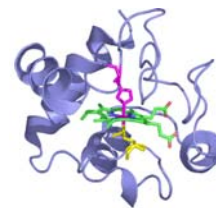




BARNARD CHEMISTRY NEWSLETTER

June 2008



Hello again to alumnae and friends of the Barnard chemistry department. Exams are over and graded, another class has graduated, and a busy summer of research is getting underway. As is our tradition, we pause to share with you some news of the college, the department, our students, and our many accomplished alumnae. We are always glad to hear from and to see you!

NEWS OF THE COLLEGE

We are about a year into the construction of the Nexus, the multi-purpose building that replaces McIntosh center. It will house dining facilities, cafés, a black box theater, event spaces, classrooms, and meeting rooms. Last summer and fall were very noisy with excavation. The steel frame is now complete. There was a festive topping-off celebration this April, complete with fireworks to accompany the announcement of a \$15 Million gift from trustee Diana Vagelos '55 and her husband Roy. We look forward to the January 2010 opening of this important addition to the campus. Altschul residents enjoy (?) a close-up view of the construction.

There is great excitement on campus about Barnard's incoming President, Debora L. Spar, who arrives in July. As you have probably heard, she comes from Harvard Business School, where she has been Senior Associate Dean for Faculty Research and Development. One major focus of her research has been families and work. An energetic and accomplished academic and administrator, she seems a perfect choice for Barnard. Plans are well underway for her inauguration in October.

A flurry of events have celebrated Judith Shapiro's successful presidency. On April 28, a panel "Looking to the Future," included President Shapiro, former Wellesley President Diana Chapman Walsh, and Alison Bernstein of the Ford Foundation. Anna Quindlen, Chair of Barnard's Board of Trustees, moderated, keeping the conversation lively and interesting. On May 5, faculty enjoyed a Broadway-themed black-tie (optional) dinner-dance in the gym. On June 16, Judith is to be honored at the Spring Gala, an important annual fundraising event.

The Higher Education Opportunity Program (HEOP), a New York State funded program for economically and educationally disadvantaged students, has been a part of Barnard college life for decades. A number of talented chemistry and biochemistry majors have benefited from this important program. The HEOP office has undergone a recent major transformation, with new leadership: Director, Michell Tollinchi-Michel and Associate Director, Nikki Youngblood. We welcome them, wish them the best, and look forward to working with them and their students.

We are very pleased that Barnard was again awarded a grant from the Howard Hughes Medical Institute, this one for \$1.5 million. Biology Prof. Paul Hertz has ably directed the Hughes Science Pipeline Program and prepared the proposals that secure its funding since the first grant in 1991. Support for summer interns has been a part of this program of great benefit to our department.

NEWS OF THE DEPARTMENT

As the year began, we welcomed a number of new faces to the department. **Prof. John Magyar** is our newest Assistant Professor. A bioinorganic chemist, John earned his Ph.D. in Hilary Godwin's group at Northwestern University, and was a postdoc with Harry Gray at Caltech. We were very pleased that he secured external funding even before he arrived, winning a Faculty Start-up Award from the Camille and Henry Dreyfus Foundation. **Jacob Newman** was a Visiting

Assistant Professor for the fall term, teaching the *Integrated Lab* (BC3365x). Jacob was completing his Ph.D. at NYU where he uses NMR to study art. **Dr. Jim Farmer** is a part-time Laboratory Associate in the organic labs. He directs a lab of the New York Blood Center. **Erika Hawthorne** arrived as the new chemistry Department Administrator. Later in the fall, we welcomed another new face, **Molly Gill**, as Administrative Assistant for Physics/Astronomy and Chemistry. Erika and Molly are a tremendous help keeping the department running smoothly.

Our fall luncheon speaker was **Cindy Kan '00**, a postdoc at Memorial Sloan-Kettering Cancer Center (MSKCC) in the laboratory of Prof. Sam Danishevsky, who has large labs both at MSKCC and in the Columbia chemistry department. Cindy gave a wonderful talk, "Studies on the Chemical Synthesis of Homogeneous Erythropoietin," describing the complexity of synthesizing glycopeptide and glycoprotein targets. Our spring guest was **Megan Núñez**, a bioorganic chemist from Mt. Holyoke College. Her subject was "The Effect of Base Lesions on the DNA Duplex." A Smith graduate (and friend of Prof. Merrer), Prof. Núñez received her Ph.D. in 2001 from Caltech, in the group of **Jackie Barton '74**.

As we have said in previous years, the Barnard Chemistry department is slated to grow, pending space for new faculty to conduct their research with students. We decided to leverage our association with the Columbia Nanocenter (NSEC) to make the first of these new hires happen. We are thrilled that we have landed **Marisa Buzzeo '01** for this new position. While at Barnard, she did inorganic research in **Linda Doerr**'s group. Marisa received a Ph.D. in chemistry from Oxford, and is finishing a postdoc at Caltech in the lab of **Jackie Barton '74**. What makes this hire unusual is that Marisa will spend the 2008-09 academic year as a research scientist at NSEC, and will start teaching here in the fall of 2009, at which time the old 8th floor library will have been converted into research labs. This arrangement will foster collaborative opportunities for Marisa, her students, and the department well into the future. We thank **Dr. Jim Yardley**, Columbia NSEC Director, for working closely with us to make this happen.

The Barnard Chemistry Society (BCS), a student-organized club, has been very active again this year. The Columbia Nanocenter co-sponsored a number of their programs. In the fall, a lecture, "Chemistry and the Environment," was given by Prof. Faye McNeill of the Columbia department of Chemical Engineering. BCS also offered entertaining demonstrations for kids as part of National Chemistry Week activities at the NY Hall of Science in Queens. In February, a lecture, "*In vivo* Optical Imaging," was given by Dr. Elizabeth Hillman of Columbia's department of Biomedical Engineering. BCS arranged a fascinating career panel about working in the NYPD Crime Labs. They also enjoy using liquid nitrogen to fast-freeze ice cream at their meetings to recruit new members. We applaud **Mira Atanassova '08** for her superlative leadership of this group over the last three years, along with all the other students who have worked hard with her. Mira presented a poster on BCS activities at the New Orleans ACS national meeting; her co-authors were **Denise Napolitano '08**, Dr. Jacob Alexander, and Dr. Jim Yardley of NSEC.

After 31 years in the Barnard chemistry department, **Prof. Leslie Lessinger** is retiring. A farewell party was given in May; a number of alums who live nearby (and whose e-mails we happened to know) were able to attend. Fitting tributes were offered by faculty and administrators. Many spoke of his extraordinary intellect, his wide knowledge, and his passionate teaching. For a number of years, Les directed Barnard's Centennial Scholars program, which is designed to offer independent scholarly opportunities to unusually talented students. He was ideally suited to this task. But he was equally central to chemistry, serving as department chair several times and teaching many different courses, including *General Chemistry I*, to generations of students. It is hard to imagine the department without him.

Student Departmental Prizes

CRC Prize for Excellence in General Chemistry	Molly Alig and Yvonne Wang
ACS-POLYED Award for Excellence in Organic Chemistry	Jennifer Gillman
ACS Award for Excellence in Analytical Chemistry	Linda Suen
Marie Reimer Prize: Outstanding Junior Chemistry Major	Xiao Yu Mo and Shenjuti Chowdhury
American Institute of Chemists (AIC) Prize: Outstanding Senior in Chemistry	Denise Napolitano
AIC Prize: Outstanding Senior in Biochemistry	Alexandra (Pali) Jen
Ira and John Kauderer Prize: premedical student majoring in Chemistry or Biochemistry	Rebecca Israel
Bernice G. Segal Summer Internships	Monnica Chan and Xiao Yu Mo
Hughes Science Pipeline Project Summer Internships	Elizabeth Edwards, René Harris, and Jennifer Schloss

College and University Prizes

Alpha Zeta Prize	Molly Weiner
Mary Allison Prize	Mira Atanassova
Lucy Moses Prize	Carmen Rodriguez
Carl Boyer Prize in the History of Science (CU)	Mira Atanassova

The department and the college are very proud of **Xiao Yu Mo '09** who won a Goldwater Scholarship in a national competition.

Twenty three chemistry and biochemistry majors were in this year's senior class. Seven participated in the year-long Senior Honors Thesis program. Each will be recognized with Distinction in Chemistry or Biochemistry. Their research advises and topics are listed below.

Student	Advise	Topic
Tarnima Ahamed	Matthew Wallenfang	Oxidative Stress Related Aging in <i>Drosophila</i> Germline Stem Cells
Mira Atanassova	John Magyar	Probing electron transfer pathways in cytochrome <i>c</i>
Krithika Kavanoor	Laura Kaufman	Investigation of the Cell Endocytosis of Polyelectrolyte Multilayer Microcapsules
Denise Napolitano	Dina Merrer	Mechanism of Halocarbene Additions to Cyclooctyne
Sonia Ortiz	Dina Merrer	Mechanism of Dihalocarbene Addition to trans-1-Methylbicyclo[6.1.0]nonane
Lindsay Repka	Christian Rojas	Amidoglycosylations of D-glucal 3-carbamates via Pd(II)-Pd(IV) catalysis
Kaitlyn Suski	Dina Merrer	Reactivity of dihalocarbenes with cycloalkynes

The class of 2008 is a numerous and talented group! Here are their immediate plans:

Tarnima Ahamed is a resident assistant (RA) in Barnard dorms this summer. Her first task is studying for MCATs. In the fall she will apply to medical school and look for jobs.

Mira Atanassova was elected to $\phi\beta\kappa$. She is starting law school, probably at Brooklyn Law.

Alexandra Athan is entering the Ph.D. program in chemistry at Stony Brook.

Yvonne Chang is looking for lab work. Her plan is to do research for two years, and then apply to graduate school.

Christina Chu will be attending the SUNY School of Optometry for a Doctor of Optometry degree and Masters in Visual Science.

Rebecca Israel was elected to $\phi\beta\kappa$. Rebecca is currently interviewing for jobs; she plans to go to medical school after a year or two.

Lauren Jain will be interning as a dental assistant in midtown Manhattan and working as a Graduate Assistant, managing the Barnard Computer lab part-time in the evenings. She plans to begin dental school the following year.

Pali (Alexandra) Jen was elected to $\phi\beta\kappa$ in Fall 2007. Her Centennial Scholar project involved work with chronically ill children and their families; the final presentation included a display of quilts that the children made with her. In the fall, she starts work for the Patrons Program, a nonprofit supporting NYC Catholic schools, doing development work and leading after-school programs at a school at 112th and 3rd. Pali plans to attend medical school in Fall 2009.

Karen Justiniano is looking for work.

Krithika Kavanoor is looking for work, planning to pursue further studies in the future.

Felicia Konopka is entering the Ph.D. program at Syracuse University this fall, where she plans to do research in nanoscience or organometallics. Felicia won an NSF-REU Chemistry Leadership Group Travel Award, which helped her attend the April 2008 ACS Meeting in New Orleans. She presented research from her Summer 2007 REU at Syracuse.

Yetta Levine is working this year while she applies to dental school for Fall 2009.

Emily Miller completed a double major in dance and biochemistry. Her senior dance project included choreographing a chemistry-inspired work, "Antisymmetric." She has started work at the Hospital for Special Surgery as the Clinical Research Coordinator for the Autoimmune Disease Registry and Repository. She plans further study after a year or two.

Denise Napolitano is applying for jobs, mainly with pharmaceutical and personal care companies.

Sonia Ortiz is entering the Ph.D. program in chemistry at Northwestern.

Lindsay Repka is entering the Ph.D. program in chemistry at Caltech.

Carmen Rodriguez will be working at Albert Einstein College of Medicine as a Clinical Research Coordinator. She hopes to go to medical school in 2009.

Ayelet Spitzer is looking for work in the Washington DC area. She plans to apply to medical school for Fall 2009.

Ida Suen is entering the M.P.H. program at the Mailman School of Public Health (Columbia). Ida's sister, Linda, is a rising junior biochemistry major.

Kaitlyn Suski is entering the Ph.D. program in chemistry at UC San Diego.

Lhamo Tshering is looking for work.

Megan Verma is looking for work.

Dara Wilensky is working as an advocate for the Urban Justice Center's Mental Health Project (in Manhattan) this year, and applying to medical school for Fall 2009.

NEWS OF FACULTY AND STAFF

Prof. Sally Chapman enjoyed teaching *Structure, Bonding, and Spectroscopy* to a record-size class this fall. The course culminated with individual projects using PC-Spartan. Quantum calculations that required a mainframe computer a decade ago, when she last taught the course, are easily done on a PC today. In the spring she taught *Introduction to Thermodynamics and Kinetics* to another large class, along with the more advanced course, *Methods and Applications in Physical Chemistry*. Prof. Chapman traveled to Yale this fall to attend a chemistry graduate school reunion, where she was on a panel about the future of higher education in science. She also participated in a review of the chemistry program at Wesleyan. She continues work promoting women in academic chemistry, through COACH and an NSF-ADVANCE grant.

Last July, Prof. Chapman attended the XXI Conference on the Dynamics of Molecular Collisions in beautiful Santa Fe. Two of her research mentors, collaborators, and friends, Bill Miller (UC Berkeley) and Dick Zare (Stanford), were special honorees. In August, she was an organizer and speaker at a symposium on her ADVANCE project at the Boston ACS meeting.

Prof. Leslie Lessinger taught *General Chemistry* in the fall and *Quantitative and Instrumental Techniques* in the spring. We are sorry to report that he is back on chemotherapy for his pancreatic cancer. He loves teaching, but regrets that the uncertainty about his future health compels him to retire at the end of this academic year. He had fun at his retirement party, and much appreciates the many expressions of support he has received from alumnae and students.

Prof. Christian Rojas was on sabbatical during Fall 2007, spending the time doing experiments in his lab at Barnard. He gave talks on his research group's studies at the spring national meeting of the ACS in New Orleans in April [Bernard, Sarah; Gupta, Ritu; Sogi, Kimberly; Decatur, John; Rojas, Christian M. Stereo- and chemoselective amidoglycosylation of glucal 3-carbamates] and at the Mid-Atlantic regional meeting (MARM) in Queens, NY in May [Rojas, Christian Glycal Metallanitrenes for 2-Amino Sugar Synthesis]. At the MARM he also organized or co-organized two symposia.

Christian will be chemistry department chair beginning July 1 and is particularly interested in moving forward with construction of two new laboratories on the 8th floor in the space formerly occupied by the chemistry library. This fall he will be back to teaching the second-semester organic chemistry course. Christian and his wife, Christine, send greetings to former students and other friends of the department. Their children are growing up fast: Alice is now 7, in first grade, and just lost her front tooth. Sidney, a third-grader who turns 9 this month, plays Pedro in her class's production of "Tio Nacho." Lewis, 3 ½, loves macabre stories like the Grimm Brothers' version of Hansel and Gretel and Poe's *Annabel Lee*.

Prof. Dina Merrer spent 2007-08 reacquainting herself with the large Organic lecture courses, which she hadn't taught since 2004, and enjoyed them immensely. Her group continues to flourish, with five students last summer and fall, and six this spring. They finished the benzocyclopropene project with a full paper in *J. Org. Chem.* [Khrapunovich, Marina; Zelenova, Ekaterina; Seu, Lillian; Sabo, Alexis N.; Flaherty, Aidan; Merrer, Dina C., Regioselectivity and Mechanism of Dihalocarbene Addition to Benzocyclopropene, *J. Org. Chem.* **2007**, *72*, 7574-7580]. This momentous occasion was celebrated by a ceremonial cleansing of the dreadful BCP odors from the lab. Last June, Dina was invited to give a talk on her group's research at the Physical Organic Gordon Conference, and she delivered a departmental seminar at Columbia Chemistry in March; both talks were very well received. Thesis students **Denise Napolitano**, **Sonia Ortiz**, and **Kaitlyn Suski** (all '08) presented their research on halocarbene additions to

strained π and σ bonds with a poster co-authored by **Michele Guide '09** and **Marina Khrapunovich '06** at the New Orleans ACS meeting in April. The contributions of these three outstanding seniors and of **Ida Suen '08** will be missed. Dina thanks all of them for their efforts and dedication, and offers them congratulations on their graduation and best wishes in the future.

For the upcoming summer, **Xiao Yu Mo '09** returns to work on the computational aspects of chlorocarbene additions to cyclooctyne, a project begun by **Sarah Bernard '07** that the Merrer group hopes to wrap up shortly. Xiao will be joined by new group members **Jen Schloss '09**, **Linda Suen '10**, and **Stephanie Zaleski '11**, who will assume the reins in the wet lab. Hopes are high for a fun and productive summer and year ahead. Finally, Dina wishes the new graduates a hearty congrats, and hopes all Chem/Biochem alums are doing well. Drop a line to say hello!

Prof. Matthew Birck has been busy this year. Most importantly, his wife, Linda, gave birth to a baby girl in February: Sophia Juliet. She has been keeping both of them tired but happy for the past few months. On campus, he had another bumper crop of students take his biochemistry lecture and he debuted his new laboratory manual in the laboratory course with several new experiments and improvements on the old ones. Prof Birck was also responsible for the coordination of the Senior Honors Thesis program this year. With the continued help of **Rebecca Israel '08** and **Dara Wilensky '08**, he made progress in his research into the pathway for bacterial programmed cell death (BPCD). Rebecca began the process of quantifying various metabolic changes under BPCD conditions and Dara worked on the production of a toxic protein from that pathway. **Anna Gilman '09** (biology) and **Pali Jen '08** also worked in the lab this year. Prof. Birck has a Special Assistant Professor Leave for Fall 2008 and will be pursuing his research intensively throughout the coming academic year.

Prof. John Magyar joined the department July 1, 2007, and immediately began work with research students. **Mira Atanassova '08** and **Emily Miller '08** worked in the lab last summer and continued through the academic year. **Alex Athan '08** joined the group in September and **Lhamo Tshering '08** started in January. Mira completed a wonderful senior thesis on electron transfer in cytochrome *c*, presenting her work at the ACS spring meeting in New Orleans. Prof. Magyar is grateful to all four students for helping to get research off to a roaring start! This summer, four students have joined the Magyar group, **Jenna Bass '11**, **Elizabeth Edwards '10**, **Nicole Mizrahi '10**, and **Sara Sasson '11**, all studying aspects of microbial metal uptake. Prof. Magyar's Petroleum Research Fund proposal was recently recommended for funding.

Olympia Jebejian co-directs the General Chemistry Laboratories with Dr. Jacob Alexander. She teaches in the laboratory, grades reports, and supervises the overall preparations for the laboratory experiments. Additionally she taught the problem-solving help class. In the spring, Ms. Jebejian taught in the *Quantitative and Instrumental Techniques* courses with Prof. Les Lessinger and the assistance of Mrs. Suqing Liu. The enrollment was high and the grading of the elaborate lab reports along with a lot of office hours kept Olympia rather busy. However, teaching these rising chemistry and biochemistry majors makes her very challenged and rewarded. In the summers Olympia teaches chemistry in the Higher Education Opportunity Program (HEOP). She is very gratified when some of these students take chemistry during the academic year and do well. She was so happy to see one of her previous HEOP students (a chemistry major) win a prestigious Goldwater scholarship. Olympia also is a first-year and sophomore academic adviser.

On a personal note, Olympia and her husband Shahe feel blessed to see their son and his family and daughter and her family being happy and doing well. Their four grandchildren, two from each couple, joyfully keep Shahe and Olympia quite busy during the weekends.

Dr. Jacob Alexander continues as a co-director of the General Chemistry laboratory program. He comments “This year’s delightful class kept us on our toes and was a pleasure to supervise as they worked diligently in the lab.” In the spring, Dr. Alexander worked hard with his students in *Molecules and Matter*, preparing for general chemistry in the fall. He was thrilled to be involved with several graduating seniors in the *Senior Seminar*. Their hard work was reflected in presentations of very high caliber. In between teaching, rumor has it that Dr. Alexander joined Prof. Chapman and others in a rowdy songfest at President Shapiro’s going away party. Who knew that chemists could sing and dance?

On the home front, his wife Joanna has been invested as a *chazzanit* (Cantor) at the Hebrew Union College – Jewish Institute of Religion and has taken a position at Congregation Rodeph Torah in Marlboro NJ. This summer will be frantic as the Alexanders make the exciting move to join many of our students as New Jerseyans!

Dr. Meena Rao writes: “Spring 2008 was one of the best *Introductory Organic Lab* classes I ever taught. It was just a magical semester. *Modern Techniques Lab* in the fall was also a great class. Students chose an important drug and made presentations about its discovery, brief synthesis and characterization. All instructors and students enjoyed the process tremendously. On a personal note: My son Gautam is graduating from high school as Valedictorian. A baby when I started teaching at Barnard, he will be entering Columbia this fall. My daughter, Gowri, will also be part of the Columbia community, starting her M.B.A. at Columbia Business School this Fall. I am very happy to say that Gautam was selected for the ACS Outstanding Chemistry student award, continuing the tradition set by his sister. My husband is enjoying traveling all over teaching a course that he developed.”

Dr. Toby Berger Holtz '67 teaches laboratories in general chemistry in the fall and organic in the spring, in addition to laboratory office hours, organic lab preparation, serving as department Safety Officer, and advising first-years and sophomores. “Teaching and interacting with students is always exciting. You learn something new every day,” she writes.

Last July, with support from a Barnard Faculty Travel Grant, Toby participated in the 16th International Conference of Ethiopian Studies in Trondheim, Norway, where she gave a paper “The Hall Family and Ethiopia: A Century of Involvement.” The paper is an outgrowth of Toby’s “academic hobby” connection with Ethiopian history. The conference was most interesting, in a beautiful setting. Toby (and her husband) enjoyed the trip.

After hectic months of planning, Toby’s daughter Razelle '01, a first-grade teacher at P.S. 173 in Manhattan, was married in December to Dov Weinstein, the founder and director of the Tiny Ninja Theater, which presents Shakespeare and other plays using puppetry (tinyninjatheater.com).

SuQing Liu, who ably assists with the biochemistry, integrated, and quantitative analysis labs at Barnard, has nearly finished her Ph.D. studies at the graduate center at CUNY. She and her husband, Anjing, are proud of our their daughter who just received her M.D. from Columbia. She will do her general surgery residency at SUNY Downstate/Kingscounty Hospital in Brooklyn.

Dr. Jean Vadakkan taught *Advanced Organic Chemistry* this spring, since Prof. Rojas was on leave. Students found the course challenging and satisfying. Jean teaches in the organic labs.

Part-time faculty this year included veterans **Frances Feerst**, **Craig Allen**, and **Grace Lee**, and newcomer **Jim Farmar**. Student satisfaction in the multi-section lab courses is very high, in large part due to the dedicated work of these fine instructors. **Frances Feerst** is retiring this year. We thank her for all her excellent work in general chemistry and other courses over the last 20 years. We will miss her, and we wish her the very best.

NEWS OF FORMER FACULTY

We were very pleased that **Ann Shinnar**, **Burt Goldberg**, **Steve DeMeo**, and **Dorothy Brand** were all able to attend Les Lessinger's retirement party.

Linda Doerr is finishing up her second year as an assistant professor at Boston University and enjoying it very much. This fall she taught Chem 101 (literally) to first-year undergraduates who were mostly biology majors. The department was pleased with her efforts such that she's been asked to teach the chemistry majors in general chemistry this coming year. Her research group has 4 graduate students, 4 undergraduates, and 2 high school students this summer. She and her partner bought a condominium in Cambridge this past year and are now coaxing morning glories to grow in window boxes. Linda can cycle to work about eight months out of the year, subject to traffic snarls around Fenway Park.

Heidi Reese, who went to Law School a few years after teaching at Barnard, is now a patent attorney working in California. Not long ago, she ran into **Rebecca Begley '97** in the Bay area.

ALUMNAE NEWS

Classes of 2000-2007

Molly Weiner '07 continued her research in Prof. Martin Chalfie's lab in the Columbia Biology department this year. She will attend Yale School of Medicine this fall, where she has been awarded full financial support.

Chantel Nicolas '07 wrote "I recently landed an Associate Chemist position in a cosmetic R&D laboratory and am interested in taking some courses in the field. I am applying to Fairleigh Dickinson University for an M.S. in Chemistry, with a Cosmetic Science concentration.... I really enjoy what I do."

Yardana Kaufman '07 will start medical school at Einstein in the fall, her first choice. Yardana has been working in the Columbia labs of Profs. Koji Nakanishi and Ilyas Washington on the synthesis of Vitamin A analogs. This research is related to age-related vision loss.

Seen at the Boston ACS meeting last August: **Diane Zhang '06** and **Montana Childress '06**, both graduate students at MIT. Their graduate study is going well; both presented papers.

Teresa Wojtasiewicz '07 is thrilled to be starting medical school at Columbia this fall.

Marina Khrapunovich '06 is finishing her second year of the M.D./Ph.D. program at Einstein. She works on the mechanism of microtubule stabilization by new natural products in the lab of Prof. Susan Horwitz.

Yevgeniya Monisova '06 will start in the combined Carnegie Mellon/University of Pittsburgh computational biology Ph.D. program this fall.

Kim Sogi '06 is finishing her second year at UC Berkeley, working in Carolyn Bertozzi's group. She reports that her project on sulfotransferases in tuberculosis is really interesting. She is learning genetics, structural biology, and biochemistry, but still does some organic synthesis.

Pam Cole '05, who plans a career in sports nutrition, is studying for an M.S. in applied physiology and nutrition at Teachers College. She is very enthusiastic about the program. She and her husband are martial arts enthusiasts. In February, Pam came to a Career Services event to tell students about her interests and studies. Thanks Pam, it is great for students to hear about diverse opportunities.

Diana Huang '05 is finishing her third year of medical school at SUNY-Buffalo.

Bridget Marcellino '05 is finishing her second year in the M.D./Ph.D. program at Mt. Sinai. She loves it. She looks forward to getting back into the lab after preparing for Boards in June. Bridget still competes internationally in Irish dancing.

Lillian Seu '05 continues in the Ph.D. program in pharmacology at UCSF in Prof. Joseph McCune's group. She is investigating host immune responses determining the outcome of HIV pathogenesis, and loves living in San Francisco.

Karen Chang '04 has just completed her M.D. at SUNY-Buffalo and soon begins a surgical residency at Stony Brook.

Louisa Morrison '04 wrote last summer: "I'm at Vanderbilt University in the Biochemistry Department and the Center for Molecular Toxicology. I am working with Dr. Fred Guengerich, a distinguished toxicologist. My research project is on the kinetics and mechanism of alkyl guanine transferase, an enzyme involved in genomic integrity. Nashville is a great place!"

Sister Francesca (Alexis) Sabo '03 was invested as a Franciscan Sister of the Renewal in September 2007. Dina Merrer, Toby Holtz, and **Esther Francisco '03** attended the beautiful ceremony in the Bronx. Sr. Francesca resides in and serves the East Harlem community.

Abby Smenton '03 is studying for her M.P.H. at the Mailman School of Public Health (Columbia), in the department of Sociomedical Sciences with a concentration in Gerontology. Busy planning for a June wedding, she took the time to help her Barnard class prepare for their 5th reunion.

Ekaterina Zelenova '03 is studying chromosome dynamics during meiosis in the nematode *C. elegans* in Prof. Abby Dernburg's molecular and cell biology laboratory at UC Berkeley.

Elnaz Menhaji '02, finishing her PhD at Yale, plans to do a postdoc in Tristan Lambert's lab at Columbia. Last summer she told us that she was engaged to her boyfriend of three years, whom she met at Yale. He was looking for NY academic jobs in Egyptology and Ancient Civilizations.

Lisa (Perlson) Silverman '02 will begin Stanford Law School in the fall. She finished her Ph.D. in chemistry at Stanford in early May. Her thesis was "Stark Spectroscopy as a Probe of Charge Reorganization in Chemical and Biological Systems." Before she starts law school, Lisa and her husband, Adam, will take a much needed vacation in Belize.

After a postdoctoral year in Oxford, **Sarah Tully '00**, returned to California in October to do postdoctoral research in Ben Cravatt's lab at Scripps. This was one of the labs she considered when first applying to grad school, so she is thrilled to be going there.

Classes of the 1990's

Moushumi Paul '99 came back to Barnard this fall to tell students about her career as a Ph.D. chemist with the U.S. Department of Agriculture (in Wyndmoor PA). Thanks, Moushumi.

Fay Xing '99 received her M.B.A. from Harvard in June 2007. Armed with both M.D. and M.B.A., she is joining a biomedical company in Minneapolis. Fay began her entrepreneurial involvement with medicine while in medical school.

Ayodele Green '97 is a psychiatry resident at Harlem Hospital. She is active in a number of causes. In an article "Why a Physician's Union?" she began "Medicine has interested me since I was a little girl, and being a woman, I learned the power of independence and of having a voice of your own." Seeing daily the challenges faced by her patients, she works in the "Save Our Safety Net" campaign of the Service Employees International Union and in Physicians for a National Health Program. Ayodele's M.D. is from Temple.



Aliya Hasan '94 became Assistant Professor of Medicine, Division of Gastroenterology and Hepatology, University of Colorado at Denver and Health Sciences Center in July 2007. She received her M.D. from NYU, and surgical training at Montefiore in NY, Cedars-Sinai in LA, and U. of Colorado Health Sciences Center, in Denver. Her website (<http://www.aliyahasan.com/>) promotes "Women's Only Colonoscopy."

Brooke Gurland '90, a colorectal surgeon, has been at the Cleveland Clinic since 2007. She is an expert on women's pelvic floor dysfunction. She received her M.D. from Hahnemann, then did a residency at Mt. Sinai and a fellowship at Cleveland Clinic.

Lisa Spiryda '90 has been Assistant Professor in the division of Gynecology at the University of South Carolina since 2007. Her clinical interests include HPV and abnormal PAP tests, minimally invasive surgical techniques, adolescent gynecology, and family-oriented obstetrics. Lisa has an M.D. and Ph.D. from Mt. Sinai.

Classes before 1990

Orit Saigh '89 is in the division of General Internal Medicine at NYU School of Medicine, and practices at the Beth Israel Medical Center, Phillips Ambulatory Care Center on Union Square.



Larysa Pevny '87, Assistant Professor in the department of Genetics at the University of North Carolina at Chapel Hill, studies the nervous system and its stem cells. Since there are very few stem cells in the nervous system, their study is extremely difficult. Her lab uses a green fluorescent protein to illuminate neural stems cells in lab mice.

Jessie Jean-Claude '85, a vascular surgeon, is Associate Chief of Surgery at the Cleveland Ohio Veterans' Association Medical Center. Jessie received her M.D. from Columbia in 1989, and trained at St. Luke's-Roosevelt, UCSF, and Malmö (Sweden). She has been at Case-Western and the Cleveland VA since 2001.



Jean Greenberg '83 is Associate Professor of Molecular Genetics and Cell Biology at the University of Chicago. From her web page, with some edits: "My broad interest is in how organisms adapt to a changing environment. I study this in the context of host-pathogen interactions using the model system of the plant *Arabidopsis thaliana* and the gram negative pathogen *Pseudomonas syringae*. We discovered that infection also activates cell growth and the cell cycle. We study how *Arabidopsis* regulates its defense and cell death response to pathogens using mutants."



Caroline Apovian '80 has been in the news, due to her book on a new over-the-counter weight loss product, *The Alli Diet Plan*. Caroline is Director of the Nutrition and Weight Management Center at Boston University Medical Center. She is also Director of Clinical Research at the Obesity Research Center of BU Medical Center, and Associate Professor of Medicine at BU School of Medicine. Caroline received her M.D. from UMDNJ in 1985.

We enjoyed a brief visit with **Beth Gross '80** at Barnard's graduation this spring. Her daughter **Pnina Herskovits '08**, a psychology major, will be attending Albert Einstein College of Medicine in the Fall. Beth is a radiologist in a small ob-gyn group practice in Queens.

It was fun to see **Jenny Stone '78** at her Barnard 30th reunion. A dermatological surgeon, Jenny recently relocated from Hawaii to the Charlotte NC area.

Adele Weitzmann Marcus '73 wrote last spring: "I've been living in Haifa, Israel for almost eleven years now. My daughter is beginning a masters in biology and my son will be starting a bachelors at Hebrew U. this fall studying physics and math. My husband works for IBM research.

I am a practicing U.S. patent agent and Israeli patent attorney. I write applications for inventors and work *vis-à-vis* the patent offices. Much of my practice deals with computer applications and business methods.”

Helen Berman '64 has been named a Sigma Xi Distinguished Lecturer for the 2008-09 year. One of her lectures is “How the History of the Protein Data Bank Informs the Future of Biology.”

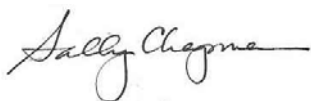
Gertrude Neumark Rothschild '48, Professor Emerita of Engineering at Columbia, was awarded one of two Distinguished Alumna Awards at Barnard's 2008 reunion. She was also awarded an honorary Doctor of Science degree at Columbia's graduation. As reported in *Nature News* (5/9/08), she recently filed a copyright infringement complaint against a number of large corporations in support of her patent for making blue and ultraviolet light-emitting diodes and short-wavelength laser diodes. She says that she does this in part to raise awareness of women's role in science, observing “people don't pay too much attention unless there's a financial impact.”

Dr. Vera Joseph Peterson '32 died in January at the age of 98. Born in Jamaica, Dr. Joseph, as she was known to her patients, was among the first African-American graduates of both Barnard (φβκ) and the Columbia College of Physicians and Surgeons. She and her husband practiced medicine in Puerto Rico, NYC, Beirut, and Geneva, before settling in Amherst MA in 1964. There she joined the Smith College Health Service, retiring as its Director in 1975.

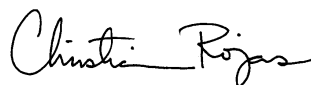
CLOSING REMARKS

Last year in this space we told you about the Chemistry Department's critical need for additional faculty and laboratory space for those faculty. We are making progress in both areas, but continue to need your support. As you read earlier in this newsletter, Marisa Buzzeo '01 is joining our faculty in a new tenure-track line. She will have lab space as part of Columbia's NSEC during 2008-2009, but her laboratory at Barnard, to be built in the former chemistry library space on the 8th floor of Altschul, does not yet exist. We must have the space available for Marisa by Fall 2009. We have preliminary plans and cost estimates from the same architectural firm that designed the highly successful organic lab renovation in 2004. Fundraising for the 8th floor project is not complete, however. It is difficult to say exactly how much we still need to raise because we do not yet have final drawings because construction costs in NYC escalate rapidly, but it is on the order of several hundred thousand dollars. We ask for your help, welcoming your generous contributions and, more importantly, your fundraising ideas and your contacts: personal, corporate, or foundation. With your continued assistance, we look forward to reporting on construction of the new 8th floor laboratories in next June's newsletter.

Keep in touch. We enjoy hearing from you and sharing your news. Barnard faculty e-mail addresses are (initial-name)@barnard.edu, e.g. schapman@barnard.edu. Regular mail and phone calls are always welcome (Chapman: 212-854-2098; Rojas 212-854-5480) Please accept our apologies if any news above is outdated or incorrect; we may assemble information from incomplete sources and sometimes unreliable memories. Please write: we would like to know and share what you are doing. If you would like to be on our informal alumnae e-mail list, send us an e-mail and we will add your name. With warmest regards,



Sally Chapman, Professor



Christian Rojas, Associate Professor

(with contributions from the entire department)

**Chemistry Department Newsletter
Barnard College
3009 Broadway
New York NY 10027-6598
USA**

Prof. Leslie Lessinger with President Shapiro, May 2, 2008

