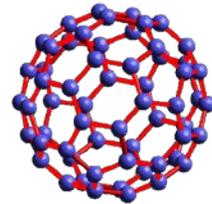




BARNARD COLLEGE
DEPARTMENT OF CHEMISTRY
MEMORANDUM



To: Current and Prospective Chemistry and Biochemistry Majors

From: Dina Merrer, Chair

Re: Welcome Back for Spring Semester 2014

Date: January 21, 2014

Welcome back. The Chemistry Department hopes that each of our students had an enjoyable and rejuvenating semester break. We look forward to a fun spring semester working together.

New Assistant Professor of Chemistry hire. Following an intensive search during the fall semester and visits to the department by four finalists, we are delighted to announce that we have hired **Dr. Christina L. Vizcarra**, currently an NIH postdoctoral fellow in the UCLA Department of Chemistry and Biochemistry. Christina will start as Assistant Professor at Barnard in July 2015 – she will be worth the wait! She is a physical biochemist whose research interests are centered around the mechanism of actin filament formation and how proteins called formins initiate and regulate actin filament assembly. Christina obtained her Ph.D. at Caltech, where she worked with Professor Steve Mayo on computational protein design, specifically developing new models of electrostatic interactions in proteins and designing large combinatorial libraries of protein sequences to screen for new function. As a postdoc, Christina is working with Professor Margot Quinlan at UCLA to investigate how *Drosophila* proteins Spire and Cappuccino build new actin filaments and interact with each other. At Barnard, Christina plans to study a formin gene that, when mutated, causes deafness and to use computational protein design to engineer actin-binding peptides for protein purification and imaging applications. Taken together, this research could lead to an understanding of how mutations in actin and formins cause disease. When she arrives, in addition to starting her research lab, Christina will be teaching the biochemistry curriculum with Prof. Mary Sever and Dr. Suqing Liu. Please join me in welcoming Christina to Barnard.

A special thank you to all students who participated in our search last semester by attending talks and meeting with the candidates. Your feedback was extremely useful and carefully considered. We deeply appreciate your willingness to participate in this crucial aspect of department life.

Upcoming new faculty search – yes, another! On the heels of our successful search for Christina Vizcarra as our new biochemist, I am very happy to announce that we will be expanding the Department again. (It's spring: time to grow!) Later in the spring (likely April), we will interview candidates for a brand new faculty position in the Chemistry Department. This is a very special position because we are searching for a faculty member at the full professor level. As such, candidates will be experienced chemists with a strong record of doing research with and teaching undergraduates. The subdiscipline of chemistry or biochemistry is completely open; we will therefore have the opportunity to meet a number of distinguished scientists. As with our faculty search in the fall, student participation via attending talks and meeting with the candidates is incredibly important. With your input, we are able to add to the Department in a way that is best for all of us. Please keep your eyes open for email notices from me with information about the search as the semester goes on.

New and returning faculty this semester. **Dr. Fay Ng** joins our department this spring. Dr. Ng will teach Fundamentals of Chemistry (CHEM BC1002). An organic chemist with experience in the pharmaceutical industry in medicinal chemistry, Dr. Ng is Lecturer in Discipline in the Columbia Chemistry Department. At Columbia, her responsibilities include teaching the advanced organic chemistry lab courses. Dr. Ng's office is inside 211 Havemeyer Hall on the Columbia campus. We are very happy to have Fay join us and she enthusiastically looks forward to working with Barnard

students. As Prof. Mary Sever continues her year of research leave, we are fortunate to have **Dr. Kristina Harris Petersen** to teach Biological Chemistry lecture (CHEM BC3282). As last semester, 601 Altschul remains Kristina's office. Many of you already know **Mrs. Olympia Jebejian** from General Chemistry I laboratory. Olympia retired from teaching at the end of 2012-13, but she returns this semester to teach Quantitative and Instrumental Analysis Lab (CHEM BC3338/3340) with Drs. Jacob Alexander and Suqing Liu. We heartily welcome back Olympia who cannot wait to be among Barnard students again. Her office will be in 809A Altschul.

Major declaration. Spring is the traditional time to declare a major if you are a sophomore. The schedule for declaring a major is March 1. We are hoping that those of you who have been prospective majors thus far will decide to join the department. If you have any questions at all about majoring in chemistry or biochemistry, please talk to any member of the department.

Summer research. The time to apply for summer research programs is upon us. Summer undergraduate research opportunities exist at Barnard, Columbia, and just about every university in the country. At Barnard, a couple of events will take place this year. Chemistry faculty will give brief talks on their research on **Friday, February 7, 2:00–4:00 p.m. in 805 Altschul** (refreshments will be served). Additionally, there will be a college-wide Summer Research Fair on **Friday, February 14, 1:00-3:00 p.m. in the James Room** (4th floor Barnard Hall). Interested students can then apply to do summer research here. Keep an eye out for additional information to be posted around the department and on the department website.

The department website also has links to some of the numerous summer undergraduate research programs available throughout the United States and even abroad: <https://chemistry.barnard.edu/scholarships> and <http://chemistry.barnard.edu/research>. Barnard's Howard Hughes Science Pipeline Project also keeps a database of web pages listing summer opportunities: <http://barnard.edu/hssp/barnard-student/internship-opportunities>. If you are interested in conducting summer research, we recommend applying to a variety of programs, because, as much as we would like to, we are not always able to accommodate all students who want to do summer research at Barnard. Note that application deadlines approach as soon as late January and early February, and programs often require letters of recommendation. Summer research programs typically offer a decent stipend (around \$4200 to \$4500 for a ten-week program), and housing and travel expenses are often covered.

Spring luncheon. Please mark your calendars for the Chemistry Department spring program planning meeting and luncheon, **Friday, April 4 at 12:00–2:00 p.m.** in Sulzberger Parlor on the 3rd floor of Barnard Hall. For students considering a biochemistry or chemistry major, the luncheon is an excellent opportunity to meet current majors in the department and to ask questions of fellow students and faculty. We have invited **Prof. Terry Plank** from Columbia and the Lamont-Doherty Earth Observatory to be our speaker. Prof. Plank is a geochemist – a volcano expert – whose work is on magmas associated with the plate tectonic cycle. Most notably, Prof. Plank was awarded a fellowship from the MacArthur Foundation (a so-called Genius Grant) in 2012.

Start thinking about 2014-15 – elective course! Building upon the rousing success of **Prof. Marisa Buzzeo's CHEM BC3254 Methods and Applications in Physical Chemistry** in Fall 2013, the Department is very happy to announce that we will again offer this course in **Fall 2014**. Prof. Buzzeo will cover fundamental and applied topics such as statistical mechanics, chemical kinetics, surface science, nanotechnology, and environmental and biomedical applications of physical chemical methods. This course will be 3.0 points and requires one semester of physical chemistry (BC3252 Thermo and Kinetics, BC3253 Quantum Chemistry, or the equivalent). We encourage you to start planning now to fit this course into your schedule next year if the topics intrigue you. Feel free to ask the students who took Methods and Applications this past fall about it as well.

Seminar/study room. Room 806 is available as a study room when not otherwise in use. If you wish to reserve Altschul 806, check the schedule posted on the door and contact the Chemistry Department Administrator, **Sarah Meadows** (smeadows@barnard.edu, 608 Altschul).

Computer room. We welcome you to use the chemistry computer room, 603 Altschul. Students doing chemistry work always have priority, but you may also use the computers for other work. On occasion, a class may reserve all the machines. Do not install any software without permission of a faculty member. Never open attachments unless you are absolutely sure they are legitimate. Please save files into a folder with your name in the “Student Documents” folder. Files left elsewhere else will be deleted. As always, it is a good idea to back up all work. Food and drink are *expressly prohibited* in this room. Anyone who violates this policy will be denied access. If a computer or printer is not working properly, please tell Sarah Meadows in 608 Altschul. Printing of documents is restricted to chemistry items. Black and white printing should always be used, except for those pages that must be in color. Documents unrelated to chemistry assignments are not to be printed. Restrictions will be placed on violators of this policy. Please clean up your workspace before you leave. Unless someone is waiting to use the computer, shut it down when you are finished.

Graduate and professional school. We receive many posters and pamphlets about graduate and professional study. Many are posted around the department, particularly on the 7th floor. The American Chemical Society’s *Directory of Graduate Research* is very useful for comparing graduate programs and finding information on individual faculty: <http://dgr.rints.com/>. Barnard chemistry faculty are also happy to speak with you and offer advice on your graduate school plans.

Jobs. If you have a work-study or Barnard job grant and are looking for placement, please speak to me or to other faculty and staff in the department; job opportunities may be available. If you have been hired to work in the department, be sure to fill out the proper paperwork with the Office of Career Development. The forms are now completed online. After that, please give our Administrative Assistant, **Molly Gill** (mgill@barnard.edu, Altschul 504A), the following information: your name, the job position, your primary supervisor, and the approximate number of hours/week that you will be working (not to exceed 15 hours/week). Molly can also help answer questions about hiring logistics.

Student contact information. Keeping in touch with our majors is of utmost importance. Chemistry and biochemistry majors, please e-mail Molly Gill (mgill@barnard.edu) or stop by her office (504A Altschul) to check that we have your correct (1) student mailbox number, (2) phone number, and (3) e-mail address. This is especially important if you are not listed in Barnard’s on-line directory.

Pictures. We like to have pictures of majors for our 8th floor bulletin board. If your picture is missing or if you would like a new one, please see Molly Gill in 504A Altschul or e-mail her a new photo.

Tutors. Sometimes we receive requests from parents seeking chemistry tutors for their high school children. Additionally, students in General Chemistry and Organic Chemistry often request tutors. Tutoring can be an interesting challenge and excellent review, not to mention a good source of income. If you would like me to refer your name, please let me know.

Final notes. I proudly say that the best part of being a faculty member at Barnard is the student body. Your collective energy, smarts, and love of learning inspire us as we work together with you every day. The department faculty and staff value your comments and advice. We as a whole and, particularly, I as chair, are/am also here to try to answer your questions about classes, the major, and summer research, and also to hear any concerns you have. Please do not hesitate to come to me or anyone else in the department. I wish everyone a successful and enjoyable spring semester!