

The Department of Chemistry and Biochemistry

Utah State University

FALL 2005

Dear Alum:

A hearty hello from Logan. I hope and trust that your winter holiday season has started off well and continues to offer you and your family joy and happiness.

I am pleased to announce that our Department is now fully approved by the state to offer a BS degree in Biochemistry. As many of you know, in the past we were not able to offer this degree, but were limited to something fairly similar, a BS in Chemistry, with a Biochemistry Emphasis. The new degree will differ first in terms of physical chemistry. Rather than the two-semester sequence that stressed thermodynamics, quantum mechanics, statistical dynamics, and spectroscopy, the Biochemistry majors will take a one-semester course in Biophysical Chemistry, more closely aligned with their future career. Biochemistry students will also be expected to enroll in a wider array of biology courses. This new degree shows promise of becoming very popular. Even though it was only announced a couple of months ago, there are already nearly 20 students who have formally enrolled.

As you can see from some of the photos within this Newsletter, Glen Thornley has completed his final year working part-time in the Department. He was kind enough to stay on long enough to train his successors.



Tracy Gilson, Glen Thornley, and LuAnn Stocking

LuAnn Stocking has been a wonderful addition to the Department, taking up Glen's formal Department duties, and helping our faculty keep track of their research budgets. Tracy Gilson has become the new proprietress of ChemStores, where chemicals and related materials are dispensed to the entire campus community. I am delighted to say that she hasn't missed a beat and has maintained this service at a very high level. Within the Departmental Office, the addition of Aarian Bingham has worked out well, and we have some stability there.

Vernon Parker returned from sabbatical, and has reassumed his role as supervisor of our General Chemistry and Organic laboratory classes. Vernon had an eventful sabbatical, beginning in Shanghai and Beijing in China, and then on to Gothenberg, Sweden for the remainder of his time. (You will find elsewhere in this Newsletter some reminiscences by Vernon regarding his years here at Utah State.) After his recent promotion to full Professor last spring, Alex Boldyrev has begun his sabbatical, which he is spending at PNNL in the state of Washington, furthering his collaboration with experimentalists there.

It is my pleasure to announce that the Department will be able to engage in a second Endowed Lectureship each year, which will supplement the current Hansen Endowed Seminar Program in Biochemistry. Through the kind generosity of Dr. Richard Olsen, whom many of you may recall as an Organic Chemistry instructor, we are now able to invite to campus very prominent chemistry researchers from around the world. While on campus, they will consult with our own faculty, engage with our students, and discuss their own research programs. This program will enhance our educational mission, providing our students an opportunity for one-on-one contact with some of the

most famous researchers in the world, and raise the visibility of our own Department on the world stage.

As you may recall, keeping our laboratory equipment up to date is a never-ending challenge. For that reason, I am particularly grateful to Dr. Carlos Roundy, one of USU's graduates. His company, Spiricon, was kind enough to donate a laser beam imaging and diagnosis setup to Stephen Bialkowski's research program, which will facilitate research in photothermal spectroscopy.

I am proud that two of our new students were named 2005-06 USU Undergraduate Research Fellows, granting each a \$1,000 stipend and the opportunity to work on a research project with a faculty mentor. We wish both Albert Lund (from Salt Lake City) and Peter Griffin (from Medina, OH) the best as they progress through our degree programs. And speaking of some of our more promising current students, let me reiterate my invitation for you, as an alumnus of this Department, to nominate one of your former student comrades (undergraduate or graduate) for the Department's annual Alumni Achievement Award. After all, who knows these former students better than you, their peers?

As I close, we are looking forward to our first major snowfall here in Cache Valley. As they say, here we go again Wishing you and your family a cheerful Holiday Season.

With Best Wishes,

Steve Scheiner



COMINGS AND GOINGS

Aarian Bingham grew up in Southern Idaho, but moved to Logan to pursue a degree in Sociology which she completed last spring. Aarian joined our department this summer. She replaces Camille Miller who moved to Denver for her husband to attend law school. Aarian lives in River Heights with her husband Jake.



Glen Thornley has retired after 30 years of greatly appreciated service to the department. University friends and associates attended a reception held in his honor in December. We wish Glen the best during his retirement years.



Steve Scheiner, Glen Thornley and Paula Thornley

Lisa Berreau has accepted a position as Associate Dean in the College of Science. She will still maintain her active research and faculty standing within the department.

ALUMNI NEWS

Alan L. Rockwood (BS 1973, PhD 1981) is Scientific Director for Mass Spectrometry at ARUP Labs. He also serves as Adjunct Associate Professor of Pathology at the University of Utah School of Medicine, and Adjunct Researcher at BYU.

David Bienvenue (BS 1995, PhD 2001) has recently been promoted to Senior Scientist at Dendreon Corp in Seattle. He manages the Protein Purification Development group, developing cancer immunotherapies. David has recently become engaged, and anticipates getting married in August 2006.

Heidi Adams Campbell (BS 1997) went on to earn a PhD in Biological Chemistry at the University of Michigan in 2003. She is presently doing postdoctoral research at the University of Texas.

Morten Sorlie (PhD 1998) is an Associate Professor at the Norwegian University of Life Sciences.

Please send along news of your career, your personal life, anything that you would like to share with fellow alumni. Just tear off the last sheet in this newsletter and put in the mail. Or go to our Department's newly upgraded internet website.

ALUMNI LINK

<http://www.chem.usu.edu>

- **Alumni Database** – The Department of Chemistry and Biochemistry wants to know about our alumni and any significant events in your lives.
- **Alumni Newsletter**

UNDERGRADUATE RESEARCH NEWS



While the rest of us were watching fireworks during the month of July, Eric Vawdrey and Dr. Phil Silva were measuring the levels of particulates being released into the atmosphere. Eric's research focused on:

- 1) Increasing knowledge about the detection capabilities of the aerosol mass spectrometer.
- 2) Analyzing metal particles from firework pollution in a real-world setting.

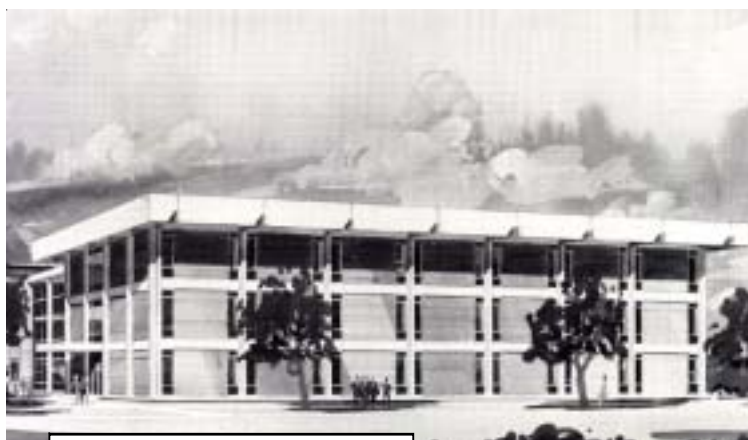
Eric will continue further experiments and data analysis to support his summer research. Funding was provided by a Sigma Xi Undergraduate Research Grant, and a USU Chemistry and Biochemistry Department Summer Research Award.



Reminiscences of Nineteen Years in the Evolution of the Department of Chemistry and Biochemistry at Utah State University

By Vernon Parker

I joined the Department in January of 1988 after spending nearly twenty years in Scandinavian universities. My application for the position was in response to an intriguing advertisement in C&E News for a person with an outstanding research record to help improve the research image of the department. I had previously spent a sabbatical half-year at the University of Utah in 1984 and had decided that Utah was one of the few states that I would consider leaving Scandinavia for. My interview for the position in May of 1987 went well and I accepted the position while still on campus.



Maeser Lab – Built 1968

Prior to beginning my appointment I was offered the Department Head (DH) position by Professor Karen Morse who was moving on to Dean of the College of Science. I turned this offer down since I was intent on maintaining my research momentum. We began a DH search during 1988 which did not result in any applicants which were acceptable to the departmental faculty. After the unsuccessful outside search I told the Dean that I would be willing to become DH if the faculty agreed to my appointment. I accepted the position after a positive faculty vote. I began my DH duties in late 1989.



After discussions with Dean McMahon my primary goal as head was to strengthen both the teaching and research capabilities of the faculty. During my tenure as DH we hired seventeen new faculty members and began a very strict policy on granting tenure to faculty. During this period five faculty members were denied tenure and a sixth resigned prior to the tenure decision. I believe that our efforts during the 1990's were rewarded by the appointment of a truly excellent faculty. Personally, I received a great deal of satisfaction in mentoring and promoting faculty and this was clearly my strongest contribution as DH.

The new Widtsoe building was completed before I resigned the DH position. This was a several year project that provided the opportunity to work with people from various disciplines and learn about the difficulties encountered in such an endeavor. This was especially evident in the disruptions caused by building a new building on the same site where an old building had to be demolished.

One of the more drastic plans, which was eventually rejected, involved constructing temporary laboratories on the quad for the lower division lab courses. The construction period passed without any great inconvenience to the department and our teaching and research programs were not greatly hindered. The end result was an attractive state-of-the-art facility for teaching and research.



Widtsoe Hall – Built 2000

I was in charge of the lower division laboratories during the spring semester of 2000 when we moved, at mid-semester, into the new facilities. This was an especially interesting experience to see how students appreciated the change from the barely usable labs in the old Widtsoe Hall to the very modern and pleasant laboratories in the new building. The students were very vocal in expressing their appreciation of the new facilities. Now, after five years, the labs do not show any appreciable wear from use and continue to provide an excellent laboratory experience in general and organic chemistry for a significant fraction of Utah State students.

In 2000 we carried out a DH search for my replacement. This is always a very difficult endeavor since it is highly desirable that the new DH be acceptable to most, if not all, of the departmental faculty. An important factor in this search was that a few of the faculty had become dissatisfied and wanted a change. After rejecting a number of other highly qualified applicants, Professor Steve Scheiner was interviewed. I was a strong advocate for his appointment since I was convinced that he would be very diplomatic and could help relieve the dissension in the department. Steve was appointed and began his tenure at Utah State University at the beginning of the 2000 – 2001 academic year. After the usual unsettled period, the department settled down and has continued to develop in our quest for excellence.

Since 1989 the Department of Chemistry and Biochemistry has made enormous advances. We now have a very productive faculty who are respected by their colleagues around the nation. In the past few years we have developed an Environmental Chemistry Emphasis and a new Biochemistry Major was implemented this year. In my opinion the future of the department is very bright.

- Vernon D. Parker

GRADUATE STUDENTS

Seven students arrived at USU in August 2005 to begin their studies towards PhD graduate degrees. The new graduate students come from the United States, China, India, Nepal, and Russia.



DEPARTMENT HAPPENINGS



FALL PIE SOCIAL

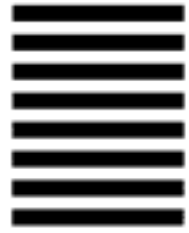
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We are interested in any news about yourself, your career, your family, etc. that you would care to share with other alumni. Submit the information via <http://www.chem.usu.edu/alumni-database.php> or detach and mail, postage paid.