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Lawrence Barton, Editor

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Chairman's Message (Christopher D. Spilling)

Again budget problems have dominated discussion at the University and probably will for the next few years. However, this year I prefer to focus on the positive. Although the renovation of the undergraduate laboratories in Benton and Stadler Halls has stalled again the university is currently exploring fundraising options from private sources. Lol Barton showed me a 1987 report that recommended that the administration press for funds for this project! On the other hand, enrollment at both the undergraduate and graduate levels is very good at the moment and thanks to your help we are able to assist more students by awarding scholarships to them. We continue to hear of the great successes of our alumni, many of which are described later in this volume, so that makes us proud of you and it enhances the value of all your degrees!



Dr. Rensheng Luo works with the new Agilent DD2 600 MHz NMR spectrometer

In earlier Chair's messages I had reported that we had received National Science Foundation MRI funding to purchase a 600 MHz NMR spectrometer. We had several delays during the purchasing and delivery, but I am happy to report that the

installation of the new instrument is well underway. The Agilent (Varian) engineers are in the final phase of testing and should turn the system over within the next two weeks.

Jim Bashkin first came to UMSL as a Research Associate Professor in 1999. Since that time he has developed a very successful research program here aimed at developing therapeutics for the Human Papillomavirus. (HPV). He has been very successful in winning grant funding from NIH in support of his program. We have tried several times to provide him with a full time regular faculty appointment and I am pleased to announce that Jim recently accepted the position as Professor of Chemistry and Biochemistry. Jim expects to teach biochemistry, organic and inorganic chemistry courses here.

Wes Harris recently accepted an appointment as Associate Dean for the Graduate School and we were able to hire Bruce Hamper as a Teaching Assistant Professor to fill Wes' teaching role. Bruce has been with the Department for two years as a part time Adjunct Professor and researcher. Bruce is a former Monsanto/Pharmacia/Pfizer employee.

The Chemistry Alumni Council (CAC) held *Chemistry Connections and Open House* in April. This was a networking event which included presentations on networking and careers, a panel of alumni from widely differing career paths discussing their careers and answering questions and it ended with a reception wherein graduate student displayed research posters as the attendees enjoyed refreshments. The event was well attended and described by the campus as perhaps the most successful program during the Alumni Weekend.

The 2010 Murray lecture was given by Professor Steven V. Ley the 1702 Chair of Chemistry Cambridge University. This was particularly exciting for me since I had worked in Steve's labs during my research/sabbatical in 1996-1997.

Anyway, we hope you are doing well in your careers and personal lives and we encourage you to keep in touch with us. One way to do that is to join our LinkedIn group which is doing quite well. See the box below.

Please join the UMSL Chemistry Alumni Group.

This is an excellent way to network with other alumni and to make contacts with former classmates. It will be valuable for professional activities too. If you are already on LinkedIn, our group URL is <http://www.linkedin.com/e/gis/865237>. If you are not a member of LinkedIn, you will be asked to join. To join please send a message to the group manager, Sean Dingman at Dingmans@umsl.edu.

Alumni Information

1960s

David Henton BS 1967 tells us that in his retirement from the Dow Chemical Co. in Midland MI he is very busy. He is still consulting a lot and spending time at his condo in Jackson Hole Wyoming and at his northern Michigan retreat. When we last heard from him, he and his wife Barb were in Wyoming for the month of September, hunting, fishing and animal viewing and doing some consulting for a couple of clients after getting back to the house in the evening. He and Barb had spent that day floating/fishing the Snake River with a full view of the Grand Tetons, eagles, and moose and then finished the day watching herds of elk with huge bulls rounding up the cows and bugling. Enjoying retirement!

Donald Kaesser BS 1967 spends a month each year with his wife Pat on Sanibel Island and in January Pat and Lol Barton spent time with them and had lunch by the pool at the resort where they stay. The Kaessers' favorite activity is reading in the sun on the beach on Sanibel – he says it does not get much better than that for them.

Raymond F. Novak BS 1968, who had been the Director of the Center for Chemical Toxicology at Wayne State University, accepted the position of Corporate Director of Research at Shriners' Hospitals for Children International in Tampa, FL, in October of 2010. His wife Fran Holly BA 1968 decided to retire from her position as Assistant to the President, Right Management, and joined him in November 2010. Ray's new position requires quite a bit of travel, oversight, management of internal review and funding of grants through an external peer review process, review of extensive research programs in orthopedics, burns and spinal cord/neuromuscular diseases and injuries, and managing and reporting to various boards. This corporate executive position offers opportunities for leadership and is both exciting and challenging. Although the disciplines represent a departure from his previous scientific work, the ability to bring an extensive academic leadership and research perspective to the work and to learn new material is invigorating. He was also able to continue on as Chair of the Board of Scientific Counselors of the National Toxicology Program at the National Institutes of Environmental Health Sciences for 2010 and in January he chaired a panel in a four day workshop on "The Role of Environmental Factors in Obesity and Diabetes". He also chaired a subcommittee of the National Toxicology Program in that same month. His NIH-funded research is still active at Children's Hospital of Michigan, Wayne State University with five people in the laboratory.

Joseph P. Bono BS 1969 who spent four years teaching at Indiana University Purdue University Indianapolis (IUPUI) and had a wonderful experience in the classroom, following retirement from his position as Lab Director for the US Secret Service, moved back to the DC area in July. He and his wife Barb are now living in Leesburg, Virginia. Joe tells me that now that he is 64 and has lived and traveled all over the world, he finally has come to realize even more that being close to family is what life is all about. He will continue to do some consulting, but being a grandfather is what is most important at this point in his life.

Steven Mestamecher BA 1969 maintains contact with us. Steve has been with DuPont in Parkersburg WV since graduation from Washington University with his PhD degree.

Douglas G. Nuelle BS 1969 practices orthopedic medicine in the mountains of north Georgia. He is currently Chief of Orthopedics at the Fannin Regional Hospital in Blue Ridge, Georgia, but he tells us he is beginning to slow down. He and his wife Tonya were recently in Hawaii with their son Dylan, who learned to surf there.

1970s

John R. Kolb BS 1970 continues to volunteer his time teaching science to grade school kids in the rural areas of Tuolumne County, CA and he believes he gets more out of it than they do! John and his wife Judy live in the small community of Sonora, found by Mexican miners in the Sierra Nevada. He is also an Adjunct Professor at Columbia College where he has been teaching two, and sometimes three, sections of first year chemistry. Early in the year they had the worst storm in 32 years. It was a very heavy, wet snowfall that as a result looked like a tornado had passed through the foothills. The trees – primarily oaks – couldn't handle the sudden heavy snow and they either cracked or just pulled out of the ground. He lost between 15 to 20 oaks overnight and had to chainsaw four oaks that had fallen over the driveway into pieces before they could leave. They lost power for the night which justified their recent efforts to guard against losing all public utilities and having to maintain themselves. They sank a well in October 2010, fed from a river underground about 125 feet down. The garden, the well, the trees, the wood stove, candles, cooking on the stove or a propane grill, puts them in the realm, he says, of *survivalist lite*.

Harold Messler BS 1970 is one of the biggest boosters of the department and the University. Now retired and spending much time with his grandchildren, we see him regularly at campus events. He is active in the Chemistry Alumni Council and we chatted with him most recently at the Chancellor's Reception for the College of Arts and Sciences in November.

Sandford (Sandy) A. Asher BA 1971 who is Distinguished Professor of Chemistry at the University of Pittsburgh has been honored with the 2011 *Charles E. Kauffman Foundation Award*.



Sandy Asher

We cite from the Pitt website; "This is based on his fundamental research in Chemistry that has advanced the field of knowledge in chemistry and benefited humankind through technologies of economic value and significance for improving human welfare, health and security. The work involved the development of sophisticated laser based methods for determining the mechanisms of protein folding and for developing standoff detection of hazardous chemicals, and for the development of smart photonic crystal chemical sensing materials. Professor Asher will be presented with this \$50,000 award in December."

Harry W. Orf BS 1971, who had been Vice President for Scientific Operations and Professor of Chemistry at the Scripps Florida Research Institute since 2004, which is located in Jupiter, FL is going back to Massachusetts General Hospital as Senior Vice President for Research. Harry spent 21 years at MGH and was Director of the Molecular Biology Laboratories there.

Dennis W. Wester BS 1971 was in touch recently. He had just travelled to the Netherlands and Russia in association with his position as Director, Applied Research at MDS Nordion in Vancouver. His wife Vicki and son Adam still reside in Richland, WA. She is teaching and Adam working at Dennis' former employer, the Pacific Northwest National Laboratory. Dennis has been translating articles in Russian scientific journals into English for several years and he tells me he does about 1,500 pages per year!

Michael J. Finkes BS 1973, MS 1978, another star booster of the department, continues his role as Vice President of the Alumni Association. One of his projects has been the series of "Dinners with 12 strangers" wherein six alumni and six undergraduates have dinner together and discuss career and life experiences and expectations. Mike extended this to become an activity of the Chemistry Alumni Council and the one held in June is described later on.

John M. Crump BS 1974, who received an MD from the University of Missouri-Columbia, is a member of the group North Florida Surgeons at the Baptist Medical Center in downtown Jacksonville, FL.

Virginia Martin BA 1974 is an MD and has been in private practice of infertility and IVF for 22 years in Birmingham, AL. It is a wonderful career. Ginny and husband Ray, who have four children, three sons, Mickey, Douglas and John and a daughter Kristina, recently got back from a trip to Vietnam, Cambodia and Thailand. We understand it was an amazing experience.

Ron Suchara BA 1974 was at the ACS Midwest/Great Lakes Regional Meeting representing his company, Agilent (formerly Varian) in the exposition.

A. Greg Wall BS 1974, MS 1981 who received his PhD degree with Eric Block at SUNY-Albany, has been retired from Sigma-Aldrich since mid 2007. Since then he has worked in industry and also taught at several locations, including the chemistry department here where most recently he has taught biochemistry. Now Greg is back where he began in the 1970s teaching K-12 at McKinley Classical Leadership Academy, a gifted magnet school in the St. Louis Public School System. In December Greg was given a Salute to Excellence Award by the St. Louis Section

of the ACS for his excellent work in outreach for the Section including coordinating National Chemistry Week for many years, Chemist Celebrate Earth Day and many activities associated with the St. Louis Science Center, among other activities.

Daniel Breyfogle BS 1975 is currently employed as Technical Director of Trans-Mate, Inc. in North Billerica MA, a company which makes commercial car wash and car detailing products. It is a small privately held company with about 20 employees. He was with the Butcher for 20 years prior to joining Trans-Mate. The company was bought by Johnson Wax Professional in 2000 and J Wax Pro wanted him to relocate to Wisconsin in 2002. He and his wife Bridget decided relocating was not right for them so he took a "package" a year later and has been at his current job since 2004.

Paul Blystone BS 1975 married his friend Kathryn this past year. They planned to be in Europe May 9-31, London, Prague, Paris, and Bordeaux area when we last communicated with him. One of his projects at the time involved a pilot venture with a local wastewater treatment plant that would attempt to polish waste water treated effluent with powdered activated carbon made from undigested sludge waste.

Daniel Henton BS 1975 missed us when he stopped by the Chemistry Department in August. He was in town to attend the Normandy High School Class of 1971 Reunion. He drove down and needed to get back to Midland relatively quickly to pick up his son Nick, who is attending the Univ. of Michigan in Ann Arbor, and bring him back to Midland for a dentist's appointment! He has been with Dow for more than 32 years in the Engineering & Process Science Department as a Research Scientist, and has been working on a number of small molecule



Dan Henton

projects that can make use of his synthetic organic chemistry skills. Until the dissolution of the department (2006), he had been working continuously in the Pharmaceuticals Process Research group for 27 years, making active drug entities for clients as part of the Contract Manufacturing Services group. A couple of compounds on which he worked (typically the final steps & isolation procedures) that are now on the market, or which have just been approved for marketing, include fexofenadine, the active ingredient in Allegra, and synthetic heparin (fondaparinux), now being made by Dr. Reddy's

Laboratories (India). He has three children, two are still in college and the third is married and living in Park City UT.

James J. Grib BS 1976 since retiring from Anheuser-Busch three years ago has been busy tutoring high school chemistry students, acquired a real estate license (to help his children purchase houses), then helped them remodel their houses and has volunteered two days a week at the Missouri Botanical Gardens in their Aroid research area. The latter has proven quite challenging but it is a great experience working with the world's leading authority on the subject, Thomas B. Croat, Ph.D. Tom has rewarded Jim's efforts by naming two species after him: *Anthurium gribianum* endemic to Colombia and *Philodendron gribianum* endemic to Ecuador. Now Jim's latest challenge will be teaching Chemistry 101 at Southwestern Illinois College (formerly Belleville Area College) at the Belleville campus starting January 2012. Jim is active on the Chemistry Alumni Council and occasionally goes out for a beer with the editor and several former classmates and UMSL colleagues.



Alumni Weekend Panel, from l-r, Jeanette Hencken, Suzanne Pea, Kim Gorman, Kevin Trankler, Bob Dittrich and Lol Barton

Ted Nilges BS 1977 is a Chemist and Environmental Health and Safety & Facilities Manager at Cooper Bussmann Inc. in Ellisville, MO, where he has been for the past 18 years. He was formerly with Siegel Robert in St. Louis.

Clarice Rieser BA 1977 was in touch with us recently. Her husband Richard retired from the VA last year but has been working a couple days a week at the University Hospital in Columbia, MO. She is volunteering on a research project there at the medical school, on the days Richard works there. They live in northern Boone County. They were on vacation for most of the month of September in the Poconos in Pennsylvania, a few days in Maryland with her father-in-law, and also spent a few days away in early October to celebrate their 25th Wedding Anniversary.

Paul Sherwin BA 1977 is a Senior Medical Director at GE Healthcare, in Princeton, NJ, where he oversees clinical trials of new diagnostic imaging agents, including PET imaging pharmaceuticals. He finds it fun and it keeps him extremely

busy. He uses his chemistry background as much as, and some days more than, his medical background. Paul has a PhD degree from the University of Illinois-Champaign-Urbana and an MD from the University of Miami and did undergraduate research with Eric Block when he was a student here. He has a son (Andrew, 22) from a previous marriage who was to graduate from Missouri State University in Springfield MO with a degree in video game design, and 2 stepdaughters, one (Jen, 19) in college and the other (Samantha, 16) in high school. His wife Mindy keeps them all organized.

Joseph Bulock, BS 1978, MS 1982, who had been with Monsanto/Searle/Pharmacia, is now Associate General Counsel at Amgen, in Thousand Oaks, California. He spent 20 years with Monsanto/Searle/Pharmacia, first as a chemist and after obtaining a law degree at St. Louis University, as an attorney. He joined Amgen in 2000.

Phyllis R. Bennet MS 1979 passed away last January 26 after a brief illness. Phyllis, who received a BS degree in chemistry from the University of Miami of Ohio in 1952, began her scientific career in the Phosphate Division of Monsanto Company in Anniston, Alabama. In 1957, she relocated to her native Dayton, Ohio, and channeled her efforts into investigating phosphate leavening agents and their reaction rates and rheological effects on bread dough and cake batter. A year later she came to the Monsanto facility in Creve Coeur and was one of the first occupants of N Building where she continued her work on the rheology of doughs and batters. Phyllis married fellow chemist Dr William Bennet in 1958. She semi-retired to raise their two sons, Thomas and David, but continued her studies of chemistry in the mid-1970s here. She began by taking a couple of undergraduate courses in 1975 and completed her MS degree in 1979. Upon graduation she was employed by Ralston-Purina, and later by its spin-off, Protein Technologies International, where she conducted research on HPLC analysis and evaluation of soy protein isolates as food ingredients. Phyllis also developed other analytical methods in connection with process development



Phyllis R. Bennet
1929-2011

and new product applications. Her presentation at a symposium on *Opportunities for Women in Chemistry* in 1989 was published in a special issue of *The Chemist*. Phyllis provided management training for minorities in technical and business programs by serving as a summer intern supervisor in the Inroads program in 1993 and 1994. Phyllis served the St Louis Section in numerous capacities. She was advertising manager of the *Chemical Bond* in 1981 and Editor in 1982. She chaired the Publicity and Public Relations Committee in 1983 and served as Publication Chair of the Local Arrangements Committee for the 1984 National ACS Meeting in St Louis. Phyllis published a special issue of the *Chemical Bond* for the attendees at the National Meeting; the advertising revenue from this issue provided additional funding for the Midwest Award. Phyllis was Chair of the Section in 1986, a year in which the Section won an Award for Outstanding Performance by a Medium-Large Section. She was particularly proud to be only the second woman to chair the Section; the other one Desiree S.

Le Beau was chair in 1952. Phyllis frequently participated in Career Day for high school students during Chemical Progress Week and in the Career Awareness Fair for 8th grade students. She organized a special General Meeting in 1992 in which Helen Free, then ACS President-Elect, was the speaker. Phyllis also served on the Audit Committee and on numerous nominating committees and award juries. She faithfully attended Recognition Night, and kept accurate records of the awards the Section received throughout the years. She was awarded the Distinguished Service Award in 1997 in recognition of her dedication and service to the Section. Phyllis will be dearly missed.



Mike Finkes and Harold Messler

Vincent H. Chang MS 1979 in the Joyce Corey group, who also received a PhD from Duke University, is Regional Quality Assurance Director-Contract operations with Abbot Laboratories in Abbott Park, IL.

Bruce Ritts BS 1979, MS 2003 continues at Steris in St. Louis where he has been since moving from Petrolite when the latter discontinued business in St. Louis and moved its operation to Baker-Petrolite in Houston, TX in 1997. Bruce has been active in the St. Louis Section of the ACs for many years, serving in several officer positions. He most recently served as the Treasurer for the ACS Joint Midwest/Great Lakes Regional Meeting in St. Louis in October, 2011.

Lance Hedwig BA 1977 retired on Oct 1 after more than 44 years at MEMC (formerly Monsanto Electronic Materials Company) in St. Peters, MO. He had been an Associate Fellow since 2000. He tells us that his grandson will be starting at UMSL next year in the honors college studying accounting. He adds that if he can live long enough to witness a grandchild's graduation from UMSL, then he knows he will be old!

1980s

Helen L. (Janoski) Anderson BS 1981 has been Vice President, Commercial Development at the Harvard Drug Group in St. Louis since August. Following graduation she spent 14 years as a Formulations Chemist with Monsanto, ultimately as Senior Formulations Scientist. Following that she served as Sales Director for Nutrasweet, Associate Director Sourcing Biotech at Pharmacia, Associate Director of Biopharma sourcing at Pfizer, Director of Sourcing at Perrigo and most recently Vice President Global Business Development at Drug Source Company. She holds an MBA degree from Regis University and studied project

management at Villanova University. We note that she served on a special round table panel on "The Business of the Pharmaceutical Industry" at the recent ACS/MW GL Regional Meeting in St. Louis.

Anis Qureshi Ashraf PhD 1982, who received her doctoral degree with Rudi Winter, was in touch with us recently. She had met Sean Dingman when he visited her company this past fall, and this led to a contact with the editor. After working for 16 years for a private cancer research institute, she worked at University of Texas/ Houston for 3 years before opening her own company. In 2000 Anis with two partners opened up an organic synthesis laboratory, Polyorganix Inc. They make specialty chemicals, especially for Sigma-Aldrich.

Susan A. (Jansen) Varnum BS 1982, PhD 1986 tells us that the light of her life these days is her 9 year-old daughter Grace. Sue is still in Chemistry as Full Professor and serves half-time as faculty fellow (advisor) to the Temple University President, Ann Weaver Hart. Every summer she runs science camps for inner city kids, two this year, one overnight/residential, one day-camp. A lot of fun, a lot of work, she tells us! She still has an active research group and has funding in science education as well. She fondly remembers and appreciates her UM-St. Louis faculty including Jones, Winter, Armbruster, Joyce and Eugene Corey, Larsen, Riehl, Harris, Block, Garin, Chickos and the editor.

Michael Rocchio BA 1982 is Account Manager at PPG Industries in St. Louis. He was previously in sales with the Rohm and Haas Company.



Psychem golf team at Alumni Weekend, Lol Barton, Miles Patterson, Mike Nicholls and Rob Harris.

Colleen B. Jonsson BA 1983 joined the University of Louisville in August of 2008 as Professor of Microbiology and Director of the Center for Predictive Medicine for Biodefense and Emerging Infectious Diseases. She was one of two students who received two B.A. degrees (Chemistry/Biology) in 1983. She went to work at Monsanto, then to graduate school at Purdue University (Ph.D.) and then did a postdoc University of Medicine and Dentistry at New Jersey. After a few years on the faculty at New Mexico State University in the Chemistry and Biochemistry Department, she became Director of the Emerging Pathogens Research Department at the Southern Research Institute in Birmingham, AL, in 2004. She will give a seminar in the department on April 9, 2012.

Martin Mantler BS 1983 had been with KV Pharmaceutical Co. since 1998 working in computer systems validation and in September 2011 he joined PSC Biotech as a Computer Systems Validation Consultant.



Ricardo Delgado PhD 2000 at a Lindenwood University Commencement with his students, now grad students in the department, Elena Vasilieva and Shana Terrill.

Jerry Ronecker BS 1982 was in touch with us this spring. He was in the throes of a month long trial in Southern District of New York that was projected to go through April. He was litigating over the state of knowledge involving chemical handling-waste disposal at a 50+ year former pyrotechnic plant and an assessment of how and when groundwater property damage occurred. All the key witnesses had a chemical background so our chemist/lawyer alumnus was in a great position. Jerry is an attorney at *Husch Blackwell Sanders LLP*; spent his early career at Monsanto, completing his law degree at St. Louis University in 1990 and then embarked on career in the law.

Steven S. Lawrence BA 1982, PhD 1989, who has been at Saginaw Valley State University in Saginaw Mi since 1992 tells us he is planning to "semi-retire" at the end of 2011. His teaching assignments include introductory chemistry and analytical chemistry. He has won numerous awards at SVSU including the Franc A. Landee Award for Excellence in Teaching (1994-95), the Earl L. Warrick Award for Excellence in Research (1998-99) and was the first recipient of the Faculty Award for Innovative Use of Technology in Teaching (2000-01). Steve also served as Department Chair and Dean at his institution and also developed a curriculum in environmental chemistry.

Greg J. Lumetta BS 1982, PhD 1987 was at the ACS meeting in Denver in August. There he was honored as a member of the third class of ACS Fellows. The ACS Fellows Program was created by the ACS Board of Directors in December 2008 "to recognize members of ACS for outstanding achievements in and contributions to Science, the Profession, and the Society".

Steven Szymczak BA 1983 sent us a very nice letter earlier this year. Among other features it describes his appreciation of his favorite professor, Joyce Corey and the daunting challenge

presented by Joe Dence's physical chemistry class. Steve is with BJ Services in Houston Texas as Manager – Product Line Technology. All BJ Services are now Baker Hughes in which the former St. Louis company Petrolite was subsumed. Although in the Hydraulic Pressure Pumping group (they do the "fracking" that is so much in the news) he regularly sees his former Petrolite colleagues.

Angelo Vangel BS 1983 continues in his position as Quality Manager for the Lighthouse for the Blind. Angelo had lunch at the Ferguson Brewery with the editor and Jeff Jones during the summer.

William J. Brundick BS 1984 is Research and Engineering Manager at Sulfatreat Co., which is located in Chesterfield, MO. The company make a FeO-based product used to removes H₂S and mercaptans from natural gas streams. The company is now owned by MI Swaco, an oil exploration company, which is part of the Schlumberger group of companies in which **Ravi Kumar Laxman**, PhD 1987 once worked. Bill was in touch in the fall of 2011.

Dawn L. Shiang BA 1983, PhD 1988 is Associate Director for Sustainable Technologies at Dow Chemical Co., in Midland, MI, responsible for imbedding best sustainable practices into Dow's global early stage R&D product development and research. She has held a variety of leadership roles across many of Dow's business and corporate research teams, as well as diverse



Bill and Dawn Shiang

geographical experience including assignments in Europe and Asia. Her experience includes businesses and technologies such as Dow AgroSciences, Building Solutions, Plastics, Corporate Research, Epoxy and Specialty Chemicals. She has recently returned from Shanghai where she was part of the leadership team that established a world-class research capability. Prior to that she and Bill (see below) were in Switzerland with Dow. Dawn is in a new role that she absolutely loves and she gets to work with Berkeley and Penn State, collaboration with NGO coalitions, etc. This year she gave one of the plenary lectures at the ACS Central Regional Meeting "Delivering a Sustainable Future through Innovation". She is also active in her local community and serves as a member of the Board of Education in Midland County. Their children, boys Wil 19 and Alex 16 have adapted to being back in the US. Wil is at his second year in Bennington College in Vermont. He's doing very well – a political economics major with a heavy emphasis on foreign languages. He's fluent in Chinese, good in German, and now taking French and Italian; he'll pick up Arabic in his junior year when he can travel to neighboring Middlebury College and take their courses. He has his father's knack for foreign languages, as Bill is fluent in 3 dialects of Chinese, and good in German. Alex is in his junior year of high school, taking advanced classes including Chemistry, but he says he wants to be a "real Dr.!"

William R. Shiang BS 1984, PhD 1989, New Product

Development Leader at Dow AgroSciences, we understand is doing really well, enjoying his role in the States but still heavily traveling – just got back from China where they rely on him heavily. His role is the culmination of a lifetime of acquiring skills including science, project management, people skills, and of course a bit of the schmooze factor. He sees no reason to slow down anytime soon although he celebrated his 60th birthday last year in Macau, where he was one lucky guy, enjoying the black jack tables! And Dow Agro Sciences is quite happy to have such a valuable leader still in their midst; though Dawn is wishing he'd take a break now and then as he rarely even had a chance to pull out his golf clubs this summer. He did take the boys with him for the first time for his annual fishing trip in Canada, now that they are back stateside, and all did quite well; then he took Alex salmon fishing on Lake Michigan and struck it well once again. Needless to say, they have a freezer full of fish!

Barbara W. Brown BA 1984 had a successful year. She was awarded a *You Make a Difference Award* for Outstanding Alumni Volunteer (category: Alumni Reunion Programs) by the UMSL Alumni Association Governing Board of Directors and then this fall she received the *Chancellor's Award for Staff Excellence* in the Administrative/Professional Staff category. Barb is director of student recruitment and admissions in the College of Optometry and a key member of the leadership of the Chemistry Alumni Council.

Floris Homan BS 1985, PhD 1989 had spent six months or so consulting and working a contract job at ABC labs in Columbia after leaving KV Pharmaceutical but in May he became the Director of Analytical Development at Albany Molecular Research Inc. His participation on the Chemistry Alumni Council will be missed.

Suzanne (Mates) Pea BS 1984 participated in the Alumni Weekend event Chemistry Connections in April. She was a panelist and described how, although not having used her chemistry for 20 years, she takes advantage of the analytical skills she learned as a chemistry student. She continues at Covidien, which she tells us has divested the chemical business and is actually a medical devices, pharmaceuticals and medical supplies company now. She also shared with us pictures of her two sons, 7 and 8 years old.

Rajiv M. Banavali PhD 1985 was in touch this summer. He continues as Director of Technology at Honeywell and was in India when we last communicated.

Tim Zhu MS 1987 was also in touch recently. He and his wife Clara have two lovely children Jackie and Maria shown herein. He established HP Craft Inc. several years ago and they all appear to be doing very well. Tim did research with the editor on boranes when he was at UM-St. Louis.

Stephen A. Kolodziej BA 1988, PhD, who is Associate Research Fellow at Pfizer, Inc., in St. Louis, will present the *24th Distinguished Alumni Lecture* on Monday April 30, 2011 See page 20 and the department website for details.

1990s

Todd R. Boehlow BS 1991, PhD 1997 was married in May to

Michele Promo a former colleague at Pfizer, in St. Louis. Chris Spilling, Jim Chickos and Wes Harris went to the wedding which was held in Albany, Georgia on April 30. Todd is Laboratory Manager at Equinox Chemicals in Albany, GA.

Daryl Hasty BS 1992, who spent his career as a Paint Quality Engineer at Chrysler Corporation in Fenton Mo, returned to UMSL on retirement and completed his MS degree, with thesis, with Jim Chickos in December 2011. Daryl also shared the award as Outstanding Student in the MS program for 2011.

Courtney Aldrich BS 1994, who is Associate Professor, Center for Drug Design and Associate Director, Center for Drug Design at the University of Minnesota-Twin Cities is giving a seminar in the department at the end of January 2012. Courtney received a PhD from UCLA in the lab of Professor Craig Merlic and followed this with postdoctoral research in Germany at the Max Planck Institute fur Physiologie in Dortmund with Professor Herbert Waldmann, prior to moving to the Twin Cities.

Denny Kraichely, BA 1994 is associate director and chemistry, manufacturing & controls team leader of portfolio management & technical integration at Johnson & Johnson in Exton, Pa. He was named as one of the "Emerging Pharma Leaders 2011" in an article published June in the issue of *Pharmaceutical Executive*. The magazine organized the awards event where he was honored among 30 recipients last fall in New York City. He is an Editorial Board member for several scientific journals, made Keynote presentations at four scientific conferences in recent years and is a Scientific Advisor for six scientific conferences. He was interviewed for UMSL Daily and a link to the interview is available on the department website.

Jeff Milner BA 1994 was in touch recently. He has been with what was once Edwin Cooper, then Ethyl Petroleum Additives Division and is now Afton Chemical as Senior Research Chemist and now Advisor for 36 years. He reminded me that **Dean Frey** BS 1992, who received a PhD from Washington University, is also with Afton Chemical.

Patricia Chernovitz PhD 1995 is a Professor at Grantham University in Kansas City. Grantham is a for-profit, online university and she has been there since Jan 09 and stayed longer than three presidents.



Tim Zhu and family, Clara, Maria, Jackie & Tim

Vicki L. Chlanda BA 1995 is Senior Specialty Sales Representative at Takeda Pharmaceuticals in St. Louis. She was formerly a Research Chemist at Monsanto.

Elizabeth A. Amin BA 1996, PhD 2002 is Assistant Professor of Medicinal Chemistry at the University of Minnesota-Twin Cities. She joined the University in 2004 and teaches in the MS in Security Technology program and in the College of Pharmacy. She was chosen Professor of the Year in 2010 by the Pharm.D. class of 2012. Featured in a public relations piece by the university, we quote "Dr Amin's research combines computational science, chemistry, and microbiology. The endgame, finding countermeasures to chemical and biological warfare agents, is a compelling challenge in today's world." More recently she was honored at the ACS meeting in Denver by the Division of Computers in Chemistry as winner of the ACS HP Outstanding Junior Faculty Award for 2011. She was the 24th Annual Distinguished Alumnae Lecturer here last May.

Arvell Steeples, BA 1996 moved to Dallas, TX following graduation and quite recently returned to St. Louis. He has more than 13 years of sale experience in advertising & marketing with AT&T and Apple.

Siu Wa Au-Yeung BA 1996 last summer made a career change and started working as a senior scientist in a medical technologies company. He lives in Markham, Ontario, Canada and had been helping run a small start-up company

Yanina Levchinsky BS 1997, MS 2000 keeps in touch with us regularly. She informed us of a visit from **Robert Stockland** PhD 1999 and his wife Barbara. Along with visiting the Berkshires and Saratoga areas, wining, dining and shopping, they also managed a little hiking trip up Hadley Mountain Fire Tower in the Adirondacks. Yana and her husband **Brian Grimmond** PhD 2000 were in town over the recent Thanksgiving holiday. Yana is Project Manager, CMC Regulatory and Process Sciences, Industrial Operations and Product Supply at Regeneron Pharmaceuticals, Inc in Rensselaer, NY and Brian is a Senior Professional Scientist with General electric in Albany, NY. The Grimmonds are avid St. Louis Blues hockey fans.

Andrew G. Breite BS 1999 is now Senior Project Manager at VitaCyte in Indianapolis. His primary activities are to direct the purification and quality control of tissue dissociating enzymes used in clinical applications to isolate pancreatic islets, hepatocytes, adipose derived stromal cells and others. VitaCyte is a very small company (only 10 people) so he perform a number of duties including quality assurance management, technical support, formulating marketing messages and direct all process improvement projects. He holds a MS degree from Purdue University in biochemistry and a MBA from Butler University.

Robert Stockland PhD 1999 is doing well in his position as Associate Professor of Chemistry at Bucknell University, in Lewisburg, PA. He received a Petroleum Research Fund grant this year, and one of his papers (P-H activation using alkynylgold substrates: steric and electronic effects) was selected as a "HOT Article" in *Dalton Transactions*. His students were happy - it gave them something else to put on their CVs! Elsewhere we

describe Robert's visit to upstate NY to see **Brian** and **Yana (Levchinsky) Grimmond**.



Distinguished Alumnae Lecturer Elizabeth A. Amin with Lol Barton

2000s

Ricardo Delgado PhD 2000 will begin a new position as Dean of Science at Lindenwood University in January 2012. We show on page 6, a picture we found on Facebook of Ricardo with two of his students at graduation; students who went on to enroll in our doctoral program - **Shana Terrill** and **Elena Vasilieva**, both now third-year graduate students here. He has actually sent us four recent Lindenwood graduates. Elena's husband **Paul Gontarz** came here last year and a new student this year **Alexis Gutterman** were also students of his. He is also the Division Chair of Biology, Chemistry and Earth Science and Chair of the Chemistry Department. The former will be given up but he will retain the Chemistry Chair position. He became the Chemistry "Program Manager" at the end of his first year there. At the time they were the Science Division. An administrative restructuring led to the establishment of a School of Science, and the programs became Departments. He will continue to do some teaching, (which is really what he loves most) but with a greatly reduced teaching load, he will have more in the way of administrative duties as well as oversight on academic issues.

Joe Ocheskey BS 2000, MS 2003, is captain in the army and Assistant Professor of Military Science at Millersville University in Millersville, Pennsylvania where he teaches Military Science. Joe was married in September and owns a 36 acre farm near York, PA. He was preparing to deploy again to the middle-east with the 55th brigade, Pennsylvania National Guard, as the assistant S3 when we last heard from him. He is also working on a master's degree in Engineering Management.

Zhepeng Wang PhD 2000 is a scientist at Washington University in St. Louis and we saw him and his wife at an alumni reception recently.

Shiyue Fang PhD 2001 was awarded tenure in 2010 and is now Associate Professor of Chemistry at Michigan Technological University. He was funded by the National Science Foundation and was able to renew it in 2011. His research group published several papers in the last two years including one that was covered in *Chemical and Engineering News* and in *Faculty of 1000 Biology* and they were also awarded one full patent. More recently, they were invited to write an article for *Current*

Protocols In Nucleic Acid Chemistry, which is a series bench-top reference book for scientists with different backgrounds who need to work with nucleic acids. He now has 3 PhD students and 2 undergraduate students in his group and another PhD student and a Postdoc were about to join the group in January 2012.

Mark Nagy MS 2001 is Associate Scientist I at Celgene in the Greater San Diego area. He was formerly a Senior Scientist with Pharmacia/Pfizer in St. Louis.

Viktoriya (Sedelkova) Gruden BS 2002, MS 2005 tells us she is a survivor at KV Pharmaceuticals in St. Louis as the company begins to recover from some recent setbacks.

Linyong Mao PhD 2002 has been in Ithaca, NY, for all of 2011 working at the Boyce Thompson Institute for Plant Research. His wife and daughter are still living in the house they bought in May 2010 in Ames, Iowa. He is working on the analysis of next generation sequencing data to detect single nucleotide polymorphisms and genome structural variation between wild tomato and modern cultivated tomato. He is also continuing the biological network research he initiated when he was a postdoc at Iowa State University.

Qingzheng Wang PhD 2002 is currently with American Peptide Company in Sunnyvale, CA and was formerly with Anaspec, Inc., in Fremont CA.

Kristina (Alderman) Thompson BA 2005 went to Vi-Jon in St. Louis as a Formulation Chemist in April. She spent almost 6 years as a Research Chemist at Spectrum Brands which is owned by United Industries. The new position turned out not what she had expected so this past November she took a new position as Chemist at Zoltek in St. Louis.

Joseph VanArtsdelen BS 2005 is a Process Design and Development Engineer at Reliable BioPharmaceutical Co. in St. Louis.

Aaron Young BA 2005 graduated from the University of North Carolina at Chapel Hill with a PhD in Environmental Science in May. He was looking for a job in public health risk assessment when he contacted Dr. Stine in the spring.



Aaron Young at his graduation from the University of North Carolina-Chapel Hill

Rachel (Andrews) Kupper BA 2006 taught at Bayless High School in St. Louis for three years following graduation. Then she taught in Mississippi for two years. This last year, she took off to stay at home with her baby boy, and in April, the family moved from Mississippi to Washington, about an hour outside of Seattle. She began the process of obtaining certification but that was not proving to be so simple. She is also looking for science positions ranging from grade 7 to 12.

Eunice (Yoon Young) Chung, BS 2006 recently found another position within Covidien in St. Louis. She had been at the Hazelwood campus but she moved to the Webster Groves location as an Analytical Chemist. This gives her better hours – no night shifts – and will make her studies at UM-St. Louis in our graduate program more convenient.

Shu Yao, BS 2006 is a graduate student at the University of Wisconsin-Madison. We met her at the ACS meeting in Denver where she presented a paper. She has almost completed her PhD and is looking for a position in the chemical industry.

Anyu He PhD 2006 is now in Round Rock, just north of Austin TX, with a small company, Cerilliant (acquired by Sigma-Aldrich recently). He previously was in Dallas at the University of Texas Southwestern Medical Center.

Erin M. Brooks BS 2007 graduated from the Optometry College in May 2011 and was featured in the UMSL Magazine at that time. She is now pursuing her masters degree in vision science and hopes to teach at an optometry school in the future.



Dan Cranford Storeroom and Lab Coordinator with Alexei Demchenko at Alexei's 'Promotion to Professor' Party.

Hui Zhao, PhD 2007 took a new position in June at Tate and Lyle in their Innovation and Commercial Development Center which was in Decatur, IL. So she continued to live in Springfield where she had lived when she worked as a Research & Development Analytical Chemist at EPL BioAnalytical Services, also in Decatur. Tate and Lyle was planning to relocate to the Chicago suburbs so Hui was spending time looking for a school for her daughter and then deciding where to live. We understand she and her family found an apartment in Schaumburg, IL and was expecting to move in at the end of December.

Sujitra Srisung, PhD 2007 was in the department earlier in 2011 having been back in the US for a conference. She continues her position as Assistant Professor in Quality Assurance at Srinakharinwirot University in Bangkok.

Colin White PhD 2007 is working as a Pharmaceutical Analyst at Datamonitor in London and his fiancée **Aileen Bongat** PhD 2009 is working at the Pasteur Institute in Paris as a postdoctoral research associate. He says he has become one of the best customers of Eurostar the English Channel tunnel train. Following graduation Colin spent a year at Keele University in England and then returned here where he taught introductory and inorganic chemistry in the department during the 2007-2008 academic year. He then spent some time as a postdoctoral fellow in the laboratory of Professor Michael Doyle at the University of Maryland prior to his move to London.



Eric L. Bruton BS 1997, PhD 2003, the current ACS St. Louis Section Chair.

Saibal Bandyopadhyay PhD 2008 with Chris Spilling is now in his fourth year as a postdoctoral fellow in the laboratory of Dr. Dennis Bong at the Ohio State University. He and his advisor published an article in the *European Journal of Organic Chemistry* and he tells us two others are in preparation. He also tells us he has worked really hard and hopes to find a suitable position soon. His wife Chandrani whom he married in Dec, 2006 is also in Columbus as a graduate student in Malcolm Chisholm's lab. She is about to graduate so they are both are looking for jobs.

James Smoot PhD 2008 is Sr. Research Scientist at Tate and Lyle Ingredients Americas in Schaumburg, IL and like his colleague Hui Zhao PhD, recently relocated from Decatur, IL.

Patamaporn Umnahanant PhD 2008 was in the department for a month in December, spending time in the lab of her former advisor Jim Chickos. She was also finding relief from the floods in her native Bangkok. She is an Instructor in the Faculty of Veterinary Technology at Kasetsart University in Bangkok, Thailand, teaching chemistry and also doing some extracurricular English teaching that the institution. She was married in December 2010 to Dr. Pongchart Buranaprassertsuk, another PhD in chemistry who works in the petroleum industry. T, as we call her, has a grant from her institution which allowed the US visit and she was able to visit her aunt in Boston on her way to St. Louis.

Sean Whittemore BS 2008 is a graduate student with Dr. James

Stambuli at the Ohio State University. We met him at the ACS meeting in Denver where he presented a paper. He also gave a paper at the Regional ACS meeting in St. Louis and already has at least one paper in print from his graduate work in *Organometallics*.

Fuqian Xie PhD 2008 from the Dupureur Lab is a postdoc in the Washington University School of Medicine. We saw him recently at an alumni reception hosted by Chancellor George.

Holly Scheibel BS 2009, who is with Covidien in St. Louis, is pursuing a MS degree in chemistry here and is also an officer in Chemistry Graduate Student Association.

Raj Malla PhD 2012 from the Spilling group is now employed by Reliable Biopharmaceuticals in St. Louis.

Stephen A. Costin PhD who completed his degree with Eike Bauer is now doing postdoctoral research at the LSU School of Dentistry.

Nicholas A. Ahlmeyer BS 2012 has recently started work at Monsanto in St. Louis.

Jason Davis BS 2011 is with Assay-Pro in St. Charles, MO.

Greg Hogan PhD who started his graduate work at Mississippi State University with Alicia Beatty and moved with her to UM-St. Louis where he completed his degree, is now an Instructor at Northwestern State University in Natchitoches, LA

Sergey L. Sedinkin PhD 2012 joined the Gokel laboratory as a postdoc after completing his degree in the Bauer laboratory.

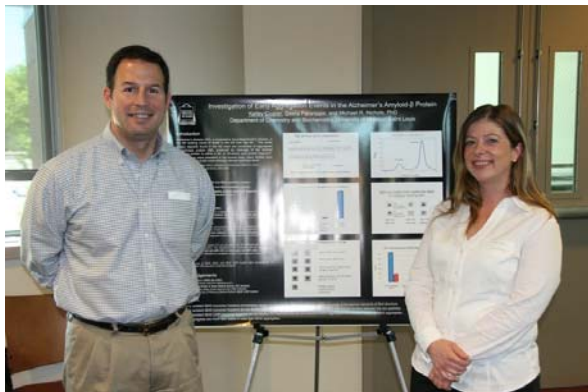


Stephen A. Kolodziej (center) BA 1987, PhD 1993, the 2012 Distinguished Alumni Lecturer playing bass guitar with the Roofrockers

ACS St. Louis Award Events

The winner of the award this year was **Dr Lucinda (Cindy) Buhse**, Director of the Division of Pharmaceutical Analysis (DPA) in St Louis, a laboratory for the Center for Drug Evaluation and Research (CDER) in the Food & Drug Administration (FDA). The Award Symposium was held at Washington University and the Award Banquet at the Glen Echo Country Club. We attended both and were able to meet several alums who work there. **Benjamin J. (Nick) Westenberger**, BA Chemistry 1973, is Deputy Director and the editor had not seen

him since an advising appointment in the early 1970s! **Hongping Ye** PhD 1992 who is a Research Chemist there and **Anjanette Smith**, BS Chemistry 1999 were also at the symposium as was **Diem (Cindy) Ngo**, BS Biochemistry/Biotechnology, 2009. Others who work at the FDA lab but we did not see them are **Larry K. Revelle** PhD 1980 and **Kimberly Story** BA 1993.



*Mike Nicholls with Kelley Coalier BSBB
2011 at the 2011 Undergraduate
Research Symposium.*

ACS Midwest/Great Lakes Regional Meeting

This meeting was hosted by the Saint Louis Section of the ACS and several UM-St. Louis faculty and alumni were involved. Jim O'Brien was a Co-General Meeting Chair, Keith Stine was the Program Chair, **Bruce Ritts**, BS 1979, MS 1982 was the Treasurer and the editor was the Governance Liaison. Chris Spilling organized the Symposium *Natural Products Synthesis*, Jim Obrien organized the Symposium *High Sensitivity Spectroscopy*, Cindy Dupureur co-organized the Symposium *Biomolecular Structure and Function* and George Gokel co-organized the symposium *Supramolecular Chemistry in Membranes*. Symposium Lectures were given by faculty members Chris Spilling, Tony Mannino, George Gokel, Mike Nicholls, Jim O'Brien, Jim Bashkin and **Alicia Beatty** (BS 1989). **Helen Anderson** BS 1981 served on a special round table panel on "The Business of the Pharmaceutical Industry". General papers or posters at the meeting were co-authored by **Stephanie Cowin** BS 2011 (currently a graduate student with Dr. Beatty), **Phil Janini** BS 2010 (currently a graduate student with Dr. Holmes), **Nichole Curvey** BS 2009 (currently a graduate student with Dr. Gokel), **Ben Martin** BS 2007 (currently a graduate student with Dr. Spilling), **Matt Lenze** BS 2008 (currently a graduate student with Dr. Bauer), **Theresa Bandrowsky** BS 2008 and **J. B. Carroll** BS 2009 (both graduate students with Dr. Wilking), **Jason Davis** BS 2011 and **Sean Whittemore** BS 2008 who is a graduate student at the Ohio State University with Dr. John Stambuli. Also in the program were **Raj Malla** PhD 2011 and **Supratik Dutta** PhD 2010, **Deepa Ajit** PhD 2010, **Laura Williams** MS 2008 and **Kevin Koeller** PhD 1994. Several other graduate students and faculty were part of the technical program including **Dr. Janet Braddock-Wilking** BA 1985.

Also at the meeting we encountered several we encountered several other alumni including **Al Sapia** BS 1970, **Ron Suchara**

BA 1974, and **Eric L. Bruton** BS 1997, PhD 2003.

The Chemistry Alumni Council

The Chemistry Alumni Council continues to be active and met regularly during the year. In addition to building the network on LinkedIn, two activities were organized in 2011. The first was associated with Alumni Weekend. *Chemistry Connections and Open House* was held in 451 Benton Hall, April 16 3:00–5:30 pm. About 65 were present in all. The first session, introduced by Chris Spilling, consisted of presentations on professional networking, first by **Richard A. Hoyt** (Covidien) BS 1976 and the second by **Dr. Sean Dingman** (Sigma Aldrich) BS 1994. The second session involved presentations on career services by **Eric Bruton** BS 1997, PhD 2003 (Jost Chemical), Miranda Eilers (Aerotek Recruiting Service) and Denise Chachere (Director of Human Resources, Jost Chemical). The third session involved a panel discussion on career experiences. It was moderated by the editor and included **Robert L. Dittrich** (Nestle-Purina Petcare), BS 1976, **Kim Gorman** (Paternity Testing Corporation) BA 1993, **L. Jeanette Hencken** (Webster Groves High School) BA 1985, **Suzanne Pea** (Covidien) BS 1984 and **Kevin Trankler** (Novus International Inc.) BS 1998, PhD 2004. The event was completed by a social reception with refreshments and poster presentations on student research.



*Officials at the Midwest/Great Lakes ACS
Regional Meeting, Eric Ressler, Lisa Balbes,
Jeff Cornelius, Bruce Ritts BS 1979, MS 2003,
Leah O'Brien and Keith Stine.*

Other events during Alumni Weekend included a *Dinner with Twelve Strangers* and a golf tournament. The former was arranged by the Alumni Association and **Mike Finkes** BS 1973, MS 1978, had a major role in the planning and execution of the event. Two faculty members, Mike Nicholls and the editor, made up a four-ball scramble team with two colleagues from the Psychology Department.

The *Dinner with Twelve Strangers* event was repeated on June 7, 2011 for chemistry alums. The idea is for six current students and six alums to share a meal and conversation for about three hours. The conversation will tend to focus on the students transition to life after graduation. The event provides an opportunity for students to: learn about "real life" experiences in the workplace, gain interviewing insight, consider the possibility an advanced degree, discuss their current career strategy, consider alternative career strategies, learn about developing a

career after landing a job and discuss a host of other topics that will assist students as they prepare for life after graduation. We understand the event went very well. Those in attendance were alumni **Mike Finkes** BS 1973, MS 1978; **Barbara Brown** BA 1984; **Bob Dittrich** BS 1976; **Bill Lesko** BS 1988, MS 1994; **Erin Brooks** BS 2007 and special guest former Monsanto Executive Will Carpenter. Students attending were students Ryan Sheridan, **Katherine Cibulka**, BA 2012 **James B. Carroll**, BS 2009, Erin Martin and Allison Saettele. Malik Darwech was a last minute cancellation. Another such event is being planned for February 2012.



Alexei Demchenko and Jim Chickos with their doctoral graduates Hemali Premathilake and, Dimitri Lipkind at the December 2011 Commencement

Graduates, Dec. 2010 through Dec. 2011

DECEMBER 2010

Rebecca Martin BA
Adrian H. Hristov BA
Greg A. Hogan PhD
Mark Voudrie MS

Stephen A. Costin PhD
Jennifer L. Doucette MS
Sophon Kaeothip PhD

John N. Iffrig, BSBB
Davorka Kovcic, BSBB
Jacquelyn K. Leise BSBB
John O. Olorunda BSBB
Aldijana Sacic, BSBB
Caleb Hopkins MSBB
Girija P. Katragadda MSBB
Tanusri Samanta MSBB
Tammy G. Yasar MSBB

Hayeon Chang MSBB
Lucy M. Kastner, BSBB
Mehdi Faraji MSBB
Richa Gupta MSBB
Nicholas R. Gill MSBB
Chilufya Kaloto MSBB
Jennifer D. Saleh MSBB
Solaema Taleb MSBB

MAY 2011

Jason Davis, BS
Marko Jovanovic, BS
David M. P. Putnam, BS
John Schallom BS
Michael Joseph Pearson, MS
Baljeet Singh, MS

Nichole Scherri Curvey, MS
Mercy Maiga Kiiru, MS
Todd M. McDonald, MS
Justin Robert Mitchell, MS
Miranda C. Shaver, MS

Hamza Ahmed, BSBB
Robert C. Ayres, BSBB
Kelley Anne Coalier, BSBB
Shiferaw Addis Desta, BSBB

Sneha G. Bairy MSBB
Somanon Bhattacharya, MSBB
Jerry Joseph Bosse II, MSBB
Lisa Kaye Gouwens, MSBB

Brian Pierce Fanella, BSBB
Amanda Jo Hausman, BSBB
Jessie Allen James II, BSBB
Syed Atta Jawaid, BSBB
Jason Thomas Kennedy, BSBB
Gracia N. N. Kazadi, BSBB
Mohit Bharatkun Patel, BSBB
Jennifer Marie Stock, BSBB

Corey S. Johnston, MSBB
Thomas E. Mahan, MSBB
Michael E. Nance MSBB
Tarak B. Patel MSBB
David Keith McGraw, BSBB
John O. Olorunda, BSBB
Nicholas C. Russell, BSBB

AUGUST 2011

Stephanie Ruth Cowin BS
Raj Kumar Malla, PhD
Patrick Michael Skornia, BS

Pat Kohlfeld MSBB
Sergey L. Sedinkin, PhD
Jagodite P. Yasomanee, MS

DECEMBER 2011

Nicholas A. Ahlmeyer BS
Nicholas J. Bardol BS
Katherine Cibulka BA
Shelly E. Hanson BA
Eden M. Ogbe BA
Sana S. Qalbani BA
Christina Nguyen BS

Jay Kishan Bhattarai MS
Matthew Davis MS
Darrell Hasty MS
Dimitri Lipkind PhD
Hemali Premathilake PhD
Eric Smailys MS
Matthew Stockel MS
Joe Wilson MS

Matthew Ban BSBB
Jophn Harrington BSBB
Angela Lanemann BSBB
Charlene S. Makita BSBB
Matthew Ban BSBB
Jophn Harrington BSBB
Angela Lanemann BSBB
Charlene S. Makita BSBB

Saranya Rajavallaban MSBB
Chris. M. Schrimpf MSBB
Nick Sullivan MSBB

Note: BB indicates Biotechnology and Biochemistry.

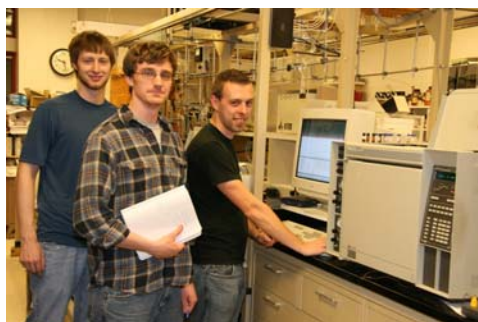


Students in Jim O'Brien's Instrumental Analysis lab, all 2011 BS graduates: Marko Jovanovic, Nick Bardol, Stephanie Cowin and John Schallom.

The Chemistry Club

2011 was another good year for the ACS Student Chapter **UMSL Chemistry Club** (Faculty Advisor, Michael Nichols). The Chemistry Club continued its involvement in many activities including career development, social functions, and demos at the

ACS Chemistry High School Day at UMSL. National Chemistry Week 2011 included liquid nitrogen ice cream making on the back patio and interactive events on the Millennium Student Center Bridge. Fall activities included a chili cook-off and attendance by club members at the ACS Midwest Regional meeting held in St. Louis. The program was well attended and enjoyed by all. Officers for 2011-12 are Allison Saeetele (President), Laura Perry (Vice-President), Son Vo (Treasurer), Erin Martin (Secretary), Dae Gyue Chris Han (SGA Rep), and Erin Lowry (Public Relations/Historian). Hung Nguyen served as the National Chemistry Week Chair. 2010-11 officers were David Putnam (President), Eldijana Pilopovic (Vice-President), Nicholas Ahlemeyer (Treasurer), Amanda Jennings (Secretary), Stephanie Guentz (Student Government Association Representative), and Christina Nguyen (Public Relations/Historian).



More instrumental analysis students, both BS graduates, Nicholas A. Ahlmeyer and David M. P. Putnam, with their TA Dimitri Lipkind PhD 2012

Chemistry Graduate Student Association (CGSA)

A particularly nice recent development in the department has been the establishment of the CGSA. Established in January 2010, it is an officially recognized campus student group and has been very active and successful. Perhaps the most significant activity has been the support for the *Relay for Life*, the annual event that helps communities celebrate the lives of people who have battled cancer. The CSGA hosted a seminar speaker this last fall, published a newsletter, organized a "Meet the new graduate students lunch", and arranged a series of social activities including a picnic, a summer BBQ, happy hours, a Halloween party, a float trip and an Xmas pot luck lunch. They also raise funds by selling raffle tickets and hotdogs, cookies, etc. They are particularly excited about the screening on the PhD comics "Piled Higher and Deeper" in January 2012.

In order to facilitate communication **Scott Hasty** BS 2008, and President of the GCSA in 2010-11, was invited to join the Chemistry Alumni Council last year. The 2011-12 CSGA Officers are: President: Shana Terrill, Vice-President: Elena Vasilieva, Secretary: **Ben Martin** BS 2007, Treasurer: Abeera Sharma, SGA Rep.: **Niki Curvey** BS 2008, Master's Rep.: Holly **Scheibel** 2009, Biochemistry Rep.: Shana Terrill, Physical Chem. Rep.: Abeera Sharma, Organic Chem. Rep.: **Niki Curvey** BS 2008 and Inorganic Chem. Rep.: Matthew Keene.

The Faculty

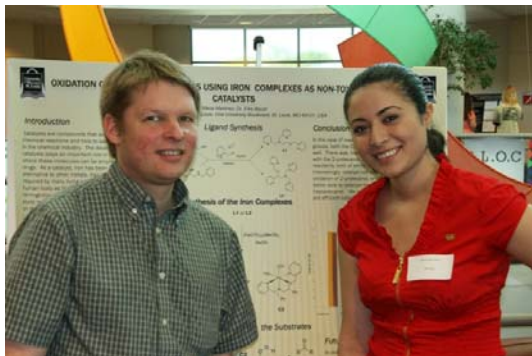
Jim Bashkin is now a regular faculty member in the department, having been with us since 1999 as a Research Associate Professor and having worked essentially full time in the Department after establishing a research lab here in 2003. Jim now becomes Professor of Chemistry and will be available to teach biochemistry, organic and inorganic chemistry. He has been in St. Louis since 1985, first with Monsanto, then at Washington University, and prior to coming here he was with Monsanto/Pharmacia/Pfizer. He received a BA in chemistry at UC-Irvine and a DPhil from Oxford University where he worked with M. L. H. Green. He did postdoctoral research with Richard Holm at Harvard prior to joining Monsanto. Jim is co-founder, Director of the St. Louis Site and Director of Chemistry for NanoVir, LLC. NanoVir discovers and develops new pharmaceutical agents. The current focus is the discovery of drug candidates against high risk (cancer-causing) human papillomavirus forms, including HPV16. Their compounds have no known cytotoxicity and their research on them has been funded by four NIH grants. Jim's co-owner and colleague Dr. Chris Fisher is Director of Biology. Chris's lab and the company headquarters are located at the Southwest Michigan Innovation Center in Kalamazoo, MI. Jim is also in the second year of a five year NIH R01, in collaboration with Fisher and Professors Dupureur and Nichols, to study the biophysics of interactions between anti-HPV agents and viral DNA.



Keith Stine and Jim Bashkin at the 2011 Robert W. Murray Lecture Banquet

Eike B. Bauer is very proud of his undergraduate and graduate research students. Undergraduate researcher Erin Martin, a Pierre Laclede Honors College Scholar, received a College of Arts and Sciences Undergraduate Research Award on October 21, 2011 (\$1000 for research). She will present her research on Missouri Undergraduate Research Day to legislators and visitors at the Capitol in Jefferson City in March 2012. The participating students have opportunities to let legislators know how their research addresses the needs of society. Both the award and the selection for the presentation at the Capitol (where she will serve as an UMSL ambassador) were competitive. Graduate student Pushkar Shejwalkar received a College of Arts and Sciences Dissertation Award on October 19, 2011 (\$3000 for research). Also Pushkar and fellow graduate student **Matthew Lenze** BS 2008 gave talks at the ACS Midwest and Great Lakes Joint

Regional Meeting in St. Louis on October 21, 2011 as did Eike as well. Former graduate students **Stephen Costin** and **Sergey Sedinkin** both PhD 2011 are now postdoctoral researchers, Stephen at the Louisiana State University School of Dentistry and Sergey in the Gokel group at UM-St Louis. Eike gave a talk at UMKC on December 1 and will give talks at Mississippi State University and at the University of Alabama, on March 2012.



Eike Bauer with his student Maria Martinez at the Undergraduate Research Symposium

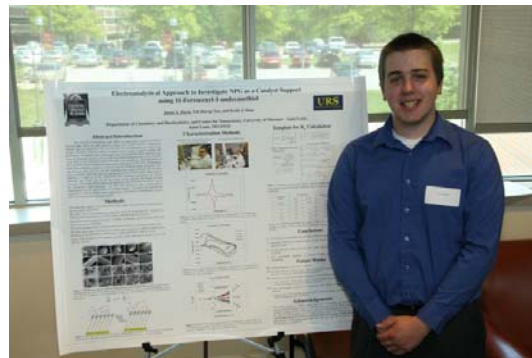
Alicia M. Beatty attended the International Union of Crystallographers (IUCr) meeting in Madrid, Spain in August. Also, she is now a Topic Editor for *Crystal Growth & Design* (an ACS journal). She attended the American Crystallographic Association annual meeting in New Orleans, where her student **Stephanie Cowin** BS 2011 gave a talk and was given an Outstanding Undergraduate Presentation award. Alicia was a Symposium Lecturer at the Midwest/Great Lakes Regional ACS meeting in St. Louis in October. Alicia recently became a member of the Chemistry Alumni Council where she shares a dual role with **Janet Wilking** being both an alumna and a faculty member.

James S. Chickos gave a Plenary Lecture at the Russian Conference on Chemical Thermodynamics in Samara Russia in October. What was to be his last PhD student, Dmitry Lipkind, graduated in December but he's not done yet and just took on a new doctoral student Alexis Gutterman. Former graduate student Joe Wilson, current a faculty member at Forest Park Community College, is back in Jim's research group and another former graduate student **Patamaporn Umnahanant** PhD 2008, visited him Nov 25-Dec 21. On the personal side, Jim's first grandchild was born on September 7, when his daughter Sarah who is married to Tom Wright gave birth to Kaitlyn. Among other things, Jim had a hip replacement in June but he biked from Jefferson City MO to St. Louis in September so he must be recovering!

Valerian T. D'Souza continues to take on a heavy teaching load and is quite involved in undergraduate education. He has taken on the responsibility for organizing the tutoring lab and continues to serve as administrator for the departmental web page. If anyone has ideas on how to improve our web page they should send suggestions to him. His research lab is involved in studying flow chemistry in collaboration with Dr. Bruce Hamper.

Alexei Demchenko continues his successful research program in the area of synthetic carbohydrate chemistry. During 2010-2011,

his research group published 23 articles, presented 13 posters at conferences, and delivered 23 invited talks at universities and symposia. He continues to serve as a Member-at-Large of the Executive Committee of the Division of Carbohydrate Chemistry of the ACS and on the Editorial Advisory Board of Carbohydrate Research (Elsevier). In 2011, he renewed his grants from the NIH and the NSF. Currently his research group (Glycoworld) consists of Research Assistant Professor **Papapida Pornsuriyasak** PhD 2006, two post-doctoral fellows, six graduate students: Sneha Ranade, **Scott Hasty** BS 2008, Swati Nigudkar, Prithika Yasomanee, Xiao Jia and Chase Gobble. A visiting student from Italy and ten undergraduate researchers also contributed to the research productivity in 2010-2011. Former graduate **Archana R. Parameswar** PhD 2008 is currently taking care of her new-born son and is getting ready to accept a suitable industrial position in St. Louis area, **Sophon Kaeothip** PhD 2010 spent one year at the University of Georgia with Geert-Jan Boons as a post-doctoral associate, and recent doctoral graduate **Hemali Premathilake** was expecting to begin her post-doctorate employment at the University of South Florida soon. Updated information on current research, teaching, and outreach activity of the Glycoworld is available the department web site. Alexei and his family moved from their home in Belnor to one in Glen Carbon, IL this past summer.



Jason Davis BS 2011 presenting research carried out with Dr. Stine at the 2011 Undergraduate Research Symposium.

Cynthia Dupureur this summer attended the 17th Albany Conversation in NY. In October, her research group enjoyed the Midwest/Great Lakes Regional ACS meeting, held this year in St. Louis. Dr. Dupureur co-chaired a well-attended symposium entitled "Biomolecular Structure and Function". The group continues to enjoy "Movie Night" at Dr. Dupureur's house, which includes potluck food (heavily international) and a science fiction flick. Last time it was GATTACA, in the 5' direction of course. Dupureur group alumnus **Dr. Supratik Dutta** (PhD 2010) is a co-author of a paper in the prestigious journal *Nature*, which describes some of his postdoctoral research conducted at Washington Univ. Dr. Dupureur has given up her position as Chair of Recruiting and Admissions for the PhD program to become Program Director for the Biochemistry and Biotechnology Program.

Chancellor Thomas F. George had a particularly busy summer in 2011, with a lot of travel both in the US and overseas, such as China, Washington DC where he chaired an NSF panel,

Indianapolis for the Great Lakes Valley Conference meeting which he chairs, among others. He is also on the search committee for the new chancellor at the Rolla campus of the University and was busy reading dossiers when we last visited. With respect to China, one of UMSL's latest ventures is starting a new university in Chengdu (western China) funded by investors from Shanghai - this has the potential of making a lot of money for our campus, as well as providing great experiences for our students and faculty (Dr. George and colleagues have been working with a core of UMSL faculty to develop this). He presented a research seminar on nanophysics in early October at the Department of Mechanical Engineering and Materials Science at Rice University. Being the "birthplace" of fullerenes, he naturally talked about them and over lunch he met Nobel Laureate Robert Curl and other prominent faculty members. He continues to do some research, on breaks, and during 2011 he published a book, 12 journal articles, 3 conference proceedings and 12 book chapters. He collaborates with colleagues from all over the world, for example from Terra Haute IN, California-Berkeley, Seoul and also Daejeon Korea, the Wright-Patterson Air Force Base in Dayton Ohio, Waterloo and London, Ontario Canada and Volograd, Russia. It was also a great year for his spouse Professor Barbara Harbach, with various awards such as from Grand Center and the YWCA, along with a CD of her compositions recorded by the London Philharmonic.



Graduate School Research Fair poster winners, Geeta Parajape, Sudeshna Roy, **Scott Hasty BS 2008**, **Teresa Bandrowsky BS 2008** and **Abeera Sharma with Chris Spilling**.

George W. Gokel became Director of the Center for Nanoscience this fall after the former Director, Jimmy Liu, accepted an appointment in the physics department at Arizona State University. George was interviewed on KWMU Public Radio in a feature named "Center director works with science of small". Dr. Gokel was honored with the *Chancellor's Award for Research and Creativity* in the fall 2011. When he arrived in 2006, he brought a group of 8 Washington University graduate students who all completed their thesis work here at UMSL. All his WU students have graduated and now he has 2 undergraduates and 6 graduate students including **Nichole Curvey BS 2009** working in his lab. **Sergey Sedenkin PhD 2012** is working as a post doctoral fellow in the Gokel lab as well.

Harold H. Harris organized a very successful day of activities specially for secondary school teachers at the Midwest Regional Meeting in St. Louis in October. The symposium included the ACS President, Bassam Shakhshiri, whose fifth volume of

Chemistry Demonstrations was recently published, *Educational Innovations* founder Ron Perkins, Laura Slocum of the *Journal of Chemical Education*, and two current high school teachers, Debby Goodwin of Chillicothe, Missouri and Kirkwood's finest, Bob Becker. By all accounts, it was the best such program ever provided at the ACS Regional level. Hal will be presenting a paper, "Silly Questions", at the ACS national meeting in San Diego this spring. It examines the assessment of the large gaps in conceptual understanding with which most students leave undergraduate chemistry courses and programs. You may know that the University has established *Founders Professorships* for ancient faculty members who would like to retire, but yet still enjoy teaching a course or so at a time. Hal has applied for one of those positions, beginning September 1, 2012.



Professor Barbara Harbach and Chancellor Tom George with Tony LaRussa when Tony was awarded an honorary degree in 2007.

Wesley R. Harris says the biggest recent change has been accepting the 0.5 FTE appointment as Associate Dean of the Graduate School in Sept of 2011. Thus far it has gone pretty well, and he enjoys being more involved with the activities of the graduate school. His research is now largely focused on the collaborative project that he and Chris Spilling have that is funded by a small start-up company (ALKYMOS). They are working on technology to remove aluminum contamination from nutritional solutions used with premature infants. His most recent graduate student **Rashmi Sharma PhD 2010** who is a postdoc at Purdue University is co-author with him on a recent paper in *Journal of Inorganic Biochemistry* on iron release from transferrin. He also just published an invited review on anion binding to serum transferrin in *Biochimica et Biophysica Acta*. His undergraduate researcher, **Nick Bardol BS 2012**, has just been admitted to the MS program.

Stephen Holmes took over the position as Director of Graduate Studies in the department this fall. His research group, which consists of **Philip Janini, BS 2011**, **David Putnam, B.S. 2011**, a postdoc Yuanzhu Zhang from Beijing University and undergraduate Hung Ngyuen, is doing well. They published 4 articles in 2011, presented 10 papers at conferences during the year and already plan to make presentations in Orlando and Chalkidiki, Greece next year. Steve has been very busy writing grant proposals to support his research program and received two campus grants in 2011 and also a Missouri Research Board grant. He has also been active in outreach to high school students. He had two participants in the Students and Teachers As Research Scholars (STARS) program last summer. Tim Ema, a high

school teacher from St. Louis, is now a Ph.D. student in the College of Education at UMSL with Dr. Granger and Josh Ema a junior at Lutheran South High School won awards for his research in the Holmes lab from LMI Aerospace, Inc./D3 Technologies, and the UMSL Chancellor's Office. His undergraduate researcher Hung Ngyuen was an ACS Summer Experiences for the Economically Disadvantaged High School students (SEED) participant and is now obviously at UMSL doing a degree in Chemistry/English and is in the Honors College and a Chancellor's Scholar. On the personal front he and his wife Keeta, Assistant Director and Instructional Designer in the UMSL Center for Teaching and Learning, bought a house (built in 1908) in Ames Place near the Delmar Loop/Wash. Univ. Their two dogs Liuba and Trotsky also keep them busy.

Rensheng Luo continues to run the NMR lab and had the busiest year in five years. In 2011 he had to spend more time troubleshooting the hardware due to the lack of electronics staff on campus. The tough situation is when all instruments are down at the same time, which really happened. He does feel pressure to fix them in no time as most researchers are not able to set their synthesis experiments without NMR to monitor products. Since October, Rensheng has been involved in the installation of the new DD2 600MHz spectrometer by Agilent Engineers. This instrument has high sensitivity and resolution. On the personal side, his daughter, Dee, is going to start her college study in biochemistry at the University of Pennsylvania, Philadelphia next Fall.

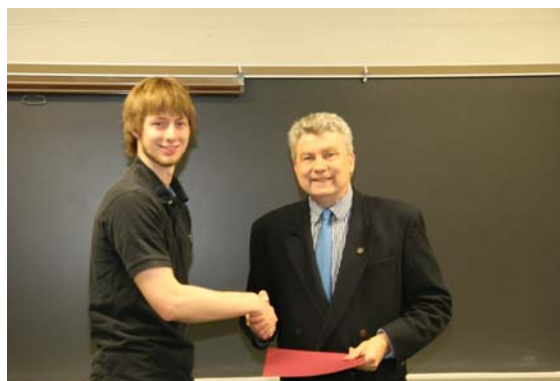


Some of the fall 2011 entering PhD students Xiao Jia, Joseph Meisel, Alexis Gutterman, Joe Wilson, Stephanie Cowin, Edith Csiki-Fejer, Phil Janini and Alan Alla.

Michael R. Nichols investigates Alzheimer's Disease-related research and is also involved in collaborations with Alexei Demchenko, James Bashkin, and Cindy Dupureur. The Demchenko collaboration investigating a potent inhibitor of lipopolysaccharide-induced cellular inflammation resulted in a publication in *RSC Advances* this year while biophysical work on the amyloid-beta protein produced a publication in *Archives of Biochemistry and Biophysics*. Mike has three doctoral students in his lab and other student researchers this past year were **Kelley Coalier** BSBB 2011, **Lisa Gouwens** MSBB 2011, **Ben Ruck** BA 2003 now in the MS program, another MS student and four undergraduates. Conferences attended by Mike and the lab members included the American Society for Neurochemistry (St. Louis), ACS Midwest (St. Louis), and the Society for Neuroscience (Washington DC).

Nigam P. Rath Nigam was invited to present a talk in the "educational inspiration: crystallographic teaching and techniques" symposium at the annual meeting of the American Crystallographic Association in New Orleans. The title of the talk was "Crystallography Experiments for Undergraduate Laboratory". Recently X-ray lab has acquired a microscope system with full video capabilities which has been very popular with students and visitors alike for viewing and screening crystals. The two diffractometers and teaching keeps him well occupied. He coauthored 23 publications in 2010.

Christopher D. Spilling graduated his thirteenth PhD student (**Raj Malla**) with two more expected in May 2012. His research group currently comprises of 6 Ph.D. students (including **Ben Martin** BS 2007, **Mercy Kiiru** BS 2009 and **Jeremy Ridenour** BA 2008), a couple of undergraduates and Research Associate Professor Bruce Hamper (see below). The group has been active at meetings with talks and posters presented at the ACS National meeting, the ACS Midwest Regional meeting and Missouri Organic Day. Spilling continues to collaborate with colleagues Cindy Dupureur and Wes Harris, but has new collaboration with groups in France, Wash U and the Mayo Clinic in Florida. The family is doing well. Andrew (20) is a junior at Embry-Riddle Aeronautical University and a midshipman 2nd class (Navy ROTC). He spent a month with the Navy this past summer on fast attack submarines. Robert (18) graduated from DeSmet HS and completed basic training and individual advanced training as a fire support specialist (artillery) at Fort Sill in Oklahoma. He is currently a member of the 101st Airborne Division stationed at Fort Campbell in Kentucky/Tennessee. William (13) is the 8th grade at Chaminade College Prep. He told his father he wants to do honors chemistry in high school. Finally, a potential scientist among his three sons!



Nicholas Ahlmeyer 2011 Alan F. Berndt Outstanding Senior Awardee with Dr. Spilling.

Keith Stine completed a year in which he had a highly active crew of researchers in his laboratory including three graduate students and a continuing postdoctoral associate. A number of undergraduates who worked in his lab recently graduated, including **Patrick Skornia** BS 2011, **John Schallom** BS 2011, **Jason Davis** BS 2011, **Marko Jovanovic** BS 2100, and **Jason Kennedy** BSBB 2011. Two new undergraduates have worked in his lab recently. Research on a number of aspects of nanoporous gold continues, including collaboration with Professor Demchenko's lab on using the material as a support for carbohydrate synthesis. The project was funded by NIH for a

third consecutive year. In the past year, his group published a paper in the Royal Society of Chemistry journal *Nanoscale*: the first major paper from the group to use atomic force microscopy. A review chapter with former postdoc **Olga Shulga**, and former graduate student **Kenise Jefferson** PhD 2011 appeared in *Methods in Molecular Biology*. Another book chapter co-authored with his postdoc Yi Horng Tan and a review article co-authored by the entire group also appeared recently. Dr. Stine organized two day long presentations of hands-on science activities at state fairs this past summer for the Missouri science outreach organization SCOPE, including at the Saint Charles County State Fair and then again at the Missouri State Fair in Sedalia. He also presented at three other events in the Saint Louis area during the year. A number of graduate students from the chemistry department helped to make these events a success. During the year, he served as Program Chair for the 2011 ACS Midwest/Great Lakes Regional meeting, as advisor to the ACS Younger Chemists Committee, assisted Professor O'Brien with the annual Career Day, and coordinating Project SEED. One of the students that participated in Project SEED this year, Hung Nguyen, was so impressed by UMSL that he decided to attend UMSL instead of Saint Louis University.



Dr Spilling with 2011 Aid to Education Awardees Allie Saettele, Sarah Hensel, Mike Dalton, Katie Cibulka, Elizabeth Ayo Vaughan, Chris Han, Jon Mattingly and Christina Nguyen.

Janet Braddock-Wilking attended the 16th International Silicon Symposium in Hamilton, Ontario Canada in August 2011. Three of the students in her research group presented their work, including **Sitaram Acharya** MS 2009, **Teresa Bandrowsky** BS 2008 and **James B. Carroll** BS 2009. The group published a paper in *Organometallics* in July 2011 on the preparation and characterization of a series of luminescent tetraphenylgermoles that displayed aggregation-induced emission (AIE) and can be potential chemosensors for the detection of volatile organic compounds (VOCs). The work was featured on the cover of the journal. Dr. Wilking went as a chaperone to Honolulu, Oahu with her son Kevin and members of the Parkway North HS Marching Band in June 2011 where they performed in the parade for the King Kamehameha Day and also played on the USS Missouri Battleship in Pearl Harbor. Her son, Alex graduated from the same high school in May and is now attending Webster University and is majoring in journalism.

Chung F. Wong 's graduate student Paul Gontarz tied the knot with Elena Vasilieva a graduate student in Dr. Dupureur's lab this summer. **Sneha Bairy** MSBB 2011 successfully completed

her thesis and joined Monsanto after graduation. Former postdoc Baojing Zhou worked with the lab again this summer before starting a faculty position in Nanjing University of Science and Technology in the fall. Two high-school students – David Gu and Joshua Gollub – spent the summer in the lab as part of the Students and Teachers as Research Scientists (STARS) program. Former STARS student, Michael Rizzo, obtained a summer undergraduate research fellowship from Harvard. Former summer undergraduate student from the Indian Institute of Technology-Bombay, Mayank Goyal, who joined Proctor and Gamble in India after graduation, visited the Wong lab this fall on his way to the company headquarters in Cincinnati for a training session. Chung missed spending time with his friends in St. Louis this Thanksgiving because of a grant review panel in Brussels."



The Stine research group in summer 2010 Keith Stine. Kitti Boonperm a visiting student from Thailand, Binod Panday, Dr. Yi Horng Tan, Kenise Jefferson PhD 2011, Jason Davis BS 2011, Abeera Sharma and Jay K. Bhattarai

Zhi Xu was featured in some press releases describing his work on the development of devices for non-invasive glucose monitoring. One leader in a release was "People with diabetes could soon have a pain-free way to check their blood glucose levels. UMSL's own Xu Zhi has developed a portable, inexpensive non-invasive blood glucose detector that is one step closer to hitting the market". The university recently signed a licensing agreement with St. Louis Medical Devices, which formed in November 2010 solely to fund and market the noninvasive device.

Emeritus, Retired, Adjunct and Former Faculty Members

Charles W. Armbruster enjoyed visits and contacts from former colleagues and students this year at his Orlando, FL condominium. The Bartons stayed with him twice and the Spillings visited in late summer. He continues to be successful in acquiring Master Points for his bridge playing and tells us he enjoys hearing from former students.

Lawrence Barton knows it is no secret what he spends much of his time doing. In addition to alumni activities, he continues to be busy with undergraduate advising, arranging events, working on the website and the graduate brochure, the ACS Directory of Graduate Research, reviewing articles for publication and

helping out in the department. He has lunch almost every day with Hal Harris and Rudi Winter. If he is not on the golf course, traveling or working in his yard, he can be found in his office in the department. He and Pat traveled to two ACS national meetings this year, he helped host the ACS President Nancy Jackson at the recent MW/GL Regional Meeting in St. Louis and he continues to be active at the local and national level in the Society. In August he was elected to the Society's Council Policy Committee. He and Pat spent a week in Rome in July and just over a week in England visiting family. He and Pat spent seven weeks in Florida during the year including a two week stint in November preceded by three days on the Robert Trent Jones Golf Trail in AL. Unfortunately his handicap slipped a little this year, partly due to the difficulty of the latter courses, and he ended the year at 18!

Eric Block and the editor had lunch at the ACS meeting in Denver. Eric, who is Carla Risso Delray Distinguished Professor of Chemistry at SUNY-Albany, is doing well professionally although he and Judy have had a tough time recently as she recovers from esophageal cancer. We are happy to learn recently that things are improving for Judy and they look forward to celebrating their 45th Wedding Anniversary in Florida this January. Eric has not retired and looks forward to a Festschrift edition of the *Journal of Sulfur Chemistry* to be published in honor of his 70th birthday. Eric has been selected as the 2012 recipient of the Sterling Hendricks Lectureship Award given by the US Department of Agriculture. Melvin Calvin, Bruce Ames, and other notables are among the previous recipients so it is a very nice honor. Eric will present his award address next August in Philadelphia at the American Chemical Society meeting.

Joyce Y. Corey continues to be very active in chemistry although she no longer is involved in laboratory work of her own. She reviews articles and grants proposals and also publishes her own material. With respect to the latter, a major review article appeared in *Chemical Reviews* in February "Reactions of hydrosilanes with Transition Metal complexes and characterization of the Products", and she just published two chapters in *Advances in Organometallic Chemistry*, "Siloles: Part 1: Synthesis, Characterization, and Applications" and "Siloles: Part 2: Silaindenes (Benzosiloles) and Silafluorenes (Dibenzosiloles): Synthesis, Characterization, and Applications". She attended the International Symposium on Organosilicon Chemistry that was held in Hamilton, Ontario in August. She organized the poster competition for posters submitted and presented by students. It turned out to be a major project, one I am sure she will relate if you ask her! One of the highlights of the year was going out to lunch with three UMSL graduates, **Yana Levchinsky** BS 1997, MS 1999, **Jean Huhmann Vincent** (BA 1992, PhD 1997) and **Brian Grimmond** PhD 2000, after Thanksgiving. They talked away for about 2 hours and it almost seemed like they had left UMSL a few months ago. All are gainfully employed and enjoying their jobs in industry. The editor was invited to lunch too but was so sorry he had already made other plans!

David L. Garin is in his seventh year as President of the UMSL Retirees Association which had its holiday luncheon at the Glen Echo Country Club in December. Recovering from two surgeries for a torn retina this year, David is back traveling again with recent trips to Santa Fe and New York City. David just received word that 2012 will be his 50th year as a member of the

American Chemical Society.

John L. Gutweiler has just completed 40 years teaching here and is six months away from the same at Logan College of Chiropractic. He tells me he got his latter job through a contact of former college Ken Barnett and the UMSL job came through Jim Chickos, via the late Janet Chickos who was at the time teaching with John's friend Kathleen Dombrink at McCluer North High School.

Jane A. Miller was at the ACS Midwest/Great Lakes Regional Meeting Diversity Luncheon where she had lively comments to make during the discussion following ACS President Nancy Jackson's presentation on diversity.

Robert W. Murray and the editor spoke quite recently. Bob is doing well in spite of some health problems. He and Claire were about to go out to lunch when we last spoke we all plan to have lunch together in March.

James P. Riehl continues as Dean, Swenson College of Science and Engineering, Professor of Chemistry and McKnight Presidential Leadership Chair at the University of Minnesota-Duluth. When we last communicated he was on sabbatical leave and he and Ceci were in Beijing and headed for Osaka the following day.



Joyce Corey and Jane Miller at the 2011
Robert W. Murray Lecture Banquet

William J. Welsh who is Professor of Pharmacology and Norman H. Edelman Professor in Bioinformatics and Molecular Design at the Robert Wood Johnson Medical School, University of Medicine & Dentistry of New Jersey, and Director of the Environmental Bioinformatics & Computational Toxicology Research Center Piscataway, NJ, was in touch recently and is doing well. We note he has been collaborating with some UMSL graduates, **Susan Keenan** BA 1997 and **Hong Fang** PhD 1996.

Rudolph E. K. Winter told the editor to tell the alumni that he says hi to all of them and would be pleased to hear from anyone so inclined. He continues to be active in chemistry with his mass spectral and related work. He hasn't topped the PNAS article he co-authored early in the year but he is working on it. He visits family in Florida and spends time with his St. Louis-based grandchildren when he is not here at work.

Former Staff Members

Donna (Palmer) Kramer spent 19 years in the storeroom, first as Manager and later as Coordinator for Laboratory Operations. She joined us from the Center for International Studies on campus in 1990 and finally added stability, organization and above all competence after some years in which it seemed we could not keep anyone. Donna went on to complete her BA degree in 1999. **Joe Kramer** and **Donna** were married on May 11, 1996. Their daughter Jessica was born on April 15, 2000. Unfortunately Donna became ill with Multiple Sclerosis and took an early retirement in 2008. She tells us she is enjoying time with her daughter and her family. She never realized how important a stay at home mom really is! She has been taking classes toward certification for a Public School Religion (PSR) teacher and is currently teaching PSR part time at her Parish.

Randa Schneider continues to provide an example to all of us. She has struggled with cancer now for more than three years but is cheerful and upbeat and tells me she is doing well. Her husband Mike is well and continues to work for the Social Security Administration and also run a private practice in psychological services. I understand the business is expanding.



*Our excellent office staff, Michelle Haley,
Lindsay Zoellner and Donna Lemp.*

The Robert W. Murray Lectureship

This departmental function continues to be one the two major events of the visiting speaker program and also involves the major social program in the department. On the evening prior to the lecture, a banquet is held, typically at the Glen Echo Country Club, and guests and alumni join the faculty in honoring the speaker and Dr. Murray. The 14th Annual Lecture was given on April 4 by **Dr. Steven V. Ley**, BP Professor of Chemistry and 1702 Chair of Chemistry at Cambridge University. He spoke on "New Tools for Molecule Makers". The 15th Annual Lecture will be given by **Dr. Valentino Stella**, University Distinguished Professor of Pharmaceutical Chemistry at the University of Kansas. He will speak on March 19 on "The Case for Prodrugs".

Scholarships and Fellowships

The Charles W. Armbruster Undergraduate Chemistry Scholarship was established following the events in August 2008 when Dr. Armbruster was awarded the Chancellors Medallion spoke at Commencement and was honored by alumni, colleagues and friends in a reception. The Scholarship is given

to incoming Missouri resident undergraduate students in the Department of Chemistry, transferring from other universities and community colleges. We issued the first such scholarship in the winter semester, 2011 to **Megan Flecke**, and for the academic year 2011-12 we awarded the first full scholarship to **Scot Jones**.

The Lawrence Barton Scholarship: This Scholarship is designed primarily for junior chemistry majors who are first generation college students and who have some financial need. Contributions to the endowment have been very good and this allowed the provision of scholarships to **Jonathan Mattingly** and **Daniel Simmons** for 2011-12.

The M. Thomas Jones Memorial Fund: This memorial fund is the only endowment that recognizes performance by graduate students. It was initially funded through contributions from family, friends and colleagues of Dr. Jones and recently his widow Patricia Jones and family have made substantial contributions to allow us initially to endow it and to improve it. Currently it is used to fund an annual award for the top graduate student seminar in each semester. The graduate students vote on this award and for 2010-2011 awards were made to **Teresa Bandrowsky** and **Raj Malla**.

The Barbara W. Brown Fellowship for Women in Chemistry: This Fellowship is designated for women students over the age of 24 and **Barbara (Willis) Brown** (BA 1984) established it. The 2010-2011 fellowship went to **Sarah Hensel**. Again, this is the only fund that is dedicated to the support of women students and you can designate your contribution to this fund if you wish.



*Chris Spilling with Steven V. Ley, the 14th
Annual Robert W. Murray Lecturer*

The Eric G. Brunngraber Undergraduate Research Fellowship: This Fellowship has existed since the late 1980s but was endowed more recently by the family of the late Dr. Eric G. Brunngraber, and we are delighted that they continue to add to it. The award is for undergraduate research. If you are interested in supporting this important aspect of the department's activities, you may designate your contributions to this fund. For 2011-12 the fellowship went to **Jennifer Berger**.

The William and Erma Cooke Memorial Scholarship:

This, the major endowed award in the Department, was one of the first such endowments on the campus. It is designed primarily for sophomores. It was endowed by Dr. Dorothy C. Cooke, in honor of her parents William and Erma Cooke, in 1989. Dorothy received her BS degree in chemistry in 1971 and is now a physician. She was always most appreciative of the support she got from the department and especially when she did research with Dave Garin. The Scholarship has provided support for two students annually now since 1992. In 2011-2012 fellowships went to **Dea-Gyue (Chris) Han** and **Allison Saeetele**.



Local State Representative Clem Smith meets with Chris Spilling and graduate students J. B. Carroll and Doug Hammerstroem

The Linda and Michael Finkes Chemistry Scholarship

is relatively new and was endowed through the generous contribution of **Linda** BA political science 1970 and **Michael J. Finkes** BS 1973, MS 1978. The recipient for 2011-12 was **Son Vo**.

Other Departmental Student Awards**Undergraduate**

The award for the **Outstanding Student in Introductory Chemistry** went to **Jessica N. Bleile** who received a certificate and the *Handbook of Chemistry and Physics* from the Chemical Rubber Company. The **Award to the Outstanding Student in Sophomore Chemistry** went to **Erin T. Martin**, the **American Chemical Society Award for Analytical Chemistry** went to **Nicholas Ahlemeyer** who received a certificate and a one-year subscription to *Analytical Chemistry* and the new **ACS Award in Inorganic Chemistry** went to **John R. Schallom**. The **American Chemical Society-St. Louis Section's Outstanding Junior Award** went to **Allison Saeetele**. The award was presented at the annual Awards Night during the ACS St. Louis Section's Chemical Progress Week. **Nicholas Ahlemeyer** received the **Alan F. Berndt Outstanding Senior Award** and the **American Institute of Chemists-Student Award Certificate**. The 2011-12 Undergraduate **Chemistry Aid to Education Awards** were given to **Elizabeth Ayo Vaughan, Katherine Cibulka, Michael Dalton, Dea-Gyue (Chris) Han, Sarah Hensel, Jonathan Mattingly, Christina Nguyen and Allison Saeetele**. Finally a **Certificate of Commendation** for

Outstanding Service went to the Chemistry Club President for 2011 **David M. Putnam**.

Graduate

The 2010-11 **Graduate Student Research Award** went to **Hemali Premathilake** and the 2010-11 **Graduate Teaching Assistant Award in Memory of Jack Coombs** was awarded to **Shana Terrill**. **Darrell Hasty** and **Miranda Shaver** were both honored with the **Outstanding MS Student Award**. **Teresa Bandrowsky, Scott Hasty, Geeta Parajape, Sudeshna Roy and Abeera Sharma** were winners in the **2010-11 Graduate School Fair Research Poster Competition** and **2011 Graduate School Dissertation Fellowships** were awarded to **Dmitry Lipkind, Hemali Premathilake and Sudeshna Roy**.

Distinguished Alumni Lecture

The 24th Annual Distinguished Alumni Lecture was presented by **Elizabeth A. Amin**, BA 1996, PhD 2002 Assistant Professor of Medicinal Chemistry at the University of Minnesota. She spoke on *Chemistry and Homeland Security*. The 25th annual honoree will be **Stephen A. Kolodziej** BA 1987, PhD 1983. Steve is an Associate Research Fellow at Pfizer, Inc., in St. Louis. After graduation from Rudi Winter's research group, he did postdoctoral work at Washington University School of Medicine and then joined Monsanto as a Research Associate. After just over one year he became Senior Research Investigator, then Group Leader and Associate Fellow and finally Associate Research Fellow with the company as it morphed through Searle, Pharmacia into Pfizer. Like many of our current students, Steve transferred to UM-St. Louis from the St. Louis Community College and went on to great success. One of Steve's hobbies is music - he is the bass guitarist for the group *Roofrockers*.

Editor's Column (Lawrence Barton)

I am continuing my version of the history of the department but I begin with a few observations. Writing the UMSL CHEMIST continues to be a joy for me because it assures I will stay in touch with many of you. I hope more of you will stay in touch in the future so please don't hesitate to e-mail me, call me or write to me. This current issue is the longest yet - perhaps too long but I hope you will read it and see how well other alumni have done. We continue to try to help alums in finding positions or contacts and I believe the LinkedIn alumni group will further that goal. I cannot thank those of you enough who have chosen to make contributions to one of the scholarship funds in the department or to the endowment we have established. Fees are about to go up again here this year as the Governor has recently announced major cuts in education funding so it even more important that we try to assist our students financially as well as educationally and personally. We are frustrated that the renovation of Benton and Stadler Halls, and particularly the undergraduate laboratories and the unreliable HVAC, continues to stall. I recently unearthed a report I wrote in 1987 urging the state to provide funding for the project. In spite of this our students continue to receive an excellent education and then go on to great success in their careers and I look forward to chronicling that for some time to come.

Departmental History, from 1985 - 1990

As mentioned last year in Volume 28 of the UMSL CHEMIST we came out of the period 1980-85 very strong but the best was to come with a new building on the horizon, and the designation as a Center of Eminence, which would lead to expansion and enhancement of the program. The strongest feature of this period was the appearance of Dr. Marguerite Ross Barnett as our fifth chancellor, and the success she brought to the campus. The period also brought some tragedy including the loss of Eugene R. Corey who spent 19 years on the faculty and Eric G. Brunngraber who had been involved in programs in the department since joining the staff at the Missouri Institute of Psychiatry in 1975.

One of my priorities as department chair during this lustrum was to develop stronger links to our alumni and to the local chemical industry. A major influence was Tom L. Tolbert, Director of External Research at Monsanto, who had described to me an academic departmental advisory group on which he served. It was Tom with whom we made the arrangement for the Monsanto Postdoctoral fellow ship in 1983. We set up such a group and sought senior officials who would be sympathetic to and supportive of the department, as well as supportive alumni who had been successful in the more prominent chemical companies in the area. I listed the membership in last year's article and the first meeting of the group took place in fall 1986. A goal of this group was to help the department, and the campus, by providing communications channels to the corporate and political leaders in the area.

As mentioned last year, the end of Chancellor Arnold Grobman's term of office was frustrated by opposition to UMSL expansion by both political forces and also Central Administration forces including the new president C. Peter Magrath. Following Grobman's retirement at the end of 1985, Arthur McKinney served as Interim Chancellor from Jan - June 1986 while a replacement was sought, and Blanche M. Touhill, an Associate Vice Chancellor for Academic Affairs served as Interim Vice Chancellor for Academic Affairs. Tom Jones had been Associate Dean of the College of Arts and Sciences and he became Interim Associate Vice Chancellor for Academic Affairs in 1986.

We were allowed to recruit for a replacement for Al Berndt during the 1984-85 academic year but funds were very scarce and eventually, due to not having adequate funds to set up an experimentalist, we sought theoreticians. This was fine because our resident theoretician Jim Riehl had become an experimentalist. We were very fortunate to persuade Bill Welsh to join the faculty and an appointment was made for the fall of 1985 but, due to his holding a fellowship at the NIH, he delayed joining us until Fall 1986. Bill held an appointment on the faculty at the College of Mount St. Joseph and was also an Adjunct Professor at the University of Cincinnati where he was collaborating in research with James Mark.

During the fall of 1985, the department made plans for spending the so-called Eminence funding. We already had been submitting 5-year plans annually and devised a plan which involved the addition of faculty members, instrumentation technicians, graduate student support and funds for the purchase

and maintenance of modern instrumentation. The plan was to develop competence in biological and materials chemistry. We regarded the hiring of Bill Welsh as the first step and began pushing the administration to begin allowing us to recruit new faculty. Art McKinney was then Interim Chancellor and he provided us with funds to hire a bioorganic chemist. The eventual consequence of that was the addition of Vally D'Souza who joined us in fall 1987 after a two year search. We were also able to squeeze \$10,000 to purchase an array processor for the new Varian XL-300 NMR spectrometer to allow more rapid processing of data. It was never clear, but the fact that Tom Jones was in the Vice Chancellor's office probably made the difference!

The fall 1985 semester was the first one during which Bob Stearns did not teach since 1966 when he began his "career" as an Adjunct Professor teaching in the evening. I recall we had a party for him around that time. Part-time colleague Jordan Bloomfield, a well known chemist and ACS colleague, who had taught for us on and off for about 10 years, retired from Monsanto and brought equipment with him and set it up in the department. His plan was to do some work here but that did not materialize and he moved to Oregon and set up J Chem Research Inc in Veneta, OR with his wife Dot.

We held an alumni reception in the fall of 1985, one of many we had during the late 1980s. Our graduate program had grown and we now had 29 PhD and 34 MS students. During the academic year 1986-87 we graduated 11 MS students, the highest number since 1982 when we graduated 13. These numbers did not include students on the way to the PhD as they do today. For those two years we merited a special mention in the C &EN Report of the Committee on Professional Training where numbers of chemistry graduates in ACS-approved institutions are tabulated. Also in 1987-88 we graduated 7 PhDs, the largest number to date at that time.



Eric G. Brunngraber 1927 - 1987.

Eric Brunngraber had been associated with the department since 1975 and in late 1985 the chemistry faculty voted to authorize

the chair to begin negotiations to have his appointment transferred to UMSL. He had been teaching for us and directed the research of graduate students (**Chandrasiri Somawardhana** PhD 1982) and several undergraduates. The process was very difficult but in late fall 1986, the transfer was approved by all parties concerned. Also in late 1986 Joe Feder, who had been our original biochemistry teacher, a part-time role for this Monsanto colleague, came to lecture to us on the developing field of biotechnology. At the time Joe was President and Chief Executive Officer of Invitron Corporation located near the airport on Natural Bridge Road.

Chancellor Marguerite Ross Barnett became the fifth chancellor of the university in June 1986. She appointed Dean Terry Jones as Special Assistant to the Chancellor for Budget and Planning, Don Phares from Economics became Interim Dean of the College and Tom Jones continued as Interim Associate Vice Chancellor for Academic affairs. Chancellor Barnett's first initiative was called Partnerships for Progress and she was initially able to extract a special state appropriation. Her emphasis was to promote excellent scholarship at the cutting edge and also to provide opportunities for under-privileged students. Thus she established a program designed for the latter goal, the Bridge Program, which was funded in part by a substantial gift from the Monsanto Company. Then CEO and President Richard Mahoney came to the campus to announce the gift. Such a visit by a top CEO created unprecedented activity for the campus. The program began in summer 1987 when students from Vashon and Beaumont high Schools participated and **Judy Briscoe** BS Ed 1987, who had been a chemistry major in the 1960s, was an instructor. The Bridge Program exists today; a fine legacy of the contributions of Chancellor Barnett.

In the early fall 1986 Eric Brunngraber began attending department meetings as a guest since his formal appointment did not occur until December but by late fall he had become ill. He had several health issues that were complicated by diabetes and he passed away on February 18 1987 from complications due to vascular disease, before he was able to take up his new role in the department. During the year we set up a memorial fund to support the Brunngraber Memorial Fellowship. This would be the first such financial award to students for which undergraduate research was an essential criterion. Initially we provided awards to students from an account we set up but in 2000 the Endowment was established due to generous contributions from Lois Brunngraber and her family. The first recipient of the award was **Tom Bedard** BS 1991.

In the spring 1986 semester we prepared a budget for the administration for the "Eminence" program. As noted this led to the recruitment for and hiring of Vally D'Souza. We had the new NMR but no funds either to maintain it or to purchase a service contract. I had learned from a Midwest chairs meeting how one could carry funds over from one year to the next so we established a charging scheme for use of the instrument and established a 'revolving account' where we put the funds. We also assigned a graduate student from Dave Larsen's group **John G. Boylan** PhD 1988 to be the operator. We continued to receive funds annually from Monsanto to support the postdoctoral fellowship and in January the funds were increased to \$30,000.

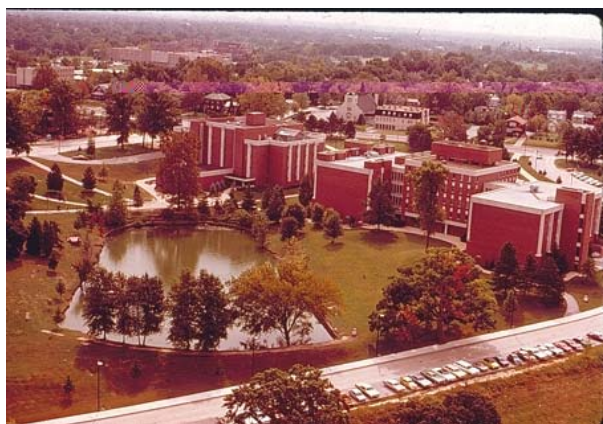
We faced a dilemma in spring 1986 when **Steve Lawrence** BA 1982, PhD 1990 had an accident and hurt his back in the laboratory. Although he was conducting research with John Schreifels, he was not technically on any contract and the University was recalcitrant in assisting with his medical expenses. This led to our rewording appointment letters so that students would be covered in such situations. I recall Marion Berndt, widow of former colleague Al Berndt attending the Award ceremony in spring 1986 and presenting the Alan F Berndt Outstanding Senior Award to John Ackerman although he didn't actually graduate until the following year. The summer that year, 1986 was the first in which we had graduate students completely in charge of courses when **Steve Lawrence** and **Jim Baker** BS 1989, MS 1993 handled the first organic chemistry lab course between them. I made a presentation to the Board of Curators in the spring 1986, one of several made by faculty leaders on campus. It related to the special committee that was wrestling with the question about whether the four UM campuses should be more independent or more closely allied. The former was favored at that time but that perception has not always been in vogue since then.

Bill Welsh joined us in the fall of 1986 and that semester I hosted the Mid America State Universities Association (MASUA) Chemistry Chairs' Conference. I had both Bill and Tom Jones make presentations; the former showed video of his molecular simulation work and Tom described how an administrator could remain very active and productive in research without neglecting his administrative duties. The formula was hard work and gaining credibility from faculty and student colleagues. I went to see the new chancellor and she described her efforts to link the university with local industry and she had already made progress with Monsanto. It was clear that she was going to stress top level scholarship from our faculty and students and also to reach out to students in the high schools from which very few went successfully to colleges and universities. She also attended the first meeting of our Industrial Advisory Council held in fall 1986 after she arrived on campus, another indication of the value this dynamic leader was going to be for us.

It was in 1987 when we first were able to provide financial support to graduate students in the summer through Alumni Fellowships—available of course through the generous contributions of alumni and friends. In 1986-87 the faculty size was back to the original 17 regular colleagues and John Gutweiler who had been an Adjunct Professor for 15 years. We were expecting Interim Vice Chancellor for Academic Affairs Touhill to appoint Tom Jones as a replacement for Dean Terry Jones who spent the year as Assistant to the Chancellor but she appointed Don Phares from Economics who was also the Director of the Center for Metropolitan studies. Before moving to the Chancellor's Office Terry Jones had spearheaded the establishment of the Advanced Credit Program on campus and Charlie Armbruster became the Faculty Liaison for the department and programs in the Parkway School District were the first one he established. Another major achievement during this period was the funding of an NSF Research Experiences for Undergraduates in spring 1987.

Chancellor Barnett continued to provide substantial leadership to the campus and this led to some very beneficial results. She reported in February 1987 that we had received contributions totaling \$1.2million from the Anheuser Busch, Emerson Electric

and McDonnell-Douglas companies for expansion of the library. This led eventually to the state providing the balance and the library extension was dedicated in 1990. She encouraged us to seek federal support and in the fall 1987, I went to Washington DC along with acting Vice Chancellor for University Relations Dennis Verity. I visited NSF and spoke to program directors while he sought our congressional delegation I attempts to secure some "wired" money. This was the beginning and it led to better success in the department's efforts in seeking funding for major instrumentation, and Verity began the effort that eventually led to the funds to establish and build the Center for Molecular Electronics in 1991.



Aerial photo of Benton and Stadler Halls and a larger Bugg Lake prior to construction of the Research Building

The department was involved in several outreach activities during this period in addition to the meetings of the Industrial Advisory council. Also, as chair, I was a member of the St. Louis Research council and served as President from 1983 -85. We featured senior industrial executives, typically members of one or the other group at a series of lunches in the department. Monsanto employees **Mike Finkes** BS 1973, MS 1978 and his senior colleague Jerry Dutra visited the department and described job openings to seniors and also committed funds for undergraduate research in the department. Famed St. Louis entrepreneur Stanley Lopata, founder of Carboline Co. visited the department and spoke to a faculty group on April 28, 1987. Bill Phillips, who had been a good friend and collaborator when he was chemistry chair at Washington University from 1978 – 1984, including collaborating on the joint purchase of the X-ray diffractometer, had become Vice President for Research at Mallinckrodt Inc. He made great efforts to assist the department and in spring 1987 Mallinckrodt announced the establishment of the Mallinckrodt Graduate Fellowship in the department. The success of this effort was no doubt assisted by the excellent relationship between Chancellor Barnet and Mallinckrodt CEO Ray Bentele. The first recipient of the Fellowship was **William R. Shiang** BA 1984 PhD 1989. Another development in 1987 came about through Melvin L. Reuppel from Monsanto. An employee Maria Miller had not completed her PhD work with Barry Trost at Madison so an arrangement was made for her to complete her work in Rudi Winter's lab. This provided more support for the department from Monsanto. Also in June 1987 the Eighth International Symposium on Organosilicon Chemistry, co-chaired by Joyce and Gene Corey and Peter Gaspar from Washington University, was held.

For the 1986-87 academic year Dave Garin served as Presiding Officer of the Faculty Council and for 1987-88 Hal Harris served as Chair of the University Senate. One of Hal's interests was the elimination of the Evening College for which he campaigned during the year, citing it as an unnecessary campus expense. Eugene Corey had served as Secretary of the Faculty Council and twice as Secretary of the Senate. In the department Dave worked with Bob Lusskin and George Vermont, research directors at Ralston-Purina and Mallinckrodt, respectively to develop a course in Industrial Chemistry, subsequently offered and taught by the two individuals along with some guest lecturers from industry. In the spring Feb 1987 I wrote to Chancellor Barnett about the Eminence funding and in April, the department met in the family room at the chancellor's residence where she outlined her approval of a modification of the plan we submitted. It clearly was not enough money but Tom Jones devised a brilliant plan which allowed us to use each year's allocation as soft money prior to committing it for funding positions. This worked well for us but the rate at which the funding came to us was so slow that inflation ate much of it up and we had to modify the plan in subsequent years. Tom was Interim Associate Vice Chancellor for Academic Affairs, then he became Assistant to the Chancellor for Budget and Planning and in the spring 1988 he was appointed Deputy Chancellor.

Another of the Chancellor's appointments for the fall 1987 semester was Charlie Armbruster who became Interim Director of the Center for Science and Technology. Charlie brought Ken Mares back to the campus and Ken has been here since then, serving as a research associate with Chuck Granger in Biology and as Director of the STARS program, in which many chemistry faculty colleague participate. That year Charlie underwent surgery for a herniated disc, which turned out to be the beginning of a series of back problems for him. Dave Garin took over the Science and Technology role in fall 1988 and held it until his early retirement in 1999. In spring 1987, an NSF REU (Research Experiences for Undergraduates) grant was funded and this allowed for 12 students, half from other universities to be funded for summer research projects. With some industrial support the program was expanded and run during the year as well. The funding lasted through 1990. The year 1987 represented the 20th anniversary of the class of 1967, the first one, and a reception was held at the Alumni Center on September 1987 where Charlie Armbruster and I made some remarks.



Aerial view of Bugg Lake after it had been drained for the construction of the Research Building

Bugg Lake had been drained in fall 1986 in anticipation of the construction of the Science complex and in April 1987 bidding for the building contract were opened. In the summer 1987 construction was initiated by the Tarleton Company of St. Louis. Tom Jones was the go-to person on campus during this time. As our facilities began to expand in fall 1987 so did department our human resources. We added Vally D'Souza in fall 1987 and that brought the faculty size to 18. Vally was assigned the office that had been used by Eric Brunngraber. Vally's postdoctoral advisor was Myron L. Bender at Northwestern and he was ill when Vally came here. Bender died in 1988 and that led to Vally and Joe Feder writing and editing the book *The Bioorganic Chemistry of Enzymatic Catalysis: An Homage to Myron L. Bender*, published in 1991. We requested a position to replace that of Eric Brunngraber and since Tom Jones was no longer supported by the College of Arts and Sciences, we initiated plans to replace him. John Scheifels was to be leaving so we also requested a replacement for him and our Eminence plan was now underway. We were also given the go-ahead to recruit for a bioinorganic chemist – at the Associate Professor level. The departure of John Schreifels, who did not receive tenure, was of course a sad one for his colleagues



Eugene R. Corey 1935-1988

Thus we recruited for two faculty members in the fall 1987 and the outcome was that we added Wes Harris who joined us from the University of Idaho as an Associate Professor and Jim O'Brien who came from a postdoctoral position at the University of Arizona. Jim eventually didn't join us until January 1989 but Wes arrived in August 1988. The O'Brien's daughter Christine was born that fall and I recall their staying with Bartons in the fall when they looked for housing in St. Louis.

The graduate program continued to grow and in fall 1987 we had 38 PhD and 36 MS students enrolled in the program. We also began discussions which would lead to the elimination of the foreign language requirement for the PhD and 15 years later for the BS degree. We continued to develop biochemistry in the department and Vally D'Souza, Bob Bolla from Biology and I sought external funds to improve the biochemistry laboratory. In December 1987 we finalized guidelines for the Brunngraber Memorial Scholarship. One of our long time secretaries Dietra (Livingstone) Lott, who had been with us since 1977 left in December 1987 and was replaced by Sylvia Stephens on

February 22, 1988.

In Spring 1988 discussion abounded on the campus about transfer mechanisms from St. Charles Community College which had been established two years earlier. The institution would become an important feeder institution for us. During the year Tom Jones and I served on a committee called "Bringing Engineering to the Urban Areas." The Committee's work was followed and accompanied by much work from successive Chancellors Barnett and Touhill. Chancellor Touhill finally clinched the deal of the joint program with Washington University, which was fine, but not quite what the Committee nor Chancellor Barnett originally had in mind. In May the first 1988 first Distinguished Alumni Lecture was presented by Sandy Asher BA 1970 and Marion Berndt presented the Alan F. Berndt Outstanding Senior Award to Bill Lesko BA 1988. That year we had the smallest BA/BS graduate output since 1987 and that was consistent with a national trend. That year however, we had the largest number of PhD graduates to date – 7.

As we planned moving into the new Science Complex, we were diligently seeking instrumentation funds from the NSF since there were some equipment funds in the building budget and using them as matching funds for successful external grants was a high priority for the use of such funds. Thus in May 1988 a proposal for a GC-MS was funded by NSF while around the same time we acquired a magnetic-sector instrument, a Finnegan-Matt via **Tom Solsten** BS 1976 who at the time was at Monsanto. It was installed with Monsanto's help during the move into the new building. In Nov 1988 a proposal for a CCD/ORD spectrometer to the NSF was also funded. We were also able to obtain from building funds \$50K to upgrade the X-ray Diffractometer which we had purchased jointly with Washington University in 1984. In June 1988 **Ray Novak** BS 1968 who at the time was Director of the Institute for Molecular Toxicology at Wayne State became the first chemistry alum to be honored with the prestigious Distinguished Alumni Award and received it at the Alumni Association Annual meeting.

In August 1988 **Jim Wheatley** our store-room manager graduated with a BS degree in chemistry. He had replaced **Ken Owens** BS 1981 in 1981 and served for eight years. Jim received the Outstanding Junior Chemistry Major Award in 1985. He was replaced in the store room by Dave Darner who saw us through the move of the store room from the central wing of Benton Hall to its current location. He didn't stay long and left in July 1989. We were stuck without anyone so **Mike Provance** BA 1988 filled in for six weeks until we hired Jim's replacement Mike Rhoades in September 1989. Alas he didn't stay long either and left us in February 1990 so we hired another student **Salvatore V. Ciaramitaro** BA 1993 as a fill in until a replacement was approved and in place. Finally **Donna Palmer** BA 1999, now Donna Kramer became store room manager in the summer of 1990 and provided some competence and stability to the position. The summer 1988, and also 1989 saw very successful REU programs in the department funded by NSF and supplemented by local industry.

In the fall 1988 another negative tenure decision involving Mike Sworin led to the establishment of another search for a replacement to start in 1989. We were beginning to move into the Science complex with Wes Harris as the first one to do so

since he had just started here. The Council for Chemical Research annual meeting was held in St. Louis and one of the featured luncheon speakers was Chancellor Barnett and I got to introduce her. In early November 1988 I recall we held an Industrial Advisory Board meeting that went very well but all that would soon become unimportant.

Bob Murray had been taken into hospital for open heart surgery in mid November but at 5:00 am on Thanksgiving Day at home we received a call from Joyce Corey informing us that Gene had died of a ruptured aneurism during the night. She was at the Normandy Osteopathic Hospital and we arrived around the same time as the Winters and Hal and Mary Harris. By about 7:30 am we were at the Coreys' home in Bellerive Acres and almost every faculty member in the department had come in. I was given the task of calling colleagues and of course, on receiving my call, most expected bad news about Bob Murray. I recall **Sherry Chang** PhD 1988 and her husband **Chet Lee** MS 1988 arriving around noon – they had been invited to spend Thanksgiving with the Coreys'. Bob West, Joyce's doctoral thesis advisor flew in by private plane from Madison. It was a very difficult time for the department, student and faculty alike. Gene was extremely popular among the students and loved by his colleagues.

On the following Monday evening, 28 November 1988, a memorial service attended by more than 200 friends and colleagues was held at the Drehmann Harrel Funeral Home on Natural Bridge Road. Hal Harris arranged a most appropriate service which included remarks by Hal, myself, Peter Gaspar, and Professor Neal Primm from the History Department, and musical performances by Charlie Armbruster-baritone, Charles Metz-harpsichord and Carole Gaspar-soprano. In April 1990 a grove of Bald Cypress trees was planted around the new stage on Bugg Lake as a memorial to Gene and a plaque was inserted along the pathway adjacent to the stage which had the inscription *This grove of trees was given in memory of Professor Eugene R. Corey, 1935-1988, by his friends.* Bugg Lake had been drained for the construction and was refilled such that it was 30% smaller but it did not leak!

We were immediately authorized to seek a replacement for Gene, a temporary postdoctoral position, so we could continue the upgrade of the X-ray Diffraction Facility in the new building. The result was that Nigam P. Rath, a staff crystallographer at Notre Dame joined us in fall 1989 as Research Assistant Professor. We also began a search for an Instrumentation Specialist to deal particularly with RF electronics and the NMR facility and in May 1989 hired **David Herod** who received a BS degree in physics 1980. As we moved into the new building, renovation of Benton continued. We sought support to reconfigure the old 408 Benton Hall as the new seminar room and funds from Anheuser Busch and Emerson Electric were obtained. The stockroom moved to its current location and the space left behind was remodeled again! In 1989 **Harold R. Messler** BS 1970 became Chair-elect of the St. Louis Section which meant that as Chair in 1990 he thereby became the second alumnus to hold that position after **Phyllis Bennet** MS 1979. Spring 1989 was the year I began hosting the ACS Career Day for high school students and used only department alumni in the program. We have run it since then and it is now a regular event on the schedule here.

In April May 1989 Joyce Corey spent the time in France at the Universtité Montpellier II Sciences et Techniques du Languedoc in Montpellier in the south of France. In May 1989 **Alicia M. Beatty** who had received her BS degree in December 1988 and was at the time a graduate student at Washington University received the Alan F. Berndt Outstanding Senior Award; she had won the Outstanding Junior Award in 1988. That summer, the office staff consisted of Sylvia Stephens, Randa Schneider and of course Betty Eshbaugh. In fall 1989 Chris Spilling joined us as a replacement for Mike Sworn who had left to take an appointment at DuPont. Chris was a postdoctoral fellow at Northwestern with Professor Tony Barrett. That fall the library construction was completed and campus funding was obtained for a new computer building.



Marguerite Ross Barnett 1942-1992

Also in fall, we were authorized to search for regular faculty replacement position for Eugene Corey and Tom Jones. Will Ridley, a colleague from Monsanto, began teaching biochemistry for us and **Bill Neuman** PhD 1988 began teaching organic chemistry in fall 1989. As a department we began giving Books and Materials Scholarships to junior and senior students from a fund initially established with some modest Aid to Education support we had received from Monsanto. Those funds eventually dried up but to this day we provide such scholarships from our alumni gift account. At the end of the 1980s we experienced the first real drop in undergraduate enrollment here but the graduate program enrollment continued to hold steady. Around the end of 1989 we were about to upgrade several aspects of the instrumentation we used for both undergraduate teaching and graduate research. A major event for the department occurred in November 1989 when the ACS Midwest Regional Meeting was held in St. Louis. Jim Riehl was General Chairman, Dave Garin was the Symposia Chair and Tom Jones was the Treasurer. For the department the major event was the Midwest Award Banquet where Bob Murray was presented with the 1989 Midwest Award. I commented at the banquet when introducing Bob what a bittersweet year it had been with the loss of Gene Corey and then this award going to a colleague.

See the streaming video *From Golf Balls to Hallowed Halls* at <http://www.umsl.edu/services/library/archives/>

Thanks to our Generous Contributors 2011

Below we list the individuals, chemistry alumni and friends who made contributions to the department in 2011. The list and the amount we raised, especially during these difficult times, are both very impressive and we are most grateful for your support. During the year, for all items including the specially endowed funds we were able to raise more than \$50K. The list includes general contributions and also those to specific funds such as the Brunngraber, Armbruster and Lawrence Barton Scholarships, the Barbara W. Brown Scholarship for Women in Chemistry, the M. Thomas Jones Memorial Fund, the Robert W. Murray Lectureship and the Department Endowment. We have just submitted materials to endow the award in honor of Jack Coombs. Again our students are most grateful to you for your generosity. It enhances our program and our students and thus the value of your degree! If we missed out your name, we apologize and hope you understand that we are fallible. Recent gifts will appear next year.

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Hongping Ye

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