



UMSL CHEMIST

Fall 2015

Special Points of Interest

- Major progress has been made in the construction of the new undergraduate laboratories in the new Science Learning Building..
- The Great Streets and University Square programs involving Natural Bridge Road and the Normandy area continue to make progress
- Announcement of the second phase of the Benton Stadler renovation project.
- Following last year's announcement of the Steven S. Lawrence and the Eugene and Joyce Corey Scholarships several new undergraduate scholarships have been established including the Rath Family Scholarship, the Hal and Mary Harris Scholarship and the yet to be announced Gary and Kathy Jacob Scholarships.
- Late breaking news is that Chris Spilling will resign as Chair to take the position, Interim Vice-Provost for Research and Dean of the Graduate School on Jan 1, 2016.

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Department of Chemistry and Biochemistry

Chairman's Message - Christopher D. Spilling

It is that time of year again when Dr. Barton badgers me to write my message for the UMSL CHEMIST. I am both sad and excited to announce that this will be my last Chair's message for the UMSL CHEMIST. I will be stepping down as Chair of the Department on January 1, 2016 to assume the position of Interim Vice-Provost for Research and Dean of the Graduate School. These offices are currently separate, but will be combined into a single position. Cindy Dupureur will serve as Interim Department Chair through the summer.

At the time of writing this message, the new Science Learning Building construction was progressing at a good pace. There is actually brick covering one face of the building and we have watched the progress during the past several months. The estimated date for opening is March/April 2016, although some of the associated renovation work will continue until the late summer. This construction, and the redesign of Natural Bridge Road have made matters a little inconvenient but we can deal with that. We are also delighted that funding for the renovation of the

existing Benton/Stadler Halls complex was announced earlier and the plans for the work are well underway.

Despite the signs of construction all over campus, budget challenges abound. As Chair of the Senate Budget and Planning Committee, I am very well aware of the problems the university faces. The department has certainly not been spared from this problem and I had to release our machinist/technician Bruce Burkeen due to budgetary constraints earlier this year. There have also been changes in Woods Hall that will further affect the department, in addition to the change in leadership.

We are delighted to see the addition of three new scholarships for chemistry and biochemistry students and that the event in May organized by the Chemistry Alumni Council in May for Jane Miller, Hal Harris and our alumni who are teachers, was a great success. I note that contributions to the Eugene and Joyce Corey Scholarship Fund have reached the initial goal, which will allow us to endow the Scholarship. We are so pleased that you, our

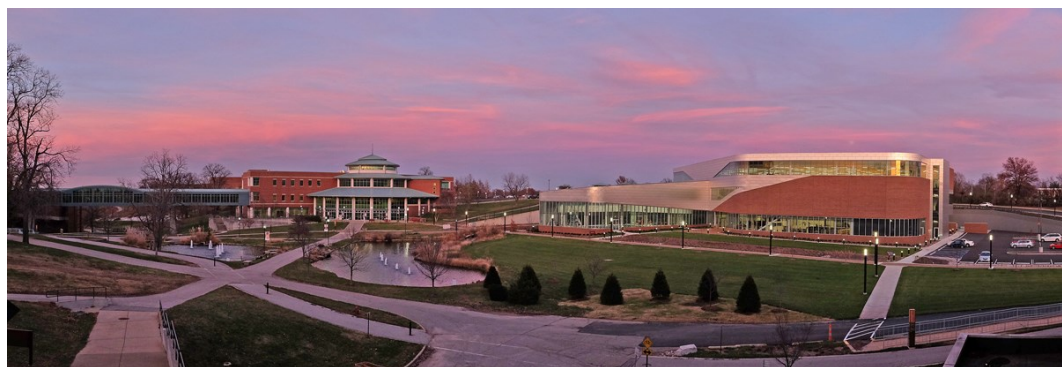
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Editor: Lawrence
Barton

alumni, have been so supportive of the department and for that we thank you. We hope you will keep in touch with us and I wish you all the very best in your personal lives and your careers.



SAVE THE DATE

The ACS meets in San Diego March 13-17, 2016. We will hold an alumni reception, separate from the meeting there. Details will be forthcoming. Look on the website or on the UMSL Chemistry Alumni Group on LinkedIn



Sunset on campus at Thanksgiving 2015 showing the Wellness Center and the Student Millennium Center



Dr. Raymond F. Novak
BS 1968

ALUMNI INFORMATION

1960s

Raymond F. Novak BS 1968 was recently promoted to Vice President Research, Shriners Hospitals for Children International, Tampa, FL. Shriners Hospitals for Children International is a pediatric specialty hospital system comprised of twenty-two (22) individual hospitals located throughout the United States, Canada, and Mexico. He is responsible for managing the budget, grants, fellowships, special shared facilities, and the research enterprise of these hospitals, eight (8) of which are Research Centers of Excellence.

Gary S. Jacob BS 1969 has seen great success recently. A member of the Chancellor's Council, Gary is Chairman and CEO of Synergy Pharmaceutical Co. Plecanatide is their first generation uroguanylin analog in late-stage clinical development for chronic idiopathic constipation and irritable bowel syndrome with constipation and stocks have done very well on Wall Street. Gary was at the 2015 Founders' Dinner.

1970s

Michael and Jeanene (Sylvester) Dueber, both BS 1972 married shortly after graduation and both worked a year before graduate school, Jeanene with Washington University and Mike with Orchard Corporation of America. Mike accepted an offer at UCLA and completed his PhD degree with Charles A. West in 1979. Jeanene got a job as a lab technician working for Professor Dan Ray, who was one of the pioneers in genetic engineering. Mike started his career at Kraft Foods in Glenview, IL shortly after graduation and worked until retirement. They have three children and seven grandchildren. Jeanene went to work part time for a family owned business in the early 90's. She was able to put her chemistry knowledge, problem solving and database management skills to use in this company, which provides technical support to utilities, government agencies and others who need information on many industrial processes. Jeanene's area of expertise became air pollution control for power plants. Although recently retired, she works periodically to manage a database she perfected and cover for others on an as-needed basis. We were delighted to see Mike at the reception honoring Dr. Armbruster in August 2008.

Virginia (Martin) Houserman BA 1974 who received an MD degree from UM-Columbia is Clinical Director for Honea, Houserman, and Allemand, PC, the ART Fertility Program of Alabama in Birmingham. She and her husband Ray have four children, three sons, Douglas 24 who works for Robot Enter-

tainment, Mickey and John twins 19, are freshmen studying Mechanical Engineering at U-Alabama and U-Missouri-Columbia and a daughter Kristina, 15 is a freshman in high school. Ginny and Ray had just been to Australia when we heard from them in March, and for her birthday in Oct. 2014 they went sky-diving over Kawai Hawaii.

Harold R. Messler BS 1970 was proud to inform us that his son Mark became a member of the UM-Columbia Medical School Class of 2019. Mark graduated summa cum laude there with a degree in biological engineering. Harold is retired from the City of St. Louis Crime Laboratory and lives with his wife Carolyn in South County

Sandi Mueller BA 1976 has taught chemistry for 37 years and she recently retired from John Burroughs School. She also taught at Bishop DuBourg, St. Mary's and Clayton High Schools and the last 26 years at John Burroughs School. For the last four years she was chair of the science department. She has been active in the ACS High School Topic group and STOM (Science Teachers of Missouri). The following is taken from a John Burroughs HS news release in May:

Presidential Scholar Ryan Thornton '15 selected his chemistry teacher and former advisor, Sandra Mueller, as the teacher who most influenced him. She will receive the Presidential Scholars Program Teacher Recognition Award at a ceremony in Washington, D.C. in late June. Ryan will be also be in Washington, D.C. at that time to receive his honor.

William Melchior BA 1977 and BA in biology, was in touch with us this past year. We hadn't heard from him since he left Petrolite Corporation in 1989. Bill had been with Carboline and then Rockford Chemical Coatings before joining Petrolite where he spent 8 years, eventually rising to Project Leader. After spending 10 years running a small business in St. Louis he entered the teaching profession and spent 14 years in the Rockwood School District teaching chemistry at Marquette High School until he retired. He obtained a Masters' Degree in Secondary Education from Lindenwood University in 2003 and is now with Chemisphere Corporation in St. Louis as a Quality Control Chemist

Victor Granat BS 1977 is Senior Analytical Scientist at Sterling Pharmaceuticals. in Dupon Illinois. It is a small pharma company and he is technically the Senior R. & D. Chemist and actually the only chemist. He develops methods, buys equipment, writes validation protocols and reports and essentially does a bit of everything and enjoys it. He feels that he is using all the experience he gained as a student, a forensic chemist and in the pharmaceutical and

Upcoming Event

The first UMSL graduating class was 1966-67. Next year will be the 50th Anniversary of that class. The Chemistry Alumni Council plans to hold a reunion of that class during 2017 and to invite all graduates to attend but especially those who graduated from 1967 through 1970. Look for an announcement on the Department Website and on the UMSL Chemistry Group on LinkedIn.

related industries in which he has worked.

Mary Hitt BS 1978, who did undergraduate research with Dr. Chickos, tells me that after graduation she worked for 2 years at Monsanto in the Biomedical Department (non-existent now) and then did a PhD in Biochemistry at UC Berkeley. That was followed by a postdoctoral fellowship at the Royal Postgraduate Medical School in London, UK for 2 years and then another for 10 years at McMaster University in Hamilton, Ontario, Canada. She was then appointed Assistant Professor at McMaster and moved to the University of Alberta in 2003 where she is now Associate Professor of Oncology. She works on animal tumor models and oncolytic viruses as cancer therapies; has a research group of 6 and is funded by the Canadian Institutes for Health Research, Canadian Breast Cancer Foundation, Women and Children's Research Institute (U. Alberta), and Granulosa Cell Tumor Research Foundation. She has had 65 papers/chapters published lifetime.

Elizabeth J. Keath BA 1978 is *Senior Project Manager* in the Institute for Clinical and Translational Sciences at the Washington University School of Medicine.

Mark Williams BA 1978 is *Manager - Technical Product Management* at Baker Hughes in Houston Texas. Mark was with Petrolite in St. Louis from 1978 to 1997 when the company moved to Houston initially as Baker-Petrolite. He served as *Manager-Fuel Additive Development* until 2008 and moved through director and manager positions to his current one to which he was appointed in March 2015.

Vincent Chang MS 1979 retired this summer after a 25 year career with Abbott Laboratories, most recently in the Chicago area. When we communicated he was traveling abroad for leisure and business, the latter associated with his new consulting venture with Yi Li Consulting. He holds a PhD degree from Duke University and held appointments with Miles Laboratories, Burroughs Wellcome, and with Tap Pharmaceuticals, a collaboration between Abbott and the Japanese pharmaceutical company Takada. Vincent and his wife Sarah provided the seed money which initiated fundraising for the *Eugene and Joyce Corey Endowed Scholarship in Chemistry*

Barbara Soltz PhD 1979 is CEO of *Conversion Energy Enterprises*, a consulting firm she and her husband Bob founded in 1993, which provides electro-optic and electronic design concepts for diode-based applications. Barbara wrote to tell me that she benefited directly and her family indirectly, from Professor Joyce Corey's inspiration, commitment and teaching of skills that enabled her to de-

velop technologies that will prevent blindness in millions who are suffering from infectious keratitis. Barb and her husband Bob are very proud of their family. All three of their children have advanced degrees either in science or engineering and have made significant contributions to their technology. Additionally three (including two granddaughters) of their oldest grandchildren are majoring in science or engineering at the University level and a fourth granddaughter has recently been recruited by the Israeli army to develop code to improve cyber security. Barbara spent 14 years with McDonnell Douglas and during that time she became Director of Research at McDonnell Douglas Optoelectronics Center located in Elmsford, NY. She is co-author of over 30 research publications in the areas of optics, diode laser devices, and wound repair and healing. She has been awarded eight patents, with four patents pending in related antimicrobial technology. Barbara has served on the NY State Technical Evaluation Board for the evaluation of semiconductor and diode laser research in NY State Universities and has given SPIE (The International Society for Optical Engineering) courses in diode laser product development for medical applications.

1980s

Scott Passer BS 1981 is a Chemist with Pain Management in Greensboro/Winston Salem, North Carolina. During his career Scott has been with Monsanto, Lorillard Tobacco, Adesis Inc., ABC Labs, Agrium Advanced Technologies and ATK. He obtained a MS degree in chemistry at the University of North Carolina at Greensboro in 1998.

Shelly Kumar PhD 1982 was in town for the Chemistry Alumni Council Event honoring Jane Miller, Hal Harris and all alumni who went into education for their careers. He stopped off on the way here and back to provide some tutoring in organic chemistry for his son, Shushome a student at the University of Illinois, Champaign-Urbana.

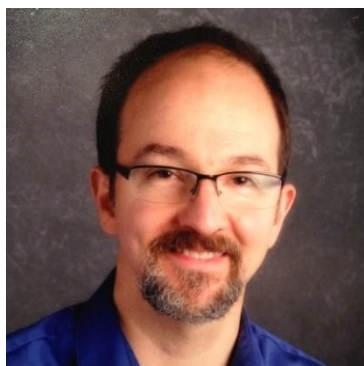
Gregg Lumetta BS 1982, PhD 1986, a chemist at the Department of Energy's Pacific Northwest National Laboratory (PNNL) was awarded the *Glenn T. Seaborg Actinide Separations Award* recognizing significant and lasting contributions to separating actinide elements, such as plutonium and uranium. Gregg was honored for his contributions which are being used to treat high-level radioactive waste in Hanford waste tanks and for the design and application of new ligands (molecules that bond to metal ions) to bind specific elements for waste cleanup applications. Hanford is the site of the world's first full-scale plutonium production plant (1943) and is now a EPA superfund site. Gregg did postdoctoral work at the University of Texas Health



Dr. Mary Hitt BS 1978



Greg Lumetta BS 1982,
PhD 1987



Dr. Jack Hammer BA 1992

Center and the Oakridge National Laboratory prior to joining PNNL where he has been since the early 1990s. Gregg and his wife Michelle have two children. Son Nick is in his senior year at Carroll College in Montana and daughter Yvonne is a sophomore Rose-Hulman Institute in Terra Haute, IN.

Greg Noelken BS 1982 retired from his position as Manager of the Chemistry Computing Faculty at Washington University in November. He joined Washington U after Petrolite, where he had been since graduation, moved to Houston. His wife Phyllis retired last year from Wash U and they plan on traveling to visit more National Parks. They have visited over a dozen and look forward to visiting many more. Greg also hopes to continue his volunteer work for Habitat for Humanity Saint Louis.

Dennis Parazak BS 1982, PhD 1995 had been with Hewlett Packard for more than 19 years as an ink chemist and a hardware design engineer first in Oregon and later in San Diego is now an Advisory Hardware Engineer with Rico Imaging—Americas Corporation in Boulder, CO. He and the editor had lunch in St. Louis last summer. Dennis was with Petrolite in St. Louis for ten years before returning to complete his PhD degree with Keith Stine.

Colleen B. Jonsson BA 1983 is Professor of Microbiology and Director, National Institute for Mathematical and Biological Synthesis at the University of Tennessee-Knoxville. She had previously been at the University of Louisville, the Southern Research Institute and New Mexico State University.

Floris Homan BS 1985, PhD 1989 has been Director, Analytical Development at Albany Molecular Research in Albany, NY for almost five years. Prior to that he spent 11 years as senior Director of Analytical Research and Development at KV Pharmaceutical Co in St. Louis.

Lisa (McChesney) Harris BA 1986 is Chief Scientific Officer and Co-Founder of Pharma Phriendly Laboratories, LLC and is also actively involved as a member and as a scientist in the start-up Cloaked Therapeutics in the Greater Chicago Area. Lisa was back on campus in 2012 when we honored Joyce Corey and Rudi Winter with a reception.

Christy S. John PhD 1988 has been a Senior Clinical Pharmacologist at the US Food and Drug Administration in Silver Spring MD, for the past 12 years. Christy, who did his doctoral work with Joyce Corey, was formerly an Associate Professor of Radiology and Biochemistry at the George Washington University in Washington DC. Following graduation he did postdoctoral research at UM-Columbia with the late Professor D. Troutner prior to joining GWU. He

and his wife Vera live in Lanham, MD. Their children Rachel and Joshua are now college graduates.

1990s

Christopher S. Mallory BS 1991 was with UpJohn/Pharmacia/Pfizer in Kalamazoo, MI, from graduation through 2006, and is now Head of Quality Control at Roche Carolina in Florence, South Carolina. In between he had positions with Shering Plough Research Institute and Merck.

Jack Hammer BA 1992 is now a chemistry teacher at Cheshire High School in Cheshire, CT. He was formerly at Joseph Foran High School in Milford, CT. He spent seven years in the pharmaceutical industry following his PhD degree from Yale in 1999.

Karen Regina BS 1993, who was a Principal Scientist from 1998 to 2011 with Monsanto, Pharmacia and Pfizer through the down-sizing, served as a lab manager at Washington University School of Medicine, and an analytical chemist at Monsanto before joining Nestle Purina as a Research Analytical Chemist last April. She also did some teaching for a couple of years between 2011 and 2014.

Lori Polette-Niewold BA 1994 is Executive Director of the El Paso County Bar Association in Colorado Springs, CO. She was formerly owner and Chief Technology Officer for Mayan Pigments, LLC in El Paso TX. She obtained a MS degree in chemistry and a PhD degree in materials science and engineering from the University of Texas –El Paso.

Craig M. Brawley BA 1996 completed his O.D. degree from the School of Optometry and is now with Vision Care Consultants, Inc. in South St. Louis County.

Mohamed Shaharuzaman PhD 1996 was in my office in June 2015. He is Director of Quality Assurance at San Corporation in Oxnard, CA. He has been there for 4 years and was formerly in a similar position with NHK Laboratories. He has a daughter who graduated with her MD and is doing her residency at USC and a son who is going into 10th grade.

Andrew Breite BS 1999 is Director of Operations and Quality Assurance at VitaCyte where he has been since 2007. He recently became an adjunct faculty member in the Purdue University School of Engineering & Technology at IUPUI as technical writing instructor.

Brian Grimmond PhD 1999 who had been with General Electric Co. in Schenectady, NY since 2001, moved to Regeren Pharmaceuticals in Rensselaer,



Dr. Lisa (McChesney) Harris BA 1986

NY this past summer. Prior to GE where he was a Senior Scientist in the Global Research Department, he was a postdoc at Yale University with Professor Jack Faller. At Regeneron, he will be focused on work that is more commercial and product oriented than the basic research he was doing with GE and his role is acting as a scientific / technical editor to support the regulatory approval of new drug approval submissions. His spouse **Yana Levchinsky-Grimmond**, BS 1997, MS 1999 has been with Regeneron since 2002 and is now Senior Manager for Technology Transfer with the company.

2000s

Gretchen (Hoel) Peck BS 2000 is *Senior Manager, Global External Supply* - GDP North America with Pfizer Inc., in Collegeville, PA. Following graduation she was with Mallinckrodt in St. Louis through 2001, then Pfizer when she moved to Groton CT with Pfizer and served as a *Manufacturing Coordinator* for four years. Returning to St. Louis in 2005 with the company, she served a *Sourcing Specialist* and then *Senior Manager, External Supply* until April of this year when she relocated to Collegeville, PA. During her recent employment in St. Louis, she completed her MBA degree at Maryville University (2012).

Aaron Burns BS 2000 is a Scientist I at Dart Neuroscience LLC in San Diego. He was previously with Pfizer and before that a postdoctoral fellow at Stanford University. He received a PhD degree from the University of Minnesota in 2010.

Shiyue Fang PhD 2001 is an Associate Professor of Chemistry at Michigan Technological University. In 2014 he directed the theses of two PhD graduates and received research grants from the NIH and the Michigan Economic Development Corporation. He published 6 research articles and two of his doctoral students received poster awards from the ACS Regional Meeting and others received University Awards and Fellowships.

Amie (Beerman) Drury BS 2002, MS 2004 is now *Sales Support Manager* at Jost Chemical Co. in St. Louis.

Viktoriya (Sedelkova) Gruden BS 2002, MS 2004, has been Supervisor, Chemistry at AAPharma Services Corporation where she supervises about 11 individuals., since January 2015. She was formerly a *Chemist 3* with Neshor Pharmaceutical (was KV) for 6 years. She and **Mario Gruden** BS 2003 have two children.

Brian Tienes BS 2003 received a PhD degree in organic chemistry from the University of Colorado

at Boulder in 2013. As an undergraduate student he did research with our former colleague Professor Pigge and prior to graduate school he was an Associate scientist with Steris Corporation in St. Louis working in the **Herb Kaiser** (PhD 1995) group. Brian is now a Chemist with the Joint Research and Development Inc., in the Washington DC area.

Elizabeth Hansen PhD 2003 is Professor of Chemistry at Rock Hill College in Rockford, IL, where she has been for five years. She was in town for the Chemistry Alumni Council event honoring Hal Harris, Jane Miller and the graduates who went into education. She completed her PhD degree in science education under the direction of Hal.

Jyothi Swamy PhD 2004 is a senior Project Manager at Sigma-Aldrich in St. Louis where she has been for about 11 years.

Medha Kamat PhD 2006 is now *Principal Scientist*, Eurofins Group, Analytical Services, in St. Charles. She and her husband Bala Ramanathan were blessed with their first child Priya Jan 20th 2015 at 7 lb. 1 oz! The family is shown here with her family including her parents Narendra (Dad) and Anjana (mom) Kamat. They were here for three



months to spend time with their first grandchild. Priya's arrival has added a new wonderful dimension to Medha and Bala's lives. Medha tells us that every day is filled with more excitement and fun than the day before as she teaches them new aspects of parenting each day! Medha helped out at the Chemistry Alumni Council event in October, *Dinner with 12 Chemists*.

Brett Cothran BA 2006, MS 2009 has been a Chemist with Sigma-Aldrich in St. Louis since January 2012.

Maria Antonette De La Cruz, Ph.D 2007 is now Organic Laboratory Director and Lecturer in the Chemistry Department at Washington University. She had previously been an Instructor at Lindenwood University and also the Meramec Campus of the St. Louis Community College.



Gretchen Peck BS 2000



Maria Antonette De La Cruz,
Ph.D 2007



Dr. Sean Whittemore
BS 2007

Rokas Juodeska BS 2007 is now a Scientist with Novartis Biologics QC in Basel, Switzerland.

Sean Whittemore BS 2007 who earned a PhD degree from the Ohio State University and did postdoctoral work at the Pacific Northwest National Laboratory in Richland, WA, is now back in Missouri working as a *Senior Research Associate* at Brewer Science in Rolla, MO. The company makes specialty coatings used in semiconductor manufacturing. The company's original product was an anti-reflective coating, and they still make those today. Sean's group is focused on new business development. When we last heard from him in February, he and his wife Megan, who live in Union, MO, were expecting their first child.

Hannah J. Smith BS 2007, who had been with Monsanto in St. Louis as an *Analytical Chemist* for 7 years since graduation, is now with the company in Oxnard, CA as *Operation Supervisor* in the Seed Physiology Laboratory.

James B. (JB) Carroll BS 2008, PhD 2013, who had been at Chemir EAG, is now an MP&P Engineer - Analytical Chemist at Boeing in St. Louis.

Kara (Kinzel) Lang BS 2008 manages the Analytical Laboratory in the Research and Development department at Elantas-PDG, where she has been since 2010. Her title is *Senior Analytical Chemist* and she completed her Master's degree in August (in Analytical Chemistry from Illinois Institute of Technology). She and **Josh Lang** BS 2007 who is a *Senior Chemical Tester* at Ameren in St. Louis, were blessed with their first child Brecken in June 2014.

Matt Lenze BS 2008, PhD 2013 has been with *Pantheon Biologics* in St. Louis, and indeed just down the road from the campus, since graduation with his doctoral degree from the Bauer laboratory. Several of our graduates are now at *Pantheon* including **Esther Askew** BS 1999, **Baljeet Singh** BS 2006, MS 2011, **Ryan Uding** BS 2009, **Jennifer Saleh**, MSBB 2010, **Jason Kennedy**, BSBB 2011, **Samira (Hasanovic) Shore**, MSBB 2012, **Nick Sullivan** MSBB 2012, **Shana Terrill-Usery** PhD 2014 and **Elena Vasilieva**, PhD. 2014.

Archana Parameswar PhD 2008 is now a Toxicologist at Lotus Labs in Plano Texas., where she moved in November 2014. She has been with the company since April 2015.

Nongnuch Sutivisedsak PhD 2008 had been with the USDA in Peoria, IL since graduation with her PhD degree from the Spilling group but in 2013 she moved to AG Precision Formulators in Madison WI, as a Production Development chemist, and in Octo-

ber she was appointed R&D Manager

Maria L. D. (Udan) Johns PhD 2009 has been with *Eurofins Group* which is located in the Missouri Research Park in St. Charles County, since May 2012. She is currently a Scientist and Team Lead in Method Development and Validation.

Jill Touchette BSBB 2009 completed a PhD degree in Pharmacology and Physiology at St. Louis University in June 2015 and is now a postdoctoral fellow at the University of Minnesota.

2010s

Supratik Dutta PhD 2010 who graduated from the Dupureur lab, spent five years as a postdoc in the Department of Biochemistry and Molecular Biophysics at Washington University Medical School and is now a Research Scientist in Mike Gross' Mass Spectrometry Laboratory in the Department of Chemistry at Washington University.

Kristen R. (Sachs) Friedman, BS 2010 has been with Pfizer in St. Louis since 2010. She began as a Sampling Handling Technician and is now an Associate Scientist-Microbiology at the Chesterfield site.



Josh Lang BS 2007 and **Kara (Kinzel) Lang** BS 2008 with their son Brecken on his first birthday.

Poonam Kaur BS 2010 is Senior Research Associate at Gilead Sciences in the San Francisco Area.

Laurel K. Mydock-McGrane, PhD 2010 was a postdoctoral fellow at Washington University with Professor Doug Covey and is now a Senior Scientist at Fimbrion Therapeutics collaborating with Professor James Janetka in the Department of Biochemistry at Washington University School of Medicine.

Faten Tamini BS 2010, MSBB 2015, who worked in Dr. Bashkin's laboratory, has been employed as a medical toxicologist by *ClinLab* in St. Louis since



Nongnuch Sutivisedsak
PhD 2004

July 2015. She is doing HPLC/extensive data analysis using LC/MS/MS for drug screening, among other things.

Christina Nguyen BS 2011 has been with Multi-Chem, a Haliburton Service as a Chemist since graduation in Houston, TX. She is currently a Chemist, working in the oil and related industries in the Frac Additives area.

Priyanka Bapat MSBB 2012, a former Bashkin lab researcher, was accepted into the University of North Carolina-Charlotte's graduate school for a Ph.D. in Biological Sciences, and was to start in the fall of 2015 semester.

Michael J. Dalton BS 2012 who holds degrees in political science (2005) and Law (2008) from the University of Missouri-Columbia, began working for an injury firm after chemistry school and decided he liked it more than patent law. He is now a partner at Partner at Onder, Shelton, O'Leary & Peterson, LLC. The firm does a lot of products liability, class action and mass torts and they specialize in pharmaceutical litigation. Mike was selected by Missouri Lawyers Weekly as a *2015 Up & Coming Lawyer!*

Dmitry Lipkind PhD 2012 is a Senior Expert at the Federal Agency of Scientific Organizations of the Russian Federation in the Department for Strategic Development and Foreign Relations.

Tedan Hu BSBB 2013 is a Quality and Systems Test Engineer with Stereotaxis in St. Louis. She completed her MS degree in biomedical engineering at Washington University in the spring and had just started work in the Cortex Innovative District—and she loves it.

Saeedeh Negin PhD 2013 who completed her degree in the Gokel laboratory has been doing post-doctoral work in the same laboratory since graduation. Dr. Negin, **Mohit Patel**, BSBB 2011, MSBB 2013, currently a biology PhD student working with Dr. Gokel and Mike Gokel, are partners in the company Upaya Pharmaceuticals, LLC (www.UpayaPharm.com). They are exploiting the technology discovered in their laboratory. Patents have been filed and bioavailability tests on several molecules were successfully conducted by a commercial lab. The company has received its first investment. In October, Dr. Negin and Mohit Patel went to Washington DC to attend an antibiotic resistance conference and to generate interest in their company. Dr. Negin presented a lecture on some of this work at the 2014 ACS Midwest Regional Meeting at a symposium on Supramolecular Chemistry, where a truly international audience was assembled. Professor Gokel also made a presenta-

tion at this symposium.

Pushkar Shejwalkar PhD 2013 has been a post-doctoral researcher at Tokyo University of Technology since June 2015. Prior to that, following graduation he was a postdoc at Hokkaido University in Sapporo, Japan. His current work involves the field of periodic mesoporous organosilicas (PMO) their synthesis and metal immobilization methods seeking further application as catalysts in various organic reactions.

Dan Simmons BS 2014 is a Chemist I at Sigma-Aldrich in St. Louis. He is working in production chemistry on lipid synthesis and purification.

Joe Wilson PhD 2014 is Associate Professor of Chemistry at the Forest Park Campus of the St. Louis Community College. He is also Faculty Advisor for Forest Park's Chemistry Club. He has won several awards at the College including *Teacher of the Year* for 2015.

Alexis Clark BS 2015 is a Quality Assurance Specialist at Mallinckrodt Pharmaceuticals in St. Louis.

Jonathan Gerber BA 2015 is now a data analyst at *TestAmerica*.

Courtney Gipson BS 2015 is a Laboratory Technician at Chemir EAG in St. Louis.

IN MEMORIAM

Kathleen L. Cammack BS 1969, we were sad to learn, died on September 11, 2011 from cancer. We lost touch with her for many years. She taught business courses at Maryville University from August 1984 until just before she died. She earned an MBA degree from the University of Tennessee and had almost completed her doctorate degree there. Kathy had been a generous donor to the department. She was very active in departmental affairs and was the one who put up decorations at Halloween, Thanksgiving and Christmas. She did research with Dave Garin and they co-published an article in *Chem Comm* in 1972.

Francine L. (Storey) Longcor, BS 1969, PhD 1984 died in April 2015, after an extended illness. Her sister Ann called us to inform us. She was my PhD student and I knew her very well. She signed up with me 20 years before my last student signed up. Her husband **Mike Longcor**, BS Chemistry 1969 was in the Air Force and he was killed in an aircraft accident. That was in the early 1970s and at the time they had a daughter Stephanie. The only "home" Fran really knew at the time was the University and she came here not long after Mike died and initially worked in my lab, then enrolled in the



Michael Dalton BS 2012



Francine L. (Storey) Longcor,
BS 1969, PhD 1984



Hal Harris

PhD program with me and graduated in 1984. Her second marriage was a failure. She was at the **50 Years of Great Chemistry Event** a couple of years ago but my attempts to contact her later were unsuccessful. During her career she worked for Lorvic Corporation, the company found by Robert Stearns, a long-time adjunct faculty colleague here, and she also worked for United Technologies Corporation, both in St. Louis. She also did a lot of substitute teaching towards the end of her career and was living in St. Ann MO, when she died. She was an excellent student here and involved in just about all the department social activities. I received many very nice comments about her from her former fellow students when the sad news was shared with them.

Kristofer J Masgio MS Yang Song, MS
Satsawat Visansirikul, MS Tori Thunderburk, BA
Ashley Wagoner, BS

BS in Biochemistry/Biotechnology

G. R. Akhunzada	Shane C. Brinker
Arvon A. Clemons	Richard Davenport
Nathaniel Letcher	Joseph P. Lyons
Stony R. Marsh	Rhett D. Mayfield
Mark A McCabe	Kent Morgan
Sara N. Rohrbough	Thomas J. Smith
Yao Xiao	

MS in Biochemistry/Biotechnology

Christie B. Dion	Shaun Eckerle
Adam Ehlen	

THE CHEMISTRY ALUMNI COUNCIL

This group had fewer meetings this past year but the bottom line looks good in that we arranged two very successful events. On May 9, we held a reception to honor Jane Miller and Hal Harris and all our alums who went into education. Of course that included the students Jane and Hal had mentored as they prepared for a career in teaching. About 75 alumni and friends attended the event which was held in the Millennium Center. Included in the presentation was Hal's announcement of his and Mary's establishment of the *Hal and Mary Harris Scholarship in Chemistry*. Jane highlighted the successes of many of the students she had mentored without actually naming them but most of us recognized many of the students. More recently in October we held the event "Dinner with 12 Chemists" which is described elsewhere. This year, the CAC will probably become an affiliate group of the UMSL Alumni Association and planning begins this fall for the celebration of the 50th anniversary of the first graduating class.

THE CHEMISTRY CLUB

2015 was a successful year for the UMSL Chemistry Club, the ACS Student Chapter. The Chemistry Club made career activities a point of emphasis last year and hosted numerous speakers from various graduate schools and companies in the St. Louis area including Saint Louis University, Monsanto, On Assignment, Aerotek, and UMSL Career Services. Other activities included National Chemistry Week, Pi Day, and demos at the ACS Chemistry High School Day at UMSL. Officers for 2015-16 are Timothy Kuensting (President), Mudar Ismail (Vice-President), Gabby Rupp (Treasurer), Sara Abramowski (Secretary), Rahmah Ghazal (SGA Rep), and Kent Morgan (Public Relations/Historian).

CHEMISTRY GRADUATE STUDENT ASSOCIATION (CGSA)

A tradition of the CGSA is to hold a welcoming

GRADUATES, DEC 2014 -DEC. 2015**DECEMBER 2014**

Jimmy L. Allen, BS	Jay K. Bhattarai, PhD
Israa Z. Diab, MS	Silke L. Evdokimov, MS
Patrick E.-A. Mua, BA	Daniel D. Ristau, BA
Maria J. Scuderi, MS	Fei Tsao, BA
Courtney N. Gipson, BS	Deidre H. Stewart, BS
Qianying Zhang, BS	

BS in Biochemistry/Biotechnology

K.-A. Abdullah,	Rebecca L. Harding,
Dennis M. James,	Brenda M. Nahlik

MAY 2015

Michael Brown, BS	Carlos Castanada, MS
Howard G. Hayes, BS	Kaleb Hicks, BA
Jon Van Huynh, BA	Shalley Lane, MS
Christina Hamilton, MS	Chris Herschbach, MS
Pragya Manandhar, MS	John McGuinness, BS
Jordan Rabus, BS	George C. Rollins II, BA
David Sanford II, MS	Shannon Schultz, MS
Yung-Yun Chu, MS	

BS in Biochemistry/Biotechnology

Sara E. Abramowski,	William D. Elliott
Dorcas W. Kamau,	Trinh Lam
Tabitha J. McCullers	Robert C. Miller
Mohamed H. Mohamed	Zarlasht Momeni
Erica M. Nelson	Faiza Nisar

MS in Biochemistry/Biotechnology

Banika J Carter,	Faten Tamimi,
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AUGUST 2015

Jared Cooper BS	Philip J. Ferko MS
Johnathan Gerber, BA	Adela Josipovic MS
Christopher Hood, BA	Paul Gontarz PhD
Sanjib Karki PhD	Hyung S. Park BS
Jessica Spencer BA	

DECEMBER 2015

Tiffany Aljets, BA	Terence Blue, BA
Doug Hammerstroem, PhD	Amer Iriskic, BA



Jane Miller with Janet Wilking
BA 1985 at the reception in
May 2015 where Jane and Hal
were honored.

Party for the new PhD students typically in the middle of each fall semester. This provides an opportunity for them to introduce themselves to faculty and other PhD students. Another tradition is to hold pitcher parties at Blueberry Hill for the students who successfully pass their dissertation proposals. This year it was done for six students. An enjoyable hiking trip was held on the Clark trail near St. Charles MO for a couple of hours one Saturday morning in the spring. Then, it was followed by short visit to the Chandler Hill Vineyards for wine "testing". A new feature, proposed by Joseph Meisel (president of the CGSA) is to learn what difficulties new PhD students are facing at their first year. One of the new PhD students will be elected to summarize all the issues and send them to the Department Chair. The idea is make this an annual tradition. A joint event is held annually by the Chemistry Club and CGSA. The activity is a helpful way to help undergraduate students with their preparations for the final exams. A group of PhD students from different disciplines will help to achieve this goal and food is provided for the event. During the fall 2015 semester, an event, *Dinner with 12 Chemists* was held. It was modeled on the *Dinner with 12 Tritons* program run by the Alumni Association. Six graduate students had dinner with 5 UMSL chemistry alumni and one faculty member. The alumni were **JB Carroll** BS 2008, PhD 2013, **Dr. Sean Dingman** BS 1994, **Rachel Hercules** BA 2001, MS 2005, **Medha Kamat**, PhD 2006 and **Mike Finkes**, BS 1973, MS 1978 and the editor was also involved. This dinner, held at Spiro's Restaurant near the campus, was a great opportunity to the students to benefit from the experience of alumni. Topics such as graduate school, career aspirations, networking, identifying a mentor while still in school, ways to appeal to potential employers, learning after graduate school, resume' preparation, getting an actual interview, interview preparation and practicing for the interview. The event went very well. Unfortunately Spiros closed recently after serving the UMSL community for 45 years when Spiro, who has a MS degree in history from UMSL, retired.

Finally the CGSA is allowed to invite a speaker for the Monday Colloquium Series, each year. Any graduate student can suggest a speaker. The choice for 2016 is Professor John Anthony from University of Kentucky who will speak on April 4, 2016.

THE FACULTY

James K. Bashkin's research activities continue to flourish and his students are doing well. He published three articles during 2015 and was issued two patents for his work in designing and making

compounds for the treatment of cancer-causing Human Papillomavirus (HPV). He presented lectures on his work at the University of South Florida, Wichita State University and at the *Second International Conference on Drug Discovery Reinvited*, in Ascot, UK. He obtained grants from the University of Missouri Interdisciplinary Inter-campus Research Collaboration Grant Program and from the College of Arts and Sciences. One of his graduate students, **Carlos H. Castaneda** MSBB 2009, was scheduled to speak at the *Fourth International Conference on Medicinal Chemistry & Computer Aided Drug Design*, in November, in Las Vegas. Coauthors included current students **Edith Csiki-Fejer** MS 2014, **M. José Scuderi** MS 2015, **Silke Evdokimov** MS 2015, graduates **Kevin J. Koeller** PhD 1994, **Faten Tamimi** MSBB 2015, **Elena Vasilieva** PhD 2014 and Professors Dupureur and Bashkin. Jim moderated the *Hellen and Will Carpenter Series on Contemporary Issues in Modern Society* on infectious diseases and their impact on American society, in November. Among the speakers was **Steve Kolodziej**, BS 1987, PhD 1992, who is Associate Fellow and Group Leader at Pfizer in St. Louis.

Eike B. Bauer was proud to tell us about the activities of his research students. **Matthew Queenen** BS 2013 and Matthew Stark were the only UMSL graduate students who presented posters at the 2015 ACS Midwest Regional Meeting in St. Joseph, MO. A SEED (Summer Experiences for the Economically Disadvantaged) student, Michael Gorges and Misael Barcenas a STARS (Students and Teachers as Research Scholars) student were high school students who did summer research in his lab in 2015. Misael performed research in the SEED program last year, and as a consequence of his performance, he received a STARS stipend this year. **Christopher Herrschbach** MS 2015 who was in the Bauer research group received the Outstanding Masters Degree Student Award in May 2015. Eike's group presented posters at the Missouri Organic Chemistry Day on April 11, 2015, and at the Graduate Student Research Fair at UMSL on April 20, 2015. An undergraduate researcher in 2014-15 **Jordan Rabus** BS 2015 received a College of Arts and Sciences Undergraduate Research Award in March 2015. and is now the PhD program.

Alicia M. Beatty tells us that her graduate students are progressing in research. Matt Fischer is finishing up work on H-Bonded frameworks, similar to Metal Organic Frameworks but better. **Stephanie Cernicek** BS 2012 is learning how to be a crystallographer and is working on metal halide assemblies in the solid state. Carl Oberle is working on magnetic clusters, - synthesizing new manganese oxide clusters using bulking carboxylic acids. A new undergraduate research project is producing



Jim Bashkin



Alexei Demchenko receiving the 2014 ACS St. Louis Award from Section Chair Jim O'Brien



Jim Chickos

lots of crystals, which is always exciting. If anyone needs an excellent analytical chemist, **Matt Fischer** will graduate this May with a Ph.D. and he's your guy.

Benjamin J. Bythell's research group focusses on fundamental gas-phase structure and fragmentation chemistry and its application to practical problem-solving. He and his students (3 graduate, 1 undergraduate) attended and presented their initial work at the 2015 American Society of Mass Spectrometry Conference in St. Louis in June. Dr. Bythell gave an invited talk at the Current Trends in Mass Spectrometry Conference in New Orleans in July. The group has published three independent papers this year. Dr. Bythell has taught Instrumental Analysis again, and written and taught a graduate level Biological Mass Spectrometry special topics class in the spring. Much of the remainder of Dr. Bythell's time has been occupied with applying for external funding. The group welcomed STARS student and four undergraduates over the summer. Additionally, **Ashley Wagoner** won the undergraduate poster competition at the UMSL Graduate Research Fair.

James S. Chickos begins his 47th as a member of the faculty next year and his research program is still going strong. He and his students generated 5 publications in 2015. He serves as Chair of the Senate Library Committee for 2015-16. For some of his leisure he is an avid cyclist and enjoys recounting the trips he has taken across the state and further afield.

Valerian T. D'Souza was preparing for a presentation in a St. Louis regional conference, the *14th Annual Focus on Teaching and Technology*, when we communicated in mid-November. That is the area where expends most of his time and energy in the department these days. He also serves on the Senate IT Committee.

Alexei Demchenko, now Curators' Professor of Chemistry and Biochemistry, continues his research program in the area of synthetic carbohydrate chemistry. During 2014-2015, his research group, Glycoworld, published 20 articles bringing the total number of publications to 140. His article with **Swati Nigudkar** Ph.D. 2014 was recently ranked in the top 25 downloaded articles from *Chemical Science*, a prestigious journal published by the Royal Society of Chemistry in the second quarter of 2015. In 2015 the Glycoworld members presented 26 posters at conferences, and delivered 14 invited talks and universities and symposia including lecture tours in India and Thailand. He continues to serve as an Associate Editor of the *Journal of Carbohydrate Chemistry*, a Member-at-Large of the Executive Committee of the

Division of Carbohydrate Chemistry of the ACS and on a number of Editorial Advisory Boards. He served as the Chair of 2015 Gordon Research Conference on Carbohydrates., as a co-organizer of 2015 Pacificchem and as a member of the Scientific Committee for the 28th International Carbohydrate Symposium (ICS2016). Recently, Professor Demchenko was elected to serve as a member of the US Advisory Committee for the International Carbohydrate Organization. Currently, his research group consists of a post-doctoral fellow **Prithika Yasomanee** PhD 2014 and seven doctoral graduate students including **Michael Mannino** BS 2014, a Master's student, two visiting students from Russia, one visiting student from Thailand, and eight undergraduates.

Cynthia Dupureur tells us that the baby boom among Dupureur group alumni continued into 2015: **Elena Vasilieva** PhD 2014 and her husband **Paul Gontarz** PhD 2015 have a new daughter, as does former undergraduate researcher **Mary Keithly** BS 2010 and her husband. Elena is now at Pantheon in St. Louis and Mary expects to complete her PhD at Vanderbilt in 2016. **Hyung Park** BS 2015 is now in our PhD program. In March Dr. Dupureur spoke at the ACS Meeting in Denver in a symposium honoring her postdoctoral advisor Jacqueline Barton, the 2015 recipient of the *Priestley Medal* and 2004 Murray Lecturer. Dr. Dupureur will relinquish her role as Director for the Biochemistry/Biotechnology Program to become Interim Department Chair.

George. W. Gokel's lab recently passed two important milestones. The 100th undergraduate student signed up to do a research project, bringing the total of undergraduate, graduate, postdoctoral associates, and faculty fellows to almost 200. Publication, (the list includes more than 450) has slowed recently as they file patent applications to cover their discovery that certain amphiphiles enhance antibacterial activity against various microbes. During this period, Dr. Gokel has written three invited book chapters: one has appeared, coauthored by graduate student Joe Meisel, in *Synthetic Receptors for Biomolecules*, published by the Royal Society of Chemistry and two others, one coauthored by **Saeedeh Negin** PhD 2013, are in press. The discovery of enhanced antibiotic activity made several years ago, has now been augmented by the finding that bacterial resistance can be reversed in certain microbes. Specifically a strain of *E. coli* that is tetracycline resistant has been studied. The resistant *E. coli* is 30-fold more susceptible to tetracycline in the presence of certain synthetic amphiphiles than in their absence. Some of this work was funded by a *Fast-Track Grant* awarded by the UM system. Other funding is supporting efforts to discover better transfection methodologies



George Gokel

and to better understand certain aspects of supramolecular hydrogenation. Graduate student Joe Meisel presented a poster at the International supramolecular conference in Strasbourg France. Dr. Gokel has recently lectured on his work in Japan, China, Australia, and Germany and also recently testified as an expert witness at a trial held before the International Trade Commission in Washington. Dr. Gokel has been recruited by Elsevier Publishing Company to co-edit, with Jerry Atwood of UM-Columbia and Len Barbour of the University of Stellenbosch in South Africa, to produce a second edition of the 10 volume *Encyclopedia of Supramolecular Chemistry*. This will be a massive effort and several of Dr. Gokel's students will be participating as co-authors on individual articles. Dr. Gokel is also Director of the Center for Nanoscience (CNS) and his colleagues in the Center are gearing up for their December meeting of the St. Louis Institute of Nanoscience and Nanomedicine. This meeting highlights science in the area and promotes the translation of scientific results into economic development for the region, and this year former Governor and Senator Kit Bond is the keynote lecture. Several distinguished individuals will be speaking about new science and about various resources available in the community. The Special Agent in Charge at the St. Louis FBI will speak about cyber security for universities, individuals, and for small businesses. The SLINN group is also spearheading an effort to sign instrumental reciprocity agreements across the city so that faculty at different institutions can use needed instruments available at other sites. Dr. Gokel and the CNS are also cooperating with an initiative at Washington University to develop a drug discovery apparatus within the St. Louis community. The effort is being funded by the Washington University Medical School where Dr. Gokel has an adjunct appointment. Washington University Vice-Provost Michael Kinch, who has extensive experience in drug development, is spearheading the operation and Dr. Gokel is one of his advisors. Despite all of these activities Dr. Gokel is still hoping to reach his 500th publication before he retires.

Bruce Hamper Bruce Hamper has been using a combination of online lectures and assignments and live classroom sessions to develop hybrid chemistry courses for non-majors. He has initiated the use of state-of-the art ion chromatography for analysis of water samples for the Environmental Chemistry course and for the recent 'Beer Brewing' class. A recent class field trip allowed students to see nearly equivalent ion chromatography equipment in use at *AB-Inbev* for analysis of the brewing hot liquor water. He and the students are developing a nationwide comparison of water profile and the impact on craft brewing. Bruce received a grant from Boeing

Corporation to develop equipment for continuous flow reactions. In collaboration with J-KEM (St. Louis), he built a prototype instrument for monitoring and control of continuous flow reactions. He is also working with senior undergraduate Alex Lyss, who received an UMSL Undergraduate Research Award for development of NMR and HPLC methods for direct analysis of enantiomeric phosphonates. His contributions recently appeared in a full paper coauthored by the Spilling and Hamper groups in the journal *Synthesis*, "A Practical and Scalable Synthesis of (S)- and (R)-1-(Dimethoxyphosphoryl)allyl Methyl Carbonates". Over the summer, Bruce mentored high school student Liam Harrison in the STARS program. Liam wrote an excellent summary of the research for the STARS program and received the LMI Aerospace Award for Excellence in Research. Bruce continues to pursue projects outside of the lab; particularly those that can involve his grandson Liam and granddaughter Maisy. He recently completed a wooden pedal car based on a 1950's era MG sports car. On completion, he realized that the pedal car is heavier than his grandson and it will be some time before Liam can pedal it uphill.

Wesley R. Harris has been serving as Interim Dean of the Graduate School for Fall 2015 following the retirement of Graduate Dean Judith Walker de Felix in August. In January 2016 he will return to the position of Associate Dean of the Grad School. During this fall he has been hosting a visiting student from Thailand, Nootcharin Wasukan. In Thailand she works with his former student *Sujittra Srisung* PhD 2007. He is looking forward to a Christmas trip to San Diego to see his son and his family, including 1-year-old grandson, Ryan.

Stephen Holmes was promotion to Full Professor in September and continues to serve as Director of Graduate Studies for the department. He gave or is planning to give research talks at Southeast Missouri State University (April 2015), UMKC (Oct. 2015), Pacificchem (Dec. 2015), University of Guelph (March 2016) and Brock University (March 2016). He and his students published three articles during the past year and he served as Guest Co-Editor of a special issue on magnetic, optical, and electronic materials in the *Journal of Materials Chemistry*. He was able to secure additional funding from the Missouri Research Board as his current NSF funding runs out soon. He currently has three graduate students in his research group. He asked me to include the following:

Instrumentation Needs in the department: UMSL Chemistry serves a variety of institutions though providing user and service facilities (e.g. NMR, X-ray, STM/TEM, HPLC, etc.). Steve is seeking donations to establish a low-cost regional user and service magnetic



Wes Harris and Chris Spilling with Graduate Dean Judith Walker de Felix at her retirement party



Students brewing beer in Bruce Hamper's Beer Brewing class.



Liz Hansen MS 2000, PhD 2003 at the reception honoring her advisor Hal Harris

establish a low-cost regional user and service magnetic materials characterization facility at UMSL to address regional needs in the greater St. Louis region. Currently no such facility exists in the entire state of Missouri with the closest ones located at UIUC and Argonne National Lab. Like many investigators who seek magnetic measurements we must often rely on external (pro bono) collaborations to get the critical data for student progress, publication, and future funding. He currently sends samples to France (since 2005) and many regional PIs (SIUE, WUSTL, UM, MS&T, UIC, ISU, MSU, SEMO; Yale) are also forced to send samples abroad, often waiting 6-12 months for critical data. The cyber-enabled magnetometer will see extensive use in regional teaching, outreach, and research activities. We are seeking an additional \$150,000 to supplement funds already obtained (\$73,000) from UMSL ORA, the UM System, UMSL A&S Dean, and the UMSL Department of Chemistry and Biochemistry. If you would like to contribute towards this effort or if your organization can do so please contact him via Email (holmesst@umsl.edu) and phone (314-516-4382) or the department chair.

Rensheng Luo tells me he co-authored at least 8 research papers during 2015. The Bruker ARX-500 NMR spectrometer is going to be shut down but the Agilent DD@ 600 MHz spectrometer can carry the additional load. Due to frequent power outages, the department has purchased a new UPS power backup system to protect the system and data.

Michael R. Nichols continues to conduct Alzheimer's Disease (AD)-related research with particular attention to the amyloid-beta protein and inflammation. The lab saw the recent graduation of **Sanjib Karki** who earned his PhD in August. Current doctoral students are Ben Colvin (5th year) and Lisa Gouwens (4th year). Six undergraduate researchers worked in his lab this past year including **Dorcas Kamau** BSBB 2015. Sanjib and Dr. Nichols both attended the American Society for Neurochemistry meeting in Atlanta. Ben, Lisa, and Dr. Nichols recently presented research findings at the Southeast Regional Meeting of the American Chemical Society in Memphis. Findings from the group were published in *Biochemistry* this year.

James J. O'Brien is now serving as Past-Chair of the St. Louis Section of the American Chemical Society. His term was very successful and the Section was nominated for a record for the Section 5 Awards at the ACS meeting in Boston, and although the Section did not win the big award, it won two of the five. He has become quite active in campus affairs and served as Chair of the Research Policy Committee and as a member of the Assessment of Education Outcomes Committee.

Nigam P. Rath presented a poster "C-H activating carboxylation of terminal alkynes with CO₂ using Copper (I) complexes" at the annual meeting of the American Crystallographic Association in Philadelphia. He co-authored 25 publications in 2015 and the

total number of refereed journal publications now exceeds 450. He and colleagues are in the process of submitting a proposal to NSF for purchase of a new diffractometer. Now advanced undergraduate laboratories classes in Organic, Inorganic and Physical Chemistry have introduced experiments in X-ray diffraction techniques. His family endowed the *Rath Family Scholarship* in 2015 (see elsewhere). He is pleased to tell me that his friend, former Bob Murray Post-Doc Shirish Rajadhyaksha, is back in St. Louis and working for Sigma. They were graduate students together in the 1980s at Oklahoma State University.

Christopher D. Spilling has been active running the department, in campus affairs and also in his research program. Chris serves as a member of the Faculty Senate and University Assembly and as Chair of the Campus Budget and Planning Committee for 2015-16. He was awarded the 2015 Chancellor's Award for Service. His research has gone well although his research group dropped in size last year. He was able to secure funding from the NSF in June for the project: "Synthesis of Phostones via Phosphono Substituted Metal Allyl Intermediates" and he published four papers and one patent during 2015. In November he presented the *Herbert and Nicole Wertheim Leadership in Healthcare and Medicine Lecture* at Florida International University where he was able to spend a short time with former colleague Douglas Wartzok who ran the Graduate School and the Research Office here for more than ten years from 1990.



Keith Stine in the lab with his STARS student and **Abeera Sharma**, PhD 2014

Keith J. Stine published several articles and completed a major project in 2015 in spite of serving as Senate Chair and dealing with serious family issues. In summer he completed editing a book entitled *Carbohydrate Nanotechnology* including his chapter on using porous materials in glycoscience. With graduate student Allan Alla, a review on monolithic column materials was published in *MDPI Chromatography*, and a paper on the use of nanoporous gold for separation of glycoproteins was accepted by *Journal of Chromatography A*. With **Jay Bhattarai**



Harold R. Messler BS 1970, **David Garin** and **Peggy Hermes** at the 2015 Murray Banquet

PhD 2015, he published a paper on gold nanostructures for localized surface plasmon resonance in *Carbohydrate Research* and with **Abeera Sharma** PhD 2014, a paper on the electrochemical processing of nanoporous gold appeared in *IOP Nanotechnology*. Allan and Jay recently prepared a large review chapter concerning methods for detecting glycoproteins for a book to be published by Nova Scientific Publishers. He had five undergraduates working in his lab this year including **Jared Cooper** BS 2015. Research on several aspects of nanoporous gold continues, including collaboration with Professor Demchenko's lab on using the material as a support for carbohydrate synthesis. He also hosted a STARS student in his lab over the summer and coordinated ACS Project SEED at UMSL which partially supported a student working with Dr. Bauer.

Janet Braddock-Wilking's PhD student, **Doug Hammerstroem** defended his dissertation in September 2015 and expects to graduate in December 2015 and take a position at Chemir EAG in St. Louis. Janet gave an oral presentation on some of his research at the 46th Silicon Symposium in June 2015 held at UC-Davis. Two current PhD students, Michael Bengston and Stephan Germann are working with her on the NSF-funded project on the synthesis and characterization of luminescent sila- and germafluorenes. They are also working on the preparation of the luminescent germanium compounds on a project funded by a UM system Fast Track grant to have some of these compounds tested for components in OLED devices. Two undergraduate students have also been working on the luminescent Group 14 molecules. Janet, her husband Bruce and two sons, Alex and Kevin traveled to Nova Scotia and to Boston in August. Kevin started his 2nd year as an engineering student at Missouri S & T. Alex graduated from Webster University in May 2015 with a BA in Journalism and began studies in September in the MS program in Journalism at Boston University.

Chung Wong's student **Paul Gontarz** PhD 2015, successfully defended his Ph.D. thesis in summer. He is currently looking for a position while taking care of the new baby daughter Anya, with which he and his wife **Elena Vasilieva**, PhD. 2014 were recently blessed. Other students participating in research in Chung's lab include **Pragya Manandhar** MS 2015, Shireen Yalda, Arundhati Dutta, and Qinwei Zhuang. Pragya is now the Ph.D. program in Biology and Biochemistry at the University of Houston and former lab member **Aaron Wilkerson** BSBB 2012 is in the Pharmacy School at the University of Arizona.

Zhi Xu is teaching physical chemistry and conduct-

ing research to develop ultra-sensitive optical spectroscopic instrumentation.

Emeritus, Retired, and Former Faculty

Charlie Armbruster tells us that he is doing fine with no after-effects following surgery last January for a small tumor on his tongue. He was grieving the loss of his brother-in-law Rod, husband of his sister Mary in the fall. The editor and **Don Kaesser** BS 1967 visited Charlie in January 2015 and hope to repeat that visit in 2016.

Lawrence Barton continues to advise undergraduate students, help maintain the department website and the Graduate Brochure as well as arrange the Robert W. Murray and the Distinguished Alumni Lectures. However his main activity still consists of writing the UMSL CHEMIST and maintaining contact with alumni. He continues as an Ex Officio member of the UMSL Alumni Association Board and was strong-armed into accepting the position of President-Elect of the UMSL Retirees Association for 2015. He had substantial involvement in the two activities of the Chemistry Alumni Council in 2015 and hopes to continue that involvement albeit in less of a leadership role, in the future. He and his wife **Patricia J. Barton** BA 1978 continue to spend several months per year in Florida and in 2014 the whole immediate family spent Xmas there.

Eric Block has had a bittersweet year. His wife for almost 49 years Judy passed away in August after a heroic five-year long battle with cancer. Eric, who is **Carla Rizzo Delray Distinguished Professor of Chemistry** at the University of Albany, NY, will be presented with the 2016 Ernest Guenther Award of the ACS for contributions to the field of the chemistry of natural products at the San Diego ACS meeting. He and the editor hope to meet in Florida during the Christmas holidays.

Joyce Y. Corey continues to work in her office every day, writing, reviewing articles, reading the literature. She also travelled during the year, spending time in January with former student **Roberta L. Farrell** BS 1975 in New Zealand, at the ACS meeting in Denver in March and in Maine during the month of June.

David L. Garin will be presenting a paper at the Western Regional ACS meeting in California in November. The work concerns an interdisciplinary model and collaborative study in chemical education. He has also been involved in demonstrations and workshops with schoolchildren and the general public in New York City. Collaborators included an artist, choreographers, an architect and a composer.

Harold H. Harris enjoyed the reception in May when he and Mary and many of their friends were



Chris Spilling accepting a certificate of appreciation for presenting an endowed lecture at Florida International University School of Medicine



Joyce Corey with Bill McCarthy, BS 1975, PhD 1984, her former graduate student, at the reception in May.



Rick Hoyt BS 1975, adjunct faculty colleague **Tony Mannino** and **Alexei Demchenko** at the 2015 **Robert W. Murray Banquet**

present as he, Jane Miller and the students they mentored were honored. He was particularly pleased to announce the establishment of the *Hal and Mary Harris Endowed Scholarship in Chemistry*. The Harris' have traveled much this past year including to Florida, Ireland, Washington DC, North Carolina and on their annual trek to the Western and Southern Open Tennis Tournament in Cincinnati in August. Hal and his wife Mary are very active tennis players and he also keeps his hand in chemistry co-authoring an article with Jim Chickos this past year.

Jane A. Miller will be presented with an *Outstanding Alumnae Award* from her alma mater Agnes Scott College, in spring 2016. We had a nice conversation last November and were sad to hear that her brother had recently died and that she was driving down to New Orleans with her son Bill in association with that. She is still very active in the *Wednesday Club* of St. Louis. The latter was founded in 1890 by women who wished to continue their intellectual growth, stay abreast of the times, and contribute to the community. However, after 20 years, she is no longer active in the *Lifelong Learning Institute* at Washington University where she taught classes and ran programs on a range of subjects. She does keep in touch with many of the former students she mentored as they took their teacher education at UMSL and had just enjoyed a birthday dinner for **Sandy Mueller** BA 1976 with **Jeanette Hencken** BA 1985, **Joan Twillman** BA 1980 and **Liz Petersen** BA Biology 1980.

Rudolph E. K. Winter continues to help Joe Kramer in the Mass Spectrometry Laboratory but is frustrated as the instrumentation becomes almost outdated. He and Margaret also spend time in Florida with his daughter and family occasionally during the year.

SCHOLARSHIPS AND FELLOWSHIPS

The Rath Family Scholarship was funded by Professor Nigam Rath and his family in June. The scholarship is for full-time undergraduate students studying STEM at UMSL and preference may be given to Chemistry/Biochemistry students. They must have a GPA of 3.0 or better and a minimum ACT score of 24. Preference will be given to a student who demonstrates financial need and may be given to students who are the first generation in their families to attend college. Award recipients will be encouraged to participate in peer-mentoring, tutoring, or similar programs in the STEM disciplines.

The Hal and Mary Harris Scholarship is the most recent one established. Recipients must be juniors seeking a degree in chemistry with a minimum GPA

of 3.0 and enrolled in a minimum of 12 credit hours.

The Eugene and Joyce Corey Scholarship Fund was also established recently and the target required for full endowment was achieved this last October. It will go to an outstanding chemistry undergraduate who has excelled in service to the department. Such service can include one or more of the areas: research, undergraduate teaching, student organization leadership and other contributions as deemed appropriate by a faculty committee. Merit will be a principal feature among the selection criteria and need will be a secondary criterion. Awards will be made for a full academic year and candidates may not receive more than one Eugene and Joyce Corey Scholarship.

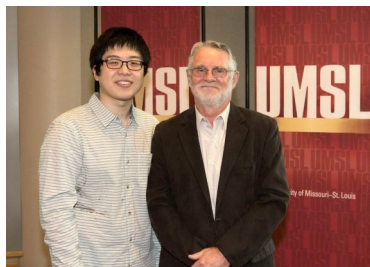
The Stephen S. Lawrence Scholarship was established at the end of 2014 by **Steve Lawrence** BA 1982, PhD 1989. We expect to make the first award in 2016. The Scholarship recipients will be junior or senior chemistry majors in good standing with a cumulative GPA of at least 2.8, who are enrolled in a minimum of 9 hours and for whom the funds will allow timely completion of the degree requirements. Recipients will have a demonstrated record of good departmental citizenship, which may include tutoring, teaching, activity in the chemistry club, or other departmental volunteer activities.

Ongoing Scholarships

The Charles W. Armbruster Undergraduate Chemistry Scholarship honors Dr. Charles W. Armbruster, the "founder" of the Department. He served as Chair of the Division of Science and as the first department chair. He retired and left the University in 1998, after 36 years on campus. The Scholarship is given to incoming Missouri resident undergraduate students, transferring into the department from other universities and community colleges. The award for 2015-16 went to two students: **Joseph Frye** and **Austin Lee Stelling**.

The Lawrence Barton Scholarship is designed primarily for junior chemistry majors who are first generation college students and who have some financial need and honors Dr. Barton who served as department chair for 18 years and continues an association with the department which has lasted more than 49 years. For 2015-16 scholarships were awarded to **William Stewart** and **Anosha Basir**.

The M. Thomas Jones Memorial Fund was the first endowment that recognizes performance by graduate students. It honors Dr. Jones who served on the faculty for 19 years and in senior administrative positions. It is funded by his widow Patricia Jones and family and was established initially by



Hyung Park BS 2015, recipient of one of the **Lawrence Barton Scholarships** for 2015 with **Dr. Barton** at the **Scholarship Reception**

contributions from colleagues and students. 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 2015-2016 awards were made to *Salvatore Pistorio* and *Philip Ferko*.

The Barbara W. Brown Fellowship for Women in Chemistry is designated for students who are women over the age of 24. It was established by *Dr. Barbara (Willis) Brown* (BA 1984) in 2000. Barb has worked on behalf of and supported the department for many years. The 2015-2016 fellowship went to *Ana Patino Perez*.

The Eric G. Brunngraber Undergraduate Research Fellowship honors the late Dr. Eric G. Brunngraber. He was the first regular biochemistry faculty member (1987) but passed away shortly thereafter. He had been associated with the department for many years and directed the research of undergraduate and graduate students. For 2015-16 the fellowship went to *Magnus Creed*.

The William and Erma Cooke Memorial Scholarship has been one of the major endowed awards in the Department since 1990, and was one of the first such endowments at UMSL. It is designed primarily for sophomores. It was endowed by *Dr. Dorothy C. Cooke* BS 1971, in honor of her parents William and Erma Cooke, in 1989. *Lahoma Kanaday* and *Steven Skaggs* received the scholarship for 2015-16.

Friends and Alumni Scholarships were established after an appeal made to alumni and friends and matched by the University in 2005. These awards are need-based and we award two per year.

The John J. Taylor Scholarship was established by his family, Allison, his widow and Rolf Mueller her husband. *John J. Taylor* BA 1979 had directed funds from his estate to a chemistry scholarship. He was a long-time Mallinckrodt employee and did all of his degree work, part-time at night. He was very supportive of the department and passed away in 2004. Again we make two awards annually.

The Monsanto Biochemistry and Biotechnology Scholarship was established in 2005 with the help of *Michael Finkes*, BS 1973, MS 1978 who encouraged his employers to provide funds which would be matched by the University. It is made available to non-freshmen in the BS program in Biochemistry and Biotechnology. The 2015 awardee was *Gabrielle Rupp*.

The Ceil Degutis Award for Research Excellence in the Center for Nanoscience was endowed by

George and Kathryn Gokel in memory of her grandmother. The award is given to a deserving graduate student (or recently completed graduate student) "who has made a significant contribution to the field of nanoscience, broadly defined." The awardee receives a cash award of \$500 and has his or her name inscribed on the plaque in the Center for Nanoscience lobby. The award is presented at the end of year award ceremony of the appropriate department.

STUDENT AWARDS FOR PERFORMANCE Undergraduate

The award for the *Outstanding Student in Introductory Chemistry* went to *Victoria Rogers* 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 *Alexander Lyss*; the *American Chemical Society Award for Organic Chemistry* went to *Jessica Spencer*; and the *ACS Award for Analytical Chemistry* went to *Hyung Park*. The *ACS Awards in Inorganic and Physical Chemistry* went to *Magnus Creed* and *Ashley Wagoner*, respectively. The *American Chemical Society-St. Louis Section's Outstanding Junior Award* went to *Magnus Creed*. The award was presented at the Annual ACS High School and College Awards Night in April. *Hyung Park* received the *Alan F. Berndt Outstanding Senior Award*. The 2015-16 Undergraduate *Chemistry Aid to Education Awards* were given to *Tiffany Aljets*, *Magnus Creed*, *Lahoma Kanaday*, *Elizabeth Ridgway*, *Steven Skaggs*, *Benjamin Standley*, *William Stewart* and *Ashley Wagoner*.

Graduate

The 2014-15 *Ceil DeGutis Award for Research Excellence in Nanoscience* went to *Joseph Meisel* and the 2014-15 *Graduate Teaching Assistant Award in Memory of Jack Coombs* was awarded to *Jacquelyn Neidererschulte*. *Christopher Herschbach* was honored with the *Outstanding MS Student Award*. The *Graduate Student Research Accomplishment Award* went to *Philip Ferko*. Recognition was accorded to 2014-2015 *Graduate School Fair Research Poster winners Stephanie Cernicek, Sanjib Karki, Matthew Queensen and Maria Jose Scuderi* and to 2015-2016 *Graduate School Dissertation Fellowship Recipient Benjamin Colvin*.

THE ROBERT W. MURRAY LECTURE

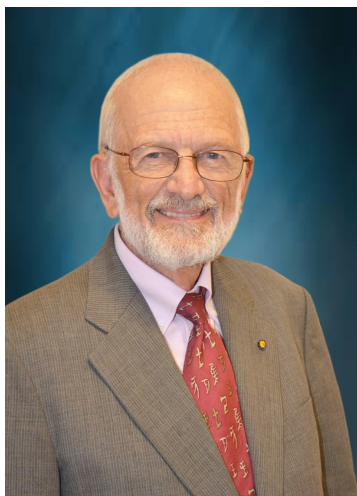
On April 6 2015 **Professor R. Graham Cooks**, *Henry Bohn Hass Distinguished Professor of Chemistry* at Purdue University presented the Eighteenth Annual Robert W. Murray Lecture. We were delight-



Chancellor George signs the paperwork for the Rath Family Scholarship with Nigam and Suchitra as Chris Spilling and Dean Ron Yasbin look on.



Graduate School Fair Research Chemistry Poster winners *Stephanie Cernicek* BS 2012; *Sanjib Karki*; *Matthew Queensen* BS 2013 and *Maria Jose Scuderi*, and Dean Walker de-Felix



R. Graham Cooks, Purdue University the 2015 Robert W. Murray Lecturer

ed to learn that he had been selected as a 2015 *Fellow of the National Academy of Sciences*, shortly after the lecture. The 2016 lecture will be given by Professor **Michael J. Krische**, of the Department of Chemistry at the University of Texas-Austin, Director, Center for Green Chemistry and Catalysis, *Robert A. Welch Chair in Science* and a faculty member in the Environmental Science Institute.

DISTINGUISHED ALUMNI LECTURE

The 28th Annual Distinguished Alumni Lecture for 2015 was **Dr. Michael Groaning**, BA 1995, MS 1997, Associate Director CMC, and Alliance Manager at *Endocyte*, Inc., in Lafayette, IN. He spoke on "An Unexpected Journey: From Benton Hall to Basel and Everywhere Else in Between". On May 2, 2016 **Michael J. Finkes** BS 1973, MS 1978, will present the 29th Lecture. Mike is retired from Monsanto where he served as a Quality Insurance Specialist. He is *Immediate Past President* of the UMSL Alumni Association, a former member of the Chancellor's Council and has been a resource to the department for many decades. Along with **Barbara W. Brown** BA 1984, he and the editor established the Chemistry Alumni Council in 2006.

EDITOR'S COLUMN (LAWRENCE BARTON)

As I was writing this in late November Chris Spilling informed me that he was resigning to become Interim Vice-Provost of Research and Graduate Dean. I will be continuing my role in the department under the Interim Chair Cindy Dupureur and I look forward to meeting many of you again soon.

Department History 2005–2010

The academic years from Fall 2005 through Spring 2010 represented the establishment of the Chris Spilling era in the department. Chris had replaced Gordon Anderson in the Fall of 2004. That period also represent the Tom George era when he really began to put his personal stamp on the University. One of the first brick and mortar features of this era was the construction of the Express Scripts Headquarters on the campus which was completed in 2007. During that period Chancellor George assigned new state funding for faculty positions that would affect the department in a positive way.

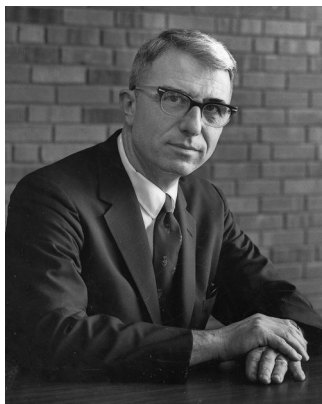
This period also saw big changes in the Central Administration of the University. Dr. Elson Floyd resigned to become president of Washington State University. This was bad for the campus because, perhaps due to his friendship with Chancellor George, he had been very supportive of the campus and had worked to see appropriation of "equity funding" to UMSL. He was also very accessible and had

held a series of meetings at UMSL with campus leaders including the editor. He was replaced in 2008 by Gary Forsee, who came from the corporate world and would leave after only three years to care for his wife who had been diagnosed with cancer.

Dr. Mark Burkholder served as Dean of the College of Arts and Sciences from 01–08 and he was also very supportive of the department. There were many changes in the latter. When **Janet Wilking** BA 1985 was appointed to a regular faculty position in 2004, we began to recruit for her replacement and, in the Fall of 2005, Dr. Rensheng Luo joined us as our NMR specialist. He would in 2009 spearhead the installation of our first 600 MHz NMR spectrometer, obtained through a grant written by Drs. Spilling and Dupureur. Eike Bauer replaced Chris Pigge in 2006 and in 2007 the editor negotiated a staged retirement beginning in 2007. That "staged retirement" continues today. Joyce Corey followed by retiring at the end of 2007. This led to faculty searches resulting in the addition of Professors **Alicia Beatty** BS 1989 from Mississippi State University and Stephen Holmes from the University of Kentucky, as replacements for Drs Corey and Barton in 2008.

I had served as Interim Director of the Center for Molecular Electronics and in 2003 we underwent our 5-year review. I chaired the effort and our strongest recommendation was that a permanent, appropriately qualified Director be appointed and budgets and infrastructure be provided to support the Center. The administration acceded to our requests and a search for a Director was conducted during the years 2004/5 and 2005/6. I chaired the search committee and it took two years to identify suitable candidates—because the University insisted we use a search firm which attracted excellent candidates but most of whom were looking for a much larger operation, budget, etc. The outcome was that Dr. Jingyue (Jimmy) Liu, an electron microscopist from Monsanto, was hired. However we were fortunate that the administration recognized that the most qualified candidate was Dr. George Gokel, a bio-organic chemist from Washington University Medical School with an outstanding academic record. Subsequently, the Chancellor released funds to allow us to hire George as Distinguished Professor of Science, Associate Director of the Center and of course Professor of Chemistry and Biochemistry. The Center was renamed the Center for Nanoscience in 2008.

George Gokel was one of a number of faculty colleagues and alumni to garner prestigious awards during this lustrum when he won the *ACS Midwest Award* in 2007. Wes Harris won the *ACS St. Louis Section Award* in 2005, followed by Jim Chickos in



James L. Bugg, UMSL's first Chancellor died in 2015

2006 and Chris Spilling in 2009. Significantly the first department alum to win that award was **Bill Neumann** PhD 1987, in 2007. At the time he was with Mallinckrodt in St. Louis. Also in 2007 Alexei Demchenko was named the ACS, Division of Carbohydrate Chemistry, *New Investigator Awardee*. In 2008 **Harold Messler** BS 1970 won the *Science Educator Award* from the St. Louis Academy of Science, an award also won by Hal Harris in 2010. In 2009 Keith Stine won the *Chancellor's Award for Outstanding Service* and later that year Wes Harris and Chris Spilling would be named *Entrepreneurs of the Year* by the University of Missouri.

We saw many changes in the departmental staff during this period, most notably the death of our beloved Ted Windsor on January 14 2008. He had been diagnosed with lung cancer in 2007. His colleagues turned out in large numbers to the wake and the funeral service He was such a valuable colleague and friend and is sorely missed. Ted was replaced by Bruce Burkeen later on in 2008. During this period the University was operating on a flat budget and a shift in policy by the administration required 50% of technical staff salaries to be covered by user fees. This was a serious problem for the department and initiated erosion of the support structure we had developed for our teaching and research activities in the 1980s when we were named a Center of Eminence on campus. This placed very serious and unfair pressure on Bruce and on John Tubbesing who had joined the staff as Senior Electronics Technician, as a replacement for Mark Regina in early 2008. This policy led to, as Department Chair Spilling noted, "not my proudest moment as Chair" when John was let go in 2010—the first ever such occurrence in the history of the department. That left us with Bruce, Joe Flunker, the part-time glassblower and Joe Kramer whose position was protected due to his professional title as Spectroscopist.

We were also sad to see **Donna Kramer** BA 1999, *Coordinator of Laboratory Operations*, take a disability retirement in 2009. She had bravely dealt with MS for several years. Donna had joined the staff as Store-room Manager in 1990. She was replaced by Daniel L. Cranford who held a MS degree in chemistry from SIU-Edwardsville. In 2010 the office staff consisted of Angela Thomas, Donna Lemp and Michelle Haley. However, Angela was able to obtain a promotion by accepting a position in the School of Nursing and in turn Lindsay Zoellner, who at the time was with the School of Nursing, was also able to obtain a promotion and came over here. At the time it worked out very well for all concerned.

In 1998 after many legal battles the states settled with the Tobacco Companies but it would be several years before any of the funding received by the states became available. Buoyed by the prospect of receiving some of the settlement funds, the University re-established Benton-Stadler Halls renovation committees. The editor served on the committee along with others from the science departments and the administration but, after much time and effort had been expended, it turned out—again—to be a red herring. This was the third time architects had been hired to draw plans since the mid-1990s, but this time the plans had been stored and used later and the current 2015-16 construction is now underway using those same plans.

Involvement of our alumni with the department continued to be very strong—not the least of which were the generous financial contributions from you all to our scholarship and other programs in the department. In 2005 I was able to persuade **Michael Finkes** BS 1973, MS 1978, to run for the Governing Board of the UMSL Alumni Association. I was and continue to be an ex-Officio member of the board. It was a tough sell because Mike only takes on assignments that he thinks are worthwhile and worthy of his time and effort and once in he puts much energy into the project. It is fitting that ten years later he would be Past-President of the Association and a member of the Chancellor's Council. In 2006 we held one of our most successful alumni reunions to date in the old Alumni Center on Natural Bridge Road. We had written a number of individual personal letters to alums and they came! Unfortunately the one that followed in 2007 was not at all successful and that led to the formation of a new structure for our alumni interactions which is described later

The Distinguished Alumni Lecture continued to be a good point of contact with all of you and we had some excellent presentations during the period. In 2006 **Dr. Alicia M. Beatty**, BS 1989 and at the time on the faculty at Mississippi State University, and who would later join our faculty spoke. Then in 2007 **Joseph P. Bono**, BS 1969 who was Director of the US Secret Service Laboratory in DC was our speaker. This was followed by a purely research presentation by **Dr. Timothy T. Wenzel**, BS, 1978 a Senior Scientist with Dow in Midland, MI. Then we had a presentation by an alum in a non-traditional career when **Donald G. Hesse** BS 1984; PhD 1991, who actually owned a small analytical chemistry company but whose day job was Vice President for Information Technology for the St. Louis Post-Dispatch. This was followed in 2010 by **Dr. Barbara W. Brown** BA 1984 who was Manager, Student



Dr. Michael Groaning, BA 1995, MS 1997, the 2015 Robert W. Murray Lecturer with his niece **Jessica Spencer**, BA 2105 after his lecture.



Michael Finkes BS 1973, MS 1978 with **Dr. David Armbruster** BS 1973 at the reception in May.



Dennis Parazak BS 1982, PhD 1996 and the editor got together last summer.

and Special Services, for the UMSL College of Optometry and is partner at Overland Optical Family Eyecare. In addition to giving interesting presentations including reminiscences of their time in the department, the speakers give career advice to our students and are able to point out that with a degree in chemistry from UMSL, they can follow many career paths which may not necessarily directly involve their specific chemistry training.

The other major lecture series, the *Robert W. Murray Lecture* continued its successful run. The lecturers were Fred Menger, *Charles Howard Candler Professor of Chemistry* at Emory University in 2006, Chad A. Mirkin, the *George B. Rathmann Professor of Chemistry* at Northwestern University in 2007, William R. Roush, *Professor of Chemistry, Executive Director of Medicinal Chemistry and Associate Dean, Kellogg School of Science and Technology*, The Scripps Research Institute, Scripps Florida in 2008, Philip P. Power, *Professor of Chemistry* at UC-Davis in 2009 and in 2010 Daniel G. Nocera *Henry Dreyfus Professor of Energy and Professor of Chemistry* at MIT, now at Harvard, was our lecturer. The lectures are always well attended by the technical community in St. Louis and our tradition has been to have a fine banquet on the preceding evening to which we invite some alumni and important area contacts and supporters.

There were very important developments in our interactions with our alumni in the period 2006-2008. I had been trying to generate support for a new type of organization which would be a combination of a Chapter of the Alumni Association and the old Industrial Advisory Council we had developed when I was chair. There had not been much support for this in Gordon Anderson's term as chair but Chris Spilling was very supportive of the idea. I enlisted the help of **Barbara Brown** BS 1984 and **Mike Finkes** BS 1973, MS 1978. We spent much time in 2006 planning this activity. Both Barb and Mike were very interested but were also very intent on establishing something that was sustainable and they took the initiative from me and ran with it. We recruited about 15 alums, essentially selected by me and thus rather heavy in folks who graduated before 1990. We named our group the Chemistry Alumni Council (CAC) and its work continues today.

The group met regularly and made great plans for operations. We selected three thrusts: events and alumni networking, financial support and technical support. As you will see we devoted almost all of our time to the first area and saw great success. For networking we set up the UMSL Chemistry Alumni Group on LinkedIn. For events, one of the ideas we had was to honor the founder of the department,

Charlie Armbruster. I was able to enlist the support of the administration, the Vice Chancellor for Advancement Tom Eschen, and Chancellor George. The plan was to award the *Chancellor's Medallion* to Charlie and to invite him to speak at the August 2008 Commencement where it would be presented. Our task was to plan the reception following the graduation ceremony. The event was very successful. About 135 alumni and friends were at the reception and alums came from all over the country and represented classes in all decades including the 1960s. As a consequence we established the *Charles W. Armbruster Scholarship* and you all were very generous in helping us raise the funds. By the time we held our event, Eschen had left to take a similar position at Maryville University and the first event attended by the new vice chancellor, Martin Leifeld, was our event.

During this period, one of our alums visited us from New Zealand. **Dr. Roberta L. Farrell**, BS 1975 who was a Professor at Waikiki University, presented a seminar in the fall 2008 on her research conducted at the South Pole. This was very well received and on learning that she may be back the following year, I nominated her for a *Distinguished Alumni Award*. This was successful, not surprisingly because in addition to a stellar record in academia and industry, she was honored by the Queen in the New Zealand honors list that year. Thus we had a celebration in fall 2009 at *Founders Dinner* where she was presented with the award. These are very competitive awards and not easy for chemists to win. However we saw much success during the period prior to that when **Dawn Shiang**, BA 1983, PhD 1987, **Douglas G. Nuelle**, BS 1969, **Kim Gorman** BA 1992, and **Sanford A. Asher**, BA 1971, won such awards in 2001, 2002, 2003, and 2004 respectively. In all we have had 10 alumni win such awards since they were established: a record of which we can all be proud.

I had retired in March 2007 and had two retirement parties, one with my family and one with the faculty at the house of Jim Chickos. However, the Chemistry Alumni Council decided to hold an alumni reception for me in Spring 2010 and it was again very successful. This time I was not involved in the planning but it went very well, again attracting about 135 alumni and friends.

As I complete this section, it is clear that our alumni and the department continue to do very well. There are changes ahead and you will have to wait until next year to see how these affected the department. In the meantime, please keep in touch and enjoy 2016, both professionally and personally.



Dr. Karl Seper BS 1982 and **Mike Hauser** BS 1981 got together this fall at SLCC-Meramec where Mike is Professor of Chemistry

Thanks to our Generous Contributors 2015

Below we list the individuals, chemistry alumni and friends who made contributions to the department including memorial and scholarship funds through December 16, 2015. We are most grateful for your support. If we missed out your name, we apologize and hope you understand that we are fallible. Recent gifts will appear next year.

AbbVie Foundation
 Nicholas A. Ahlemeyer
 Americans United for Separation
 Sanford A. Asher and Nancy L. Day
 Lawrence and Patricia J. Barton
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 Michael J. Walkonis
 Qingzheng Wang
 James C. and Mary K. Warmbrodt
 Michael S. Wear
 Gary R. Weese and Aixia Sun
 Shuguang Wu and Bo Liu
 Robert J. Zehr
 Hui Zhao
 Henghu Zhu



Fall colors on campus 2015

ACKNOWLEDGMENTS

I wish to thank Eike Bauer and August Jennewein, the University photographer, for some of the photographs and **Patricia Barton** BA 1978 for proofreading.



View of the Wellness Center

UMSL Chemistry Alumni Fund

Enclosed is my contribution of \$ _____ Yes I work for a matching gift corporation.
_____ I would like information about bequests to the University.

Designation for funds:

- Chemistry Department Endowment _____
- Robert W. Murray Lectureship _____
- Eugene and Joyce Corey Scholarship Fund _____
- E.G. Brunngraber Fellowship (undergraduate research) _____
- Charles W. Armbruster Scholarship _____
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- Contact me; I have ideas for a new scholarship/fellowship or other fund _____
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Lawrence Barton, Professor Emeritus
 Department of Chemistry and Biochemistry
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 St. Louis, MO 63121

INFORMATION UPDATE SPRING 2016

Please respond to this questionnaire. We have mentioned previously how important it is for us to keep track of what you are doing, both professionally and personally.

Name _____ UMSL Degree _____ Year _____

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Recent Activities and Other News:

News of other alumni:

UMSL CHEMIST

FALL 2015

**Please join the UMSL
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 Group on LinkedIn
 for announcements of
 alumni activities and
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Fall colors on campus 2015