

# BARNARD CHEMISTRY DEPARTMENT NEWSLETTER

June 1997

Greetings to alumnae and friends. With the 1996-97 academic year over, we are pleased once again to bring you news of the college, the department, and of you, at least those of you from or about whom we have heard. We welcome your notes and visits. If you would like to communicate by e-mail with any faculty member, our addresses are {first initial plus last name}@barnard.columbia.edu, e.g. schapman@barnard.columbia.edu. Most faculty have e-mail addresses at Columbia too, but some of us consult these infrequently, at best.

## NEWS OF THE COLLEGE

A year ago, the college was struggling with a lengthy and rancorous strike. We are happy to report that a settlement was reached in September, and that most, if not all, of the sense of community on the campus was quickly restored. Some important lessons were learned.

Probably the biggest news at the college is widespread renovation and reconstruction work, much of which is just now underway. The last major campus project was Sulzberger tower. Since then, the college has been focusing on the capital campaign and a careful evaluation of needs, which are many. With the successful completion of Phase I of the campaign, some important major gifts, and refinancing of the remaining debt on Sulzberger, the college has embarked on an ambitious plan. Projects benefiting science are a big piece of this work. The greenhouse on top of Milbank will be replaced with a facility that will be very important to the biology department. It will be modern in function and architecturally distinguished, sufficiently so to have received a positive write-up in the Sunday *New York Times* this spring. The new greenhouse, a gift of trustee Arthur Ross, is scheduled to open in the fall.

A second major project involves every science department. Two pressing needs were the initial impetus: (1) improved animal care facilities for psychology, and (2) improvement in space for the growing environmental science department. To accommodate these and other needs, the resulting \$15 million project ends up involving two floors of Milbank, four floors of Altschul, and six departments. When it is complete, Environmental Science will occupy the 4th floor of Altschul, with additional teaching space on five and six, the math help room will be in Milbank, Psychology will have renovated space, Physics and Chemistry will have surrendered some space in return for some renovation, and Biology will have major renovation of one floor. In the meantime, to put it bluntly, chaos reigns --- more on that later.

Other renovations underway this summer include a classroom and the entry area in Barnard Hall, air conditioning in the gymnasium, and bathrooms in Hewitt. "At last", I can hear some of you saying. Next summer the Altschul air conditioning unit will be replaced. We are crossing our fingers that we get through this summer: the current system is less than reliable. As disruptive as this work certainly is, everyone agrees that all this activity is a sign of a healthy college, looking confidently to the future.

We hope that moving Environmental Science (ES) to Altschul will contribute to new opportunities for cooperation between our two departments. One important step in this direction is the recent approval by the Faculty Planning Committee of a new appointment in Environmental Science, an environmental organic chemist who will have quarter time teaching responsibilities in chemistry. This new Professor, to be hired next year, will have a research lab in ES, but we anticipate there will be many opportunities for sharing students and facilities. Importantly, this will fill a need in our department to relieve some teaching pressure in organic chemistry.

Through the efforts of the Development Office and the generous help of an alumna, several science departments recently shared a large donation of used scientific equipment from Glaxo-Wellcome. Gifts which will be very useful in biochemistry are several thermostatted water baths and a preparative HPLC. *If you happen to work for a company which has a program to give away gently used equipment, keep us in mind.*

Barnard continues to play catch-up in the world of computers. It is a difficult process: costly, and continuously changing. Many students arrive at college today equipped with computers and high expectations. Networking the dormitories is proceeding on an accelerated schedule, and the systems must be upgraded repeatedly to accommodate the increased demand. The faculty is struggling with a recent transition from a DOS/Windows-based mail system (cc:Mail) to a Unix-based one (Pine). The latter has advantages from a management point of view, but some of us are frustrated at having to learn new ways to communicate with our classes almost every year.

“The Barnard Project for Gender and Science” is a recent grant to the college from the Association of American Colleges and Universities (AAC&U). Barnard competed successfully with a large number of institutions. The program, jointly funded by AAC&U and the National Science Foundation, is designed to encourage colleges to build stronger two-way bridges between science and women’s studies departments. Among the objectives is to explore how some of the new scholarship on gender might be incorporated in science courses, and how a better understanding of science could become part of women’s studies. It is an ambitious goal, and not without possible pitfalls, given the climate of hostility between some scientists and some feminist scholars. But of course that is the challenge: to sort out what is good and useful in the dialog. The Barnard team is ably lead by **Prof. Laura Kay**, an Assistant Professor of Physics and Astronomy, an astrophysicist who is regularly teaches a Women’s Studies course on Women and Science. Among the activities planned at Barnard is a faculty seminar. We are looking forward to it. There are also several curricular innovations related to the project, including a new course on Women and Health, to be taught by **Prof. Ruth McChesney** of the Biology department.

### NEWS OF THE DEPARTMENT

This has been a busy year in the department. We had a bumper crop of 23 senior majors. Enrollments remain high in the first two years as well: in both General and Organic chemistry we must offer morning labs in addition to the daily afternoon labs to accommodate all the students. A new biochemistry lecture course was offered this spring, BC3282y, “Biological Chemistry”. Biochemistry majors may still take the Columbia C3501x course in the fall term, but the demand for a course at Barnard was demonstrated by the enrollment of 32 students. The course was ably taught by Prof. Ann Shinnar, who is completing her second year at the college.

A few more words on the renovations, and their effects on Chemistry. Some of you may recall three connected teaching labs on the sixth floor of Altschul. The two smaller rooms to the south are being converted to a lab for Introductory Environmental Science. Several walls are being moved, recovering wasted space in the center hallway. The balance room and darkrooms are being reconfigured, and Prof. Megehee’s research lab is being renovated. In the meantime, we had to vacate much of the sixth floor instructional space. Profs. Megehee and Shinnar moved their summer research operations to seven, on rather short notice. Everyone in the department pitched in, but **Su Qing Liu** and first-year student **Wei Ye** have been wonderful, doing a great deal of the heavy and dirty work. Many thanks to them both. In mid-August, we will have to reverse the process, to get labs ready for the fall term.

A visiting faculty member this year, replacing Prof. Megehee, was **Prof. Jill Rehmman**. Dr. Rehmman has a Ph.D. in biophysical chemistry from Columbia, where she worked in Jackie Barton's laboratory. Dr. Rehmman taught inorganic chemistry in the fall, and General Chemistry II and the third semester of physical chemistry in the spring. Because of increasing interest in biological systems, we have been shifting the content of the latter course more towards biophysical chemistry, and Jill's expertise made an important contribution.

**Dr. Meena Rao**, who often teaches in the general chemistry labs, and has filled in in the past in a variety of courses, taught Intermediate General Chemistry (BC3232y) this spring. We are very pleased that Dr. Rao has agreed to become the Director of the Organic Labs starting in 1997-98. Since her Ph.D. is in organic chemistry, she is a natural for the job.

As we said last year, Prof. Marco Pagnotta was not awarded tenure. This year, the department searched for a new organic chemist. We are happy to announce that **Dr. Christian Rojas** will be joining the department this fall as an Assistant Professor. Dr. Rojas is a synthetic organic chemist. He received his B.A. from the University of Virginia and his Ph.D. from Indiana University where he worked with Dr. David Williams. His doctoral research included synthetic work related to the antibiotic, lankacidin C. He received an NIH Fellowship to do postdoctoral work with Prof. Julius Rebek, initially at MIT, and subsequently at the Scripps Research Institute. At Barnard, his initial research program relates to the preparation of amino-saccharide enzyme inhibitors. He will teach organic chemistry, both lecture and laboratory courses.

The top three students in General Chemistry I this fall were all in their first year, and their records were quite comparable. Therefore the CRC Press Freshman Chemistry Award was shared by **Sarah Tully '00**, **Tarah Pua '00**, and **Cindy Kan '00**. Congratulations to all three. The chemistry department's class of 2000 will be exceptional if they decide to major! The ACS-PMSE Award for excellence in Organic chemistry was awarded to **Jhoanne Bautista '99**. Jhoanne is doing research with Prof. Shinnar this summer, supported by the Howard Hughes grant. **Noreen Hui-Yun Chen '98** won the ACS award for excellence in Analytical Chemistry. Noreen was also awarded a Bernice Segal Summer Fellowship, to begin her senior thesis project with Prof. Megehee. Noreen also was co-recipient of the Gertrude Bunger Zufall Scholarship for a senior premedical student. She shares that award with **Christina Min '98**, who also won a prestigious summer fellowship at NIH. Christina will do her senior thesis with **Prof. Jym Mohler** in the biology department this fall. **Olga Fishman '98** is also be doing a senior thesis this year, and has started the project with Prof. Shinnar this summer, supported by the Hughes grant. **Claudine Lombardi '98** won the Marie Reimer Prize for the top junior chemistry major. Claudine will be doing her thesis research with Prof. Shinnar in the fall.

Ten students wrote senior theses this year, a record. Their projects and mentors are listed on the following page. We are grateful to members of the Biology department for directing thesis work of several of the biochemistry majors. Several of these students began their projects with summer fellowships in 1996, sponsored by the Howard Hughes Medical Institute grant to the college, by the Pew Consortium, and by the Bernice Segal Fund.

One of the features of the thesis program is the weekly meeting of all students and faculty. This is important for a number of reasons: students gain excellent experience in talking about their work in periodic research updates, faculty members other than the student's mentor can sometimes offer useful suggestions or insights, and it is an excellent way to keep us all better informed about research activity in the department and beyond. Stronger ties to the biology department are an important benefit. We had a busy time in April scheduling the presentations of these projects, but the results were most impressive and gratifying.

Chemistry and Biochemistry: Senior Thesis Projects (1996-97)		
STUDENT	ADVISOR	PROJECT
Ali Abbasi	Bruce O'Gara Biology	Characterization of acetylcholine receptors on the pharynx of the medicinal leech
Rebecca Begley	Jeanne Poindexter Biology	How bacteria can gain resistance to viruses without mutating to a resistant form
Rosemary Kher	Jeanne Poindexter Biology	Interaction of membrane proteins of <i>Caulobacter crescentus</i> with the coat protein of RNA $\phi$ Cb5
Danielle Lehsten	Gilbert Stork Chemistry (CU)	Total synthesis of digitoxigenin: employing $\alpha$ -silylated vinyl ketenes to obtain high selectivity
Larisa Ravitskaya	Jym Mohler Biology	The protein product of the <i>Drosophila</i> gene <i>unkempt</i>
Natalie Seiser	Dan Robie Chemistry	Pressure broadening in the visible O <sub>2</sub> absorption spectrum by cavity ring-down spectroscopy
Sheng-Ching Wang	Ann Shinnar Chemistry	Purification of an antibiotic peptide extracted from the lamprey intestine
Bonnie Woo	Janet Larkin Biology	Purification of a rab protein involved in the transcytotic pathway of a hepatocyte
Li-Min Yang	Ann Shinnar Chemistry	Purification of bromoperoxidase from the intestinal tissue of the Atlantic hagfish
Janet Yee	Leslie Lessinger Chemistry	Iodine-bile acid host-guest compounds: synthesis and x-ray characterization

On a lighter note, the Chemistry Club produced a wonderful T-shirt for the graduating seniors. On black, with bold yellow letters it says (the numbers are on a graduated cylinder):

**Top Ten Reasons to declare a Biochem/Chem Major at Barnard:**

10. Three Problem sets a week - no problem!
9. 9 a.m. classes in Friday...all 4 years.
8. Learn how to extract caffeine and use it.
7. Be in chemical equilibrium with 805 Alt and its other inhabitants (chirp, chirp).
6. 5 credit labs.
5. Everyone knows your name, GPA, and what your last lab smelled like.
4. Personal keys to the chemistry library.
3. Phobic interactions with McQuarrie, Wade, Atkins, Stryer, Most, et al.
2. You become the "third person".
1. [a list, in fine print, of the major requirements]

Most are self-explanatory. For number seven: several crickets escaped from the biology department and took noisy refuge in 805 Altschul this semester.

The highest award of the New York Section of the ACS is the Nichols Medal. The Nichols Foundation traditionally pays for one faculty member and one student to attend the award symposium and dinner. In recent years, we have added our own tradition, inviting all the seniors who are writing theses to attend. This year was special: the medalist was **Jackie Barton '74**, the first woman to receive this honor. The symposium was wonderful. Speakers included Peter Dervan (Jackie's husband, who, like Jackie, teaches at Caltech), Steve Lippard (Jackie's Ph.D. mentor at Columbia, now at MIT) and Anna Marie Pyle (a former student of Jackie's, now

at Columbia P&S). The Barnard students who attended had a wonderful time, enjoying special recognition from Jackie and being photographed with her.

The tradition of departmental luncheons each term continues. The Altschul Atrium is a convenient locale. The speaker in the fall was Michelle Millar, an inorganic chemist from SUNY Stony Brook who gave a very lively and entertaining talk. In the spring, we were very pleased to welcome back **Adrienne Raphael Farid '82**, a research scientist at Hoffman-LaRoche. Adrienne received her Ph.D. from Columbia, working with Prof. Jackie Barton. The students enjoyed very much hearing Adrienne talk about her work in the pharmaceutical industry, and the faculty enjoyed seeing her again. If you are in the New York area and would enjoy coming to talk to our majors about your work in chemistry or a chemically related area, give me a call. Students especially appreciate meeting younger alums.

### NEWS OF THE FACULTY

**Prof. Leslie Lessinger** was recently named an Ann Whitney Olin Professor, in recognition of his many contributions to Barnard. Dr. Lessinger's biggest task as department chair this fall was running the search for a new Assistant Professor of organic chemistry. We had many strong candidates this time around, and the market was very competitive -- lots of places looking to hire. We interviewed four fine candidates, and are very happy with result, the hire of Christian Rojas.

Prof. Lessinger left the chair to go on a special senior faculty leave spring semester. He is writing a general chemistry textbook in collaboration with Dr. Heidi Reese. The general aim is to create a worthy successor to Prof. Segal's book, aimed at the advanced end of introductory chemistry courses. The book is about 1/3 written in first draft. Textbook writing has give him tremendous respect for Prof. Segal and her ability for clear explanation. Dr. Lessinger enjoyed teaching quantum chemistry in fall, where he tried to give more spectroscopy, and earlier in the course. He will take over Chem 1601 next fall, a course he looks forward to teaching again.

This year, Prof. Lessinger supervised the senior research thesis of **Janet Yee '97**, who investigated inclusion complexes of deoxycholic acid and cholic acid. Janet succeeded in making a blue complex of cholic acid that probably contains triiodide ion, but the material is fibrous and could not be investigated by crystallography. Janet also synthesized and was able to grow some dark red crystals of a complex of deoxycholic acid and molecular iodine. Initial characterization of the material shows that it is of a known type of deoxycholic acid complex, and that in the crystal the ratio of deoxycholic acid to iodine is 4:3.

Prof. Lessinger continued as co-director of Centennial Scholars Program, with Prof. Helene Foley of Classics. An excellent group of seniors presented their projects. Science-related projects were those of Naomi Bardach '97 (religion major), who studied Ayurvedic medicine in Pune, India, and compared it to Western medicine; Carol Morgan '97 (politics major), who studied health care delivery in the upper Amazon in Brazil; and Jackie Donnelly '97 (biology major), who worked at the La Selva rain forest research station in Costa Rica, studying charcoal and pollen in the soil to obtain evidence of human habitation. Finally, Dr. Lessinger served on the Committee on Instruction, which embarked on a slow start to review of college general education requirements. Some survey work was completed, but serious attention to this will only happen next year.

After three years, **Prof. Sally Chapman's** term as Chair of the ACS Committee on Professional Training was completed in December. She remains on the committee, but is happy to relinquish its Chair. Committee activities of which she is proud include the preparation of a new brochure, *Planning for a Career in Industry*, and ongoing discussions about Ph.D.

programs. The latter was greatly enhanced by cooperation with Prof. Ron Breslow of Columbia, ACS President for 1996. Starting in 1997, Prof. Chapman is Chair of the Advisory Board of the Petroleum Research Fund.

Two papers by Prof. Chapman were published recently: the first derived from her educational activities: "Innovative Curricula and the ACS Committee on Professional Training", in *Education for Industry* (ACS, 1997). The second, a research paper, started as the senior thesis project of co-author **Stephanie Lau '95**: "A Classical Trajectory Study of  $O^- + HF \rightarrow OH + F^-$ ", *J. Phys. Chem. A* **101**, 2310-2315 (1997). Prof. Chapman was a session chair at the Gordon Research Conference on Molecular Energy Transfer in California in January, 1997. She continues with a collaborative research project initiated on her 1995-96 sabbatical in Italy.

Prof. Chapman taught General Chemistry I in the fall. One innovation was a weekly evening problem-solving workshop, knowing that some students find office hours intimidating and might find this useful. It had a small but faithful clientele, about 20 students. In the spring, she and Mrs. Jebejian taught the quantitative analysis course. A major addition was the a new atomic absorbance (AA) spectrometer, bringing more modern analytical instrumentation into the course.

Prof. Chapman took two trips this June: one for business and one for pleasure. The business trip was to the "Northeast Regional Molecular Modeling Workshop" at U. Mass. She hopes to incorporate some of what she learned into the quantum course, BC3253x, this fall, and into other courses later. The following week, she went on a rafting trip through the Grand Canyon, something she has wanted to do for years. She found it more interesting and beautiful and also more challenging than expected. Prof. Chapman is not entirely happy to be department chair again: there is a lot of extra work, and every year it seems to be more.

The big event of **Prof. Elise Megehee's** year was the birth of her second daughter, Victoria Irene. Vicki was 6 lbs. 15 oz. and 19 inches at birth, but at 8 months now weighs in at 19 lbs. and 29 in. She hasn't missed many meals... Born on Columbus day, she is a natural explorer, especially now that she is starting to crawl! Elise has been on leave this year—for obvious reasons. She returned from leave in May, just in time to participate in the great temporary move from the sixth floor due to the construction. By the end of the summer, she will have a newly renovated research lab.

This summer **Noreen Hui-Yun Chen '98** is working with Prof. Megehee. She will start with the important task of finishing off a few last experiments needed for Prof. Megehee's research papers. Having successfully scaled up the microwave synthesis of *cis*-[Rh(bpy)<sub>2</sub>Cl<sub>2</sub>]PF<sub>6</sub>, she has moved on to optimizing the microwave and conventional synthesis of *cis*-[Rh(bpy)<sub>2</sub>Br<sub>2</sub>]PF<sub>6</sub>. This should be easy since we have made the chloride and iodide complexes, right? So far this has not been the case. Since our NMR is temporarily not functional, Prof. Megehee has been running all of the spectra for her research on the NMRs at Columbia. With luck, our instrument will be running soon. Elise will present a poster at the Inorganic Gordon Conference this summer at Newport, Rhode Island.

During this last year, **Prof. Daniel Robie** continued work on the 1601 lab, the fall physical chemistry laboratory, and the thermodynamics lecture course. For a change, while Prof. Megehee was on maternity leave, Dr. Robie taught the spring spectroscopy lab. It was an interesting return to an old favorite.

In the lab, **Natalie Seiser '97** completed her thesis at the end of the fall semester. However, she has continued her work with Dr. Robie as she prepares to enter the graduate program in chemistry at Columbia. In the spring, she and Dr. Robie attended the annual meeting

of the American Physical Society in Washington, where there was a special symposium on cavity ring-down spectroscopy. There are very interesting developments of this technique coming down the pike! Having measured pressure broadening coefficients of O<sub>2</sub> by N<sub>2</sub>, Dr. Robie and Natalie are preparing a poster for presentation at the Molecular Dynamics Conference in Minnesota, and subsequent publications. This summer, **Bonnie Koo '99** is working with them to upgrade the data acquisition software and improve the sensitivity and precision of the experiments. Work is also underway to build a cell to measure the cavity ring-down spectrum of H<sub>2</sub> and of HI. Near 630 nm, absorption by 1 bar of hydrogen is about 1% in a pathlength of 10 kilometers. To detect this weak absorption with cavity ring-down spectroscopy, mirrors of 99.999% reflectivity are required. By coincidence, 630 nm is near the wavelength of operation of the ubiquitous HeNe laser (the red laser used in check-out stands at supermarkets), so the mirrors are readily available. In support of this work, Dr. Robie was awarded a PRF grant of \$23,400 last fall.

Having arrived at Barnard 2 years ago, **Prof. Ann Shinnar** has gone through the "mostly boxes" stage to established biochemistry protocols and research projects. One very active area of her research focuses on how primitive vertebrates such as the hagfish and lamprey produce antimicrobial peptides to serve in defense against infection. Another hot topic is the search for a brominating enzyme, which accounts for the bromotryptophan, discovered earlier by Dr. Shinnar, a novel amino acid in peptides from hagfish intestine. Both of these projects require the basic tools of peptide and protein purification. Funding from Barnard and Bristol-Myers Squibb sponsored the purchases of key equipment such as HPLC for purification, a vacuum centrifuge, and a lyophilizer (freeze-dryer).

**Sheng-Ching Wang '97** and **Li-Min Yang '97**, Dr. Shinnar's first senior thesis students, provided much assistance in setting up the research lab. Both made tremendous strides in getting these two projects up and running. Dr. Shinnar is attending a Gordon Conference on natural products in July 1997. She has been invited to speak about her recent research, which will include thesis results of Li-Min and Sheng-Ching. During the summer, **Olga Fishman '98** and **Jhoanne Bautista '99** are continuing these projects. In addition, **Jason Mui** from Cornell University is doing lab work sponsored by the PEW Foundation on biosynthesis of squalamine, a steroid antibiotic from dogfish shark.

Professor Shinnar is also upgrading equipment and experiments for the Biochemistry Lab. This year special money from the College allowed for the purchase of spectrophotometers, electrophoresis apparatus, and fraction collectors. The availability of fraction collectors means that students no longer have to "count drops" from their columns. Now that's progress!

**Prof. Marco Pagnotta** will be teaching at Dwight-Englewood School in New Jersey next year. His wife Cindy had some serious health problems again this year, but her recovery was fortunately much quicker. We wish Marco and his family the very best, and thank him for his superb teaching and many other contributions to the department and to the college.

**Mrs. Olympia Jebejian** continued to work as Director of General Chemistry laboratories. With the large enrollments in the General Chemistry course, she spends a good amount of time to ensure that the experimental part of this course is well planned and organized. During the Fall semester, she also taught the special problem-solving help class, a laboratory section and a recitation section. During the spring semester, Mrs Jebejian was in charge of the overall set-up and preparations for the Quantitative and Instrumental Techniques and the General Chemistry II laboratories. She taught the Quantitative and Instrumental Techniques course together with Prof. Sally Chapman.

During the summer of 1996, Mrs. Jebejian once more taught in the the Higher Education Opportunity Program (HEOP). HEOP students participate in a rigorous six-week program in preparation for the fall semester, when they join Barnard as first-year students. Olympia finds teaching in this program very rewarding and challenging. She is very gratified when these students do well academically, especially when they take chemistry courses at Barnard. Finally, Mrs. Jebejian serves as an academic adviser to first-year and sophomore students.

**Dr. Jim Carter** went on medical leave this January. He has recently undergone some surgery to alleviate problems associated with extensive cancer chemotherapy. We wish him a speedy convalescence, and hope he will make it to his Raccoon Island summer home in NJ soon.

In addition to teaching both general and organic chemistry labs, **Dr. Toby Berger Holtz** assumed a number of responsibilities this year. We are grateful for her many long hours helping the Organic I lab course run smoothly. Dr. Holtz will be the Laboratory Administrator starting this fall. Fortunately, this still includes teaching some lab sections, a job she does very well.

**Mrs. Gauri Gupta**, our laboratory administrator, took a maternity leave, starting in January. Perhaps Mitali Gupta will be in Barnard's class of 2018 with Victoria Megehee. Congratuations to both families. Gauri is now staying home with her two small chindren.

**Dr. Jean Donohue** does a wonderful job teaching in the organic chemistry labs both semesters. Jean and her family have recently moved, only a few blocks, but the effort is the same! **Dr. Colette Levi** has enjoyed much better health this year. She teaches in the two introductory labs: general and organic chemistry. **Mrs. Su Qing Liu** works in the physical chemistry lab both terms, in the Biochemistry lab in the fall, and in the quant lab in the spring. **Dr. Frances Feerst** teaches in the General Chem lab in the fall, and the escapes to Florida for the cold winter months. **Dr. Heidi Reese** will be attending Law School next year. We thank her for her many contributions to the department.

#### NEWS OF FORMER FACULTY AND STAFF

We spoke to **Prof. Emma Stecher** recently. Prof. Stecher retired from Barnard in 1971 after 26 years, but continued to teach, at Pace University, for another 12 years. At age 91, she is now fully retired, living in Queens. She enjoys hearing about alumnae in this newsletter.

#### NEWS OF ALUMNAE

##### *Class of 1997*

**Ali Abbasi** will be working for Anderson Consulting.

**Rebecca Begley** was recognized at the Honors Assembly as a four year athlete. She is a runner. Since Rebecca had almost enough credit to graduate in January, she carried a part-time load this spring. We hired her as a laboratory instructor in Organic Chemistry, and she did a superb job. Thanks! Rebecca is moving back to California, where she is looking for work.

**Alin Chang** is looking for work. She hopes to attend medical school in the near future.

**Win-Ying Cheung** is also on the job market.

**Eileen Doyle** is entering the Chemistry Ph.D. Program at Johns Hopkins.

**Christine Dunham** is starting the Ph.D. program in Chemistry at the University of California at Santa Cruz.

**Ayodele Green** will be starting medical school in the fall. Last we heard, she was going to Downstate, but these things sometimes change as last minute wait lists are activated.

**Nicole Johnson** plans to work this year and to apply to medical school for the fall of 1998.

**Rowena Jose** has started a job in Texas.

**Rosemary Kher** graduated Phi Beta Kappa and with Honors in Biochemistry. Rosemary received the Ira and John Kauderer prize, for a premedical student majoring in chemistry. Rosemary will be attending Columbia Dental school in the fall.

We believe that **Janice Lansita** and **Katerina Nestoras** are looking for work.

**Danielle Lehsten** graduated with Honors in Chemistry. She is entering the Ph.D. program in chemistry at Harvard, where she plans to continue doing synthetic organic chemistry.

**Jennifer Nightingale** is engaged to be married soon. We don't know her other plans.

**Jane Pan** was elected to Phi Beta Kappa based on her outstanding record through the junior year. Jane plans to work for a year or so, and then she will probably go to medical school.

As of early June, **Larisa Ravitskaya** is chewing her nails, as she is on waiting lists of four medical schools. In the meantime, she is teaching an MCAT prep course, and doing volunteer work in a molecular biology lab at St. Luke's. We hope that the phone will ring soon.

**Claudia Taboada** is looking for work.

**Natalie Seiser** graduated Phi Beta Kappa and with Honors in Chemistry. She was awarded the American Institute of Chemists award for excellence in Chemistry. She will enter the Ph.D. program in Chemistry at Columbia.

**Sheng-Ching Wang**, who graduated with Honors in Biochemistry, is entering the Ph.D. biochemistry program at Hopkins. Eileen and Sheng-Ching plan to share an apartment in Baltimore.

**Bonnie Woo** graduated with honors in Biochemistry. Last we heard, Bonnie, **Li-Min Yang**, and **Janet Yee** are all looking for work. Good luck to you all: tell us when you have landed jobs.

As you can see, a number of our very talented (and of course superbly educated) graduates are still looking for positions. We would be happy to refer any of them to you, or vice versa!

#### *Classes of 1990 through 1996*

**Camay Chiu '96**, in the midst of her studies in medical school at SUNY Downstate, wrote a nice note to Barnard's premed committee. As you probably know, getting into medical school these days is exceedingly difficult, and Camay wrote thanking the committee for its support "at a time when responses were minimal and desperation was setting in". Camay reports: "I am now truly where I want to be."

**Man Hoi Wong '96** finished her first year of graduate school at NYU. She plans to do biochemical research in DNA nanotechnology in the lab of Dr. Nadrian Seeman.

**Sinchun Hwang '95** sent a holiday card from SUNY Stony Brook, where she is working hard in medical school.

**Joan Chang** and **Stephanie Lau '95** have both decided to move on from their research jobs at Albert Einstein School of Medicine. Their supervisor called requesting that we send him some equally talented successors. (Thanks for doing such a good job!) Joan has decided that she wants a career in teaching. She is looking for a one-year high school position, and plans to attend graduate school the following year. We haven't heard about Stephanie's plans.

**Amy Law '95** has been in the graduate program in chemistry at the University of Rochester. She has decided on a change of focus, and will be going to Pharmacy School of the University of Maryland in the fall. Good luck, Amy, we know you will do well.

**Linda Lam '95** is in the Osteopathy program at UMDNJ in Camden.

From time to time, we see **Julie Nichols '95**, who is in graduate school at Columbia, since she does some teaching in the Barnard Environmental Science department.

**Dana Ostrow '95** is another recent alumna moving into Public Health. She will be starting graduate school at Columbia next fall. In the past few months we have seen a lot of her: she is working in Barnard's Information Technology department; her e-mail handle: "Trainer-Dana". Among other things, she is teaching faculty and staff to use the new e-mail systems. Profs. Chapman, Lessinger, and Megehee enjoyed being students together in one of her classes.

**Nihan Simsek '95** is spending some time in Turkey this summer, following her second year in medical school at Mt. Sinai.

**Linda Liou DeJesus '93** works as the New York area sales rep for Brand-Nu Laboratories, located in Meridian CT. We have found them to be a very reliable source of solvents, with prices frequently significantly better than other vendors.

We have seen **Prudence Lim '93** in the neighborhood several times this year, most recently at graduation. Prudence is now in the health policy program at Columbia's School of Public Health. She says it is fascinating, and recommends it to others interested in careers in health.

**Naomi Basicke '92** attended the ACS national meeting in Orlando. She came to the symposium on Education for Industry, where Prof. Chapman was giving a talk, and they enjoyed a quick conversation. Naomi is finishing her Ph.D. at Penn State, and will be heading west for a postdoc, to Idaho, I think. Please accept my apologies, and correct me if that is wrong. Good luck!

**Chelsea Kim Bachrach '91** wrote this spring to tell us that she will be attending Boston University School of Law starting next fall. B.U. Law has a health law program, and publishes the *American Journal of Law and Medicine*. Another interesting medically related career!

Last fall, we received a nice note from **Jennifer** (formerly Tsengjian) **Chin '90**. She completed an M.S. in Chemical Engineering Practice, and expects to complete her Ph.D. at M.I.T. this year. Her Ph.D. work has been in the group of Prof. Jonathan Harris. Among other projects, she has worked on the molecular dynamics simulation of the perfluorocarbon liquid-vapor interface.

#### *Classes of the 70's and 80's*

**Zenta Batarags Hayes '88** wrote in December that she and her husband Brian we expecting a baby in March. We would love to hear how you are all doing! Zenta works for Seagrams.

**Golnaz Moazami '87** sent us a nice formal announcement of the opening of her practice in Ophthalmology and Ophthalmic Surgery. She is associated with the Harkness Eye Institute at Columbia P&S.

We saw **Karen Goldberg '83** at the ACS meeting in Orlando last August. Karen's work is going well in Seattle where she is on the faculty at the University of Washington. She was on her way to give a presentation of some recent results.

We often see **Polly Gregor '79** in the neighborhood, sometimes accompanied by one or more of her three children. Polly is an Assistant Professor at Sloan-Kettering.

#### *Before 1970*

**Toby Berger Holtz '67** is a Lab Associate in our department; see above. On a more personal note, Toby's son is an undergraduate at Harvard, and her daughter will be a first year student at Barnard next fall.

**Helen Stern Sunshine '66** telephoned recently. She works at the NIH Office of Scientific Review. She was looking for suggestions for reviewers for some NIH programs.

**Eva Gans '62** sent a nice letter bringing us up to date on her activities. (Some of you may also remember Eva as a Lab Associate in some Barnard chem classes about twenty years ago.) Eva received an M.S. in Computer Science from the Columbia School of Engineering in 1984. She

worked for some years in the area of natural language processing at I.B.M. in Yorktown Heights. More recently, she has been working closer to her home in Teaneck, as a computer consultant to Technology Design and Evaluation Associates, a chemical engineering consulting firm. One major project soon to be completed has been building a Spandex factory in Israel. Eva and her husband Leo are very active volunteers and community activists. She was recently named the first woman General Campaign Chairman for the UJA Federation of Bergen County and North Hudson, in charge of a seven million dollar campaign.

**Liane Reif-Leitner '56** is very busy in her consulting career. She is a highly sought-after expert in grant writing, and has presented workshops across the U.S., as well as in China and Russia. In addition to her successful book *Grant Application Writer's Handbook* (Jones and Bartlett, 1995), there is a video "Getting Funded: It takes more than Just a Good Idea" (also Jones and Bartlett). Dr. Reif-Leitner's husband was pleased to have his NIH grant renewed recently. It must help having an expert grant writer as a spouse! She enjoyed seeing some fellow chemistry majors at Barnard Reunion '96.

**Lila Amdurska Wallis '47** wrote, observing a paucity of news in the earlier classes category, and kindly supplied us with some clippings. Dr. Wallis is a Clinical Professor of Medicine at Cornell University. To quote from a clipping recognizing her being named to a Mastership by the University Board of Regents: "She is an internationally recognized expert on osteoporosis, estrogen replacement therapy, and menopause. She is also known for her contributions to women's health, a field of study which was of concern to her long before it became prominent as an overlooked field of medicine." Dr. Wallis has retired from her clinical practice, but is very active in medical education. She is Editor-in-Chief of a forthcoming textbook on women's health.

### CLOSING REMARKS

As usual, I would like to take this opportunity to remind you of two important endowed funds at the college. **The Edward J. King Memorial Fund**, in honor of Dr. King, who chaired the department from 1960 to 1973, provides research assistance for junior faculty, filling a critical need in the intellectual life of the college. **The Bernice G. Segal Memorial Fund** originated with a fund set up by Prof. Segal in her lifetime, assigning a share of the proceeds of her textbook. It continues as a memorial to her. The fund provides generous summer fellowships for science students to do research at Barnard. Prof. Segal recognized what is only more true today: without generous stipends, financial pressures prevent very needy students from availing themselves of important research opportunities. Both endowments continue to grow, thanks to your generosity. If you wish to make a donation to either fund, please send a check to the Development Office, payable to Barnard College. *Please specify clearly the fund to which your gift should be applied.*

**A final employment note:** we have openings for part-time lab instructors next year, for the General and Organic I labs. If you are interested, please call (212-854-2098) ASAP. The pay isn't great, but the students are wonderful to work with!

Keep in touch. We enjoy hearing from all of you.

Yours very truly,

Sally Chapman  
Professor and Chair