BARNARD CHEMISTRY DEPARTMENT NEWSLETTER

June 2004

Greetings to chemistry and biochemistry alumnae and friends of the department. The semester is over, grades have been submitted, and the class of 2004 has been launched into the world. It is time to reflect on the academic year and bring you up to date on the college, the department, the faculty, the students, and those alumnae about whom we have recent news.

NEWS OF THE COLLEGE AND UNIVERSITY

Columbia University has been celebrating its 250th anniversary this year, and Barnard has enjoyed participating in the festivities. Prof. Robert McCaughey of the Barnard history department wrote the official history: *Stand Columbia: A History of Columbia University*. We recommend it: it is a fascinating and enjoyable book. Symposia and panels have been part of the celebration. One interesting panel in Low Library this spring concerned the history of diversity in the university. Prof. Rosalind Rosenberg, also of Barnard's history department, has been studying this topic and was the main speaker. One theme that emerged from her presentation was the important role that the two affiliated institutions, Barnard College and Teachers College, played in bringing to Columbia in the early 20th century a more diverse faculty and student body than was present on most ivy league campuses. Prof. Rosenberg gave a related presentation at the recent Barnard alumnae reunion weekend.

Barnard and Columbia are both thriving. Applications are high, so the quality of the admitted student bodies is superb. Anyone who visits would observe that both campuses are in better repair and overall appearance than in several decades. Some of this reflects and is reflected in the general economic growth in the neighborhood. Gentrification is never without its downside, but a cleaner and safer neighborhood has real virtues. We watch with interest the extensive discussions in the university and surrounding community about President Bollinger's initiatives for growth. His bold dream, as we understand it, is an extended campus to the north, into the largely commercial and industrial area between Broadway and the Hudson.

Housing in Manhattan is an increasingly precious commodity. Construction has begun on Cathedral Gardens, at 110th Street and Manhattan Avenue, which includes housing for Barnard faculty and students. Occupancy is slated for the fall of 2005. Planning continues for the Nexus project, the next major on-campus construction. Designed to replace McIntosh Center, this new building will be multi-purpose: library, classrooms, and student center. The college has so many critical space needs that sorting them out and making choices will probably continue for some time. In the meantime, fundraising is well under way.

Tenure is a topic under intense scrutiny at the college. The issues are many and complex. The tenure system has problems everywhere, but some are unique to Barnard. Our affiliation with Columbia has meant that, since 1973, all Barnard tenure decisions go for final review to a university *ad hoc* committee. In principle, and sometimes in practice, the different circumstances at Barnard are taken into account, but the safeguards are weak. Excellent teacher-scholars with strong records have been denied tenure. Women make it through the ranks to tenure at a significantly lower rate than men. A special faculty committee spent over a year studying this issue. They have presented a report with a number of recommendations; many have already been implemented. But the system continues to take its toll: cell biologist Janet Larkin and biochemist Ann Shinnar represent two recent tough losses.

Barnard has created a new Science Advisory Council. A small group of distinguished alumnae will come to campus for occasional meetings to learn about the college and to give advice to the administration about issues related to science. The first meeting was in April. The group included practicing scientists and physicians. Among the chemistry alumnae present were **Dr. Thelma Warshaw '44**, **Dr. Lila Wallis '47**, **Dr. Rochelle Hirschhorn '53**, **Prof. Helen Berman '64**, **Dr. Lucy Hsu Chang '77**, and **Dr. Alice Reicin '82. Prof. Jackie Barton '74** participated by telephone. The Council heard two panels of faculty and students: one on undergraduate research at Barnard (Prof. **Christian Rojas** and **Bridget Marcellino '05** were panelists) and the other on interdisciplinary studies. The Council, chaired by **Dr. Alison Estabrook**, made a number of strong recommendations. Among their ideas was an alumnae mentoring program for Barnard students. We are pleased that these very busy women are willing to take the time to get involved with strengthening science at Barnard. Several have made also significant contributions to the organic chemistry laboratory renovation. Thanks!

The college has hosted a number of very interesting panels this year. In celebration of Women's History Month in March, Carol Mosely Braun, Eleanor Clift, and Marie Wilson joined President Judith Shapiro to discuss "What will it take for a Woman to Win the White House?"

Several alumnae, including chemistry majors **Thalia Robakis '99** and **Hyon Ju Park '03** participated in a panel on "Women in Medical and Dental School" in March. Thalia is in her fourth year in the MD/PhD program at Columbia, and Hyon Ju is in her first year at Mt. Sinai.

NEWS OF THE DEPARTMENT

Our really exciting news is that complete renovation of the organic chemistry laboratory space has begun! Extensive planning has gone on throughout the year, and we are thrilled with the plans. The architects are Mitchell/Giurgola, and the construction firm Caldwell and Walsh. The major change, and what makes this such an ambitious project, is the addition of enough fume hoods so each of the 24 students in a class can work in a hood, as is essential with modern safety standards. The renovated labs will be clean and fresh and better laid out to accommodate modern instrumentation. The northeast corner of the floor, once bathrooms and a locker room, becomes part of the integrated organic chemistry teaching and research space. As recently as early April, we thought the project was at least a year off. But on April 14 we learned that, thanks to an anonymous million dollar gift, the project would begin this summer. We have emptied the lab completely; Meena Rao and Toby Holtz in particular have worked tirelessly. The renovation is scheduled to be completed at the end of the calendar year, in time for the large Organic I lab course to begin in January 2005. In the meantime, the smaller and more advanced fall organic lab course, "Modern Techniques in Organic Chemistry", will use lab space borrowed from the Environmental Science department. Environmental Science is also kindly lending laboratory space for the summer research of organic Profs. Rojas and Merrer and their students.

Raising the funds for this ambitious project has been a major focus of the college's development office. Foundations, corporations, and individuals have already contributed more than two million dollars. Alumnae have been generous both with their money and with their time in helping the fundraising effort. Among the generous donors is **Dr. Bernadette Chan '80.** But it is definitely not too late to contribute.

A smaller but also significant construction project is happening on the 8th floor. With some regret, we have agreed to the decommissioning of the chemistry library. The simple fact is that, with journals on-line, extensive shelf space for bound journals is no longer a good use for precious real estate. Our longer-term plan for this space (we hope not too long) is to create two small teaching and research laboratories. When Altschul was built, the Chemistry department

had only four Professors, so only four faculty research labs were built. We now have 6.5 on-line faculty (i.e. tenured or tenure track); one half position is shared with Environmental Science. Right now, the junior faculty have research labs, but the senior faculty (Lessinger and Chapman) do not. Chapman's research is computational, while Lessinger borrows research space from teaching labs: not a satisfactory arrangement. The department has been allocated two additional faculty lines, but these cannot be filled until the space problem is solved. As pressing as this problem is, it follows the organic renovation in our priorities.

In the meantime, the chemistry library space has been divided into two rooms. The north room goes temporarily into the general college classroom stock --- a severe need, particularly since fewer and fewer classes meet in the early morning and on Fridays. The south room will continue to serve some of the functions now served by the library: individual study, group study, laboratory notebook grading, and meetings with small groups of students. Some of the book collection has been moved into the regular collection in Barnard's Lehman Library. Some other books will continue to be shelved informally in the new reading and study room, but will no longer be part of the official library collection. After we had sorted the books, many were still in need of a home. It took just one e-mail to Columbia chemistry graduate students: a steady stream of scavengers came and rescued many of the discards.

The tradition continues of holding departmental luncheons each semester with an outside speaker. In the fall, the speaker was **Dr. Chris Reddy** from Woods Hole Oceanographic Institute, who talked about "A new look at two old oil spills" off Cape Cod. This spring, we were particularly pleased to welcome back one of our own, **Dorothy Beckett '80**, Professor of biochemistry at the University of Maryland (College Park). She spoke on "The Regulation of Protein Function in a Biological Switch". Dorothy is fearless in seeking answers to basic questions, deploying an impressive range of sophisticated physical tools. Thank you, Dorothy, for a fascinating and inspirational talk.

A brand new course was offered this spring: Advanced Organic Chemistry (BC 3280), developed and taught by Profs. Rojas and Merrer together. Professor Merrer focused on principles of physical organic chemistry, including structure, bonding, and determination of mechanism. Prof. Rojas emphasized topics in synthesis, including methods and mechanisms in organometallic chemistry, concerted cycloadditions, and stereoselective additions to the carbonyl group. Nine enthusiastic and talented Barnard students completed the course.

A group of eight faculty and students attended the annual Nichols Medal Symposium and Banquet. This year's medalist was **Prof. Allen J. Bard** of the University of Texas. The symposium asked the question "So what's new in electrochemistry (and why should we care)?" A good time was had by all. The back of the newsletter shows a picture taken at the symposium.

We are always pleased to announce the winners of various student prizes and awards.

Rachel Steinman '06 won a NSEP Boren Undergraduate Scholarship. Dean Janet Alperstein describes this as "the most prestigious national study abroad scholarship". Rachel will spend Spring 2005 in the People's Republic of China. Coordinating a science major with a semester or more abroad takes considerable planning, but a couple of students each year have managed to do so; they find the experience tremendously rewarding.

College-wide Prizes

Gurtrude Bunger Zufall prize: premedical student ending her junior year **Annie Jiang '05**

Departmental Prizes

CRC Prize for excellence in First Year Chemistry	**Elizabeth Ann Alf '07**
ACS-PMSE Prize for excellence in Organic Chemistry	**Marina Khrapunovich '05**
ACS Prize for excellence in Analytical chemistry	**Annie Jiang '05**
Marie Reimer Prize: junior major	Chemistry: **Montana Childress '05**
	Biochemistry: **Lauren Tal '05**
American Institute of Chemists Prize: outstanding senior	**Leah Roberts '04**
Ira and John Kauderer Prize: premedical student majoring in chemistry	**Sonal Patel '04**
Bernice G. Segal Summer Internships	**Diane Zhong '06, Marina Khrapunovich '06**
Howard Hughes Medical Institute Internships	**Annie Jiang '05, Bridget Marcellino '05**

Thanks to the Hughes and Segal internships as well as individual faculty grants, fourteen students are working with five faculty members doing research in the department this summer: **Diane Zhong '06** with Prof. Lessinger, **Ritu Gupta '06**, **Katherine Nguyen '05** and **Louisa Morrison '04** with Prof. Kujawinski, **Alex Severino '05**, **Rena Azulay '05**, and **Bridget Marcellino '05** with Prof. Rojas, **Marina Khrapunovich '06** and **Diana Huang '05** with Prof. Merrer, and **Montana Childress '05**, **Jessica Eisenberg '07**, **Rebecca Hayoun '06**, **Annie Jiang '05**, and **Zeah Venitelli '06** with Prof. Doerrer. We may be juggling space and working around construction projects, but lots of good science is happening too.

A small class of senior chemistry and biochemistry students graduated this year. Three wrote senior theses. The topics are listed below.

Student	Advisor	Topic
Sonal Patel	Linda Doerrer	Towards Complexes with Metallophilic Interactions between Group 11 Metals
Leah Roberts	Ann Shinnar	Squalamine Biosynthesis: Subcellular Localization in Spiny Dogfish Liver
Kiley White	Colin Nuckolls (Columbia)	Hydrogen Bonding Enforced Stacking of Triphenylene Trisamides

Not all plans of this year's class are firm, but here is what we know now:

Amber Iqbal and **Leah Roberts** are both entering the Master's program in nutrition at Columbia. Both will probably apply to medical school sometime in the future. Leah was honored by the department of Athletics this spring as a scholar-athlete. Achieving a GPA of 4.0 or better while rowing on the varsity crew is a major accomplishment!

Ruth Kang will be applying to medical school in a year.

Sonal Patel is entering medical school this fall, probably at the NMDNJ.

Louisa Morrison continues her research in Prof. Kujawinski's lab here at Barnard this summer, while she also works as a HEOP tutor. Late in the summer, Louisa will move to Woods Hole where she will continue working with Dr. Kujawinski.

Kiley White is hoping to get a little bit of traveling in before looking for a laboratory job.

Riffat Rahman graduated in January 2004. We know that she is very busy with her small son, but we don't know if she is also working outside the home.

We don't know what **Karen Chang** is doing. When you receive this newsletter, Karen, fill us in!

NEWS OF THE FACULTY

Professor Leslie Lessinger was kept very busy this past year, not only teaching his regular courses in quantum chemistry, the first semester of integrated laboratory, and the Centennial Scholars foundation seminar and senior symposium, which he enjoys very much, but also with an unusual amount of administrative work as Chair of the Department, which he enjoys somewhat less.

The denial of tenure to Dr. Shinnar by the Columbia *ad hoc* Committee meant that a search for a tenure-track biochemist had to be run, and the unfortunate failure of that search meant that a search for a one-year term Assistant Professor followed on that. We were happy to find a very good person, **Dr. Nasreen Haque**, to fill that post. Dr. Dina Merrer has now finished her third year, and Dr. Lessinger had to oversee her third year review, mandated by the college. We are very pleased that **Dr. Chuck Doubleday**, who has taught the General Studies Organic Chemistry sequence at Columbia for many years, will be teaching the organic lectures at Barnard this coming year. Dr. Lessinger also hired a new laboratory instructor, **Steve Dougherty**, who is very enthusiastic, and works in the introductory and organic laboratories. Finally, Dr. Lessinger is in charge of preparing the tenure case for Assistant Professor Christian Rojas.

In addition to personnel matters, Prof. Lessinger had to play a major role in all the various construction projects, both actual and proposed, going on in the department: the sixth floor construction of two small offices for Prof. Doerrer's group and the rearrangement of the teaching laboratory instrument room; the plans for the total renovation of the organic teaching and one research laboratory space on the seventh floor, which is now under way; and the conversion of the eighth floor library space. In addition, Prof. Lessinger keeps before the eyes of the administration our remaining space needs: upgrades of the personal research laboratories of Profs. Rojas and Merrer, especially the hoods; conversion of one eighth floor bathroom to a faculty laboratory space adjacent to Prof. Lessinger's office, 811. We have also advocated putting in toilets on six and eight in the space now occupied by the useless dumbwaiter. The department has worked heroically together on all of these projects, and when they are all finished we should look much more up to date, spacious, and well appointed than we do now.

Prof. Sally Chapman attended the biennial conference *The Dynamics of Molecular Collisions* at Lake Tahoe last July. She presented recent research with undergraduate co-authors **Kiryn Haslinger '02** and **Cortney Higgins** (Hendrix College 2001): "Energy Transfer in Collisions of Pyrazine with Diatomics". On sabbatical leave this fall, Prof. Chapman stayed at Barnard to finish some work. One paper, co-authored by Cortney Higgins, "Classical trajectory Study of Energy Transfer in Pyrazine-CO Collisions", is in press in *The Journal of Physical Chemistry A*. A second paper, this one with Kiryn Haslinger, is still in the works.

Prof. Chapman spends increasing amounts of time advocating for academic women chemists. She continues to enjoy working with COACh, a group she considers her "uppity women chemist friends". If you don't know about COACh, please visit the web at **http://coach.uoregon.edu**. The workshops are a great success! In addition, she has joined another group of uppity women, part of the PROGRESS program at ACS. The project, "Strengthening our Academic Foundations", won NSF ADVANCE funding; Prof. Chapman is the PI. This project includes site visits to 35 research-intensive chemistry and chemical engineering departments to assess the climate for women, followed by analysis and reports and symposia with recommendations. The visiting phase is about a third complete; the results of the interviews are sobering. We may have come a long way, but there is still a long way to go.

Prof. Chapman becomes Chair of Chemistry this July. This is her fourth time as Chair, and she hopes that tenuring some of our talented younger faculty will enable it to be her last.

Prof. Christian Rojas's teaching included two new courses this year. The Advanced Organic Course, described earlier, was an entirely new offering. In addition, this spring Rojas taught Intermediate General Chemistry (BC 3232) for the first time. As you may recall, Intermediate General Chemistry is the final chemistry course in the pre-health curriculum, with excellent students and a substantial enrollment. Two students worked on research projects with Prof. Rojas this year: **Bridget Marcellino** and **Rena Azulay**, both juniors.

Prof. Rojas was awarded a three-year competing continuation grant on "Amidoglycosylation Reactions of Glycal Metallanitrenes" from the NIH, National Institute for Allergies and Infectious Diseases ($199,875, including facilities and administration costs). He presented his group's work on nitrogen atom transfer methodology for amino sugar synthesis on a lecture tour that included talks at the departments of chemistry at Stanford, Princeton, the University of Maryland, New York University, and at the Eli Lilly Research Laboratories in Indianapolis. In addition, Rojas served as a temporary member on the Medicinal Chemistry Study Section at the NIH in October. Prof Rojas will be at the ACS meeting in Philadelphia, and encourages alumnae to stop by and say hello.

Prof. Linda Doerrer happily returned to Barnard from her special Assistant Professor Leave to take up the challenge of teaching General Chemistry BC1601 in the fall. Following extensive discussions with Profs. Chapman and Lessinger, the decision was made to break this course into two courses, both to be taught by Dr. Doerrer this year. This coming spring we will first offer BC1002, "Molecules and Matter", designed for students with little or no background in chemistry. Students completing this course will be eligible to go on to BC2001: General Chemistry, which will be largely the same as the old BC1601. Initially 1002 will not have a lab component, but we hope to add one in the future.

These changes have been made possible largely by the presence of **Dr. David Millar,** from Glasgow Caledonian University, who is a postdoc in Dr. Doerrer's lab. In addition to doing research with her, he worked in one BC1601 lab section and taught BC3254 this past spring. With his background in chemical engineering and ever-cheerful friendly outgoing demeanor, Dr. Millar is a terrific addition to the department. The Doerrer group research continues to move forward, with a substantial manuscript on the $[M(OAr)_4]^{2-}$ chemistry submitted this spring, and two more papers likely to go out this summer. Dr. Doerrer gave a talk, "Homoleptic Late Transition Metal Phenolate Complexes: Syntheses and Expansions", at the University of Delaware in February, and was an invited speaker in ACS President Charles Casey's Academic Employment Initiative (AEI) at the ACS meeting in March in Anaheim. She will also be at the ACS meeting in Philadelphia in August 2004. Stop by and say hi!

Prof. Dina Merrer taught Organic II and I lectures in the fall and spring semesters, respectively. Also, together with Prof. Christian Rojas, she launched a brand new course, Advanced Organic Chemistry, in the spring. On the research front, **Diana Huang '05** and **Marina Khrapunovich '06** continued their research from Summer 2003 in the Merrer lab on the mechanisms and kinetics of reactions of carbenes with strained benzannelated rings. They were joined by **Lillian Seu '05 and Ilana Vinograd '04** during the academic year. In March, Diana, Marina, and Lillian accompanied Dina to the ACS meeting in Anaheim to present their research. Lillian's travel was funded in part by an award to her from the ACS Division of Organic Chemistry. Dina also ventured outside the carbene world to collaborate with Prof. Ann Shinnar and **Sevan Ozcetinkaya '06** on an investigation of the UV spectra of haloindoles (*Tetrahedron*

Lett. **2004**, *45*, 4899-4902). She looks forward to her Special Assistant Professor Leave this coming academic year, spending some time in the computational lab of Prof. Barry Carpenter at Cornell, and toiling away in Altschul, enjoying, we hope, the newly renovated organic facilities.

Prof Ann E. Shinnar has presented her research in posters at two national meetings. At the ACS National Meeting in NY in September, she presented "Biosynthesis of squalamine and related antimicrobial aminosterols in cartilaginous fish liver," with **Eleanor Allen '03**, **Christine Musich '02**, **Joan Shu '01**, **Rayna Goldstein '03**, Hege Willemsen and Yasuhiro Itagaki. At the American Society for Biochemistry and Molecular Biology in Boston in June the topic was "Bromotryptophan: Biological role in protease resistance of hagfish cathelicidin antimicrobial peptides," co-authored with Kathryn L. Butler (née **Katie Curran '02**), and **Hyon Ju Park '03**.

Prof. Shinnar has had two papers published recently: "Hagfish intestinal antimicrobial peptides are ancient cathelicidins," in *Peptides* 24: 1655 (2003), with T. Uzzell, E. Stolzenberg, and M. Zasloff, and "Experimental and theoretical ultraviolet spectra of haloindoles," in *Tetrahedron Letters* 45(25): 4899 (2004) with Dina C. Merrer and **Sevan Ozcetinkaya '06**.

Leaving Barnard at the end of June, Prof. Shinnar begins a new position as Associate Professor of Chemistry at Lander College, a division of Touro College in Queens. Her address beginning September 2004 will be Chemistry Department, 75-31 150th St., Flushing, NY 11367.

We are very sorry to report that **Prof. Elizabeth Kujawinski** is also leaving Barnard. While Prof. Kujawinski's formal appointment was in the Environmental Science department, half of her teaching in was in Chemistry. She has done an excellent job teaching General Chemistry II lecture and laboratory as well as directing undergraduate research, studying how bacteria process dissolved organic matter in river waters. She was recently awarded an NSF Career Award. Dr. Kujawinski and her husband (they were married very recently) were both offered excellent positions at Woods Hole Oceanographic Institute, and Barnard and Columbia were not able to put together a comparable package. We thank Liz for all she has done for the department, and wish her the very best in her new position.

Prof. Kujawinski presented a paper at the American Geophysical Union meeting in San Francisco in December: "The link between microbial community composition and organic matter transformations in a laboratory system". Among her co-authors was Chemistry major **Louisa Morrison '04**.

Prof. Joanne Goodey Pellois and her husband Jean-Philippe became proud parents of a son, Maxence Peter Pellois, to be called Max, on March 26, 2004. Dr. Pellois taught Chemistry BC3338 and 3340 (Quant Lab) this spring; she was in the classroom and lab through spring break and did an excellent job of coordinating the job of replacing her thereafter. Olympia Jebejian and SuQing Liu are also to be commended for keeping things going smoothly.

Mrs. Olympia Jebejian continued to work as the Director of the General Chemistry laboratories. In the fall semester, accommodating all the students in the five laboratory sections of the General Chemistry I laboratories and setting up the experiments kept her very busy. She also supervised the grading of all the laboratory reports written in a rather detailed scientific format. Additionally, she oversaw the teaching in all the laboratory sections besides teaching in the laboratory. During the spring semester, Mrs. Jebejian was in charge of the overall preparation of the General Chemistry II and the Quantitative and Instrumental Techniques Chemistry laboratories. She also taught in the latter course with Prof. **Joanna Pellois** and Mrs. **Su Qing**

Liu. Mrs. Jebejian acts as a teaching mentor for new faculty in her unassuming, subtle, but very effective style. Her long experience and knowledge of individual students are invaluable to us.

In the summer Mrs. Jebejian continues to teach chemistry in the Higher Education Opportunity Program (HEOP). Students in this program, participate in a rigorous six weeks of class work in preparation for the fall semester when they start Barnard as first year students. Olympia Jebejian feels very rewarded when some of these students come back and during the academic year take the General Chemistry course and do well. On a personal note, Mrs Jebejian, is very happy to see both her son, Sarkis and daughter Maria (BC'95) happily married. Mrs. Jebejian has just welcomed her third grandson to the world.

Laboratory Associate **Stanley Shapiro**, a veteran high school teacher, gave three workshops on improving science literacy at the National Science Teachers Convention, in Atlanta in April 2004. In November, Laboratory Associate **Bob Black** was awarded a Patent (#6652643) related to improving the resistance of cements to the passage of water.

NEWS OF ALUMNAE

Classes of 2000-2003

A year ago we didn't have information about the plans of several members of the class of 2003. Here are some updates: **Abby Smenton** works at Merck. **Kate Zelenova** is a research assistant at Rockefeller University. **Hyon Ju Park** is in medical school at Mt. Sinai.

Sahar Saddoughi '03 writes: "My experiences here at GE have helpful me solidify the fact that I want to go into medical research, and hopefully one day teach. I am hoping that a combined program [MD/PhD] will give me the best education to make my dreams a reality."

Ruo Hong Zhai '03 worked as a lab technician at the Rogosin Institute, and is now studying for her Master's in Chemistry at Sacred Heart University. Ruo will probably continue to Dental School when she completes her M.S.

Monique Bryan '02 writes: "My experience performing research at the Albert Einstein College of Medicine has been a rewarding one. However, I am writing you to inform you that I will be attending Howard University this fall for their Doctor of Pharmacy program." Congratulations, Monique. We hope you enjoy the program.

Last September we enjoyed attending the opening reception for the exhibit "Honest Jim: James D. Watson, the Writer" at the Science, Industry, and Business Library of the New York Public Library. **Kiryn Haslinger '02** worked for Watson for a year following graduation, and helped prepare the exhibit. Kiryn has finished one year in the Ph.D. program in Chemistry at NYU. Kiryn returned to Barnard one evening this fall for an informal program on career options for science students. She was featured in a nice article in the Barnard alumnae magazine.

Miki Kim '02 writes: "I have been trying to keep life interesting. Besides working at Skadden [a prominent NYC law firm], I've found some time to do some traveling. I just got back from a three-week trip to India and it was such an amazing trip. I saw New Delhi, Jaisalmer (where I did a camel safari! ouch...but it was fun anyways), Corbett National Park, and a couple of hill stations in the Himalayas. I had never really seen a mountain before, so the Himalayas were something beautiful. I also took a day trip to Agra to see the Taj Mahal, which I think was my favorite part of the trip: one of those instances where you see a monument in books your whole life and then all of a sudden you see it in person and it's more beautiful than you could ever have imagined!" While traveling, Miki spent time thinking about her future, and decided to apply to

the Masters' program in biotechnology at Columbia; she has now been accepted. She may eventually combine this with a law degree.

Tarah Pua '00 has completed medical school. She found NYU a wonderful place to study medicine. "You see everything at Bellevue", she remarked, on a recent visit. Tarah will be continuing at NYU, doing her residency in OB-GYN.

Sophia Fu '00 also completed medical school this spring. Sophia will be doing a residency in general surgery at SUNY Downstate.

Charli Long '00 is getting married in Lima, Peru this winter. We have heard of destination weddings, but this surely wins a prize. We assume that Charli met her fiancée, Coco, while she was on a Fulbright in Peru.

We received a nice long note from **Christina Ring '00** late last summer. Some excerpts: "I'm two weeks into my third year of medical school, meaning I now take residence in the hospitals. Life as a medical student is amazing...third year is just fantastic so far. I enjoyed my first two years of lectures, but everyday I was wondering when I'd get to the "good stuff" - the real reason why I went to medical school in the first place! I've started my first clerkship with surgery, which is just so cool, for lack of better words. I have gotten to scrub in on a lot of cases so far and observe as well...and I've managed to stay out of the way of the circulating and scrub nurses without getting yelled at, which is a feat in itself. And just the other day, I had a lecture on acute abdomens with a retired surgeon who stopped me afterwards to explain how oxidation-reductions reactions work to provide energy in the mitochondria (since he knew I was a chemistry major)...so, even in surgery, a chemistry degree comes in quite handy!

For the next year, I'll be rotating through various core clerkships to get a sample of the different disciplines in medicine. Right now, I am leaning towards internal medicine and perhaps doing a fellowship in endocrinology, nephrology, or infectious diseases...but I am trying to complete the year with an unbiased and open mind for everything I try....we'll see where I end up!

Outside of school, I'm keeping myself busy with my mountain bike in the summer and skis/snowshoes in the winter. I traveled around Asia over winter break. I still keep in touch with my fellow chem majors...Cindy Kan and I have long phone conversations all the time and traveled to Paris together last summer."

Classes of the 1990's

Moushumi Paul '99, finishing her Ph.D. in chemistry at Illinois, took time off last summer to participate in (and complete!) Chicago's 40-mile Avon walk for Breast Cancer. Prof. Chapman and Prof. Elise Megehee (now at St. Johns College) enjoyed catching up with Moushumi over lunch at the ACS National Meeting in New York in September.

We congratulate **Bonnie Koo '99** on being accepted to Columbia P&S for medical school. While enjoying the travel and rewards working as an IT professional at Morgan Stanley, Bonnie decided a few years ago that medicine was her true calling. She has worked hard to get there.

Sunita Pradhan '99 writes " I have been working on a special project for the last five years, called Schools-On-I-Net (SOIN). SOIN is a web-based platform for schools that promotes communication and information sharing among teachers, administrators, parents and students. Basically, the idea is since students are part of a digital world, schools should be too. SOIN is the school's "next generation" partner in education. It helps teachers and parents get connected.

After a successful pilot program, we are now completing our second year with a local private school. The program has been a success. We are now working towards implementing the

program in other schools. I have had the good fortune of being closely involved in the development of the product and now in its marketing and management. The SOIN platform has proven that it really works and that it is really useful." For anyone interested in this system, the web address is www.schoolsoninet.com

We heard from **Fawzia Qazi '99** this winter. She is working for her MS in Chemistry at Cal State Long Beach while teaching full-time at Peninsula Academy. Her thesis research involves the synthesis of novel iron compounds with nitrogen containing ligands. Fawzia was married in April 2003**.**

Tanuja Goulet '99 writes: "I'm still out here in San Francisco and we make some east coast people jealous with our mild weather. I'm writing because I have at long last --- well, almost 5 years --- found a subject I would like to study for graduate school, cognitive science. I haven't taken any formal university classes since 1999, but I have taken many classes as a volunteer HIV test counselor in California. I now work at UCSF.

Eileen Doyle Bayman '97 writes: "Work is going well at Pfizer for me in San Diego. It's funny, now that Pfizer's buying out all these companies, there is someone at every gathering who works somewhere in the world for us. I just went to my 10 year high school reunion in Westchester over Thanksgiving and one of my classmates and another classmate's husband work for the big P." Eileen writes to us from time to time about job opportunities for our students. We are always happy to pass these on to students and recent alums.

Linda Liou deJesus '93 writes: " Things are going quite well for myself and my family. My daughter, Isabela, is now 9 years old and is an avid reader. She is a great student and very mature. Gabriel is turning three in February. He is a typical boy: very active and crazy with fire-trucks. My husband, Daniel, is working in Yale New Haven Hospital. In additional to his regular clinical responsibilities, he is also the coordinator for all students on clinical rotations as well as clinical research projects. He also moonlights in Hartford Hospital.

I have left my last company where I worked for 7 years. I got a degree in Executive MBA during my pregnancy with Gabriel. I joined Waters Corporations, an HPLC and MS instrument manufacturer, almost two years ago. I manage their Chemistry Operations division for US-East. It is much more technical since I also manage our Chemistry Specialists, who are responsible to assist scientists in HPLC/MS method development, trouble shooting, and education seminars. I have gained much knowledge in chromatography and MS. I still travel much and spend much of my time in Cambridge and New Jersey/New York, where most of my reps are concentrated."

Classes of the 80's

We hope you read the nice write-up about **Cheryl Wills '86** in a recent Barnard alumnae magazine. Cheryl is a very successful forensic psychiatrist in New Orleans.

Miriam Weiss '85, preparing to teach a general chemistry course, borrowed a copy of Bernice Segal's textbook. The book is no longer in print, and old copies are hard to find, but it is still a model of clarity. Those who studied chemistry with Bernice can hear her in her words.

Jessica Stern '85 teaches at the Kennedy School of Government at Harvard. An expert in terrorism, nuclear smuggling, and national security, Jessica has a M.S. in Chemical Engineering and Technology Policy from MIT, and a Ph.D. in public policy from Harvard. Her latest book is *Terrorism in the Name of God: Why Religions Militants Kill.*

Classes before 1980

Lucy Hsu Chang '77 and her husband run an import business. Lucy visited Barnard this spring as a member of the Science Advisory Council.

On March 2, *The New York Times* ran a story about **Jackie Barton '74**: "Constantly in motion, like DNA Itself". Sounding a bit like an entertainment review, the article described Jackie as "a heavy metal fan", "a high-wattage figure on the chemical circuit", and "a braid of contradictions". The article included a nice discussion about Jackie and her work, as well as some important comments from Jackie about public attitudes about science and chemistry.

Rochelle Hirschhorn '53 is Chief of the Division of Medical Genetics in the Department of Medicine at NYU. Her lab investigates inherited diseases, primarily adenosine deaminase deficiency and acid alpha-glucosidase deficiency. Dr. Hirschhorn is a member of the Institute of Medicine. She visited Barnard this spring, as a member of the Science Advisory Council.

CLOSING REMARKS

As usual, we take this opportunity to remind you of two important funds at the college. **The Edward J. King Memorial Fund,** in honor of Prof. King, chemistry Chair from 1960 to 1973, provides research assistance for junior faculty throughout the college. Two awards were made this year: one to Prof. **Paul Currie** in Psychology for "Orexigenic and Metabolic Action of Ghrelin in Discrete Hypothalamic Nuclei", and the other to Chemistry's **Dina Merrer** on "Singlet Carbene Additions to Strained Cyclic Compounds." The **Bernice G. Segal Memorial Fund** originated with a fund set up in her lifetime by Prof. Segal, assigning a share of the proceeds of her textbook. The fund, which provides summer research fellowships for science students at Barnard, continues as a memorial to her. Prof. Segal recognized what is very much true today: without competitive stipends, financial pressures prevent needy students from availing themselves of important research opportunities. To donate to either fund, or to the organic lab renovations, please send a check to the Development Office, payable to Barnard College. *Please specify clearly the purpose to which you wish your gift applied.*

Keep in touch. We enjoy hearing from you and sharing your news. Barnard faculty and staff e-mail addresses are (initial-name)@barnard.edu, e.g. llessinger@barnard.edu or schapman@barnard.edu. Phone calls are always welcome (Lessinger: 212-854-8461; Chapman: 212-854-2098; others can be found in the directory on Barnard's web page), as is old-fashioned mail. Our apologies if any news above is incorrect: we sometimes assemble information from incomplete sources and our not always reliable memory. Please write, and we will happily make corrections or add more personal details.

With warmest regards,

Sally Chapman
Professor and Chair as of 7/1/04

Leslie Lessinger
Professor and Chair through 6/30/04

Chemistry Department Newsletter
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Nichols Medalist Allan Bard with Leah Roberts, Kiley White, Sonal Patel, and David Millar