

LETTER FROM THE CHAIR



I hope this has been a productive and fulfilling year for everyone. For the Biology Department, it has been one of change and growth, and next year is shaping up to be more of the same. The most visible changes this year are the additions and losses to our faculty, but we are developing new courses and academic programs and expanding our teaching and research facilities, as outlined below. I hope that you will find them as exciting as we do and will consider helping us to make them happen. As always, your input is welcomed and heartily encouraged.

Over the past year we have seen some personnel changes. In September 2005 we welcomed Dr. Nathalia Glickman Holtzman to the department, and in February 2006 Dr. Alicia Meléndez joined us. A profile of Dr. Holtzman can be found in this issue of *Currents*; we will introduce Dr. Meléndez in a forthcoming issue. Recruitment of new faculty to replace retiring colleagues remains one of our major foci. We are currently in the midst of recruiting an evolutionary geneticist, and anticipate the recruitment of two, perhaps three, new members next spring. New faculty need funding to establish research laboratories, and this is one of the challenges we face and one in which our alumni can enhance the college's contribution, which too often is restricted to equipment funds.

Last year we also saw the passing of Dr. Anastasia Gregoriades and Dr. Daniel Marien. Highlights of the lives and careers of these two cherished colleagues can be found in the following pages. Dr. Gregoriades, who joined Queens College after her "retirement" from a research career, made an enormous impact on our students in a very short time. She taught *Microbiology*, *Immunology*, and *Cell Biology*. The former two were among the most popular courses in the department. Dr. Marien taught *Genetics* for many years. In his capacity as health profession advisor, he had a lasting impact on hundreds of students. We were all enriched by our association with Drs. Gregoriades and Marien. I invite you to share with us your remembrances of them, and I welcome your suggestions on what the department might establish as fitting permanent tributes.

Biology is a rapidly advancing field—both conceptually and technologically—and the department strives to keep up. Within the past two years we have initiated two long-term projects: curriculum development and enhancement of our research infrastructure. In curriculum development we have started a major effort to revamp and unify the *Introductory College Biology* course for non-science majors. The Biology Department contributes to the general education program of Queens College by offering this hugely popular course, which is taken by almost 800 students each year. For the majority of the students majoring in the social sciences, humanities, business, languages, or arts, this course is often their only systematic exposure to the life sciences. In reorganizing this course, one of

our goals is to provide these students not only with a substantive foundation in Biology, but also to introduce them to scientific thinking and scientific methods.

A second project we will undertake is the development of a two-semester *Anatomy and Physiology* course, in high demand because it is required by many post-graduate health profession programs, including physical therapy, occupational therapy, nursing, physician assistance, and others. Unfortunately, it is not available at Queens College; our students are forced to take it at other campuses. With the anticipated demographic shifts and growing demand for health-care professionals in our society within the next two decades, this course would be a much needed and timely addition to our curriculum. Equipping an up-to-date instructional laboratory in anatomy and physiology and recruiting the instructional staff are challenges we anticipate.

Another project that we are very excited about is the continuous expansion and enhancement of our instructional and research infrastructure. At the center of this project is the upgrading and acquisition of equipment for the Cellular and Molecular Biology Core Facility. We hope that this will become a dynamic research and teaching facility and the center of interdisciplinary collaboration at the college. The facility is currently used by the Departments of Biology, Chemistry, Earth and Environmental Sciences, and Psychology. One of the major challenges in building such a facility is in optimizing the limited resources and space while acquiring state-of-the-art equipment that benefits the maximum number of students and faculty. The college and CUNY provide funds for relatively small pieces of equipment. For major equipment, we must rely on federal funding. This year we are fortunate to have a Major Equipment Grant from the National Science Foundation we can use to replace our decade-old laser scanning confocal microscope.

A new greenhouse has just been completed on the roof of the Science Building. This will greatly expand our plant genetics, developmental, and ecological studies. It will also be the home of a new laboratory course in plant physiology being developed by Dr. Timothy Short. Building research infrastructure is necessarily a slow, long-term undertaking. However the payoff in the enhancement of our educational and research missions is high.

We are eager to forge closer ties with our alumni and friends. This year I have heard from a number of you through letters and email messages. The most exciting event, however, was a visit from Andrea Scheidt '62. She toured our facility, met with faculty, and had a lunch meeting with students. The students were greatly impressed by her diverse career path and found her advice motivating. Andrea's own reflection on her visit is included in these pages.

I urge you to keep in touch with the department and the college. You may update your contact and biographical information by completing the form in this newsletter or online at www.qc.edu/cgi-bin/php-cgiwrap/qcf/BIO.php. You may also contact me directly at corinne.michels@qc.cuny.edu. Please be sure to write "Biology alum" in the subject line of your message.

Corinne A. Michels, PhD
Distinguished Professor and Chair

DR. NATHALIA GLICKMAN HOLTZMAN

On the Move



Nathalia Holtzman joined the Department of Biology in the Fall of 2005 by way of New York University, just a short hop across the East River. This belies the odyssey that had preceded her arrival.

Nathalia was born in The Netherlands. When she was six years old, the Glickmans uprooted themselves and headed for North America.

After four years in Chapel Hill, North Carolina, the odyssey continued northward to Toronto, Ontario, where Nathalia completed high school.

Next stop was Vancouver, where she entered the University of British Columbia. However, Toronto somehow suited her better, and Nathalia returned to matriculate at the University of Toronto, majoring in molecular biology and genetics. She was also attracted to developmental biology, which was to become a lasting interest. For graduate school, Nathalia chose the University of Oregon, which brought her across the border one more time and back to the West Coast. Five years later and with a degree in hand, Nathalia got on the road again for yet another coast-to-coast excursion: to join the Skirball Institute at New York University as a post-doctoral fellow.

Nathalia's fascination with science and the natural world was nurtured as a child at the breakfast table and on camping trips. Her father, currently a professor of biology at the University of Victoria in British Columbia, used to bring microscopes along on family camping trips! When Nathalia entered the University of British Columbia, she was torn between paleontology and biology. At the University of Toronto she discovered that developmental biology brings together the best of all possible disciplines: it is the perfect combination of cell biology, molecular biology, genetics, theoretical biology, and evolutionary biology.

The University of Oregon is the first spawning ground of the zebrafish as a model system for genetics and developmental biology. There, it was hardly surprising that Nathalia would choose a doctoral dissertation project fully in keeping with her upbringing: migration. She focused on the migratory processes that bring mesodermal precursor cells, which are

destined to form the heart, to the embryonic midline in zebrafish. Although their origin is still not well understood, the cardiogenic mesoderm cells are first discernible among the lateral mesoderm. Their journey toward the midline is one of the major cell migratory events during embryogenesis.

At Queens College, unraveling the secrets of cell migration and its relationship to morphogenesis is the crux of Nathalia's research interests. Heart development in the zebrafish embryo remains her model system. Upon their arrival at the midline, the cardiogenic mesodermal cells differentiate, go through sundry morphogenetic changes, and give rise to a series of complex tissues. Failure in these processes results in anomalies in the cardiovascular system.

Nathalia still remains intrigued by evolutionary processes. She is planning to study how heart development is conserved across species, and how modifications in tissue interactions and cell migration give rise to variations in heart structure in different groups of fishes.

As an offspring of a biology professor, Nathalia has given much thought to teaching and is gearing up to share her enthusiasm for teaching and research with students in the department. Within a semester of her arrival, she has instituted a Teaching Orientation and Training Program for graduate students. Our graduate students are an important component of the department's teaching effort; particularly in laboratory sections of introductory courses, they personify the discipline for many students who are being exposed to college biology for the first time. Nathalia's much-needed program will serve both the students and the department well.

Student mentoring and enhancing student interest and involvement in research are also high on Nathalia's agenda. She is setting up her laboratory with an eye toward creating a research environment in which undergraduate students will feel at home. She notices that many students think that research is the same as the laboratory exercises they perform in class. The first step in breaking this misconception is to bring students into the research laboratory and share with them the joy of discovering something no one else has known before.

Two years ago Nathalia received offers of faculty positions from several institutions in New York, including other CUNY colleges. But to her, Queens College stands out as being the best place to find a balance between teaching and research. We are happy to report that Nathalia has not yet changed her opinion. In fact, her earlier assessment has been reinforced. And she discovered a big bonus: the quality of some of the undergraduate students is impressive. As she confides, "This is my dream job."

Maybe the odyssey is over.

**Dr. Anastasia Gregoriades,
1940–2005**

Dr. Anastasia Gregoriades, Professor of Biology, died of cancer at her home in New York City on June 15, 2005. She was 65.

Dr. Gregoriades was born in the village of Skalohori Kozanis, Greece, on May 5, 1940. (Skalohori is a relatively remote village in northwestern Greece that has a tradition of producing good teachers.) Her family immigrated to New York in 1947 and took up residence in Manhattan, where she spent the remainder of her life.

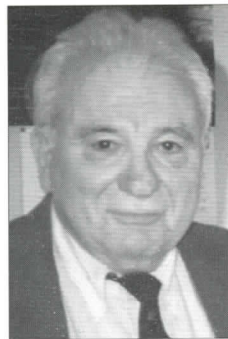
Dr. Gregoriades received her BA in 1962 and her MA in 1964, both from Hunter College, CUNY. She went on to Cornell University Medical College, where she obtained her PhD degree in 1968. She joined the Public Health Research Institute of the City of New York as a postdoctoral fellow, and was there as a researcher for 15 years. From 1983 to 1998 she was a professor and conducted research at the New York College of Podiatric Medicine. The focus of her research work was the structure and assembly of the influenza virus. In 1998 she came to Queens College as an Adjunct Professor of Biology, and retired from teaching in 2004.

Dr. Gregoriades was a valuable member of the biology faculty. Through her teaching and counseling, she left a deep imprint on the academic and personal lives of many of our students. Her success stemmed from her love of teaching and the rapport that she established with her students. Although her tenure at the college was relatively short, she had firmly established herself as one of the most effective and respected instructors in the department. She was responsible for two of our most popular courses—*Immunology* and *Microbiology*—and consistently received the best student evaluations within this faculty. There was a general consensus among students that Dr. Gregoriades was demanding but fair, and her students inevitably felt that they had learned a lot regardless of their grades. The large number of letters of reference that she wrote also attested to her popularity.

Dr. Gregoriades attributed her esteem from the students not only to her mastery of the subjects, but to her concern for them. In a brief reminiscence shortly after her retirement, she wrote: “I tried to get to know my students personally, and I let them have it when they needed it. . . . They really appreciate one’s involvement with them. Occasionally, you will get cards from students which will astonish you on the impact you had on them—things you could never have imagined.”

There are aspects of Dr. Gregoriades that were not revealed to her students. It may interest them to know that she was equally tough, forthright, and fair with her colleagues. She lived by strong principles and did not recoil from speaking her mind when necessary. However, her colleagues found her to be a caring, gentle, and engaging woman who was a pleasure to work with. In her spare time she collected antiques. Her cookies and baklava were simply outstanding.

Dr. Gregoriades is survived by her husband, Demetrios Stavropoulos; their sons, Dr. Nicholas Stavropoulos and Alexander Stavropoulos, a CUNY graduate student; and her sisters, Athanasia and Paula.



Dr. Daniel Marien Dies

Editors’ note: Dr. Daniel Marien, Professor of Biology, passed away in November 2005. We include below a memorial statement written by Dr. Corinne Michels.

It is with great sorrow that the Department of Biology informs you of the death of Professor Daniel Marien. Dan earned his BS degree from Cornell and received his PhD from Columbia in 1956. His doctoral thesis on *Drosophila* species evolution was carried out under the mentorship of Theodosius Dobzhansky, the renowned geneticist and evolutionary biologist. Dan joined the Biology faculty at Queens College in 1962 as an assistant professor but had taught at the college since 1953. He taught genetics and loved railroad trains. He retired as a full professor in 1992.

But these facts do not tell the whole story. Those of you who remember Dan Marien probably know him best for his 35-year stewardship of the Health Professions Advisory Committee. In 1965 Dan took over the Pre-medical and Pre-dental Advisory Committee, as it was then called, and over the years developed this committee into a strong advocating body for our students applying to graduate schools in the health professions. After retiring, Dan continued as head of the Committee until the summer of 2000, when he reluctantly turned over the reins.

Over the years, Dan advised hundreds of students on course selections, extracurricular activities, how to prepare for an interview, what to wear, and what to say. He wrote many of the committee’s recommendation letters and frequently helped students with academic and even personal problems. He was well-known and respected by the admissions officers of most of the U.S. and many international medical schools. Moreover, as the field of pre-health professions advisement grew, Dan soon became an advisor to the advisors. He was an active participant in the Northeast Association of Advisors for the Health Professions. Upon hearing of Dan’s passing, many of his colleagues sent remembrances. Below are quotes from a few.

Carol Baffi-Dugan of Tufts University, wrote, “Northeast advisors knew Dan for many years as a warm, generous soul whose commitment to students was unparalleled and whose generosity to colleagues helped many of us get our advising feet on the ground. Prior to his retirement, but much more so after, Dan became the sage of our Health Professions ListServe, sprinkling down-home common sense, and often self-deprecating humor, into his advice. . . . He has left an indelible mark and truly is the grandfather of the NAAHP.”

Norm Engstrom of Northern Illinois University suggests “that there be created some appropriate permanent recognition of his mentorship and membership in this profession. On the spur of the moment I do not have good ideas what form to suggest for the recognition, perhaps a scholarship fund, travel to meetings fund, most curmudgeonly advisor award, most humorous advisor, most supportive advisor, most passionate advisor, most irascible advisor, most irrepressible advisor, most admirable advisor. Whatever . . . Dan will be one of the most missed advisors.”

Our many alumni with rewarding careers in the health professions owe a debt of gratitude to this dedicated professional. There is no better way to end than letting Dan speak for himself. “Good academics and high MCAT scores do not necessarily make a good physician. I wrote my best and strongest letters for individuals who I felt were ‘good people.’ ”

Andrea Scheidt Visits Department: "Oh, the Places You'll Go"

In March 2006 I took a step back in time and ended up light-years ahead. Where was I? On the Queens College campus, in the new Biology building.

I first entered the original E Building (now Colwin Hall) 48 years ago. It was then a square, squat building constructed in around 1905 that housed all the faculty, classrooms, and laboratories that QC had to offer the Biology Department. Biology did not even have the whole building but had to share space in the basement with the Education majors, spending the same four hours for uncredited lab that they did for their "kiddy lit" course. Our curriculum then was basic and straightforward: Biology 1 and 2, Microbiology, Invertebrate Zoology, Botany, Genetics, Physiology, Comparative Anatomy, Embryology, and a few other courses to satisfy the requirement of 32 credits for a major in biology leading to a Bachelor of Science degree. These courses were taught by outstanding faculty, including Toge Johansson (the "Bee Man"), Arthur and Laura Colwin, Donald Lancefield, Dan Marien, Max Hecht, and Marian Himes, among others.

The research facilities and opportunities were minimal; brewing a bucket of farina for Dr. Marien's *Drosophila melanogaster* and working with him on genetics research was a big deal. It often felt that QC was more generous to the students who majored in chemistry, which was regarded as THE science. But there were such good times hanging out in the faculty "lounge" when not in scheduled labs and classes, talking with faculty about the future of our lives and the world.

And oh, what a world it has become. Now Biology is THE science. The *Drosophila* has had its genome almost completely sequenced. The curriculum at QC today includes not only the seminal courses that were offered in the 50s and 60s, but also a vast number of exciting and on-the-cusp courses, and research leading to a bachelor's and/or master's degree at QC and courses and research leading to a PhD (at the CUNY Graduate Center) in cellular, molecular, and developmental biology; evolution, ecology, and behavior; physiology and neuroscience; and plant sciences. The specialties and research foci of the greatly expanded faculty are at the same time fundamental and esoteric: molecular genetics, population ecology, Golgi membrane trafficking; bioclimatology; neural control of behavior, structure, and development of *locus coeruleus* in zebrafish; development, molecular genetics, signal transduction in *C. elegans*; and regulation of gene expansion in aging and cell death, to name a few.

The facilities today are enough to make you want to start all over again. The professors'/researchers' laboratories are the same size as the labs into which an entire course section would squeeze for a four-hour lab using monocular microscopes. These new labs are buzzing with faculty and student activity, as audible and directed as Dr. Johansson's bees.

And oh, how the opportunities have evolved. In 1962 the usual paths for a grad with a BS in biology were (i) doing research or technical scut work in someone's lab at a medical school or research institute such as Columbia, NYU, Cornell,



Sloan-Kettering, or Rockefeller, (ii) working on a PhD and then teaching in college and/or doing research, (iii) getting a degree in education (from Columbia's Teachers College, for example) and teaching high school, or (iv) getting all the necessary chemistry courses, taking the MCAT, and going to medical school.

Then came Earth Day in 1970 and the recognition of the environment and environmental sciences; also came new developments in genetics and the growth of new occupation specialties; and then in the 1980s, and continuing today, came the explosion of biology in patent law and the flow of biologists into law schools and then law firms and industry seeking attorneys with technical backgrounds and advanced degrees in biological sciences.

The opportunities for a QC biology major from almost half a century ago were always evolving, so a new degree could be picked up, and a new road taken. Capitalizing on the foundation QC gave me, I have changed careers twice: first, earning a master's degree in Public Health in Environmental Sciences and setting up a new Department of Environmental Management at a major New York City hospital; then, earning a law degree and admission to the Patent Bar (which requires the scientific and technical training provided by a bachelor's degree in specific majors and allows an attorney to practice in patent cases before the U.S. Patent and Trademark Office) and a career in intellectual property law. And, as I consider my next incarnation, it's not over yet.

Thank you, QC.

Andrea Harris Scheidt, '62

Andrea Harris Scheidt '62 has been practicing law for over a decade, specializing in all aspects of intellectual property matters concerning trademarks, copyright, unfair competition, and patents. She has been co-author of a monthly column entitled "Character" in the *Licensing Journal*, co-author of "Trademark & Trade Dress," United States, in "International Law and Practice," 2005, and participates in *pro bono* activities for the New York-based Volunteer Lawyers for the Arts.

In addition to a bachelor's degree from Queens College, Andrea earned a master's degree in Public Health Administration from Barnard College, Columbia University, and a doctorate in law from Fordham University. She lives in New York City with her husband, Dr. Stephen Scheidt.

During her visit to the department, Andrea toured department facilities, met with faculty members, and had lunch with students. She also had an interview with Queens College President James Muyskens.

Editors' note: The Department welcomes visits from alumni and friends. We will be happy to arrange a tour of the facility and discuss our teaching and research efforts. For more information, please contact Dr. Corinne Michels, chair of the department, at corinne.michels@qc.cuny.edu.

ALUMNI NEWS

Ellen Cho France ('98) has just published her first scientific paper: France, E., C. Boyd, J. Coleman and P. J. Novick (2006). "The polarity-establishment component Bem1p interacts with the exocyst complex through the Sec15p subunit." *J. Cell Sci.* 119:876-888.

Diana Kreutzer ('81) earned her MEd degree from Elmira College in 1991. She is teaching 7th-grade science at Trumansburg Middle School. She lives on 20 acres of meadow and woods in the Finger Lakes Region of New York with her husband, Al, and their two daughters. Al is a firefighter/EMT. The family volunteers for the Humane Society of Schuyler County and various other community organizations. They recently returned from visiting Kenya. Diana would love to hear from her old Queens College biology schoolmates. She can be reached at <krefoo@fltg.net>.

Jason Schneider ('95) is a District Director within the Learning for Life Program, Boy Scouts of America. He writes: "The most memorable, difficult, time-consuming, and interesting class [at Queens College] was Invertebrate Zoology with Dr. David Alsop. Part of being a District Director in the Learning for Life Program, which is a non-traditional program of the Greater New York Council Boy Scouts of America, is that I teach Life Science at the elementary and secondary school levels. Dr. Alsop is a great example on how to teach with energy and excitement, which helps students to learn and experience science. By far the best lecture and laboratory I ever experienced." Jason may be contacted through email at <schneider_jason@ecoisp.com>.

FACULTY NOTES

Michael Barry, in collaboration with **PoKay Ma** and graduate student **Nazila Tehrani**, presented a paper entitled *Organization of Barbel-Based Facial Taste System in Weatherloach* at the American Chemical Sense Society Meeting in Sarasota, Florida. Dr. Barry was the faculty mentor for **Angie Zhang**, a senior at

Townsend Harris High School. Her project, which explores the foraging behavior of the weatherloach, an eel-like bottom-dwelling fish, won a semifinalist award in the Intel Science Talent Search.

Stephane Boissinot received a \$230,000 award from the National Institutes of Health to study the *Molecular Evolution of Flavivirus-Resistance in Mouse*. Dr. Boissinot also gave three special lectures:

1. *Selection against LINE-1 retrotransposons in human*, FASEB summer research conference on Mammalian Mobile Elements, Tucson, Arizona, June 2005.
2. *LINE-1 retrotransposons: Molecular evolution and interactions within the human genome*, Department of Biological Sciences, University of Idaho, Moscow, Idaho, October 2005.
3. *LINE-1 retrotransposons: Molecular evolution and interactions with the human genome*, Department of Biological Sciences, Fordham University, New York, October 2005.

Corinne Michels received a \$380,000 Major Research Instrumentation Grant from the National Science Foundation. Funds from this award will be used to purchase a new confocal microscope and a biolistic unit for the Biology Core Facility. This is an interdisciplinary effort involving several departments. Her co-investigators in this award are **Joshua Brumberg** (Psychology), **Karl Fath** (Biology), **Susan Rotenberg** (Chemistry), and **Timothy Short** (Biology).

Dr. Michels and her doctoral student **Saima Cheema** presented a paper entitled *SNF1 is required at a post-transcriptional level for the expression of Mal61 maltose permease protein*, at the Annual Yeast Cell Biology meetings, Cold Spring Harbor Laboratories, Cold Spring Harbor, New York.

Cathy Savage-Dunn received a \$215,879 grant from the National Institutes of Health to continue her study on signal transduction in the nematode in a project entitled *Body size control genes and TGF β signaling in C. elegans*.

GRADUATES • SEPTEMBER 2004—JUNE 2005

Ajodhia, Chitra
Ascarì, Kristy Elena
Barayeva, Anzhela,
Honors in Biology
Benlevi, Sherwin
Boodhun, Ashvin S.
Budhram, Shilini,
Honors in Biology
Casco, Janice M.
Castillo, Alfred
Dada, Oluwatoyosi Abidemi
Eisenberg, Penina Yehudit,
Honors in Biology
Feng, Yung-Wen "Sophia,"
High Honors in Biology,
Lancefield Prize, The
Sunny and Saul Budow

Memorial Scholarship
Ferguson, Shamia
Francin, Jaclyn
Grossman, Avrohom,
Honors in Biology
Hamid, Faisal
Herde, Maureen J.
Hsu, James I.
Huang, Susu
Israel, Yuriy,
High Honors in Biology,
Feigelson Award
Khan, Rbeea M.,
Honors in Biology
Kirton, Woodrow C.
Lame, Maria V.,
Honors in Biology

Latorre, Grace N.,
Honors in Biology
Lee, Hyun Jeong,
Honors in Biology
Maldonado, Victor F.
Mandel, Sharon S.,
High Honors in Biology,
Darwin Prize,
The Queens College
Women's Club Award
Merani, Sharmila
Moussai, Mehran
Munshi, Asiya,
Honors in Biology
Nitschke, Lynette Marie,
Honors in Biology
Penaloza, Carlos G.

Phillips, David
Puleo, Michael-Paul
Ripon, Imtaj
Salihi, Walid
Saminejad, Behrang
Schmidt, Michael T.
Shirazian, Alireza,
Honors in Biology,
Colwin Prize
Simmons, Naomi J.
Sood, Roger R.
Weinstein, Lynda E.
Welcome, Peabo Aubrey

Biology 2005 MA Graduates

Esquivias, Leticia
Graham, Todd

BIOLOGY ALUMNI FUND

Between 1/1/05 and 12/31/05, 76 alumni and friends donated a total of \$8,320.83 to the Department of Biology. At a time of budget cutbacks, these gifts fill an important niche in the department. They are an important source of discretionary funds, which are used for departmental enhancement, for faculty recruitment, to support student and faculty research and student travel to scientific conferences, and to supplement scholarship awards to students. We are deeply grateful for this support.

LIST OF DONORS

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ACKNOWLEDGMENTS:

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STUDENT HIGHLIGHTS

Rachel Schnur Wins Goldwater Scholarship

Rachel Schnur, a junior in the department, has been awarded the prestigious Goldwater Scholarship for 2006. This nationally competitive scholarship award recognizes outstanding individuals who intend to pursue research careers in mathematics, engineering, or the natural sciences. Each candidate for this award must be nominated by the home institution, and each institution may nominate only four individuals.

Rachel is currently working in Dr. Timothy Short's laboratory, studying the genetic bases of phototransduction in plants, a project that she started as a freshman. This is not her first foray into plant biology. In the sixth grade, her project on the effect of magnetism on plant growth tied for first place at a science fair.

Outside of the classroom and the library, she spends most of her time in the laboratory. Rachel is good at mixing work and play, however, and finds time to serve as a gym instructor at a local Yeshiva. She plans to earn a doctoral degree in molecular genetics, and pursue a career in cancer research and university teaching.

"I'm in the lab all day long, and I love it."



Last year she studied breast cancer metastasis on a summer internship at Albert Einstein College of Medicine. This summer she will focus on her work on plant genetics under the auspices of the Queens College Howard Hughes Medical Institute Summer Program for Undergraduate Research.

As a member of an extended Queens College family, Rachel had always known that she would attend Queens College. Her mother Allyson Schnur (néé Roth) is an alumna (BA, sociology, '73), so is her grandmother Pauline Roth (BA, romance languages). Her sister Kate is currently a freshman here. Rachel calls Queens College "one of those wonderful things in life that are less obvious than others."

ALUMNI QUESTIONNAIRE

We want to keep in touch! If you just want to say hello, or tell us what's new in your life, please fill in the information sheet below and return to: Prof. Corinne Michels, Dept. of Biology, Queens College, Flushing, NY 11367
Tel.: 718-997-3400 • Fax: 718-997-3445 • E-mail: corinne_michels@qc.cuny.edu

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Telephone:

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Bus. _____

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Make address/telephone available to Alumni?

yes no

Education/Employment History

Personal Highlights and Comments:

2005 BIOLOGY DEPARTMENT PUBLICATIONS

Boissinot, S., A. Entezam, L. Young, P. Munson and A.V. Furano (2004). The insertional history of an active family of LINE-1 retrotransposons in humans. *Genome Research* 14:1221–1231.

Furano, A. V., D. Duvernell and S. **Boissinot** (2004). L1 (LINE-1) retrotransposon diversity differs dramatically between mammals and fish. *Trends in Genetics* 20(1):9–14.

Boissinot, S., C. Roos and A.V. Furano (2004). Different rates of LINE-1 retrotransposons amplification and evolution in New World monkeys. *J. Mol. Evol.* 58:122–130.

Boissinot, S. and A.V. Furano (2005). The recent evolution of human L1

retrotransposons. *Cytogenetics & Genome Research* 110(1–4):402–406.

Martin, S. L., W-L. P. Li, A. V. Furano and S. **Boissinot** (2005). The structures of mouse and human L1 elements reflect their insertion mechanism. *Cytogenetics & Genome Research* 110(1–4):223–228.

Greller, A. M., G. E. Lotowycz, G. Moore, E. Lamont, H. Binger, B. Connolly, V. Dankel, J. Hoar, C. Johnston, A. Mangiacapre, J. Schmidt, L. Zimmerman, V. Luisi, M. L. Lamont and S. E. Clemants (2005). Vascular flora of Caumsett State Historic Park, Lloyd Neck, Long Island, New York, with notes on the vegetation. *J. Torrey Botanical Society* 132(1):149–168.

Greller, A. M. (2005). [Book Review] *Forest Canopies*, 2nd edition, by Margaret D. Lowman and H. Bruce Rinker, 2004, Elsevier, London. *J. Torrey Botanical Society* 132(3):535–536.

Wang, J., W. A. Mohler and C. **Savage-Dunn** (2005). C-terminal mutants of *C. elegans* Smads reveal tissue-specific requirements for protein activation by TGF- β signaling. *Development*, 132:3505–3513.

Savage-Dunn, C. (2005). TGF- β signaling. In: *WormBook*, The *C. elegans* Research Community [ed.], WormBook, doi/10.1895/wormbook.1.22.1, <http://www.wormbook.org>.

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