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Department of Chemistry and Biochemistry

Chairman's Message - Cynthia M. Dupureur

I am writing to you from the newly renovated Benton Hall! In July we began the process of moving everyone from scattered temporary offices elsewhere in the Science Complex to the central tower of Benton. Now that the faculty are physically closer together, the casual conversations in the hall have resumed and the feeling is more relaxed and cohesive. The space is very airy, with lots of glass and light, which at the moment brings the sun and the fall leaves right into the building. We also have new classrooms and with new technology and a new colloquium room. The large mosaic of the structure of caffeine just outside the department office is a must see. You all have an open invitation. Around all of the

temporary arrangements we have had some highlights this year, the most impressive of which is the funding of five new research grants to faculty colleagues, one of which is for a new X-ray diffractometer to support our regional facility. Again we celebrated another Distinguished Alumni Award to one of graduates, this time to Michael Finkes. Dr. Barton expands on this general topic later. Our celebrations for the jubilee anniversaries of the 1960s graduating classes continue very successfully. We continue to see changes in personnel and especially regret the retirement of Wes Harris at the end of this year. Wes will have been here for 30 years, the past three as Associate Dean of the Graduate School.

Volume 36, 2018 Editor: Lawrence Barton

The situation in the department office has been fluid recently. A bittersweet development was that Lindsay Shy, our Office Manager who has served us very well for eight years, received a promotion and moved to the Office of Finance and Administration as a Manager. With us her responsibilities had expanded as she was serving both the Physics and Chemistry Departments, with only a half-time assistant. We once had three full timers! Her replacement only stayed for two months and that added to my own headaches. In spite of these problems, the future is great for the department and if you would like to visit, please let us know. Best wishes for success in your professional and personal lives.



After the May Commencement Professors Demchenko, Bauer and Dupureur pose for pictures with their PhD graduates (l-r) Satsawat Visansenkul, Matthew Stark, Jacqueline Neiderschulte (with child Cordelia), and Yong Sang.

GOLDEN REUNION CELEBRATION: THE CLASS OF 1968

This was the second in the series of four events celebrating the fiftieth anniversary of the graduations of students graduating in the period 1967-1970. Both have been very successful, based on the feedback the Alumni Association has received. As you know we have held our own chemistry celebration and the two have been similarly successful. At each of the two events, four chemistry alums from the particular year returned for the festivities and others had hoped to come but had family-related conflicts at the last minute. This next year will feature the class of 1969, the first of our larger classes. From my records there were 12 graduates in 1967, 17 in 1968 and 29 in 1969. The new (2019) graduates will also be invited. To the May event.

In May about 32 members of the class of 1968 attended the festivities and the group included chemistry graduates *Michael Hasser*, *Harland Kalman*, *Ray Novak* and *Wiley Moore*. We had also expected *Robert Nicolotti* BS 1968, to attend but a last minute family commitment precluded that. Also in attendance at our celebration *Donald Kaesser* BS 1967, who was unable to attend last year.

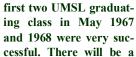
The Alumni Association event began with a "Check-in and Mingle" reception at 2:00 pm on

Friday May 11. That was followed by a 90 minute campus heritage tour narrated by my colleague Dave Ganz, Professor Emeritus from the College of Business, in one bus and yours truly in the other bus. There were neighbors of mine from the early 1970s among the group of alumni. Chancellor Emerita Blanche M. Touhill then gave her UMSL: lecture, THEEARLY YEARS and the evening ended with the GOLDEN ALUMNI RE-CEPTION in the Student Millennium Center. was a most enjoyable event and alumni, faculty and staff attended, including yours truly and Patricia Barton, BA 1978.



The group of 1968 alums who attended the Golden Anniversary Celebration in May 2018

On the Saturday, the 1968 alumni were served a continental breakfast, robed, and they then marched and were introduced at the Commencement ceremony. Following the Chancellor's Luncheon for special guests, the platform party and the honored golden jubilee graduates, the Department reception honoring the graduates was held in the solarium of the new Teaching and Learning Building. The group was a little smaller than the event in 2017 but it was enjoyed by all. We look forward to a greater attendance and a similarly enjoyable event in 2019 celebrating the 50th anniversary of the class of 1969.



Upcoming Events

The celebrations of the

50th anniversary of the

cessful. There will be a similar campus wide event for the class of 1969 on May 17 and 18, and the Chemistry Alumni Council intends to hold another event in conjunction with this and planning is currently

underway.

The Chemistry Alumni Council is now more than 10 years old and has seen great success, some of which is summarized in the Editor's Message. If you would like to participate in this organization, please contact the Editor who will share your interest with the leadership.

Look for all the nnouncements of activities of the group on the Department Website and on the UMSL Chemistry Group on LinkedIn.



The four 1968 chemistry graduates at the event Michael D. Hasser, Raymond F. Novak, Wiley L. Moore and Harland Kalman.

ALUMNI INFORMATION

1960s

Arthur S. Clark Jr. BS 1968 was unable to attend our event. He was attending his grandson's graduation in Texas. He spent 35 years with Monsanto in St. Louis and Alabama and retired as a Senior Research Chemist. He enjoyed the work and is thankful to UMSL for making it possible. After retirement he consulted for about six years until the grandkids made life more interesting.

Michael D. Hasser BA 1968 attended the 2018 Golden reunion with his wife Jeanne. Mike had initially worked at Carboline in St. Louis where he served as Vice-President of Operations. In 1977 he obtained an MBA degree at UMSL. He moved on to US Paint Corporation and retired as Operations Manager. The editor recalls Mike in his Inorganic Chemistry class in 1967. Mike was overheard speaking about baseball and his father. The topic was a mystery until our conversation at the event in May. Mike's father was a high school teacher and coach and a part-time the 1970s. Harland spent a career as a Research Scout for the Cardinals. Among his successes were the signings of Mike Shannon and Dal Maxville. Mike pointed out that the former was a no brainer as every team was interested in Shannon but not Maxville, who was signed in 1960, which was a real coup because he went on to great fame as a player and baseball executive.

Raymond F. Novak BS 1968 and his wife Fran attended the event and they also attended the 2017 event. Fran is also a graduate (BA French 1969) and the editor recalls attending their wedding almost 50 years ago. Ray who did research with Dr. David Larsen in the department, completed a PhD degree at Case-Western Reserve University was Professor in the Departments of Anesthesia and Pharmacology at Northwestern University, held appointments including Director of the Center for Molecular Toxicology and Professor in the Department of Pharmacology at Wayne State and retired earlier this year as Vice President Research for Shriners Hospitals for Children International in Tampa, FL. Shriners Hospitals for Children International is a pediatric specialty hospital system comprised of Patricia (Skewes) Manthey BS 1968 lives in La twenty-two (22) individual hospitals located throughout the United States, Canada, and Mexico.

Harland Kalman BA 1968 and his wife Sharon enjoyed the Golden Reunion celebration and attended all the events. Harland and his brother Les Kalman BS 1970 both graduated from UMSL with chemistry degrees and Barry, another brother taught part-time in the department in



The group assembled in the Solarium of the Science Learning Center on May 12,

Chemist at Anheuser-Busch in St. Louis.

Vernon P. Koziatek BS 1968 was unable to attend the event but his twin brother Eugene Koziatek BSBA attended the Alumni Association event. Vern retired in November, 2016 after working 44 years in government service. During this time, he spent time in the Army Criminal Investigation Laboratory (drug analysis and trace evidence such as paint, fiber, glass, etc.), the Veterinary Laboratory (food chemistry), a Toxicology Laboratory (body fluids) and finally as a clinical chemist in a laboratory of one of the Army's regional medical centers. The last three positions were all with Dwight David Eisenhower Army Medical Center at Fort Gordon, Georgia. He received an MBA degree from Augusta College in Augusta GA in 1976. He was drafted following graduation and worked in a military crime lab in GA where he met his wife Doris. He returned to Missouri and worked for a couple of years in the St. Louis Metropolitan Police Department Crime Lab with Harold R. Messler BS 1970 before moving to Georgia. He and the editor share an interest in golf.

Crosse WI, in the Driftless, an area between Lake Michigan and the Mississippi River that was never glaciated. Her property consists of 25 acres) of hill country with a wide range of microwildlife habitats. After graduation she did some laboratory teaching at UMSL. Then she worked as a research assistant at Barnes Hospital. Her son Jason was born in 1973 and the family soon moved north, to La Crosse, WI. A second child, Elizabeth, was born in 1976. As she raised her children and home schooled them for some time,



Joseph P. Bono BS 1969, also MA Political Science 1974

she followed her interest in birds and wildlife and heard recently that Gary is no longer with Synerbecame a licensed wildlife rehabilitator and also a volunteer for Wisconsin DNR eagle surveys. She eventually enrolled in the Biology graduate program at UW-La Crosse. Her experience and expertise at handling raptors led to her first job with Wisconsin DNR in 1991 doing peregrine falcon restoration. She stayed at WDNR as a Conservation Biologist and she tells me that for the next 23 years she was amazingly lucky to be in the Bureau of Endangered Resources during a period of intense restoration, recovery, and monitoring of endangered birds. After peregrines, she went on to monitor and work with eagle and osprey statewide populations and more recently in 1996 with Trumpeter Swans. She retired in 2014 and still participates as a volunteer in DNR projects including frog and toad surveys and the WI breeding bird atlas project. She publishes, does field trips and a few public education programs as well. She told me that if she had to start over she would double major in chemistry and biology.

Wiley L. Moore BS 1968, who had attended the Golden Reunion Celebration in 1967, returned for his own 50th anniversary and was one of the four who addressed the department group on Saturday afternoon May 12. He spent 10 years as a fighter pilot in the Navy and tells us he lived through that to become a pilot with Continental Airlines, retiring flying Boeing 777 aircraft from Newark airport. He currently lives in Tacoma WA., and worked on aircraft safety for Boeing in his last position.

Robert A. Nicolotti BS 1968 had planned to attend the event in May but a last minute call to he and his wife Shirley to babysit his grandchildren in Pittsburgh took preference but we look forward to seeing him at the next one. He received a PhD degree in pharmacology from Washington University and spent time working for Mallinckrodt and Sigma-Aldrich prior to serving as the Laboratory Manager for the St. Louis County Department of Health for about 15 years. He retired in 2012 and he and Shirley celebrated their 50th wedding anniversary Aug 19, 2017. Family and writing letters to the SLPD take up some of his time but he also composes music and sent me a copy of a recent song "The Fabric of Life".

Gary S. Jacob BS 1969 stepped away from CEO to become Executive Chairman at Synergy Pharmaceuticals last December. He tells me it was a natural move for him since the launch of the drug he discovered and promoted, TRULANCE, is the total focus. One of his protégées, the former Chief Commercial Officer is now CEO. We

gy and in December 2018 was appointed CEO of Immuron Inc. a publicly listed Australian bio pharmaceutical company focused on oral immunotherapy. We enjoyed seeing Gary and his wife Kathy at the Founders' Dinner in October.

Joseph P. Bono BS 1969 was in touch recently. In 2007 he retired from federal service as the Laboratory Director of the US Secret Service Laboratory in Washington, DC. His prior positions included the Quality Manager of the Drug Enforcement Administration (DEA), Office of Forensic Sciences. He has been the Director of the following forensic science laboratories: the DEA Special Testing and Research Laboratory in Dulles, Virginia; the DEA Mid-Atlantic Laboratory in Washington, DC; the Naval Criminal Investigative Service (NCIS) Regional Forensic Laboratory in Naples, Italy; and the St. Louis County Police Department Laboratory. He served as an Adjunct Instructor in the Forensic and Investigative Sciences Program at Indiana University Purdue University Indianapolis (IUPUI) prior to returning to the DC area to be with his grandchildren in 2011. He was President of the American Academy of Forensic Sciences (AAFS) in 2010 and recently had some serious health issues but we understand he is recovering. He and his wife of 48 years, Barbara, live in Leesburg, VA.

Steven Mestemacher BA 1969 was in touch with us last year. He reminded me that he only spent two years in the department. He was majoring in math when Dr. Armbruster talked him into switching to chemistry. He did some research with Dr. Larsen which led to a publication coauthored by Dr. Diestler. He chose Washington U for graduate school because his now wife was still at UM-Columbia and he could commute on weekends. He competed his PhD degree with Joe Kurz at Wash. U and then had an extraordinarily successful and long-term career (38 years) with E. I. DuPont de Nemours Company, in Research, and Management, of polymer chemistry, and also served as an adjunct professor early in his career. He reminded me of the time he, David Larsen, Ray Novak BS 1968 and I celebrated, the night before Ray's wedding to Fran Holly almost 50 years ago, on the levy downtown (when one could do that!)

Douglas G. Nuelle BS 1969 was in touch twice this past year. He had some health issues which we understand are now under control. He also recalled working at Monsanto during the summer of 1970 between his first and second year at Washington University Medical School. The research group was working on asymmetric rhodi-



Wiley L. Moore BS 1968 addressing the group at the reunion of the class of 1968

without the laborious process of making both isomers and then crystalizing out the L isomer. He had recently discovered that the work, directed by William L. Knowles, led to the latter receiving the Nobel Prize in Chemistry in 2001. I told Doug that if he had stayed in chemistry he would have known that in 2001.

1970s

John Kolb BS 1970 is one of our most loyal and supportive alumni and we hear from him annually. He tells me that after 5 years of fighting malignant metastatic melanoma, including treatments which involved immunotherapy at Stanford Medical School, scans currently show no cancer. We are delighted to hear that good news. John did his graduate work at Northwestern and was a member of the first group of graduate students with Tobin J. Marks, 2017 ACS Priestley Medalist. After a postdoctoral fellowship with F. A, Cotton at Texas A. and M. University, he a general surgeon in Jacksonville FL for 34 joined the staff of Lawrence Livermore National Lab, Chemical Sciences Division and Defense Systems. He retired in 2001 after more than 25 years but continued to work part-time for six years and lives in the foothills of the Sierra Nevada on five acres of land with his wife Judy. At that bench chemistry was not for her so she will last count he had three children and five grandchildren.

ers Dinner with his wife Carolyn. They have ing full-time as a Clinical Professor in the Southbeen quite busy after downsizing and moving to a condo. Their youngest son Mark is still at UM- Dental Medicine. He had been practicing dentis-Columbia. After three years of medical school try in University city and Webster Groves for 37 Mark chose a more challenging path that would fulfill his desire for creativity and joined Professor Duan's lab in Molecular Microbiology and Immunology as a lab. assistant intending to register as a PhD student. His previous experience in PCR, CRISPR and small surgery stimulated him to focus on research.

David Armbruster BS 1973, who obtained an MS in biochemistry from Rice University and a PhD in clinical chemistry from the Medical College of Virginia, took a part-time position as Clinical Manager for the St. Louis Center for Pain Management. Dave retired from Abbot Diagnostics in the Chicago area early in 2017 Top 1%." Honorees must have been continuousand relocated to St. Louis with his wife Patricia ly recognized for professional excellence in their Armbruster BS 1973, a retired school teacher. industry for the past five years. Consistently Dave and Pat recently became involved in the chosen by his peers as a "Castle Connolly Top Chemistry Alumni Council.

Michael J. Finkes BS 1973, MS 1978, former President of the Alumni Association, former member of the Chancellor's Council and a leader of the Chemistry Alumni Council since its incep-

ium catalysts to try to make L-dopa directly tion, received a Distinguished Alumni Award at Founders' Dinner in September

> Daniel R. Henton BS 1975 was in to see us in February. Dan who also holds a PhD degree from the Ohio State University, retired from Dow Chemical Co., in Midland MI in 2013 but has continued professional activity. He works with high school and college students on research projects in a interaction thorough Midland Molecular Institute and Michigan State University. He and his students presented their work at the ACS Meeting in San Francisco and have been quite productive in publishing papers and patents.

> John M. (Jack) Crump BS 1974 called me in June and it was wonderful to talk to my former undergraduate researcher whose results would have been good enough to have earned him a PhD degree in graduate school. He obtained his MD degree from UM-Columbia in 1978 and was years. He is now retired and is well and active in ballroom dancing, chess and runs a practice which distributes medical marijuana. His daughter, a student at the University of Florida, did research for 4 years but decided, like her father, not pursue a PhD degree. The editor had encouraged Jack to do a PhD in 1974!

Harold R. Messler BS 1970 attended the Found- Vincent U. Rapini, Jr., BS 1976, began workern Illinois University-Edwardsville School of years. He received his DDS degree from UMKC. In November 2017 he began a one year term as President of the Missouri Dental Association. We were sad to learn that Vince lost his wife Patricia in March 2017 to pancreatic cancer after a long struggle. He was expecting to become a grandfather for the first time in July

> Robert Zehr BS 1976, MS 1979 who provided the stimulus for us to establish the Rudolph Ernst K. Winter Graduate Fellowship Fund, has again been named to American Registry's list of "America's Most Honored Professionals 2018 -Doctor" for the past 14 years, Dr. Zehr has appeared on the cover of Gulfshore Life Magazine as one of its Top Doctors and was featured in the magazine's inaugural issue of Healthy Living. He founded the Zehr Center for Orthopedics in



Michael J. Finkes BS 1973, MS 1978, wearing the boutonniere, with the other 2018 Distinguished Alumni Awardees at Founder Dinner.



Robert Zehr BS 1976, MS 1979



Jeanette Hencken BA 1985 on her "bucket list" post-retirement Rockies trip with her best friend, husband Tom.

hip replacement.

Mark Pozzo BS 1978, MS 1982 joined Monsanto 40 years ago in 1978 as a research specialist and now he is Research Fellow and Group Leader with Pfizer. In 1994 he made the switch from Monsanto where his work began in developing various processes for agricultural products like Round Up and acetanilides like Lasso and Harness and morphed into small molecule pharmaceutical development. There under the label of Pharmacia/Searle he had the opportunity to make significant contributions to several new drugs including Celebrex and Inspra. In 2006 he moved into Biologics in Pfizer and was able to start his own group handling large molecule development projects that included synthetic chemistry components combined with large molecule proteins and monoclonal antibodies. He now works alongside Steve Kolodziej BA 1988, PhD 1992. Last year was particularly rewarding with the group completing development and filing for several new drugs. To quote him "Not a bad record for some guys from a state university of a fly over state. Definitely a credit to our chemistry education from UMSL". Personally he has been blessed as well with three grown sons, Jeff, Dan and Eric. A commercial airline pilot living in Dubai, a fifth grade teacher in Rockwood and a Physician Assistant living in Alabama respectively. He and Lisa his wife of 36 years, whom he met at UMSL, have two grandsons and counting.

1980s

Larry K. Revelle PhD 1980 we heard about via his PhD advisor Eric Block. Life has not been easy for him since graduation. He has had 5 hospitalizations for severe depression but very good health since 2002 when he switched from research to regulation at the FDA Division of Pharmaceutical Analysis in St Louis. Over the past six years he have averaged close to 300 drugs analyzed per year by HPLC, NIR, Raman, XRF in investigating fraud and toxic chemicals in generic and reference drugs from all over the world. He has been there for more than 28 years and since his health is good he will continue working until he feels like retiring.

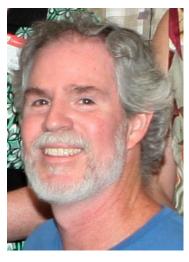
David A. Miller MD (BA Biology and Chemistry 1983) is continuing his new career in urgent care medicine after retiring following 20 years as a primary care physician in Crestwood and Kirkwood, Missouri. He is currently an Assistant Medical Director of Affinia Healthcare and Clinical Director of Affinia's Urgent Care in the Sou-

Naples FL and is a recognized expert in knee and lard area. Affinia Healthcare is the largest federally qualified health center in St. Louis City. He recently completed his Masters of Health Administration at Webster University in St. Louis. He continues to serve his community as a volunteer physician once a week with Volunteers in Medicine - West County in Manchester, Missouri; as a scout leader with a BSA Troop in Wildwood, MO, where his two sons recently received their Eagle rank; and as a Lt. Colonel with the U.S. Air Force Auxiliary as the Missouri Wing's medical officer and public affairs officer He is the son of the late Dr. Dick D. Miller of UMSL's School of Education, and has been active on campus since 1971 when he was in the fifth grade – joking that he is one of the reasons for the "No Skateboarding or Bicycle Riding" signs in the old parking garages - and fondly remembers lazy summers swimming in the pool outside of the Thomas Jefferson library. He was also one of the department's few undergraduate teaching assistants in the early 1980's. His oldest son, Christopher, started his Freshman year at UMSL - making the third generation of Millers on campus.

> Rajiv Banavali PhD 1985 recently moved from his position as Chief Technology Officer for Honeywell in Morristown New Jersey to a position as Global Vice President for the Huntsman Corporation. His role will be to establish R and D Laboratories in China, Switzerland, India and Germany and expects to be located in Singapore and Basel. Switzerland. For many years he was with Rohm and Hass until they were bought by Dow Chemical in 2013.

> Jeanette Hencken BA 1985 retired this year as Chemistry and Forensic Science Teacher at Webster Groves High School after 25 years. She won numerous awards for her teaching and served on the Chemistry Alumni Council for ten years.

> James R. Wheatley BS 1988 who served as our store-room manager from 1981 - 1988, died on Friday March 9 after fighting cancer for a couple of years. Jim was a great guy and a member of a group of alumni that some colleagues and I met for a drink, every 3-4 months. He was most recently a Principal Analytical Chemist with Mallinckrodt in St. Louis He started his career with Mallinckrodt after leaving the department and spent time with Metaphore, which became Kereos, before returning to Mallinckrodt in 2008. He was very well thought of as a chemist and I recall the late Denis Forster, a very well-known St. Louis chemist, telling me that Jim Wheatley and Bill Neumann PhD 1987 were two of the very best chemists ever to work with him. Jim also did undergraduate research with Joyce Corey.



James R. Wheatley, Jr. BS 1989, age 61, died in March

Compliance Specialist at Pfizer. Inc., in St. Louis. He was in the news this summer when he ran for House District 102 in the Missouri State Legislature and lost the primary by 13 votes. This was contested in court but the judge ruled that there no irregularities. Thus Gary lost and says this is probably the last election he will try. He and his wife Janet celebrated their 44th wedding anniversary last May. Their daughter is a veterinarian practicing for 18 years in St Peters and their son is living in Portland working for a creative media company. They have two grandchildren. Retirement is approaching and he has made a personal commitment to return to working on environmental concerns where he can leverage his backgrounds in chemistry and wildlife management. He is now trained in three Lisa (Meyerkord) Silver BS 1996 has been Stradisciplines: Missouri Master Naturalist, Missouri Stream Team Monitor, and the Climate Reality Leadership Corps. His retirement will be filled volunteering with other like-minded individuals reclaim or enhance terrestrial areas (participating in prescribed burns, conducting bird surveys, clearing invasive plants), monitoring water quality and speaking out on climate change.

1990s

Katherine Carr MS 1990 retired from Monsanto Company in Jan 2016 during a staff downsizing, and her husband retired in Aug 2017, so they recently moved from the St. Louis metro area to Moberly, MO. She is enjoying her retirement and still consulting on occasion, but mostly enjoys the quiet country lifestyle and spending time with her granddaughter, who is nearby in Columbia. She enjoys getting the UMSL CHEM-IST and sent us her new address to assure that continues.

Salvatore V. Ciaramitaro BA 1993 tells us that, after a number of contract employment positions, he landed on his feet at Phillips 66 in Wood River IL. working in operations. In the alkylation unit and putting his chemistry knowledge to good use.

Steven Rooney BA 1994, MS 1996, who lives in Irving Texas, was in touch with us again this past year in a bittersweet exchange. His wife Teri was losing her battle with cancer and caring for her was his major preoccupation. We learned more recently that she died on September 15. Steve has been able to stay busy and a book he coauthored "How Aspirin Entered Our Medicine Cabinet." was published by Springer in 2017. A second book with the same coauthor "A Time-Release History of the Opioid Epidemic" was published in July 2018. Steve continues to teach chemistry at Tarrant County Community College and also at Northlake College in Dallas County.

Gary Wester BA 1989, MS 1992 is a Quality Jean (Huhmann) Vincent BA 1991, PhD 1996 has changed jobs. After she had been working at Air Products for 18 years, the Performance Materials Division was sold to Evonik, a large German-based specialty chemicals company. Jean is now Vice President of a product line called Advanced Polyurethanes. This line develops and sells performance additives (catalysts, surfactants, others) for use in automotive, footwear, coatings, adhesives, elastomers, composites. Evonik kept the labs and offices from the Air Products acquisition in Allentown, so that is still her home base. She enjoys her new challenge but wishes she had taken a business class or two at UMSL when she was still in graduate school.

> tegic Sourcing and Services Manager at Millipore Sigma, in St. Louis since 2007. She joined Sigma-Aldrich after a brief stint at ARC in St. Louis, in 1996 as an Analytical Chemist. She also served as a Buyer, Sourcing Specialist and Project Manager prior to promotion to her current position in 2007. She and Gary Nichols were the first recipients of the original version of the Armbruster Scholarship and the only ones to actually graduate in chemistry.

> Gary Nichols BS 1997, PhD 2002 is now Senior Principal Analytical Chemist/Manager Mallinckrodt Pharmaceuticals in St. Louis where he has been since 2002.



Steve Rooney BA 1994, MS 1996

Jennifer (Moser) Hockenhull BS 1999 spent vice Co since April 2018. He had almost 20 years at Mallinckrodt Inc., in St. Loubeen Senior Supply Chain & Optimiis, leaving in 2017 when she was Manager- zation Analyst for four years with Analytical Chemistry and Products. Then she Bunge, both in St. Louis. Prior to that was with the spinoff Curium for a short time he had been with Mallinckrodt as Senbefore joining Millipore-Sigma in May where ior Supply chain Planner. He obtained she is now Project Manager. Jennifer is the an MBA degree from UMSL in 2009 daughter of *Frank Moser* BA 1995 who retired and a graduate certificate in supply in 2014 after 41 years with Mallinckrodt as Sen- chain logistics in 2008. ior Science Fellow.

Robert Stockland, Jr., PhD 1999 was recently in Principal Compliance Chemist with touch and he appears to be doing very well. He is Professor of Chemistry at Bucknell University, where he has been since 2000, following a postdoc at the University of Chicago. He was 5 weeks into the semester, in which he has two lecture courses, a lab, and 4 new undergraduates in his research lab. He sent us some photos of interesting emissive "crystals-on-crystals" they are working on. Both the main crystals as well as the small ones are colorless and transparent until irradiated (365 nm). He was proud to report recent publications including the cover for European Journal of Organic Chemistry for which his wife Barb designed the cover art.

2000s

Brian Abney MS 2000 has been Director of Quality Control for American Laboratories in Omaha, NE since July. Brian graduated from Eastern Kentucky University with a BS degree and was with Mallinckrodt in St. Louis until 2001. He has held several positions in analytical and pharmaceutical laboratories, gradually advancing up the technical and management ladder.

Aaron Burns BS 2000 had been a Scientist I at Dart Neuroscience LLC in San Diego but the company dissolved in early 2018. However we note that he has been Associate Director of Medicinal Chemistry at Mirati Therapeutics also in San Diego since November 2017. He was previously with Pfizer in La Jolla, CA., and before that a postdoctoral fellow at Stanford University. He received a PhD degree from the University of Minnesota in 2010.

Katherine Block BS 2001 is now at AbbVie in the Bay Area as Clinical Biomarker and CDX gene strategy Lead since April. She spent the previous three years with Agilent Technologies as Project Manager, companion diagnostics. She holds a PhD degree from the university of Arizona and gave our Distinguished Alumni Lecture in 2014.

ning Optimization Manager at Bayer Crop Ser-

Darija Hadziselimovic BA 2002 is a Mallinckrodt Inc., in St. Louis where she has been since 2015. In 2014 she obtained a MBA degree from Webster University.

Mesfin Janka PhD 2003 was featured in a press release by North Carolina State University on a flow chemistry technique that offers a faster, safer way to screen, study and optimize industrial chemical reactions. He is

Principal Research Chemist at Eastman Chemical Company in Kingsport, TN. I enjoy receiving his holiday card in December usually including his family picture with his wife Zee and boys Yonathan and Eyonel.

Kristofer J. Masgio, BA 2003, MS 2015 has been a Field Services Engineer with Agilent Technologies in St Louis since June 2017. Following graduation he spent two years with American Bottoms Wastewater Treatment Facility and then three years with Reliable Biopharmaceutical Corp., both in the greater St. Louis area, before joining Mallickrodt and was a Senior Research Chemist there when he left last

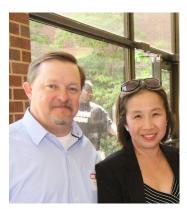
Padma Nair PhD 2003 from the Gordon Anderson lab was in touch this past spring. She is on the faculty at Pima Community College, Tucson, Arizona. Padma was proud to tell us that she was selected for the 2018 Southern Arizona American Chemical Society College Educator Award for Excellence in Teaching. She thanks us all for the teaching and support from us which have been a great source of inspiration and have made a big impact on her career. She and her family, including Anil Nair, former postdoc with Bill Welsh and now Vice President of Icagen, a pharmaceutical company in Tucson, and their two sons Pranav (14) and Anil (10) visited Mario Gruden BS 2003 has been Global Plan- us in 2017, but it was Thanksgiving and no one was in the department.



Mario Gruden BS 2003 and his family, Viktoriya (Sedelkova) Gruden BS 2002, MS 2004, and children Michelle and Sasha in October.



Padma Nair PhD 2003 with her family, sons Pranay and Anil and husband Dr Anil Nair in the department in Nov 2017



Kevin Trankler BS 1997, PhD 2003 and Amy (Thanavaro) Trankler PhD 2004

position as a Color Formulator at OFRA Cosmeting January in their pharmaceutical business. He is ics in Pompano Beach, Florida, in December an Applications Technologist III, primarily fo-2017. He had been in Florida for about a year a cused on new product development in the phar-Product Development Manager with Tropichem maceutical coatings business, serving as the tech-Research Laboratories in Jupiter. Mark spent 14 nical lead on programs and projects involving years as a Research Chemist with Sensient Tech- coating, color and flavor systems in order to build nologies in St. Louis following graduation.

Anchalee (Amy) Thanavaro Trankler PhD 2004 is now Senior Scientist at STERIS Corporation, in St. Louis, where she has been for almost 14 years. Amy is married to Kevin Trankler BS 1997, PhD 2003 who is Senior Manager, Analytical Services, Charulata Prasannan PhD 2009 is now Senior Novus International, Inc., in St. Charles County. Amy was a panelist in the Chemistry Alumni Council event Chemistry Connections held in April.

Shu Yao BS 2005 is now CEO at Green & Clear 2010s World Environmental Engineering Inc. in Shenzhen City, Guangdong, China.

John Schmitz BS 2006 is a Technical Manager at Mallinckrodt Pharmaceuticals in St. Louis, where he worked while completing his degree here. He Matthew Lenze BS 2008, PhD 2013 had been tells us that things are going very well for him. He enjoys his work with radioactive isotopes and has been really busy since IBA Molecular merged with Mallinckrodt Nuclear to form what is technically Curium Pharma. John is involved in new product development, tech transfers, and gets to travel to Europe more frequently to visit the new

Eunice Chung BS 2006 is a Senior Analytical Chemist at Mallinckrodt Pharmaceuticals where she has been since graduation. She obtained a MS degree in chemistry from Saint Louis University in 2013.

Chris Vaughn BS 2006 lives in San Antonio and is a Senior Scientist with Cytori Therapeutics, in San Antonio. He works in the analytical department of the nanomedicine division. The group is developing a generic drug product of encapsulated doxorubicin. He has been there for about 18 months and was previously with DPT Laboratories, also in San Antonio. Following graduation he was an HPLC chemist with Alcami in St. Louis for 6 years.

Christina (Vanpreter) Hamilton BS 2008, MS 2015 began her career with Vijon as a QC chemist, spent a year as a formulation chemist at Monsanto and then spent five years also as a formula- Swati S. Nigudkar PhD 2014 had been with Montion chemist with Spectrum Brands all in St. Lois. In 2015 she took a position with PLZ Aeroscience Corporation where she is now R & D Manager.

Mark Ulrich BS 2003, MS 2006 started a new Sean Whittemore BS 2008 started Sensient colors new sales and reinforce existing ones He had been with Brewer Science in Rolla, MO and had been active in the South Central Missouri Section of the ACS. We last saw Sean at a meeting of the St. Louis Section of the ACS in September.

> Project Manager at the Indian Institute of Technology in Mumbai.. Following graduation she was a postdoctoral fellow at the University of Kansas Medical Center.

Kenise Jefferson PhD 2010 recently took an appointment as Instructor at Kean University in Union, NJ.

with Patheon in St. Louis, now Thermo-Fisher, since graduation in 2013 but has been Senior Technical Director with US Polymers-Accurez, LLC also in St. Louis since 2017.

Jillienne (Touchette) Toenjes BS 2008 obtained a PhD degree in pharmacological and physiological science at St. Louis University, did postdoctoral research at the University of Minnesota-Twin Cities and is now Director of Medical Writing at Superior Medical Experts in Minneapolis.

Mary E. Keithly BS 2010, who received a PhD degree in chemistry from Vanderbilt University in Nashville, TN, taught for two years at Missouri Southern State University, but recently moved to Chadron State College in Chadron, NE. She is an Assistant Professor and teaches Chemistry and Physical Science for Elementary and Middle School Education students.

Binod Pandey PhD 2012 who had a position at PPDI (Pharmaceutical Product Development Inc) in Middleton WI., in April 2017, has returned to St. Louis and has been with Millipore Sigma since August. Following graduation he spent five years as a Postdoctoral Fellow at Penn State.

santo but recently left the company and is now doing a postdoctoral fellowship at Wayne State University.



Mary E. Keithly BS 2010

Alexis Clark BS 2015 is a Quality Control Lation research with Dr. O'Brien. boratory Technician at Sensient Food Colors in St. Louis where she has been since December Ashley Dent BS 2019 is now a doctoral student 2015. She spent several months following grad- in the chemistry program at North Carolina State uation with Mallinckrodt in St. Louis as a Quali- University, Raleigh-Durham, North Carolina. ty Assurance Specialist.

Edith Csiki-Fejer PhD 2016 who completed her dissertation with Dr. Bashkin is a Biologist in the Clinical Affairs group at Monsanto in St. Louis working on sequencing and bioinformatics.

Salvatore Pistorio PhD 2016 who completed his dissertation with Dr. Demchenko is now a Downstream Process Tech Transfer Specialist at Zoetis Inc., in Catania, Sicily, Italy. He spent one year with Monsanto as a Process Development Chemist following graduation.

Carlos Castaneda MSBB 2009 PhD 2017, another Bashkin group graduate, has been a bench chemist with Pfizer since Nov. 2017 working on gene therapy.

University of Maryland Baltimore County extension in Catania, Sicily. She completed her dissertation research with Dr. Bashkin and is married to Salvatore Pistorio PhD 2016.

Lorna Espinosa BS 2018 had been an intern at Urban Chestnut Brewing Co., after taking Bruce Hamper's Beer Brewing Course, but on graduation she began a position as an Analytical Chemist in the Nestle' Purina Analytical Laboratories at their headquarters downtown St. Louis.

Jacquelyn Niederschulte PhD 2018 returned to her native Oahu, Hawaii and has taken a position as Digital Marketing Strategist at Shockwave Media. She completed her degree in the Dupureur laboratory and her photo at graduation appears on page 1 of this volume.

Matthew Stark PhD 2018 held a position for three months in Los Angeles at a company named CannaSafe Analytics specializing in analyzing medical marihuana for pesticide residues. Recently he accepted a position as a postdoc at the FDA Lab in St. Louis.

Yong Sang PhD 2018, who completed his dissertation research in the Dupureur Lab, has accepted a postdoctoral fellowship at the University of Buffalo with Professor Daniel Kosman SUNY Distinguished Professor in the Department of Biochemistry in the Jacobs School of Medicine & Biological Sciences.

Graduating seniors off to graduate school:

Kristin Bales BS 2018 has joined our PhD degree program and signed on to do her disserta-

She was recently in touch with us and sent the following very nice message:

In my short time at NCSU as a first year grad student, I have been made vastly aware that I got a better education, hands down, than the majority of the other chemistry PhDs. I just wanted to take a second to show UMSL some serious appreciation. I couldn't have been more prepared to start my PhD adventure. I am so thankful I got my bachelors at UMSL. Keep up the excellent work!! Thanks again

Joseph Frye BS 2019 has joined the doctoral program at Florida State University, Tallahassee, where his undergraduate research advisor Dr. Bythell did his postdoctoral research..

Maria Jose' Scuderi PhD 2017 is teaching at the Nicholas Glenn BA 2018 joined the doctoral program in chemistry at the University of Michigan, Ann Arbor

> Justin Weatherford-Pratt BS 2018 is now in the PhD program in chemistry at the University of Virginia in Charlottesville, VA.



Nicholas Glenn BA 2018



Joseph Frye BS 2018



Kristin Bales BS 2018



Justin Weatherford-Pratt BS 2018



Ashley Dent BS 2018

GRADUATES, DEC. 2017—DEC 2018

DECEMBER 2017

Mansour D. A. Alharthi MS
Matthew Fischer PhD
Lisa Gouwens PhD
Brian Johnson, BS
Howard Mayes MS

Kristin Bales, BS
Scott Geringer MS
Eric Hardy, BA
Kalyn Jones, BA
Douglas Tang, BA

BS in Biochemistry/Biotechnology

Dember Bonds
Lattifah Brooks
Mukhtar Chaudhry
Christine Dalton
Brendan Greer
Kevin McBrearty
Ryan Stewart

Daniel Bowman
Mukhtar Chaudhry
Jacob Delcoure
Tanner Hudson
Shelby Miller

MS in Biochemistry Biotechnology

Malik Darwech Babu R. S. Desai Lesley K. Miller Ananya Mukherjee

MAY 2018

Mohamad Alrahawan MS Katbah Alrashedi MS Najwa Alsulami MS Ashley R. Dent BS Lorna M. Espinosa BS Joseph Frye BS Ethan Grames MS Nicholas A. Glenn BA Melissa M. James BA Kellsie B. Jurkowski BA Manu Kurian BS John Mayginnes MS Adam M. Mikulus BA Jacqui Niederschulte PhD Daniel Simmons MS Carl D. Oberle PhD Matthew J. Stark PhD Steve Skaggs MS Anna K. Sumner BS Nick Viriyasiri BS Justin Weatherford-Pratt BS Satsawat Visansirikul PhD Deva S. Talasila MS

BS in Biochemistry/Biotechnology

Mostafa M. Amor
Ariel P. Dunteman
Craig A. Hogard
Danielle E. Karraker
Thao T. N. Pham
Lessica L. Brockland
Jacob C. Higgins
Lauren M. Jenkins
Cynthia J. Peer
Tracy L Ramsey



The Panel at Chemistry Connections 2018: Amy Tranker PhD 2003, Rick Hoyt BS 1976, JB Carrol BS 2008, PhD 2013, Rachel Adams BA 2002, MS 2005 and Kim Gorman BA 1993.

Rachel M. Schafer Mihaela V. Stoyanova Katherine West Katelyn U. Wiehe Duo Zhang Garrett D. Zoellner

MS in Biochemistry/Biotechnology

Pablo Gonzalo Iturralde Rhett David Mayfield
Thao Thi Ngoc Pham Snowlee Phu
Kellie Radake Mihaela V. Stoyanova
Jessica R.N. Thompson Daniel J. Thorne
Cara Michelle Willoughby

AUGUST 2018

Carissa Nelson, PhD

Biochemistry/Biotechnology

Pablo G. Iturralde, MS Travis R. Mechlin, BS

DECEMBER 2018

Justin M. Nemeth BS Tinghua Wang PhD

BS in Biochemistry/Biotechnology

Josh Bratcher Anna K. Hoffmeister Hilmo Malkie Rachel M. Manno Presley A. Pham Jennifer K. Selph Nilkumar J. Thanki Katelyn U. Wiehe

MS in Biochemistry/Biotechnology

Jason Bedwinek

Wei-Ting Huang
Sarah Ruhland
Catherine Alex
Saif Alruwaili MS

Cassandra M. Hoffner
Snowlee Phu
Taylor W.r Wagner
Daniel Greenwood
Yelena K. Hines

THE CHEMISTRY ALUMNI COUNCIL

Again the CAC was active and very successful. Led by *Michael Finkes* BS 1973, MS 1978, there were three very successful events. We honored the 1968 graduates in May, described earlier, held a workshop on *Careers and Networking* in April and in October a *Dinner with Twelve Chemists*.

The workshop consisted of presentations by *Eric* Bruton BS 1997, PhD 2004 and Dr. Lisa Balbes, active leader in the ACS St. Louis Section and an ACS Career Counselor. This was followed by a panel discussion. The panel, which was chaired by the editor, consisted of Rachel (Hercules) Adams BA 2002, MS 2005, JB Carrol, BS 2008, PhD 2013 Kim Gorman BA 1993, Rick Hovt BS 1976 and Amy (Thanavaro) Trankler PhD 2003, Alumni active in the CAC this past year included Rachel (Hercules) Adams BA 2002, MS 2005, Mark Owens BS 1977, MS 1982, Jim Grib BS 1976, MS 1982, Bruce Ritts BS 1979, MS 1983, JB Carrol, BS 2008, PhD 2013, Michael Hauser BS 1981, MS 1986, Tim Miller, BA 1969, Eric Bruton BS 1997, PhD, 2003 Janet Wilking BA 1985, Bob Dittrich BS 1976, and David and Pat Armbruster both BS 1973.

Planning will start in late fall 2018 for the Cele-

bration of the 50th Anniversary of the class of *Benjamin J. Bythell*'s NSF 1969. We also will especially invite the class of proposal "Chemistry of Useful 2019 and their families. Other activities will be Destruction" was funded July. determined at a December meeting of the CAC. It focuses on identification of

The group holds very few meetings but organizes very successful events. The major problem is we need to recruit younger alumni and new leadership for the group. Anyone interested in reconnecting with the department and working with a great group of committed alums should contact the editor at lbarton@umsl.edu.

THE FACULTY

James K. Bashkin was recruiting and gave an invited talk in the Frontiers of Nucleic Acids Symposium at the Southeast Regional Meeting in Augusta, Georgia in October. Co-authors include four undergraduates, Rachel Schafer (now a Biochemistry Ph.D. student at SLU), Nicole Miller, Chris Wilke, and Ruth Kvistad, two former grad students Edith Cskiki-Fejer PhD 2018 and Carlos Castaneda PhD 2017, a postdoc Souparnika Sreelatha, and two collaborators Scott Givan and Christopher Bottoms from UM-Columbia. He is always able to tell us about the progress of his former students in the workplace.

Alicia M. Beatty hooded two doctoral students at the May 2018 Commencement: Carl Oberle BS 2013 and Matthew Fischer. Matt is at Novus International as a Formulations Specialist and Carl is with EAG Laboratories as a Scientist. The Beatty research group published an article "π-Choreography in aromatic ammonium formate solids," in CrystEngComm this year which had a rather elaborate Table of Contents graphic!

Eike B. Bauer's research group in 2017-18 consisted of PhD students, Matthew Stark and Andria Widaman, MS students Deva Talasila MS 2018 and Kellsie Jurkowski and undergraduates Yechezkel Brown and Doug Tang. Kellsie performed undergraduate research spring/summer 2017 and was accepted into the MS program and continues research in the group. Deva graduated in May and joined in our PhD program this fall. The group attended Missouri Organic Day in April 2018, where Matt Stark presented a poster. Matt also presented a poster at the Graduate Fair hosted by the UMSL Graduate School in April 2018. Michael Barnes-Flasspoler (BS senior, undergraduate research student) presented posters in April 2018 at the UMSL undergraduate Research Symposium and at the St. Louis Area Undergraduate Research Symposium. Dr. Bauer with fellow heavy metal fans Keith Stine and Steve Holmes saw "Alice Cooper", "The Dead Kennedys" and "ZZ Top" He recently took over full responsibility for the Murray Lecture.

proposal "Chemistry of Useful It focuses on identification of carbohydrate sequence and structures based on a newly developed fundamental understanding of the gas-phase fragmentation chemistry. He gave invited talks at Wayne State, Washington State, Duquesne, Southern Illinois and Northern Universities Illinois UMSL. He also presented at the American Society of Mass Spectrometry (ASMS) Sanibel Conference on Computational Modelling in Mass Spectrometry

in St. Petersburgh, FL. Graduate students *Jordan Rabus* BS 2015 gave a talk at the Sanibel Conference and Maha Abutokaikah was awarded a Graduate School Dissertation fellowship and she also presented an invited talk at the ASMS Conference, San Diego, CA in June. *Joseph Frye* BS 2018, former undergraduate researcher, began graduate school at Florida State University in September and plans to continue to work in analytical mass spectrometry by joining the group of either Alan G. Marshall or Christian Bleiholder. The Bythell group has now published five papers on carbohydrate gas-phase structure, spectroscopy, and fragmentation chemistry.

James S. Chickos had his last doctoral student Carissa Nelson PhD 2018 graduate this past summer. His current research group contains

Christian Fischer-Lodike an undergraduate and Ameera Zafar a High School student from MICDS. During the summer 2018 he had a STARS student Matt Boyd and Kanyavee Wootitunthipong, a student from Thailand, where his former student *Patamaporn Umnahanant*, PhD 2007 teaches his in his laboratory.

Valerian T. D'Souza tells us that he finally achieved the goal of allowing students to complete Introductory Chemistry 1 at their own pace. According to Hal Harris this was an experiment started in California in the 60s but failed. Technology has now allowed him to succeed in this effort. Students have been able to complete that course anywhere from 7 weeks to 2 semesters. We note that this new approach to learning has received much attention in the media recently.



Professor Jim Bashkin with the relatively new Dean Andrew Kersten at the Chancellor's residence



Professor Eike Bauer at the Murray Lecture

Alexei V. Demchenko continues his well-funded portunities for our undergraduates through enresearch program in the area of Chemical Glycosciences. During 2017-2018, his research group Glycoworld, published 18 articles bringing the total number of publications to 166. He also delivered 21 invited lectures in the US, and his group members delivered 34 talks and posters at regional and international conferences. The Glycoworld currently consists of two post-doctoral fellows, eight doctoral students and two undergraduates and their research is funded by two major NIH grants and a recently renewed grant by the NSF. The most recent Glycoworld graduates Xiao Jia PhD 2016 is at EKG Labs in the St. Louis area, Salvatore Pistorio PhD 2016 has moved back to Italy to accept a Tech Transfer Specialist position at Zoetis Inc., and Satsawat Visansirikul PhD 2018 has accepted a faculty position at Mahidol University in Thailand. Professor Demchenko is the 2018-2019 Chair-Elect of the Division of Carbohydrate Chemistry of the American Chemical Society. Updated information on current research, teaching, and outreach activity of the Glycoworld is available http://www.umsl.edu/chemistry/Faculty/ demchenko.html or @Glycoworld (Twitter).

Cynthia M. Dupureur tells us that late last fall the group gathered to work on an escape room together. Kristin Bales BS 2018 was the MVP for the effort, and is now a PhD student here at UMSL. May graduation was special for the group, as Dr. Dupureur was the Master of Ceremonies and hooded two students Yang Song Kauai., Hawai. The Graduate School, where he PhD 2018 and Jacqui Niederschulte PhD 2018. Jacqui's family brought leis all the way from Honolulu, which made for festive photos. (See page one). Yang is now a postdoc at University at Buffalo and Jacqui is working for Shockwave Media. She says her time analyzing data in the lab has prepared her well for the job. Dr. Dupureur attended the Gibbs Conference in Carbondale again this fall, and recently gave an invited lecture at Vanderbilt University, where Mary E. Keithly BS 2010 earned her PhD. Mary is now teaching at Chadron State College in Nebraska.

George. W. Gokel continues has research in the supramolecular chemistry of synthetic amphiphiles which is funded by the National Science Foundation and just took on a new PhD student. He is also CEO of Upaya Pharmaceuticals, a start-up company established by the Gokel group including Mohit Patel, MSBB 2012, PhD Biology 2012 Saeedeh Negin PhD 2012 and Michael Gokel.

Bruce Hamper has was named UMSL Nontenure Track Faculty Member of the Year for 2017-18. He has continued to develop new op-

gaging courses and research. CHEM 1021: Beer Brewing - Chemistry and Biochemical Principles has evolved into a hybrid course with the introduction of YouTube videos and new laboratory investigations. He has presented "Beer Brewing and Science Education" in a number of forums in our community and increased interest in our programs in the brewing community. Early in 2018, Ferguson Brewery introduced '1021 Ale' based on the most popular beer recipe from our CHEM 1021 class of the previous semester. Lorna Espinosa BS 2018 carried out research in the Hamper lab in collaboration with Urban Chestnut Brewing Company and her results on the 'Determination of Isohumulones in Beer using HPLC' were presented at the Undergraduate Research Symposium. Undergraduate Aaron Boland and Master's candidate Nicholas Viriyasiri are continuing isohumulone and humulone analysis of beverages using mass spectroscopy and LCMS methods. Over the summer of 2018, he initiated a new research program into the preparation of vaccine conjugates. Undergraduates Hunter Campbell and Aaron Boland, along with STARS student Saida Donaldson, investigated continuous flow reaction methods for preparation of protein-polysaccaride conjugates as model systems for novel vaccines.

Wesley R. Harris concludes that his most significant news is that he is retiring on Dec 31, 2018, which means he will have been at UMSL for 30 years. He expects to be around for the first half of 2019, cleaning out his lab and trying to finish a couple of papers. After that, he and his wife Marion are moving back to her home island of is Associate Dean, is doing well and they were able to stop the trend in declining enrollment, with an 2% increase in enrollment for FS18. They had just completed a 5-year review and were waiting for the report from the review committee, when he reported to me in October..



Professor Bruce Hamper, the 2018 non-tenure track faculty member of the year.



Professor Wes Harris and wife Marion. They are retiring and moving to Hawai.

NSF Molecular Magnets Workshop on St. Simons Island, GA in February and at the 43rd International Conference on Coordination Chemistry, Sendai, Japan in July 2018. He will organized a symposium at Pacifichem in 2020. He was awarded a new 3 -year NSF grant, "Design and Characterization of Late Transition Metal Single-Molecule Magnets" for \$485,000, and he assisted in the successful NSF proposal to upgrade the X-ray Facilities "To Advance Regional Collaboration in Chemical Crystallography". An undergraduate researcher in his group, Austin Stelling. has made and crystallized several polynuclear complexes that are new photoresponsive candidates. A helium recovery system attachment for Quantum Design PPMS magnetometer is on order for lowcost regional magnetic characterization. He was elected for a second term as chair of the Faculty Senate Spring Research Panel. He presented at Missouri Inorganic Day in Rolla, MO, and was reelected to the editorial board of *Polyhedron*. He continues to serve as a panelist for the National Academies of Sciences, Engineering, and Medicine Research Associateship Program (Mar. 2018).

Rensheng Luo reports having busy year and both NMR and MS labs are running well. He published one co-author paper during the year. His daughter, Dee starts her medical school in New York. She graduated with a degree in biochemistry from the University of Pennsylvania.

Lynda M. McDowell teaches a variety of courses including Introductory Chemistry, Quantitative Analysis, Physical Chemistry, Biochemistry Lab, and new next spring: Chemistry for the Health Professions. Teaching Biochemistry Laboratory last spring felt a bit like going home. It was a joy to see one student from that class get a summer internship. Adding to the good news: several

former students graduated and moved on to iobs graduate school. She wants her former students to keep in touch and perhaps even stop by her new office in Benton Hall 321. Reforming the Quantitative Analysis course is an ongoing collaboration with teaching assistants. Progress to date includes reducing the number and quantity of hazardous materials, replacing the Spec 20s with SpectroVis Plus spectrophotometers, finding new procedures, rewriting the classics, and reorgan-

Steven M. Holmes was an invited speaker at a izing the new lab in SLB 317 to reduce the use of NSF Molecular Magnets Workshop on St. Simons Island, GA in February and at the 43rd International Conference on Coordination Chemistry, Sendai, Japan in July 2018. He will organized a symposium at Pacifichem in 2020. He was awarded a ture portion of the course.

Michael R. Nichols continues to investigate Alzheimer's Disease (AD) and inflammation-related research. Continuing projects focus on development of an AD-selective antibody, investigation of a recombinant inflammasome protein complex. and the interaction of cell-secreted microvesicles with amyloid-beta protein. Group members Lisa Gouwens and Sweta Desai obtained PhD degrees last December and Evan Garrad BSBB 2016 spent a gap year in the lab before heading to Medical School at UM-Columbia. Currently he has three doctoral students, three undergraduates and a research Technician, Thao T. N. Pham BSBB, MSBB 2018 in his lab. Findings from the group have been were published in ACS Chemical Neuroscience this year. He is excited to report that UMSL will be hosting the American Society for Neurochemistry 2020 National Meeting in St. Louis/St. Charles, April. 18-22, 2020. Dr. Nichols will serve as the Local Host Chair and Dr. Holly Pope BSBB. 2008, who is now the Admissions Representative for the UMSL Pierre Laclede Honors College, will be the ASN High School Day coordinator.

James J. O'Brien with Keith Stine continues to run HS Career Day for the ACS St. Louis Section in which he serves as Alternate Councilor, Director and Chair of the Midwest Award Committee. His research in intracavity laser spectroscopy funded by the NSF continues and in 2018 he published an article in the Journal of Chemical Physics co-authored by Leah. C. O'Brien of SIU-Edwardsville and graduate student Jack Harms.

Nigam P. Rath continues to run a very productive X-ray diffraction facility. He is delighted to report receiving NSF funding for a new diffractometer (\$325K), which will be a replacement for the 1st CCD diffractometer in the department installed in 1996. He and colleagues are evaluating instruments and were expecting to make a final decision this past fall.

Christopher D. Spilling continues as Vice Chancellor for Research and Graduate Studies, but he still has an active NSF funded research program. He teaches organic problem seminar occasionally. He gave a plenary lecture at the International Conference Phosphorus Chemistry in Budapest in July lectured at the University of Ghent, Belgium in September. He also vacationed in England and Iceland in June. He loves being grandad to Andrew's son Benjamin (now 2).



James (JB) Carroll BS 2008, PhD 2013 and his wife **Dr. Holly Pope** BS Biochem/Biotech, who received her PhD degree from Saint
Louis University.

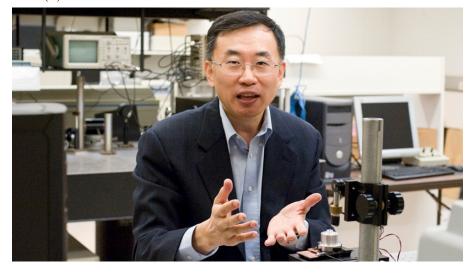
Keith Stine tells us that research on a number of in research funded by the Research and Engiaspects of nanoporous gold continues in his lab, neering Apprenticeship Program (REAP) sponincluding collaboration with Professor Demchenko's group on using the material as a support for carbohydrate synthesis. Together, they presently hold an NIH R01 grant and an NIH U01 grant. Papers based on the collaborations appeared in Organic and Biomolecular Chemistry and Journal of Organic Chemistry. His group published review chapters and articles on nanoporous gold, including in MDPI Nanomaterials and Materials Research Society Bulletin. A project on lipid monolayers and their interaction with glycoalkaloids is being pursued by graduate student Bishal Nepal. Working in his lab are postdoc Jay Bhattarai, and graduate students Bishal Nepal, Dharmendra Neupane, and Vasily Mikhailov. Physics student Helal Maruf began working towards a Ph.D. in physics under his direction. The undergraduates who worked in his lab in 2018 were Anastasia Jensen and Sara Herbstreit. He also hosted a STARS associate student in his lab over summer 2018, Jesse Au. Together with Prof. Bauer and others from campus, he has been working to run the Missouri Louis Stokes Alliance for Minority Participation that seeks to promote the success of underrepresented minority students in the sciences.

Janet Braddock-Wilking's research continues to investigate new luminescent silafluorenes ad germafluorenes for biological applications in collaboration with Cynthia Dupureur's research group. They recently submitted a proposal to the National Science Foundation which describes some promising preliminary results. Janet gave a talk on some of these results at the Joint 101st Canadian Chemistry Conference and 49th Silicon Symposium in Edmonton, Canada in May 2018 which honored the chemistry of Robert West and his 90th birthday. West was Joyce Corey's PhD advisor at the University of Wisconsin-Madison. Janet did some other traveling over the summer to Scotland and Oregon.

Chung Wong's former undergraduate research students Howard Mayes BS 2015, MS 2017 and John Mayginnes BS 2015 have now joined our PhD program. Howard is now working in Dr. Bythell's lab. This year, Chung published his first article in the Journal of Chemical Education since he joined UMSL and another appeared in the Journal of Computational Chemistry Howard Mayes is the first author of the J CHEM Ed paper. Others participating in research this year include three students in Chemistry and Biochemistry and three in the Biochemistry/ Biotechnology Program. Last summer, highschool student Elijah Montgomery participated

sored by the US Army Research Office, and the STARS program.

Zhi Xu teaches Physical Chemistry Lab(I) and Lab(II), and conducts research on Ultrasensitive Spectrophotometry and non-invasive blood chemical detection. He has been busy with the installation and testing of a new Nd:YAG laser for Lab(II).



Professor Zhi Xu in a picture appearing in an article in UMSL DAILY describing faculty entrepeneurship. His research in optical analytical instrumentation led to the founding of St. Louis Medical Devices, a startup company that is continuing development of his non-invasive glucose monitoring device.



Professor Janet Braddock Wilking (BA 1985) with her husband Physics Professor Bruce Wilking and Padraig Murray, the youngest son of the late Bob Murray at the 2018 Murray Lecture Banquet.



Professors Larsen, Winter and Spilling at Emerita Professor Jane Miller's 90th birthday party in February

EMERITUS, RETIRED, AND FORMER FACULTY

Charlie Armbruster continues to do well living in Orlando FL. He is not as mobile as he used to be on the racquetball court but he gets out every day of the week and plays bridge. He is currently a Ruby-Life Master and his goal is to become a Gold-life Master. His brother Jim and sister-in-law Gloria stayed with him for a couple of days and then they all drove north to Amelia Island, to see Mary, Charlie's sister and stayed for 3 days. The editor promised to visit him in spring 2019.

Lawrence Barton and his wife Patricia J. Barton BA 1978 had a difficult year. Their son Andrew died on his 52nd birthday in January after a brave four year fight with a rare form of cancer. He was diagnosed with synovial sarcoma in February 2014 and underwent seven clinical trials. A bright spot during the year was when the University celebrated Dr. Barton's 80th birthday at the Chancellors residence with faculty colleagues and alumni. He continues to maintain an office on campus and continues to work on alumni affairs and with the Chemistry Alumni Council and also to update the website and the graduate brochure in addition to advising a group of chemistry undergraduates. Professors Wilking and Bauer have assumed responsibility for the Distinguished Alumni Lecture and the Robert W. Murray Lecture, respectively, He continues as an Ex Officio member of the UMSL Alumni Association Board and of the UMSL Retirees Association where he serves as webmaster. He and Pat now spend about 8 months a year in their townhouse in Fort Myers, FL where he plays golf, rides his bike and enjoys the warm climate...

Alan F. Berndt's widow Marion died in October. She was 83. Al was on the faculty from 1965 until 1984 when he succumbed to pancreatic cancer. He taught physical, analytical and introductory chemistry and the Outstanding Senior Award is named after him. He was an x-ray crystallographer and also developed an interest in dental chemistry and coauthored the book Dental Fluoride Chemistry with former adjunct professor Robert. I. Stearns. The Berndts had three children and 9 grandchildren. Marion was a respected teacher, storyteller, and an advocate for numerous Jewish causes. When she retired from teaching she worked the College of Arts and Sciences for several years as an academic advisor.

Joyce Y. Corey is still a fixture in the department where she reviews, writes and attends some meetings. She spent her usual month in Maine last summer and also attended the 49th Silicon Symposium in Edmonton, Canada where her 90 year old

PhD advisor Bob West was honored.

.David L. Garin tells us that Bob Lamberg BS 1972, who is an ophthalmologist at Clarkson Eyecare did his annual eye exam and follow-up in October. Bob said that he examined Rudi Winter the previous week and was about to see Margaret Winter. The editor was in to see Bob during the summer. David finally made a trip to Budapest and took a river cruise on the River Danube. Unfortunately, global warming (drought) left the river too low to cruise between Budapest and Vienna so it became a bus/cruise. He continues to ride his bike and is interested in environmental and political causes.

Harold H. Harris is making a remarkable recovery from total knee replacement surgery early in July. He is already back on the tennis courts, but not quite up to full speed yet. He and Mary drove their new Tesla Model 3 to Maine with stops to visit friends and family in Detroit, Toronto, New York, Vermont, and New Hampshire. Hal is in his office in the renovated Benton Hall on most days.

David W. Larsen was in touch recently. He and Marcia are doing well and are now at the Barclay House on Brentwood across from Shaw Park in clayton. It is a high rise retirement community run by Bethesda. Don and Joyce Driemeier are there, along with other academics and it is a nice community. Don Driemeier was Business Dean for many years and also Interim Chancellor from 2002-2003. Dr. Larsen was on the faculty from 1964—2000, and was the first full time chemistry faculty member hired by Charlie Armbruster. He taught physical chemistry and did research principally in NMR spectrometry.

Jane A. Miller turned 90 in 2018 and celebrated by holding a birthday party which unfortunately the Bartons could not attend. Hal Harris sent us some pictures which are shown here. Jane joined the faculty in 1965 and retired in 1992. Jane taught introductory chemistry and the history of chemistry and served as a joint faculty member with the College of Education and was responsible for mentoring future chemistry teachers. She is admired and loved by her former students.

Rudolph E. K. Winter tells me that the Mass Spec facility, in which he worked for more than 20 years, is now essentially out of action. The instrumentation has not been updated to the extent it should and demand for spectra has dropped significantly. Some colleagues have their own instrumentation. The GCMS, purchased in 1988, still is used regularly but users don't require any help. He expresses his gratitude to those who contributed to the fund in his name for graduate



Professor Hal Harris with Emerita Professor Jane Miller at her 90th birthday party in February

tive of Robert Zehr, BS 1976, MS 1979, who established the fund.

STAFF MEMBERS

Betty Esbaugh was in touch with us in April, rial Scholarship is She spends the winter months in Pharr, Texas and summers in Miamisburg, OH. She lost Ken her husband a few years ago. She is proud to tell us about her daughter Lelo who practices law from home and grandson Eric who has a MS degree from Villanova University. Betty was the first Office Manager in the department and retired in 1998. She joined the University in 1963 Mossotti and originally worked in the Chancellor's office.

Lindsay Shy, we were shocked to learn in July, major alumni supportresigned her position as Office Manager to take the position, Business Manager, in Student Affairs, on Campus. She had been with us for 8 years and replaced *Angela Thomas* in 2010. We found a replacement but she didn't last more than a couple of months.

with Physics and Biology for two years. Leah was very helpful as a key member of the barebones staff we now have in the department. Her title was Office Support Specialist and she moved to the College of Arts and Sciences as Business Support Specialist, also in September. She was replaced by *Derek Plut* in November. : He comes from working at STLCC Flo Valley, where he was an Adaptive Technology Specialist. He collects video games.

SCHOLARSHIPS AND **FELLOWSHIPS**

The Charles W. Armbruster Undergraduate Chemistry Scholarship honors Dr. Charles W. Armbruster, who served as Chair of the Division of Science and as the first department chair. The Scholarship is given to incoming Missouri resident undergraduate transfer students, For 2018-19 it went to Rebecca Taylor.

The Lawrence Barton Scholarship is designed primarily for junior chemistry majors who are were made to Stevie first generation college students and who have Shelton and Anastasia financial need. For 2018-19 scholarships were Jensen. awarded to Jayme Collins and Ariona Booker.

The Barbara W. Brown Fellowship for Wom**en in Chemistry** is designated for students who are women over the age of 24. It was established by Dr. Barbara (Willis) Brown BA 1984 who UMSL and preference has worked on behalf of and supported the department for many years. The 2018-2019 fellowship went to Jayme Collins.

The Eric G. Brunngraber Undergraduate award was made to Har-Research Fellowship honors the late Dr. Eric G. per Wieldt.

student support and he is particularly apprecia- Brunngraber. He was the first regular biochemistry faculty member. For 2018-2019 the fellowship went to Anastasia Jensen.

> William and The Erma Cooke Memodesigned primarily for sophomores. It was endowed by Dr. Dorothy C. Cooke BS 1971, in honor of her parents William and Erma Cooke, in 1989. Tracie Close and Eric received scholarships for 2018-19. this was the first ed scholarship on the campus.



Professors Corey and Dupureur with Hayley Steber recipient of the Eugene and Joyce Corey Scholarship

The Eugene and Joyce Corey Scholarship goes to an outstanding chemistry undergraduate We also lost *Leah Trimble* whom we had shared who has excelled in service to the department. It was established to honor the late Eugene R. Corey who served on the faculty from 1969 to 1988, and Professor Emerita Joyce Corey. The 2018-2019 award was made to Hayley Steber.

> The M. Thomas Jones Memorial Fund was the first endowment that recognizes performance by graduate students. It honors Dr. Jones who served in faculty and administrative positions for 19 years .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 fall 2017 awards were made to Michael Mannino and Matthew Stark and for spring 2018 to Satsawat Visansirikul and Matteo Pan-

> The Stephen S. Lawrence Scholarship was established by Steve Lawrence BA 1982, PhD 1989 and is awarded to junior or senior chemis-

try majors who are good departmental citizens. 2018-18 awards

The Rath **Family** Scholarship is for fulltime undergraduates studying STEM at may be given to Chemistry/Biochemistry stu-The 2018-19 dents.



Harper Weidt receiving the Rath Family Scholarship from Professor Dupureur



Aid-to-Education award recipients Ethan Gallaher, Alexander Sanderson, Alan Scheibel, Hayley Steber, Austin Stelling and Anastasia Jensen with Prof. Dupureur



Graduating senior **Justin Weatherford-Pratt**, receiving the Alan F. Berndt Senior Award from Dr. Dupureur. Justin won the Junior Award last year and the Awards for Organic and Analytical chemistry as a senior. As we mention elsewhere ,he is off to graduate school for a PhD degree at the University of Virginia.

The Linda and Michael Finkes Chemistry Scholarship is funded through the generous contributions of *Linda* BA political science 1970 and *Michael J. Finkes* BS 1973, MS 1978. The recipient for 2018-19 was *Sinhareeb Basim Al Oleiwi*.

The Hal and Mary Harris Scholarship is awarded to juniors seeking a degree in chemistry with a minimum GPA of 3.0 and enrolled in a minimum of 12 credit hours. The 2018-19 award went to *Hayley Steber*.

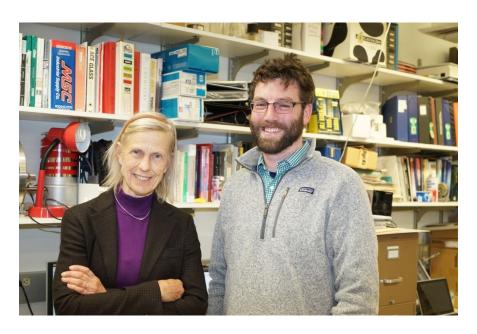
Friends and Alumni Scholarships are need-based and were established after an appeal made to alumni and friends and matched by the University in 2005. These aren't so easy to track and are often awarded after our award ceremony but for 2018-19 they were awarded to *Kaitlyn Crocker*, *Eric Mossotti* and *Harper Wieldt*.

The John J. Taylor Scholarship was established by his family. *John J. Taylor* BA 1979 had directed funds from his estate to a need-based chemistry scholarship For 2018-19 *Tracie Close, Anastasia Jensen* and *Sinhareeb Al-Oleiwi* received scholarships.

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 awarded to non-freshmen in the BS program in Biochemistry and Biotechnology.

STUDENT PERFORMANCE AWARDS Undergraduate

The award for the Outstanding Student in Introductory Chemistry went to Nichole Miller 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 Evan Antoine; the ACS Award for Organic Chemistry went to Justin Weatherford-Pratt; and the ACS Award for Analytical Chemistry also went to Justin Weatherford-Pratt. The ACS Awards in Inorganic and Physical Chemistry went to Alan Scheibel and the ACS-St. Louis Section's Outstanding Junior Award also went to Alan Scheibel. The latter award was presented at the Annual ACS High School and College Awards Night in April. Justin Weatherford-Pratt received the Alan F. Berndt Outstanding Senior Award. The 2018-19 Undergraduate Chemistry Aid to Education Awards were given to: Akinyemi Adeusi, Ethan Gallaher, Anastasia Jensen, Alexander Sanderson, Alan Scheibel, Hayley Steber and Austin Stelling.



Professor Lucy Zuirys, 2018 Robert W. Murray Lecturer with graduate student **Jack Harms**, whose advisor is Professor O'Brien, in his laboratory



Professor Dupureur, Dr. Barbara Harbach, Curator's Professor of Music, and Director of the School of Fine Arts and Communication, who is married to Chancellor Tom George and new Dean of the Graduate School Dr. Teresa Thiele, at the Murray Banquet.

Graduate

The 2017-18 Outstanding Graduate Teaching Assistant Award in Memory of Jack Coombs was shared between Jack Harms, Michael Mannino and Howard Mayes. The Outstanding MS Student Award went to Daniel Simmons and Steven Skaggs. The Graduate Student Research Accomplishment Award went to Satsawat Visansir who graduated with a PhD degree from the Demchenko lab in 2018. Matthew Stark was awarded a Dissertation Fellowship for Spring 2018 and Maha Abutokaikah was awarded one for the 2018-19 academic year by the Graduate School and we just heard that Jack Harms was awarded one during the fall 2018 competition. Graduate School Research Fair winners 2018 (Poster awards) were 2nd place: *Jordan Rabus* (Bythell), 3rd place: Jacquelyn Niederschulte (Dupureur) and 4th place: Tinghua Wang (Demchenko).

THE ROBERT W. MURRAY LECTURE

On Monday April 23 the 21st Annual Robert W. Murray Lecture was presented by Dr. Lucy Zuirys, Professor of Chemistry and Professor of Astronomy and the Steward Observatory at the University of Arizona, Tucson. Her topic was "Chemistry Among the Stars: The Unexpected Molecular Environment Beyond Earth". She described her work in which she studies astrobiology, astrochemistry and chemical physics and materials influencing early biochemistry, thus tracing life's origins back to interstellar space. The 2019 lecture will be presented by Dr. James Paulson, Cecil H. and Ida Green Professor and Co-Chair, Department of Molecular Medicine, Professor, Department of Immunology and Microbiology, The Scripps Research Institute, La Jolla, CA. It will take place on Monday April 1, 2018. Details will appear on the department website.

DISTINGUISHED ALUMNI LECTURE

The 31th Annual Distinguished Alumni Lecture was given by *Yana Levchinsky-Grimmond* BS 1997, MS 1999. Yana completed a MS degree with thesis in Janet Wilking's lab and moved to the Albany area in upstate NY, first to work at the GE Global Research Center and after two years she moved to Regeneron Pharmaceuticals where she is now Senior Manager Technology Transfer. She is married to *Brian Grimmond* PhD 1999 who completed his graduate degree with Joyce Corey and is also employed by Regeneron. Janet Wilking now is in charge of the lecture and she

recently announced that Martin E. Haves BS 1999 will give the 2019 lecture. Martin obtained a PhD degree in synthetic organic with Professor Rick L. Danheiser at MIT in 2004. Since then he has been with Abbot and more recently with AbbVie in Worcester MA., working in the general area of medicinal chemistry. His current position is Director ADC (antibody drug conjugates) Platform Strategy. In our department he was a Monsanto Scholar, an ACS Scholar and won both the ACS Outstanding Junior Award and the Alan F. Berndt Outstanding Senior Award, He did undergraduate research with Dr. Spilling. Martin also received a BA degree in mathematics in 1999. Both his undergraduate degrees were accorded Summa Cum Laude.

EDITOR'S COLUMN (LAWRENCE BARTON)

This past summer represented a new beginning in many respects for the department. The renovation of Benton Hall was completed, the building re-opened and faculty and students moved into new facilities. Thus for the second year in succession the internal environment changed for the better.

Faculty offices are somewhat smaller but they are new with no crumbling walls and a HVAC system which we hope will be reliable. The department office complex has a new much brighter look to it with much more openness, glass doors and open spaces. We invite you to the department, about the progress of alumni in come and see the new Benton Hall and the new their professional careers, and above all it proteaching laboratories if you have not seen them.

We continue to celebrate the past by honoring alums on the 50th Anniversary of receiving their degrees and, from the feedback we have received, those celebrations have gone very well. We look forward to a slightly expanded version next Spring when we will also invite the graduat- August Commencement when he received the ing seniors to be part of the event. In 2019 it Chancellor's Medallion. will be held over the period May 17-18. We March 2010 125 alumni and stress that this is not simply for the 50 year graduates and the brand new ones but for any of our retirement of the editor. alumni who would like to see the new facilities, meet the new graduates and hear the reminiscences from folks who were students on campus 50 years ago. We encourage you to come and meet each other, the faculty and also other alums.

The event described above is being planned by the Chemistry Alumni Council. This was established during the period 2006—2008 after some planning by Michael J. Finkes BS 1973, MS 1978, Barbara (Willis) Brown BA 1984, OD 1988 and the editor. We believe we are the most successful department-based alumni group on



Yana Levchinsky-Grimmond BS 1997, MS 1999, the 2018 Distinguished Alumni Lecturer with Professor Janet Wilking, who now organizes the lecture. Janet was also Yana's research advisor for her MS degree with thesis.

campus, and that is due to the dedication of a small number of alums who have made this possible. To recap the activities, we focused on networking and on holding a few focused events. We established the Chemistry Alumni Group on LinkedIn and although it only has about 350 members, it is a good medium for news about vides links to alumni in industry who may provide contacts for possible employment, technical askance and general networking. We also have held some remarkably successful events.

In 2008 135 alumni and friends honored Dr. Charles Armbruster at a reception following the

friends helped celebrate the April 2011 we held *Chemistry* Connections where 60 attendees heard about careers and networking. A similar event was held in April 2018 when about 45 alumni and current students were treated to presentations and a panel discussion. In 2012 we honored Rudi Winter and Joyce Corey where the total attendance was about 125. The year 2013 represented the golden jubilee of the founding of



The editor with Patricia J. Barton BA 1978 at his 80th birthday party at the Chancellor's residence. He is holding the golden golf ball presented to him by Alexei Demchenko

UMSL and the event *Fifty Years of Great Chemistry* attracted 125 attendees, We continued to honor retired faculty members in 2015 when about 70 alumni and friends honored Jane Miller and Hal Harris for their mentoring of future science teachers. When Chris Spilling moved from the chair position to the administration we held an event that honored and recognized Chris' contributions to the department. His former students, alumni faculty colleagues, staff and administrators amounted to an attendance of 85 at the event. Since then we have celebrated the Golden Anniversaries of the classes of 1967 and 1968.

We were delighted to honor another alum with a Distinguished Alumni Award in 2018. This time it was Michael J. Finkes BS 1973, MS 1978 and last year it was Gary S. Jacob BS 1969. These awards are extremely competitive and it is not easy to make a case for a very successful industrial chemist with many discoveries, patents, etc. in competition with a politician, a banker, lawyer, etc. However in spite of having submitted several unsuccessful nominations we have seen great success, relative to our colleagues in other fields. The department has seen the second highest number of such awards of any single department, after Political Science. The listing of the chemistry recipients may be found adjacent and with more details on the department website under Alumni. If you think we should nominate a former classmate, or even yourself, please contact the editor.

We continue to attract some outstanding students. They tend to find good positions on graduation and several go on to graduate or professional school. I was proud to describe the diverse group of students going on the do PhD degrees at top schools and I am also pleased to note that we have seen an upturn in admissions to medical school. That list includes 7 or 8 students in the last couple of years, most of them from the biochem./biotech. degree program but the list did include one BS in chemistry.

The campus continues to change. We have a new Dean, Andrew Kersten, a new Graduate Dean Teresa Thiele and the Provost Kristin Sobolik came early last summer. The campus looks different. A new Business building can be seen along West Drive, the Science Complex now resembles a large cross from above and of course most of the interior is different. East Drive is dominated by the Wellness and Recreation Center and the Millennium Student Center and Natural Bridge Road, east of the north campus is now flanked by the new Optometry Patient Care building on the south side and of course west of

UMSL and the event *Fifty Years of Great Chem-* that on the north side is the Science Com*istry* attracted 125 attendees, We continued to plex comprising Benton Hall, Stadler Hall, the honor retired faculty members in 2015 when Research Wing, the William Clay Center for about 70 alumni and friends honored Jane Miller Nanoscience and the Teaching and Learning and Hal Harris for their mentoring of future sci-building, aka the new science teaching labs.

Finally thanks to all those who maintain connect with me or one of my colleagues. If you do not, we would love to hear from you Our alumni have made very important contributions to the area economy and elsewhere. You are highly thought of and we never tire of hearing how well you have done. Describing your success enhances the reputation of the department, the institution and your degrees! UMSL and its chemistry program have both done very well for the past 55 years and we can all be very proud.

Of course we thank all of those of you who have chosen to support us. Such support is almost all directed at student scholarships and awards. We have a relatively successful program of awarding scholarships to our students and rewarding them for their successes. This would not be possible but for the generosity shown by many of you. I believe we distribute more than \$40K in scholarships, etc. annually. This is unsurpassed among the individual departments on campus. I repeat myself here in saying that this would not be possible without your generosity.

Come and see us, either to one of the reunions we hold or just to visit. For those of you who graduated prior to the 1980s, there are very few of the faculty members who taught you who are still here. Jim Chickos is the only one who has not retired and Drs Corey, Garin, Hal Harris, Winter and the editor are the only ones seen regularly in the department. We hope to see some of you on the campus and we wish you all the very best for 2018.

Chemistry Winners of the UMSL Alumni Association Distinguished Alumni Award

1988 Raymond F. Novak, BS 1968

1991 Harold R. Messler, BS 1970

1994 Harry W. Orf, BS 1971

2001 Dawn L. Shiang, BA 1983, PhD 1987

2002 Douglas G. Nuelle, BS 1969

2003 Kim S. Gorman, BA 1992

2004 Sanford A. Asher, BA 1971

2009 Roberta I. Farrell, BS 1975

2014 William R. Shiang, BS 1984, PhD 1987

2014 Barbara W. Brown, BA 1984

2017 Gary S. Jacob, BS 1969

2018 Michael J. Finkes, BS 1973, MS 1978



Professor Jim O'Brien who will be completing 30 years on the campus at the end of 2018.

Thanks to our Generous Contributors 2018

Below we list the individuals, chemistry alumni and friends, and matching employers, who made contributions to the department processed through December 15, 2018. We are most grateful for your support. Recent gifts will appear next year.

Ron and Sandra Ackerman

ARC, Inc.

Philip V. Asaro

Sandy Asher and Nancy Day

Pat and Lol Barton

Katherine Block

Paul and Carol Bostick

Andrew Breite

Edward H. Brunngraber

Erich H. Brunngraber

Vincent and Sarah Chang

Dennis and Cathie Clapper

Joyce Corey

Todd and Kathleen Crawford

Edith Csiki-Fejer

Cristina De Meo and Alexei Demchenko

Donna and Michael Dietrich

Sean and Renee Dingman

Dow Chemical Company Foundation

Shiyue Fang

Marjorie and Bernard Feldman

Linda and Michael Finkes

Lee and Judy Gori

Jim and Pam Grant

Great Rivers Confluence Foundation

Yana L. and Brian Grimmond

Surendra Gupta

Mary and Hal Harris

Jeanne and Mike Hasser

Ginnie and Ray Houserman

Gary and Kathy Jacob

Patricia L. Jones

Shahin and Brian Keller

John and Judith Kolb

Steve and Mary Kolodziej

Shelly and Sangeeta Kumar

Karen and John Linck

Justin Linsman

Mallinckrodt Pharmaceuticals

Sal and Michele Manganelli

Kenneth Mares

Aaron McCoy

Persis and Minoo Mehta

Harold and Carolyn Messler

Steve and Joyce Mestemacher

Sharon Moran

Justin Mueller

Steve and Kimberly Mumm

Rita and Victor Nelson

Rita and Victor Nelson Don and Joan O'Neal

Gerald Pancio

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Vinny and Patricia Rapini

Andrew Ratermann

Charlotte and Bill Ridley

Vicki and Bruce Ritts

Karl and Laurie Seper

Dolly and Bill Shiang

Greg and Carol Steiner

Keith Stine

Lynda McDowell and Daniel Studelska

TAP Pharmaceutical

Evan Timmens

Dan and Karen Tucker

Joan and Ron Twillman

Shana Usery

Angelo Vangel

Qingzheng Wang

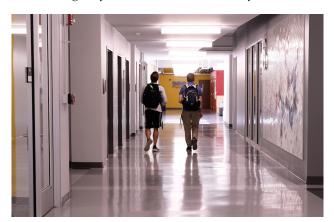
James Wheatley

ACKNOWLEDGMENTS

I wish to thank Eike Bauer, and Jim O'Brien, and August Jennewein, the University photographer, for the photographs and *Patricia Barton* BA 1978 for proofreading.



The classroom currently used for the Chemistry Colloquium B-103 was originally Benton 120 and more recently B-102.



View looking west on the third floor of Benton Hall. The department office is on the immediate left and the students are passing the elevators.

UMSL Chemistry Alumni Fund Yes I work for a matching gift corporation. Enclosed is my contribution of \$ I would like information about bequests to the University. Designation for funds: Chemistry Department Endowment Eugene and Joyce Corey Scholarship Fund E.G. Brunngraber Fellowship (wadar in the second sec E.G. Brunngraber Fellowship (undergraduate research) Charles W. Armbruster Scholarship Lawrence Barton Scholarship M. Thomas Jones Memorial Fund (graduate student support) Rudolph Ernst K. Winter Graduate Fellowship Fund Barbara Willis Brown Women in Chemistry Scholarship Outstanding GTA Award Dedicated to the Memory of Jack L. Coombs Unrestricted Contact me; I have ideas for a new scholarship/fellowship or other fund I have included the University in my estate plan Please make check payable to UMSL. "Chemistry Alumni Fund" and return to: Lawrence Barton, Professor Emeritus Department of Chemistry and Biochemistry University of Missouri-St. Louis St. Louis, MO 63121 Or contribute online at the UMSL website by clicking GIVE on the upper right of the site. Select the option "other" and type in the designation (eg. Chemistry Department Endowment). **INFORMATION UPDATE SPRING 2019** 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 ___ Current mailing address: Employer: Current Position: Recent Activities and Other News: News of other alumni:

FALL 2018

Please join the UMSL
Chemistry Alumni
Group on Linkedin for
announcements of
alumni activities and
other department
events