

July, 2010

Dear Chemistry Alumni:

We want to tell you what is happening in the Chemistry Department at Valparaiso University, and we also want to let you know about your classmates. This is Volume 38 of the Chemistry Department Newsletter which was first written in 1971 and has been sent out annually ever since except for the years of 1971 and 1994.

Dr. Tom Goyne was honored this year at the 2010 VU Commencement by being awarded the 2010-2011 Distinguished Teaching Award presented annually by the Valparaiso Alumni Association. This award “recognizes outstanding faculty members and encourages a high level of effective teaching at the University”. Past VU chemistry professor winners of this award are **Dr. Ted Schwan** (1984) and **Dr. Gil Cook** (1994). The first award was made in 1970 to **Dr. Jim Schueler** in Civil Engineering.

Dr. Warren Kosman was diagnosed with a tumor in his thymus this past year which affected his speaking voice. After extensive radiation and chemotherapy as well as an operation, the physicians have declared him clear of this cancer!! He is planning to retire at the end of the 2010-2011 academic year after 34 years teaching at VU. **Dr. Steve Engerer** is busy this summer with VU Focus sessions where new incoming freshman students are preregistering. **Kevin Jantzi** is doing research this summer and is finishing two papers for publication. He attained tenure this year.

Dr. Tom Goyne has continued his efforts to sequence the genes for a family of metal-reducing enzymes expressed by the bacterium *Shewanella* algae. This work is a small part of a major DOE effort to harness microbes to the task of containing subsurface uranium and plutonium contaminants at Cold War-era nuclear weapons facilities. This summer, he is working on this project with three VU students and **Laurie Simmons** ('93) who teaches high school biology and chemistry in Knox, Indiana. This summer, he is also helping to supervise two students engaged in water quality testing in Northwest Indiana with funding from GLISTEN (the Great Lakes Innovative Stewardship through Education Network).

Dr. Bob Clark and his research team are continuing their investigations of the heme-containing, carbon monoxide-sensing transcription factor, CooA. Last year, **Dr. Clark's** students presented the results from their projects at two conferences. In October, **Laura Wagoner** ('10), **Edra Jani** ('10), and **Rachel Troester** ('10) gave oral or poster presentations at the Indiana Academy of Sciences (IAS) annual meeting. **Rachel Troester** was selected as the best female presentation of the chemistry session at this meeting. In April, **Edra Jani**, **Rachel Troester**, and **Dr. Clark** presented poster presentations at the American Society for Biochemistry and Molecular Biology (ASBMB) National Meeting in Anaheim, CA. This summer **Dr. Clark** is working with two students, senior **Amanda Sedoris** and junior **Josh Wagoner**. **Amanda** will continue **Edra Jani's** studies that involved characterizing the spectroscopic and functional properties of an unusual nitric

oxide-bonded form of CooA. She will also develop a new project that uses cryoradiolysis to study changes that occur to the CooA heme coordination structure upon reduction. In collaboration with **Dr. Goyne, Josh Wagoner** will continue the molecular biology project **Laura Wagoner** initiated last year. **Josh** will use site-directed mutagenesis to try to enable CooA to sense gas molecules other than carbon monoxide.

Dr. Jonathan Schoer is continuing his water quality research this summer at the Indiana Dunes National Lakeshore. He is collaborating with Dr. Joy Marburger of the National Park Service and one student to better understand the functioning of restored wetlands and how they impact water quality.

Dr. Gil Cook as Senior Research Professor continues on with his research, primarily with enamines and use of a Milestone Microwave Reactor. He has a publication this month in *Tetrahedron Letters* on the “green” reduction of enamines using inexpensive alcohols such as methanol or ethanol in a microwave reactor. The mechanism of this reaction is described. It is the first report of the reduction of enamines by alcohols.

The VU chapter (Beta Sigma) of *Phi Lambda Upsilon*, a national Honorary Chemical Society, inducted 16 new undergraduate members at the annual **Chemistry Awards Banquet**. The new members are **Traci Blomquist, Joel Booth, Joshua Cardinal, Kara Griffiths, Edra Jani, Joshua Lyons, Wendy Marth, Colleen McCurry, Ryan Miller, Christopher Mueller, Samuel Schaub, Daniel Stackowic, Rachel Troester, Joshua Wagoner, Laura Wagoner, and Susan Wiltrakis**. The speaker this year was **Lowell Hager** (‘47) who is Professor Emeritus of Biochemistry at the University of Illinois at Urbana-Champaign and a member of the National Academy of Sciences. He spoke on “A Lifetime of Playing with Enzymes”. Some of the invited guests at the Banquet beside the parents of the students were Provost **Mark Schwehn** and Arts and Sciences Dean **Jon Kilpinen**. Other awards given at the banquet were as follows: **Melissa Luebbers** (Wadsworth, IL) received the **CRC General Chemistry Achievement Award**; **Lauren Prusincki** (Elwood, IL) received the **Undergraduate Award for Achievement in Organic Chemistry**; **Joshua Lyons** (North Olmsted, OH) received both the **Undergraduate Award in Analytical Chemistry** and the **Charles W. Wolf Memorial Award**; **Windy Santa Cruz** (Fall Creek, WI) received both the **ACS Award in Inorganic Chemistry** and the **American Institute of Chemists 2010 Award**; **Lindsey Gilman** (South Bend, IN) received the **Outstanding Senior Chemist Award**.

In addition to these awards, our chemistry majors received other honors. Senior chemistry majors **Edra Jani, Colleen McCurry** and **Jacob Roshanmanesh** were elected to the Eta of Indiana Chapter of the *Phi Beta Kappa Society*. **Joshua Cardinal, Lindsey Gilman, Edra Jani, Hannah Johnson, Colleen McCurry, Ryan Miller, Windy Santa Cruz** and **Susan Wiltrakis** all graduated *Summa Cum Laude* (GPA of at least 3.8/4.0). **Lindsey Gilman** received a **2010 Student Affairs Outstanding Leadership and Service Award**. **Lindsey Gilman** (’10) was 1 of 24 students to participating in the summer school program in nuclear and radiochemistry sponsored by the Division of Nuclear Chemistry and Technology of the American Chemical Society. The course is funded by the U.S. Department of Energy and was held for six week at San Jose State University, San Jose, CA and Brookhaven National Laboratory, Upton, NY. She received the **Top Student Award** based on her work there. **Windy Santa Cruz** received an Arthur Ashe Jr. Sports Scholar Award which recognizes minority undergraduate Students for their academic and athletic achievements. **Windy** was named to the first team for women’s track and field. There were four chemistry majors at the 19th Annual Student-Athlete Academic Honors Banquet. **Lindsey Gilman** (cross country/track) received the **2010 Laurel Award** at that banquet which is presented each year to the graduating senior student-athlete who achieved the highest cumulative grade point average. The first winner of this award in 1992 was chemistry major **Ann Stien** (swimming). Other chemistry majors who have won this award are **Debbie Edmondson** (1993, swimming), **Marc Ridel** (1993, soccer), **Brad Peters** (1997, cross country/track), **Mark Kerins** (2000, cross country/track), **Kristin Nissen** (2001, tennis), **Mark Landmeier** (2002, cross country/track), **Evan Roller** (2005, tennis) and **Betsy Reitema** (2006, basketball). This year senior chemistry major **Windy Santa Cruz** (track) joined **Lindsey** with a **Finishing**

At the Top citation (seniors earning a cumulative GPS above 3.9). Past chemistry major student-athletes who have received this citation (along with those winning the Laurel Award) are **Matt Dahlgren** (1997, swimming), **Laura Kulans** (1997, volleyball) and **Alison Eicher** (1999, volleyball).

There were 15 chemistry alumni who came to the **31st Annual “Standup” Breakfast** (used to be Luncheon). Be sure to stop by for the **32nd Annual “Standup” Breakfast** which will be held in the lobby of Neils Science Center on Homecoming Saturday, September 24-26, 2010 from 9:30 through 11:00 AM. Be sure to stop in and chat with us and with your former classmates. Last year on the preceding Friday there was a **special lecture** presented by **Dr. John Golbeck** ('71) entitled “*The Promise of Solar Energy*”. **John** is Professor of Biochemistry and Biophysics/Professor of Chemistry at Penn State University. He received a *Valparaiso University 2009 Distinguished Alumnus Award* at the 2009 Homecoming. **Mark Wedel** ('68) also received the *Distinguished Alumnus Award* this year. They are the 13th and 14th chemistry alumni to receive this award since it was first instituted in 1974. **Carsten Falkenberg** ('72) was awarded an *Alumni Achievement Award* at this time. The 150th Anniversary of the founding of Valparaiso University was celebrated this past year. The results of a vote taken among VU alumni and friends for the *150 Most Influential People* in Valparaiso University History were announced at Homecoming. Two VU chemistry professors, **Dr. Ted Schwan** and **Dr. Gil Cook**, were among the 150 persons announced. The **13th Annual Premedical Lecture** will be presented on the afternoon of Homecoming Friday, September 24, 2010. **Dr. Carl Brighton** ('53) was the speaker in 2008, and we had no Premedical Lecture last year.

The Chemistry Department Seminar meets weekly, and we have had some of our alumni as speakers this past year. These alumni speakers were **Suzanne Nutter** ('98) chemist at Eli Lilly, **Dr. Sandy Rosenthal** ('87) Professor of Chemistry, Vanderbilt Univ. Director of Vanderbilt Institute of Nanoscale Science and Engineering and **Dr. Frank Willmore** ('93) Postdoctoral Researcher, Univ. of Texas-Austin.

News from the classes is as follows: **Ted Schwan** ('41) still lives in Valparaiso as a retired VU chemistry professor. He taught at VU for 36 years. **Lowell Hager** ('47) is Professor Emeritus of Biochemistry at the Univ. of Illinois-Champaign. He spoke at the Dept. of Chemistry Honors Banquet (see above). **Herb Ebert** ('53) passed away in Feb. 4, 2009. **John Fackler** ('56) is Distinguished Professor of Chemistry Emeritus and Dreyfus Senior Mentor at Texas A&M University. Both he and **Jim Bohning** ('56) (Lehigh Univ.) are among the 162 chemists honored in the first class of *ACS Fellows*. These fellows are honored for “excellence in chemistry and service to society”. **Don Becker** ('59) is a retired nuclear analytical chemist after working at the National Institute of Standard & Technology for 40 years. **Kenneth Ramming** ('61) passed away on July 29, 2004. He had a distinguished career in academic surgical oncology and was a member of the UCLA faculty for 30 years. He was a member of many prestigious surgical and oncologic societies, and he received awards in research and teaching over the years. He did pioneering work in cryosurgery for various malignancies, and he was a founding member of the UCLA liver transplant program. **Kathy (Ungrodt) Ernst** ('67) lives in Trapper Creek, Alaska. She went back to teaching after 2 years of retirement. She teaches both pre-algebra and an occasional EMT class. **Diana (Schultz) Beardsley** ('69) passed away on March 30, 2010. Diana had a Ph.D. in physical chemistry from Princeton Univ. and an M.D. from Duke Univ. She was associate professor of Pediatric Hematology/Oncology at Yale Medical School. She had been a member of the Yale faculty since 1986 after a stint at Harvard from 1981-1986, and was an internationally known pioneer in the study and treatment of hemophilia and childhood cancer. At Yale, she built a nationally recognized program in coagulopathies and platelet disorders. Her commitment to her patients was featured in the book *The Gift of Experience – Conversations About Hemophilia*. She also served as an associate editor of the American Journal of Hematology as well as many committees. She had many professional publications including her first one in the Journal of Organic Chemistry with **Dr. Gil Cook** as a result of summer research at VU. **Susan (Herscher) Ramsey** ('69) also worked with **Dr. Cook** at VU that summer and is a coauthor on that

paper. **Susan** and her husband have been living in western North Carolina since her husband retired from the Navy. They have two sons and three grandsons. She got a masters in computer science and statistics and worked for the Navy for 7 years at Stennis Space Center in Mississippi.

From the 1970's comes the following news: **Paul Sieving ('70)** is Director of the Eye Institute, National Institutes of Health. **Dave Felgenhauer ('70)** obtained a DDS from Univ. of Illinois (1978) followed by an Oral and Maxillofacial Surgery Residency in 1983. He now practices in Woodridge, IL. His son graduated from VU in Spring, 2009. **Mark Delassus ('71)** is the new pastor of St. John Lutheran church in Sherwood, OH. **John Golbeck ('71)**, Professor of Biochemistry and Biophysics/Professor of Chemistry at Penn State University, received a *Valparaiso University 2009 Distinguished Alumnus Award* at 2009 Homecoming and gave a lecture on "The Promise of Solar Energy". **Suzi (Kepler) Ahnquist ('72)** obtained a dental degree from the Univ. of Kentucky and now practices in Georgetown, KY. She has become a Fellow with the Academy of General Dentistry and an Fellow with the Academy of Comprehensive Esthetics. **Randall Knuth ('74)** obtained a dental degree with honors from Marquette Univ. School of Dentistry in 1978. He has been practicing dentistry in Tucson, AZ for over 30 years. **Lisa (Raeder) Bull ('76)** works for a medical device company in Toledo, OH and her husband is an interim pastor for two churches. Their son works at the VU Christopher Center Library. **Jason Renkes ('79)** has started a new company called Patriot Proppants. The company manufactures products used to accelerate the extraction of natural gas from shale formations.

From the 1980's comes the following news: **Greg Smith ('80)** obtained an MD and did a residency at Indiana Univ. Medical School, finishing in 1988. He worked for 20 years at Neuroscience Associates PSC in Louisville, KY in private practice. Then he went to work for the VA Medical Center in Louisville, KY as Chief of Neurology. He was voted by his peers as one of the "Top Docs" in neurology in the area in Louisville Magazine 8/09. He has continued to coach high school diving for 20 years. His eldest daughter is a veterinarian and his eldest son is in medical school. **Bob Bok ('80)** obtained a PhD in biochemistry from the Univ. of Illinois-Champaign in 1984 and an MD from John Hopkins Univ. in 1989. He is now Assistant Professor in Radiology, Univ. California at San Francisco in the Helen Diller Family Comprehensive Cancer Center. **Rich Trubey ('80)** obtained a PhD degree from Univ. of Illinois-Champaign in 1985. He now is Principal Research Engineer for Hamilton Sundstrand in Pomona, CA. His son graduated from VU in 2008 and his daughter just finished her freshman year at VU. **Sandy (DeLise) Davis ('84)** teaches chemistry at Virginia Highlands Community College. **Bill Schuh ('84)** is the Chief Medical Information Officer and Medical Director of the Research Institute at Carle Foundation Hospital in Urbana, IL. **Rob Bryant ('85)** continues his work on the development of high performance polymers for aerospace applications at NASA's Langley Research Center in Hampton, VA. This past summer VU chemistry major **Windy Santa Cruz** did full time research in Rob's lab at Langley. **Brian Piazza ('86)** is with the St. Clair Surgical Group in Port Huron, MI and is Medical Director for Lakeshore Surgery Center. **Sandy Rosenthal ('87)** is professor of chemistry at Vanderbilt Univ. and Director of the Vanderbilt Institute of Nanoscale Science and Engineering. VINSE brings together science and engineering faculty to share their expertise to create new devices or applications through the use of nanotechnology. The institute has 42 university-affiliated faculty members. Sandy spoke at a Chemistry Dept. Seminar this past spring on nanocrystals (see above). In 2009 Sandy was given the Jeffrey Nordhaus Award for Excellence in Undergraduate Teaching. This award was established in 1982 to recognize Arts and Science faculty who have excelled in teaching undergraduates. Nominations are reviewed and ranked by student member of Phi Beta Kappa, after which the dean selects a winner. Sandy's husband, **Adam List ('86)**, is the director of undergraduate laboratories in chemistry. **Eric Bittner ('88)**, after being a Visiting Scholar at Stanford Univ., joined the chemistry faculty at the Univ. of Houston in 1997. In 2000 he received an Early Career Award from NSF and in 2007 he was a Guggenheim Fellow. In 2009 he became the John and Rebecca Moores Professor in recognition of both his teaching and his research. His research work is in the area of

quantum mechanical calculations, and one of his award supporters wrote concerning his teaching: “In the era where teaching has been watered down to placate students, Professor Bittner held the line in his courses. Despite his high expectations, students respond well to him.” **Julia Hains ('88)** just joined the teaching staff at BASIS Tucson High School in Tucson, AZ. She is the only chemistry teacher in the school will get to design the chemistry program. BASIS Tucson is a charter school ranked 9th on the *US News and World Report's* 2009 list of America's Best High Schools. The producer of a documentary on the woes of the American educational system states that BASIS “...is academically as rigorous as anything I have seen in the world; more rigorous than Finland, more rigorous than the best in India and China.”

From the 1990's comes the following news: **Michelle (Pinske) Gilbertson ('90)** is Wiess Instructor of Chemistry at Rice University. Her husband teaches at Univ. of Houston. **Stephanie Kapfer ('91)** is working on staff at Portsmouth Naval Hospital in Virginia as a pediatric surgeon. She has adopted a Pacific Islander baby boy. **Suzanne (Furness) Tibbits ('93)** is moving back to Indiana with her family after teaching for several years at a high school in Colorado. **Frank Willmore ('93)** received an M.S. in chemical engineering from Iowa State University in 1995 and a Ph.D. in chemical engineering from the Univ. of Texas at Austin in 2006. He is studying small molecule diffusion in polymers and computer modeling and simulation. He spoke at a VU Chemistry Seminar this past spring (see above). **Kevin Siek ('93)** is married with six children and works at Leco in St. Joseph, MI. **Quenby Erickson ('94)** finished her fellowship at MD Anderson Cancer Center in June, 2009 and is now an assistant professor in the Department of Dermatology at St. Louis University. **Virginia (Bowden) Lehmann ('95)** lives with her husband and two children in Champaign, IL and continues teaching chemistry at Parkland College. **Beth (Tatro) Grossart ('97)** is a major in the US Army Medical Corps deployed in Afghanistan. She is a part of Headquarter & Headquarter Company of the 3rd Brigade Combat Team of the 101st Airborne Division. She is Brigade Surgeon which means that she is ultimately responsible for the healthcare for the entire brigade of about 3,500 soldiers. During her Iraq deployment, she was a Battalion Surgeon and did a lot of patient care. While she still has a fair amount of patient care, this job is a bit more administrative as she supports her battalion surgeons, PA's, nurses and medics spread throughout the brigade. She spoke at the VU Premedical Arts Colloquium Spring of 2008. **Adam Vega ('98)** is working for the Clark County, NV (basically, Las Vegas) Department of Air Quality and Environmental Management as an Air Quality Enforcement Officer. They are the local version of the federal EPA, and Adam inspects stationary sources, such as gas stations and asphalt plants, for compliance with federal and local air quality regulations. **Dan Eifert ('98)** lives in Chicago with his wife, **Rachelle (Lurvey) Eifert ('98)** and two sons. Dan is a professional bass soloist and has performed across the Midwest in both opera and concert. He made his solo debut with the Chicago Symphony Orchestra and with the Chicago Symphony Chorus in their 50th Anniversary Celebration Concert. He was the guest bass soloist in the performance of Bach's *St. Matthew Passion* presented last March at Valparaiso University. **Jennifer (Latham) Simon ('98)** taught for 5 years and is now assistant principal at Merrillville High School (Indiana). **Chris (Schering) Pruis ('99)** is Organic Chemistry Lecturer and Laboratory Coordinator at Arizona State University. **Andy Juell ('99)** was an actuary student and worked in Chicago for 6 years. He then went to graduate school in education and is now looking for a teaching job.

From the 2000's comes the following: **Jennifer (Bender) Cash ('00)** is continuing her graduate school studies at Univ. of Illinois-Champaign, working toward a PhD and an MD. She lives with her graduate student husband and daughter. **Chandra Mathew ('00)** obtained a JD degree from Suffolk Univ. Law School. She has an adjunct teaching position in a graduate program at Northeastern Univ., teaching a class on New Drug Development. She has been working in regulatory (FDA law) for a biotech company and recently started to train in-house on intellectual property law and patent prosecution. **Tim Nush ('01)** received an MD degree for Indiana Univ. School of Medicine and now works with Indiana's Goshen Health System's PrimeCare Physician Network. He practices family medicine, specializing in obstetric

services. **Cara (Colba) Mischnick ('01)** taught 7th grade science and math for 6 years and in now is a stay at home mom with her two children. **Doug Knepper ('02)** is Lab Manager at Univ. of Notre Dame. His wife, **Carly (Kemmis) Knepper ('02)** is a postdoctorate at Univ. of Notre Dame. **Aster Kammrath ('02)** received a Ph.D. from University of California-Berkeley and now has a post doctoral position at Univ. of Wisconsin-Madison in atmospheric chemistry. She applied for and received a L'Oreal USA Fellowship for Women in Science. **Leah (Keehr) Anderson ('02)** received an MD from Mayo Medical School and she has joined a small group practice in Bozeman, MT doing family medicine. **Eric Edgcomb ('02)** works for Baxter Labs in Round Lake, IL. **Aaron Miller ('02)** received a PhD in organic chemistry from Northwestern Univ. in 2007. His wife took a teaching position at the Univ. of Wisconsin-Marshfield and He is working in the research foundation of the Marshfield Clinic. **Allison (Broadstone) Bergdoll ('03)** has a baby girl, and she has joined the Dupont Orthodontics group in Birmingham, AL. **Samantha Hayes ('04)** teaches 7th grade science at Chesterton Middle School (Indiana). She led the Chesterton Middle School Science Olympiad team to fourth place at the Indiana State Science Olympiad competition. **Michael Sjoding ('04)** is doing a residency in internal medicine at the University of Chicago. **Lori (Hoffmann) Shelmerdine ('07)** is in the physical therapy program at the Univ. of Illinois at Chicago. **Patrick Long ('08)** works as a chemist for United Industries, a subsidiary of Spectrum Brands, in St. Louis. **Melanie Jones ('08)** is working for Pratt & Whitney Rocketdyne in Canoga Park, CA as a non-metallic materials engineer. **Dean Webb ('08)** is attending the Univ. of Michigan Dental School. **Matthew Rioux ('09)** is attending the Univ. of Illinois at Chicago College of Pharmacy. **Stephanie Scherer ('09)** is a graduate student at Washington Univ. in St. Louis. **Ryan Beck ('09)** will be attending Rosalind Franklin Univ. Chicago Medical School this fall.

The future plans for some of the 2010 graduates are as follows: **Edra Jani** and **Jacob Roshanmanesh** will be attending Indiana University School of Medicine; **Colleen McCurry** and **Hannah Johnson** will be attending Loyola University School of Medicine; **Susan Wiltrakis** will be attending University of Alabama School of Medicine; **Ryan Miller** will be attending Univ. of South Dakota School of Medicine; **Daniel Stackowicz** will be attending dental school; **Lindsey Gilman** will be attending MIT graduate school; **Windy Santa Cruz** will be attending Univ. of Illinois-Champaign graduate school; **Katie Krieter** is attending graduate school at Univ. of West Virginia; **Sarah Tesch** is working as a water quality monitor at Disney World.

Again, I encourage all of you to stop in to see us when you come through (or near) Valparaiso. At least drop us a note either written or by E-mail so that we know what you are up to these days.

Sincerely,

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