Faculty hiring continues as University soars in rankings

Northeastern University continued to reap the benefits of strategic management and sustained growth in its academic mission to become one of the fastest rising in the Nation in 2012. It once again saw its National ranking jump (into the top 60), and its popularity topped the charts with the unique statistic of having the largest numbers of student applicants of any private institution in the USA. Underpinning this growth is a comprehensive faculty-hiring program, which resulted in over 80 new hires this year across its 8 colleges. In the Department this includes two new recruits who will join us this Fall. Professor Raymond Booth joins us from the University of Florida, where he established an international reputation for the study of drugs which target the 5HT receptor. Booth, who joined UF following his PhD [University of California at San Francisco] and post-doctoral studies [Harvard Medical School], brings a program which is heavily supported by the NIH and will be cross appointed in the CDD and Department of Pharmaceutical Sciences. Also joining us will be Professor Ke Zhang, an expert in the design and synthesis of polymer based nanomaterials. Ke comes to Northeastern following postdoctoral research at Northwestern University and a PhD from Washington University (St. Louis) and will establish a program in polymer based drug delivery. Both researchers will be housed in laboratories in Mugar Hall, allowing for strong collaborations with the CDD and access to major chemical analysis and molecular imaging instrumentation. At the time of writing, three other faculty hires are also pending, which will augment our capabilities in drug discovery, molecular analysis and computational chemistry. The future looks very bright for both the Department and University, and we are delighted to welcome these new colleagues onboard.

Barnett Institute moves into new laboratories in 140 The Fenway

Following over a year of planning the Barnett Institute moved into state of the art new laboratories in June 2012. This proved to be a herculean task which ran smoothly and involved the university architects and facilities and planning departments. In addition to a customized core mass spectrometry laboratory that houses up to 20 instruments, the facility is also home to the new Waters Corporation Center of Innovation Laboratory directed by Professor Engen. A dedication event was held on June 20 following a day long scientific symposium. The new home for the Barnett Institute, which celebrates its 40th year anniversary next year was welcomed by Institute director Professor Karger, as it allows for the first time, all its researchers access to contiguous instrumentation rooms, laboratory space, offices and conference facilities on the 3rd floor of the building. Welcome!
We have enjoyed another great year in the department, with lots of exciting developments and new faces to welcome. Following the reorganization of the Colleges, our new home in the College of Science has allowed us to grow our program in a number of strategic directions with the support of our founding Dean, Murray Gibson. As described in this edition of Husky Chemist, this included new faculty hiring, joint ventures with partners in the private sector and government, the opening of new research and instructional laboratories, and as always, the recruitment of talented new students.

During the past year the University moved forward again in the US News & World Report national rankings to number 62 and annual research expenditures for the first time exceeded the $100 Million level. This growth is remarkable, making us one of the fastest rising Universities in the nation. Undergraduate student applications broke another record – with some 44,000 seeking entry in one of the 2,800 spaces – an incredible achievement and one which cements Northeastern as one of the most competitive private schools in the nation. In the Department, we admitted a record number of highly qualified students – 50 undergraduate majors with average SAT scores of 1416 – the highest for any department in the University. The combination of real world experience obtained on co-op with academic research excellence is a powerful differentiator for prospective students, and this trend looks set to continue. For Fall 2012 entrance we have attracted a class of nearly 60 students, with similarly high SAT scores, which will build our majors program to close to 200! Our yield rate in attracting these highly qualified students was again the highest in the college, no doubt a function of the excellent learning environment we have created for them.

Our graduate program continued to grow from strength to strength. Bolstered by new faculty hires and the opening of state-of-the-art new research laboratories, our talented doctoral students continued to excel. With an incoming class of over 20 full-time PhD’s, our environment for research is vibrant and has allowed us to secure a large number of significant research awards. The 100+ full time PhD and co-op PhD students are training in areas critical to the economy and despite caution nationally, our graduates continue to be highly sought after, a testament to the relevance and recognition of the research our faculty conduct.

In addition to the ever-expanding research programs sponsored by federal agencies, we are also fortunate to enjoy very strong ties to the industrial and biomedical sector. Recently announced was the partnership between the Department and Waters Corporation which will result in the opening of a new biopharmaceutical training laboratory at our Burlington campus. This $ multi million investment, which has ties to the FDA was made possible by our preeminent expertise in bioanalytical chemistry research. This field is so active currently that the University is now engaged in starting up a new company derived from our research – BioAnalytix. In the biomedical field, inspired by department researchers the university has established a joint research program with the Dana Farber Cancer Institute, part of the Harvard Medical School system. The program, which is internally funded will promote development of translational research including cancer treatment and diagnostics. These are examples of how we as a faculty are continually engaged in identifying immediate and emerging needs in research and also in workforce training. Such activity is critical to the continued success of the university as the tour de force in experiential education and cutting edge research, and we are proud to help lead these efforts.

As always, there are many exciting developments described in this edition of the newsletter, as every year we manage to push the boundaries and grow to scale new heights. None of this is possible without my wonderful colleagues, dedicated staff, and above all our talented and gifted students and alums. I remain thankful as ever, for the opportunity to serve as your chair.

Graham Jones
Pollastri and DiMilla win teaching awards

Professor Mike Pollastri was honored by the student body as the recipient of the 2012 excellence in teaching award, the highest bestowed on our faculty. Based on student led nominations, Pollastri was feted at a ceremony on April 18, and presented with the award by President Aoun and Provost Director. Pollastri was nominated based on his mastery in teaching undergraduate organic chemistry, where his efforts to integrate technology in the classroom and student centered learning style drew praise from both majors sections and service classes. Also recognized this year was Professor Paul DiMilla, as recipient of the first year teaching award given by the engineering college. DiMilla was cited for his selfless dedication to the freshmen chemistry program, where he also functions as course coordinator. Based on his success, he was also afforded a joint appointment in the department of chemical engineering, ensuring our pedagogic ties are strengthened yet further. Congratulations Mike and Paul!

New courses in tropical medicine and energy

Consistent with the Universities strategic emphasis in Health, Security, and Sustainability, a raft of new and exciting curricular offerings are being developed. Within the department, new courses are being developed as we speak, for implementation in the 2012-13 academic year. In concert with our research efforts in global health and neglected disease, Professor Oyinda Oyeleran is currently developing a new course in the chemistry of Tropical Medicine. The course, related to an offering she developed while on the faculty at Williams College, is intended as a core course to allow students to obtain broad insight to the etiology and treatment of tropical diseases, which are a global concern. Similarly, Professor Rein Kirss is responding to our leadership in renewable energy research by developing an introductory course in the chemistry of renewable energy. Both courses will be offered to non science majors as part of the general education requirement for undergraduates, allowing them to obtain a unique insight to the subject matter from a chemical perspective.

Department and Waters announce new training facility

Following on the heels of the opening ceremony for the center of excellence [see page 1], Waters Corporation and Northeastern also announced plans for the construction of a training academy in biopharmaceutical analysis. The center Biopharmaceutical Analysis and Training Laboratory (BATL) was inspired by skillset needs in the rapidly growing biopharmaceutical and biosimilars field in light of the new FDA regulations surrounding these products. Having given testimony in hearings connected with the passing of the bill, Department researchers will be heavily involved in the design of the facility which will be housed at Northeastern’s Burlington MA campus. Backed by a multi million $ investment from Waters, the facility is slated to open early 2013, and will be the first of its kind in the Nation.

Changes to the MCAT examination loom

In response to the recommendations of the national academy / HHMI report on medical school curricula, substantial changes in the composition of the MCAT entrance examination will come into effect in 2015. The report also recommended changes in the nature of undergraduate chemistry, biology and physics preparation, favoring an integrated approach to content delivery. In response to this charge, the department is represented on a university wide curricular reform committee, and is in the process of redesigning several of the 1000 and 2000 level course offerings for pre-medical students including general chemistry and organic chemistry. The changes will be fully implemented by Fall 2014, with a pilot study anticipated for 2013.
Penny Beuning – Penny is now looking forward to sabbatical leave at the Institute of Biotechnology, Vilnius, Lithuania, which will involve new research directions. Additional research funding was secured from the NSF [joint with Prof. Ondrechen], and the American Cancer Society. Penny was also very active with our NSF ADVANCE program, hosting numerous workshops.

Raymond Booth – Professor Booth is looking forward to establishing his new research laboratories at Northeastern – on the second floor of Mugar Hall. The move from the University of Florida will take place during the summer months and he is gearing up to teach medicinal chemistry courses in the department and also for the department of pharmaceutical sciences.

David Budil – Professor Budil completed his first year as associate dean for research where he was involved in establishing a number of interdisciplinary initiatives through the Tier Grant Program. David also secured major federal funding through a joint project with Professor Rebecca Carrier. Renovations to his laboratory space in Egan are underway, which will allow closer interactions with NUCRET.

Geoffrey Davies – In collaboration with Principal Research Scientist Elham Ghabbour, Geoff continued to grow the online journal Annals of Environmental Science and hosted the 15th Humic Science & Technology Conference at Northeastern in March 2012. Their National Soil Project is close to 1000 samples analyzed for their sequestered carbon contents. Geoff also served on the College Council for COS.

Max Diem – Professor Diem’s laboratory for spectral diagnostics continued to develop practical applications of their cutting edge technology. A major joint venture funded by Cellmark Theranostics forms the cornerstone of their commercialization efforts and a multi-year agreement was struck between the University and company.

John Engen – The past year was a very busy one for John’s research team, including many publications. The Fenway move to the laboratories was followed by inauguration of the new Waters Corp. Center of Innovation. John is taking sabbatical leave this coming year at the Max Planck Institute of Biochemistry in Martinsried, Germany to work with Prof. Dr. F. Ulrich Hartl.

Thomas Gilbert – Tom taught a 2-week intensive course “The Particulate Nature of Matter” to a class of 21 public and parochial school teachers during late June and early July. The course consisted of inquiry-based learning activities and lab experiments. At the end of this summer he hosted the Summer Bridge to AP Chemistry program for 15 students from the John D. O’Bryant school.

William Hancock – Professor William Hancock continued to extend the visibility of our proteomics program on the international stage in connection with his role in the Human Proteome Organization (HUPO). A multi-center clinical screening program is now underway involving research teams in the USA, Australia and South Korea on the risk factors linked to breast, colon and stomach cancers respectively.

Robert Hanson – After much planning the Hanson group finally moved in to new laboratory space in the Egan building. The radiomedicinal chemistry program that Bob oversees will also involve dedicated isotope handling facilities and laboratory space in the Mugar building, ideally located in close proximity to the animal imaging facilities.

Graham Jones – The Jones laboratory is working with a consortium of biopharmaceutical companies for product development using flow-microwave reactors. They were also awarded funding from the Dana Farber Cancer Institute to develop new agents for hypoxic tumor control. Graham is also working with the FDA and Waters Corporation on the design of the new biopharmaceutical training laboratory.

Barry Karger – Under Barry’s direction the Barnett Institute reached a major milestone with the publication of its 1,000 paper – a major accomplishment! Another development was the formation of a new Barnett affiliated startup company – Bioanalytix, which will offer characterization services for biopharmaceutical companies. Barry was also the lead on a major NIH center grant, which will be reviewed this fall.

Rein Kirss – Rein has been working with Tom Gilbert and Geoff Davies on two textbook projects. He has also developed several new courses for undeclared science majors including an introductory course in the chemistry of renewable energy. He continues to serve on the College of Science Curriculum Committee.

Carolyn Lee-Parsons – Carolyn’s new research program in metabolic and biochemical engineering for the production of medicines and biofuels from plants and microalgae is gaining momentum and is benefiting from active collaborations in proteomics and metabolomics within the department.
News from our faculty

Sanjeev Mukerjee – Under his leadership, the Northeastern Center for Renewable Energy Technology established a number of new research collaborations. During the past academic year Sanjeev also chaired the departments materials chemistry search committee, and served on the provosts tenure and promotions advisory committee. Based on his accomplishments he was also nominated for the title of University Professor.

George O’Doherty – The O’Doherty group is now at full strength and enjoying the new customized organic synthesis laboratories on the 2nd and 3rd floor of Hurtig. George had another busy year on the conference and lecture circuit, and has established long term ties with the Shanghai Normal University. George took the lead in organizing a department wide organic ‘super group’ meeting series for our graduate program.

Paul Vouros – Paul continued to develop new tools for mass spectrometry analysis of small molecules, and his work on Differential Ion Mobility Spectrometry for the rapid analysis of drugs of abuse was highlighted in the press. He continues to serve as Subject Editor of Mass Spectrometry Reviews and was also appointed to serve on an interdisciplinary cluster search in homeland security.

Mary Jo Ondrechen – The Ondrechen group had another productive year and secured additional multi-year NSF funding for their research. Mary also worked with the ADVANCE program to establish and develop a post doctoral mentoring program for minority chemists. Mary was recently elected to the Faculty Senate Agenda Committee for 2012-13 and will be working closely with administrators and fellow faculty members.

Michael Pollastri – Mike was asked to take the lead on the College’s Global Health Initiative, which involved him heading up a cluster search and exploring partnerships with key stakeholders, including a number of institutions connected with the our new Seattle campus. In addition to his NIH funded program in neglected disease he also oversees a collaborative cystic fibrosis drug discovery program with Flatley Laboratories.

Eugene Smotkin – Gene’s research program was bolstered by renewed support from NuVant Systems and a new DoD grant for spectroscopy and theory of interfaces. He has also been busy as chair and organizer of an International Symposium which will be held in Iceland in August. Gene established a collaboration with Professor O’Doherty on electrochemically mediated organic transformations.

Ke Zhang – After agreeing a contract to start Fall 2012, Ke has been visiting with the University architects to design and construct the new laboratories to be located in Mugar Hall. In addition to multi step synthesis capabilities, the labs will be equipped for tissue culture work and host an AFM instrument. Ke gave an inaugural lecture to graduate students as part of the welcome week orientation.

Mary Jo Ondrechen

Sanjeev Mukerjee

George O’Doherty

Pam Mabrouk – Pam has been extremely active in her new role in the Deans Office where she oversees, undergraduate and graduate programs and faculty affairs. A major effort involved reorganizing the student advising and co-op services for the college. Pam designed and implemented a restructured model to which staff will now be recruited in time to be fully operational for Fall.

Lee Makowski – Lee expanded his study of protein ensembles securing NSF funding for methods development; increasing use of the synchrotron sources at Brookhaven and Argonne National Laboratories, and organizing a workshop at Grenoble. Experiments using scanning microdiffraction have demonstrated the power of this technique for mapping the distribution of molecular structures in tissues.

Alexandros Makriyannis – The CDD had another excellent and productive year under Alex’s direction and his receipt of the 2012 medicinal chemistry award from the ACS was a major accomplishment. In connection with the university wide faculty recruitment initiative, a number of new hires with ties to the CDD are anticipated, and a joint search committee [with Pharmaceutical Sciences] has now been established.

Carla Mattos – The Mattos group is now firmly established in Hurtig, and plans are underway to establish the crystal growth room and protein x-ray structural facility. The latter was funded through a grant from the NSF. Since her arrival, Carla has been in high demand and she will serve on the biochemistry steering committee as well as on the graduate admissions committee in CBB.

Sunny Zhou – The Zhou group received new funding from the NIH for their work on protein modifications and established collaboration with Novartis on epigenetics, which will allow the program to expand significantly. Sunny was also active in his capacity as graduate coordinator, and is in the process of establishing joint ventures with universities in Asia which will involve graduate student recruiting and marketing.

Ke Zhang

Ke Zhang

Carla Mattos

Carla Mattos

Pam Mabrouk

Sunny Zhou

Mary Jo Ondrechen

Lee Makowski

Michael Pollastri

Eugene Smotkin

Paul Vouros

Sunny Zhou

Mary Jo Ondrechen

Sanjeev Mukerjee

Alexandros Makriyannis

George O’Doherty

Sunny Zhou
Makriyannis wins ACS Award in Medicinal Chemistry

Professor Alexandros Makriyannis is the recipient of the 2012 Award in Medicinal Chemistry from the American Chemical Society. Makriyannis, who also serves as Director of the Center for Drug Discovery will be presented with the award at the 33rd National Medicinal Chemistry Symposium, to be held in Tucson next May. The Reaction Times, a monthly newsletter for the ACS, called Makriyannis a “very inventive and highly prolific” researcher, whose 40-year career has involved discovery of new medications, and over the past 25 years medicines specifically based on the cannabinoids. Despite their long history, it wasn’t until the late 1980s that scientists began to understand how cannabinoids function. Through their research, Makriyannis and his colleagues unexpectedly discovered a previously unknown physiological system in the human body that is serendipitously responsive to the plant compounds. One of its key roles is to maintain homeostasis in the body, thereby implicating a variety of disease areas. Makriyannis has spent the latter half of his career exploring its effects on neuropathic pain, metabolic disorders and neurodegenerative diseases, each of which modulate the endocannabinoid system, but in very different ways. Makriyannis’ work with the endocannabinoid system is but one area of research supported by the Center for Drug Discovery. The interdisciplinary team of more than 50 PhD Students, post-doctoral researchers and senior faculty members is dedicated to the discovery of novel medications and to the development of approaches and technologies aimed at improving the discovery of new therapeutic drugs. Makriyannis joined the faculty in 2005 from the University of Connecticut, and also holds a joint appointment in the Department of Pharmaceutical Sciences. Congratulations!

Pollastri leads initiative in Global Health

With the University strategic research plans defined in the areas of health, security and sustainability, it is natural that chemistry, which represents the ‘central’ science would play a leading role in these initiatives. Based on his considerable expertise in the area of neglected and orphan diseases, Professor Mike Pollastri was tapped to spearhead a new cross-college institute in Global Health. The initiative involves cluster hiring of research faculty, the development of innovative curricula, and an outreach program which involves universities, industry and government organizations around the globe. One area of initial focus of the group is in neglected tropical diseases, a group of debilitating or fatal diseases including parasitic diseases such as malaria, sleeping sickness, Chagas disease and lymphatic filariasis. The impact of NTDs is staggering. There are an estimated 1.4 billion people who are infected with one or more NTDs, with twice that number at risk of contracting them. Approximately one-third of the world’s population is at risk of one or more of these diseases, for which the drugs and treatments are woefully inadequate. Most of those who are at risk are very poor, and these illnesses are a huge burden for entire families, communities and nations. Though investments made in NTD research have typically been small relative to the overall research spending in the U.S., those dollars have been very effective in translating improved products for NTDs. As Pollastri notes - here at Northeastern, we are committed to becoming a bigger player in driving this conversation through our global health institute, which will have a research component for drug discovery and a policy component for development of new ideas regarding access to medicines and innovative ways to incentivize research. Keep up the good work Mike!
Co-op News...

It has been an exciting year for co-op in the Chemistry department. A total of 68 students were placed between July 2011 and January 2012. Many of our partner companies in the prestigious biotech community, impressed with our students’ talent and drive, have expanded their co-op program to accommodate more placements. We also continue to forge new partnerships. We expanded our opportunities into the food and chemistry arena with new positions at Zotos International, Inc and Concord Foods. In 2011, 35 new positions were created to meet the needs of our student and employer partners.

This year has seen a rise in the number students opting to co-op outside of the Boston area. This spring we developed a co-op at the US-Department of Energy at the Oak Ridge National Laboratory in Tennessee and at the Center for Translational Immunology Research at Columbia University in New York. Our students also continue to span the globe. New this spring we sent a student to the Drug Discovery Unit in the School of Life Sciences at the University of Dundee in Scotland and forged a new co-op partnership with the International School of Breman in Germany.

The Chemistry major continues to grow with even greater numbers of hard-working and accomplished students. This fall, I am excited to welcome our largest incoming class of over 50 students.

We find that alumni involvement and mentoring through co-op are integral parts of shaping a student’s future and leading them on a path of success. To become a mentor and/or part of the co-op process please contact me at k.cameron@neu.edu or 617-373-4498 to learn more!

Best,
Katie Cameron

Co-op at Tufts Veterinary School

In June, Katherine Spring (‘13) finished her first co-op at Tufts Cummings School of Veterinary Medicine. Desiring to go to veterinary school, Katherine sought out a co-op tying this to her chemistry experiences, and with the help of chair Graham Jones, she was able to join the lab of Andrew Hoffman, DVM in the clinical sciences department at Tufts. Under mentorship from Julia Paxson, PhD, DVM, she began studying the effects of aging on the matrix of the lung and the loss of repair mechanisms during aging. The lab took a comprehensive view in studying the lung, looking both at the matrix and the cell types in an attempt to identify a progenitor cell that could be employed to help boost repair. The over-arching goal was to develop a protocol to re-cellularize a matrix that would be utilized by a transplant candidate, without the need for immunosuppressive drugs.

At Tufts, Katherine employed the knowledge that she had gained from her chemistry classes, particularly bioanalytical, to work on immunohistochemistry and Western blots, qualifying and quantifying key proteins in different age groups. She also worked de-cellularizing and repopulating lungs to be analyzed via global proteomics using a native tissue standard. This study was accomplished through a partnership with the Barnett Institute here at Northeastern as she learned about mass spectrometry with guidance from James Glick, PhD. The data gathered by Katherine will be included in future publications by Paxson, and the success of this partnership opens up future collaborations for students wishing to pursue veterinary medicine careers.

Co-op Research published

It was not so long ago that the much sought after co-op positions that attract majors to Northeastern were seen as an experience that would help land a full time post on graduation. While the same is no doubt true today, the research preparation that our students are provided with prior to co-op means that they regularly engage in cutting edge research during their six month internships. As a consequence of this, more and more of our students are finding themselves as inventors on patents and authors of publications from industrial laboratories. The latest of these is senior Max Mahoney, whose work at Amgen was recently published in the Journal of Chromatography. Congratulations!
As the 2012-2013 academic year approaches, we look back at this past year for the Graduate Student Association. Under the governance of the previous officers (Jennifer Monahan - president, Zhenke “Jack” Liu - vice president, Jennifer Woodring - secretary, and KyOnese Taylor - treasurer), we witnessed an incredibly productive year for the GSA. As myself and my fellow officers (Jonathan Doan - vice president, Debarpita Ray - secretary, and Naimee Mehta - treasurer) take over for this upcoming year, we hope to continue the excellent work done by previous administrations.

As I write this letter on behalf of the GSA, the current first-year graduate students are busy preparing for and taking their qualifying exams, as they prepare to become Ph.D. candidates. Several years ago, the program went through several changes, with one of the largest being the condensing of the coursework into a single academic year and summer semester, with cumulative exams being taken during the second summer semester. This allows for graduate students to focus their remaining time in the program solely on research.

Throughout the year, the GSA is in charge of the planning of numerous events. Again, credit goes to last year’s officers, as the transition to the current officers has only occurred during the last few months. They did a terrific job planning numerous events that allowed for the interaction of the faculty, staff, and graduate students in a more social aspect which further increases camaraderie within the department. These events included our annual holiday poster session, an ice cream social, International day, and several BBQs. Without fail, the events were very well received by students, staff, and faculty alike. Since the transition to the current officers, the department has again been busy, as in recent months we have had an end-of-year BBQ, Odyssey Harbor Cruise, and a BBQ in Ashland. The GSA also has the designation of planning the annual colloquium series. I would like to thank Antonella Mazur, Francisca Sekyere, and Ramya Parasuram for doing a fantastic job, and I would also like to thank in advance Tetiana Bairachna, KyOnese Taylor, Jennifer Woodring, and Ryan Knihtila for volunteering to take over these duties for the 2013 calendar year. The past groups have done a wonderful job collecting a variety of speakers in order to cover the broad spectrum of fields of chemistry, and I am sure that the incoming group will do a fantastic job as well.

The largest event every year that the GSA is responsible for is the Open House weekend for prospective graduate students. The goal of the weekend is to host high-quality candidates for the program to the university for a weekend so that they can get an idea of the people, program, university, and city of Boston. A mixer is organized on Friday night to introduce them to each other as well as current graduate students in a low key environment before they spend the majority of the day Saturday meeting with students and faculty in a more formal setting. Lab tours, poster sessions, a student panel discussion, and talks by select faculty members help provide a more detailed overview of the program that we have, and evening events help provide a very informal session for the prospective students to ask questions that have come up during the day, as well as a chance for current graduate students to learn more about the prospective students. This past year, dinner was a family-style meal at Mother Anna’s in the North End, followed by a comedy show across the street at the Improv Asylum. Clearly this past year’s Open House was a veritable success, as we have an impressive incoming class of 23 students arriving this fall. The bar has been set very high, and the current GSA officers are certainly hoping to put on a very good Open House this year in order to continue to bring in the best possible graduate students.

At this point I would like to congratulate the members of the department that received awards this year. Jen Monahan and Dr. Michael Pollastri received the departmental citizenship awards. Kelton Barnsley, Gregory Pirrone, Michelle Silva, and Jonathan Doan were given the outstanding Teaching Assistant awards. Jaylene Ollivierre was rewarded for her outstanding chemical research. And finally, Andy Bean was given the GSA staff award.

The GSA takes pride in constantly improving the graduate program whenever possible. The past administrations have done a great job enhancing the program when improvements were possible and necessary. This administration hopes to be able to do the same. An updated version of the “grad student survival guide” will be distributed to the incoming students during their departmental orientation. The constant upkeep of the recently established GSA email account (gsa.neuchem@gmail.com) with important documents and calendars will help increase organization within the GSA as a whole. While lots of credit goes to past administrations and their respective officers, it is also vital to thank all of the graduate students that have helped with all the events. None of this would have been possible without the input and manpower provided by all of the graduate students in this department.

Looking forward to a great upcoming year!

Ryan Pavlicek
GSA President

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<td><strong>Outstanding Chemical Research</strong></td>
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Dear new and returning students,

Wow! What an exciting 2011-12 school year we had. I can’t believe all that we accomplished within the Northeastern and Boston community. One thing I know is that without all of you we wouldn’t have been able to do it. A big thank you goes out to our new advisor: Katie Cameron. Also, to the leaders of last school year: Victoria Berger, Stephen Ejk, Daniel Klosowski, Becky Lewis, Elise Miner, and Justin Roberts. For our upcoming 2012-13 school year we have a few new leaders, as well as some returning members: Chrissy Hartigan, Elise Miner, Justin Roberts, Anthony Varca and myself. We are preparing to have a year full of interesting trips, talks and meetings.

The trips we took last year kept up with our past traditions. With one of the largest classes ever entering the chemistry program here at Northeastern, we still managed to ride roller coasters at Six Flags, pick apples and got lost in a corn maze at Connors Farm, snow tubed down Nashoba Valley’s mountain and cheer the Celtics on versus the Spurs. We can’t wait to continue the traditions, as well as make new ones this upcoming 2012-13 school year. A unique trip this year included an opportunity for the students to visit the Warner Babcock Institute to learn about green chemistry practices.

In addition to the trips, many professionals came to talk about their research, companies and experiences. These speakers included: a theoretical chemist, green chemist, business school professor highlighting the trends in the pharmaceutical world, master brewer at a local brewey and many more. This year we hope to bring an even more diverse selection of speakers to campus.

Presenting at the national ACS meeting in San Diego within the successful student chapter section was also a wonderful experience. Our chapter’s poster highlighted our exemplary mentor program that has remained strong throughout the years. In addition to presenting a poster, our chapter also won two national awards: commendable student chapter and a green chemistry chapter award!

While this will be my last year as an undergraduate within the Chemistry department I wanted to take this chance to say thank you. The university experience that I have had the remarkable opportunity to participate in has been more than memorable. Thank you students, professors and faculty for making NUSAACS such an amazing program. Now, time for an amazing school year!

See you all in the fall,
Christine Dunne
New laboratories opened

Following many months of design, construction and outfitting we were finally able to open dedicated research laboratories for Professors Carla Mattos and George O’Doherty this Spring. The Mattos group biochemistry laboratories are located in 112 HT, and are augmented with a server room, a crystal growth room and a to-be-designed protein x-ray facility, supported by a recent grant from the NSF. The O’Doherty group occupies two laboratories [220 HT and 320 HT] equipped for state of the art organic synthesis including 15 fume hoods and solvent recycling capabilities. We are confident that their new homes will provide an ideal environment for research excellence!

New campus to open in Seattle

In order to service the ever expanding global reach of the University, Northeastern is in the process of opening satellite campuses in Charlotte, NC and Seattle, WA. The primary objective of these campuses is to serve as a locus for the delivery of online and hybrid degrees and certificate programs, the campuses selected following a rigorous market analysis. While the primary focus of the Charlotte campus will be in business and financial education for working professionals [the city is home to Bank America and other financial institutions], in the case of Seattle, biotechnology and regulatory science will be featured. Seattle is home to a number of world renowned biomedical research centers and workforce training in this area is a critical need. Colleagues are currently engaged in designing online and hybrid versions of the biotechnology and regulatory science PSM degrees for delivery in 2013, spearheaded by program leaders Cynthia Bainton and James Leung.

Department to host International Conference in Iceland

Professor Eugene Smotkin’s research program involves development of state of the art analytical and electrochemical instrumentation for the study of reactions dynamics. Recognizing his stature in the field, and supported by NuVant Systems Inc. Gene is the lead organizer of an international conference on electroanalytical systems to be held in Selfloss, Iceland. The event, which takes place August 25-29 will attract over 100 delegates from over a dozen countries. The department values this visibility and will be publishing proceedings from the event in the Fall.

Another major wins prestigious NSF award

Following on the heels of Rhiannon Thomas last year, another of our majors has been awarded the coveted NSF fellowship for doctoral research. Erin Ronayne, who graduated in the May 2011 class is attending the University of Wisconsin, Madison for her PhD. The NSF fellowships are extremely competitive and this speaks volumes of Erin’s accomplishments. Bravo!
Department says goodbye to Professor Philip Warner

Following a career spanning some three decades, including nearly a quarter of a century at Northeastern, Professor Philip Warner retired from the University this year. An expert in mechanistic and computational chemistry, Warner was trained at Columbia University and UCLA before starting his independent career at Iowa State. He rose through the ranks to full professor and was recruited to Northeastern as Chair in 1998. A celebratory supper was held on May 6 attended by faculty and staff. Phil and his wife Jeannine are headed to Rochester, NY, where Jeannine will take up a resident physician appointment following her graduation with the MD from U Mass Medical School. We wish Phil the best in his retirement, which will no doubt be busy, helping raise their twin boys!

Record crowd celebrates senior supper

As the chemistry majors program grows steadily, our annual recognition event for our graduates and their families – the ‘senior supper’ has become an event requiring major planning. Nearly 200 people celebrated the accomplishments of the some 45 graduates for 2012 this past May – requiring the entire floor plan of the ballroom to accommodate! Awards in various categories were presented before each graduate was individually recognized by our head advisor – Katie Cameron. Our highest accolade, the outstanding graduate award, was presented to Krista Wager, who completed her BS/MS degree and will be heading to medical school next year.

Matz and Shapazian Scholars research showcased at Symposium

In what has become an annual fixture in the academic calendar, the Matz symposium was held on April 3, 2012, attended by students, faculty, Dean Gibson, and Bob and Eileen Matz, who established the scholarship program in their name. In addition to Matz undergraduate research scholars from biology, psychology, neuroscience and chemistry, a presentation was given by the annual Shapazian Scholar - Katherine Spring. These scholarships, which promote excellence in undergraduate research, have afforded many individuals the opportunity to conduct innovative research under the supervision of a faculty member, and we are deeply indebted to Bob and Eileen Matz, and Trustee Carole Shapazian for their continued support.

Penny Beuning awarded tenure

Following the customary six year probationary period for junior faculty, Assistant Professor Penny Beuning, an expert in DNA repair enzymes, was awarded tenure and promotion to the rank of Associate Professor this Spring. In addition to developing an internationally recognized program in her field, Penny has developed an excellent reputation as an instructor in the biochemistry / chemical biology area, where she has also developed new courses. Congratulations Penny!