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Five new investigators join university's faculty

Five investigators have recently been appointed to The Rockefeller University faculty as the result of a major recruiting drive launched last fall. Neurobiologist Mary Elizabeth Hatten, currently a professor of pathology at Columbia University, will join the senior faculty. Kenji Adzuma, Yongwon Choi, Robert Darnell, and Seth Andrew Darst will become members of the junior faculty. They will join computational neuroscientist Joseph Atick, whose appointment was announced earlier.

"I am very pleased by the new appointments," said President Torsten Wiesel. "These investigators will bring new depth and fresh ideas to the research at the university. I am especially gratified that my distinguished former Harvard University colleague Mary Beth Hatten has chosen to join our faculty—she is a major scientific figure who conducts important and innovative research."

Mary Elizabeth Hatten: working to understand the brain

Hatten, whose lab will be located on the fourth floor of Tower, said: "Coming to Rockefeller offers a unique opportunity for my lab. We will have access to a great many resources, and the move will facilitate our collaborations with Rockefeller Professor Nat Heintz. In addition, Torsten Wiesel's plans for expanding work in the neurosciences at Rockefeller are very exciting and I look forward to being a part of those developments."

Hatten will be the fifth woman to be appointed full professor at

Rockefeller. She follows Florence Sabin (1925), Rebecca Lancefield (1958), Marilyn Farquhar (1971), and Gertrude Perlmann (1973).

Hatten uses the tools of cell and molecular biology to understand how cellular architecture is established in the mammalian brain during development. Much of her research is aimed at elucidating how neurons, or nerve cells, migrate to take their proper places in the brain. For that purpose, she has pioneered the integration of video technology and microscopy. Another aim of Hatten's research is to understand the genes and the sequence of molecular signals that govern when, where, and how immature precursor cells assume the roles of fully developed neurons.

Hatten studies the cerebellum, a relatively simple part of the brain that serves in many ways as a model for the more intricate cerebral cortex. Her studies may eventually lead to a better understand-

ing of conditions such as childhood epilepsy, fetal alcohol syndrome, some forms of learning disability, and certain kinds of brain tumors.

The four new members of the junior faculty, who will hold the title of assistant professor and head of laboratory, specialize in diverse aspects of the biomedical sciences.

Kenji Adzuma: studying genetic recombination

Adzuma's research has focused on the molecular mechanisms of genetic recombination in the bacterium *E. coli*. At Rockefeller, he plans to continue his biomedical studies of bacterial proteins involved in recombination and expand them to include yeast. These simple organisms can provide insights into the genetic mechanisms in higher organisms. Adzuma earned a B.S. and Ph.D. in molecular biology from Osaka

See *Investigators*, page 2



Mary Elizabeth Hatten will join the senior faculty of the university this fall.

Evening concerts trumpet outstanding new season

By Mika Ono

Continuing one of its more illustrious traditions, the university will bring an outstanding roster of musicians to perform in evening concerts this year.

"The quality of the concerts is widely considered on par with those at Carnegie Hall or Lincoln Center," said Cathy Rogers, administrator of the series in the Public

Affairs Office. "Often musicians will play at Rockefeller one week, and have an exclusive booking at a major concert hall the next. Tickets at the university are much cheaper. It's really a bargain.

"Caspary Auditorium is a great place to attend performances," she added. "Not only is it convenient, it is small enough so you can really see and hear the musicians."

This year's program was selected by former Rockefeller Professor Gerald Edelman and Associate Professor George Reeke, Jr. In reviewing the 100 or so candidates for the program, they strove to choose a mix of well-known artists and up-and-coming musicians.

"The Guarneri String Quartet—a very popular and good ensemble—will perform in the series, as they have every year," said Reeke. "Among the less well-known artists we reviewed, I was especially impressed by 23-year-old pianist Hélène Grimaud, and 18-year-old violinist Alyssa Park. While they don't yet have a following in New York, I suspect their concerts at the university will be the beginning of many successful ones in New York City."

The concert series was founded in 1958 by the late Professor Theodore Shedlovsky, who was also founder and first director of the university's Children's School. A scientist who applied the techniques of physical chemistry to the study of life processes, Shedlovsky ran the series until the mid-1970s, establishing a precedent of bringing some of the world's best musicians to the community.

Subscriptions—to this year's full 12-concert roster or to Series A or B—are now available. Performances, which begin at 8:00 P.M. in Caspary Auditorium, will be as follows:

Wed., Oct. 14, 1992—Alice Artzt Guitar Trio (A)

Thurs., Oct. 29—pianist Horacio Gutiérrez (B)

Wed., Nov. 11—cellist Carter Brey and pianist Christopher O'Riley (B)

Wed., Dec. 2—violinist Pamela Frank and pianist Claude Frank (A)

Wed., Jan. 6—Buswell-Parnas-Luvisi Trio (B)

See *Concerts*, page 2

2 RU Security nabs robbery suspect

3 Cowbirds attack 'family values'

4 New mail room head delivers

Rodolfo Ibarra



Music at Caspary Auditorium.

Five investigators join faculty

(continued from page 1)

University. He has been working at the National Institute of Diabetes and Digestive and Kidney Diseases, in Bethesda, Maryland.

Yongwon Choi: probing the secrets of the immune system

Choi studies the development of T cells, white blood cells that orchestrate a wide range of immune-system responses. He also investigates how these cells interact with retroviruses, including the AIDS virus. He received his Ph.D. from the University of Illinois College of Medicine in 1988. Since completing his doctoral work, he has been working at the Howard Hughes Institute at the National Jewish Center for Immunology and Respiratory Medicine in Denver, Colorado. In addition to his position at Rockefeller, he is an assistant investigator of the Howard Hughes Medical Institute.

Robert Darnell: investigating rare brain diseases

Darnell has been studying rare brain diseases called the paraneoplastic neurologic syndromes, disorders that result from the body's immune response to different types of cancer. His research identified

the novel proteins expressed in the tumors and in the brain that are targets of the immune response. Darnell earned a B.A. in biology and chemistry from Columbia University, and an M.D. and Ph.D. in molecular biology from the Washington University School of Medicine. He was an intern and resident at Mt. Sinai Hospital, and resident and then chief resident in neurology at The New York Hospital. Since 1990, Darnell has been assistant attending neurologist at Memorial Sloan-Kettering Cancer Center and The New York Hospital, and assistant professor of neurology and neuroscience at Cornell University Medical College. In the tradition of father and son teams at Rockefeller such as botanist Louis Kunkel and clinical immunologist Henry Kunkel, Robert Darnell will join his father, Vincent Astor Professor James Darnell, Jr., on the faculty.

Seth Andrew Darst: searching for molecular structure

Darst studies the structures of specialized complexes of macromolecules, particularly those involved in DNA replication and transcription. His research on molecular

Profile: Mary Elizabeth Hatten

Neuroscientist Mary Elizabeth Hatten, who joins The Rockefeller University faculty this fall, earned an A.B. in chemistry from Hollins College, and a Ph.D. in biochemical sciences from Princeton University. After completing her doctoral studies, she spent three years working in the Neuroscience Department at Harvard Medical School. In 1978, she joined the faculty at New York University School of Medicine. She moved to Columbia University's College of Physicians and Surgeons in 1987.

In 1991, Hatten was one of only 10 recipients of the National Science Foundation's Faculty Award for Women Scientists and

Engineers. Her numerous other awards include the Javits Neuroscience Investigator Award, the McKnight Neuroscience Development Award, and the Pew Neuroscience Award.

Hatten is associate editor of the *Journal of Neuroscience*, and is on the board of editors for the *Journal of Neurobiology* and *Glia*. She is a member of the Board of Scientific Counselors of the National Institute of Neurological and Communicative Disorders and Stroke, National Institutes of Health, and chair of the Society for Neuroscience's Ad Hoc Committee on the Status of Women.

structure uses two-dimensional crystallography, a novel technique used to prepare substances to be seen with electron microscopy. Darst earned a B.S. in chemical engineering from the University of

Colorado, and an M.S. and Ph.D. in chemical engineering from Stanford University. Since receiving his Ph.D., he has been a post-doctoral scholar at Stanford's Department of Cell Biology.

RU security nabs robbery suspect

A Rockefeller University security guard apprehended a suspect who accidentally ran onto campus while fleeing from the police earlier this month.

"I was standing by the main gate, around 2:00 o'clock, and a man ran through the gates towards the tennis courts," said security guard Dennis Rivera. "I ran after him, and caught him as he was trying to climb over the fence to get back onto the street."

A New York City policeman, hot in pursuit, arrived shortly afterwards.

"Apparently, the suspect had stolen a TV and some T-shirts from an apartment up the block," said Rivera. "He hailed a taxi to get away, but when the driver saw the police, he took off—with the TV in the cab. That left the suspect with the police close on his heels, without anything to show for it."

The suspect—who, according to Rivera, was 5'7" tall and 18 or 19 years old—was taken to the police station after the incident.

(continued from page 1)

Wed., Jan. 20—flutist Gary Schocker and the Italian string group I Solisti Italiani (A)

Wed., Jan. 27—violinist Alyssa Park (B)

Wed., Feb. 10—Lafayette String Quartet (A)

Thurs., March 4—pianist Hélène Grimaud (A)

Wed., March 24—clarinetist David Shifrin and violist Paul Neubauer (B)

Wed., April 14—soprano Benita

Valente (A)

Wed., April 28—Guarneri String Quartet (B)

Those who wish to subscribe to the series should fill out a subscription card (those who have not received a card through the campus mail should call x8971). The card should be sent with a check—for \$195 for the full series, or \$100 for series A or B—to the Accounting Office, Box 259. Checks should be made out to "The Rockefeller University." Those interested in

attending individual concerts should call x8971 a few days before the concert to see if tickets are available.

"There is a reception in the artists' room on the third floor of Abby Aldrich Rockefeller Hall right after the concert," said Rogers. "Anyone who wishes to meet the musicians is welcome to attend."

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

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Dorthea von Haefen



The Guarneri String Quartet will continue the tradition of performing in the university's evening concert series.



'Family values' vs. 'lifestyle diversity'

Cowbird studies take flight at Millbrook Field Center

by Susan Blum

A doting mother she's not.

The brown-headed cowbird lays her eggs in the nests of other bird species and then takes off, leaving the hatching and nurturing of her fledglings to foster mothers who treat the cowbird babies as their own.

This self-serving behavior, known as "nest parasitism," is more than a simple failure of avian family values. It often threatens the vigor—and, in some cases, the very survival—of the species that serve as the hosts. Cowbird babies often hatch before their foster siblings, thus diverting precious resources from nestlings who, by dint of their genes, deserve more of their parents' attention.

Across North America, cowbirds have parasitized the nests of over 200 different bird species. In certain regions of the country, parasitism by cowbirds has already helped put three species on the endangered list: Kirtland's Warbler in Michigan; Least Bell's Vireo in Southern California, and Black-Capped Vireo on the Texas-Oklahoma border. Elsewhere, the cowbird's behavior is a likely suspect in the decline of many other North American songbirds.

When species are endangered, the U.S. Fish and Wildlife Service steps in, and the agency has already initiated programs to control cowbird parasitism in the regions where the problem is most severe. A four-year Fish and Wildlife Service study aimed at determining the extent of cowbird parasitism in the Northeast has just concluded its second summer at Rockefeller University's Field Research Center in Millbrook, New York.

Caldwell Hahn, a research biologist with the Fish and Wildlife Service, is directing the project. She was eager to work at the field center for both intellectual and practical reasons. Founded in 1972, the facility has served as the site of pioneering, interdisciplinary studies on animal cognition and communication by Professors Emeritus Donald Griffin and Peter Marler, and by its current director, Fernando Nottebohm. Uniquely placed to foster research in interrelated scientific disciplines, the center has the right ecological profile for Hahn's study, as well: as far back as the 1980s, Marler reported a high rate of cowbird parasitism at Millbrook.

Nottebohm has enthusiastically

Susan Blum



A newly-hatched cowbird, just minutes old, rests next to three cowbird eggs and two eggs of the host parents.

welcomed the Fish and Wildlife Service investigators because their studies raise issues that dovetail with the kinds of questions he and his Rockefeller colleagues pursue. These questions involve the complex connections between an animal's neurophysiology, its environment, and its behavior.

"Cowbirds are a fascinating example of one species 'hijacking' another," Nottebohm said. Underlying this ornithological offense are fundamental puzzles of endocrinology, development, communication, and species identity. For instance, cowbird parents bypass the nest-building stage of courtship that typically triggers ovulation. What, then, is regulating the female's hormones?

Cowbird offspring are no less complex than their parents. Once hatched, they must give the appropriate cues that elicit food and protection. Do they learn the language and "culture" of their foster parents, or do they use signals that compel their attention and response? After leaving the nest, cowbirds flock and mate with other cowbirds. How do they recognize another member of their own species?

Before these questions can be broached, Hahn and her colleagues must gather what Nottebohm calls the "first generation" of data on cowbirds. One aim of the research is to learn where cowbird parasitism is strongest, be it in open fields, at the forest edge, or in the forest interior. A second and even more challenging goal is to learn how cowbirds select their hosts, in order to determine which species are most threatened.

Until recently, studies of cowbirds focused on the population level, to find out which species were parasitized, and how severely. But, says Hahn, "if you also want to get a handle on the factors that determine how female cowbirds select

their hosts, you need information about their individual behavior."

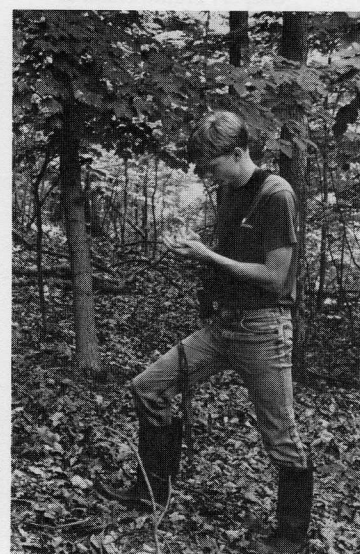
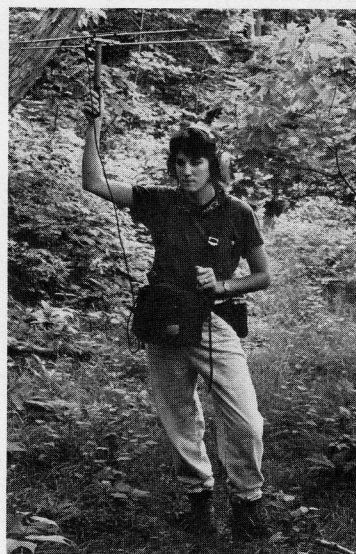
The techniques for such research are now at hand. Hahn's studies are the first to use radio telemetry to track female cowbirds' movements and DNA fingerprinting to link cowbird mothers with their offspring.

This summer, about 25 female cowbirds were outfitted with tiny radio transmitters attached to antennae some eight inches long. The gear stayed on for about a month, during which time telemetry specialists were able to trace each bird's "use area," a region similar to a territory. Aided by this telemetry data, nest finders set out daily to find parasitized nests and bring back the cowbird eggs laid within them. The eggs were incubated and hatched, and blood from the chicks was drawn, in order to compare its telltale DNA "fingerprint" with blood drawn from female cowbirds captured briefly and banded for identification. The

results are not yet in, but any matches disclosed by the testing will further the understanding of the egg-laying pattern of female cowbirds. These data, in turn, will help answer such questions as whether individual cowbird females are "specialists" who parasitize just one or a few host species, or "generalists" who entrust their offspring to one and all.

Rockefeller's Field Center is providing the cowbird researchers with a unique environment to explore what Nottebohm calls "the diversity of lifestyles that nature comes up with." Such an environment is an invaluable asset, he says, because he believes the challenge of contemporary neuroscience is to blend laboratory investigations in neurophysiology with field studies documenting what free-ranging animals do in the wild. Scientists in Nottebohm's own research group are actively pursuing that blend. Among the projects currently underway at the field center are studies of how genes are turned on when territorial songbirds listen to their own species's song, how hormone levels differ among house wrens of different "marital status," and how seasonal changes in food storage and retrieval by chickadees relate to the growth of new neurons in a brain region called the hippocampus.

"We are able to go out into nature and mine the treasures that otherwise would remain unknown," says Nottebohm. While cowbirds might prefer that those treasures remain unearthed, many other species—including our own—stand to benefit from the exploration.



Left: Telemetry specialist JoAnn Wisnewski tracks the whereabouts of female cowbirds. Right: Nest searcher Jon Boone records the location of another nest harboring cowbird eggs.

Susan Blum

Signed, sealed, delivered: a new mail room head

Dozens of people pass through The Rockefeller University mail room each day to pick up their mail, drop off packages, or buy stamps. Those who have been there recently will have noticed a new face behind the counter—that of Deborah Lynch, new mail room supervisor.

"My goals are to make the mail room more modern and more service-oriented," said Lynch. "I would like to help people learn about the different options available to them."

Lynch has lost no time in streamlining operations behind the scenes. A smaller, quieter and more modern mail-stamping machine has been ordered. Furniture has been rearranged to

give the workers more space. And a new IBM computer is on the way.

"We will be installing a computerized system to keep track of Federal Express and DHL packages," said Lynch. "Beginning September 1, you won't have to worry about filling out an airbill. Just drop off your package and our staff will take care of it."

Lynch noted that because of a new deal with DHL, the price of this service has been cut by about 75 percent.

"In addition, we will be keeping closer track of packages being delivered to the university," she said. "People picking up packages from the mail room will have to sign for them."

Lynch, a native of Brooklyn, comes to Rockefeller from Swiss Bank, where she was head of the mail room for four years. Prior to that time, she was employed by Marriott Corporation for five years. Lynch holds a B.A. in management and marketing from the New York Institute of Technology.

The Rockefeller University mail room is open from 8:30 A.M. to 5:30 P.M. from Monday through Friday, and from 8:30 A.M. to 1:00 P.M. and 1:30 to 4:30 P.M. Saturday. Stamps are sold from 11:00 A.M. to 5:00 P.M.

"If anyone has questions or problems, they should feel free to ask me," Lynch said. "I'm here to help."



Deborah Lynch, the new head of the mail room, is working to modernize and stream-line operations.

Potpourri

Seminars

The Junior Faculty-Student Seminar Series offers talks most Tuesday mornings during the academic year. Suggestions for speakers for the upcoming year should be sent to Claude Desplan as soon as possible at box 151, x7965, or Fax x7923.

Call for volunteers

Individuals willing to help out with the events celebrating the dedication of the new building, Sept. 23

to 26, should contact Sandi Walsh, x8072.

Spraying

Weather permitting, the trees and shrubs on campus will be sprayed tomorrow, Sat., Aug. 29, between 6:00 A.M. and noon. The Grounds Department recommends that those on campus that day stay out of direct contact of the spray, close windows, turn off air conditioners, and keep pets inside. The rain date is Sat., Sept. 12. For

more information, call James Sullivan, x8001.

Promotion

Streamson Chua, of the Hirsch lab, was promoted from research associate to assistant professor.

Honor

Rockefeller alumnus Chiye Aoki ('85) was selected as one of the first recipients of the new Presidential Faculty Fellows Program Awards. The award was given to Aoki in recognition of her work in neuroscience. Aoki is currently assistant professor of neural sciences at New York University.

Election

Professor and Dean Bruce McEwen has been elected to be the next president of the International Society of Neuroendocrinology.

Award

Alumni Annette T. Lee (Class of '89) staff investigator at the Picower Institute for Medical Research, in Manhasset, is one of 35 scientists and physicians awarded a grant by the American Federation for Aging Research (AFAR), Inc. Lee will be studying the molecular basis of aging and in particular the influence of age-related DNA mutations on diseases such as cancer which are so prevalent among the elderly.

Certificate of appreciation

New York City Public Schools system has awarded its Partner in Education Certificate of Appreciation to James Z. Metalios, director of physical facilities. The certificate was given in recognition of his leadership, expertise, and ser-

vice to New York City Public School students. Anyone interested in participating in the program, "Open Doors/Speakers in the Classroom," can obtain information by calling 349-1625.

Births

Kate Kadoun, associate director in the Development Office, and her husband, David Moodey, announce the birth of a baby girl, Jessica Kadoun Moodey, born Aug. 10 at Lenox Hill Hospital.

Andrea Abushady, administrative secretary in Technology Transfer, and David Freiman are also announce the birth of a baby girl. Born on Aug. 12, Kirsten Elizabeth Freiman weighed 7 pounds 14 ounces.

News&Notes survey

Eighty-two percent of the readers who responded to the survey about *News&Notes* gave the paper a favorable rating. Thirty-two percent rated the paper excellent; 50 percent, good; 13 percent, fair; and 4 percent, poor. Many of the suggestions and story ideas submitted on the questionnaire will be incorporated into upcoming issues of the paper.

Discount

Peter's Car Service has extended its special for members of the Rockefeller community until the end of the year: \$15 to LaGuardia airport, \$26 to Newark airport, and \$25 to John F. Kennedy airport. Pickups can also be arranged. Peter's Car Service has a new toll-free number: 1-800-643-9272. Calls placed from outside the United States should be made to (718) 386-6768.

September symposium

From cell biology to neurobiology

A scientific symposium will be held Thurs., Sept. 24, in Caspary Auditorium, as part of the festivities celebrating the completion of the new lab building. Lectures will focus on cell biology, one of the university's traditional areas of strength, and neurobiology, an important direction for the future. A schedule of the conference follows:

9:00 A.M. Welcoming remarks, President Torsten Wiesel

9:05 A.M. "Membrane Traffic in Eukaryotic Cells," George E. Palade

9:50 A.M. "The Biochemical Mechanisms of Transitions in the Cell Cycle," Marc W. Kirschner

10:35 A.M. "Microtubule-

Dependent Organelle Transport and Growth Cone Motility," Michael P. Sheetz

11:20 A.M. "Protein-Lipid Interactions at the Interface of the Actin Cytoskeleton with Membranes," Thomas D. Pollard

2:00 P.M. "How Hearing Happens," Albert J. Hudspeth

2:45 P.M. "Spontaneous Activity and Synaptic Competition During the Formation of Neural Connections," Carla J. Shatz

3:30 P.M. "Experiencing and Perceiving Visual Surfaces," Ken Nakayama

4:15 P.M. "The Problem of Awareness," Francis H. C. Crick