



## BARNARD CHEMISTRY NEWSLETTER June 2009



Hello again to alumnae and friends of the Barnard chemistry department. Exams are over and graded, the class of 2009 has graduated, and a busy summer of construction, writing, and student and faculty research is getting underway. As has been our tradition for more than 40 years, 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

The biggest news of the year is the arrival and inauguration of our new President, Debora Spar. The inauguration ceremony took place in Riverside Church on October 23 (mole day!) There was lots of music with warm greetings from many constituencies: faculty, students, staff, alumnae, and Columbia, with a wonderful address by Debora. Among the themes she articulated for her presidency are preparing Barnard women for leadership, increasing globalization of the community, and providing greater support for faculty research. A festive community street party on Claremont Ave. followed the ceremony.

One of President Spar's first challenges this year was maintaining a balanced budget with declining endowment and other income. Nevertheless she managed to maintain an upbeat tone throughout the year. Indeed, Barnard's modest endowment compared to its peers was actually a hidden blessing this year, since a smaller part of the operating budget comes from endowment income. For Barnard, the greater challenge is an increase in need for student financial aid. Everyone at the college has been working hard to find ways to save money without compromising quality. There is a freeze on salaries for the year, and some efforts to reduce staffing where possible, but unlike at some colleges, searches to replace key faculty are proceeding as needed. VP for Administration Greg Brown has done an excellent job keeping us all well informed about the budget situation.

We are two years into the construction of "the Diana" (formerly referred to as the Nexus), the multi-purpose building that replaces McIntosh center. We look forward to the January 2010 opening of this important addition to the campus. It is still mostly swathed in canvas, but the partially brick-colored glass façade is now being installed. We understand that the outdoor pathway between Milbank and the upper campus will be open in time for the fall semester.

With construction on campus, graduation ceremonies were held under a tent in front of Butler Library at Columbia. It is a nice venue, since there is plenty of space. This year's festivities were a great success, with terrific student speakers and the graduation address by Hillary Clinton. Hillary's energy is captivating. Her speech was full of good humor and important themes. President Spar also had an excellent encouraging message. Rather than trying to summarize, we suggest you visit the Barnard website to read or hear these.



The official portrait of Judith Shapiro was unveiled with a party the day after Barnard's graduation. Depicted with her beloved poodle, Nora, Judith's portrait joins those of other Barnard presidents in Sulzberger parlor.

## NEWS OF THE DEPARTMENT

As you may have heard, **Prof. Emeritus Leslie Lessinger** died on March 13, 2009 after a long battle with pancreatic cancer. A memorial gathering of family, friends, and colleagues was held at the college on April 18. Thanks for the many notes of remembrance we have received; Les clearly touched many lives. He was an extraordinary man: a dedicated teacher, brilliant scholar, a mainstay of our department, and a wonderful friend. A scholarship fund has been established in his memory; contributions are welcome, through the Barnard Fund.

**Prof. Christian Rojas** has been Chair of the department since July. Among his first responsibilities was shepherding the tenure case of **Prof. Dina Merrer** through various committees at Barnard and Columbia. We are thrilled to announce that Dina was awarded tenure.

In past newsletters, we have told you about plans to renovate parts of Altschul, with partial funding from the Mellon Foundation. We are happy to report that one phase of this renovation is underway: what used to be two offices and the chemistry library on the west side of the 8th floor is being converted to two faculty office-lab suites. Lab space for faculty-student research has been one of our highest priorities, and this project is an important step. Work on the 6th floor is also part of the Mellon project, but awaits funding, along with projects for Biology and Environmental Science. The 8th floor demolition is moving fast; the project is to be done by September.

We have some new faces in the department. **Marisa Buzzeo '01** has spent this year as a research associate with Columbia's NSF-funded nanotechnology center, officially starting as an Assistant Professor at Barnard this fall. Marisa did undergraduate research at Barnard with Prof. Linda Doerrer, received her D.Phil. from Oxford, and did postdoctoral work at Caltech in the lab of Jackie Barton '74.

**Alison Williams** joined the department this year as a senior lecturer. A biophysical chemist, Alison has taught at Swarthmore, Wesleyan, Rutgers, and Princeton. She received her B.A. from Wesleyan and Ph.D. from Rochester. Her research involves thermodynamic and spectroscopic studies of DNA. She has been active in national efforts to improve access to and diversity in the sciences. Alison and Marisa will occupy the renovated labs on the 8th floor.

**Prof. Matthew Birck**, on leave after completing three years in the department, resigned last November. Matt enjoyed teaching at Barnard and doing biochemical research with students, but decided that a non-academic position would be more to his liking. He is now at the U.S. government Homeland Security lab in Newark, NJ. Matt and his wife Linda are *very* busy with family: one year-old daughter Sophia was joined by identical twin girls in March!

A search for a new Assistant Professor will commence this summer. The principal teaching responsibilities will be the biochemistry lecture and lab courses. We are looking for someone who will establish a vigorous research program involving Barnard students. Please help spread the word; we appreciate hearing about possible candidates.

Another new faculty member this year, **Prof. Kristina Harris**, was hired to teach the biochemistry courses while Prof. Birck was on leave. We are very pleased that she will continue for the coming year. Kristina has a Ph.D. from NYU and Cardiff University (Wales). She has worked with **Prof. Burt Goldberg** who was a visiting faculty member here some years ago.

The Barnard Chemical Society (BCS) held a career panel in March featuring chemists in a variety of professions: NYPD, DEP Hazmat, the Metropolitan Museum of Art, and the Columbia University Medical Center (CUMC) Pathology Dept. We are grateful to BCS club President **Mia Mattioli '09** and the other organizers for their enthusiasm and work.

The talk at our fall majors' luncheon was "Synthetic Adventures with the Nazarov Cyclization", by **Prof. Alison Frontier** from the University of Rochester. In the spring, **Marisa Buzzeo** gave the students a wonderful glimpse into her odyssey from Barnard and back again.

Our wonderful students are what makes Barnard such a fantastic place. We are proud of them all. Special recognition goes to those listed below.

*Department Prizes*

CRC Prize for Excellence in General Chemistry	<b>Deena Mitlak and UI Weena</b>
ACS-POLYED Award for Excellence in Organic Chemistry	<b>Nanette Jarenwattananon</b>
ACS Award for Excellence in Analytical Chemistry	<b>Jenna Bass</b>
ACS Division of Inorganic Chemistry Undergraduate Award	<b>Michele Guide</b>
Marie Reimer Prize for Outstanding Junior Chemistry Major	<b>Linda Suen</b>
American Institute of Chemists Prize for Outstanding Senior in Chemistry	<b>Xiao Yu Mo</b>
American Institute of Chemists Prize for Outstanding Senior in Biochemistry	<b>Jennifer Schloss</b>
Ira and John Kauderer Prize for premedical student majoring in Chemistry or Biochemistry	<b>Sasha Roudenko</b>
Bernice G. Segal Summer Internships	<b>Maggie Jiang and Natalie Howlett</b>
Hughes Science Pipeline Project Summer Internships	<b>Nicole Mizrahi, Julia Tolentino, and Jenna Bass</b>

*College Prizes*

Alpha Zeta Prize	<b>Shenjuti Chowdhury</b>
Grace Potter Rice Fellowship	<b>Michele Guide</b>
Lucy Moses Prize	<b>Alexandra Jen</b>

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

Student	Adviser	Topic
Simran Buttar	Christian Rojas	Amidoglycosylation of Gulal- and Allal 3-Carbamates
Monnica Chan	Virginia Cornish (CU)	Mutagenesis of phosphoribosylanthranilate isomerase (TrpF)
Evelyne Goné	Christian Rojas	Gulal 3-Carbamate Amidoglycosylation
Jennifer Schloss	Dina Merrer	Dihalo-carbene Additions to Cyclooctyne
Michele Guide	Colin Nuckolls (CU)	The Fabrication of Crystalline Organic Photovoltaic Devices
Xiao Yu Mo	Dina Merrer	Computational Studies of Chlorocarbene Additions to Strained Systems

The seniors presented the department with a lovely framed picture, shown on the back cover. Here is what we know of their plans:

**Simran Buttar** is starting medical school at SUNY Downstate this fall.

**Nathalie Celcis** is working as a research technician in the pathology department at the CU Medical Center.

**Monnica Chan** has applied to the Peace Corps, hoping to be assigned to Africa. While she awaits assignment, she is looking for work.

**Shenjuti Chowdhury**, who was elected to  $\phi\beta\kappa$ , is starting dental school at Columbia this fall. She will be working as a tutor in Barnard's HEOP program this summer.

**Evelyne Goné** is looking for work; she plans to attend medical school starting in fall 2010.

**Michele Guide** is entering the Ph.D. program in chemistry of materials at UC Santa Barbara. She will be working there in the lab of Quyen Nguyen this summer.

**Xiao Yu Mo** is looking for work. She has had several interviews at big pharma companies.

**Sasha Roudenko**, who was elected to  $\phi\beta\kappa$ , is starting medical school at NYU this fall.

**Jennifer Schloss** is looking for work.

This summer **Erica Shapiro** is continuing a research project with Prof. Faye McNeill in the Department of Chemical Engineering at Columbia. Erica was elected to  $\phi\beta\kappa$  last fall.

**Leena Taneja** is looking for work.

### NEWS OF FACULTY AND STAFF

**Prof. Sally Chapman** is very pleased that Prof. Rojas is department chair! She has had a busy year, teaching *General Chemistry I* to about 110 students in the fall, and *Thermodynamics and Kinetics* to a much smaller group in the spring. She moved her office during the latter half of the spring term, to make room for the renovations. She is now located in 811 Altschul, a converted hallway and locker room, for those who remember Altschul from years ago. Come visit!

Sally continues to work with a group from ACS, preparing papers reporting findings from their NSF-ADVANCE-funded chemistry department site visits. We hope that a brief report on the study will be published in the *Journal of Chemical Education*, with longer reports in the social science literature. She visited Lehigh University in the fall, giving two talks, one on her research and the other on the ADVANCE project. This spring, she visited chemistry departments at Iona and Swarthmore Colleges.

Prof. Chapman was very pleased to be honored this May with a Barnard Teaching Award. Awardees are selected by Barnard's faculty Committee on Appointments, Tenure, and Promotion based on nominations from department Chairs. Prof. Chapman was in fine company: **Lisa Gordis** (English) and **Natalie Kampen** (Art History/Women's Studies) were also recognized.

**Prof. Christian Rojas** is completing his first year as chair of the department; it has been a real learning experience, with much good advice from assistant chair Sally Chapman. Besides growing into his new administrative role, Christian published an article, "Protecting Group and Solvent Control of Stereo- and Chemoselectivity in Glucal 3-Carbamate Amidoglycosylation," in *Organic Letters*, a journal for rapid communication of results in organic chemistry, published by the American Chemical Society (Gupta, R.; Sogi, K. M.; Bernard, S. E.; Decatur, J. D.; Rojas, C. M. *Org. Lett.* **2009**, *11*, 1527–1530). Barnard co-authors were Ritu Gupta '08, Kim Sogi '07, and Sarah Bernard '06. John Decatur, the NMR lab director from Columbia, contributed NMR spectroscopic analysis. Christian also wrote two chapters for the volume *Name Reactions for Homologations Part II*, edited by J. Jack Li with a foreword by chemistry Nobel Prize winner Elias J. Corey, published by Wiley in April 2009. The chapters were on the Brook Rearrangement, which involves migration of silicon from carbon to oxygen, and on the Curtius Rearrangement, a process that involves release of molecular nitrogen and 1,2-shift of a group from carbon to nitrogen. Christian gave invited lectures at SUNY Stony Brook, where he lunched with chemistry graduate student Alex Athan '08, and at Indiana University. With Simran Buttar '09, Shenjuti Chowdhury '09, Jennifer Gillman '10, Evelyne Goné '09, and René Harris '10, he was co-author on a poster "Glycal Metallanitrenes for 2-Amino Sugar Synthesis," that Simran, Evelyne, and René presented at the 237th National Meeting of the American Chemical Society in Salt Lake City in March.

Christian and his wife, Christine, send greetings to former students, as do Sidney (just turned 10), Alice (newly 8), and Lewis (4  $\frac{3}{4}$ ). We look forward to continuing to receive news from our alumnae.

Academic year 2008-09 proved to be a momentous one for **Prof. Dina Merrer** and her group. She taught *Modern Techniques* lab in the fall and *Organic I* in the spring. Her group continued strongly, with 4 students last summer and fall, and 3 this spring. Also in the fall, we finished the computational portion of the cyclooctyne project, due in large part to the efforts of Xiao Yu Mo '09: Mo, X. Y.; Bernard, S. E.; Khrapunovich, M.; Merrer, D. C. "A Computational Study of Chlorocarbene Additions to Cyclooctyne", *J. Org. Chem.* **2008**, *73*, 8537-8544. Additionally, the group's funding from the National Science Foundation (NSF) was renewed for three more years, welcome news that came even before President Obama's economic stimulus package was announced. Last September, Dina was invited to give talks at the NSF-sponsored Workshop on Physical Organic Chemistry at Lake Tahoe and at the University of Nevada, Reno. Senior thesis students Xiao Yu Mo and Jennifer Schloss presented the group's research on dynamic control of intermolecular carbene reactions with a poster co-authored by Linda Suen '10 and Stephanie Zaleski '11 at the Salt Lake City ACS meeting in March. We will miss Xiao's and Jenn's contributions to the group and the Department. Many thanks to them for their efforts and dedication, hearty congratulations on their graduation, and best wishes in the future.

For the upcoming summer, Linda Suen and Stephanie Zaleski return to work on dihalocarbene additions to *trans*-bicyclo[6.1.0]nonanes and cyclooctyne, respectively. Linda and Stephanie will be joined by new Merrer group members Julia Tolentino '10, Marlena Sheridan '11, and Ul Weena '12, who will work on a combination of new experimental and computational projects. Congratulations to Julia for receiving a 2009-10 Howard Hughes internship. Hopes are high for a fun and productive summer and year ahead. Finally, Dina wishes to thank all past and current members of the Merrer group and chemistry and biochemistry majors for their support in helping to make her tenure case successful. She expresses her deepest gratitude to you all.

**Prof. John Magyar** had great fun this year teaching *Inorganic Chemistry* in the fall and *General Chemistry II* in the spring, both for the second time. In the fall, Harry Gray (in town to receive Columbia's Pupin Medal) visited the inorganic class for a lively discussion of his work, which everyone seemed to enjoy. Research in the Magyar lab is going well, thanks to the enthusiastic students who have worked in the group this year. The group is studying microbial metal uptake mechanisms and has been working to overexpress proteins from *Prochlorococcus marinus* (a marine cyanobacterium), *Methanocorpusculum labreanum* (an archaeon from the La Brea Tar Pits), and *Colwellia psychrerythraea* (a cold-loving bacterium from Arctic sediments). Nicole Mizrahi '10, Jenna Bass '11, and Sara Sasson '11 comprise the group this summer. Elizabeth Edwards '10 and Brisa Hurlocker '10 worked in the lab with Jenna and Nicole during the academic year. Elizabeth is spending the summer at Arkansas Children's Hospital and will rejoin the group in the fall; Brisa has moved upstairs to the Rojas group to try her hand at organic synthesis this summer. The students have all been working very hard and have made tremendous progress this year!

In December, John presented a departmental seminar at Brooklyn College on "Metals, Microbes, and Global Biogeochemical Cycles." John has also presented his group's work at several conferences in the past year, including an invited talk at the Fall ACS meeting in Philadelphia and posters at Gordon Research Conferences on Environmental Bioinorganic Chemistry, Electron Donor-Acceptor Interactions, and Inorganic Reaction Mechanisms. (He enjoyed spending a week in Galveston in March with Jackie Barton '74 and Karen Goldberg '83, who both gave talks at the inorganic mechanisms GRC.) John also co-organized two symposia at the Philadelphia ACS meeting: one in memory of Fred Basolo, the other in honor of Elizabeth Theil, the winner of the ACS Garvan-Olin Medal for women in chemistry.

**Prof. Marisa Buzzeo '01** is thrilled to be back on campus (albeit from a short distance this past year) and is enjoying her time as a research scientist in Columbia's nanocenter, learning new techniques and establishing collaborations with members of the chemistry, physics and engineering departments. She is currently developing a number of projects involving nanofabrication, DNA electrochemistry, and membrane surface chemistry, which she will continue to pursue as she builds her research program at Barnard. Marisa had great fun getting to know some of this year's seniors through the thesis seminar course and wishes them all the best of luck in their exciting adventures that lie ahead. She also helped coordinate the latest installment of the NSEC Research Experience for Undergraduates (REU) program and looks forward to hearing about these students' progress over the summer.

The start of the 8<sup>th</sup> floor construction has been particularly exciting, and Marisa is extremely grateful for how supportive and understanding the entire department has been about the preparations and impositions that have accompanied this project! She is anxious to set up her new lab space and is delighted to have three students working with her this fall: Nanette Jarenwattananon '11, Bianca Lahiji '10, and Michelle Sykes '11. Marisa is also very much looking forward to co-teaching the *Integrated Lab* with Alison Williams and SuQing Liu come September. It has been wonderful to return to the friendly and familiar halls of Altschul and Marisa can't wait to join the department officially this August!

**Dr. Alison Williams** taught *Structure, Bonding and Spectroscopy* (BC3253x) and the *Integrated Lab I* (BC3365x) in the fall and *Intermediate General Chemistry* (BC3232y) and *Integrated Lab II* (BC3368y) in the spring. Getting to know Barnard and four new (for her) courses made this a very busy year! She gave two talks about her research: "Time-Resolved UV Resonance Raman Studies of Polyriboadenylic Acid" at the 5th International SPEC 2008, an international meeting on novel applications of vibrational spectroscopy in biology and medicine, in São José de Campos in Brazil, and "Physical Studies of DNA Behavior", an invited talk at St. John's University.

**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 also taught the problem-solving class help class for the General Chemistry course. In the spring, Ms. Jebejian taught in the *Quantitative and Instrumental Techniques* course. Having as new colleagues in this course the capable collaboration of Prof. Christian Rojas and Dr. Jacob Alexander along with, as in previous years, the assistance of Mrs. Suqing Liu was quite enjoyable, and yet she missed the absence of one of the mainstay instructors of so many years, Prof. Les Lessinger. The grading of the elaborate lab reports and the long office hours kept Olympia rather busy.

Olympia and her husband feel blessed to see their son and his family and daughter and her family continue doing well and being happy. Their four grandchildren, two from each couple, are growing up fast and are a source of pride and joy for them.

**Dr. Jacob Alexander** continues to serve as co-director of the General Chemistry laboratory program. A smaller enrollment gave us some breathing room, but the addition of a new experiment meant a lot of preparation and evaluation. In the spring, Dr. Alexander enjoyed a record enrollment in our *Fundamentals of Chemistry* course to help students with a weaker background prepare for *General Chemistry* in the fall. In addition, he was thrilled to teach *Quantitative Analysis*. This summer will be busy as he and Ms. Jebejian dodge construction teams on the 8<sup>th</sup> floor while preparing the lab for the onslaught of eager General Chemistry students. In addition, preparations are underway for the fall "NanoDay in New York", a science education project Dr. J helps lead in collaboration with the Columbia Nanoscience and Engineering Center. A paper is slated for publication: "When VSEPR fails: Continuing synthetic and computational investigations of the behavior of alkaline earth metal acetylides" Guino-o, M., Alexander, J.S., McKee, M., Hope, H. and Ruhlandt-Senge, K. in *Chemistry: A*

*European Journal*. On the home front, Jacob's wife, Joanna, loves her new position as Cantor at Congregation Rodeph Torah in Marlboro, NJ, and they enjoy being Rahway, NJ residents.

**Dr. Toby Berger Holtz '67** continues to teach in the General Chemistry and Introductory Organic Chemistry laboratories. In addition, she is the Chemistry Department's Safety Officer, and she does the lab prep for the organic labs and general chemistry lecture demonstrations.

It has been a banner year for the Holtz family: the wedding of Toby's younger daughter, Miriam Malka, to Shalom Cramer at a kibbutz outside Jerusalem in December, and three new grandchildren: a granddaughter, Avigayil Sara, born September 4, 2008 to Shalom and his wife, Leebie Mallin; and two grandsons: Azaria Tzvi, born February 12, 2009 to Mordecai and his wife, Sari, and Saadia Yitzchak, born May 2, 2009 to Razelle '01 and her husband Dov Weinstein.

**SuQing Liu** and **Jean Vadakkan** work very hard in our lab courses, SuQing primarily on the 6th floor (biochemistry and integrated labs) and Jean on the 7th (organic). **Meena Rao** coordinates the *Organic I* lab in the spring and works along with other faculty in the fall organic lab.

Part-time faculty this year included veterans **Frances Feerst**, **Craig Allen**, and **Grace Lee**, and returnee **Mandy Bennett**. We are very grateful for all they do for us and our students.

### NEWS OF FORMER FACULTY

**Linda Doerrer** is finishing up her third year at Boston University and has recently published a paper with BingNa Zheng '07 as first author in *Inorganic Chemistry*. The Doerrer group is reaching a steady-state of three undergraduates at a time, with five PhD students at the moment. Linda taught *Advanced General Chemistry II* this spring to 49 students, which was challenging and stimulating. The final oral presentation projects included a rap about Seaborgium ( $Z=106$ ). She sees Annie Jiang '05 and Montana Childress '05 regularly at MIT seminars. Outside work, Linda continues to enjoy biking and running as weather permits, and she has recently been reading more about geology. Her role as Aunt Linda continues to expand as her niece and nephew use her for everything that their parents are worn out by. She and Alexandra will spend a holiday in Sweden at a self-catering cabin, where one apparently cannot avoid catching fish at least 2' long.

**Shelley Weinstock** enjoys working for a start-up company in NJ with a childhood friend. She wrote last summer "My kids and Paul are great. Paul has a book coming out in August and working on a documentary about a Newark Principal. Max will be applying to college in the fall and Kate will be starting high school!" We subsequently learned that Max is an incoming freshman at Columbia.

### ALUMNAE NEWS

#### *Class of 2008*

We recently wrote an e-mail to last year's graduates asking for an update. Here are some replies:

**Alex Athan:** "I just completed my first year in the chemistry PhD program at Stony Brook. I have been accepted into Professor Iwao Ojima's lab, and I will be starting organometallic research this summer.

**Christina Chu:** "I just finished my first year at optometry school [at SUNY]. In May, I went to Ft. Lauderdale for the Association for Research in Vision and Ophthalmology meeting because my project was accepted in the poster presentation. During the summer I will be continuing clinical research and earning a Master in Vision Science along with my Doctor of Optometry."

**Pali Jen:** "I'm finishing up my year of work as a development fellow for a Catholic elementary school in East Harlem. I'll travel a bit and spend some time at the Painted Turtle Camp over the summer and will be leaving NYC for San Francisco as I start med school at UCSF this fall."

**Ayelet Spitzer:** “This year I am doing genetic research on obesity at the NIH in Bethesda. It is enjoyable as I am making some progress with my research. Next year I will be back in NY for med school at NYCOM.”

**Denise Napolitano:** “Since September I've been working in the NYPD's Forensic Investigations Division. I'm having a wonderful time and I'm learning so much about forensic analysis. I especially enjoy the instrumental analysis that we do, such as identifying drugs using GC/MS and comparing fibers using UV-vis and IR spectroscopy. I'm really enjoying this experience and I'm glad I have the opportunity to work here.”

**Dara Wilensky:** “My fellowship this year has been fantastic-- my job has exposed me to the city's most disenfranchised population imaginable (homeless mentally ill adults), and I really feel like I'm making a difference in my clients' lives. I'm starting with my med school applications now, so I've got one more year of freedom... which is great because the Urban Justice Center [UJC] has hired me as a real employee for August and onwards (after my fellowship ends). I'll be the health care advocacy coordinator for the Mental Health Project at UJC.”

**Lauren Jain '08** will be attending dental school in the fall, but last we heard she was still deciding between Stony Brook and Columbia, both fine programs.

**Yetta Levine '08** stopped by for a visit in May. She has been working in a plastic surgeon's office this year and will start dental school at UMDNJ in the fall.

**Emily Miller '08** has been working at the Hospital for Special Surgery in Manhattan as a clinical research coordinator, recruiting patients for a Lupus and Antiphospholipid Syndrome registry. This has given her a great opportunity to observe hospital-based clinical research, and has confirmed her decision to pursue an MD. She is preparing medical school applications, aiming to start in fall 2010. She continues to dance, and has danced professionally since graduation.

**Sonia Ortiz '08** is a PhD student in chemistry at Northwestern. Her research is supervised jointly by SonBin Nguyen and Joseph Hupp.

**Lindsay Repka '08**, a PhD student in chemistry at Caltech, has joined the lab of Sarah Reisman.

**Kaitlyn Suski '08** is a chemistry PhD student at UCSD, working in Kimberly Prather's lab.

**Lhamo Tsering '08** is a laboratory technician in the biology department at LaGuardia Community College. She hopes to start taking courses at CUNY this academic year, working towards her Master's degree in biochemistry.

**Megan Verma '08** travelled to Japan after graduation. On her return, she started work in a law firm in the city, planning to apply to law school.

#### *Classes of 2000-2007*

**Chantel Nicolas '07** was working as an associate chemist at Cosmetic Essence, Inc. in Holmdel, NJ and as a graduate student at Fairleigh Dickinson. She presented a poster, "Regulation of Collagen, Elastin and Heat Shock Proteins by Caffeic Acid," at the regional ACS symposium at FDU. She has recently relocated to Atlanta, GA.

**Ritu Gupta '07** tells us that a paper “Enantioselective Total Synthesis of (-)-Napyradiomycin A1 via Asymmetric Chlorination of an Isolated Olefin” was published in *JACS*. Ritu is a Ph.D. student in Scott Snyder's lab at Columbia.

**Rebecca Goldstein '07** has been working in a pathology research lab at CUMC since graduation. The work in the lab looks at molecular mechanisms behind Alzheimer's disease and stroke. Rebecca starts in the PhD program in pharmacology at Weill-Cornell this fall.

**Bing Na Zheng '07** is an Analytic Core Lab Technician at the Institute for Clinical and Translational Research at Albert Einstein College of Medicine.

**Luna Alammar '06** writes "I am finishing up my second year as a graduate student in the department of Biochemistry, Cellular and Molecular Biology at Johns Hopkins Medical School. I am in Dr. Janice Clements' lab studying the innate immune response to HIV infection in the brain. I'm enjoying my time very much here and am having a lot of fun."

**Yevginiya Monisova '06** wrote in March: "I am well into my first year of grad school in the CMU-Pitt joint PhD program in Computational Biology. I have two advisers: a computational/machine learning expert, Dr. Su-In Lee, and a Biological Sciences Professor Javier Lopez, both from Carnegie Mellon. The general topics of my research are nonsense mediated decay and how it connects to alternative splicing, as well as recursive alternative splicing, the specialty of Lopez's lab. Although all my work right now is computational, I will be doing wet-lab experiments in the future. The course work this semester is challenging. Today, in Cell and Systems modeling lecture we were discussing integration methods and Oregonator came up". [This model chemical oscillator is discussed in Chemistry BC3252y.]

Dartmouth medical student **Aimée Peck '06** "brought lights and cameras to Tanzania, to film the actions of the selfless villagers who are key players in a global battle against a disease called river blindness. She hopes to shine klieg lights on an epidemic that, before effective treatment was available, infected up to 60% of people in some areas and blinded up to 10% of those infected." [quoted from a Dartmouth Medical Newsletter]

**Martha Low '05** received her DVM from the veterinary school at Illinois this May. She will be interning at a veterinary clinic in Langhorne, PA. She plans to pursue veterinary ophthalmology.

**Pam Cole '05**, in the Nutrition and Applied Physiology Master's program at Teachers College, is very enthusiastic about health science journalism and media. She has a monthly column in *Fight! Magazine*, and has worked with Joy Bauer, the nutritionist for the *Today Show*.

**Diana Huang '05** has graduated from SUNY-Buffalo School of Medicine and will begin her residency in OB/GYN at Beth Israel Medical Center in Manhattan this summer.

PhD students at Northwestern find time to do more than science. **Roxanne Atienza '03**, in the Scheidt group, was included in the blog Sexy Science (<http://sexyscience.blogspot.com>); see Women of Science, Set 1. (In spite of the name, this site shows successful women in science in a positive light.) She is pictured by her fume hood. Way to go, Roxy!

**Ruo Hong Zhai '03** is finishing dental school at NYU. We were glad to see her in April 2008 at the Barnard party celebrating Quandra Prettyman and the Africana Studies department.

**Elnaz Menhaji-Klotz '02** received her PhD in chemistry from Yale in 2008, working in the group of John Wood. She is now a postdoc at Columbia in Prof. Tristan Lambert's group.

**Charli Long '00** visited us in November. She enjoys her work in animal drug evaluation with the FDA in Maryland. Her job involves some travelling to the Midwest.

**Crystal Suri '00** graduated from Mount Sinai School of Medicine with a Ph.D. in Biomedical Sciences in 2005. Since then, she has been working as a patent agent the a law firm Jones Day and is attending Fordham Law School in the evenings with an expected graduation of May 2010.

**Sarah Tully '00** is a postdoc at Scripps in Ben Cravatt's lab. She says that she is learning a lot. She is funded by a Damon Runyon Fellowship. Congratulations, Sarah.

*Classes of the 1990's and 1980's*

**Jennifer Montgomery '99** wrote recently: "I finally finished the USC/Caltech MD/PhD program this May. I received my PhD from Caltech in 2007 with my thesis titled "The effects of behavioral stress and endothelin receptor antagonists on cancer". Then I returned to USC to finish off the last two years of med school. I spent this fall traveling around the country interviewing for a radiology residency position. In March, my husband, son and I found out we would be moving to Ohio. I will begin my radiology training at University Hospitals Case Medical Center in Cleveland, OH starting July 2010. Radiology residency requires a "preliminary" year in either surgery or medicine before radiology training. I opted for medicine and will be spending this year at Summa in Akron, OH. I have mixed feelings about returning home to Ohio although I am very happy about the programs in which I will be training. My mother is also thrilled to have her grandson so close. We just completed the move from Pasadena, CA to Akron, OH last week and things are finally starting to settle down." Jennifer met her husband Fraser at Caltech where he was a post-doc; their son, Ewan, just turned 3.

**Ogei Yar '94**, a physician at St. Stephen's Hospital in Newark, is working on developing enhanced cardiac magnetic resonance imaging. Ogei had done research at Barnard with Prof. Lessinger, kept in touch with him, and attended his memorial this spring.

**Linda Liou De Jesus '93** is the Global Strategic Program Manager in the Life Sciences and Chemical Analysis Division at Agilent Technologies.

**Jen Chin Chapman '90** is a patent attorney with Bristol-Myers Squibb.

**Laural Boone '88**, also an attorney, recently moved to Lovells, a UK law firm with a new NYC intellectual property practice. Prof. Chapman has run into Laurel, sometimes with her family, on upper Broadway a couple of times this year.

**Yasmin Khakoo '86**, a physician at Memorial Sloan-Kettering, is a pediatric neurologist with expertise in diagnosing and treating the neurologic complications of cancer.

**Polly Kanganis '84** was a Spanish major at Barnard, with minors in both Chemistry and English. She enjoys keeping up with our department though the newsletter. She sent us an update: "After Barnard, I went on to earn a M.S. in Clinical Nutrition at the College of Physicians and Surgeons at Columbia, where I was introduced to some amazing researchers and physicians in the field of cholesterol metabolism. I eventually worked in Dr. DeWitt Goodman's lab where some of the best research in mevalonic acid, and other precursors of our current day Mevacors, Lipitors, etc. took place. My training at Barnard was excellent preparation for my research work with Dr. Goodman's group. Eventually, I attended the College of Physicians and Surgeons, and earned my M.D. in 1990. I completed a residency in Obstetrics and Gynecology at Columbia-Presbyterian and have been in private practice since 1994. For the past nine years I have been running a solo practice, now exclusively focusing on GYN."

We enjoyed reading about the research of **Jean Greenberg '83** in the April 6 *Chemical and Engineering News*. Her group has shown how plants make and use azelaic acid, a C<sub>9</sub> dicarboxylic acid, as a messenger for defense. Jean is a faculty member at the University of Chicago.

**Robin Hochberg Louie '81** stopped by for a visit in January. After a career in business and raising a family, she is exploring the possibility of returning to chemistry, possibly as a middle school science teacher.

*Classes before 1980*

**Lauren Plante '79** writes: "After Barnard I went to medical school (Albert Einstein), then did a couple of residencies, got a couple of board certifications, and went to Hopkins for a master's degree in public health. Currently I'm Associate Professor of obstetrics and gynecology plus anesthesiology at Thomas Jefferson University in Philadelphia...my clinical practice is in maternal-fetal medicine and critical care obstetrics. Two cats, one dog, two kids, living in Bala-Cynwyd, PA, but looking to move west again.

**Susan LaFlamme '77** is a Professor at Albany Medical College. Her lab investigates molecular mechanisms governing integrin-mediated adhesion and adhesion-dependent processes.

We received an e-mail from **Pearl Steinmetz-Herskovitz '75** last June. She reports: "My family and I have been living in Israel for the past 22 years. 3½ years ago we moved to the city of Rehovot, where I am Director of the CT Unit at Kaplan Hospital. My interests are CT of the genitourinary system and of the chest. I have published several articles with a nephrology colleague on the Functional Surface Area of the Peritoneal Membrane in *The Journal of Nephrology Society*, and presented papers at several international conferences.

My husband works in Occupational Safety and Health in a civilian capacity for the Israeli army. Our oldest son, Yaakov is finishing his B.A. in Philosophy at Hebrew University, and intends to continue with a Masters. Our second son, Netanel is now 23. In 2001, when he was 16, he was injured in a terrorist attack (suicide bomber). He has overcome his injuries and is very strong emotionally. He recently finished his army service and is pursuing a B.S. in Occupational Therapy at Haifa University. Our youngest child (a daughter), Re'ut (= comradeship), is 11 and finishing 5th grade. The politics / problems in this beautiful country are often upsetting (especially when one thinks one could do it better in a different way), but it's wonderful living here, contributing, and hoping to make a difference in this complicated world."

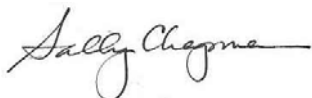
**Jackie Barton '74** becomes Chair of the Division of Chemistry and Chemical Engineering at Caltech on July 1. A Caltech website says the Provost Stolper and President Chameau "are confident that Jackie has the judgment and energy to lead the division creatively and effectively, and that she will be an outstanding advocate for the division and for the Institute as a whole."

**Susan Krown '67**, a medical oncologist at Memorial Sloan-Kettering, specializes in the treatment of malignant melanoma and the malignancies associated with AIDS and HIV infection.

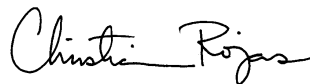
### CLOSING REMARKS

As always, we are grateful for your continuing support of Barnard and the department. Contributions to the scholarship fund in memory of Les Lessinger are most welcome, along with contributions to the Bernice G. Segal Fund which supports summer research students and the Edward J. King Fund which supports young faculty.

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)

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**2009 Chemistry and Biochemistry Graduates**

Leena Taneja, Evelyne Goné, Simran Buttar, Nathalie Celcis, Monnica Chan  
Michele Guide, Sasha Roudenko, Erica Shapiro, Shenjuti Chowdhury  
not shown: Jennifer Schloss and Xiao Yu Mo