



7/31/2019

Message from the Editor:

Another busy academic year in the Department of Chemistry and Biochemistry has ended. The four faculty members remained active with teaching, research, and administrative service responsibilities as described in part below. The summer does not provide much of a respite as eight students are doing research and ten other students are taking a summer general chemistry course. Furthermore, McMurry is implementing construction and renovation plans for the science building as a part of a Title V grant from the Department of Education. While we always enjoy visits from our alumni, we must ask that if you stop by that you “excuse the mess” which the department seems to be in right now. We hope the product of the hard work we put in will be something that attracts more science students to McMurry and helps them to be successful when they get here.

Sincerely,

Dr. Edward Donnay

donnay.edward@mcm.edu

Alumni News:

Alumni present at Homecoming 2018 included Dr. Girvin Harkins ('60), Joe Loter ('65), Ralph McCleskey ('65), and Rick Quy ('70).

Dr. Girvin Harkins ('60) celebrated his 80th birthday this summer. As a longtime member of the Board of Trustees, Girvin has been back to campus many times. It is always a pleasure to speak with Dr. Harkins.

Dr. Ralph McCleskey ('65) was selected as the 2018 McMurry Homecoming Alumni Artist and exhibited his artwork during homecoming. He was also honored with the Distinguished Alumni Award at the 2nd Annual Night of Distinction which celebrates alumni achievement in April. He was the keynote speaker and gave a fantastic address to the gathered students, faculty, friends, and alumni. He was honored for a lifetime of service to his profession, McMurry University, and the Abilene community. He has lectured statewide on best practices in acute cardiac care and published articles in multiple medical journals. He was a principal in leading the Abilene City Council in passing a no smoking ordinance and hosted the “Ask the doctor” radio program for 10 years. He helped to develop the concept and realization of the Sacred Wind statue on campus.

Mr. A. Ray Hamilton ('66) received the Outstanding Alumni Award in Math & the Sciences at the Night of Distinction event. After graduating, Ray began his teaching career in Anson, TX followed by Great Falls, Montana. Ray earned a Master's degree from the University of Montana in 1975 and in 1987 Ray received a McAuliffe Fellowship. Ray helped to develop a science research course for Greenwich High School in Greenwich, Connecticut, that is still being taught today for 50+ students per year, even though Ray has been retired for over 10 years.

A third chemistry alum was honored at the Night of Distinction in April, Gabrielle “Gabby” (Famble) Mallet ('05) was recognized with the Young Alumni Achievement Award. Gabby is the Assistant Department Chair Statewide for the First Year Seminar program as well as Associate Professor for Developmental Math at Texas State Technical College. She received the W.R. Potter Mark of Teaching Excellence Faculty Award in 2017 for her innovative teaching practices and leadership. Gabby served as the President of the faculty senate for four West Texas campuses and as a Chair for the statewide faculty senate for two years. She is currently pursuing her Ph.D. in higher

education from Azusa Pacific University, where she was awarded the Carolyn Juillerat Memorial Scholarship given to the student whose leadership talents contribute to collaborative teamwork.

Dr. Veltkamp ran into Mrs. Kathy Arno ('69) at the Women's Leadership Luncheon and was pleased to discover they have a common interest in teaching students using active-learning pedagogies. Kathy is a project manager with AVID: Advancement Via Individual Determination (www.avid.org).

Dr. Donna Jean (Anderson) Fredeen ('81) was McMurry University's Spring Commencement 2019 speaker. Dr. Fredeen completed an internship at El Paso Products, an oil refinery located in Odessa, before beginning her Ph.D. studies at Texas A&M where she met her husband, Ken. In 1986, they moved to Connecticut where she was briefly an Assistant Professor at the University of Bridgeport. She ended up at Southern Connecticut State University in New Haven in the fall of 1987 where she spent 26 years moving through the faculty ranks and was eventually named Dean of the School of Arts & Sciences in 1998. She led the revision of the general education program, implemented the First-Year Seminar, and learning communities. During her final years at SCSU she focused on the vision and design of a new science building and the fundraising for that project. In 2013, she accepted the position of Provost/Vice President of Academic Affairs at Rider University in New Jersey. At Rider, she facilitated and implemented the Engaged Learning Program that is the foundation of the current strategic plan. A 2011 finalist for the Connecticut Women of Innovation Award, Donna Jean was recently inducted into the Texas A&M Science Academy of Distinguished Former Students in recognition of her contributions to science education.

Sean Smith ('06) was invited to speak to a religion class at McMurry University in February and stopped by for a visit. He is a minister at Asbury United Methodist Church in Odessa.

Dr. Jennifer (Revell) Ramey ('10) was made a Fellow of the American Academy of Optometry in November.

Dr. Erica (Rawls) Wilson ('11) and her husband Adam are currently expecting a baby girl. When born, she will join older sister Allie in the Wilson household.

Dr. Jonathan Urbanczyk (minor '11) and his wife welcomed the addition of a baby boy in early July 2019.

Dr. Danni McMahan ('12) started a new job in October 2018. She works at Veterans Affairs North Texas Healthcare System.

Mr. Nathan Worley ('12) married Abigail Denham in January. Nathan also started a new position as Market Chief Strategy Officer at The Hospitals of Providence.

Mr. Brandon Copeland ('14) received a degree as a Medical Technologist (aka clinical laboratory scientist) from Texas Tech University Health Science Center School of Health Professions. He is currently training at Hendrick Hospital for the next three months.

Mr. Joshua Brooks ('14) graduated from the Physician Assistant program at the Texas Tech Health Science Center in May.

Mr. Daniel Kent ('17) and Ms. Ashley Rangel were married in December 2018. He is attending the Texas Tech Health Science Center School of Pharmacy in Abilene.

Congratulations to everyone above on their achievements!

The McMurry Science and Math Advisory Board (SMAB) sponsored the seventh annual golf tournament in conjunction with the spring alumni weekend in Abilene on April 12th-13th. Proceeds from the golf tournament help fund SMAB priorities, such as Charles and Lisa Bloomer Research Stipends and student academic travel. If you would like to know more about this event or SMAB, you can visit, <http://academics.mcm.edu/smab/> or contact Dr. Tikhon Bykov at bykovt@mcm.edu.

Departmental News:

The department is happy to introduce a new graduate this spring, Ananda Lewis! Ananda began at McMurry University in the fall of 2015. She completed almost all the degree requirements in three years and took advantage of our early admission agreement with the Texas Tech University Health Science Center School of Pharmacy to begin her studies there last year. The credits from her first year of pharmacy school were acknowledged as the last step to completing her McMurry University degree in Biochemistry. While at McMurry, she conducted research with Dr. Shin as part of the grant from the Welch Foundation. She is continuing with her studies at the pharmacy school to complete her Doctorate of Pharmacy degree. Congratulations Ananda!

Recently we have had a number of students taking courses in the chemistry department as post-baccalaureate students. Most of the time they are trying to satisfy the prerequisite courses for medical or pharmacy school after completing an undergraduate degree at another institution. One of those students, Mark Izbrand, took General Chemistry II at McMurry University in the summer of 2016 and multiple science courses since. He has also done great work as a research student with Dr. Pyenta. He has accepted a position as a science researcher in a cardiology group at UT-Southwestern Medical Center in Dallas while he is applying to medical schools. Congratulations Mark!

The department hosted the Associated Chemistry Teachers of Texas (ACT₂) Biennial Conference during July 2018. The theme of the conference was “Superheroes of the Periodic Table”. Eighty-five high school teachers spent 3-4 days at McMurry attending events, workshops, and presentations. The conference workshops pushed our resources to the limit, but we made a good impression. Dr. Donnay, who helped coordinate the event, took over as a regional director in the ACT₂ organization.

The local section of the American Chemical Society (ACS) sponsored Dr. Katie Walker, a chemist who currently works as a Regulatory Specialist for an adhesives manufacturing company and was past-chair of the local section, to present a talk at McMurry in November. Dr. Walker has had several jobs since getting her advanced degree including teaching chemistry at the university level for 5 years, working in chemical industry for 3 years, and starting an educational electronics company on the side. Her presentation was titled “To Be Determined: Your Career in Chemistry”. She spent time visiting with students and touring McMurry University and ACU during her trip to Abilene.

At 6:02 pm on October 23rd (i.e. Mole Day 6:02 10/23), McMurry University used a “Program-in-a-Box” from the ACS to host a viewing of a webinar titled “Voyage to Mars: Red Planet Chemistry”. The box contained advertising flyers, balloons, and items to be given away as door prizes at the gathering. Except for an unexpected network outage, the students and faculty who attended enjoyed the webinar.

The McMurry University Student Affiliates Chapter of the ACS was active this year. They participated in a “STEAM” themed edition of Art Walk in downtown Abilene in September. Along with the Biology Department, they staffed a table that made slime and extracted DNA from strawberries for kids. In an annual tradition, the club hosted 4th grade students from Jim Ned elementary during homecoming in October. The club co-sponsored a web simulcast of a local section ACS meeting concerning laboratory safety in March and invited an instrument salesperson from Advion, Inc. to talk about the equipment they sell.

In an effort to improve success in general chemistry McMurry University began participation in the “Gateways to Completion” program sponsored by the Gardner Institute. The goal of the Gateways to Completion program is to transform teaching, learning, and reduce failure rates in lower division and/or developmental education “gateway” courses through working directly with faculty and staff. A committee made up of the faculty members who teach General Chemistry and outside members from Biology and Kinesiology met monthly to assess all aspects of the course and develop recommendations. We will be implementing many of these recommendations this coming year.

Departmental Research:

A team of faculty and students attended the 52nd annual Meeting-in-Miniature sponsored by the Dallas-Fort Worth section of the ACS (DFW-ACS) at the University of North Texas in Denton on April 27, 2019. Faculty attending were Drs. Pyenta, Shin, and Donnay. Six students from the Chemistry Club went along. Meetings are an excellent opportunity for both students and faculty to establish networking connections with other students and gain exposure to current scientific projects at other universities. Two McMurry students gave talks about a research project supervised jointly by Drs. Shin and Pyenta. Yuwei Bao gave a talk titled “Molecular Docking Analysis of Various Small Molecules with Class I Histone Deacetylases as Potential Anti-Cancer Drugs.” The title of Yejide Oyewole’s talk was “Biological Activities of Dihydroxamic Acid Derivatives in HDAC1 and HDAC8 in MDA-MB-231 and MCF-7 Breast Cancer Cells.” She won first prize in her room over 14 other talks given by undergraduate students from UT-Dallas, Texas Wesleyan University, SMU, and UNT. Both students did research last summer funded by the Welch Foundation.

This summer the department has eight undergraduate students conducting research on the Welch Foundation Departmental Grant: Lara Meyer, Nicole Doyle, Chrystal McCutchen, Ernesto Valle, Meghan Westcott, Abdullah Alnofaiey, M. Dontae Chambers, and Yuwei Bao. Drs. Shin and Pyenta involve the students in a collaborative project to evaluate histone deacetylase inhibitors as anticancer agents against two different cancer cell lines, MDA-MB-231 and MCF-7. Synthesis of the inhibitors occurs in the Shin laboratory while the Pyenta laboratory grows and maintains the cancer cell lines for testing. Other aspects worked on in the two groups include computational docking studies and isolation of possible anticancer compounds from West Texas plants.

School and Miscellaneous News:

McMurry navigated a once-every-ten-years reaccreditation process this past year with the submission of a written report last fall. An off-site review team flagged a few items for a closer look by an on-site team that visited in late March. The SACS teams identified a couple of small issues and McMurry is currently preparing a focused response. The university receives final notification of its reaccreditation status this December. Renewal of our accreditation appears likely with minimal further monitoring.

Mr. Larry Conlee (Physics '71) received an honorary Doctor of Science degree from McMurry University during spring commencement. He participated in the special program in “Piezoelectricity” taught on weekends by Dr. Virgil Bottom. This led to internships at Hewlett-Packard and a job with Motorola, Inc. He improved the quality and the utilization of synthetic quartz in pagers, 2-way radios, and cellular telephones. His team developed the first digital cellular phones in 1992. In 2001, he joined Research in Motion (BlackBerry) as Chief Operating Officer, Product Development and Manufacturing in Waterloo, Ontario, Canada. In 2009, he was recognized as “Top COO” in Canada.

McMurry applied for and received a Department of Education Title V grant in October. The focus of the grant is to increase enrollment, success, and completion rates in STEM fields. The grant provides \$750,000/year for five years and includes two new programs (Human Health Science and Sustainability), a partnership with Cisco College, research teams, new equipment, and renovations on the second floor of the science building and later in the greenhouse. The renovations enlarge the biochemistry teaching space and create two offices via the removal of a small classroom. The plans create a biochemistry/molecular biology research area by combining two small laboratories (previously used to teach physical and inorganic chemistry). Extra fume hoods in the organic teaching laboratory to teach greater numbers of students are also included in the construction. The displaced inorganic chemistry lab will occupy the current biochemistry research laboratory and the plan is to teach physical chemistry lab in the analytical laboratory. Finally, McMurry is renovating the restrooms on the second floor to be ADA-compliant. The department scrambled to empty the spaces

designated for construction at the end of the fall term in December. While workers removed two walls that month, no further construction occurred until this June. Faculty are frustrated with the pace, but we are looking forward to when the project is completed. I am sure that updates on the progress of the grant will appear in future newsletters.

McMurry University's athletic department announced a plan to add "e-sports". The e-sports team will begin play in the fall. In addition, a donor provided a large gift to build a softball field near the current baseball stadium.

40 Years Ago in the Department

(Below are news items and excerpts from the department newsletter from May 1979. The entire newsletter can be seen under the "Department News" tab on our website, www.mcm.edu/chemistry)

"David Schkade and Tim Oglesby graduated with ACS certified degrees and Cave Baum and John Sanders received the B.S. degree ... Greg Alexander will graduate in August. ... Also, John Manning will graduate in chemistry in August."

"Gamma Sigma Epsilon Honorary Chemical Society had a convention in Tuscalousa [*sic*], Alabama, in April. Those from the Xi Beta Chapter attending the convention were Bob Reid, Donna Anderson, Carl Mumford, John Manning, John Sanders, and Roy Sonntag. ... Chemistry students who have been honored this year as outstanding students are Bob Reid (sophomore), Mike Jones (junior), and Tim Oglesby (senior). Tim has been awarded an honor by the Texas Institute of Chemists. He was awarded a medallion ... based on his academic record and non-academic achievements."

"This summer Dr. Klassen will have two students working with him in research. Mark McClure and Mike Jones, both seniors, will begin work the last part of May. This spring Dr. Klassen attended the ACS meeting in Hawaii."

"Dr. W. B. McDaniel, a former vice-president of McMurry College, passed away July 4, 1978. He was also a former chemistry professor prior to becoming vice-president of the college."

"This year Mr. Harvey Jones taught biochemistry at McMurry. Harvey is employed at Hendrick Hospital in the clinical laboratory. ... We are fortunate to have Harvey as part-time instructor on the staff."

"Next fall Dr. Margaret Day-Francesconi will join the Department and the College. Dr. Day-Francesconi is a biochemist...will teach biochemistry and general chemistry laboratory. Also, part of her teaching assignment will be in biology."

Alumni Search:

For the following alumni we have no contact information. If you know the contact information for one of these alums, we welcome your sharing that information with us, or you might contact that person and ask him/her to contact us.

Gayle Hart Long '64

Michael Haralson '68

Susan Arth '75

John Walrath '80