



Solutions



Greetings, McMurry University chemistry and biochemistry alumni! You may be aware that McMurry University has decided to forego the use of any mascot after the NCAA denied our appeal to remain the Indians. One of the clear points that became apparent during this debate was that every effort should be made to strengthen McMurry traditions. Although the Department of Chemistry and Biochemistry has not put out a newsletter for quite a few years, it was sent regularly until 25 years ago. We, the current faculty in the department, felt that this tradition should be renewed.

However, there are two main hurdles to overcome before the implementation of an annual newsletter can begin. First, there are gaps in the list of current contact information of chemistry and biochemistry alumni. Second, the recent retirement of Dr. David Klassen means that we are not familiar to many alumni. The goal of this first newsletter is to briefly introduce ourselves and to enlist your help in locating the current addresses of former chemistry and biochemistry colleagues. We invite you to read the short faculty biographies that follow and send to the address below any contact information for the chemistry alumni on the list on page 4.

Furthermore, we are interested in what you have done after leaving the McMurry chemistry department. Send us an update and with your permission this information could appear in a future newsletter. Alternatively, you can stop by the department's website at www.mcm.edu/academic/depts/chemdept/chem. We look forward to hearing from you!

Dr. Pamela Veltkamp – Analytical, Physical, and Environmental Chemistry

Hello! I am the chairperson of the department. I am in my 12th year at McMurry and am in my third year as chair. Prior to coming to McMurry, I taught for 5 years at my alma mater, Dordt College, in northwest Iowa. I received my B.A. in chemistry from Dordt in 1984 and my Ph.D. in Analytical Chemistry from the University of Colorado-Boulder in 1991. My research interests are in environmental chemistry, both atmospheric and water chemistry. My teaching duties here include Physical Chemistry, Quantitative Analysis, Instrumental Analysis, participating in General Chemistry (sometimes lecture, usually lab) and two courses for the Environmental Science department—Environmental Chemistry and Contemporary Issues in Environmental Science.

As chair, I would like to encourage you to keep in touch with us! If you don't know us, we would welcome a visit from you so that we can learn who has come through this department in the past. We'd like to hear what you are doing and to share your good news and accomplishments with other readers of this newsletter. And we welcome feedback from you—whether it is about the newsletter, what we as a department should be doing to better prepare our students for careers in chemistry, or other items you might like to comment on.

Dr. Arlen Jeffery – Organic Chemistry

I earned my Ph.D. in Chemistry from The University of Iowa in 1998 and lectured at Wichita State University in Wichita, KS and Butler County Community College before coming to McMurry in 2000. I teach organic and organic structural analysis, and rotate teaching general chemistry and labs, CORE-Human Knowledge, and McM-101. I am the co-sponsor for the McMurry Student ACS club and have promoted the chemistry shows at Saint John's Elementary.

My main research interest involves anti-viral chemistry, with specialization in carbohydrate, amino acid, nucleoside, and phosphonate chemistry synthesis. My major research project is the design and synthesis of a double-headed nucleoside (DHN); the carbohydrate developed from L-serine. The project ultimately will evolve into a double-headed nucleoside phosphonate to prolong the lifetime of the pro-drug within the biological system.

Dr. Paul Pyenta – Physical Biochemistry

Hello! I am currently an associate professor of biochemistry at McMurry University. I earned my PhD at Cornell University (Ithaca, NY) working in biophysical chemistry under Dr. Barbara Baird. Before that, I earned a BS in chemistry and a BA in mathematics at Wayne State University (Detroit, MI). My PhD thesis centered on diffusion and mobility studies of membrane-bound proteins in the inner leaflet of mammalian cells. I used microscopic and laser applications to investigate these properties. Fluorescence served a large role in these studies, and has become a favorite tool for me. I am currently pursuing two projects at McMurry: (1) probing the real-time dynamics and conformational properties of proteins using fluorescence resonance energy transfer, and (2) transforming a bacterium known as *Bacillus thuringiensis* with DNA for green fluorescent protein (GFP) in order to track it through the digestive tracks of certain insects. Academically, I have always been interested in (1) the teaching of the sciences, and (2) the cross-discipline areas, such as that between chemistry, biology, and physics. These interests go hand-in-hand, and allow "Dr. P" (as students often call me) to infuse interdisciplinary topics and examples into the classroom. I regularly teach general chemistry, biochemistry, and biophysical chemistry for McMurry's chemistry department.

I am married to Josie; we have three sons (ages 6, 3, and 2), and are expecting a daughter to be born in February 2007. I am originally from Michigan, and Josie is from New York. We both have come to love Abilene, the warm (err... hot) weather, the terrain, and have happily left the cold winters of the northeast behind. We recently moved to a house in the country south of Abilene, where we enjoy the fresh air, the freedom of country living, our pets, and our small flock of chickens. Josie is busy raising the children and keeping house, but hopes to return to work as a nurse sometime in the future. I am kept busy doing handy-man duties, and enjoy playing with energy-saving projects, such as solar water heating and wind energy.

Dr. Edward Donnay – Inorganic Chemistry

Hello, I joined the faculty at McMurry upon the retirement of Dr. Klassen in 2006. I received my doctorate from Washington University in St. Louis in 2002. I spent three years as a visiting assistant professor at Furman University in Greenville, SC and a year at Kent State University as a postdoctoral researcher before moving to Texas. I am having fun exploring my new surroundings and meeting new people. This year I have been immersed in the non-major chemistry course and involved with general chemistry. I will be teaching the upper level inorganic course next fall. Current and future projects include editing this newsletter, initiating a monthly seminar series, and having students learn chemistry through service to the community by participating in chemistry demonstrations. If you are interested in talking about any of these ventures please contact me.

My research interests involve making new and unusual transition metal complexes. For example, the synthesis of ruthenium and chromium complexes that contain three different diimine ligands will allow us to tailor the molecular properties to approach various problems. These types of complexes have been proposed as possible anticancer agents due to the ability of the excited states to oxidize guanine, a DNA base. However, the delivery and binding of the transition metal complexes to DNA are still under investigation. I am also interested in addressing other synthetic problems or issues that are brought to my attention. Collaboration and bringing multiple approaches to a problem is usually the best way to find innovative solutions.

Mrs. Alecia Eppley – Organic and Medicinal Chemistry

I am an adjunct in the chemistry department and have been teaching Fundamentals of Biological Chemistry for the past three years. This is a relatively new course designed to meet the needs of pre-nursing students. Before teaching at McMurry I taught at Hardin-Simmons for one year. I also do consulting work for ACT which involves editing and writing for several of their exams. I am a native Minnesotan and moved East for college. I received a bachelor's in chemistry at Smith College, in Northampton, MA and a master's in organic chemistry at Cornell University in Ithaca, NY. I worked for two years as a medicinal chemist for SmithKline Beecham pharmaceuticals (now GlaxoSmithKline) in suburban Philadelphia. My family came to Abilene in 2000 when my husband joined the McMurry faculty in the Department of Religion and Philosophy. We have three children.

The following table contains the names of alumni for whom we have incomplete, incorrect, or no address. If you know the contact information for any of these alums, we welcome your sharing that information with us, or you might contact that person and ask him/her to contact us. Thank you!

Greg Mamikunian '56	Robert C. Loyd '75
David Neel '58	Peter Morford '75
James Tingle '59	Mary (Shooter) Real '75
Dr. Thomas DuBois '62	Tommy C. Taylor '75
Jack Shultze '62	Dr. Roderic Harold Fabian '76
Dr. Reynold Carlson '63	Conley Goines '76
Mohammad Dareshori '63	Dr. Norman Carl Sulser, Jr. '76
Gail (Hart) Long '64	Eugene Weitzel '78
Harry Bistrisky '65	Buddy Fisher '80
Steven Sample '66	Mark B. McClure '80
Dr. James Ira Duff '67	Laurel Van Winkel '81
Dr. Mary Jane (Matthews) Wray '67	Kirk Arthur Brooks '82
Sharon BuBoise '69	Mansel Harris '82
Dr. Carolyn Nell (McCoy) Cutaia '69	Rosalind Rankin '83
Dr. H. Thomas Spillman '71	Dr. Mary Linda Sellers-Hann '83
Dr. Carl Wayne Hudson '72	Gregory Aguilar '85
George E. Bernard '73	Johnny Duane Rowland '85
Roger Keith Allen '74	Kerry Kyle Clark '86
C. Randall Cotney '74	Marcus Von Babb '94
Dennis J. Smiley '74	Mirela Zimic '97
Susan Arth '75	Dr. Doug McEwen '01
Richmond Cullins '75	

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