



7/20/2017

### **Message from the Editor:**

Springtime is known as a season of renewal. The current faculty members of the department (Veltkamp, Pyenta, Donnay, and Shin) are also going through a renewal process of sorts. By this time next year all four of us will have recently completed a sabbatical. Sabbaticals are important for us because it allows us to step away from our primary work function, providing excellent instruction to students, and instead focus on other important endeavors that comprise our profession such as scholarship and service. When we return to the classroom our minds are refreshed and our spirits are renewed. This coming year I hope that you will think about renewing your connection to McMurry University if it has lapsed. Plan to return for homecoming or attend a different alumni event that is close to you. If this is not feasible, perhaps dig out your McMurry maroon and white gear and wear it with pride. (If you're like me and the old clothes don't fit anymore; the chemistry club is selling T-shirts this fall. Let me know if you are interested.) At least read this newsletter and remember back to your college days and then get in touch with us or one of your school chums. I know we appreciate hearing from you and I bet your classmates would too!

Sincerely,

Dr. Edward Donnay

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### **Alumni News:**

At homecoming in October McMurry University held a signing ceremony for the new Dr. W. Norton Jones Endowed Professorship. Dr. W. L. Magnuson ('59) and Dr. Girvin Harkins ('60) were the guests of honor as they chaired the campaign, but many alumni who studied with Dr. Jones were present including Mr. Les Albin ('62), Mr. Jerome Doerrie (ex'62), Dr. Joe Loter ('65), and Dr. Richard Quy ('70). Mr. Albin is retired from teaching at Austin Community College where he worked for 30+ years. Dr. Loter spoke with us about his teaching at Texas A&M-Corpus Christi. Dr. Loter retired from teaching in 2010 and still makes his home in Corpus Christi.

Dr. Donald McLaren ('74) wrote us an email that informed us that he recently moved from his previous job as a pediatrician with the International Mission Board in Richmond, Virginia to Arizona to work with the Indian Health Service.

We also heard from Dr. Ralph Turner ('74) and Dr. Max Wynn ('80).

Our lab manager, Mr. Steve Davis ('98) received his Master of Science degree in Environmental Management from Hardin Simmons University this year. Congratulations, Steve!

Kay Younggren ('02) was also at homecoming and later we heard that she agreed to serve on McMurry University's Board of Trustees beginning this summer.

Seth Smith ('06) and his wife Courtney Hendricks Smith were also here for homecoming. Seth is the pastor at the UMC in Claude, TX. Courtney teaches seventh grade science in nearby Amarillo ISD. She was a graduate of the biology department at McMurry University. They have two little girls.

Brooke Morris ('07) gave a presentation to the chemistry club on campus in April about her work with developing scintillators for Eljen Technologies in Sweetwater. She handed out samples of the plastic scintillators that glow when exposed to UV light to students in attendance and answered questions about work in chemical industry.

Mrs. Katie (Neal) Pierce ('10) is now officially triple C licensed in surface water treatment, wastewater treatment, and lab analysis. This comes in handy at her job with the City of Abilene Environmental Laboratory.

In 2017, for the third year in a row, Mr. Brandon Randell ('10) was a finalist for the Science Teacher Limelight Award for his work at Cooper High School in Abilene. He won the award in 2015. We enjoyed the chance to catch up while he was at homecoming as well.

Dr. Erica (Rawls) Wilson ('11) and her husband are expecting their first child, a baby girl, later this year. Congratulations to the Wilsons!

You may have noticed that Dr. Danni McMahan ('12) was featured in the Spring 2017 issue of *The Messenger* (McMurry University's Alumni Magazine). She is a licensed pharmacist serving a two-year residency at a Veterans Administration hospital in Dallas, where she works with a medical team in various parts of the hospital. This is after graduating first in her class from the Texas Tech University Health Sciences Center School of Pharmacy in 2016.

From Facebook, we noted that Dr. Tara Williams ('12) got engaged and will be married later this year. Congratulations Tara!

Also we noted that Ms. Amanda (Genzling) Sikes ('13) passed the National Council Licensure Examination for Registered Nurses in January after an accelerated BSN program at Texas Tech University Health Sciences Center. She now works as a RN in the Emergency Room at Hendrick Medical Center in Abilene.

Mr. Josh Brooks ('14) was recently admitted to the Texas Tech University Physician's Assistant program. He will spend 15 months in Midland, then perhaps back in Abilene for a year of clinical work to complete the program. Congratulations Josh!

The McMurry SMAB sponsored the fifth annual golf tournament in conjunction with an alumni weekend event in Fredericksburg on April 28<sup>th</sup> and 29<sup>th</sup>. Dr. Donnay attended the alumni weekend and spent time with Richard Quy ('70), Joe Hudman ('71), Brad Rowland ('14), Josh Brooks ('14) and other alumni at the meals Friday and Saturday evenings. Brad and Josh won trophies as part of the winning golf team and Josh won an award for the longest drive. A great time was had by all the participants and it would be marvelous if there was a bigger turnout next year when the golf tournament will be in the DFW area. Proceeds from the golf tournament fund SMAB priorities such as the Charles and Lisa Bloomer Research Stipend, supports student academic travel, and helps meet expenses associated with field research. If you would like to know more about this annual event or SMAB, you can find a link to their website on our webpage, [www.mcm.edu/chemistry](http://www.mcm.edu/chemistry) or contact the chair Elaine Harmon at [elaine.d.harmon@gmail.com](mailto:elaine.d.harmon@gmail.com).

### **Departmental News:**

The department is happy to introduce three new graduates: Daniel Kent, Shantel Thomas, and Lizbet Miller! Daniel has spent the past year at the Texas Tech Health Sciences School of Pharmacy in Abilene since being granted early admittance to their program after his junior year. Under the agreement between the two schools, a McMurry University bachelor's degree is awarded upon successful completion of the first year of pharmacy school. He did take a break in studying for finals at the pharmacy school to walk in McMurry's graduation ceremony. Shantel Thomas spent two summers doing undergraduate research, one with Dr. Shin funded by the Welch Foundation and another at the University of Akron sponsored by the National Science Foundation with Dr. Sadhan Jana and Dr. Tianbo Liu studying polymer chemistry. She was also a standout track athlete during her time at McMurry winning six golds at the conference meet in her senior season. She currently plans to seek employment for a year as she prepares to apply to pharmacy schools for the fall of 2018. Daniel and Shantel shared the honor of Outstanding Senior from the department. Lizbet Miller is an active duty member of the US Air Force which has meant the road to her degree was

more circuitous than most. Nonetheless, she persevered and completed the final requirements and has received her McMurry University degree in biochemistry with minors in math and allied health. Congratulations to all three graduates!

Another student the department wants to convey best wishes toward is Mukundwa Gael. Mukundwa is a native of Rwanda although he has been in the US for quite some time. He transferred to McMurry University and took multiple chemistry and biology courses in two years on the path towards a biochemistry degree, but came up a little short of meeting all the university requirements. Nevertheless, Mukundwa scored in the 98<sup>th</sup> percentile on the entrance exam for pharmacy schools (the PCAT) and has been accepted into the pharmacy program at the University of Tennessee. Since he got accepted into his first choice school, the department will forgive him for not keeping us company this fall.

The McMurry University Student Affiliates Chapter of the American Chemical Society (ACS) hosted 4<sup>th</sup> grade students from Jim Ned elementary during homecoming. This was the fourth year in a row that students from Jim Ned were hosted by our chemistry club. What began as a simple chemistry show for the classmates of Dr. Pyenta's children has now grown into an annual tradition. Last year's 4<sup>th</sup> graders (i.e. this year's 5<sup>th</sup> graders) were hosted by the biology club for the third year. The students participated in several science activities around visits to teepee village.

The local section of the ACS sponsored Dr. Stephanie Taylor, a senior lecturer in the Department of Science and Math Education at the University of Texas–Dallas and President-elect of the Associated Chemistry Teachers of Texas (ACT<sub>2</sub>) to present a talk titled “Authenticity in the K-16 (and beyond) Classroom” in September. She will be organizing the biennial conference for ACT<sub>2</sub> in the summer of 2018 that will take place at McMurry University. The conference will bring 80-100 high school chemistry teachers to campus for presentations and workshops.

During her sabbatical in fall 2015, Dr. Veltkamp studied possible predictors for student success in CHEM 1410 and also reviewed a number of possible programs for improving student success in our first-year courses. In her report to the administration, she strongly advised that McMurry adopt a nationally recognized program known as Supplemental Instruction (SI), which is headquartered at the University of Missouri-Kansas City (UMKC). In December, 2016, McMurry's Board of Trustees decided that McMurry should adopt this program, and sent Dr. Veltkamp, Dr. Larry Bonds (English), and Dr. Cindy Martin (Math) to the two-day training at UMKC in January, just a few days before classes began. Dr. Cindy Martin is serving as the campus coordinator for SI. In part, that means she identifies courses in which SI could be useful and encourages those professors to use SI, and she trains the student peer leaders who will serve as SI leaders for those courses. During the spring semester, we had SI in General Chemistry II and in one section of English I. Given the very short time we had between training and implementation, it is difficult to judge the effectiveness of the program in just one semester. However, SI will be expanded to a beginning Psychology course, Anatomy and Physiology I, General Chemistry I, and English II during the fall semester.

Dr. Donnay was on sabbatical during the spring 2017 semester, confirming and expanding upon work done by students with chromium metal complexes. He obtained an appointment as a Visiting Scholar at the University of Texas–Arlington in the laboratory of Dr. Fred MacDonnell to have access to high end instrumentation used to characterize the photochemical and physical properties of the compounds. These compounds eventually could be used as improved photosensitizers in photodynamic therapy against cancer.

Dr. Shin applied for and was granted a sabbatical for the spring of 2018. Dr. Shin says, “Due to the resistance to synthetic cancer drugs and complexity of breast cancer, it caught our attention to investigate extracts from natural resources as potentials against breast cancer. The extracts of *Asclepias syriaca*, *Asclepias viridis*, *Solanum elaeagnifolium*, *Gaillardia pulchella*, and

*Glandularia bipinnatifida* of West-Central Texas plants in Taylor and Callahan counties were tested with a microtitration viability assay with breast cancer cell line MDA, compared to SAHA. The preliminary study has shown extracts of *Asclepias syriaca* and *Gaillardia pulchella* significantly reduced the viability of breast cancer cell line MDA in culture.” She will investigate those biologically active compounds in collaborative work with Dr. Jeon Jun-Ha at University of Texas-Arlington. In addition, she will continue to evaluate histone deacetylase inhibitors synthesized in her lab as anticancer agents or antibiotics in collaboration with Dr. Robert Shaw at Texas Tech University and other institutions. Dr. Shin was also promoted to the rank of full professor beginning the fall of 2017.

The department was successful in obtaining a three-year renewal of our Welch Foundation Departmental Grant for \$25,000/year conditional on completion of an acceptable yearly report. This grant is essential for supporting students and faculty doing research. The department has received this funding from the Welch Foundation continuously since 1998 and the streak will now be extended until May 2020. Current work being done under the grant is described below. In addition, Drs. Pyenta and Shin received a Sam Taylor Award worth \$1,500.00 in 2016-2017 for a joint project, entitled “Evaluation of Cell Viability with Histone Deacetylase inhibitors in Breast Cancer Cells: MCF-7 and MDA-MB-231 as Potential Anti-Cancer Drugs”.

#### **Departmental Research:**

Dr. Shin had a paper published in the Journal of Enzyme Inhibition and Medicinal Chemistry titled “Inhibition of *Bacillus anthracis* Metallo- $\beta$ -lactamase by Compounds with Hydroxamic Acid Functionality” (*J. Enzyme Inhib. Med. Chem.*, **2016**, *31* (Suppl. 4), 132-137). Jonathan Urbanczyk, a 2011 McMurry University graduate with a degree in biomedical science major who wrote an honors’ thesis with Dr. Shin on drug discovery of antibiotics, was recognized as a co-author. He is currently doing a residency in Internal Medicine with the hopes of sub-specializing in Cardiology afterwards at Baylor Scott and White Hospital Temple, TX.

Dr. Shin’s research interests have evolved through the work done by her former student Kara Black (a 2015 McMurry University Biology graduate who is currently in medical school) and in collaboration with colleagues, Drs. Juliet Spencer at University of San Francisco, and Gary Wilson, Anna Saghatelian, and Paul Pyenta at McMurry University. As a result, bioactive substances extracted from West Texas plants were tested with two different types of breast cancer and various bacterial cells. Preliminary results of this project entitled “Breast Cancer Cell MDA Viability of Extracts from Taylor and Callahan Counties of West-Central Texas Plants: *Asclepias syriaca*, *Asclepias viridis*, *Solanum elaeagnifolium*, *Gaillardia pulchella*, and *Glandularia bipinnatifida*” was presented by Dr. Shin in the general poster session of the Division of Medicinal Chemistry at the 252nd ACS National Meeting in Philadelphia, PA, August 21-25, 2016; MEDI 57.

This summer the department has five undergraduate students conducting research on the Welch Foundation Departmental Grant. Dr. Donnay will supervise Megan Butler on a project to synthesize analogues of dipyrrophenazine (DPPZ), a ligand that increases metal complex-DNA binding. Ananda Lewis, Brittany Everett, Haley Shepard, and Alisa Rasley will be working with Drs. Shin and Pyenta on the collaborative project for which they received the Sam Taylor grant (*see Department News*) or continuing the work described in the previous paragraph.

#### **School and Miscellaneous News:**

Recent retirements from the ranks of McMurry University faculty and staff include Rev. Bill Libby from religion/athletics and Dr. Gary Shanafelt from history. Both are still teaching part time and are fixtures at McMurry sporting and artistic events. Bev Ball has also decided to retire after a

long and distinguished career coaching swimming at Abilene High before beginning the swimming program at McMurry University.

There has been quite a turnover in the Student Affairs area of campus. A new Dean of Students and Campus Life, Dr. Allen Withers, was hired, this year. Dr. Withers comes to McMurry after serving at two schools in West Virginia, Alderson Broaddus University and New River Community & Technical College. Searches are currently underway to hire a new Director of Student Activities, an Assistant Dean for the First Year Experience, and a new University Chaplain. McMurry has also decided to begin a softball program. A coach has been hired and is busy recruiting the first team members. The team will begin play next spring on a city owned field. An on-campus softball stadium is planned in the future.

McMurry University is expanding its online presence with two new programs. The first is a completely online general business degree. This program is specifically for non-traditional students. The target audience are those individuals that have some previous college background, but for whatever reason did not complete a degree. The second online program is open to anyone who is interested in criminal justice.

#### **40 Years Ago in the Department**

*(Below are news items and excerpts from the department newsletter from April 1977. The entire newsletter can be seen under the "Department News" tab on our website, [www.mcm.edu/chemistry](http://www.mcm.edu/chemistry))*

"This year four chemistry majors are graduating. Conley Goines completed work for a B.S. degree in December ... Greg Fabian, Dwight Needels, and Carl Stubbs will graduate with a B.A. degree. ...Carl, Dwight, and Greg will have ACS certified degrees."

"This summer Dr. Klassen and Dr. Sonntag will continue a research program. Tom Garrett will be working on a student research fellowship. At the New Orleans ACS meeting, Dr. Klassen read a paper on ruthenium and osmium complexes coauthored with Tom Headstream and Dwight Needels."

"Gamma Sigma Epsilon Honorary Chemical Society sponsors the Conn Award for undergraduate research papers and last year Rod Fabian was given a Conn Award. This year Dwight Needels has entered the contest. The Xi Beta chapter at McMurry inducted Tom Garrett, Kurt Blacketter, and Bill King into the Society. ...Carl Stubbs was honored by the Chapter with the outstanding member award." McMurry chemistry students honored for their academic achievements were: freshman- Mike Jones, sophomore- Bill King, junior- David Schkade, seniors-Dwight Needels and Greg Fabian.

"As all of you know, Dr. Jones passed away last spring after a brief illness. ...Almost all of you received a letter from the department concerning a scholarship fund to honor Dr. Jones. ...the fund stands at \$3,835. ...It is our hope that the scholarship can be awarded in the fall of 1978 to a chemistry major." *Currently the endowed Dr. W. Norton Jones Scholarship is awarded annually to a junior chemistry major for use during their senior year and this year it was worth approximately \$4900.*

"The administration has approved our request of last September to employ a biochemist for the department beginning in August 1977. Our request was modified by the administration in that the person employed must teach part-time in biology. Assuming that our enrollment will increase, the biochemist would ultimately teach full-time in chemistry. This staff member will not be a

replacement for Dr. Jones because we will add biochemistry to our program... We are hopeful that we can employ someone before the end of April and we will interview a candidate this month.”

**Alumni Search:**

The following list contains the names of alumni for whom we have 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.

Gayle Hart Long '64

Susan Arth '75

John Howard Sanders '79

Lyn Patrice Griswold '92