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BENCHMARKS

THE COMMUNITY NEWSLETTER OF THE ROCKEFELLER UNIVERSITY

FRIDAY, MAY 14, 2010

ANNOUNCEMENTS

Convocation is June 10. Thirty-seven students will receive Ph.D.s at this year's Convocation. In addition honorary degrees will be awarded to Hanna Holborn Gray, historian, president emeritus of The University of Chicago and chairman of the Howard Hughes Medical Institute; and Harold E. Varmus, Nobel laureate, president and chief executive of Memorial Sloan-Kettering Cancer Center and former director of the National Institutes of Health. As was the case last year, the presentation portion of the ceremony will be held in the morning in order to accommodate the large number of graduates. The schedule of events:

10 a.m. Presentation of Graduates, Caspary Auditorium. Tickets are required. For tickets, please e-mail Arianne Dowdell at adowdell@rockefeller.edu.

2:30 p.m. Academic Processional from Weiss Lobby to Caspary Auditorium. All are welcome to gather along the route.

3 p.m. Convocation. Caspary Auditorium. Tickets are required.

4:30 p.m. Reception, Peggy Rockefeller Plaza. All are welcome.

World Science Festival kicks off June 2. The third annual World Science Festival, for which Rockefeller is a university partner, will bring together leading scientists, artists and thinkers for a five-day celebration of science to take place at venues throughout New York City. Paul Nurse will participate in two events: "The Search for Life in the Universe" and "The Limits of Understanding." Discounted tickets are available for some events; watch your e-mail for details. For the full schedule, visit www.worldscience-festival.com

Employee discount available at New York Sports Club. Discounted memberships are now available for university employees for \$69 a month plus a onetime \$59 fee. Go to www.companiesgetfit.com to register; spouses, domestic partners and dependents may enroll by calling 800-611-9833.

Announcements for this page may be submitted to zveilleux@rockefeller.edu.

BENCHMARKS

Paul Nurse, President
Jane Rendall, Corporate Secretary
Joe Bonner, Director of Communications
Zach Veilleux, Executive Editor

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FROM RUSS CARSON, CHAIR, BOARD OF TRUSTEES

Searching for a new president

As you know, Paul Nurse will be leaving Rockefeller at the end of the year to take up the presidency of the Royal Society in London.

The vice chairs of the Board of Trustees and I, together with the Executive Committee of the Board, have now decided on the process we will follow to identify a new president to succeed Paul. We have agreed that it is important that we consult widely and, in particular, that we take advantage of the knowledge and extensive experience of members of the faculty. We have established a search committee comprising thirteen members with myself as chair, eight other members of the Board of Trustees (including three of the scientific members, Joe Goldstein, David Botstein and David Hirsh) and four members of the Rockefeller faculty. Two faculty members have been nominated by the faculty through Academic Council to join the search committee, Cori Bargmann and Michel Nussenzweig, and two faculty members have been invited by the vice chairs and myself to join, Rod MacKinnon and Mike Young. The other trustees on the committee are Marlene Hess, Marnie

Pillsbury, Don Randel, Rick Salomon and Jim Simons. Jane Rendall will serve as secretary to the committee.

An executive search firm, Spencer Stuart, has been engaged to assist the committee in the process. Jennifer Bol, the lead partner of the Spencer Stuart team, worked on the previous search which brought Paul Nurse to Rockefeller. Jennifer and her colleagues, Alexis Stiles and Heather Carpenito, will help us identify qualified candidates, provide background research on those candidates, and manage the logistics of the search process.

I want to ensure that all members of the university community have a voice in the process of finding a new leader for our institution. In that regard we have set up an e-mail address, search@rockefeller.edu, to receive the inputs of members of the Rockefeller community. I encourage all members of the community to e-mail us their thoughts on both the characteristics we should be looking for in a new president and any suggestions as to potential candidates that we should consider. If you recommend a candidate to us, please include the individual's

name, institutional affiliation and a brief description of why you feel the individual merits consideration for the position. While it will be necessary throughout the process to preserve confidentiality with respect to the names of individuals the committee identifies as potential candidates, we intend to communicate regularly with the campus on our progress in the process, and we wish this process to be as transparent as possible.

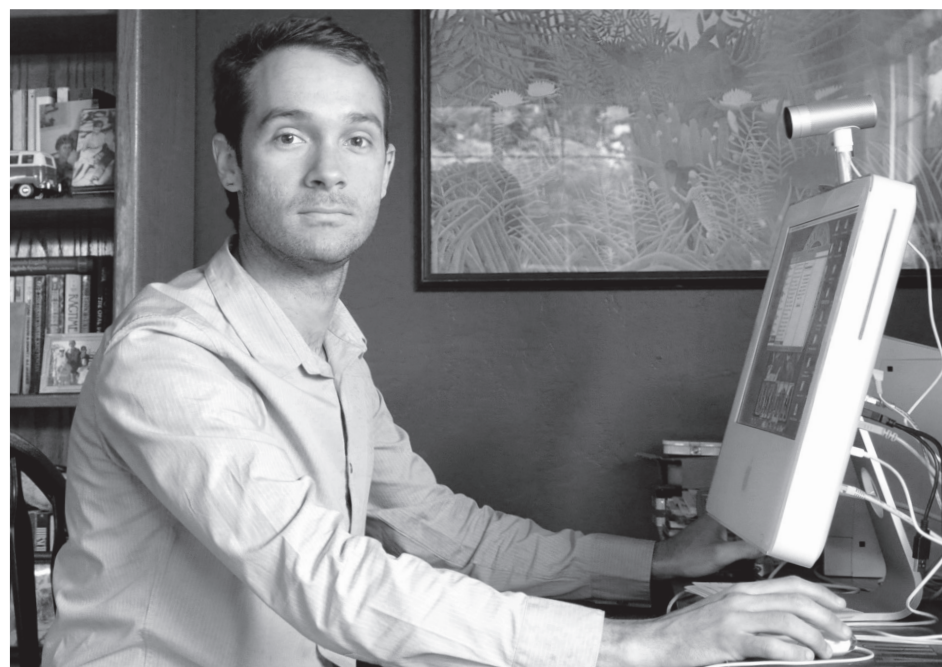
We plan to have the first formal meeting of the search committee on May 19. With your help we hope to have a large pool of suggested candidates to consider at that meeting. Before the end of June we expect to develop a short list of no more than ten individuals to be contacted and invited for interviews.

If all goes well, I anticipate that we will have our next president in place by the end of this year, before Paul departs for London. As I said in my e-mail to the campus when Paul and I informed you of his planned departure, the university is in excellent shape and is in a strong position to attract an outstanding individual as the next president of Rockefeller.

FACULTY RECRUITMENT

New faculty member seeks secrets of intestinal immunity

by ZACH VEILLEUX



The skin may be our first line of defense against infection, but its job is easy compared to our intestines. There the body must cope with a constant stream of foreign antigens from our food as well as a flourishing ecosystem of bacteria, viruses and parasites. It must not only fight off the harmful ones, but correctly tolerate a wide variety of those that are helpful.

"The intestine is one of the best places to study immunology," says Daniel Mucida,

who will join Rockefeller as assistant professor and head of the Laboratory of Mucosal Immunology at the end of the summer. "There are more lymphocytes in the intestines than there are everywhere else in the body combined, and they must not only recognize and clear harmful pathogens, but also maintain tolerance toward an enormous variety of different antigens that they are exposed to every day."

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CAMPUS NEWS

Smith Hall to open in July

by ZACH VEILLEUX

With construction crews from Turner and its subcontractors installing the final finishes in Smith Hall and the bridging building, Planning and Construction is making plans to begin moving the first of eleven labs into their new spaces starting the first week in July.

"Everything is on schedule for the building to be delivered as planned on June 29," says George Candler, associate vice president for planning and construction. "Over the next several weeks, even as construction personnel are painting and finishing their work on various fixtures, Rockefeller crews will begin installing and connecting telephones and network access devices, and our architects will be going room by room to compile a punchlist of items that still need final attention from the builder."

Inspections by the city, which are needed to secure a temporary certificate of occupancy, will also be conducted over the next several weeks. If the inspections go smoothly and work stays on schedule, furniture deliveries can begin early in the summer and labs will be moved in on a rolling basis to be completed by September.

Outside, crews have finished installing most of the 1,003 marble pavers that will make up the walkways and plaza areas leading to the bridging building's entrance. They have also begun plumbing work for

continued on page 2

Library expands digital offerings

E-books and e-book readers are among new products available for loan

by JOSEPH BONNER

When publishers first began to offer digital content, electronic access was typically available for just slightly more than a print subscription. Today, according to university librarian Carol Feltes, subscribing to the electronic version is the standard. This spring, the Rita and Fritz Markus Library announces several new initiatives — including the availability of Kindle e-book readers — that Ms. Feltes hopes will provide the library’s users with better access to this ever-expanding digital universe.

Two years ago, the library whittled its print subscriptions down to only 55 titles, retaining what some library staff members believed was a “core” selection of popular titles that people would still visit the library to pore through. “We had regular visitors who came to do nothing more than look at print issues and browse through them,” she says. “But over the past two years there has been less and less of this activity. We eventually realized that we were shelving many things that were rarely, if ever, touched again.”

Libraries in general have been moving from print to digital. The labor required to receive, process, shelve and manage print journals has become more than shrinking library budgets and staff could bear, says Ms. Feltes. But perhaps more importantly, the shift to digital collections has allowed librarians to better track usage patterns and tailor their offerings to their clients’ needs. Based on that data, the university’s library recently canceled subscriptions to 73 journal titles — some of which were small collections of electronic titles that were subscribed to in a group — that were receiving little access. Twenty-three new titles were added.

“All new subscriptions are digital, unless there is no electronic format available, which is rare,” says Ms. Feltes.

The library has also added links to Web-based subscriptions of e-books, as well as individual titles that can be downloaded to personal computers or e-book readers. And it recently launched a pilot project under which four Amazon Kindle2s, each pre-loaded with 25 popular science titles ranging from a textbook on nonlinear dynamics to Charles Darwin’s *On the Origin of Species by Means of Natural Selection*, are available for loan. If the pilot is successful, the program may be expanded.

Finally, the university has expanded its access to backup electronic services that help ensure online archival content remains available even if publishers disappear or Web sites go permanently dark. Last month, the university joined a not-for-profit academic library collaborative archive called CLOCKSS, which focuses on scholarly science, technology and mathematics titles. CLOCKSS is decentralized and geographically disparate to provide increased security for archived content. The service turns on access to a particular title, making it freely available to all subscribers, only if there is a “triggering” event, such as a publication going out of print. The university pays about \$600 a year for its subscription and has status as a voting member of the collaborative.

The CLOCKSS service augments the university’s existing subscription to Portico/JSTOR, which provides access to popular titles like *Scientific American*, *New Scientist* and *Bioscience*. Like CLOCKSS, trigger events make orphaned content available for free to members. It costs about \$4,000 per year. “These services are cheap risk management to ensure that content you have been diligently paying for year after year doesn’t suddenly disappear,” Ms. Feltes says.

Leslie Vosshall granted tenure

by ZACH VEILLEUX

The university’s Board of Trustees has granted tenure to Leslie B. Vosshall, head of the Laboratory of Neurogenetics and Behavior, and she has been promoted from associate professor to become the Robin Chemers Neustein Professor. The Board approved the promotion at its March 10 meeting.

Dr. Vosshall, who was originally inspired to study science by her uncle, retired Syracuse University physiologist Philip Dunham, chose neuroscience because it has allowed her to ask questions not only about physiology but about behavior and genetics. She came to the university as a graduate student, where she studied in Michael Young’s laboratory, and received her Ph.D. in 1993. She then did postdoctoral work at Columbia University, in Richard Axel’s lab, but returned to the East Side a few years later, becoming assistant professor at Rockefeller in 2000. She was promoted to associate professor in 2006 and was named a Howard Hughes Medical Institute investigator in 2008.

Dr. Vosshall’s research focuses on the mechanism of smell, a critical sense that underlies an organism’s ability to detect food, find mates and avoid predators. She has investigated how flies, mosquitoes and humans are able to perceive and process odor stimuli and how they can discriminate between thousands of different odors in the environment. In the case of mosquitoes, she is also interested in learning to manipulate the odor-sensing mechanism in order to prevent the insects from being able to detect — and spread disease to — human hosts. In work that was published in *Science* in 2008, she discovered the mechanism by which the widely used insect repellent DEET blocks mosquitoes’ ability to locate their prey.



PHOTO: ALLAN ZEPEDA/AP © HHMI

Recently her lab has expanded its scope to ask questions about how smell is linked to behavior, both in insect models and in humans. “When the lab first started we were narrowly focused on the mission of describing the fly olfactory system: finding all the chemosensory receptors that allow flies to smell odors, carbon dioxide and pheromones; mapping circuits into the brain; figuring out how the insect chemosensory receptors worked at a functional level,” Dr.

Vosshall says. “In recent years, we have begun to ask more integrative questions involving the human sense of smell and also how innate insect behaviors — like responding to smells, finding food and having sex — are modulated by internal physiological states. We want to understand how the insect brain decides when to eat and when to stop eating, whether that insect is a *Drosophila* fly looking for yeast growing on fruit or a hungry female *Aedes* mosquito looking for a human blood meal.”

Dr. Vosshall has been the recipient of awards from the John Merck, Beckman and McKnight Foundations. She received the 2002 Presidential Early Career Award for Scientists and Engineers, a 2005 New York City Mayor’s Young Investigator Award for Excellence in Science and Technology, a 2007 Blavatnik Award for Young Scientists, the 2009 Lawrence C. Katz Prize from Duke University and a 2010 Dart/NYU biotech award.

“I’m very excited about our new mosquito projects,” Dr. Vosshall says. “The mosquito is an understudied model system of great medical importance. I hope we can make some significant contributions in the next decade to understand how and why female mosquitoes are so good at hunting humans.”

NEW TRUSTEES

Debra Black and Ajit Jain elected to Board of Trustees

by JOSEPH BONNER

Debra Black, co-founder of the Melanoma Research Alliance, and Ajit Jain, president of the Reinsurance and Specialty Risk Division at Berkshire Hathaway Group, are the newest members of Rockefeller University’s Board of Trustees. They were elected to the board on March 10.

Ms. Black, a melanoma survivor, and her husband, Leon Black, founded the Melanoma Research Alliance in 2007 to accelerate progress toward a cure for this disease, which is the sixth most common cancer in the United States. Ms. Black serves as chair of the Alliance’s Board of Trustees.

Ms. Black is also a Broadway producer. Her productions include two Tony Award winners: *The History Boys* and *August: Osage County*. She currently serves on the boards of Lincoln Center Theater, The Living Room for Artists and the New York State Council on the Arts.

Ms. Black holds a B.A. in English from Barnard College and resides in Manhattan with her husband. They have four children.

“Russ Carson’s leadership of the board

is compelling, and I have a deep respect for the important work done at Rockefeller,” says Ms. Black. “Since we launched the Melanoma Research Alliance, I have come to appreciate and respect the biology underneath melanoma and other cancers.”

Mr. Jain was born and raised in India, and he received an engineering degree from the Indian Institute of Technology. He then worked for IBM in Bombay, India, before attending Harvard Business School for an M.B.A. Upon graduation, he joined McKinsey & Co. in New York. Since 1986, Mr. Jain has led the reinsurance division of Berkshire’s National Indemnity Co., Berkshire’s most profitable business.

Warren Buffett, chairman and C.E.O. of Berkshire Hathaway, has described Mr. Jain as a “superstar.” Shortly after Mr. Jain’s arrival at Berkshire Hathaway, Mr. Buffett put him in charge of National Indemnity’s small and struggling reinsurance operation, which provides insurance for



Debra Black (left) and Ajit Jain.

insurance companies. Today, with a staff of just 30 people, the reinsurance division has become a giant, setting records for transaction size in several areas of insurance.

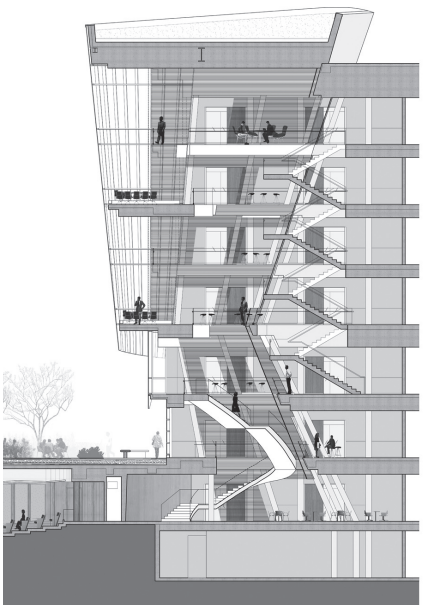
“It was a great honor to be asked to join Rockefeller University’s Board of Trustees, and I look forward to the privilege of working with such an illustrious group,” says Mr. Jain. “While it is clear that I can learn much more from my fellow trustees than they can from me, I will make every effort possible to help facilitate the groundbreaking work of the institution and its staff.”

Smith Hall (continued from page 1)

an ornamental pool that will be located near the entrance to Smith Hall, and are adding soil and grading for several berms that will give the garden depth and dimension. Ultimately, 13 trees — White Fringe, Corneliancherry dogwood, goldenrain and crabapple — 536 shrubs and 18,105 perennials, bulbs and groundcover plantings will be installed. In addition, eight crabapple trees, which were removed from near Smith Hall’s entrance and have been in storage for the past two years, will be replanted.

The landscape architecture firm responsible for the design, Michael Van Valkenburgh Associates, has done several high-profile projects in New York City, including a portion of the Hudson River Park in Chelsea and the entire 85-acre Brooklyn Bridge Park along Brooklyn’s waterfront, the first portion of which opened this spring.

Work on the second phase of the project, Flexner Hall’s renovation, will begin as soon as Flexner is emptied in late summer.



Smith Hall Lab Assignments

- 5th Floor**
Tom W. Muir, Tarun Kapoor
- 4th Floor**
Hironori Funabiki, Leslie B. Vosshall
- 3rd Floor**
Robert B. Darnell
- 2nd Floor**
Ralph M. Steinman
- 1st Floor**
Daniel Mucida, Agata Smogorzewska, Sohail Tavazoe
- A Level**
Mary Jeanne Kreek
- B Level**
Spectroscopy Resource Center
- C Level**
Albert J. Libchaber

Ted Scovell named new director of Science Outreach

by TALLEY HENNING BROWN

Textbooks and Wikipedia are fine for facts, but to really learn science, you need access to a lab. In his new position as director of Rockefeller University's Science Outreach Program, Ted Scovell, a former high school teacher himself, hopes to give new generations of young scientists access to the facilities — and mentors — that can take them well beyond dissecting frogs and earthworms. A Harvard University biology graduate and Rockefeller Outreach alumnus himself, Mr. Scovell joined the university February 1. He succeeds Bonnie Kaiser, who retired from the university last year.

Though armed with an impressive science pedigree — as an undergraduate at Harvard University he studied ants with Edward O. Wilson in the 1980s — Mr. Scovell didn't initially go into science or teaching. Noticing that even the graduate students around him had a hard time finding jobs in science, he opted instead to join the growing field of investment banking. After 11 years as a portfolio and hedge fund manager at big-name firms including Morgan Stanley, First Boston and J.P. Morgan, Mr. Scovell and his wife took a sabbatical in Costa Rica in 1996. Mr. Scovell had his first taste of teaching when he was asked to take over for the injured science teacher in the town of Monteverde. "After that experience, I just couldn't go back to my old job," says Mr. Scovell, who the following year took a teaching job at Friends Seminary in Manhattan, where he stayed for the next 12 years.

Rockefeller's Science Outreach Program introduces academically promising high school students, as well as K-12 teachers, to the rigors of basic research by matching them with laboratories and mentors for two summers. Founded in 1992, the program has graduated 761 students and 101 teachers, and an estimated 10 percent of students go on to place in the Intel Science Talent Search and other

prestigious science fairs. Mr. Scovell's Outreach experience, which occurred when he was still fairly green as a teacher in 2000, was in the lab of Richard and Jeanne Fisher Professor Michael W. Young, where he studied the genetic basis of circadian rhythms in fruit flies. The next summer he was paired with Donald W. Pfaff, in whose lab he used oxytocin knockout mice to study the effects of hormones on behavior.

"Ted has been on both sides of the equation, as a teacher and as a student of the scientific process," says Sidney Strickland, vice president for educational affairs and dean of graduate and postgraduate studies. "Both experiences



PHOTO: ZACH VEILLEUX

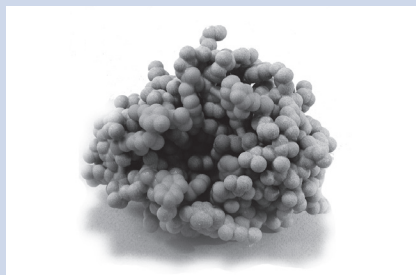
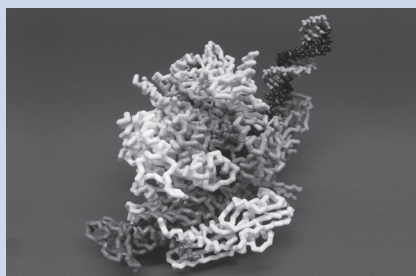
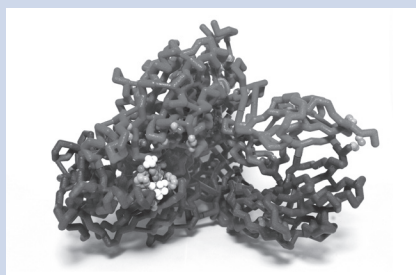
inform his approach to science education in a way that will greatly benefit the Outreach Program."

Since 2005, Science Outreach and Rockefeller investigators have also played host to teams of area middle and high school students through the Milwaukee School of Engineering's SMART (Students Modeling a Research Topic) program. Mr. Scovell, who was trained in the SMART curriculum — using three-dimensional protein modeling to teach the intricacies of chemistry and biochemistry — has himself fielded several SMART teams and will harness Science Outreach to bring SMART teacher training workshops to New York (see "SMART program for teens opens New York branch at Rockefeller," below).

Mr. Scovell has vetted applications for this summer's Outreach program and is formulating his plans to reshape its scope. Among other initiatives, he plans to introduce a critiquing component to the mandatory STRAW (Scientific Reading and Writing) course; he will designate second-year Outreach students and teachers as mentors for first-years; he will schedule regular sessions for Outreach teachers to share with each other techniques that have worked or not worked for them; and he is also considering ways to devote some time early in the summer for students and teachers to learn basic lab skills as a group. "It can be scary when you go into a lab for the first time and someone hands you a pipette and you don't know what to do with it, or you spend the first week stabbing gels and generally feeling clumsy and awkward," says Mr. Scovell. "By learning these basic skills together as a group beforehand, the students can feel more confident when they split off to join their individual labs. It will also help provide more of a sense of community from which they can draw support, to share the joys and frustrations of the scientific enterprise from their own perspective."

SMART program for teens opens New York branch at Rockefeller

by TALLEY HENNING BROWN



A program to get middle and high school students involved in protein modeling, that began as a regional science education initiative at the Milwaukee School of Engineering and came to Rockefeller University in 2008, will soon have a center of operations in New York City. In line with Ted Scovell's new position as director of Rockefeller's Science Outreach Program (see "Ted Scovell named new director of Science Outreach," above), Mr. Scovell is also launching RU SMART, the New York branch of the original program.

Designed with the double purpose of reinvigorating old-school, often uninspiring science lessons and helping arm future scientists with a deeper knowledge base, the Students Modeling a Research Topic (SMART) program offers workshops to K-12 science teachers on how to incorporate hands-on, three-dimensional molecular modeling into their curricula. Wielding the new method, teachers then partner with professional research scientists to help their students learn more about — and model — a pet protein.

The students in a SMART team spend several weeks with a computer program

that allows them to build the protein atom-by-atom, while learning from their scientist-mentor the effect each addition has and the various ways that atoms can form bonds. "By the time they've finished building their molecule, they can tell you exactly what its function is and how its structure relates to its function," says Mr. Scovell. "And they're excited to share that knowledge." SMART teams that have partnered with Rockefeller labs have modeled, for example, the bacterial RNA polymerase elongation complex, which is central to bacterial DNA transcription, and the platelet integrin receptor $\alpha\text{IIb}\beta_3$, which enables blood clotting.

RU SMART, which received \$25,000 from a pilot project grant from The Rockefeller University Hospital's Center for Clinical and Translational Science, kicked off its inaugural season earlier this month with a symposium for New York City's three 2010 SMART teams: one from The Dalton School, working with a lab at Mount Sinai Medical School; a team from Hostos-Lincoln Academy of Science, working with the Weizmann Institute of Science; and one from Manhattan Hunter Science High School, working

with a lab at Hunter College. Each team gave a 10-minute presentation of its work, and there was a poster session with other participating schools in the area. Seth A. Darst, head of the Laboratory of Molecular Biophysics and a host of two SMART teams so far, gave the symposium's keynote speech. Following in early July, Rockefeller will play host to "Modeling the Molecular World," a four-day workshop for 12 New York-area K-12 teachers to learn the SMART method for chemistry and biochemistry curricula.

"This method of teaching is still relatively new in schools, but teachers love it. The program has spread even among schools with underprivileged students, and I know from experience that there are some real diamonds in the rough out there, kids who really should be doing research but who might not otherwise have the opportunity," says Mr. Scovell. "And if we're training 12 teachers every summer, that will help us build up our contacts at many different schools across the metro area, in turn broadening our recruitment base for the Outreach Program."

Daniel Mucida (continued from page 1)

A native of Brazil, Dr. Mucida attended the Federal University of Minas Gerais in the Brazilian city of Belo Horizonte, graduating in 2000. It was there that his broad childhood interest in physics, math, genetics and marine biology evolved into a fascination with the workings of the immune system. Studying in the lab of Nelson Vaz, who first described the phenomenon of oral tolerance in modern immunology, he was inspired to begin exploring how the body is able to mediate its immune reactions in the intestines.

For his Ph.D. work he focused on tolerance in mucosal tissues — not just those of the mouth and digestive tract, but also of the nose and respiratory system. Working primarily in mice, he made discoveries

about how specific immune system cells — lymphocytes and T cells — contribute to "oral tolerance," our ability to avoid reacting to what we ingest. He received his Ph.D. jointly from the University of São Paulo in Brazil and New York University in 2005, where he worked in the labs of Maria Curotto de Lafaille and Juan Lafaille.

As a postdoc he has spent time at both the University of São Paulo and the La Jolla Institute for Allergy and Immunology near San Diego, where he has been since 2006. His work in La Jolla has focused on the role of diet and bacteria in intestinal immunity. In 2007 he showed that a vitamin A metabolite, retinoic acid, produced by intestinal dendritic cells, is able to modulate the development of inflammatory

and regulatory cells. His recent studies in germ-free mice, which do not develop a mature immune system, have shown how interactions between bacteria and CD4 helper T cells are crucial to modulating the cells' inflammatory activity.

"We are very fortunate to have recruited Daniel to Rockefeller," says Paul Nurse, the university's president. "His work on immunity and the relationship between intestinal bacteria and inflammation is very innovative and has the potential to teach us much about how we might someday harness the power of the immune system to fight infectious disease and prevent autoimmune conditions such as asthma."

"Our work isn't just about intestinal infections, food poisoning and food allergy,

but also pertains to infections that originate in other systems," Dr. Mucida says. "Many viruses, for instance, use the gut to replicate and spread regardless of their point of entry. In addition, antibodies which form in response to foreign bodies in the gut can help the body's immune system correctly identify threats elsewhere in the body."

Dr. Mucida, who is an avid surfer, will relocate to New York and open his lab on September 1.

"The immune system is constantly working to balance its ability to protect with its ability to tolerate. Much of this takes place in the intestines, and that's why it's an ideal place to study the molecular and cellular pathways that are triggered by infectious agents," Dr. Mucida says.

Awarded:

Nam-Hai Chua, the Lawrence Bogorad Award for Excellence in Plant Biology Research from the American Society of Plant Biologists. Dr. Chua, Andrew W. Mellon Professor and head of the Laboratory of Plant Molecular Biology, is honored for his development of fundamental tools essential to conducting molecular research in plants. The Bogorad Award is awarded biennially to a plant scientist whose work “both illuminates the present and suggests paths to enlighten the future.”

Titia de Lange, the G.H.A. Clowes Memorial Award from the American Association for Cancer Research. The Clowes Award is given annually to an individual with outstanding recent accomplishments in basic cancer research; it is jointly sponsored by the AACR and Eli Lilly and Company. Dr. de Lange is Leon Hess Professor and head of the Laboratory of Cell Biology and Genetics.

Elaine Fuchs, the Women in Cancer Research Charlotte Friend Memorial Lectureship from the American Association for Cancer Research, in recognition of her work on molecular, biochemical and genetic mechanisms of skin stem cells. Dr. Fuchs, Rebecca C. Lancefield Professor, head of the Laboratory of Mammalian Cell Biology and Development and a Howard Hughes Medical Institute investigator, delivered the lecture at the AACR's annual meeting April 17 in Washington, D.C.

Mary Jeanne Kreek, an honorary degree from the University of Bologna in Italy, presented on April 21. Dr. Kreek is Patrick E. and Beatrice M. Haggerty Professor and head of the Laboratory of the Biology of Addictive Diseases.

Paul Nurse, an honorary degree from Amherst College, to be presented at their commencement on May 23. Dr. Nurse is president of the university and head of the Laboratory of Yeast Genetics and Cell Biology.

Donald W. Pfaff and **Bruce S. McEwen**, the 2010 Foundation Ipsen Neuronal Plasticity Prize, for studies on the “neuroendocrine control of behavior.” The French foundation presents the award to researchers who publish remarkable, pioneering studies. Drs. Pfaff and McEwen will share the prize with Thomas Insel, director of the National Institute of Mental Health. The award will be presented at the 7th Forum of European Neuroscience in Amsterdam on July 4. Dr. Pfaff is head of

the Laboratory of Neurobiology and Behavior; Dr. McEwen is Alfred E. Mirsky Professor and head of the Harold and Margaret Milliken Hatch Laboratory of Neuroendocrinology.

Ralph M. Steinman, the 2010 Heineken Prize for Medicine, for his discovery of the dendritic cell and its role in the immune system. Awarded since 1989, the prize consists of a cash gift of \$150,000 and a trophy featuring the Greek god of medicine, Aesculapius. Dr. Steinman is Henry G. Kunkel Professor and head of the Laboratory of Cellular Physiology and Immunology.

Leslie B. Vosshall and **Paul Greengard**, 2010 Dart/NYU awards. Dr. Vosshall, Robin Chemers Neustein Professor and head of the Laboratory of Neurogenetics and Behavior, is recognized with the NYU Biotechnology Alumnae Award for her work in elucidating the mechanism by which insects can detect carbon dioxide. Dr. Greengard, Vincent Astor Professor and head of the Laboratory of Molecular and Cellular Neuroscience, is recognized with the Dart Award for Applied Biotechnology, for research into new treatments for schizophrenia and sleep disorders associated with neurological disease. The Dart/NYU awards are supported by Dart Neuroscience LLC and are administered by the Biotechnology Study Center of NYU School of Medicine.

Promoted (academic appointments):

Dragana Nesic, to senior research associate, Stebbins Lab.

Leslie B. Vosshall, to professor head of laboratory, Vosshall Lab.

Hired:

Eric Anderson, executive assistant, Casanova Lab.

Erika Andrade, postdoctoral associate, Heintz Lab.

Christopher Arjune, animal technician, Heintz Lab.

Carlo Bajen, foreign research intern, Tuschl Lab.

Abide Balli, animal attendant, Comparative Bioscience Center.

Lucia Bernad Palomares, postdoctoral fellow, Chua Lab.

Amanda Breeding, office administrator, Technology Transfer.

Pil Joong Chung, postdoctoral fellow, Chua Lab.

Nidhi Gangadhar, postdoctoral associate, Steller Lab.

Manuel Garcia Garcia, postdoctoral associate, Freiwald Lab.

Allison Goff, laboratory technician, Vosshall Lab.

Emmanuelle Jordi, foreign research intern, Greengard Lab.

Rebecca Kelley, grants management specialist, Sponsored Research and Program Development.

Ko-Woon Lee, research associate, Greengard Lab.

Suqing Liu, research assistant, Greengard Lab.

Tony Luib, administrative assistant, Greengard Lab.

Carlton McCrory, animal attendant, Comparative Bioscience Center.

Deepa Murali, visiting scientist, Hatten Lab.

Melissa Noel, postdoctoral associate, Strickland Lab.

Satoshi Okada, postdoctoral associate, Casanova Lab.

Andrew Park, research assistant, Steinman Lab.

Stephane Pouzol, research assistant, Rice Lab.

Sara Renberg, visiting student, McEwen Lab.

Kathrin Schwinghammer, foreign research intern, Hang Lab.

Jayendra Shukla, postdoctoral associate, Konarska Lab.

Benoit Sorre, postdoctoral associate, Siggia Lab.

Jonette Suiter, administrative assistant, Brady Lab.

Hamidah Sultan, research support assistant, High Throughput Screening Resource Center.

Anne Theisen, foreign research intern, Rice Lab.

Jason Williams, animal attendant, Comparative Bioscience Center.

Xiaodong Zhu, postdoctoral associate, Hatten Lab.

Michal Zimmermann, visiting student, de Lange Lab.

Elin Zingmark, visiting student, McEwen Lab.

This publication lists new hires, awards and promotions. Staff promotions are listed yearly; academic promotions and appointments are listed monthly.

Martin Rees is 2009 Lewis Thomas Prize winner

by JOSEPH BONNER



For as long as humans have gazed at the night sky, we have questioned our place in the universe and how and where it all began. Martin Rees, the celebrated British cosmologist and astrophysicist, has chronicled scientists' speculations about the cosmos through seven volumes of popular science. On April 26, President Paul Nurse presented Dr. Rees with the 2009 Lewis Thomas Prize for Writing about Science. The prize recognizes Dr. Rees's 2000 publication *Just Six Numbers: The Deep Forces that Shape the Universe*.

“In his book *Just Six Numbers*, Martin takes us on a journey through the cosmos, and introduces us to six exquisitely tuned numbers that enable the universe — and life as we know it — to exist,” says Dr. Nurse. “Martin provides his readers with lucid and compelling descriptions of the origins and meanings of nature's fundamental constants. It is a great pleasure to recognize him with the Lewis Thomas Prize.”

Dr. Rees, who is currently president of The Royal Society, studied at the University of Cambridge. In 1973, he became a fellow of King's College and Plumian Professor of Astronomy and Experimental Philosophy at Cambridge, a post he held for 18 years before becoming a research professor. In addition to his role as head of The Royal Society, he is also professor of cosmology and astrophysics and master of Trinity College at Cambridge and a member of the United Kingdom's House of Lords.

Dr. Rees has made seminal contributions to our understanding of how the universe operates, including the origin of cosmic microwave background radiation and the distribution of quasars, work that challenged the Steady State theory of the origin of the universe in favor of the Big Bang. He was also among the first to suggest that quasars are powered by black holes. He is the author of more than 500 research papers.

A trustee of the Institute for Advanced Study in Princeton, New Jersey, Dr. Rees is the recipient of numerous awards, including the Royal Swedish Academy's Crafoord Prize, the Balzan Prize, the Bower Award and Prize for Achievement in Science from The Franklin Institute, the Gruber Cosmology Prize and the UNESCO Niels Bohr Medal. He is a foreign associate of the National Academy of Sciences and the American Academy of Arts and Sciences.

Established in 1993 by The Rockefeller University Board of Trustees, the Lewis Thomas Prize is named after its first recipient — writer, educator and physician-scientist Lewis Thomas. The award honors “the rare individual who bridges the worlds of science and the humanities — whose voice and vision can tell us about science's aesthetic and philosophical dimensions.” Past recipients include Freeman Dyson, Jared Diamond, Oliver Sacks, Edward O. Wilson and Richard Dawkins.

Dr. Rees's prize lecture, titled “From Big Bang to Biosphere” and delivered in Caspary Auditorium preceding the presentation of his award, took audience members through a colorful tour of the history of the universe. The lecture can be heard at www.rockefeller.edu/lewisthomasprize.

Junior gardeners get their hands dirty

The azaleas may be the standout botanical feature on Rockefeller's campus at the moment, but be on the lookout for new additions. Junior gardeners at the Child and Family Center have begun planting gardens around the western-most of two fountains on the north side of Caspary Auditorium's blue dome.

Karen J. Booth, director of the CFC, says securing land for gardening was one of the first things teachers requested when she took the job last July. In total, 10 plots, one for each of nine classrooms plus an herb garden and a “free-digging area,” are taking shape. “Children are planting quick growing vegetables like cucumbers, beans, tomatoes and pumpkins, that we should see yield from and that the children will be able to eat in the classroom,” she says.

The effort is part of a growing movement in early childhood education to address the “nature deficit” that accompanies increasing urbanization and greater usage of technology and TV viewing at younger ages, Ms. Booth says. It also stimulates curiosity and can form the beginnings of scientific inquiry. “We want to allow children more natural play, more direct encounters with soil and seeds and

animals and insects. Some children have never kicked their feet in a stream, been in the woods, held a worm, and these are important experiences to have,” she says.

With help from Anne Nurse, wife of President Paul Nurse and a former nursery school teacher in the U.K., Ms. Booth planted marigolds and blueberry bushes around the borders of some plots. “Anne has been very involved and supportive of this project, which has been

great,” Ms. Booth says.

Another new addition to the campus is three newly planted Eastern White Pine trees on the south side of the university's main driveway. The trees are indigenous to the northeastern United States, says Alex Kogan, associate vice president for physical facilities and housing, and were planted to replace trees that were uprooted during construction of an electrical vault under the 66th Street parking lot.



Urban gardeners. CFC teachers, parents, students and volunteers, from the Green and Blue Rooms, work the earth. From left to right: Omaira Ortiz, Karl Gross, Noline Van Kan, Olivia Sang, Roselaine Gavida and Anne Nurse.