

UMSL CHEMIST



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Chairman's Message (Gordon K. Anderson)

As we near the end of 2002, these are certainly interesting times at the University of Missouri-St. Louis! In September, Chancellor Blanche Touhill announced her intention to retire, and she will do so at the end of the year. Dr. Donald Driemeier, former Dean of the School of Business, and currently Deputy to the Chancellor, will become Interim Chancellor in January. As you have probably heard, the UM System will also have a new President in January, Dr. Elson Floyd, President of the University of Western Michigan, taking over from retiring President Manuel Pacheco in January.

Like many other states, the state of Missouri currently has serious budgetary difficulties. As a state-supported university, the financial condition of the University of Missouri is tied directly to the state budget, so this is a tough time for us all. The university suffered a significant withholding of funds at the end of the last fiscal year, and this year's budget is 10% below last year's. We are anticipating another withholding of state funds this year. This has created a sense of anxiety on the campus. The university has addressed to shortfall by increasing student fees, and by offering another early retirement incentive program. Although a number of people were eligible for this program, thankfully no one in the Department of Chemistry and Biochemistry opted to retire. One outcome of a retirement in Biology is that we have combined our two storerooms, so Donna Kramer now runs (just as effectively) a combined science storeroom.

Once again, renovation of the chemistry teaching labs in Benton Hall tops the list of proposed campus construction projects, but with the current lack of state funds we are not expecting money to be made available for this much-needed renovation anytime soon. Although no work has been done on the laboratories themselves, the department has invested in a number of pieces of equipment for teaching and research. In 2001 we upgraded the old Varian XL-300 to a state-of-the-art Bruker Avance spectrometer, and we have purchased new FT-IR and fluorescence spectrometers. We are about to install a new polarimeter and a MALDI mass spectrometer. We will be seeking funds to add another X-ray diffractometer and another NMR spectrometer in the near future.

As more of our seminar speakers choose to make Powerpoint presentations, we have decided to invest some of the funds provided by our alumni in a computer and ceiling-mounted projector for our seminar room. These will be installed over the winter break and will be ready for use next semester. We really

appreciate your investments in the department, and this will be a very tangible reminder to all of us of your generosity.

As I anticipated last time, Drs. Alexei Demchenko and Cindy Dupureur joined the department in fall 2001. They have fitted in very well, and they both already have productive research groups. Dr. Tony Mannino has become our regular evening organic chemistry professor, and this semester Dr. John Maga was appointed as an adjunct professor to teach biochemistry.

Many of the classrooms across campus are now equipped with instructor computer stations, and many of us make use of these. Most of us also make use of the on-line My Gateway system, where activities range from posting class material and announcements, to mandatory on-line quizzes and chat rooms. We plan to teach an on-line course for non-science majors for the first time next semester. A new computer classroom, equipped with about 20 laptop computers, was opened in Benton Hall this fall. It occupies the space previously used as a graduate student lounge and Physics TA offices. We have relocated our graduate students to a much nicer space adjacent to the NMR lab.



Dr. Anderson presents John Kozlowski with the 2001-02 Outstanding Master's Student Award

We continue to interact with members of the Chemistry Department at the University of the Western Cape. Drs. Hal Harris and Vally D'Souza visited South Africa this past summer, and my former graduate student, Dr. Malcolm Arendse, spent six weeks here during the fall. We had two more exchange students from Heriot Watt University in Scotland last year, and our first

UMSL chemistry student is spending this year in Edinburgh. Recruiting students to the campus, and to chemistry, is something we continue to work on. Members of the faculty are involved in a number of recruiting activities, and at a number of levels. Done Becker and members of the Chemistry Club were out recently doing demonstrations for pre-school kids in the Riverview district. You have to start recruiting early these days! One way you can help the department is to direct students our way. We find that many potential students do not know much about UMSL and, as alumni; we hope you had a positive experience here. Your advice about attending UMSL may make all the difference.

As usual, please feel free to drop by the department. We'd be happy to show you some of the changes that have taken place. Keep us informed of your whereabouts, and please let us know if there is any way in which we can help you

Editor's Message (Lawrence Barton)

The past 18 months clearly have not been good ones for the University, our state or our country. However, in writing the UMSL CHEMIST about successes and life stories of our former students, I see that there is much to be thankful for. On the other hand, an interesting and sometimes disturbing feature of your existence is the changing face of the corporate world. We have former students scattered all over the US. You work for a range of companies but the range has diminished in recent times. Thus those of you with Monsanto, G. D. Searle, Upjohn, Pharmacia, Pfizer and Park-Davis, among others, now work for the same company. Similarly, former students at Dow Chemical and Union Carbide report to the same bosses. Solutia came into existence and many spin-off companies were established, from both Monsanto and Solutia, so it is increasingly more difficult to keep track of those of you who are still employed. Anyway we hope that you are employed and doing well. I keep in touch with many of you and am able to point former students, in some cases, to job opportunities so please let me know if you are seeking an employee or if you are seeking employment.

Again we wrestle with the question of how best to serve our alumni. Obviously keeping them informed by publishing a newsletter answers part of that question, but there are still some gaps. Should we establish a chapter of the Alumni Association? The answer has been no in the past but the Alumni Association would still like to see that. If we were to establish a chapter, then we would need volunteers to do much of the work. Should we run more alumni get-togethers? Receptions have not been very popular in the recent past so we wonder if you have any suggestions. Anyway, what we would like to hear from you is what you would like from us.

One of the most pleasing features of the job of a university professor, or indeed any teacher, is to hear of the successes of former students. It would be impossible to describe all the serendipitous instances when mention has been made of former students, but I will make note of two events. One was the Symposium on Anion Receptors I attended at the ACS Midwest Regional Meeting in Lawrence, Kansas in October. Brad Smith of the University of Notre Dame extolled the virtues of colleague **Dr. Alicia M. Beatty** (BS. 1989) and Dr. Ben Hay, of the Pacific Northwest National Laboratory, acknowledged the work and

support of **Dr. Greg Lumetta** (BS 1982, Ph.D. 1987). The other instance was the recent seminar by **Dr. Steve Kolodziej** (BS 1987, Ph.D.) here at UM-St. Louis in December when he acknowledged the fine work of **H. Pete Kleine** (BS 1979) and **Mark Nagy** (MS 2001). Similar such instances are to be found elsewhere in this newsletter.

The campus continues to change its face as new parking structures appear, new road systems are developed and the Performing Arts Center nears completion. The entrance to the campus from the north is quite inconvenient at the moment but we understand that in the long term it will be much improved. The administration of the campus and the system is changing rapidly. Both President Pacheco and Chancellor Touhill are taking advantage of the early retirement option recently made available to all eligible University employees. Thus there is concern about how these positions will be filled. The faculty as a whole has not received other changes in the UM-St. Louis administration very well. The good news is that no one in the chemistry department chose to take early retirement and now we wait to see what happens as a consequence of the major budget cuts we have seen this past year. The financial state of the University of Missouri mirrors that of the state and the nation. We have seen massive cuts to programs, faculty numbers drop and, as a consequence, the number of course sections offered has also dropped. Student fees have been raised and on top of that a surcharge was imposed for this year. We await the governor's budget message in the New Year when we fear additional budget cuts will likely be imposed.

The message this year comes with an apology. In the listing of contributors last year, we started by naming all those individuals with the designation "Dr" before their names. Then we listed others. This was the way I received the list from the Development Office. I can honestly say that I did not notice this feature and that was the way the list appeared. August 2001 was a particularly hectic and personally difficult time for my family,



Doug. Nuelle presenting the 2002 Distinguished Alumni

and me, and my goal was to get out the UMSL CHEMIST, upon which I had worked for weeks. Some of you were offended by the way the listing was put together and for this I apologize. On the other hand, I thank all of you who contributed to the department. A section at the end of this newsletter identifies most of the students who benefit from scholarships, financial aid, etc., made possible by your contributions during the past year. Also at the end, in the Section "How you can help the department" we describe some suggestions of a political nature that might not be obvious to you.

As we describe therein, the St. Louis campus has not been treated as well as we believe it ought to have been treated by the UM System administration and I expand on that theme in that section. I spoke about this in my August Commencement Address and cite from the address at the end of this newsletter.

Anyway, as usual we wish all the best in your careers and your personal lives.

Alumni Information

1969

Joseph P. Bono, BA, was with Harold Messler (BA 1970) in Atlanta in early spring. We hear that Joe had traveled to Afghanistan and Pakistan, just prior to that time. Joe's oldest son was to be married in May in Paris and to return to take up residence and work at the Lawrence Livermore National Laboratory.

Harry Koster, BS, works at *Spectrum Brands* in Earth City. We heard about this from a current student (Rachel Hercules, BA 2001) who works at the same location. The editor recalls Harry's undergraduate seminar based on research he did at Washington University Medical School with Dr. Kathleen Smith, who directed a project in schizophrenia research. He was there throughout his undergraduate period, from 1965 to 1969, and then worked for Scientific Associates from 1969 to 1971 after which he joined the Schultz Company (now Spectrum Brands) and has been there ever since. He tells us he has a wonderful wife of 27 years, Della Frances, who is working on her degree in social work and they have five grown children and seven grandchildren.

Tim Miller, BA, who had been with Ralston Purina for many years, has been doing consulting work. A recent assignment involved his serving as Acting Plant Manager, York, PA for Manna Pro Corp. of St Louis. In January he left the York plant and moved to the Circleville, Ohio, facility where he was in the process of closing this plant and coordinating the merging of operations with another company at another location. What was originally a 6-8 week project was to last until the end of this 2002, nearly 2 years.

Douglas G. Nuelle, BS, gave the 2002 *Distinguished Alumni Lecture* in May and also received a *Distinguished Alumni Award* at Founders Day on Thursday, September 12. Doug graduated with honors from Washington University School of Medicine, served a surgical internship at Washington University, followed by a two-year stint in the US Navy and a residency at the Willis C. Campbell Clinic in Memphis, TN., prior to establishing a successful 20-year practice in Port Charlotte, Florida, where he was President of Charlotte Orthopedic Clinic. His career includes being the first in the world to perform arthroscopic surgery of the Temporal Mandibular Joint (TMJ). He also holds patents on devices relating to TMJ treatment and developed another device to assist surgeons in quantifying the soft tissue tension during total knee arthroplasty. In January 2000 he moved to the mountains of North Georgia where he is the only orthopedic surgeon within a radius of 30 miles. He is currently Chief of Orthopedics at the Fannin Regional Hospital in Blue Ridge, Georgia.

James Reilly, BS contacted us recently from Lexington, MO., where he was beginning his 30th year of teaching chemistry at Wentworth Military Academy. Jim received a MS degree from Washington University following his UM-St. Louis degree.

1970

John R Kolb, BS, who holds a Ph.D. degree from Northwestern University, retired early in 2001 from the Lawrence Livermore National Laboratory where he had been for more than 25 years. John and his wife Judy now live on five acres in the Sierra Nevada foothills. Three successful children and five grandchildren make life very full as does occasional consulting for technology/engineering firms, volunteer work teaching science to grade school children and volunteer work for the Tuolumne County Sheriff's Department.

Harold R. Messler, BS, was featured on the Discovery Channel in February in connection with his role in the prosecution of Dr. Glennon Engleman, the serial murderer/dentist. Harold is the Chief Criminalist with the St. Louis Police Department and he provided key evidence in the case.

1971

Ronald E. Ackerman, BA, (MS 1980) was featured in Chemical and Engineering news in December 2002. We quote from the article. "Ronald Ackerman has joined Environmental Technologies in St. Louis, as chief chemist. Formerly employed by Monsanto, Ackerman has developed or validated more than 60 industrial hygiene methods for sampling and analysis. He is an active member of the American Industrial Hygiene Association and past secretary of its Sampling & Analysis Committee". A photograph and acknowledgment that Ron received degrees from UM-St. Louis were also included.

Sandy Asher, BA, is scheduled to give talks at the 2003 *Pittsburgh Conference* in Orlando in March. One is in the session *Nanoparticle Probes for the Life Sciences* and the other in a session *Detection of Terrorist Weapons: Chemical Weapons*. Sandy is Professor of Chemistry at the University of Pittsburgh.

Dorothy Greco, BS, was at the recent scholarship reception on the campus. Dorothy and her husband **Al Greco** (BS Biology 1971) have endowed the *William and Erma Cooke Memorial Scholarship*. (see later) several years ago. We are sad to note that Dorothy's mother Erma Cooke passed away in November 2001.

PLEASE NOTE THE FOLLOWING DATES: ON APRIL 17, PROFESSOR DON TILLEY, UNIVERSITY OF CALIFORNIA, BERKELEY, WILL PRESENT *THE SIXTH ANNUAL ROBERT W. MURRAY LECTURE*. ON MAY 5, JERRY RONECKER, BS 1982, WILL PRESENT *THE FIFTEENTH ANNUAL DISTINGUISHED ALUMNI LECTURE*. PLEASE CONTACT THE DEPARTMENT FOR DETAILS (516-5311) OR THE WEBSITE: <http://www.umsl.edu/chemistry/>.

1972

Kenneth O. Henderson, BS, has been Vice President Technology with the Cannon Instrument Company in State College, PA, since 1998. He had previously been with Castrol, North America, and Ethyl Petroleum Additives Division, the

latter in St. Louis. The ASTM committee on Petroleum Products and Lubricants recently cited him for "selfless and tireless contributions towards standards development and improving standards developments processes". This was when Ken was awarded the ASTM Award of Merit for his work.

1973

Patricia (Mauler) Armbruster, BS, and husband **David Armbruster** BS, moved to northern Illinois in Aug 2001 after living in Dallas/Ft. Worth for 6 years. David is a Clinical Affairs Manager for Abbott Diagnostics Division in Abbott Park, IL (North Chicago). He has his PhD in Clinical Chemistry and is a Diplomate of the American Board of Clinical Chemistry. He holds an MA degree from Rice University, and a Ph.D. degree from the Medical College of Virginia. Pat is a high school Chemistry teacher (Advanced Placement and Chemistry I) at Lake Zurich High School, Lake Zurich, IL. She was halfway through a Masters in Chemistry at North Texas State University prior to the move. She plans on continuing her degree next summer of fall. They have two adult children. Geoff lives in Texarkana, AR and Gwen lives in Illinois.

1975

Daniel C. Breyfogle, BS, is Vice President for Research and Development at the Butcher Company in Marleborough, Massachusetts. About a year ago he returned to R & D after a nine-year sabbatical in Technical Service and Marketing. The company was sold two years ago to its major competitor, Johnson's Wax.

Daniel Henton, BS, last October received the "Excellence in Science" award from Michigan Scientists' Organization at Dow Chemical Co. in Midland, MI. This is the highest honor that the scientists at Dow can bestow upon a Dow researcher. The award was bestowed for his work on fexofenadine and intermediates leading to fexofenadine (the active ingredient in *Allegra*, the non-sedating antihistamine). This follows the Kramer Award he received four years ago from Dow's Developmental Scientists' Organization, making him one of the few people at Dow to receive both awards. Dan holds a Ph.D. degree from the Ohio State University. His oldest daughter is in her third year at the Univ. of Michigan, working on a dual major in Computer Engineering and Industrial Design (Art) and getting "A"s and "B"s. His second daughter is a sophomore in high school, getting straight "A"s and is on the Pom Pon team and son Nicky is in 8th grade, and is taking 10th grade Geometry at the high school, along with 9th grade Spanish (also straight "A"s).

Steven Villasenor, BS, who had been with Mallinckrodt Inc. in St. Louis for many years, is now at Solvay Pharmaceutical in Atlanta GA running an analytical chemistry group.

1976

Robert L. Dittrich, BS, was in the department this summer. He is with Nestle-Purina Pet Care, formerly Ralston-Purina in St. Louis. He is a Research Scientist and doing analytical chemistry. He lives in Columbia, IL.

1977

Cheryl McClain Shea, BA, was named recipient of the 2001 Silvia Ashworth Scholarship Award, an award earmarked for single mothers attending Chiropractic College. Cheryl is a student at Logan Chiropractic College and has two children. This is a national award and Cheryl competed with students from around the country. Cheryl is also President of Creative Marketing Solutions, a full service marketing and advertising agency in Shrewsbury, MO. She also holds a MBA degree from Washington University.

1978

Pauline Bellavance, Ph.D., retired from Fontbonne University this year and moved to Greenville, South Carolina, with husband Mike who has a new position there. She had a part time summer position teaching general chemistry at Spartanburg Methodist College. More recently she was hired by Greenville Technical College Charter High School. This high school is part of the public school district, however, it emphasizes mastery learning, has a dress code, and is very strict about discipline. She likes her new job and is teaching 5 sections of physics to mostly freshman. She doesn't see much difference between the HS students and the students she taught at Fontbonne.

Russell W Moutray, BS, (MS 1989), is Analytical Service Manager with Spectrum Brands (formerly Chemsico).

1979

Bruce Ritts, BS, (MS 1983), is Treasurer of the St. Louis Section of the American Chemical Society. Bruce is with Steris Corporation in St. Louis.

1980

Debora Bergstrom, BS, who had been with Dow-Corning in Midland, MI, has taken a leadership role in technology development and commercialization with a new company, Dendritic Nanotechnologies Limited, based in Mount Pleasant, MI. It is a start-up based on a partnership between Starpharma of Victoria, Australia, and a small group of people working with Don Tomalia in Mt. Pleasant. They are looking at pharmaceutical applications of dendrimers. She reports that her family is doing well. Of her three daughters, Christina is a third year chemistry student at Michigan Tech, and doing well, Stephanie is a freshman at Northern Michigan University pursuing international studies and Allison is in 7th grade and is heavily into fencing. She also does very well in school, enjoys horseback riding and plays the viola.

Donna G. Friedman, Ph.D., who is Professor of Chemistry at the St. Louis Community College at Florissant Valley, has been selected to receive the 2001 Distinguished Service Award of the St. Louis Section of the American Chemical Society. Donna is a former Section Treasurer and Chair and has been involved in many activities of the Section for many years. She also serves on the national society committee on Membership Affairs.

Mark Leiber, BS, (MS 1986), won a share in the prestigious Edgar M. Queeny Award for Science and Technology, for 2001,

from the Monsanto Company in St. Louis. Mark is a Senior Research Chemist, Chemistry Process Technology at Monsanto. He is a co-inventor on several of the new catalyst patent applications and was the first to conceive and demonstrate the feasibility of key parts of the new technology. His laboratory ran more than 4000 experiments to provide much of the detailed experimental data needed for commercialization. He also was instrumental in developing the operating strategy for the commercial process. There were five recipients of the award which was made for their discovery, development, and successful implementation of a new catalyst technology for the manufacture of glyphosate, the active ingredient in Monsanto's Roundup herbicide. The Queeny Award was established in 1980 to recognize the development of significant and unique proprietary technology that has resulted in a commercial success, or in a product or process where the potential for commercial success can be clearly identified. Mark also had his first patent application issued this year. His work involves collaboration with scientists at Purdue University and the European Commission.

1981

Normand DelCastillo, BS, is a consultant with World Wide Technologies Consulting, in Maryland Heights, MO. Norm holds a BSBA degree in finance also from UM-St. Louis and a MBA degree from Lindenwood University. He was a small business owner for several years prior to his current position and we hear that he has been very successful of late.



Ted Windsor in the chemistry office during a celebration of his receipt of the Chancellor's Award for Staff excellence,

Michael A. Hauser, BS, (MS 1986) has been teaching chemistry at St. Louis Community College at Meramec since 1992 where he is Associate Professor of Chemistry. He recently was honored with an Emerson Excellence in Teaching Award. These awards are given annually in all the school districts and colleges in the state. Mike is the first chemist to win such an award at Meramec where a campus-wide competition selects the awardee from the more than 150 faculty

members. He received the award, a crystal apple, at a banquet at the Ritz-Carleton Hotel in November. Mike worked as a research chemist for eleven years at Monsanto Company in St. Louis following graduation. His work there involved the scale-up of synthetic reactions into industrial processes. He also developed analytical methodology for monitoring chemical reactions. His wife Lynn is a Registered Nurse, and they have two small children as well as two cats and a dog.

Shailendra Kumar, Ph.D., sent us his usual Holiday card last year. His wife Sangeeta received tenure at her college. Children Himani (9) and Sushane (6) are growing fast and keeping their parents busy. Shelly is Professor of Chemistry at Governor's State University near Chicago where he recently developed an on-line organic chemistry course on the Internet.

1982

Dennis Parazak, BS, (MS 1987, Ph.D 1995), who is with Hewlett-Packard, moved to San Diego from Corvallis, Oregon a little over a year and a half ago. Son Eric just turned five and started kindergarten. At HP, he is working on inks for commercial and office printers. He worked on the HP Business Inkjet 2200 series for office applications and more recently the HP Color Inkjet Printer cp1160 series. Dennis now has 6 HP patents. We recall that Dennis had several publications from his work when he was with Petrolite in St. Louis.

Jerry Ronecker, BS, is scheduled to give the 2003 *Distinguished Alumni Lecture* next May. He worked at Monsanto after graduation and then left to go to Law School at Saint Louis University, graduating in 1990. He is now an attorney practicing environmental toxic tort law and product liability. He is a partner in the St. Louis law firm, Husch, Ampersand, Eppenberger. He has been with the firm since September 1990. He says that a week doesn't go by without his using his chemistry. Much of his work is Super-Fund type work.

Dr. Karl Seper, BS, moved from Occidental Chemical Co. two years ago and joined Rohm and Haas Company Borohydride and Magnesium Chemicals in Grand Rapids, Michigan.

1983

Shankar Rananavare, Ph.D., was featured in an article in *Small Times*, a Portland, Oregon, site describing his research on nanoparticles and catalysis. The feature was about flat planar displays, which may be used to indicate prices in supermarkets. Shankar has a joint appointment at Portland State University and the Oregon Health and Science University.

Steve Szymczak, BA, is Director of Sales and Marketing for BJ Unichem Chemical Sales in the Houston area where he and his wife Tricia have been for 9 years. Steve moved to the sales and marketing side of the business after several years in technical service. Since joining Petrolite in St. Louis, Steve has spent 18 years with 3 companies in the oilfield specialty chemical business. The Szymczaks have 6 children, ages 8 to 22.

Mark Viler, BS, continued as Laboratory Director of the St. Louis Health Department as it looked for a new Department Director. His job has become even more important as the department deals with such concerns as Anthrax and bioterrorism.

1984

William R. Shiang, BA (Ph.D., 1988), gave a Plenary Lecture at the 10th IUPAC Conference on Crop Protection in August. Bill tells us that he is completely out of the lab now at Dow Chemical in Midland, MI. and is currently a Global Supply Chain Leader. He is the first chemist at Dow to hold such a position that usually goes to an engineer. Bill was on the schedule to present a chemistry colloquium here at UM-St. Louis but he had to cancel because of a last minute schedule conflict.

1985

Rajiv Banavali, Ph.D., became the Global R&D Director for the Inorganic and Specialty Solutions business unit of Rohm and Haas in Philadelphia. He is a member of the ISS leadership team and responsible for R&D activities for borohydride based businesses, Road Construction Chemicals, and Specialty Magnesium, in addition to his current responsibilities which include Primenes and Dyes and Markers. The borohydride business is that of the former Venton/Morton which Rohm and Haas purchased. Rajiv began his career with Rohm and Haas in 1987 at the Houston plant as a process chemist in the Tritons and Primenes area. In 1992 he became the Manager of the R&D for Primenes and in 2000 took on the additional responsibilities for the Dyes and Markers businesses. After graduation he was a postdoc at Texas Christain University with Paul Bartlett. He and his wife Marysusan, who also works for Rohm & Haas, moved into a new home in Philadelphia in October 2001.

Sandra Wisneski, BS, who is married to **Richard Wisneski**, BA, 1986, is a Research Manager at Mallinckrodt Inc.'s St. Louis Plant. They are blessed a 5-year old daughter Sarah who prefers to be addressed as "Princess Sarah". Rich is a Plant Support Chemist at the same facility and they are both grateful for the career preparation and advancement opportunities afforded by their UM-St. Louis Chemistry degrees

1987

Dorothea Bean, M.S., has been teaching chemistry at Ursuline Academy in St. Louis since 1995. We met recently at the St. Louis Section, ACS Continuity Dinner. She attended the Flynn Workshop held in the department during the summer, 2002. Also during the summer of 2002, she was one of four teachers selected to serve as "Teacher Fellows" at Pharmacia as she worked at the Chesterfield Campus in "Drug Discovery" doing enzyme kinetics. Dorothea put us in touch with her sister **Pat (Mauler) Armbruster** and Pat's husband, **David Armbruster**, both of whom received BS degrees in 1973. (see 1973).

Steve Kolodziej, BA (Ph.D. 1993), is with Pharmacia at the Chesterfield Village site and we are please to learn that he was promoted to the Fellows Program there. He tells us that he runs into other alumni at the Chesterfield site including **R. Keith Webber** (MS 1985), **Jeffery Scholten** (BS 1997, MS 2001), **H. Peter Kleine** (BS 1978, MS 1982), **Matthew Mahoney** (BS 1993), **Mark Nagy** (MS 2001) and **Scott Long** (BS 1992). Other alums that he occasionally encounters include **William Neumann** (Ph.D. 1988), **Kevin J. Koeller** (Ph.D. 1994), **Todd R. Boehlow** (BS 1991, Ph.D. 1997), **Hossein Shabany** (Ph.D. 1998) and former Murray postdoc Megh **Singh**, all at the North Lindbergh site of Pharmacia. He presented a seminar in the department this December titled, "The Use of Parallel Medicinal Chemistry to Optimize Potency and Selectivity of Hydroxamic Acid-Based MMP Inhibitors".

Michael Merriman, BS, is a senior Field Applications Specialist for Applied Biosystems. He was in the department last January.

1988

Joseph Poett, BA, is Associate Professor of Biology at

Southwest Illinois College. Joe was formerly at the USDA Lab in St. Louis where he was a colleague of **Fred Mitchell** (BS 1973) who we now understand has moved to Boston.

1989

James French, BA, (BS 1990) is a laboratory supervisor at PM Resources in Bridgeton, MO. We heard this from **Daniel Coleman** (BA 2000) who is currently in our MS degree program and also working at the same company.

Gary Wester, BA, (MS 1992) is still at Pfizer Inc. in Kansas City as Laboratory Supervisor in the Animal Health Products Division. He was concerned that the plant may be closing and, when we last heard from him, he was exploring other options.

1990

Michael G Meisinger, BA, (MS 1993) is with KV Pharmaceutical Co in St. Louis.

1992

Hongping Ye, Ph.D., who had her own company, *D and J Scientific Inc.* and more recently worked at the Washington University School of medicine, recently began employment at the Division of Pharmaceutical analysis of the Food and Drug Administration in St. Louis.

1993

Christine Maupin, BA, is working at the US Patent Office as a patent examiner in Washington DC. Her area is biotechnology and biochemistry. She received her Ph.D. degree with former colleague Jim Riehl at Michigan Technological University.

Michael W Schreiner, BS, is at KV Pharmaceutical Co. in St. Louis

1994

Sean Dingman, BS, who had been a Senior Research Chemist at Astaris, has accepted a full time position with AP Materials based in St. Louis. He left Astaris in February and immediately began his new position. He is responsible for process chemistry around AP Materials patented Sodium Flame Encapsulated (SFE) materials. Sean received a Ph.D. degree with Bill Buhro at Washington University.

Mohammed Shaharuzzaman, MS (PhD 1996), is in Los Angeles working for NHK Laboratories, a pharmaceutical company. He is Director of Quality Control. He worked with Jim Chickos at UMSL and after graduation, he and his family moved to Canada where he did an MS in Chemical Engineering degree at the University of British Columbia.

Erik C. Wilson BA, met Dr. Hal Harris recently in St. Louis. Erik is Vice President of American Water Treatment, Inc. a company that sells equipment and chemicals and provides service to customers.

1995

Hong Fang, Ph.D., who completed her Ph.D. degree with Dr. Barton, just had the eleventh and last paper associated with her thesis work published in the *Journal of the American Chemical Society*. She is now a Senior Computational Chemist for R.O. W. Sciences, at the National Center for Toxicological Research (NCTR) Food and Drug Administration (FDA) in Jefferson, AR. She has been busy with new technologies including bioinformatics, chemoinformatics, microarrays and proteomics. Every thing is new and exciting to her. Daughter Lillian is nine years old now. She takes Chinese, dance, music and karate lessons and it really keeps Hong and husband Weida busy. Weida Tong, a former postdoc with both Drs. D'Souza and Welsh, has a new assignment as Director of the new Center for Toxicoinformatics in NCTR.

Michael Groaning BA (MS 1997), completed a postdoctoral Fellowship at the ETH in Zurich, Switzerland, and has just taken a position as a Scientist at Hoffmann-La Roche Ltd, Pharmaceutical Division, Discovery Chemistry, in Basel, Switzerland. Mike holds a Ph.D. degree from Colorado State University where he worked with Professor Al Meyers.

Kevin McHugh, BA, who was with KV Pharmaceutical in St. Louis for some time, is now with Ultimate Electronics in St. Louis, according to one of his former KV colleagues

Binh V. Lam, BS, who had been with the Edward D. Jones Company in St. Louis, is now with SBC, also in St. Louis, working as a programmer. He completed a master's degree in Management Information Systems, at UM-St. Louis in 2001.

Michael Pasioka, BS, was with KV Pharmaceutical Co. in St. Louis and was about to visit Jonathan Bould and his girlfriend in Galway Ireland, when we last heard from him. Mike worked as an undergraduate researcher with Dr. Barton when Bould was a postdoc in the lab. Since then Mike left KV and is now with Mallinckrodt in St. Louis and is very pleased with his situation there.

Craig Simon, BA, was scheduled to go to Yale after graduation, where he was accepted in the Medical School. Problems with raising the money to do that resulted in a change of career. He tells us that he uses his chemistry background every day although he is now an attorney. Upon receiving his law degree from Saint Louis University School of Law he accepted a position with Senniger, Powers, Leavitt, & Roedel. It is a large firm in St. Louis that specializes in intellectual property (Patents, Trademarks, and Copyrights) and Antitrust litigation. His practice focuses on the preparation and prosecution of patent applications in the chemical, life sciences and related fields, both in the United States and abroad. Other areas of his practice include the prosecution of unfair competition and antitrust litigation.

Sam Au-Yeung, BA, who did undergraduate research with Keith Stine, completed a Ph. D. degree in Polymer Science and Plastics Engineering in 2001 at the University of Massachusetts Lowell. His thesis work involved the modification of surfaces by incorporating phosphatidylcholine, a phosphatide which is one of

the most common constituents of biological membranes, into the polymeric substrate, using supercritical fluids as the reaction medium. Such surface modified materials can be used in implant applications, since they possess biocompatibility. Since graduation, Sam has been involved in related research in polymer science and developing new materials at Triton Systems, which has been recognized as a an outstanding innovative technology and product company, located in Chelmsford, MA.

1996

Elizabeth A. Amin, BA, (Ph.D 2002), was enjoying her position as Applications Scientist post at Tripos, in the Palo Alto area in California when we saw her recently at the ACS meeting in Boston. She tells us that she has had opportunities to hear about, and occasionally participate in, various types of computational/informatics research at universities, and at pharma, biotech and agricultural companies. She is pleased to be allowed time and resources to keep up with her own metalloprotein research and to continue to work with Profs. Welsh and Harris on the MMP-3 and human serum transferrin projects, but the difficult part is living in the Bay Area since she and her husband really miss life and friends in St. Louis. We heard most recently from Bill Welsh that she and her husband just moved to Minneapolis where he has a new position.



Graduate students John Swearingham, Eric Bruton, Padma Nair and Mesfin Janka at Missouri Inorganic Day, held on campus in May 2002.

Yahia Hamada, MS (Ph.D. 1999), is on the faculty at Wayne State College in Wayne, Nebraska. We met him at the ACS Midwest Regional Meeting in Lawrence, KS, in October 2002. He is enjoying teaching in Wayne. He tells us that the institution serves rural areas from South Dakota, northwest Iowa, and northeast Nebraska. It is a good place in the middle of nowhere.

1997

Kirsten (Talir) Blasé, BS, had been working at Washington University Medical School with Michael Welch but took a year off when her first child Katie was born. She has recently been hired to do high school chemistry tutoring.

Toni De La Cruz, Ph.D., was in the department this fall. After spending four years as a postdoc at Washington University School of Medicine she moved to Creighton University as a lecturer in organic chemistry. She tells us that surviving the first

year was very enjoyable. She found time to visit Italy this year and intends to go "home" to the Philippines this December.

Susan M. Keenan, BA who did research with Bill Welsh when she was an undergraduate student here, is doing a postdoc with him now in his lab in Piscataway. She is engaged to a former Welsh postdoc Kirk DeLisle who works at Accelrys (same place as **Swati Puri** Ph.D 2001) as an applications specialist in Princeton NJ. Susan received a Ph.D. degree from Washington University School of Medicine.

1998

Jim Gray, BS, is with Wyeth BioPharma, formerly Genetics Institute in St. Louis. He is a Project Manager in Quality Control. He had been working on a graduate degree here but was considering doing either an MBA or a Computer Science degree.

Yana Levchinsky-Grimmond, BS (MS 2000) keeps in touch with us and she and husband **Brian Grimmond** (Ph.D 2000) were in the department this summer. Brian is working on contrasting agents with GE in Schenectady, NY, and was attending the Molecular Imaging conference in August where he ran into **Paul McQuade** (Ph.D. 2000). Yana, who used to work for GE, and now is with *Regeneron Pharmaceuticals* in Rensselaer, NY, went to the International Ion Chromatography meeting at the end September in Baltimore. This summer she and Brian went to see Joyce Corey in Maine, and also to Newport RI the weekend before the Inorganic Chemistry Gordon Conference where they got to spend time with **Janet Wilking** (BA 1985, and a current faculty member here), **Robert Stockland** (Ph.D. 1999) and also saw **Fola Lapido**, a former postdoc with Gordon Anderson and now Associate Professor at the University of Kentucky.

Tammi (Gahimer) Pavelec, Ph.D. 1998 is teaching and administrating at Lindenwood University in St Charles. She started there in the fall of 2000 after teaching at St Charles County Community College as an adjunct instructor following graduation. She and her husband now have two children; the second Nicholas was born in 1999.



Anne (Cafferty) Turnbough (Ph.D.1998) with husband Joe and children Oren and Katie.

Anne Cafferty-Turnbough, Ph.D., is still with InterBio in Houston but Novozymes, a big enzyme company, purchased the firm and they are pressuring her to move to Virginia. She is not sure about that but continues as the Regulatory Affairs Director for the biologicals division. She and husband Joe now have two children, Katie and Oren, who was born last August. Anne was getting ready for a 2-week trip home to see her

parents in Ireland when we heard from her last fall. She loves being a mother and has been helpful in providing information about alumni who don't provide it themselves and for that we are very appreciative.

Isabel Vasconcelos, Ph.D., whose baby we said was a girl, actually had a baby boy, Lucas. Isabel was with the Food and Beverage group of Ecolab but was tired of traveling, and we recently heard that she was looking for another position. In fact Ecolab is a customer of InterBio so she and Ann Cafferty sometimes run in the same circles. Isabel and her husband Luis were in the department this fall.

1999

Michael Bills, BA, is with Proctor and Gamble in Cincinnati. Mike has been in touch with us recently as he works to finish off his BS degree.

Martin Hayes, BS, who is currently a graduate student at MIT, working with Professor Rick Danheiser, was in the department recently with his wife **Antoinette (Morris)** BS Biology. He is in his fourth year and looking forward to graduation.

W. Michael Johnson, BS, is with Wyeth BioPharma Division which is in the industrial park on Natural Bridge Road near the airport. He is in the Raw Materials Division.

Jennifer Moser, BS, continues with Mallinckrodt Inc. in St. Louis where her father **Frank Moser III**, BA 1995, has been for many years.

2000

Donna Andrauskas, Ph.D., is an Applications Scientist with Digilab in Randolph, Massachusetts.

Ricardo Delgado, Ph.D., continues to teach chemistry at Duchesne High School and has recently been teaching a college credit course offered through Saint Louis University that is taken at the high school. This required his certification as an adjunct faculty member at SLU. He was about to start working at St. Charles Community College this fall and was replacing a former student of Chris Spilling, **Vykky Ferrario** (MS 2000). Vykky was working at Duchesne last year, as well as SCCC, and she was leaving due to another pregnancy, so she recommended Rico for the position. Rico enrolled in the Flinn Workshop this summer at UMSL.

Melissa Stuchell, BS, has been in touch with us. She is a graduate student at the University of Utah in the combined Molecular Biology and Biological Chemistry program. She joined Wesley Sundquist's group to study HIV budding. She sent us some details of her project and also some background material. She was starting prelims in Dec. 2001 and was to give her oral defense last January.

Paul Webb, Ph.D., is with the USDA Laboratory in St. Louis where another recent graduate **Jeff Donahue** (Ph.D. 2002) also works.

2001

Gretchen (Hoel) Peck, BS, who had been with Mallinckrodt/Tyco Healthcare in St. Louis, has moved to Pfizer in Groton, Connecticut.

Swati Puri, Ph.D., has a position at Accelrys Inc as an application specialist stationed in San Diego. Accelrys markets the Insight/Discover and Cerius_2 molecular modeling software packages.

Edyta Schranz, MS, and husband Ingo Schranz are now in Grand Forks, North Dakota. We received this message from Ingo recently. "I am sure many of you remember us, the Schranz family, Edyta, Nicole, and me, and may wonder whatever happened to those guys. Well, we left St. Louis one cold January morning, drove over the Mississippi which had ice floating on it, and kept going north until we crossed the Red River which was completely frozen over. I enrolled at the University of North Dakota working on (N-E) chelates, E = O, S, N-R of group 10 as potential SHOP catalysts, and more recently I have switched over to diphosphine ligands containing diazasilaphosphetidine heterocycles. In fact we just had a paper accepted in *Inorganic Chemistry* which will hopefully be published this year. The research gods have definitely been good to me for I am currently writing my dissertation. Edyta was fortunate enough to be hired as a part time teacher at UND so that she has been pretty busy with teaching and taking care of Nicole who had her second birthday party in July. She climbs furniture, and knows phrases in three languages. She really seems to enjoy herself while exploring the world, and taunting her parents. In any case, we are happy here as a family, and look forward to whatever life has in store for us next."

Philippa (Jayatilleke) Wolohan, Ph.D., who completed her Ph.D. degree with Bill Welsh last year, and works at Tripos Inc. in St. Louis, was married to Peter Wolohan in Sri Lanka on the 28th December 2001. Peter, who came here in 1995 to do postdoctoral research with Dr. Welsh, tells us they had a fantastic day and everything went well. Following the wedding they honeymooned in Singapore and toured Sri Lanka. Peter is currently doing postdoctoral research at Washington University with Professor Michael Welch with whom **Paul McQuade** (Ph.D. 2001) and **Abdul Khan** (Ph.D. 1995) are also doing postdoctoral research. We just heard that on December 9, Philippa and Peter became the proud parents of a little girl. Her name is Chloe Angela; she weighed in at 6 lbs 10 oz and was 20 inches long at birth. Philippa says she and Chloe are both doing well.

Wei Zhu, MS, who recently received a MS degree in computer science at UM-St. Louis, has moved to Providence, RI where his wife is enrolled into the cytopathology program at URI. Wei was seeking a job in both the Chemistry and Computer Science areas, and hoped to combine both. Very recently we heard that he had started work as clinical bioanalytical researcher at Sepracor, a pharmaceutical company in Massachusetts. His routine task is bioanalytical method development and validation (mainly HPLC/MS/MS), database design, implementation and maintenance for clinical bioanalytical and pharmacokinetic data sets. It is an office job without involving any laboratory work, however, it gives him the opportunity to utilize his chemistry training and computer skills and he likes the job.

2002

Denise Ainley, BS, is working at Mallinckrodt Inc., in St. Louis.

Lin Yong Mao, Ph.D., who did his degree under the direction of with Keith Stine, completed a Masters degree in chemical informatics at Indiana University (IUPUI). He is now joining the Computational Biochemistry, Biophysics and Biology Group, part of the Environmental Molecular Sciences Laboratory at the Pacific Northwest National Laboratory in Richland, Washington. This location is where **Dennis Wester** (BS 1970) and **Gregg Lumetta** (BS 1982, Ph.D. 1987) have been for several years.

Marjorie Nutt, BS, is working in Earth City at Servern Trent Laboratories. She runs the TOX instrumentation as well as having wet chemistry responsibilities. She enjoys working there but is looking for more challenging assignments.

Viktoriya Sedelkova, BS, has enrolled in the Masters Program in chemistry here. She is with Sigma-Aldrich in St. Louis where she worked during her undergraduate studies here.

Qingzheng Wang, Ph.D., who did his degree with Joyce Corey in organic chemistry, is doing a posdoc with Bob West at the University of Wisconsin. He says that the chemistry in Bob's lab is very exciting and he is working on a very interesting project in which they are trying to develop new polysiloxane-based polymer electrolytes for lithium batteries.

Heng-Hu Zhu, Ph.D., is now doing a postdoctoral fellowship at Washington University Medical School with Dr. Steven Zeng, after a short postdoctoral stint at Saint Louis University Medical School.

Graduates, Aug. 2001 through May 2002

AUGUST 2001

Amy Marie Bartek, BS
Minh Ly, BS
Rachel K. Hercules, BA
Robert L. Otte, BA
Heng-Hu Zhu, Ph.D.

Padma Nair, MS
Jeffrey Scholten, MS
Luis Llamas, MS
Quinzheng Wang, Ph.D.

DECEMBER 2001

Dawn M. Boyd, BA
Elizabeth Amin, Ph.D.
Lin Yong Mao, Ph.D.
Shadonna Shaeffer, Ph.D.

Christy Marie Baker, MS
Janean M. Overbey, BA
Kelly R. Pressler, MS

MAY 2002

Denise Ainley, BS
Bridgett Gordon, MS
Jeffrey Donahue, Ph.D.
David Derrington, MS
Fatima Ghasedi, Ph.D.
Jennifer Van Wyk, MS
Gary Nichols, Ph.D.

Claire Brook, MS
Amie Beerman, BS
Matthew Dunn, BA
Frank Dover, BS
Joshua Fair, BS
Robert Fritchey, BA
Bill Moellering, BA

Kim Nguyen, BS
 Viktoriya Sedelkova, BS
 Debbie (Wyman) Nienwendaal, BS

Marjorie Nutt, BS
 Karen Terry, BA

AUGUST 2002

Lisa Emery, BA
 Joshua D. Miller, BA
 Michael Stevens, BS

Matthew G. Marshall, BA
 James D. Simpson, BA
 Lei Meng, MS



Harold Messler, Dr. Barton, Douglas Nuelle, his wife Tanya, student Joe Ocheski and Dr. Spilling at the 2002 Awards Reception.

The Faculty

Gordon K. Anderson began a second term as department chair in 2001-2. He says that in these difficult financial times, it feels more like fighting a rearguard action than holding a leadership position, but the department will continue to do the things it does well. He served on a campus task force that proposed revisions to the general education guidelines. One result is that all students will need at least one additional science course. Dr. Anderson continues to direct the research of graduate and undergraduate students, and this summer he served as mentor for a high school student and teacher in the annual STARS program. Former graduate student Malcolm **Arendse** is currently visiting from the University of the Western Cape, South Africa, for 6 weeks and he is back in the Anderson lab. He is having a busy fall semester as Ph.D. students **Mesfin Janka** and **Padma Nair** are both writing their dissertations and plan to graduate in January.

Lawrence Barton completed his two-year term as Chair of the Faculty Senate and University Assembly in July. It was a major investment of time, energy and emotion. He met regularly with the Chancellor and Vice Chancellor for Academic Affairs, the Curators, the Chancellor's Cabinet and with countless committees, etc. Highlights of this activity were his testimony at a public hearing of a MO House Subcommittee on Education Appropriations on funding equity among the state's 13 institutions of public higher education, several efforts to get the attention of the St. Louis Post-Dispatch to address more constructively UM-St. Louis campus issues, and efforts to convince the President and Board of Curators to change the formula whereby the UM budget is apportioned among the four campuses. The year of administrative activity was capped by his giving the Commencement Address in August 2002. His research program flourished during the period in spite of these latter distractions. His NSF-funded program in borane chemistry, and a related funded collaboration with Professor J. D. Kennedy at Leeds University in the UK, resulted in nine research papers appearing

since this time last year. Among these are articles in the *Journal of the American Chemical Society*, *Inorganic Chemistry*, *Organometallics*, *Journal of Organometallic Chemistry* and *Collection of Czechoslovakian Chemical Communications*. He also presented invited research papers in Moscow, Russia and Boston this summer. Unfortunately his research group has diminished as grants funds expire and thus new grant submissions are the high priority items on the agenda. He is back to teaching a full load of courses in inorganic chemistry. On the personal front he and Pat were blessed with their fourth grandchild, Samuel Boyce Billman, in September. The parents are younger daughter Hilary who lives with her husband, the writer Jon Billman, in Wyoming.

Donald F. Becker published two papers this past year in *Biochemistry* and *Acta Crystallographica*. He also received a second NIH grant to pursue structural studies on PutA in collaboration with Dr. John Tanner at the University of Missouri-Columbia. Don's research group consists of one postdoctoral associate, four graduate students, and one undergraduate student. In January Don's group was pleased to acquire additional laboratory space in the Research Building. Presently, Don is collaborating with researchers at *Pharmacia* in Chesterfield to develop methods for studying protein-membrane interactions using a surface plasmon resonance instrument at *Pharmacia* (Biacore 3000). To his surprise on his first visit, he met a former student, **Mark Nagy** (M.S., 2001) who now works at *Pharmacia* in an adjacent lab. "It is quite satisfying" Don commented, "to see former UMSL students doing well in their careers." In July, Don and one of his graduate students, **Berevan Baban**, attended the 14th *International Symposium on Flavins and Flavoproteins* at St. John's College of Cambridge University, in England. They presented posters and enjoyed making friendships with flavoprotein enthusiasts from around the world. Berevan will receive a MS degree with thesis this December.

James S. Chickos' graduate student, **Gary Nichols** (BS 1996) received a Ph.D. last summer and is now employed at Mallinckrodt Inc. in St. Louis. Jim spent one month in Europe this summer visiting northern Greece, Romania and former East-Germany (Rostock), attending a IUPAC conference on thermodynamics. Together with postdoctoral fellow Dorothea Hillesheim-Cox, he sponsored two excellent high school students, both of whom were E. Reuben & Gladys Flora Excellence in Research award winners. With Bill Acree of the University of North Texas, the efforts of past Chem 202 students finally made it into press in three review articles in the *Journal of Physical and Chemical Reference Data*, (two have appeared and one is in press). Past Chem 202 students can go to <http://webbook.nist.gov/chemistry/> to find their work acknowledged.

Joyce Y. Corey continues to be very busy teaching, doing research and in campus affairs. This summer she attended the XIIIth *International Symposium on Silicon Chemistry* in Guanajuato, Mexico, which was combined with the 35th *Organosilicon Symposium*. She co-authored two presentations, chaired a session there and also attended meetings of the *International Advisory Board*, of which she is a member. She also co-authored two presentations at the 17th *Annual Missouri Inorganic Day*, here at UM-St. Louis in May. She was very

pleased to receive the President's Award for Research and Creativity (for 2002), particularly so because the work that is being recognized was performed at UM-St. Louis by our undergraduate and graduate students. They deserve a goodly portion of the credit. This is a system-wide award and it is the most prestigious award given for research in the University. She has spent much of the current year working on an update of a review that she and Janet Wilking published in *Chemical Reviews* in early 1999. The update covers abstracted work on reactions of hydrosilanes with transition metal complexes during the period Jan. '99 through Dec. 02. It seems like such a short period of time but covers in excess of 300 references. This year Joyce was also appointed to the Editorial Board of the ACS journal, *Inorganic Chemistry*, and to the Missouri Research Board.

Valerian T. D'Souza who handles the department web site and other computer related assignments, went to Cape Town, South Africa, for a month on a faculty exchange program and taught a course in bioorganic chemistry. He is trying to establish research collaboration with faculty there. He was on the organizing committee of the first SANTA MARIA WORKSHOP ON CHEMISTRY at Santa María del Mar, Havana, Cuba and presented a paper titled "The Synthesis of Artificial Enzymes". This paper will appear in the journal *Supramolecular Chemistry*. His research group is now one graduate student, Jyothi Swamy, who gave her first seminar this fall.

Alexei V. Demchenko, who joined the department in August



Drs Christina De Meo and Alexei Demchenko with
2002 Murray Lecturer J. Fraser Stoddart

2001, has initiated a vigorous research program in the area of synthetic carbohydrate chemistry. His first few months were spent renovating, upgrading and simply cleaning up the Dr. Murray's old laboratory, which opened its doors to welcome first "Glycoworld" members Drs. Nelli Malysheva and Cristina De Meo, as well as an undergraduate researcher Linda Ridenhower. Initial attempts to find a comprehensive methodology for the synthesis of 1,2-*cis*-linked glycosides have appeared to be rather successful. Preliminary results of this promising research program were recently communicated at the *XXIst International Carbohydrate Symposium* (July 2002, Cairns, Australia); lecture title "New methods and strategies for the synthesis of ambiguous 1,2-*cis* glycosides"; Dr. De Meo has also presented a poster at the same meeting. Since he established his research program here, one research article has been published in *Tetrahedron Letters*, and a book chapter with Dr. Boons (UGA) and a review article are currently in press. One of the most recent additions to the

"Glycoworld" is Mr. James Smoot, who has decided to pursue a doctoral degree.

Cynthia M. Dupureur says she has now settled into her laboratory here at UM-St. Louis. With graduate student Lori Bowen, she attended the Midwest Enzyme Conference in October and presented a poster. She published a paper in *Biochemistry* in January and she heard that her NIH grant Restriction Endonuclease Structure and Function from the National Institutes of Health was funded at \$856,680 for four years. UMSL alum **Paul E. Johnson** (BA 2001) joined the lab. Cindy attended a FACEB conference on nucleic acid enzymes in June in Vermont.

Harold H. Harris spent most of May and part of June 2002, at the University of the Western Cape, near Cape Town, South Africa. He was advising the chemistry department there about how to develop and implement technology for teaching chemistry. He feels that South Africa is key to the future of the entire continent, and he finds a sense of purpose amongst the people there, despite the significant challenges of poverty and the AIDS epidemic. He says that the Cape Town area is one of the most beautiful locations in the world, and he hopes to be able to visit there again. UMSL was host to one of the Flinn Scientific Foundation's Summer Chemistry Workshops for high school chemistry teachers. Teachers spent a week in the department, learning about demonstrations, laboratories, and teaching methods from master teachers Bob Becker (Kirkwood High School), Ed Brogie, and Penny Sconzo. Sigma Chemical Company, the St. Louis Section of the American Chemical Society, and UMSL underwrote the workshops locally. Hal Harris led the effort to get the workshops here, and graduate student Elizabeth Hansen was the local site coordinator. Modeling Physics is an important movement in the physics education community that UMSL has been promoting, with the leadership of Hal Harris. Hal directs the UMSL programs that certify teachers in both secondary chemistry and physics. In 2000, a series of Modeling Physics workshops was supported by a grant from the Missouri Coordinating Board for Higher Education; this summer, a Modeling Physics course was offered, with a significant subsidy from the office of Professor Patricia Simmons, Orthwein Professor of Science Education. Hal Harris presented a seminar on September 18, "Exploring the Fringes of Science", to the Chemistry Department of SIUE. The talk was based on materials he has developed for a course he has offered in the UMSL Honors College, in which students learn about how science works by examining a number of "fringe", fraudulent, or controversial issues in science.

Wesley R. Harris has a study funded by the NIH and in April he and Chris Spilling, a collaborator on the grant, attended a meeting of NIH-funded groups working in the area of iron overload, and presented a progress report on the development of new phosphonic acids for iron decorporation. In May he attended and chaired a session of the first annual Midwest Metals Meeting. This is a new regional meeting of research groups interested in metal ions in biological systems. Faculty and students from departments of Chemistry, Biochemistry, and Biology at Midwest universities attended it. Most of the campuses represented were from Missouri, Illinois, and Michigan. Also in May he attended the 2nd MOBIO conference at Lake of the Ozarks. MOBIO is a trade group that is attempting to promote the growth of the Biotech industry in Missouri. The meeting is attended by

representatives from industry, state government, and academia. Dr. Harris attended as a member of the executive committee of the UM Bioinformatics Consortium. He has finished his term on the Research Board. Attended a RB retreat in September as an invited alumnus of the board. He has accepted the Chair of the UM Patent and Licensing Committee, which was not supposed to involve much work but, as fate would have it, he landed right in the middle of a major dispute between the UM Patent Office and two UM faculty-inventors over the distribution of patent income. He currently has two graduate students, Claire Brook and Peng Xiong, and a new postdoc, who just arrived from India.

James J. O'Brien's family news is that daughter Emily is in grade 5 and Christine has started high school at Incarnate Word Academy where she has been on the freshmen Volleyball team. Each will play in select volleyball teams over the next half year for Team St. Louis. Jim is also coaching one of the Team St. Louis teams. Over the 2002 summer the family spent a month in Australia visiting the O'Brien family in Townsville (Queensland) and spending a few days in Sydney. The girls also spent several days on Herron Island, a family resort off the Queensland coast. Workwise, he has been primarily involved using the intracavity laser spectroscopy technique to collect high-resolution spectra of diatomic molecules created in a hollow cathode plasma discharge working in collaboration with Leah O'Brien. They presented material from this research at a Free Radicals conference in Italy last year, at more recent conferences and have published articles from it as well. He is also gearing up to measure more absorption spectra of near-infrared bands of methane in the 600-1000 nm region at methane temperatures between 77 and 150 K (-196 to -123 C) and in addition to measure spectra of ammonia in the same region at low ammonia temperatures as well. These spectra are for use by astronomers engaged in studies of the outer planets and some of their major satellites (e.g., Saturn, Uranus, Neptune, Titan). Methane and ammonia spectra features appear in reflected sunlight spectra from these bodies and provide information about their atmospheres. They have been fortunate in getting federal funding from the National Science Foundation and NASA to support both these research endeavors.

F. Christopher Pigge was awarded tenure this year and promoted to Associate Professor of Chemistry and Biochemistry. He also took over the reins from Professor Winter as Director of Graduate Studies. He graduated his second Ph.D. student - Fatemeh Ghasedi Nichols (BS, 1985, MS, 1994) - in May 2002. During the past year he has published several papers in *Tetrahedron Letters*, *Journal of Organic Chemistry*, and *Current Organic Chemistry*. He now has external grants from both the NIH and the Petroleum Research Fund. He and his wife Beth-Anne had their third child, Christopher Lee Pigge, in mid-December.

Nigam P. Rath is busy with collecting and solving single crystal X-ray structures of compounds synthesized in our department as well as from other universities and laboratories. He attended the Annual meeting of the American Crystallography Association in San Antonio. A recent development is that he has been going to the Advanced Photon Source at the Argonne National Laboratory to collect synchrotron data on extremely small crystals and weak diffractors. We are in the process of seeking funding to upgrade the X-ray laboratory.

Christopher D. Spilling gave two lectures on chemical terrorism

in a multidisciplinary course on terrorism. He and some of his research group members attended Missouri Organic and Inorganic Days. Chris gave the keynote lecture at Inorganic Day. Attended a meeting on the Clinical Applications of Magnetic Materials in Tallahassee FL. His research has expanded into a new area ferrofluids. He and his family wife Kathy and sons Andrew, Robert and William, went to England in June where he gave a lectures at Astra Zeneca and Kings College, but he spent more time watching the soccer world cup. He attended the Reactions and Processes Gordon Research Conference where he played golf with graduate student **Bill Shiang** (BS 1884, Ph.D. 1988). He also attended the Natural Products Gordon Research Conference where he was an invited speaker. His current research group includes two undergraduates, five graduate students, a postdoc and **Brad Rowe** (BS 1996) who is being paid as a postdoc although he will formally graduate in December. A Visiting Scholar Dr. Peng Wang just returned to China.

Keith Stine recently published a chapter on 'Chirality in Monolayers' for the Encyclopedia of Surface and Colloid Science (Marcel Dekker) that appeared both in print and in an on-line version. A paper with his former graduate student **Linyong Mao** (Ph.D. 2002) recently appeared in *Journal of Chemical Information and Computer Sciences*. Chemistry colleague Hal Harris is a co-author of the paper and it concerns some original computer simulations of monolayers. He is continuing to research monolayers, focusing currently on some work on sphingolipid and steroid mixtures. During 2002, he is serving as Secretary to the Local Section of American Chemical Society. In April, he served on an NSF SBIR panel on Drug Delivery. He recently met with **Sean Dingman** (BS, 1995, Ph.D. Washington University), one of his former and most accomplished undergraduate researchers, now working at AP Materials and also playing bass in a local band called 'Book of Lies'

Janet Braddock-Wilking attended the Organometallic Gordon Research Conference in Newport, Rhode Island in July 2002 and presented a poster. She spent the weekend before the conference visiting with **Yana Levchinsky-Grimmond** (BS 1998, MS 2000) and **Brian Grimmond** (Ph.D 2000) and his co-worker at GE, John Leman who worked on the same project with Janet when she was a postdoc with Andy Barron at Harvard. **Robert Stockland** (Ph.D. 1999) spent the weekend with them as well and also stayed for the conference. Janet also attended the 13th International Symposium on Organosilicon Chemistry in Guanajuato, Mexico in August 2002 and gave oral presentation and also chaired a session at the conference. In addition to running the NMR Facility, her research program is obviously very active. She recently published a communication in *Organometallics* and August 2002 graduate **Lisa Emery** (BA and now in the graduate program here) wrote an Honor's thesis describing work she did under Janet's direction.

Dr. Zhi Xu and Dr. D. W. Larsen have invented a new spectroscopic technique and demonstrated over 100 times better sensitivity over commercial spectrophotometers. The invention could have impact on the future development of several important analytical instrumentations including UV-Vis spectrophotometer, Atomic Absorption, circular dichroism (CD) spectrophotometer, IR, and HPLC. A patent has been filed by the University of Missouri. Mr. William A. Hanshaw joined Dr. Xu's research

group this summer and is working on the project to develop high-density optical storage devices based on organic molecules.

Joseph Dence is now a permanent fixture in the department and during the past couple of years he has taught organic, physical and general chemistry. He continues to write books and publish articles, mostly in mathematics. He was off to see our former colleague Dennis Diestler who now resides in Lincoln, Nebraska.

John L. Gutweiler continues to juggle teaching here and also at Logan College of Chiropractic. John will have been teaching in the department for 30 years at the end of 2002.

Emeritus and Former Faculty Colleagues

Charles W. Armbruster now lives in Orlando Florida where he has a most beautiful home. I visited him last April when I was in Orlando for the Spring ACS Meeting and we had a good time talking about the old days and former students. Rudi and Margaret Winter, whose daughter Elizabeth and family live in Sarasota, also visited Charlie this summer. He had serious back surgery about 18 months ago and recovery was slow. For him that was a real problem as he has always been so active in sports. Anyway, he still exercises and plays a version of racquetball.

Kenneth W. Barnett continues to work at Ashland chemical co in Dublin Ohio. Although we have not seen Ken or his wife Pat for many years, we usually hear from them at Christmas. Children Lisa and Chris are doing well; the former is a successful actor and the latter is a teacher.

Lee Brammer has now been at the University of Sheffield in England since September 2001. He still has three graduate students and a postdoc still working here so he comes twice a year and communicates with them regularly. He appears to be doing well in Britain and was just named Editor of the journal *CrystEngComm*, the online Royal Society of Chemistry Journal which covers crystal engineering.

Eric Block was appointed Distinguished Professor of Chemistry at the State University of New York- Albany this fall. We were fortunate to be able to spend some time with Eric at the ACS Meeting in Boston.

David L. Garin is often in the department. He taught freshman and organic chemistry last year and recently presented a paper at the Midwest ACS meeting in Lawrence, KS suggesting a lecture-free introductory chemistry course. What would substitute? Several workshop sessions and on-line quizzes. Along more traditional paths, David's annual summer bicycle trip was to Lake Champlain and Montreal, a city which he rates as one of the best for urban cycling. He was recently elected vice President of the UM Retirees Association.

Dr. David W. Larsen also spends much time in the department. He is actively developing a new high-resolution spectrometer in collaboration with Professor Zhu. At the moment they are writing an SBIR proposal for funds to extend their development.

Jane A. Miller was about to leave for New Orleans to attend her brother's wedding in December when we spoke. Jane is recovering slowly from a hip fracture resulting from a fall and is

anxious to get back to a full schedule of traveling.

Robert W. Murray pops into the department on about a weekly basis. He is an active member of the UM-St. Louis retirees association and has been traveling occasionally.

James P. Riehl is Dean of Science and Engineering at the University of Minnesota-Duluth. He is scheduled to present a seminar in the department in March 2003. He continues with his research, assisted by collaborations with colleagues around the world. Son Patrick has a Ph.D. degree from Berkeley and son James is a graduate student at UC-Santa Barbara. We have been able to maintain contact with Jim and his wife Ceci.

William J. Welsh was in the department recently for the Ph.D. oral examination of Charles Jeffreys who will graduate this December. Bill is doing very well at the Robert Wood Johnson Medical School (RWJMS) in Piscataway NJ. Bill holds a faculty appointment as Endowed Professor in the Department of Pharmacology and serves as Director of the statewide Informatics Institute of the University of Medicine & Dentistry of New Jersey. He is also founder and CEO of GenChemiCs, headquartered in Princeton NJ; a company which specializes in the development and application of advanced tools in cheminformatics, bioinformatics, and computer-aided molecular design.

Rudolph E. K. Winter tells me he is still retired. On the other hand he comes in every day and among other things he attends all the student seminars and runs our excellent Mass Spectrometry Facility. He has a collaborative study underway with colleagues from UMC. Published an article this summer "Geographic Distribution of Three Alkaloid Chemotypes of *Croton lechleri*" with D. J. Milanowski, M. P. F. Elvin-Lewis and W. H. Lewis, of the department of biology at Washington University, in the [Journal of Natural Products](#).

Joyce Corey wins University of Missouri Presidential Award for Research and Creativity.

The following was taken from the Spectrum, a University of Missouri System publication:



Joyce Corey receives the 2002 University of Missouri Presidential Award for Research and Creativity.

Joyce Corey, professor of chemistry at the University of Missouri-St. Louis, is the 2002 winner of the Presidential Award for Research and Creativity. The award is given in recognition of a sustained effort of nationally or internationally prominent research or creativity and includes a \$15,000 stipend. UM-St. Louis did not offer an advanced degree in chemistry when Corey joined the faculty in 1968. Corey quickly began establishing a productive

research program. One of the world's leading experts on organosilicon chemistry, Corey is an active member of the American Chemical Society. Chemists around the world use a process Corey developed early in her career called the "Corey reaction." She has authored more than 100 articles. Corey attended Radcliffe College from 1956-58, received a bachelor's degree in chemistry from University of North Dakota in 1960 and master's and doctoral degrees from University of Wisconsin-Madison in 1961 and 1964, respectively.

The Staff

Charmaine Henson this past year has been busy with her 3 grandchildren but she managed to get in a few weekend bike rides with the Trailnet group and along the River Road. Her spinning classes must be helping because the rides seem a little easier and she can go a little further this year, but she is still a LONG way from keeping up with graduate student Claire Brook. Unfortunately she lost her Irish Setter, Wendy, to cancer after less than two years. The rescue group was very supportive and she found a 15-month-old Irish in Union MO whose family was moving to a condo. Kelly is still in the puppy stage, so the adjustment has been a little bit of a challenge. One day she managed to pull the sofa half way across the room. Whether it was out of boredom or just so she could chew up the other side of it she doesn't know! Charmaine hopes Kelly has settled down enough by the spring so she can walk her with the other Irish in the St. Patrick's Day parade this spring. The parade's always a lot of fun and they have run into Dr. Murray there the last couple of years.

Gordon Kerschmann considered taking the early retirement option this fall but we were delighted that he chose not to do so. Gordon is typically busy maintaining the NMR spectrometers in the department and assisting with computer hardware problems.

Joe Kramer is now classified as a Spectroscopist and he and Dr. Winter run an excellent Mass Spectrometry Facility.

Donna Lemp began her employment with UMSL in Aug 2000 with an office position in the Division of Teaching and Learning, in the School of Education. She joined the chemistry department in December 2001. She rejoined the work force about 4-1/2 years ago after spending 14 years at home raising her children and participating in volunteer activities. She is a St Louis native and enjoys being around the campus and learning something new nearly every day.

Donna Kramer now runs a stockroom for both the chemistry and biology departments. The latter stockroom was closed when the director retired earlier this past year.

Dena Woods is a secretary who joined the department last April but hopes to be here a long time. We certainly hope so too. Previously, she worked for Edward Jones Investments as a branch office administrator. Dena and her husband enjoy walking their two Siberian Huskies and taking road trips.

Frank May keep us amused with is sense of humor. Franks organizes and annual canoe float which is part of the Clean Rivers Program. Among the faculty the Bartons and Jim Chickos have been on these trips, which in addition to doing a good service for

the environment, are good fun.

Pat Mayberry left the department this year to take a position in the Department of Teaching and Learning in the College of Education.

Ken Owens (BS 1980) was awarded his 5th anniversary recognition this year. For the first time in our history we offered a course in glassblowing for credit and, of course, Ken taught it.

Ted Windsor received the Chancellor's Award for staff excellence this year and we are all very proud of him for that achievement. Fortunately he did not take the "early" retirement and says he has about three more years in him for the department.

In Memoriam - Robert H. Cabaniss 1929 - 2001

Bob Cabaniss passed away in October 2001 after a struggle with cancer. He was associated with the department for more than 25 years. He was a self-taught scientific glassblower and was transferred to Monsanto in St. Louis from the Lion Oil refinery in El Dorado, Arkansas. He later worked at McDonnell-Douglas and began an association with UM-St. Louis in 1966. When the editor joined the faculty in 1966 Bob would come to the department on Saturday mornings. Bob was appointed Scientific Glassblower in the Chemistry Department in December 1969 and took early retirement in 1992. Following this period, he continued to work for the department part-time until he became ill with cancer, which was later to take his life. During his time here he maintained contact with McDonnell Douglass and also maintained his own company, Florissant Scientific Glassblowing. Many scientists around the Midwest used his unique skills and some of his work was included in experiments on the Space Shuttle. Bob was replaced in the department by **Ken Owens** (BS, 1982) and it is ironic that Ken learned all his early skills from Bob whom he befriended when he was a student here and later storeroom manager.

The Robert W. Murray Lectureship



*J. Fraser Stoddart, 2002
Robert W. Murray Lecturer.*

The Lectureship has been a great success since it was established in honor of Bob Murray six years ago. Thus far the lecturers have been as follows:

2002, **J. Fraser Stoddart**, Winstein Chair Department of Chemistry and Biochemistry, University of California, Los Angeles. Lecture title: "An Integrated Systems-Oriented Approach to Molecular Electronics"

2001, **Robert H. Grubbs**, Victor and Elizabeth Atkins Professor of Chemistry, California Institute of Technology, Lecture title: "Making Molecules with Metathesis Catalysts"

2000, **Harry H. Wasserman**, Eugene Higgins Professor Emeritus and Senior Research Scientist, Yale University. Lecture title: "The Chemistry of Vicinal Tricarbonyl Compounds. Applications in the Synthesis of Bioactive Products"

1999, Christopher S. Foote, Professor of Chemistry, University of California, Los Angeles, Lecture title: "Singlet Oxygen, Buckyballs and DNA".

1998, **Robert W. Murray**, Curators' Professor of Chemistry, University of Missouri-St. Louis. Lecture title: "Ubiquitous Oxidation Chemistry".

As usual last year's event was very successful. A crowd of about 100 attended the lecture by Professor J. Fraser Stoddart in the old 102 Benton Hall, now numbered 104. A banquet was held in honor of the Professor Stoddart on the Sunday evening at the Glen Echo Country Club. The Sixth Annual Robert W. Murray Lecturer will be Professor Donald Tilley of the University of California, Berkeley. The title of the lecture will be announced later.

The Lawrence Barton Scholarship

This Scholarship is designed primarily for junior chemistry majors who are first generation college students and who have some financial need. The endowment now allows for a stipend of \$1,000. The 2002-2003 recipient is Kayla Gincherman.

The M. Thomas Jones Memorial Fund

This fellowship is now fully endowed thanks to Ms Patricia L. Jones. It is designated for graduate students only and the department decided to use it to give an annual award for the top graduate student seminar. The graduate students vote on this award and in 2002 the award was split between **Fatemah (Ghasedi) Nichols** (BS, 1983, MS 1989) and **Mesfin Janka**. The former graduated with her Ph.D degree in May 2002 and is teaching at East Central College in Union MO, and the latter graduates with his Ph.D. degree in December 2002 and will take up a postdoctoral position at the University of Rochester. This is the only endowed fund which supports graduate students and if you are interested in supporting graduate students, you are certainly welcome to designate your contribution to this fund.

Barbara Brown Fellowship for Women in Chemistry

This fellowship is designated for women students over the age of 24 and it was established by **Barbara (Willis) Brown** (BA 1984). The 2002-2003 fellowship went to Cherise Pruitt. Again, this is the only fund, which supports women students so you can designate your contribution to this fund if you wish.

The Eric G. Brunngraber Undergraduate Research Fellowship

This Fellowship, which has existed since the late 1980s but was recently endowed by the family of the late Eric G. Brunngraber, supports undergraduate research. If you are interested in

supporting this important aspect of the department's activities, you may designate your contributions to this fund.

The major endowed award, the **William and Erma Cooke Memorial Scholarship**, is designed primarily for sophomores. It was endowed by Dorothy and Al Greco in honor of Dorothy's parents William and Erma Cooke. We recall the moving ceremony when Dorothy announced, at one of the Scholarship Receptions, that she was establishing the fund. Her mother was present as Lois Tegethoff, a member of the Development staff at the time, assisted in the event. We are very sad to report that Erma Cooke passed away in November 2001. Dorothy's families held a celebration of her mother's life at the Alumni Center.

Departmental Awards for 2001-2002

Undergraduate

The award for the *Outstanding Student in Introductory Chemistry* went to **Poppy Idrawati, Jeffrey Griesmar** and **Heather Thomas**. They all received a certificate and the *Handbook of Chemistry and Physics* from the Chemical Rubber Company. The *American Chemical Society Award for Analytical Chemistry* went to **Kim Nguyen** who received a certificate and a one-year subscription to *Analytical Chemistry*. The *American Chemical Society - St. Louis Section's Outstanding Junior Award* went to **Kayla Gincherman**. The award was presented at the annual Awards Night during the ACS St. Louis Section's Chemical Progress Week. **Elaine Katz** received the *Alan F. Berndt Outstanding Senior Award* and the *American Institute of Chemists-Student Award Certificate*. *A William and Erma Cooke Scholarships* for 2002-03 went to **Brian Tienes**. The *2002 Undergraduate Chemistry Awards sponsored by the Monsanto Company* were awarded to **Patrick Fitzgerald, Kayla Gincherman, Brian Tienes** and **Keith Tyhurst**. The *2002-03 Barbara Willis Brown Scholarship for Women in Chemistry* went to **Cherise Pruitt**, the *2002-03 Eric G. Brunngraber Undergraduate Research Fellowship* went to **Patrick Fitzgerald** and the *2000-01 Lawrence Barton Scholarship* went to **Kayla Gincherman**. A *Certificate of Commendation for Outstanding Service* went to **Kayla Gincherman** as did the *Outstanding Undergraduate Teaching Assistant Award*. Others receiving the latter award were **Michael Burgard** and **Viktoriya Sedelkova**.

Graduate

The 2002-03 *Mallinckrodt Fellowship* went to **John Coniglio**, a *2002 Graduate School Dissertation Fellowship* went to **Gary Nichols** and *M. Thomas Jones Memorial Fellowships* went to **Fatemah (Ghasedi) Nichols** and **Mesfin Janka**. The 2001-02 *Outstanding Master's Student Award* went to **John Kozlowski** and the 2001-02 *Graduate Student Research Award* went to **Mesfin Janka**. A *Commendation for Excellent Performance by a Teaching Assistant* was awarded to **Elizabeth Hansen** and the 2001-02 *Graduate Teaching Assistant Award in Memory of Jack Coombs* was awarded to **Padma Nair**. **Padma Nair** was also honored by the *Golden Key International Honor Society Outstanding Graduate Teaching Assistant Award*.

Alumni

Douglas G. Nuelle, (BS 1969) presented the 2002 (15th) **Distinguished Alumni Lecture** and also received a Distinguished Alumni Award from the University. The lecture was titled: "*Serendipity*." Some biographical information about Doug is given elsewhere in this newsletter.

Among other alumni who were recognized for contributions, which are described elsewhere in this newsletter, are **Kenneth O. Henderson, Daniel Henton, Michael Hauser, Mark Leiber** and **Cheryl McClain Shea**.



From left to right graduate students Fatemah Ghasedi and John Coniglio with their advisor Professor Chris Pigge.

Contributions 2001-02

Below we list all the individuals, chemistry alumni and friends of the department who made contributions to the university last year, excluding department faculty members. The list is very impressive and we are most grateful for your support. We have done our best to assure that the listing is up-to-date. If we missed out your name, we apologize and hope you understand that we are fallible. Recent gifts will be listed next year. We have not included industrial matching funds or other such gifts because that list is more difficult to assemble.

CONTRIBUTIONS FROM ALUMNI AND FRIENDS

Mr. and Mrs. Ronald E. Ackerman
 Dr Linda R. Adams
 Dr.Elizabeth A. Amin
 Dr Dennis M. Anglim
 Dr. and Mrs. David A. Armbruster
 Dr. and Mrs. Sanford A. Asher
 Dr Siu W. Au-Yeung
 Dr. Lawrence Barton and Ms. Patricia J. Barton
 Ms. Rhea S. Baxter
 Mr. and Mrs. John Blase
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 Mr. and Mrs. Joseph W. Bullock
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 Dorsett Dental Group
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 Mr. Raymond and Dr. Virginia Hauserman
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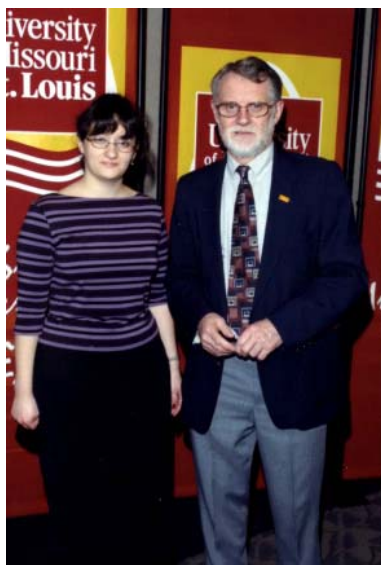
Alumni Association News.

The Alumni Association is currently conducting a membership drive and they are looking for new members. Information about the Association and about how to join may be obtained by visiting the Alumni Association website at the following URL <http://www.ums1.edu/services/ur/alum/alumassoc/index.htm>

For some time the Association has been hinting that they would like the chemistry Alumni to establish a Chapter. Please let us know if you believe we should establish a chapter and also if you are interested in participating in the establishment of one.

How you can help the department.

I have been asked how I am able to obtain so much information on alumni, more than one finds in the typical departmental alumni newsletter. The answer is not an easy one to give. Since I was here when the first class graduated, I know just about all the graduates of the department and have made it my business to keep in touch with as many as possible. There are several reasons for doing this. It is clearly very satisfying to see one's former students do well. If there are such things as products of our work, then it is the graduates of the program, which are the most significant. Other measures of productivity include research publications and grants but these would not be possible without the students



Dr Barton with the Barton Scholarship Awardee Kayla

who do most, if not all, the experimental work. Of course it is important if one is writing a newsletter such as this to maintain contacts. I regard most of the former students I met here as personal friends and that is an additional impetus for maintaining contact. Success of graduates is a good argument to the administration to support us. Success of graduates working in corporations, either in this area or elsewhere, provides an important lever when we are seeking support from industry.

As in most universities, the fraction of our financial support that derives from the state has been steadily dropping, and thus we need more external support from corporations, friends, alumni etc. For years we have been cognizant of the fact that as a young university, we don't have so many alumni who are in a position to make substantial gifts to the university. Since now some of our graduates are retiring, that situation must be changing and we hope you can find it possible to make a contribution to the department. Unfortunately, we have very little financial aid available for students here and one goal is to increase the support given to students, especially undergraduates in the form of scholarships. Remember, anything you do to help improve the institution helps you because it increases the value of your degree. The better the reputation of an institution, the more highly regarded its degrees.

Another way you can help us and indeed UM-St. Louis is to become more aware of the situation faced by Higher Education in Missouri and also by UM-St. Louis within the University of Missouri System. Below I cite from my Commencement Address given in August 2002.

"One can help the institution by contributing money, providing assistance both professional and in other ways. But particularly at this moment you can also help the institution as citizens, taxpayers and voters. Your investment – the value of your degree – is at stake. Missouri does not support its institutions of higher education very well. Missouri is not a poor state and indeed has enormous potential to raise more funds to provide for its citizens in the areas of education, social services, transportation, etc. I looked up some data from the 2000 Statistical Abstract of the US, published by the Census Bureau. Among the states, Missouri is: 15th in population; 17th in Gross State Product; 23rd in average annual income; 32nd in persons with a bachelor's degree; 35th in



Faculty and students following a department seminar, Fall 2002

public school teachers salaries; 39th in Higher Education expenditures per capita and 48th in general revenue per capita -

mostly due to low taxation levels and the limitations imposed on the state by the Hancock Amendment. During the period 1995 – 1999, the state issued \$973 million in tax refunds as a consequence of the Hancock amendment. According to James G. Moody, former Director of the Budget for the State – under then Governor John Ashcroft, lower growth assumptions for the state predict that state revenues will be more than \$1 billion below the constitutional growth limitation by 2003. In other words MO will be in the red by about the same amount it paid out in tax refunds under the Hancock Amendment.

Recently Missouri, like many other states, has been confronted with a severe financial crisis. The state's response has been to require that higher education carry far more than its share of the burden. It withheld a disproportionate amount of higher education's state funding. During the past year, total withholdings to higher education by gubernatorial action amounted to \$286 million, or 37 percent of the total of all statewide withholding actions in fiscal year 2002. But higher education appropriations represent only 12 percent of the state's general operating budget! This has meant cuts in program offerings; no salary increases for faculty and staff and some threatened layoffs. There is also an early retirement initiative underway. There is a very real risk that we will lose some of our top teachers and researchers. The teachers left behind will have to teach more and thus not serve the students so well. Capital expenditures – that is, programs such as the renovation of UMSL's 36-year old science teaching laboratories - had to be delayed again. On top of this, student fees have been increased by 8.4 % for next year. In addition a new 9% surcharge has been imposed on the students. Ten or so years ago, fees were increased by about 12% per year for a five-year period. This has resulted student fees at the University of Missouri being higher than those at any of the other Big 12 institutions. I have seen UM



Chancellor Blanche Touhill, who retired in December 2002 and received the "Right Hand of St. Louis Award" from the St. Louis Regional Chamber and Growth Association

-St. Louis grow from a campus in the 1960s operating out of two buildings: Benton Hall and the former Golf Clubhouse. At that time we offered several baccalaureate programs and two small MS programs; one in education,

the other in business. Today we offer one first professional program, many doctoral and masters and 39 baccalaureate programs. With this growth as the background, I want to spend a few minutes describing to you how UMSL is under funded relative to the other UM campuses and also to all the regional universities and colleges in the State.

By the 1970s, many of the undergraduate programs that exist today had been established. On the other hand most of the doctoral programs, many of the master's programs and, overall, the majority of our expensive professional and graduate programs were established only in the past 20-year period. From 1963 to 1980 our share of the total budget of the University of Missouri grew from a very small percentage to about 12%. Yet during the past 20-year period, the period of major graduate program expansion, our share of the UM budget remained constant – at close to 12%. And we have had to fight to establish many of these programs – programs that are needed to serve the most populous region in the state. We have been forced, over the years, to make do with less. Our computer laboratories and recreational facilities clearly don't match up to those available on the other UM campuses, and our science labs are the oldest in the system!

The University of Missouri-St. Louis is striving to develop into a major research university. Yet consider the following. Among Missouri's thirteen public 4-year institutions of higher education, UMSL is: 11th out of 13 in funding per FTE student, ahead of only Missouri Southern and Missouri Western Colleges, 13th out of 13 in funding per headcount - in other words last and also 13th out of 13 in funding per degree - also last. These funding inequities are an unfair burden on the St. Louis region. In part because of the inequitable funding state formula, UM-St. Louis students pay a larger per-credit share of their educational expenditures than any other student at a public institution in the state. Note these numbers because they are very revealing. For every dollar invested by the state, a student at UM-St. Louis pays \$1.15, whereas the equivalent statistic for the other campuses are: UM-Columbia: \$0.72, UM-Kansas City: \$0.94 and UM-Rolla: \$0.70.

State funding supports the bare-bones general operation of the campus, not the extras or the frills. The inequity in the formula for allocating state appropriations must therefore be remedied. The Board of Curators of the University of Missouri bears responsibility for setting these funding policies, and it is time for the Board to implement a plan for the gradual updating of the formula in order to establish a process of equitable funding across campuses. The Board of Curators reports to the state government and to the Governor. Thus the Board ultimately reports to the people of the St. Louis region. UM-St. Louis students, their parents, and St. Louis taxpayers have a right to demand fair treatment of their public institution of higher education in the University of Missouri system. If the Board of Curators, as a body, does not respond, the elected officials of the students and taxpayers should seek legislative remedies to rectify the problem.

As taxpayers, and citizens of Missouri, you graduates can make a difference by voting, communicating with your state Representatives and Senators and by becoming involved in the state's process to make sure that higher education is treated fairly".

We acknowledge the work of Jim O'Brien, who has taken most of the photographs included in issues of the UMSL CHEMIST over the past several years.

UM-St. Louis Chemistry Alumni Fund

Enclosed is my contribution of \$ _____ Yes I work for a matching gift Corporation.

Designation for funds:

Robert W. Murray Lectureship _____
E.G. Brunngraber Fellowship (undergraduate research) _____
Lawrence Barton Scholarship _____
M. Thomas Jones Memorial Fund (graduate student support) _____
Barbara Willis Brown Women in Chemistry Scholarship _____
Undergraduate _____
Graduate _____
Unrestricted _____

Please make check payable to UMSL. "Chemistry Alumni Fund" and return to:

Professor Lawrence Barton
Department of Chemistry
University of Missouri-St. Louis
St. Louis, MO 63121

INFORMATION UPDATE 2002

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:

Other News:

News of other alumni:

