

chemistry@wwu

Chemistry Department • Western Washington University

Research Corp. and Murdock Charitable Trust Grant

For the Chemistry Department, the most significant event to date of the 21st century has been the award of a \$750,000 Department Development Grant by two philanthropic foundations, the Research Corporation and the M. J. Murdock Charitable Trust. The following is the WWU Press Release announcing the investment to help fund this ambitious departmental plan for change.

In recognition of Western Washington University's emphasis on a quality liberal arts education and undergraduate research, Research Corporation and the M. J. Murdock Charitable Trust have awarded a \$745,967 grant to the university's chemistry department.

"An award of this regard is evidence that Western's academic reputation for excellence is nationally recognized," said President Karen W. Morse. "This grant has sparked an evolution of Western's chemistry department and greatly contributes to the university's overall mission to achieve the highest level of distinction."

The grant, along with approximately \$1.6 million in pledged funds from Western, will be used to recruit 10 faculty (nine to replace retiring faculty and one new position) and equip them with state-of-the-art instrumentation for instruction and research. The funds will also allow the department to hire two new instructional lab coordinators, create new research laboratory space and generate a culture of undergraduate research in chemistry and biochemistry.



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"We expect that we will be able to recruit top-notch faculty," said Mark Wicholas, chemistry department chair. "We want to attract the most talented and capable science students to Western by developing a chemistry department that

is recognized as one of the best nationwide for its quality undergraduate curriculum."

For students this means a wealth of undergraduate research and mentoring opportunities, including funding for travel to present research at regional and national meetings; a year-end research colloquium; and an active seminar and summer research program. In addition, the grant will allow the department to create a one-year honors course in general chemistry.

Noted for already having a strong instructional program in chemistry, Western was invited to apply for the grant last year by M.J. Murdock Charitable Trust of Vancouver, Wash., which will contribute \$497,300, and Research Corporation of Tucson, Ariz., whose portion of the grant totals \$248,667. Funds will be distributed during the next six years, starting last July.

Research Corporation President John Schaefer describes it as "the largest total dollar allocation made in the recent history of the corporation's department development program."

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Message From The Chair

Greetings to all our alumni and friends! As Bob Dylan says "The times they are a changing", and so it is for us here in a very significant way. We are in the second year of a Research Corporation/Murdock Charitable Trust Grant, a six-year \$750,000 award with the objective to transform the department into one of the best undergraduate chemistry departments in the country. We are emphasizing the undergraduate research experience. For faculty and students this is a rich and intensive one-on-one form of instruction. Thirty students undertook faculty-supervised research during the past academic year and seventeen more worked full-time on funded research projects last



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summer. Two of our undergraduates won a \$500 best poster award for their research at a National American Chemistry Society Meeting in San Diego in April 2001 competing against graduate students and post-doctoral fellows. We are very proud of our students and their many accomplishments!

We are entering a major transition period for our faculty. We have two new faculty, Steve Emory and Lisa Gentile, who started with us in September. Furthermore, ten of us will be retiring within the next five years and ten replacements will be hired. We also hired Heather Barrieau, a recent chemistry graduate, as general chemistry laboratory coordinator in charge of day-to-day operations for all our general chemistry laboratory courses. This is a much needed new position funded by our grant and the University!

Although our building is only nine years old, we are short of space and will be remodeling this summer in order to create new research areas. But in spite of the need for additional laboratories to be added during the remodeling, we believe we have the very best chemistry building in the country. Student enrollment in chemistry courses is burgeoning as is the number of majors in the department. Last year we graduated forty-four chemistry and biochemistry majors. This year our junior/senior level biochemistry course has eighty-two students enrolled!

This summer the department undertakes its most ambitious venture ever. We are host to the Biennial Conference on Chemical Education, an event that will bring in attract over 1,500 chemists to WWU. George Kriz is the organizer; he will truly have his hands full!

Although much is happening here, we will always have time to welcome alumni who want to return for a visit. Let us know if your travel plans bring you to Bellingham.

Mark Wicholas,
Chair

Annual Chemistry Research Colloquium

On Friday, May 18, 2001, undergraduate and graduate students in the Chemistry Department highlighted their research accomplishments during the 2000-2001 academic year through oral and poster presentations. The department's research colloquium was part of Scholars Week 2001, a campus-wide series of events that celebrated student participation in research and creative activities that involved more than two-hundred WWU students in a wide range of departments and programs. The chemistry research colloquium included a distinguished panel of judges, a full schedule of poster and oral presentations, a plenary lecture by Professor Bill Tolman, Distinguished McKnight University Professor at the University of Minnesota, and a banquet for student awardees, faculty, judges, other participants, and visitors. The third annual chemistry research colloquium is scheduled for Friday, May 17, 2002 with Professor Harry Gray, Arnold O. Beckman Professor of Chemistry at Caltech, as the plenary lecturer. We invite alumni and others with interest in our chemistry program to attend this year's research colloquium. Please mark your calendar and contact Professor Don Pavia (pavia@chem.wwu.edu), the faculty organizer of our third annual research celebration.



17th Biennial Conference on Chemical Education

The 17th Biennial Conference on Chemical Education is being held at WWU from July 28 through August 1, 2002. The conference will host some 1500 attendees who are chemical educators from across the United States, Canada, Mexico and abroad. George S. Kriz is General Chair; Sara Selfe, Chemistry Instructor at Edmonds Community College, is Program Chair.

The Division of Chemical Education of the American Chemical Society has sponsored the BCCE conferences since 1972. Educators from all levels — high school, community college, college, and university — are expected to attend. BCCE conferences facilitate the exchange of ideas, provide access to the latest in teaching innovations and curricula, and create and maintain contacts among all who are interested in chemical education.

Recent conferences have featured such groundbreaking advances as the use of computers in the laboratory, computer-based molecular modeling, and microscale

laboratory practice. These techniques have quickly been incorporated into modern chemistry curricula, in part through the efforts of attendees who implement the innovations they have seen at the conferences in their own courses.

The BCCE program includes several plenary sessions, five days of symposia, invited papers, and

workshops. Plenary speakers are invited experts in the fields of chemistry or science education. Symposia and workshops will cover a wide range of topics, including the following: investigations in environmental chemistry; the role of biotechnology in chemical education; bringing science education to underrepresented societies; teaching chemistry for the Pacific Rim; computers in chemical education; strengthening the connection between industry and higher education.

An exhibition hall, open throughout the conference, features participation from a wide variety of companies and organizations, including textbook publishers, instrument manufacturers, chemical suppliers, and vendors of specialized materials for chemical education.

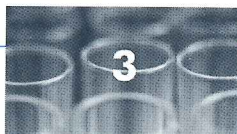
Sponsors committed to date include Varian, Inc. as grand sponsor; Batelle Northwest; Puget Sound Chapter of the American Chemical Society; Hayden-McNeil Publishing; Phillips Petroleum; Chem Glass, Inc.; Washington College Chemistry Teachers Association; Huxley College of the Environment and President Karen W. Morse, Western Washington University. For more information see the BCCE website at <http://chem.wvu.edu/acs/bcce/index.html> or contact Professor Kriz in care of the chemistry department for a brochure.



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Expansion of Undergraduate and Graduate Research Needs Support

The Chemistry Department is actively developing more research opportunities for students. The departmental development grant that started in summer 2000 (see the accompanying story) supplies funds for remodeling our building (to provide more research space) and money for competitive start-up packages for new faculty. Additional support staff will also be possible. We have recently acquired new GC, GC-MS, HPLC, and AAS instruments that will be extensively used in teaching and research labs. A complete upgrade of our 300 MHz NMR has just been completed making this a much more user friendly instrument! In addition, we are seeking a new 500 MHz NMR specifically for upper division courses and research. Alumni donations, along with gifts from friends, corporations and foundations will enable the Chemistry Department to meet the demand for undergraduate research with increased funds for student summer stipends and supplies. Currently, the number of students who wish to pursue summer research in the Chemistry Department exceeds the number of stipends we can offer. The vast majority of these stipends come from highly competitive, externally-funded grants obtained by faculty members. We want to provide research opportunities for all of our students who have an interest. With your support we will come closer to achieving this goal.

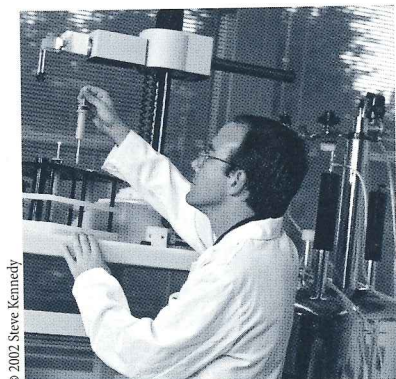


Keeping Current With Technology

A portfolio of modern instrumentation is, well, instrumental for quality teaching and research in chemistry. The technology of chemical instrumentation improves every year, and along with it, the importance of instrumental analysis in the practice of chemistry. To support vibrant research programs, and to ensure that each new generation of students is taught with up-to-date technology, we continually work to upgrade equipment and to acquire new instruments. State-of-the-art instrumentation can be very expensive, and in the last few years alone, the Chemistry Department has invested close to \$500,000 in new and upgraded equipment. Among the most significant new acquisitions are several liquid and gas chromatographs, including gas chromatography-mass spectrometry, two new atomic absorption spectrophotometers, a circular dichroism spectrometer, and specialized equipment used in research, such as an atomic force microscope. These instruments are used by hundreds of students each year, and play a vital role in all areas of faculty-student research.

Funding for equipment comes from competitive external grant programs, the University, and Chemistry Department resources. Gifts from private donors and industry are another important source of support. One of our highest priorities this year is to purchase a new 500 MHz nuclear magnetic

resonance spectrometer (NMR). NMR spectroscopy is an essential tool for structural characterization of molecules and a modern instrument is essential to support the instruction and research missions of the department. At a cost of about \$600,000, Western would be one of a very small number of primarily undergraduate chemistry departments in the nation to have such a powerful instrument. This new NMR spectrometer would be used for both teaching and research, and would complement our existing 300 MHz NMR spectrometer, which underwent a \$140,000 upgrade earlier this year.



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In Memorium

Professor Fred W. Knapman

(1908-2001)

The Department was saddened to learn that Fred Knapman, Professor Emeritus, Chemistry, passed away on July 9, 2001, in Bellingham. He was born in 1908 in Lethbridge, Alberta, Canada. His parents emigrated to Canada from England in 1905. Fred graduated from high school at age 16. After attending the Calgary Normal School for eight months, he taught for several years in one-room schools on the Alberta prairie. In 1931 he moved to Bellingham.

Professor Knapman was the primary person involved in establishing the chemistry program at Western. He began his career at Western as a student in the 1930s. In 1933 he secured a position as an assistant in the science department where he washed glassware and prepared laboratory demonstrations at a wage of 25 cents per hour.

He graduated from Bellingham Normal School (now WWU) in 1934 and became a teacher in Lewis County, Washington. In 1938, Fred earned a masters degree in chemistry at the University of Washington. Later, he completed a doctorate in education at Columbia University.

Fred returned to Western as a chemistry instructor in 1942. He had a brilliant career here where he served as an effective advocate for the sciences, a leader in building a new science building, and as an administrator. It can safely be stated that Fred Knapman is the founder of the modern era in the chemistry program here at Western. He was a strong force in the building of Haggard Hall of Science in 1960 and managed to persuade Linus Pauling, who was to become a Nobel Laureate, to speak at the building's dedication. Most of the faculty who were recruited to Western in the 1960s fondly remember being entertained at Fred and Frances Knapman's home on Chuckanut Drive. When Fred retired in 1974, he had served the college as Professor of Chemistry, Chairman of the Science Department, Chairman of the Chemistry Department, and Dean of Arts and Sciences. Fred was always a friend and a strong supporter of the Chemistry Department even after his retirement.

On the occasion of his eightieth birthday, Fred and his wife Frances started the Knapman Scholarship Fund. The Knapman Scholarship is the preeminent scholarship in the department. It is a two-year scholarship awarded to two outstanding students each year, one a junior and one a continuing senior. Fred will be sadly missed by all in the Department. Fred was always gracious and a gentleman of the "old school," loved by faculty, staff and students alike. He was a treasure whom we can never replace.

2001 Outstanding Chemistry Graduate:

A Student on a Mission to Improve Global Air Quality

Diana Phillips is a student on a mission to improve global air quality. This past June, Diana was selected as the Outstanding Chemistry Graduate for the 2000-2001 academic year for her many accomplishments and contributions during her time at WWU. In between working in the Chemistry Stockroom, preparing for and assisting in several laboratory courses and serving as the co-president of the WWU chapter of the student affiliates of the American Chemical Society, Diana participated in two years of research in the laboratory of Professor Mark Bussell. The crowning achievement of Diana's research was the synthesis, characterization and evaluation of an oxide-supported molybdenum phosphide (MoP) catalyst for removing sulfur impurities from fossil fuels. Diana's catalyst is nearly four times more active than a molybdenum sulfide catalyst that is the principal ingredient of the commercial catalysts used in the petroleum industry. The results of Diana's research project are the subject of an article that will appear in an upcoming issue of the *Journal of Catalysis* and represent a significant breakthrough in reaching the national goal to develop low-sulfur gasoline and diesel by 2006. In recognition for Diana's research achievements, she received a 2000 Undergraduate Materials Research Initiative Award from the Materials Research Society and shared (with Randy Self, B.S. 2001) first prize in the Colloid and Surface Chemistry Poster Competition at the national American Chemical Society meeting held in San Diego this past April. More than 100 posters were entered in the competition and most of the entries were submitted by doctoral students at major research universities.

In August 2001, Diana entered the doctoral program in chemistry at the University of California, Berkeley, one of the top-ranked research universities in the country. Diana recently joined the research group of Professor Ron Cohen; her doctoral research will focus on gas flux measurements in the troposphere. As part of her project, she will build a thermal dissociation - laser induced fluorescence (TD-LIF) instrument to detect HONO in the troposphere. Diana's instrument will fly on a NASA flight scheduled in about 3 years to measure tropospheric ozone production about the spring equinox (TOPSE). Diana's quest for improved global air quality continues and, as with all our chemistry graduates, we look forward to learning more about her life after WWU.

Biochemistry Grad Pursues Her Interest in Biomedical Research

The graduating class of 2001 included many talented students. Among that group Jennifer (White) Keeffe stands out. Jennifer received the Seabong Chang award in 2001 (given to the outstanding graduate in Biochemistry) and prior to that had been a recipient of the prestigious Knappman Scholarship in recognition of her exceptional achievements in her coursework. In September of 1999 she joined the research group of Dr. Anthony-Cahill and began work in the area of protein folding and stability. The following summer Jennifer received an undergraduate research stipend from Zymogenetics, Inc. to conduct her research at WWU in the Anthony-Cahill lab. Initially Jennifer worked with the green fluorescent protein (GFP), making several mutants designed to answer questions about the mechanism of folding in GFP. She then began working on a protein folding project that had been developed by another outstanding graduate, Anna (Mowry) Fishburn (Class of 2000). Jennifer made significant progress with this project, studying the stability of several mutant forms of myoglobin (an oxygen binding protein prevalent in muscle tissue which is related to the oxygen carrying protein hemoglobin). Jennifer presented her results at regional, local, and Departmental conferences, where she was recognized with awards for the quality of her presentations and her research. The information gained from her research will answer important questions in globin protein folding and stability, and may lead to the design of tailor-made catalysts, therapeutics (e.g. a synthetic blood substitute) and/or diagnostic agents.

After graduation it was time to attend to more important matters. This past July Jennifer and Dan Keeffe (WWU Geology, Class of 2001) were married, and are now living in Seattle. Jennifer is currently studying the structure of the "HMG box" DNA binding proteins in the lab of Rachel Klevit at UW. Jennifer is also studying the structure of the BRCA1 protein (which plays a role in breast cancer). She plans to pursue a Ph.D. in Biochemistry in the next year or two. We wish Jennifer and all our alumni the best for the coming year!

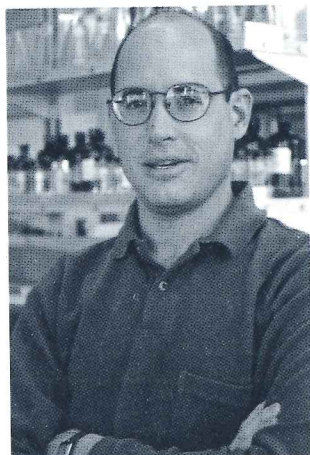
Department updates

Patrick Wins PECASE Award

Dr. David Patrick was selected to receive a Presidential Early Career Award for Scientists and Engineers (PECASE) for his creative research on liquid crystal imprinting with applications in re-writable memory storage devices controlled by optical, magnetic and electrical fields, and for his educational commitments. More information on Dr. Patrick's research may be found on his group's website: <http://atom.chem.wvu.edu/dpatrick/dpatrick.html>

The PECASE award is the highest honor bestowed by the U.S. government on outstanding scientists and engineers who are in the early stages of establishing their independent research

careers. This is the fifth year of the awards established to recognize some of the nation's finest junior scientists and engineers and to maintain U.S. leadership across the frontiers of scientific research. Nine participating federal agencies shared 59 PECASE awards for 2000 and only 20 National Science Foundation (NSF)-supported researchers were selected to receive the award. The awards were presented at the White House Old Executive Office Building by President Clinton's science advisor, Neal Lane.



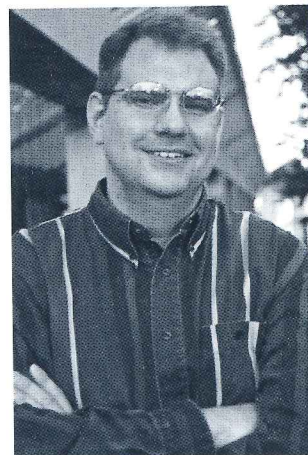
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"These awards acknowledge much more than past performance," said NSF director Rita Colwell, "They represent our expectation that these women and men will continue to provide leadership in science, engineering and higher education well into the millennium." NSF awardees have demonstrated a notable commitment to the integration of research and education. Since the White House established the award in 1996, 100 NSF-supported faculty members have received this presidential honor in such diverse fields as biophysics, mathematical modeling, transportation engineering and microeconomics.

NSF selects its PECASE nominees from among its most meritorious CAREER (Faculty Early Career Development) awardees. The CAREER award supports exceptionally promising college and university junior faculty who are committed to the integration of research and education. CAREER awards range from \$200,000 to \$500,000 for a period of four to five years.

Vyvyan Receives CAREER Grant

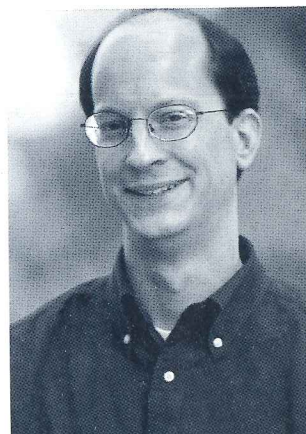
Assistant professor James Vyvyan recently received a Faculty Early Career Development (CAREER) Grant from the National Science Foundation. The CAREER grant program is one of NSF's most prestigious awards for new faculty members who are most likely to become the academic leaders of the 21st century, and is the first step in the competition for the Presidential Early Career Award for Scientists and Engineers (PECASE). Vyvyan's CAREER grant provides \$391,750 over five years for Prof. Vyvyan's research project "Synthesis of Allelopathic Agents as Leads to New Agrochemicals." More information on Dr. Vyvyan's research found on his webpage at <http://atom.chem.wvu.edu/dept/staff/org/jvyvyan.html>



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Bussell Wins Olscamp Research Award

Professor Mark Bussell received the Paul J. Olscamp Award at the spring 2000 commencement exercises. The \$1000 award was created by an endowment provided by former WWU president Paul J. Olscamp, and has been given annually since 1983 to a WWU faculty member selected by the Research Advisory Committee and the President as having made an outstanding contribution to research and scholarship. Dr. Bussell's research is in the area of new hydrodesulfurization (HDS) catalysts. Supported by funding from the National Science Foundation, Bussell's group synthesizes and tests new catalytic materials that remove sulfur impurities from petroleum feedstocks. Sulfur impurities in fuel contribute significantly to air pollution. Dr. Bussell joined the WWU faculty in 1990 and has published 10 articles on HDS catalysis in the last five years alone. You can read more about his research program at <http://atom.chem.wvu.edu/dept/staff/phys/mbussell.html>.



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Lisa Gentile, Assistant Professor

In July of 2001, my family and I loaded all of our belongings onto a moving van and headed West from New Hampshire. I was one of the new hires last year, and my primary teaching responsibilities at WWU will be in the biochemistry and biophysical chemistry series. I start this adventure after having earned a Ph.D. in biochemistry at Brown University, completed a postdoctoral position at the University of British Columbia, and started a faculty position at the University of New England (Biddeford, ME, 1998-2001).

Five Western undergraduates and I had fun over the summer getting my lab space set up and experiments started. We are



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interested in protein structure, but more specifically how altered structure correlates with altered function, and how proteins recognize their binding partners. We currently are working on two projects. The first aims to understand the structural basis for pathogenicity in mutations of presenilin-I, a protein involved in early onset Alzheimer's Disease. The second project involves mapping two endogenous neurosteroid binding sites on the

NMDA receptor.

My husband, Tom Harvey, is also teaching in the chemistry department at Western this year as a sabbatical replacement for George Kriz. He will be involved in the organic series as well as chemistry 101. Having come from an industrial position at Millenium Pharmaceuticals in Boston, Tom is enjoying his interactions with students. Our five year old, Courtney, keeps us plenty busy in our spare time. To no avail, we have been trying to convince her that molecular models make great toys. Unfortunately, she still thinks Barbie is way cooler - we'll keep working on that.

I have learned a few very valuable lessons in my short time in western Washington. The most important of which is that if you don't root for the Seattle Mariners, then don't tell anyone :). I look forward to settling in and seeing what the rest of the year brings. I also look forward to meeting you when you are in town. Bye for now - Lisa

Kriz Outstanding Teacher

Professor George S. Kriz was honored with the Peter J. Elich Excellence in Teaching Award, which is given annually to a member of the College of Arts and Sciences in recognition of their excellence in the classroom. The award includes a \$1500 stipend to further the recipient's professional activities. Nominations for the award come from faculty, students, and alumni. Professor Kriz began teaching at WWU in 1967 and specializes in organic chemistry. He has co-authored (with chemistry professors Don Pavia and Gary Lampman) a series of widely used textbooks for organic chemistry laboratory and spectroscopy courses. He



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is active in the local Puget Sound Section of the American Chemical Society and the Chemical Education Division of the ACS. He is currently on leave to serve as the General Chair of the 17th Biennial Conference on Chemical Education (BCCE) to be held on the WWU campus July 28-August 1, 2001. For more information, see the BCCE website at <http://chem.wvu.edu/acs/bcce/index.html>.

Department updates

Steve Emory Joins Chemistry Faculty

The decision to move to Western was clear and easy from Steve's perspective. First, he wanted to join a department where both teaching and quality research at the undergraduate level were valued. Second, the institution needed to provide an environment where both of these objectives could be accomplished. Finally, Steve wanted to live in an area that was culturally diverse, but was not a mass of urban sprawl. For him, Western and the town of Bellingham are an almost perfect fit.

Since joining the faculty, Steve has been busy preparing lecture notes for classes as well as trying to set up his research laboratory. Steve recruited his first graduate student, Teresa Wenda, this past summer who has been a tremendous help in organizing his laboratory. This winter quarter Steve hopes to recruit a couple of undergraduate students to his research group as well.

Thus far, Steve's favorite aspect of the job is talking with students outside of the traditional classroom setting. Whether it is discussing research issues, homework problems, or future career plans, he truly enjoys these one-on-one interactions with students.

Steve is originally from California where he received his undergraduate degree in chemistry from California Lutheran University in Thousand Oaks. This is also where he met his wife Christy. Both of their families still reside in the Ventura County area.

After graduation, Steve worked for one year as an analytical chemist in an environmental testing lab while his wife completed her degree in geology. They then left for Indiana University where Steve pursued his doctoral degree in analytical chemistry. At Indiana, Steve joined the research group of Professor Shuming Nie where he worked on single-molecule Raman spectroscopy. Upon completion of his Ph.D., Steve and his wife moved to Los Alamos, New Mexico where he was a postdoctoral fellow at Los Alamos National Laboratory, working under the direction of Dr. Richard Keller. His research focused on the development of ultrasensitive detection technologies for applications in molecular biology.

Steve's wife, Christy, and he have a three-year-old daughter, Aili, and a six-year-old cat named Gordy. Gordy enjoys running up and down their new stairs, while Aili enjoys trying to chase the cat. The adjustment to the rather dramatic change in climate (high mountain desert to lush coastal forests) has been eased by the conveniences of Bellingham. Coming from Los Alamos, where they were used to hour-long commutes to perform the simplest of tasks, Steve and Christy really enjoy the many cultural, recreational, and shopping opportunities that Bellingham has to offer. They have been here for approximately three months and have yet to go to Seattle (except to pick up grandparents at the airport) to do something because there is so much for us to do in Bellingham. They feel extremely lucky to be living in such a special place.

When Steve is not working in the lab or enjoying time with his family, he tries to stay in good physical condition by running. Steve has begun exploring the fantastic trail system in Bellingham. A favorite run is from the chemistry building to the lookout tower at the top of Sehome Hill. Steve also enjoys the trails in Whatcom Falls Park nearby his house.

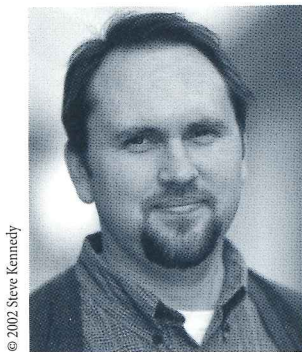
Although Steve has only been at Western and in Bellingham for a short time, he has gained the sense that both are very special places. Steve and his family hope to call them both home for a very long time.

Lorraine Wilde: Stockroom Manager/ Safety Officer

Lorraine is the new stockroom manager since August, 2000, replacing Dennis Fitch. Her background includes a bachelors degree in biology with a minor in chemistry from University of Puget Sound (Tacoma, Washington) and a master's degree in environmental toxicology and chemistry from Huxley College, right here at WWU. Prior to WWU, Lorraine worked for 6 years as a consulting toxicologist and environmental scientist, primarily in CERCLA (Superfund) Cleanup for firms in Seattle including CH2M HILL and Golder Associates. She also worked as a wetland scientist conducting delineation, mitigation, and restoration at a local consulting firm. In addition to consulting work, Lorraine taught upper division toxicology courses for Huxley and conducted vocational training at a residential drug and alcohol rehabilitation facility.

Since coming to the Chemistry Department, Lorraine's efforts have focused on lab and stockroom organization and cleanliness, hazardous waste handling and compliance, and safety awareness. She looks forward to the arrival of the new faculty that are expected to join our chemistry family in the coming years. What Lorraine loves most about her job is interaction with the students. There are ten work study students working in the stockroom as well as a dozen lab preppers and teaching assistants. Lorraine also enjoys discussing future plans and current research with our many research-active undergraduate and graduate students.

Lorraine holds the board position of at-large (Academia) and newsletter editor for the Pacific Northwest Chapter of the Society of Environmental Toxicology and Chemistry (PNW-SETAC) and volunteer at the Nooksack Salmon Enhancement



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Association building and maintaining Access databases. In my spare time (when there is any!), Lorraine remodels her home (built in 1928) with her husband, Mike, teaches her two dogs new tricks, and practices the piano. She is also an avid "outdoors-woman". Lorraine loves kayaking, river rafting, snow-shoeing, hiking, and volleyball. She is very happy, proud, and excited to be part of this award-winning department.



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l-r: Heather Barrieau and Lorraine Wilde

Heather Barrieau: General Chemistry Lab Coordinator

Heather Barrieau was hired by Western's Chemistry Department in June of 2001 as the General Chemistry Lab Coordinator. Heather is responsible for supervising, coordinating and participating in the department's general chemistry instructional laboratory program. Each quarter Heather will be involved in teaching sections of general chemistry laboratory as well as finding ways to improve the laboratory instructional program. Her favorite part of the job is working with students to understand chemistry in exciting and applicable ways.

After graduating in 1999 from Western's Chemistry Department, Heather went to work for Georgia-Pacific Pulp and Paper Company which recently closed its doors after many years in Bellingham. Heather worked as a chemist at GP for three years, including an internship, and was very sad to say goodbye, but very thankful to join the Chemistry Department's staff. Heather and her husband, Shawn (originally from Maine), were thankful to not have to move from Bellingham where she has lived all her life.

Heather and Shawn recently bought a big "fixer upper" house that takes up all of their extraneous time (but, no complaints!). When she and her husband do find extra time, they like to spend it with their two cats, as well as with friends and family. They also enjoy traveling - hiking, biking, skiing, sailing throughout the San Juan's, and walking through Freeport, Maine. So, if Heather is not at Western, you can find her working on her house or outside playing!



Calling all Chemistry Alumni!

The Western Foundation Annual Fund Phonathon is an important link between the Chemistry Department and you. The 2002 Phonathon is scheduled for early March. Raising about \$5,000 annually for the Department out of about \$400,000 campus-wide, the phonathon is the most efficient means we have of soliciting donations from alumni, parents and friends of Western in order to support new technology, student scholarships, and undergraduate research. In addition, the phonathon gives our students the opportunity to have personal contact with Western alumni. Our goal is to "Fund-raise and Friend-raise" by informing alumni of events and opportunities, and to update our records so we can continue to keep in touch.

Newly Minted Alumni

Congratulations to our graduation classes of 1999/2000 and 2000/2001. Graduation honors and immediate post-graduation activities as known to us are in parentheses behind each graduate's name.



Class of 1999/2000

MS Chemistry

Ryan Looper
(PhD Program in Organic Synthesis, Colorado State University-Fort Collins)
Brandon Stillwell
(Chemist, ProCyt, Seattle)

BA Chemistry

Jeff Fernandes
(Inorganic Technician, Lauck's Testing Labs)
Gary Younts

BA Education: Chemistry/Biology

Jackie Carlson (Cum Laude)

BA Education: Chemistry/Mathematics

Jolene Kolstad

BA Education: Chemistry/Physics

Jonathan Frostad
(Teacher, Oak Harbor High School)

BS Biochemistry

Brian Baer
(PhD Program in Medicinal Chem, University of Washington)
Ben Davis
Jennifer (Gilbert) Madeoy
(University Honors Program, Chemistry Department Honors; Lab Technician, Fred Hutchinson Cancer Research Center)
Brian Gilbert
Kevin Hambly
(MS Program in Applied Bioscience, Keck Graduate Institute-Claremont, California)
Lana Hanford
(Cum Laude; PhD Program, Interdisciplinary Biomedical Sciences, University of Pittsburgh)
Eric Heggem
Kristin Herndon
(Quality Control Assoc., NW Biotherapeutics)
Sopheay Hun
(2nd WWU Degree in Art; Microbiologist, Clinical Micro-Stat)
Allison Johnson
(Quality Control Analyst, Immunex)
Christopher Lockwood
Bruz Marzolf
(Research Associate, Institute for Systems Biology, Seattle)
Anna (Mowry) Fishburn
(Cum Laude, Chemistry Dept Honors; Fred Hutchinson Cancer Research Center)
Zac Nelson
(member of Ecology Study Group, last sighted studying tortoises in California)

Sam Schaefer-Joel
(Magna Cum Laude, Chang Biochemistry Award; Research Internship, New England Biolabs)
James Stupfel
(Research Assistant, Oregon Health Sciences University)
Travis Wood
(Research Associate, Xcyte Therapies)

BS Chemistry (and ACS Certification)

Kate Bailey
(Quality Assurance Assistant, Quest Pharmaceutical Services, Newark, Delaware)
David Cole
(PhD Program in Organic Chemistry, Montana State University-Bozeman)
Sky Countryman
(Technical Sales, Chromatography Phenomenex, California)
Joe Deverich
(Instrument Technician, IBM, Vermont)
John Fauver
(Hazardous Materials Technician, Fred Hutchinson Cancer Research Center)
Katherine Foland
(PhD Program at Arizona State University)
Amy Forstrom
(Director of Information Systems, The Max Foundation-VidaMax-Max Life Stem Cell Registry)
Bruce Harder
Christian Holst
(MS Program, WWU)
Jessica (Lange) Bjorklund
(Research Assistant, Immunex)
Rebekah Main
(Magna Cum Laude, Chemistry Department Honors; PhD Program in Physical Chemistry, Cal Tech)
Mitch Ness
Ha Nguyen
(Podiatric Medicine Program, Temple University)
Jennifer Oaksmith
(PhD Program at Cornell University)
Emily Peterson
(Magna Cum Laude, Chemistry Department Outstanding Graduate Award; PhD Program at University of California-Irvine)
Justin Roche
(Lab Technician, LaBelle Associates)
Chuck Schelle
(PhD Program in Material Science & Engineering, University of California-Santa Barbara)
Jonathan Schrader
Cheryl Schwenk
(Research Associate, Molecumetics),
Nick Smith
(PhD Program in Materials Chemistry, University of Wisconsin-Madison)
Cassandra Storms
(Procurement, Cable Technology, Kalispell, Montana)
Dave Svilar
(Sonus Pharmaceuticals)
Scott Symons
(Imaging Assistant, St. Joseph Hospital, Bellingham)
Mojdeh Vahid, Brian Woodruff
(Researcher, Immunex)

Class of 2000/2001

MS Chemistry

Jeffrey Heiser
Roxanne Hulet Kelly
(will enter PhD Program in Chemical Education, University of Northern Colorado in Fall '02)
Douglas Scott

BA Education: Chemistry/Mathematics

Sandra Sikonia

BA Chemistry

Anya Dollar
David Johnson
Amy (Kendall) Shock
Amanda Murphy
(2nd WWU degree in Plastics Engineering; PhD Program in Polymer Chemistry at University of Calif-Berkeley)

BS Biochemistry

Jessica Brzana
(MCAT Prep Instructor for Kaplan in Seattle)
Nikki Chin
Jason Frazier
(Fred Hutchinson Cancer Research Center)
Joe Hickey
(Production QA Technician, Rosetta Inpharmatics)
Mark Hudson
Meagan Lindstrom
(Arizeke Pharmaceuticals, San Diego)
Barrett Nelson
Cherstin Neslund
Blair Paul
Coni (Posey) Hickey
Christine Rose
(Magna Cum Laude; Medical School at St. Louis Univ)
Jennifer (White) Keffe
(Magna Cum Laude, Chemistry Department Honors, Chang Biochemistry Award; Research Scientist, Biochem/Biomolecular Structure & Design Program at University of Washington)
Tanya Wilke
(Chemistry Department Honors; Technician with Lauck's Testing Labs)

BS Chemistry and ACS Certification

Kathleen Barry
(Formulation Chemist, Cell Therapeutics, Inc.)
Jessica Blevins
(Combimatrix, Mukilteo)
Kevin Bonney
(applying to pharmacy school for Fall '02 admission)
Andy Bookter
(still hanging around B'ham, conducting ballast water experiments on an oil tanker and seeking full-time position in environmental consulting)
Connor Christy
Marci De Leon
(2nd WWU Major in History; PhD Program in Biophysical Chemistry at University of Washington)
Andrew Dodd
(will enter PhD Program at Institute of Paper Science and Technology in Fall '02)
Mary Jo Fairburn
(Web Designer for Voicestream Wireless Engineering. Owner of a Web Design Company, "Cosmic Pixel")
Jesse Gabelein
(Biesecker Biochemical in Stanwood)
David Hunn
(2nd WWU Major in Mathematics)
Nicholas Kesinger

Scott Korlann

(PhD Program in Chemistry at University of California - Los Angeles)

Mitchell Longstreth

(Quality Control, Botanical Labs, Ferndale)

Monica Lynch

(Americorps Volunteer in Baltimore for one year, followed by enrollment in pharmacy school)

Heather McKissick

Joe McLellan

(MS Program at WWU)

Keith Palmer

(Field Technician, National Cash Register)

Bevin Parks

(PhD Program in Chemistry, University of Oregon)

Diana Phillips

(Chemistry Dept Outstanding Graduate Award; PhD Program in Physical Chemistry at University of California-Berkeley)

Wendy Schatzberg

(PhD Program in Chemistry at Colorado State Univ-Fort Collins)

Dwight Seferos

(PhD Program in Chemistry at University of California-Santa Barbara)

Randy Self

(Analytical Lab Tech with Lauck's Testing Labs)

David Shock

Stephanie Tedrow

(Technician at Chateau Ste. Michelle Winery)

Sian Thornton

(2nd WWU Major in Mathematics; Peace Corps in Nepal beginning Feb 2002 teaching science and updating labs throughout the country)

Uyenphuong Vo

.... Alumni with Patina

A few notes gathered on department alumni since the last newsletter of Fall 1999. Some of the notes were volunteered by the alumni themselves and the rest were ferreted out by the department snoops (aka the chemistry staff). If you have any information-i.e., further education, employment news, personal/family news-to share with your fellow alumni in the next department newsletter, please submit it to us by e-mail, snail-mail, phone, or the old-fashioned way, during a personal visit to the department. Updates can also be made by filling out the form available under "Alumni" on our department web site.

1960s Graduates

James MacMillan '64; PhD '69 Ohio State. Jim has retired to Birch Bay, WA after wrapping up many years as an organic professor at the University of Northern Idaho. "Retirement" will include some part-time teaching for our department, beginning Winter Quarter 2002. **Jeffrey Hurlbut** '66; PhD '69 Univ Calif-Santa Barbara. Retired from professorship at Metropolitan State College, Denver Colorado in 2000. He and his wife, Beth, elected to build a retirement home in Bellingham. Jeff

now spends part of his "retirement" time teaching part-time in general chemistry for the department and continuing to serve as a science advisor for the Food and Drug Administration, but in Seattle rather than Denver.

David O'Keeffe '66; PhD '72 Arizona State. Dave and his wife Barbara (Tingley), also a former WWU student, recently moved to Tyler, Texas where he accepted the position of Provost and Vice President for Academic Affairs at the University of Texas-Tyler. Barbara is the Director of Environmental Health and Safety at the university. Dave's previous position was Dean, School of Science and Technology, Cameron University, Oklahoma. **Jerry Price** '68; MS '70 WWU. Jerry retired this year from his position as Quality Assurance Manager at Georgia Pacific Corp, Bellingham. Jerry and his wife, Nancy Sherer, as department scholarship sponsors, join us each spring at the department's reception for award and scholarship recipients. Jerry also served this year as one of the judges for the department's first Scholar's Day student research poster session and symposium.

John Gelder '69; MS '71 University of Wisconsin-Madison; PhD '75 U Arizona. Professor of Chemistry at Oklahoma State University since 1977 where his focus is on chemical education. John is Chair of the Board of Publications for the Journal of Chemical Education and the Chief Faculty Consultant in Chemistry for the Educational Testing Service. John will be visiting his alma mater next summer when Western hosts the American Chemical Society's 17th Biennial Conference on Chemical Education (BCCE), since he has been "recruited" by George Kriz to serve as the conference poster session coordinator.

1970s Graduates

Libby Bradshaw '71 attended the WWU alumni function held in Boston in April 2000, according to Joe Morse (Chem/Sci Ed Professor), who was in attendance at the function with his spouse, WWU President Karen Morse. Our most recent information is that Libby is a physician living in Massachusetts.

One alumnus who contacted us by e-mail after receiving our last newsletter was **John Priest**. After John earned his MS here in '74 he completed a PhD in Toxicology at Utah State University (at the same time Joe and Karen Morse were there) and two PostDocs-one at WWU and a second at Harvard SPH. John is currently Director of Research and Development for Amina Medical in Scotts Valley,

California. Combining blood glucose measurement technology developed at his former company in Issaquah with painless sampling technology developed in Palo Alto at Amina, the company launched a virtually painless blood glucose testing system in early 2000. (Their system was featured in the March 19, 2000 issue of Parade magazine.)

1980s Graduates

Roger Koops '81; MS '83 WWU; PhD '90 University of California-Riverside. After updating us in the last newsletter, Roger elected to immediately move and switch employment. In March 2000 he reported that he is now the Associate Director of Quality at Genelabs, a biopharmaceutical company located in Redwood City, California.

Greg Cox '82. From chemistry to science fiction author and editor! Greg's final book of his "Gamma Quest" trilogy was published by Berkley Books in June 2000. He is currently working on a new "Star Trek" trilogy for Pocket Books, tentatively scheduled for publication in 2002. He is also a Consulting Editor for Tor Books in New York City.

John Bittinger '83; M Ed WWU '88. John dropped us an e-mail after the last newsletter and reported that things are well in Everett for himself and his wife Gayle (a fellow WWU alum). Their daughter Katie is 10 and son Alex is 4. John is in his 13th year of teaching high school and enjoying it very much. Gayle is an editor and writer of preschool materials for teachers and parents, with over 65 titles to her name. (John isn't bragging about her, of course!)

Ann Schmierer '83. After several years as a researcher with Immunex, Ann returned to school and earned her PhD at the University of Washington in '98, where she remained until Summer 2000 as Macrophage Project Coordinator for the University of Washington Engineered Biomaterials Program. Then Ann and her husband Craig packed up and moved to Atlanta, Georgia when she accepted a position at the Georgia Tech/Emory Tissue Engineering Research Center as their Manager of Industrial Relations.

Rex Robinson '84; MS '89 Huxley, WWU. Rex is back from the great beyond!! In the last newsletter, we incorrectly listed Rex in our alumni "In Memoriam" section, based on what turned out to be a hiccup in the WWU alumni database. Due to the investigative efforts of fellow graduate Clint Burgess, we discovered Rex, alive and well, working as a

chemist at the Exponent Environmental Group in Bellevue. Being a good sport, Rex joined us for the Seattle area alumni reception in May 2000, looking pretty good for a guy back from the dead.

Gary Arvan '85 is losing his hair! But everything else in his life seems to be on track. He and his wife Poppy (a fellow WWU alum) have two boys—Daniel, age 10, and Steve, age 8. Being a top-notch parent, Gary spends part of his time coaching basketball and soccer, plus makes the attempt to stay in shape himself with biking (both mountain and road) and some weight lifting. After a stint immediately after WWU graduation with Fisher Scientific, selling chemicals and lab equipment, Gary worked at Evergreen State College, then moved on to Boeing, where he has been involved in software development for the past 16 years. At the time of this update (August 2000) Gary was an Oracle Database Administrator supporting a couple of projects, including "ConneXions", the Boeing project to put internet access on the airplane.

Ed Chapman '85. Joe Crook gleaned a few more details out of Ed in an e-mail exchange. Ed worked at Genetic Systems in Seattle for 2 years after graduation from WWU with his BS-Chem/Biol degree (and the Chang Biochemistry Award), then went on to earn his PhD in Pharmacology at the University of Washington. He then spent four years in a post-doc at the Howard Hughes Medical Institute before accepting an assistant professorship in the Department of Physiology at the University of Wisconsin-Madison. Check out his website (www.physiology.wisc.edu/www/chapman.html).

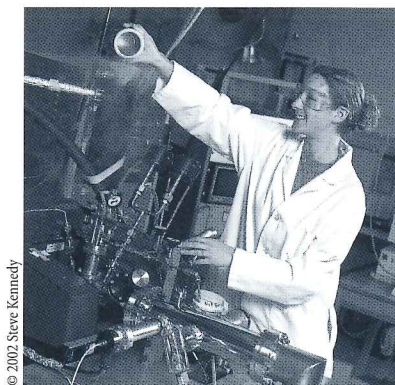
Tom LaGrande '85; PhD '94 Indiana University and Lisa (Hamond) LaGrande '87 were also in attendance at the WWU alumni function held in Boston in April 2000, as reported by Joe Morse.

1990s Graduates

Marc Kirchmeier '90. After earning his PhD from Oregon State University, Marc and wife Tonja moved to "The Great White North" for a 2 year PostDoc position at the University of Alberta. While in Edmonton, son Cole was born. They now reside in Cleveland, Ohio where Tonja works as a recovery room nurse at Case Western Reserve University, Marc works for Oakwood Labs, LLC (a drug delivery company) and Cole is a child comedian at daycare.

Florian Evangeline "Vangie" Christensen MS Biology '91 in the lab of Gerry Prody. We are saddened to report that Vangie suffered a heart attack and died this November in Hawaii. Vangie was a research assistant in Gerry Prody's lab during the period 1998-1990 and her M.S. thesis "Studies of Tobacco Ringspot virus and its Associated Satellite in Tobacco Protoplasts" completed under Gerry's direction was the first WWU-nominated thesis to be awarded the Distinguished Master's Thesis Award by the Western Association of Graduate Schools. Many of our biochemistry alums who were here during Vangie's years with the department benefited from her talents and wisdom. She will be greatly missed by the chemistry gang.

Anthony Diaz MS'93. After completing his MS degree in the lab of Mark Bussell (for which he was WWU's nominee—was awarded the "Distinguished Master's Thesis Award" by the Western Association of Graduate Schools), Anthony completed his PhD at Oregon State University in 1996. He then spent 1996-2000 back east as a Principal Engineer for Sylvania before accepting an assistant professor position with Central Washington University in Fall 2000. Check out his website (www.cwu.edu/~chem/faculty/diaz/index.html).



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Wes Quigley '93; MS WWU '95 is completing his PhD in analytical Chemistry at the University of Washington. Wes visited the department last June and gave a seminar presentation on "The Analysis of Flowing Liquids: Drop-Based Detection." James Boaz MS'95 and Steve Reid '98 are fellow forensic scientists at the Marysville Lab of the Washington State Patrol Crime Laboratory Division. They presented a joint seminar here at WWU in October 2000 on "Criminalistics and Chemistry-Forensic Science in the WSPCL."

Lonnie Robarge '94 completed his PhD

in Chemistry at Oregon State University in Spring 2001.

Josh McBee '95; MS '97 WWU. From the Bellingham Herald of 1/30/00, we learn that Josh "received a three year, \$50,000 National Institute of Health vision training grant. McBee is an organic chemistry doctorate student at the University of Washington. He is researching the biochemistry of vision and its role in human visual disorders and their treatment."

As reported by his undergrad research professor, Mark Bussell, **Garth Simpson** '95 has been on hyper-speed since leaving Western, completing his PhD at the University Colorado-Boulder in '00, followed by a one year post-doc at Stanford and accepting an assistant professorship in analytical chemistry at Purdue in '01. Garth was also awarded the Victor LaMer Award by the American Chemical Society's Division of Colloid and Surface Chemistry for the year's outstanding PhD thesis in colloid and surface chemistry. Check out Garth's website (www.chem.purdue.edu/Faculty/simpson.htm).

An update on another Bussell research lab undergraduate, **Samantha "Sam" Glazier** '96. Sam will be graduating this fall with a PhD from Cornell. She has accepted a Keck fellowship at Bryn Mawr College in PA. The fellowship is a three year mentor program that is 50% teaching and 50% research.

Matt Lashley '96 visited the department in February 2001 and presented a seminar on "Estrogen Receptor Targeting-Imaging and Gene Therapy" based on his PhD studies at University of California-Davis.

Matt Bell '97. Entered the graduate program in Kinesiology and Applied Physiology at University of Colorado-Boulder in Fall 1999 after spending two years as a chemist at Georgia Pacific, Bellingham.

Byron Gates '97 will receive his PhD in Surface and Materials Chemistry from the University of Washington in December 2001 and will begin a PostDoc at Harvard University in January 2002.

David Germack '97. The last newsletter found David at work as a chemical technical with Primex Technologies in Moses Lake. He decided to head for sunny California, with a move to Benicia and a position as a field chemist with Ensco, a hazardous waste mgmt company. David has now moved further south, to San Jose, and is a visiting researcher at the IBM Almaden Research Center, where he works in the lab of Dr. Craig Hawker doing synthetic organic and polymeric chemistry.

Matt Kaerberlein '97 married his long-time sweetheart, fellow WWU alumnus Tammi

Isaacson (BS-Biology), in August 2000 back home in the Pacific Northwest. His undergraduate research professor, Sal Russo, was in attendance. Matt expects to complete his PhD in the Biology Dept at MIT in December 2001 while Tammi continues work on her graduate studies at Northeastern. After graduation Matt will become VP of Research for a start-up bioinformatics/genomics company studying human aging.

Lynn (Ladd) Kemper '97 and her husband Scott welcomed a baby boy to the family on March 30, 2001.

Keith McCrea '97, former member of the Bussell research group and son of former Chem Dept secretary, Ruth McCrea, completed his PhD in Physical Chemistry at University of California-Berkeley in May 2001. Keith is currently a joint-postdoctoral fellow at the Polymer Technology Group and in the lab of his former PhD research advisor, Professor G. Somorjai.

Dan Cunningham '98 and **Jennifer Martinez '99** were married in early 2000 and brought the pictures to our May 2000 alumni event as proof. Our own Spencer Anthony-Cahill performed the services. Our faculty really do go all-out for their students!

Tim Dahl '98 and **Amber Ratcliffe '98** both accepted positions after graduation with the group working on the Human Genome Project at the University of Washington Department of Molecular Biotechnology. But when the founder of the department, LeRoy Hood, left in 2000 to form a new, non-profit research corporation, the Institute for Systems Biology, Amber and Tim soon followed. Amber's role was to set up and then manage the high-throughput array lab. The institute has now grown to more than 150 staff members within the 1st year of operation and has relocated to a larger, new facility at the north end of Lake Union in Seattle.

Julia (Whitford) Bach '98. Last word on Julia (from March 2000) is that she did relocate to the San Francisco area after her Sept 1999 wedding and is employed by Chiron, an international biotechnology company with headquarters in Emeryville.

Heather (Callery) Barrieau '99. Heather has joined the chemistry staff here at WWU. Check out the article on new staff elsewhere in this newsletter for the full details.

Greg Cruikshank '99. If we have our e-mails straight, Greg married Alexis Howard and left his position as an extractions chemist with an environmental chemistry firm in Seattle for graduate school in art conservation somewhere on the east coast.

Ryan Looper '99; MS '00 WWU. Ryan recently became the fifth master's research student of the department to be selected as WWU's nominee for the Western Association of Graduate Schools' Distinguished Master's Thesis Award, the fifth to be selected as a finalist for the award and the third to win the award. Congratulations to Ryan and his WWU MS research advisor, Jim Vyvyan. They were honored at a March ceremony in Los Angeles earlier this year.

2000s Graduates

Sky Countryman '00 married his long-time girlfriend and is kept busy in Technical Sales at Chromatography Phenomenex, based in California. The international company specializes in HPLC, GC, and SPE products.

Joe Deverich '00 bounced around for a year immediately after graduation, from Chiroscience, to Chateau Ste Michelle Winery, and on to Qiagen Genomics before moving back to Burlington VT in July 2001 to begin work as a technician on a microelectronic production line for IBM. He is also a married man (to Christina) as of May 2001.

John Fauver '00 also joined the married ranks; his marriage to Becky took place in September 2000, as did **Jenny Gilbert's '00** to Mark Madeoy. Jenny is working in Elaine Ostrander's lab at Fred Hutch, where she screens for BRCA1 mutations as part of a breast cancer project.

Kevin Hambly '00 is in the second and final year of his master's program at Keck Graduate Institute. His industry-sponsored, team-based master's project this year is with a drug discovery company utilizing a technology platform that allows prediction of protein interactions solely from primary sequence data.

Jessica Lange '00 and Tor Bjorklund married in August 2000. They were friends in high school and "upgraded" during college years, while Jessica was at WWU and Tor was an oceanography student at the UW. They live in Seattle.

Anna Mowry '00 married fellow biochemistry research student **James Fishburn** (WWU BS-Biology '99) at Lairmont Manor in Bellingham on August 27, 2000. Her father performed the ceremony and their respective research advisors (Spencer Anthony-Cahill and Sal Russo) were in attendance.

Joe Hickey and **Coni Posey**, both June 2001 BS-Biochemistry graduates, were married September 8, 2001 at the Port Orchard Church of the Nazarene.

Two other members of the June 2001 graduation group, **Amy Kendall** and **David Shock**, also married after graduation. **Keith Palmer '01** married his girlfriend of 6 years, **Tereasa McGowan** (WWU BA-Poli Sci '98), in June 2001, two weeks after graduation. (More details on their web site: www.palmersnw.com).

And another marriage! **Jennifer White '01** and **Dan Keeffe** (WWU Geology Dept '01) also married the summer after graduation (July 28, 2001) and honeymooned on Kauai, primarily in a tropical storm.

New Barbara French Duzan Scholarship Endowment

Established in 2000 by a substantial gift from department alumnus Barbara French Duzan (BS-Chem/Biol and 1993/94 Chemistry Department Outstanding Graduate) and her husband, Steven Duzan, former president of Immunex, the endowment annually funds a \$1,000 scholarship. The scholarship is awarded to a major for his/her senior year who demonstrates both academic achievement and financial need.



donor spotlight

Karen (Weihe) Hulford

(BS in Chemistry, WWU, 1969)

Following 30 years with Georgia-Pacific, Bellingham Karen Hulford is making the most of early-retirement, delighting in time spent at her mountain-side retreat and in her role as a grandmother to two grandsons in nearby Bellingham. This is a much more bucolic lifestyle than Karen lived in 1995 when she was Western Region-Sales Manager for the Georgia-Pacific Corporation and Chlor-alkali Product Manager. That was also the year she decided to act on her desire to give something back to Western, and she established the Sarah Bras Weihe Chemistry Endowment to provide equipment and materials for the chemistry department.

Taking advantage of G-P's matching contributions program, Karen soon reached the endowment threshold and has enjoyed watching the endowment pay-out to the Chemistry Department increase each year — most recently \$4,600 to purchase needed equipment and supplies for WWU chemistry laboratories. According to Chair Mark Wicholas, "The Sarah Bras Weihe Endowment provides critical supplemental funds that are essential in order for our Department to provide the best possible equipment for our students."

Karen started the endowment as her son, Scott Hulford, chose to make it four generations of her family to attend WWU. It was also during a time when she was serving on the Alumni Association Board and had an opportunity to re-connect with the Western she had loved as a young girl accompanying her father to the campus and later, as a commuting student enjoying coming and going to and from campus

through the "Snake Pit" (literally, the domicile of a student's snake menagerie) in Haggard Hall. Karen shares that the "Snake Pit," complete with sofas and tables, was

where she and other non-residential students would meet to visit and hang-out on their way to and from campus.

She remembers her experience in the Chemistry Department as being a time of high energy fueled by young faculty members George Kriz and Gary Lampman who were only a few years older than their

students. As she reflects on those years, and the fact that there were no other women chemistry students in her class, and the only women in the department were Ruth Schoonover in the stockroom, and faculty member Marion Besserman, it's clear that those circumstances were lost among the positive experience she had. The confidence she gained as a WWU student helped Karen to hold her own among colleagues at G-P and to assert her interest in advancing in non-traditional positions of leadership and management.

When asked what led her to increase her own financial contributions to Western, Karen shared that it was in response to the phonathon and the enthusiasm of current Western students reminding her of all she gained through, and because of, her own WWU experience.

She also attributes her increase in contributions to her years of serving on the Scholarship Committee of the Alumni Association Board citing the inspiration garnered from reading scholarship applications from hundreds of qualified and deserving applicants.

In reflecting on her advice to other alumni, it is to somehow get involved with Western through the Alumni Association, the Chemistry Department's Young Scholars program, the Western Foundation, or otherwise. She is also concerned that in light of Western's growing national presence, that WWU not lose sight of its heritage within the region and its "partnership" with Whatcom Community College.

Through actions, through gifts, through investing, Karen Weihe Hulford is an alumni making a difference!

Ways to Make a Difference

In addition to gifts of cash or supplies, The Western Foundation also accepts gifts of property, appreciated stock or securities and estate gifts. Giving is a personal choice and the types of gifts made are as varied as the interests of our donors.

In this period of increased economic uncertainty, some donors are comforted by the option of charitable gift annuities and charitable trusts for alumni and friends of the University. For many people, these trusts offer the opportunity to increase income from highly appreciated assets with substantial savings to capital gains taxes. At this time, charitable gift annuities pay an income of 6.7% for a 65-year-old, 7.9% for a 75-year-old, and 10.4% for an 85-year-old.

All gifts to The Western Foundation are tax deductible as allowable by law. A number offer particular tax or estate planning advantages that may be useful to you or your family. Most importantly, each is an investment in Western, out students, faculty, and the academic department or program of your choice. The Western Foundation staff will be happy to confidentially discuss all gift options with you or with you and your attorney or financial planner. Please call Stephanie Bowers, Executive Director of The Foundation, at 360-650-3027 for further information.



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We wish to thank the following alumni and friends of the department who have made contributions to our various Western Foundation funds during the 1999/2000 and 2000/2001 academic years. Employees that matched donations are noted in brackets following the donors' names.

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Rita T. Svensson
Gary & Millie Tetrick
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Bradley Whistler
Alan & Junell Whitford
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Sheryl Ann Wood

Duzan Biochemistry Scholarship Endowment

Steven & Barbara (French) Duzan

Knapman Scholarship Endowment

Many of these donations were made in memory of Professor Emeritus Fred Knapman, who passed away at the age of 92 on July 9, 2001.

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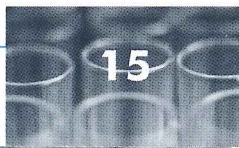
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Ruth Watts Scholarship Endowment

Arthur & Margaret Watts

Weihe Equipment Endowment

Karen Hulford [Georgia Pacific]



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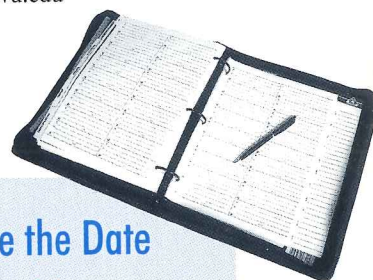
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Reserve the Date

Annual Chemistry
Research Colloquium,
Friday, May 17, 2002.
Professor Harry Gray, Arnold
O. Beckman Professor of
Chemistry at Caltech, will
deliver the plenary lecture.
For details, e-mail Professor
Don Pavia,
pavia@chem.wwu.edu.

WWU Chemistry
Department Alumni
Event, Thursday, May 30,
2002 at the Columbia
Winery, Seattle "suburb" of
Woodinville. Invitations will
be mailed in late April.