

A Unique Path to Scientific Excellence

Nina Fedoroff, a 1972 graduate of Rockefeller's Ph.D. program, returned to campus in June to receive an honorary degree at the University's 50th Anniversary Convocation. A distinguished faculty member at Pennsylvania State University, Dr. Fedoroff also serves as Science and Technology Adviser to Secretary of State Condoleezza Rice. Noted for her pioneering work in molecular biology, Dr. Fedoroff was awarded a 2006 National Medal of Science. Following is an excerpt from her remarks at Convocation.

My start in adult life was anything but auspicious. I was a pregnant high school dropout, married at 17, a mother at 18. But I really wanted to learn. I studied on my own and graduated from high school, then talked my way into Syracuse University while my husband was stationed overseas. By 19, I was on my own, with a child to support and an income of \$127 a month. I managed to get a scholarship and keep going to school, taking care of my child, teaching music, performing, and doing occasional Russian-English translations. My zoology professor, Roger Milkman, invited me to do research in his laboratory. I began working with fruit fly salivary gland chromosomes. I remind you that this was still prehistoric times in biology, before cloning and sequencing. But just doing experiments, however naïve and simple they might have been, got me hooked.

My first Rockefeller graduation was one of the best days of my life, and I'm pleased that my daughter, Natasha, who spent part of her childhood here and shared my first graduation ceremony, is here to share the second one. Ph.D.s, of course, are beginnings, not endings. In the time since, I have had the incredible good fortune of participating in the molecular revolutions of the late 20th century. I sequenced one of the first genes ever sequenced, when that technology was in its infancy. I was one of the very first plant molecular biologists, and I had the privilege of working with Barbara McClintock, bringing her extraordinary genetic insights into the molecular age. Today my lab works on plant heterotrimeric G proteins and on microRNA biogenesis, still another revolution.

I have always been grateful for the Rockefeller philosophy that graduate students are colleagues. It wasn't easy. Some felt quite lost in that sudden expectation of maturity, and probably still do. But I discovered early on that what I had taken away from my time here was a level of independence and self-determination that few have right out of graduate school. In turn, I have sought to treat my students as colleagues and teach them to question and learn as a way of life. And for the young women in the audience and graduating: you simply have an unprecedented range of options and opportunities open to you. Don't shy away from the difficulties. You can have it all.



photo by Bruce Gilbert

A Year of Awards and Recognitions

We are proud to announce some of the honors and awards received by Rockefeller women scientists during the 2007-2008 academic year:

Titia de Lange, Ph.D., the Leon Hess Professor, was elected a fellow of the American Association for the Advancement of Science. She also received the third annual Massachusetts General Hospital Cancer Center Prize.

Elaine Fuchs, Ph.D., the Rebecca C. Lancefield Professor, was elected a fellow of the American Association for the Advancement of Science. In addition, she was elected vice president (and future president) of the International Society for Stem Cell Research.

Leslie Vossball, Ph.D., the Chemers Family Associate Professor, was appointed a Howard Hughes Medical Institute Investigator—one of 56 scientists selected from among 1,070 applicants nationwide. Last fall, Dr. Vossball received one of the first Blavatnik Awards for Young Scientists, given by the New York Academy of Sciences.

Lucy Bai, Ph.D., a 2007 *Women & Science* postdoctoral fellow, was the recipient of a Damon Runyon Cancer Research Foundation Fellowship.

Catharine Boothroyd, Ph.D., a 2008 *Women & Science* postdoctoral fellow, was awarded a Charles H. Revson Senior Fellowship in Biomedical Science, in support of her research on African trypanosomiasis.

Ileana Cristea, Ph.D., a 2006 *Women & Science* postdoctoral fellow, is now an assistant professor at Princeton University. She received an Avant-Garde Award from the National Institute on Drug Abuse to study HIV/AIDS prevention and treatment.

Maria Neimark Geffen, Ph.D., a *Women & Science* fellow at the University's Center for Studies in Physics and Biology, was the recipient of a 2008 Burroughs Wellcome Fund Career Award at the Scientific Interface.

Nolwenn Jouvenet, Ph.D., a 2007 *Women & Science* postdoctoral fellow, received an inaugural Mathilda Krim Fellowship Award from amfAR, The Foundation for AIDS Research.

Michelle Lowes, M.D., Ph.D., an assistant professor of clinical investigation, received a Doris Duke Clinical Scientist Development Award.

Anne Schaefer, M.D., Ph.D., a research associate, was awarded a grant from the National Institutes of Health to fund a two-year study of addiction.

save the date

February 5, 2009

Thursday, 6:00 to 8:00 p.m.

To RSVP for this event or request further information, please call Amy Harris at (212) 327-8689.

INTELLIGENCE: IT'S NOT JUST IQ

The *Parents & Science* Winter Evening Program

SPECIAL GUEST:

Dr. Howard Gardner, John H. and Elisabeth A. Hobbs Professor of Cognition and Education
Harvard Graduate School of Education

W&S Funds Microscope with Cutting-Edge Results

With funding from *Women & Science* donors, Rockefeller neuroscientist **Mary Beth Hatten**, Ph.D., recently purchased an UltraVIEW VoX spinning disc confocal microscope that offers especially clear views of living neurons. Powered by state-of-the-art Perkin-Elmer software, the UltraVIEW VoX provides tools to measure distinctive features of developing nerve cells and to track their movements in three dimensions. The UltraVIEW VoX at Rockefeller is the first microscope of its kind to be installed in the United States.

Dr. Hatten, the Frederick P. Rose Professor, has headed the Laboratory of Developmental Neurobiology since 1994. She is an innovator in the use of video microscopy to study how neuronal migrations shape the architecture of the developing brain. Dr. Hatten notes, "The microscope has allowed us to make remarkable 3-D movies of living neurons, which we can use to test the function of specific genes in brain development."



Basic research by Dr. Hatten is important for understanding a number of disorders that arise from abnormalities during development, including autism, learning disabilities, epilepsy, and schizophrenia. Her work may also one day steer treatments for childhood cancers. As Dr. Hatten acknowledges, "I am so grateful to the *Women & Science* contributors who have helped take our lab's research to the next level."

Women & Science Raises \$1.9 Million in New Funding Renews Focus on Cancer Research and Neuroscience Investigations

The Eleventh Annual *Women & Science* Spring Lecture and Luncheon was a record-breaker all around. The event was the biggest ever, drawing 550 people to hear Dr. **Mary Jeanne Kreek** discuss her research on addiction. Partners in Discovery, the fundraising arm of *W&S*, raised \$1.9 million—an amount exceeded only by the Tenth Anniversary Campaign last year.

W&S programs in the current academic year will focus on neuroscience and cancer research. The May 2009 luncheon will feature two Rockefeller women neuroscientists—**Cori Bargmann**, Ph.D., and **Leslie Vosshall**, Ph.D.—in a program about the future of brain research. **Eric Kandel**, M.D., from the Columbia University College of Physicians and Surgeons, will moderate the discussion. *W&S* will create a seed fund for cancer and neuroscience research, while continuing to fund graduate and postdoctoral fellowships and the University's summer research programs.

This year, *Women & Science* has also added a new event to the calendar—the **Beatrice Renfield Lecture in Research Nursing**, which is designed to present topics about clinical research nursing and nursing education. The Renfield Lecture will be held the evening of Tuesday, April 28, 2009 and will feature **Marilyn DeLuca**, Ph.D., R.N., Executive Director of the Jonas Center for Nursing Excellence. This annual lecture is made possible through a generous donation from the Beatrice Renfield Foundation in memory of Mrs. Renfield and her long-standing philanthropic support of the nursing profession.



left: Diana Taylor, Cindy Whitehead, President Paul Nurse, and W&S Chair Patricia Rosenwald

below left: Karen Levy and Sandra Horbach

below: Blair Pillsbury Enders and Ashley Bradley



left: W&S Chairs Lulu Wang, Sydney Shuman, Patricia Rosenwald, and Judy Berkowitz



left: W&S Chair Samantha Boardman Rosen and Judith Giuliani

above: Gigi Mortimer and Assoc. Prof. Leslie Vosshall

W&S Helps Foster Creativity



photo by Zach Veilleux

Maggie McGregor Corson, 4, takes creative control at the Child and Family Center art studio. The CFC art studio, which opened in the fall of 2007, was funded by *Women & Science* donors. As CFC Director Marjorie Goldsmith recognizes, "It's hard enough for

elementary and even secondary schools in this country to hold on to their art programs. But it's actually rare for an early-childhood program to have one, and we do."



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