **Weill Auditorium, WMCCU, 1300 York Ave. Tea at 3:45 p.m.**

WEDNESDAY, MAY 31

12:00 p.m. **Human Obesity and Insulin Resistance: Lessons from Experiments of Nature**. Stephen O'Rahilly, Oxford University. Rufus Cole Centennial Lecture. **Casparry Auditorium.**

12:00 p.m. **The Replication Strategy of Foamy Viruses**. Axel Rethwilm, Institut für Virologie, Medizinische Fakultät Carl Gustav Carus, Dresden, Germany. CFAR Seminar. **Sixth Floor Conference Room, ADARC, 455 First Ave. Contact Gary Gailor, 448-5163.**

4:00 p.m. **Peptides from Venomous Cone Snails: 50 Million Years of Ion Channel Pharmacology**. Baldomero M. Olivera, Distinguished Professor of Biology, U. of Utah. Student-sponsored Seminar. **301 Weiss. Pizza and refreshments at 5:00 p.m. on the 17th floor of Weiss. Open to RU/WMCCU/NYPH/MSKCC community and guests.**

5:00 p.m. **Effects of the Extraterrestrial Environment on Cardiovascular Pathophysiology**. Jeffrey S. Borer, Chief, Division of Cardiovascular Pathophysiology, Gladys and Roland Harriman Professor of Cardiovascular Medicine, NYPH-WMCCU. Roy C. Swan Lecture in Biomedical Sciences. **Weill Auditorium, WMCCU, 1300 York Ave.**

6:00 p.m. **Prostate Cancer: Controversies in Screening and Treatment**. Steven A. Leibel, Chairman, Dept. of Radiation Oncology, MSKCC. Carl A. Olsson, J.K. Lattimer Professor and Chairman, Dept. of Urology, Columbia U. College of Physicians and Surgeons. The Rudin Lectures for the Public: Cancer Prevention and Treatment. **New York Academy of Medicine, 1216 Fifth Avenue at 103rd St. Co-sponsored by MSKCC and Columbia U. College of Physicians & Surgeons. Admission is free. For registration and information call 822-7273 or visit <http://www.nyam.org/meded/registform.html>.**

6:00 p.m. **Resilience and Vulnerability of the Adult Brain: From Serendipity to Clinical Relevance**. Bruce McEwen, Professor, RU. Neuronal Stem Cells, Breakthrough Research Seminar. **New York Academy of Sciences, 2 East 63rd Street. Contact Henry Moss, 838-0230 x410. Presented by the Neuroscience Section of the New York Academy of Sciences, the Neuroscience Therapeutics Section of Parke-Davis Pharmaceuticals and the New York Section of the Society for Neuroscience.**

THURSDAY, JUNE 1

4:00 p.m. **Genetic Analysis of Iron Metabolism in Yeast and Its Relevance to Human Disease**. Jerry Kaplan, Professor of Pathology, U. of Utah School of Medicine. 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.**

10:00 p.m. **Calpainopathies: Functional and Pathophysiological Challenges**. Jacques Beckmann, Associate Director, Centre National de Genotypage, Evry, France. Seminar. **116 Rockefeller Research Laboratories, MSKCC, 430 East 67th St. Contact Linda Stevenson, 639-5818.**

The Arts and Other Events

The Scientist and Aesthetics: Selections by Torsten Wiesel. An exhibition of President Emeritus Torsten Wiesel's personal art collection. **Pace/MacGill Gallery, 32 East 57th St. Through Saturday, June 17. Gallery is open Tuesday through Friday from 9:30 a.m. to 5:30 p.m. and Saturday from 10:00 a.m. to 6:00 p.m.**

FRIDAY, MAY 19

12:00 p.m. **Tri-institutional Noon Recitals**. John Kamitsuka, piano. Performing Beethoven's *Minuet WoO 82* and *Sonata No. 4* and Prokofiev's *Sonata No. 7*. **Casparry Auditorium. Contact John Gerlach, 327-7776. Open to RU/WMCCU/NYPH/MSKCC community and guests.**

THE ROCKEFELLER UNIVERSITY Friday Lectures

These events are held in Casparry Auditorium at 3:45 p.m. Tea is served in Abby Aldrich Rockefeller Lounge at 3:15 p.m. All are welcome.

FRIDAY, MAY 19

William H. Stein Memorial Lecture: Structural Biology in Four Dimensions: The Catalytic Pathways of Cytochrome P450 and Alkaline Phosphatase at Atomic Resolution. Greg Petsko, Director, Rosenstiel Center, Brandeis U.

FRIDAY, MAY 26

A General Principle for Intracellular Membrane Fusion. James Rothman, Chairman, Cellular Biochemistry and Biophysics Program, MSKCC.

FRIDAY, MAY 26

9:15 a.m.–11:00 a.m. **Spring Arts Festival**. Child and Family Center. **17th Floor of Weiss. Open to RU community and guests.**

12:00 p.m. **Tri-institutional Noon Recitals**. Caramoor Virtuosi: Colin Jacobsen and Ayko Yoshida, violins; Nicholas Cords and Leo Suzuki, violas; Edward Arron and Alexis Pia Gerlach, cellos. Performing Haydn's *String Trio in G, Op. 53/1*; Beethoven's *String Trio in D, Op. 9/2*; and Brahms's *String Sextet in G, Op. 36*. **Casparry Auditorium. Contact John Gerlach, 327-7776. Open to RU/WMCCU/NYPH/MSKCC community and guests.**

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