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The Rockefeller University

news&notes

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Three physician-scientists address RU Council meeting

The spring meeting of the Rockefeller University Council, entitled "The Dawning of Molecular Medicine: Looking to Genes for New Therapies," took place last week in Caspary Auditorium. Following opening remarks by Council Chairman David Rockefeller, President Torsten Wiesel introduced the program and the three speakers: Associate Professor Jeffrey M. Friedman, Frederick Henry Leonhardt Professor and Senior Physician Jan L. Breslow, and Adjunct Professor and Visiting Physician Ronald G. Crystal. All three, Wiesel noted, are physician-scientists whose work exemplifies some of the recent advances in molecular medicine.

Friedman talked about his lab's effort to find two genes that regulate eating and appetite and to understand how they affect body weight in healthy and ill people. Breslow presented some findings from his research on the role of genes that may predispose people to heart disease. Crystal described his work on replacing the gene responsible for cystic fibrosis with their disease-free counterparts. These and similar efforts may one day result in therapies for rectifying—perhaps even staving off—diseases caused by renegade genes.

Medical researchers Ronald G. Crystal (*left*), Jan Breslow (*center*), and Jeffrey Friedman speak at the RU Council meeting.

A lively panel discussion ensued, sparked by the questions of the Council, which consists of 130 friends of the university who promote public awareness of the role of basic research in disease prevention and treatment. President Wiesel circulated among the audience with a microphone, and after much back and forth, the meeting was adjourned and followed by a reception at the President's House.

New Waterfront Haven

President Torsten Wiesel speaks at the dedication of the East River 60th Street Pavilion on Wednesday. The new pavilion, which will provide a 12,000-square-foot riverfront porch for recreation, is part of a multimillion dollar amenities package negotiated between the Tri-Institutions and the community for air rights over the FDR Drive. Behind Wiesel are Borough President Ruth Messinger and Parks and Recreation Commissioner Henry J. Stern.

Friday lecturer to speak on B cell pathway

Assistant Professor and Howard Hughes Medical Institute Assistant Investigator Michel Nussenzweig will speak on "Immunoglobulin and Regulation of the B Cell Pathway" at the Friday lecture today (May 13).

Nussenzweig uses the tools of molecular biology and genetics to understand how the immunologic specificity of B cells, the cells that produce antibodies, is regulated and maintained. He also studies how the antibody receptor of a mature B cell signals that it has attached itself to an antigen.

One aspect of Nussenzweig's research is the phenomenon of "allelic exclusion." Because each cell contains two versions, or alleles, of every gene, each cell could, theoretically, make more than one antibody—but it does not. Nussenzweig has shown that a component of the antibody itself is responsible for this exclusion.

"Michel has been on our campus for several years now and has established a broad-ranging program in immunology," said Professor James Darnell, who will introduce Nussenzweig. "Particularly notable is the work he has done on signal transduction pathways in lymphocytic cells."

Today's lecture will touch on Nussenzweig's work on the regulation of B lymphocytes in immunoglobulin. He will talk about how antigen receptors regu-

See ***Friday****, page 3*

Joseph Bonner

A solar eclipse, as seen through the glass of a welder's mask at RU (*left*), darkened skies Wednesday afternoon. The eclipse could also be seen by making a circle with one's hand (*center*) and projected through the branches of a tree in front of Founder's Hall. The next eclipse will be in 2012.

Local chorale to perform at RU noon recital in tribute to AIDS workers

In a tribute to the many professionals within the Tri-Institutional community who have worked in the struggle against AIDS, the Stonewall Chorale will perform fourteen sacred hymns and secular works at the Tri-Institutional Noon Recital next Friday (May 20). The presentation coincides with the Ninth Annual AIDS Walk New York, which will be held the following Sunday.

The Stonewall Chorale numbers some fifty committed amateurs who direct their energies toward song and community service. This past year they gave a benefit concert at Carnegie Hall for refugees in Bosnia-Herzogovina, accompanied by the Symphony of the United Nations. They have also caroled in the wards of various New York hospitals, among them the Terence Cardinal Cooke Hospital, the St. Vincent Hospital, and the University Hospital at Stony Brook. In their statement of purpose, they describe their dedication to "the idea that the power of music can help break down barriers between people."

Their RU program will offer a diverse selection of choral pieces, ranging from sacred hymns dating back three hundred years, to folk hymns and spirituals, and works by modern composers such as Irving Berlin and Charles Ives. Many of the works are joyful, and were chosen by Stonewall Chorale Music Director Nancy Vang to showcase chorale artistry, which is not a widely performed musical idiom.

Vang studied in the Liszt Academy in Budapest and St. Olaf College, Northwestern University. She has prepared choruses for the St. Louis Symphony and performed as a singer in this country and in Europe. Pianist Cristina Stanescu won a national prize in her native Romania as most outstanding music student and is now working toward her doctorate, on full scholarship, at Juilliard's School of Music. She will serve as a vocal coach fellow at Tanglewood this summer.

The performance, to be given in Caspary Auditorium at noon, is free and open to the public.

Individuals from the University who are registered for the AIDS walk on Sun., May 22 who would like to walk together should contact David Man in the library, x8907.

Courtesy of the artists

The Stonewall Chorale full ensemble: Members of the chorale will perform at the Tri-Institutional Noon Recital Fri., May 20.

New editors begin at N&N

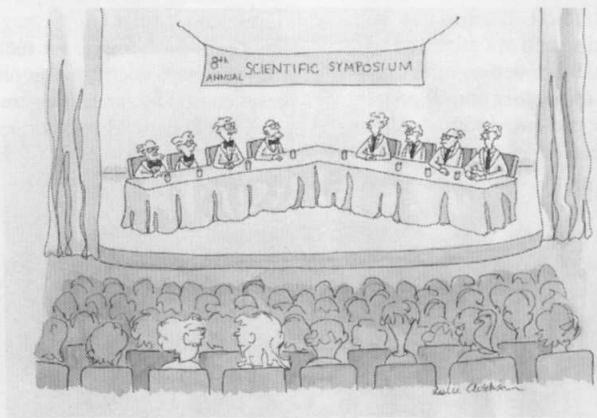
Starting this week, *News&Notes* welcomes two new members to its editorial staff. Kay Locitzer will serve as the new editor and Joseph Bonner will act as assistant editor. Doron Weber, director of communications, will continue to oversee the campus newsletter.

Locitzer has worked as a writer and editor at the City University of New York's Graduate School and University Center. She has also been a research assistant in a psycholinguistics lab at Princeton University and served as an assistant to the director of the Learning Research and Development Center at the University of Pittsburgh. Locitzer received a B.A. from Carnegie-Mellon University and a master's degree in science writing from New York University. She lives in Manhattan with her husband, Yair Harel, and daughter, Suki, who will be joining the RU infant-toddler center in September.

"I am very pleased to be joining the university and look forward to meeting many members of the Rockefeller community," Locitzer said. "Please feel free to contact me with any comments or suggestions for *News&Notes* or just drop by for a chat."

Bonner was a proofreader and copy editor at Plenum Publishing, a scientific and medical publisher in New York, before coming to Rockefeller. Previously, he worked as an editorial writer for a weekly paper in Pennsylvania. Bonner received a B.S. in Ceramic Science and Engineering from Penn State University in 1987 and completed the course requirements for an M.S. in Ceramic Science. A resident of Manhattan, he is engaged and plans to marry this fall.

News&Notes thanks its departing editor, Mika Ono Benedyk, and former assistant editor, Jennifer Horne King, for a job well done.



"For some reason, the panel is divided."

A new editorial staff begins at *News&Notes* this week: Kay Locitzer, editor (left) and Joseph Bonner, assistant editor.

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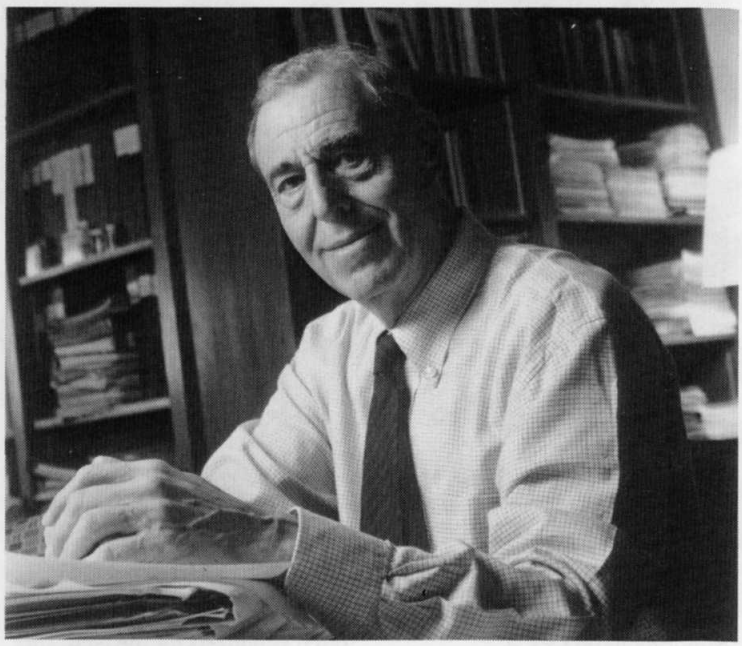
Retirement is just a word for theoretical physicist E.G.D. Cohen

by Susan Blum

As a theoretical physicist, Professor E.G.D. Cohen has always strived to elucidate the laws governing the behavior of matter. Now, a Professor Emeritus at Rockefeller— in so-called retirement since this past July—Cohen is demonstrating one of his own fundamental laws of behavior: "I am as active and involved as ever," he said.

Cohen's field is statistical mechanics—the area of physics that investigates the behavior of the myriad, ever-moving molecules found in matter. His particular focus is the complex behavior of the molecules of dense fluids at different densities and temperatures.

Much of his initial work in the early 1960s focused on low-temperature physics. At that time, he made theoretical predictions about the behavior of liquid helium mixtures at very low temperatures that were later confirmed experimentally and ultimately led to the design of the helium dilution refrigerator, a powerful cooling device that is now a standard low-temperature instrument. He then became interested in the behavior of dense fluids and fluid mixtures not in thermal equilibrium—that is, where the density and the temperature of the system are not the same everywhere within it.



Rockefeller University Professor Emeritus E.G.D. Cohen remains active in retirement.

A transformation in viewpoint

In his career, Cohen has had the satisfaction of seeing once-intractable problems in nonequilibrium physics start to yield under the power of new approaches. As Cohen recounted, one "liberating development" was the recognition that a systematic approach to the problem was in fact less useful than an "ad hoc" one.

"When I first began in the field, everybody had a particular idea of how to generalize systematically the well-known theory of dilute gases—which Boltzmann worked out in the nineteenth century—to dense gases and liquids. That idea, which came from a Russian named Bogolubov, turned out to be wrong. But the fact that it was wrong opened the way for a new way of looking at things."

Cohen likened this transformation in viewpoint to the one that distinguished the Middle Ages from the Renaissance. "In the Middle Ages, they asked how many angels could dance on the head of a pin. This was not a good question, since it could never be answered. But in the Renaissance came better, soluble questions, such as how to solve a quadratic equation. In this sense, I was a Renaissance man," Cohen jested.

Caged molecules

Among Cohen's contributions was "to identify the relevant sequences of collisions among particles which, if taken account of in the proper statistical way, could account for most of the properties you observe. Once you had them, you could forget about the others," he said.

Using a nontechnical metaphor, Cohen explained that in a dense fluid, each molecule finds itself in a cage formed by its nearest neighbors. "The most important feature of all dense fluids is: how easy is it for a particle to get out of its cage? That depends not only on what the particle does, but also on what the particles that form the wall of the cage do. Our task is to quantify that and write down an explicit formula which tells you in an idealized case how easily a particle can escape."

As it turns out, he continued, "There are regularities that are highly independent of the precise nature of the system — that is, whether it is water, or liquid helium, or a colloidal suspension. And this universality allows you to make predictions," he said.

Give and take is a constant

Dr. Cohen received a Ph.D. in 1957 from the University of Amsterdam. He then served as a research associate at the University of Michigan from 1957 to 1958, where he worked with George E. Uhlenbeck, and as a research associate at the Johns Hopkins University from 1958 to 1959, where he worked with Theodore H. Berlin. (Soon after, Berlin and Uhlenbeck became founding members of Rockefeller's physics group.) Between 1959 and 1963, Cohen was associate professor at the Institute for Theoretical Physics at the University of Amsterdam. He joined RU as a professor in 1963.

For more than thirty years now, Cohen says, "Rockefeller has been ideal for me." He delights in the opportunities for interaction with other Rockefeller physicists such as Mitchell Feigenbaum and Marcello Magnasco, whose studies provide insights relevant to his special interests. And now, in his new status as Professor Emeritus, he points with particular satisfaction to the continuing close contact he has with postdoctoral associates and graduate students: "There is a constant give and take. They keep me young, and I help them mature."

Friday Lecturer

(continued from page 1)

late lymphocyte development and function using, as models, B cells and membrane immunoglobulin.

A graduate of The Rockefeller University (Ph.D., 1981), Nussenzweig received an M.D. from the New York University School of Medicine in 1982. He also received the Bertram M. Gesner Memorial Research Award from the NYU School of Medicine that year. He completed his residency in internal medicine at Massachusetts General Hospital in 1985, and was a clinical fellow in infectious diseases during his final year of residency. From 1986 to 1989, he was a postdoctoral fellow in the genetics department at Harvard Medical School. In 1990, Nussenzweig joined the faculty of RU to head his own laboratory. In 1990, he became an assistant investigator of the Howard Hughes Medical Institute.

Nussenzweig is a member of several university committees, including the Academic Council, the Award Nominating Committee, and the Tri-Institutional M.D.-Ph.D. Coordinating Committee. He is advisory editor for *The Journal of Experimental Medicine*. He is author or coauthor of more than twenty publications, and is awaiting the awarding of a patent on the uses of antigen receptors.

The lecture will be held in Caspary Auditorium at 3:45 P.M. and preceded by tea at 3:15 P.M. in Abby Aldrich Rockefeller Hall. Admission is free. All are welcome to attend.

RU's Michel Nussenzweig lectures today (May 13) on the regulation of B lymphocytes in immunoglobulin.

On the run with Jolanta Diakun: How an RU nutritionist burns calories

In the fall of 1986, Jolanta Diakun, a research nutritionist at the university hospital, peered from the sidelines as thousands of runners thundered past in the New York City Marathon. "I thought, 'What a bunch of loonies,'" she said. Two years later, she joined the loonies and ran her first marathon. Since then, she has run the grueling 26.2 miles that constitute a marathon five more times.

What Diakun remembers most about her first race is the euphoria that many marathon runners experience. "You get that runner's high. I was exhilarated," she said. "And, since the marathon covers all five boroughs, I had my family cheering me on in Brooklyn and friends watching in Queens and in Manhattan." Diakun also recalled the inspiration from seeing the members of the Achilles Track Club participate. "It was great to see people competing and overcoming their disabilities," she said.

After her first appearance in the New York City Marathon, Diakun ran marathons in Bermuda and Boston. And she has run in the legendary New York race twice more. Her next race is the Cleveland Marathon on May 15, then on to Minneapolis on Oct. 2.

Jolanta Diakun, a research nutritionist at the university hospital, is preparing to compete in the Cleveland Marathon, Sun., May 15.

Diakun chooses her races on the recommendations of friends and from running publications. "I'm racing in Cleveland because it's a nice, flat course and supposedly very scenic," she said.

When she's not interacting with patients in her RU lab, Diakun often volunteers for the New York City Public School system, so she relishes the solitude that accompanies running. "Running gives me peace of mind, time to think, and an opportunity to work out at the same time," she said. "Besides, running is a lot easier to do than something like tennis, which I also enjoy. With tennis, you need a partner, you have to schedule court time, and you need equipment. When I want to run, I just put on my shoes and go."

As much as Diakun enjoys competitive running, it comes in second to her primary love: slalom waterskiing. "Both offer excellent cardiovascular benefits," she said. "Running strengthens you for waterskiing and vice versa." Diakun plans to enter her first waterskiing competition this summer.

Diakun's training schedule consists of workouts with weights in the morning, followed by evening runs. She also takes running classes as a member of the New York Road Runners Club, where she works on speed and the techniques that she hopes will enable her to improve her performance. "In November I ran the New York City Marathon in 3 hours and 38 minutes, and I really want to beat that in Cleveland."

Potpourri

Tri-Institutional Noon Recital
The St. Lawrence String Quartet will perform works by Felix Mendelssohn, Dmitri Shostakovich, and Ottorino Respighi at the Tri-Institutional Noon Recital today (May 13). The quartet performed at The White House at the request of Isaac Stern in honor of the 1993 National Medal of Arts recipients, and won first prize at the 1992 Banff International String Quartet Competition. The group includes violinists Geoff Nuttall and Barry Shiffman, violist Lesley Robertson, and cellist Marina Hoover. Mezzo-soprano Anne Marie Hoover will also appear with the quartet. Hoover has performed at the Salzburg Mozarteum Festival and in the Manhattan School of Music opera, baroque, and contemporary ensembles. The concert, to be held in Caspary Auditorium at noon, is free and open to the public.

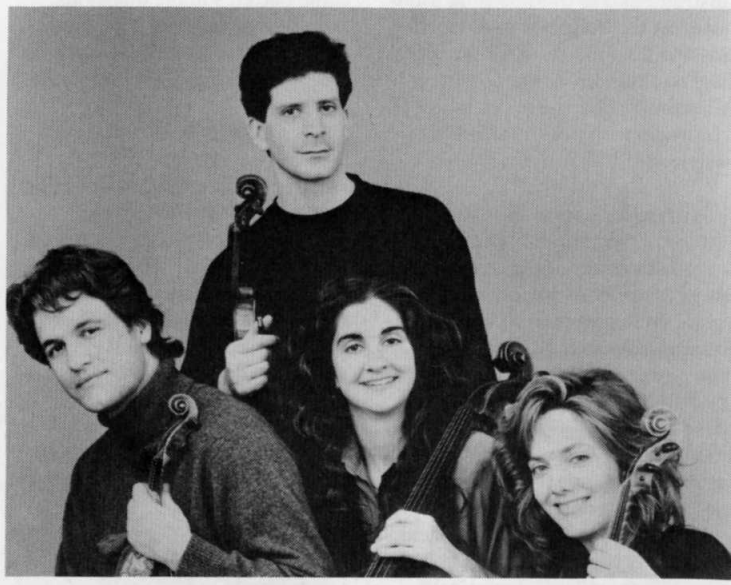
OLR workshops
On-line requisitioning workshops will continue in May; the next workshop is Fri., May 20 from 10:00 A.M. to noon. Please bring the following:

- a floppy diskette;
- an old purchase requisition to practice with;
- your access codes and login information.

If you have not received your access codes, send a Request for Authorization form, signed by your lab head, to Toby Fishman, Controller's Office, box 187 before the workshop. To register for the workshop, call x7768.

Clinical Research Seminar
Rockefeller University Associate Professor George Drummond will speak on "Control of Jaundice in Newborns by an Inhibitor of Bilirubin Production" at the Clinical Research Seminar, Wed., May 18, at noon, in Nurses Residence 110B.

Departures
Assistant Professors: Tzyh-Chang Hwang, Gadsby lab; Debkumar Pain, Blobel lab.
Adjunct Faculty: William W. Jow, Population Council; Kalman Migler, Simon lab; Yoshio Uchino, Wilson lab; Hiroshi Ueno, Manning lab.
Visiting Professor: Nicola Tavoloni, Hanafusa lab.
Visiting Assistant Professor: Hisataka Sabe, Hanafusa lab.
Research Associate: Steve Moulding, Goulianos lab; Jack Zhao, Goulianos lab.
Postdoctoral Associates: Marcello Caria, Asanuma lab; Corinna Darian-Smith, Gilbert lab; Karim Fahmy, Sakmar lab; Teresa Improta, Darnell lab; Siobhan Kuhar, Heintz lab; Jose Javier Martin de Llano, Manning lab; Donata Medaglini, Fischetti lab; Lei Rong, M. Young lab; Jane Spetzler, Cowburn lab; Eric Visgogliosi, Müller lab; Kathy C. Wang, Roeder lab.
Postdoctoral Fellows: Dorothea Kominos, Kuriyan lab; Rosario Mato Labajos, Tomasz lab; Jianxun Li, Aderem lab; Tor Regberg, G. Cross lab; Karen Sokol, Hayre lab; Yoshifumi Watanabe, McEwen lab; Soon-Ok Yoon, Hatten lab; Weimin Zhong, J. Darnell lab.
Guest Investigator: Guiseppina Arpaia, Chua lab; Paola Paglia and Yasunori Yamaguchi, Steinman lab; Pierluigi Pompei, McEwen lab.



Christian Steiner

The St. Lawrence String Quartet will perform at the Tri-Institutional Noon Recital today (May 13).