Notes from the Chair

January 2018

Dear Alumni and Friends,

Happy New Year to all of you. It is time for our annual newsletter to update you with news from the Department of Pharmaceutical Chemistry and KU. We hope that everyone is doing well, and that we have the opportunity to meet as many of you as possible at various conferences and events in 2018.

In conjunction with his retirement in December 2016, we have honored Val Stella with a symposium, “Val Stella: Celebrating 44 Years of Innovation in Pharmaceutical Research”, which took place in San Diego, November 10-11, 2017. This symposium was attended by ca. 175 participants, and featured scientific talks as well as general overviews over various aspects of Val’s career. Thank you very much to everybody who attended and contributed to, and/or planned this very successful symposium. On the evening of November 11, 2017, we invited everybody to a reception to celebrate the 50th anniversary of the Department of Pharmaceutical Chemistry.

The Department of Pharmaceutical Chemistry has recruited Mike Hageman as the Valentino J. Stella Distinguished Professor. Mike is an alumni of the Department, and has started to work at KU in August 2017. We are grateful for the many donations from pharmaceutical companies and Department alumni and friends, which have helped us to create this named professorship in honor of Val Stella. We have furthermore created a new graduate fellowship, the Valentino Stella Students and Friends Graduate Fellowship, and I would like to thank also all the contributors to this new fellowship on behalf of the entire Department of Pharmaceutical Chemistry.

In 2017, the Department of Pharmaceutical Chemistry graduated its first Distance PhD student “with honors”, Ming Lei from Genentech. We have currently three Distance PhD students enrolled in our program. Our Distance Masters Program is now in its 10th year, and we continue to receive applications to maintain a steady enrollment in this program.

The 12th Biennial Meeting of the Globalization of Pharmaceutics Education Network (GPEN) will take place September 26-29, 2018, in Singapore. We expect attendees from

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51 member universities worldwide, from ca. 11 regional universities, which will be invited to participate, and from ca. 25-30 pharmaceutical and biotechnology companies. In total, we estimate that GPEN2018 will welcome between 250 and 275 attendees. For more information, please visit the website: https://gpenconference.com.

The Department of Pharmaceutical Chemistry has initiated the construction of an 11,000 sq ft addition to the south-west corner of Simons Research Laboratories. This addition will house laboratories, meeting and class rooms, as well as offices for faculty and staff. At time of construction, we will also renovate the existing space in Simons Research Laboratories, including the construction of several specialty laboratories. We expect completion of the construction by the end of July 2018.

The Department continues to benefit from generous financial support for predoctoral fellowships and awards donated by many individuals and several pharmaceutical companies. In addition, our faculty continue to be well funded through private and federal agencies, and have received a series of awards, which will be detailed below in the individual faculty sections.

In the following, you will find updates on the individual faculty and their laboratories. We hope that you will enjoy this newsletter, and hope to see you at one of the upcoming meetings.

With best personal regards,

Christian Schöneich
Professor and Chair
Several students have completed their degrees since the last newsletter:

- Abdullah Al-Hossaini
- Khalid Al-Kinani
- Rupesh Bommana
- Michaela McNiff
- Apurva More
- Lorena (Antunez) Napolitano
- Solomon Okbazghi
- Chad Pickens
- Ishan Shah

Six graduate students were recruited for Fall 2017:

- Anil Basra, Virginia Commonwealth University
- Aric Huang, McMaster University
- Stephanie Johnson, University of Kansas
- Kaushal Jerajani, Northeastern University
- Ryan Skaar, Simpson College
- Zhaoxian Wang, Wayne State University

Students who have completed their degrees in the Distance Masters Program are:

- Sardar Jakaria (CML)
- Benjamin Mann (Celerion)
- Stephanie Staub (Teva)
- Simon Tran (Gilead)
- Yue Wang (Genentech)
- Evelyn Yanez (Genentech)

Our current students in the Distance Masters Program come from various companies; they are:

- Edmond Bailey (Catalent)
- Kristen Forseth (Gilead)
- Ian Hartzel (Pfizer)
- Yuzhe Hu (Genentech)
- Allison Ingram (Oncimmune)
- Alisha Kellogg (Amylin)
- Stephanie Kishbaugh (BioMarin Pharmaceuticals)
- Jonathan Kretz (Amgen)
- Alex Langford (Pfizer)
- Hao Lou (Amgen)
- Karina Padilla (Genentech)
- Anthony Tomlinson (Genentech)
- Lun Xin (Cook Pharmica)

Students currently in the Distance Ph.D. program are:

- Kim Gochioco (Amgen)
- Yue Wang (Genentech)
- Yi Yang (Genentech)

Student who has graduated from the Distance Ph.D. program:

- Ming Lei (Genentech)
The KU Pharmaceutical Chemistry Department celebrated its 50th anniversary November, 2017. To continue the tradition that was started 10 years ago (at the 40th anniversary), we again had a reception in San Diego, CA. This reception site corresponded with the Stella Retirement Event (planned for November 10-11), and just prior to the AAPS Annual Meeting (November 12-16); all of which was held in San Diego, CA. The anniversary event was held on Saturday evening, November 11.

A link with more pictures will soon be provided on our website.

Picture entitled “Five Aussies on a Boat” — at 50th Anniversary Reception
From left: Des Williams, Bill Charman, Val Stella, Rodney Pearlman, Don Monkhouse

44 Graduate students
90 Postdocs and visiting scientists
4000 Undergraduates
The URP was successfully completed with poster presentations by our students on July 28, 2017. The program is directed by Dr. Cory Berkland with the assistance of Ann Heptig. This program is one of the recruiting tools to attract potential graduate students to the department. The 2017 summer URP participants were:

- Taylor Brasted, University of Kansas. Lab: Dr. Cory Berkland
- Bailey Brooks, Texas Tech University. Lab: Dr. Cory Berkland
- Nguyen (Natalie) Bui, Creighton University. Lab: Dr. Brandon DeKosky
- Rebecca Clark, California State University, Fullerton. Lab: Dr. Michael Wang
- Sofia de la O, University of Kansas. Lab: Dr. Mark Shiflett, Chemical & Petroleum Engineering
- Sean Dunham, University of Georgia. Lab: Dr. Christian Schöneich
- Sarah Schaefer, University of Kansas. Lab: Dr. Michael Wang
- Madeleine Tadros, Rice University. Lab: Dr. David Volkin

Seventy-three undergraduate students from eighteen different departments and programs on campus presented posters at the KU Summer Undergraduate Research Poster Session sponsored by KU’s Center for Undergraduate Research. For a complete listing of participants, along with their hometown, home institution, project title, faculty mentor and department, please go to: http://news.ku.edu/73-undergraduate-students-present-summer-research

URP summer 2017 participants: Dr. Cory Berkland, Director, Sofia de la O, Taylor Brasted, Natalie Bui, Rebecca Clark, Bailey Brooks, Madeleine Tadros, Sean Dunham
Nicole Brooks has been with Department since October, 2002. She still enjoys spending time with family and friends, cooking, gardening and traveling. She still quilts on occasion, she received a Cricut machine last winter and is enjoying crafting with that. Her son, Jacob, will turn 14 in April and is in eighth grade. He played football in the fall and will do track and baseball in the spring/summer. He still loves playing video games.

Tammy Dunning has completed her twenty-sixth year in the Pharm Chem Department, and sixteenth year as Editorial Assistant for the Journal of Pharmaceutical Sciences. Her hobbies include quilting, reading, working in her yard and watching KU football and basketball games.

Karen Hall I’m still here . . . 18 years and counting. No big news . . . my cat population has remained the same and I went to England over Christmas this year in spite of my plans to not go until they learned to drive on the right side of the road. I didn’t drive this time and used public transportation. That was an adventure, too. I actually had to quit shopping because I couldn’t carry any more on the bus. Oh well . . . home safe and sound and enjoying my vehicle.

Nancy Helm has just celebrated her 41st anniversary with the department. She continues to handle all the graduate applications and coordinating and helping organize seminar speakers, departmental events, etc. Her most recent task has been helping with the Stella Retirement Event in San Diego, CA and the immediately following 50th anniversary departmental reception. Her greatest joy, however, is spending time with her grandson (Cohen William Davis, born 3/15/16). He is rapidly becoming a huge KU basketball fan and likes to sit and watch the games on TV to point out all the Jayhawks he sees!!

Ann Heptig has been with the Department since August, 2001. Ann and her husband, Dan, have two grandsons in Pennsylvania and a granddaughter in Lawrence. Ann’s new interest is woodworking. She still enjoys quilting and reading.

Becky Whaley continues to work with J. Pharm. Sci., which she has been doing since September, 2001. She keeps busy with her soap business, SallySueSoaps & Luxuries, “the Pink Goat soap company”, making goat milk soaps and lotions. She and Karen Hall attend several shows around the area each year. Becky’s last single daughter, Emily, was married last October. She’s also enjoying her granddaughter, Kinley, age 4, grandsons, Kason, age 2 and Hudson, age 1.
Professor Ken Audus’ interest continues in drug transport and permeability properties of the placenta and blood-brain barriers. When he has an opportunity, he continues collaborative work on various research projects with several colleagues at KU and KU Medical Center. As KU Pharmacy is integrated across three KU campuses (i.e., Lawrence, Kansas City, and Wichita) each has unique resource needs for support of students, staff, and faculty. Ken continues to place a priority on planning for resources to provide new research laboratory spaces to allow relocation of all of the basic sciences in Pharmacy to modern facilities either on the West Campus or KU’s Innovation Way currently under construction on Daisy Hill. The School also participates with the Schools of Medicine, Nursing, and Health Professions on the Medical Center campus in Kansas City in interprofessional education activities and supported the building of the modern Medical Education facility opened on that campus this Summer. Ken continues to spend a significant amount of time on the road for fund-raising and visiting alumni and friends of the School of Pharmacy at pharmaceutical companies around the country, and at many hospitals and community pharmacies across Kansas and surrounding states. On the personal side, Ken and Cheryl enjoy their grandchildren Luke, now 13 years old, Mae, 10 years old, and the new arrivals identical twin girls, Iris and Vera, now 2 months old. Ryan & Sarah live in Leawood, Kansas (Kansas City metro area), which means we (mainly Cheryl) get to see and watch the four grandchildren often. Carly is working and living in Lawrence and spends a lot of time now with her significant other, Ben. Cheryl is “retired” but continues to landscape, decorate or remodel the home, spoil the grandkids, and travel with Ken when she can. In his “spare” time Ken mostly likes to find a golf course with friends, watch Luke and Mae in sports or school activities, do some research on his genealogy, or assist Cheryl in home projects, and has found these activities help him relax a bit.

Professor Cory Berkland’s lab continues to bridge research in Pharmaceutical Chemistry, Chemical Engineering, and Bioengineering at KU. The lab recently started collaborations with government agencies. Research with USAMRIID has explored the benefits of converting intravenous antibiotics to aerosolized antibiotics, as a means to locally treat lung infections resulting from potential bioterrorism threats. Lab studies with a government contractor, Leidos, has explored the mechanism of immune modifying peptides on a mouse model of autoimmunity. In addition, research sponsored by the Juvenile Diabetes Research Foundation in collaboration with Orion BioSciences has yielded interesting data suggesting the possibility of slowing or halting progression of Type 1 Diabetes in mice. Finally, a start-up company out of the lab, Savara Pharmaceuticals, was listed on the NASDAQ, which is a first for KU.

Professor Brandon DeKosky’s The DeKosky lab got off to a strong start this year! Brandon DeKosky started as the newest Assistant Professor in Pharmaceutical Chemistry in January 2017, with a laboratory focused on high-throughput analysis of highly effective antiviral immune responses. The laboratory currently consists of three graduate students (Rukmini Ladi and Ahmed Fahad from Pharmaceutical Chemistry, and Bailey Banach from Bioengineering), four postdocs (Tiffany Nguyen, Andrew Chung, Wei Jin, and Bharat Madan), one research technician (John Zhou), and one undergraduate student (Colton Lagerman, a senior in chemical engineering). The lab also hosted an REU student, Natalie Bui, from Creighton University over the summer. During his recent postdoctoral research at the National Institutes of Health, Dr. DeKosky worked to develop a new platform for rapid antibody analysis and antibody discovery, which was recently accepted for publication and is forthcoming in Nature Biotechnology. This work also comprised key supporting data for an NIH Early Independence Award, giving the lab and Dr. DeKosky a major boost upon arriving to KU. A KU undergraduate alumnus, Dr. DeKosky is enjoying being closer to family and reconnecting with old friends and colleagues from Lawrence and Kansas City in his spare time.

See the DeKosky lab picture on next page.
Professor Laird Forrest’s forthcoming.

Dr. Anna Hagen is teaching three classes: “Writing and Communicating Science for Graduate Students” to second-year Pharmaceutical Chemistry graduate students in the spring (in time for submitting and presenting their Ph.D. thesis proposals), and two electives for P3 Pharmacy students called “Scientific Writing for the Health Professional” and “Presentations for the Health Professional”. She continues to explore new ways to teach writing, slide design, and communication.

Professor Jeff Krise and his group continue to study how small molecular weight drugs localize and distribute within cells and how this impacts therapeutic outcomes. Our recent emphasis has been focused on the extensive accumulation of weakly basic drugs in acidic lysosomes. We are interested in understanding how the lysosomal entrapment of drugs observed in single cells grown in culture impacts whole body pharmacokinetic distribution behavior. In addition, we are interested in understanding how drug accumulation in lysosomes influences their normal structure and function. This research may ultimately lead to a better understanding regarding how drugs exert their desirable therapeutic effects as well as undesirable side effects. Jeff and his wife Joanna and their three children [Edward (3), Steven (10) and Abigail (12)] wish everyone the best.

Professor Susan Lunte forthcoming.
The Macromolecule and Vaccine Stabilization Center (MVSC) continues to focus on a variety of research programs covering topics such as (1) physicochemical characterization of macromolecules, (2) inter-relationships between protein dynamics and stability, and (3) stabilization and formulation development of vaccine and biopharmaceutical clinical candidates.

There were several well-deserved promotions for our MVSC scientific staff members. Dr. Ozan Kumru and Dr. John Hickey were named Scientific Assistant Directors. Dr. Ying Wan, Dr. Prashant Kumar and Dr. Neal Whitaker were promoted from Postdoctoral Researchers to Associate Researchers. Melinda Fish was also promoted to Program Manager.

Two new Postdoctoral Researchers, Dr. Swathi Pullagurla and Dr. Lorena Napolitano, recently joined the lab. Soraia Saleh-Birdjandi also joined the lab as a Research Assistant. Professor Volkin took a new graduate student, Nishant Sawant.

Several exciting transitions occurred in the past year for MVSC members. Dr. Asha Patel accepted a position as Scientist at Johnson and Johnson, Dr. Ravi Shukla as Sr. Scientist at Merck, Dr. Ron Toth as Scientist at GSK, and Dr. Neha Sahni as Scientist at GSK. One of Professor Volkin’s graduate students, Apurva More, passed her PhD dissertation defense. Dr. More has accepted a position as Scientist with Sanofi Genzyme.

Several of our lab members marked some important personal events as well. Dr. Ying Wan and Dr. Jian Xiong welcomed a baby girl, Rae, in February and Dr. Kawaljit Kaur and Dr. Vineet Gupta were married in October!

Overall, 2016-2017 was a very busy and productive year in the MVSC. We expect 2017-2018 to be a very promising year and wish you the same!

Greetings from the Pickingland laboratories. Bill and Wendy Picking are now in their fourth year in the Department of Pharmaceutical Chemistry at KU. Bill continues to serve as Director of the Higuchi Biosciences Center and Wendy has a new biotechnology start-up (Hafion) as she continues in her vaccine development work. The immunology core continues to be spearheaded by Francisco Martinez-Becerra who is the Director of the Immunology Core Laboratory (ICL) which will be included as a component of a COBRE application (Center for Engineering Tissue Repair, Reconstruction and Response or CETR3) being submitted by Bill with Paulette Spencer from the School of Engineering (https://kvi.ku.edu/immunology-core-laboratory/). Use of the facility continues to grow at a steady pace. We are currently down to one postdoctoral trainee in the laboratory, but Meenakumari Muthuramalingam (Meena) is doing an outstanding job in her first year. Second year graduate student Jason Stewart is moving along well with his vaccine studies and two new graduate students have been added to the group – Ryan Skaar (Pharmaceutical Chemistry graduate student) and Shoichi Tachiyama (Molecular Biosciences graduate student) are off and running on their projects. Allison Ingram has also worked in the laboratory as a Masters student. Qi Zheng is still a Research Associate in the lab and she continues to be the go-to protein purification guru of the group. Mike Barta has moved on to an industry position in Kansas City, but we remain in contact and he still has a few papers to go out of the lab based on the work he did while he was here. As a replacement for Mike’s leadership, we have added Senior Research Associate Sean Whittier who bring a nice structural biology and biophysics touch to the group. Several undergraduates (including Julie Spangler, Cecilia Villanueva, Sierra Layton and others) have also worked in the laboratory during the last year.

We once again hosted the Great Plains Infectious Disease (GPID) Meeting (http://kvi.ku.edu/GPID). The meeting was again a success with well over 100 attendees and a special guest speaker (David DeShazer) from
USAMRIID. The 16th GPID Meeting was on November 10-11 and recordings of some of the talks can be viewed on the KVI/GPID website. Our two groups continue to work together on the molecular virulence mechanisms of Shigella and identifying ways to prevent the dysentery caused by this important bacterial pathogen. We’re continuing to seek funding from numerous sources for the vaccine work and we’re looking into ways to expand this enterprise. We have been helped immensely in this endeavor by our friends at KU Innovation & Collaboration and within the Kansas City Life Sciences Institute. We’re also in the early stages of considering new paths toward developing anti-infective agents.

We look forward to the challenges of the upcoming year and the new paths forward that will arise during that time.

Professor Christian Schöneich The year 2017 was another eventful and happy year for the entire family, but also witnessed a few scary moments. We were able to spend some time in the Venetian villa of the family close to Rovigo, Italy, which we refer to as Villa Pisani-Raimondi. About 40 fruit trees and a large vegetable yard provide ample fresh food between spring and fall; across the road, you can still get an excellent cappuccino, and around the village are multiple family restaurants, which provide excellent meals for a few Euros. The Mediterranean Sea is about 30 miles away, an easy drive/bike ride for beach time, cultural explorations, and more excellent food. Elena has returned from a 6-month visit to Italy to assist her mother, and has started to teach Italian again. Elena and Christian shared many special moments this summer on a 12 day hike along the trail of St. Francis in the hills of central Italy. Our hike led us through Tuscany and Umbria, and we specifically noted how welcoming people were in both larger and very small villages. Of course, they did not hesitate to point out to us that wolves and bears may roam the areas along the trail at night, and that we needed to be careful with dogs as well.

Sonia is completing her senior year at KU as a double major in Chemistry and Psychology, and has sent applications to chemistry graduate schools around the country. She has received two great offers from the West Coast and East Coast so far, and we will let you know in time where she will pursue her PhD. Antonio is completing his first year as a (civilian) engineer on a large Air Force base in Georgia, and Sebastian is completing his third year in Medical School. Professionally, the year 2017 has been full of interesting scientific results and collaborations. Professional travel has led to China, Japan, Italy (including Puglia and Sicily), Switzerland, and Germany, as well as several places in the US.

Professor Teruna Siahaan’s group is still working on utilizing cadherin peptides to modulate the blood-brain barrier (BBB) for improving in vivo delivery of molecules to the brain as well as using cell adhesion peptides to targeting molecules to antigen-presenting cells for controlling autoimmune. Kavisha Ulapane, a graduate student, recently published a paper on improving in vivo brain delivery of peptides and proteins using cadherin peptides. She also developed extraction and quantification methods to determine the amount of peptide delivered to the brain. Brian Kopec, 3rd year graduated student, passed his oral preliminary examination and also became one of the NIH Biotechnology Training Program trainees. Brian is working on delivering bioactive molecules to animal models of brain diseases. Verodia Charlestin (NIH PREP Scholar) was accepted as a graduate student at the Department of Biochemistry, University of Notre Dame. Ricardo Gonzalez (NIH IMSD Scholar) became an NIH PREP Scholar at the University of North Carolina, Chapel Hill and is now applying to graduate programs. Dr. Mario Edgar Moral (NIH IRACDA Scholar) has published two papers on peptide delivery and drug conjugation topics.
Professor Valentino Stella  Last year at this time I asked the question “How does one say goodbye to something one has enjoyed and been doing for 46 years? With grace, I hope.” I can now say that retirement has been freeing, but at times confusing.

The year was eventful. In August, I traveled to Australia to spend time with my brother. While there I had a cardiac event that required a stent in the right coronary artery. On returning to Lawrence, while doing OK, realized things were not quite right. So, on September 18, 2017 I ended up having to have double bypass surgery of my left coronary artery. I am writing this update, approximately three weeks after the surgery. Those three weeks have been difficult and challenging but one can see definite progress. I am now walking a couple of times a day and logging about 6-7,000 steps. My advice to all of you, if you have shortness of breath and any tightness in the chest, get to your doctor ASAP. I was lucky, my heart attack in Australia was minor with minimal heart muscle damage.

Professionally, I have continued to publish a few papers per year although my interest in doing so is waning. I guess it is time to let go. The one area I continue to collaborate on is the chemical and physical properties of aryl and alkyl boronic acids including bortezomib. I am really looking forward to the festivities in San Diego.

Our family continues to do well. Cathy, our oldest, her husband and three granddaughters are now living in Lawrence and have a home about 14-15 minutes walk from our place. Cathy is teaching in the public school system. Anne and Daniel moved to Valley Stream on Long Island. Their daughter was born on November 2, 2016. Gabrielle is a doing great, including walking at 8.5 months. Anne is an adjunct assistant professor at Kingsborough College in Brooklyn teaching public speaking and various theatre classes. She is loving it! Elise moved back to Vancouver where she is working in information management.

Beth and I continue to enjoy some great travel experiences. In February, we traveled to Patagonia. Standing on the most southern tip of the world, Cape Horn, looking out at the confluence of the Pacific, Atlantic and Southern oceans was magical as was the vistas on Torres del Paine in Chile and the southern ice fields/glaciers in Argentina. In addition, we spent two and a half weeks in Italy, which included stops in Rome, the Puglia area and eating ourselves into oblivion in the Emilia Romagna area. In April, we traveled to Haida Gwaii to be present at the investiture of Guujaaw, now known as Gidansta, as a major Haida Chief. He asked to wear the robe that Beth had commissioned. The 4-5 days were amazing. In August, I visited my brother in Australia and got to travel to Fraser Island. Australia never ceases to amaze me.

We completed fundraising for the extension to the Simons building to house our Global Health and Vaccine Center efforts as well as future faculty growth. Construction is well on its way with a completion date in July, 2018. We were excited that Mike Hageman joined our faculty as the Stella Distinguished Professor.

The department continues to do very well, in my eyes, and I am optimistic about the future. We seem to be attracting good graduate students and many are performing very well.
Professor J. Stobaugh’s research group now consists of himself, as his last graduate student, Josh Woods, successfully defended his dissertation on August 21, 2014. In life without a graduate student, with the help of my son Jordan, I have assembled a nanoLC/MS system that is routinely performing complex separations at an operating pressure of 36,000 psi, which we refer to as Xtreme Ultra-Pressure Liquid Chromatography (XUPLC). The nano-XUPLC system utilizes a capillary column of 360 µm OD x 75 µm ID x ~1 m in length, packed with sub-2µ particles, which is interfaced to a HRMS (Waters Xevo G2 QToF). Another aspect is where does one obtain such columns? Of our own manufacture of course! This has resulted in the assembly of packing and washing systems wherein these columns are packed at 40K psi or sometimes higher. Occasionally one of the end-fittings lets go, resulting in a capillary launch in the laboratory! In any case, this activity is highly entertaining and certainly provides a great relief to the current environment in US academia. As to the future, the R-word is at least on my mind. I am currently busy managing the family farm back in Texas. A complete change over is underway, from crops to 100% grass, as I want to be in the beef cattle business there when I do retire.

Professor Thomas Tolbert and his group continue to study antibody glycosylation, the production of protein drug conjugates, and the use of antibody fragments as a model system for understanding mAb function. In May of 2017 Professor Tolbert traveled to Omiya, Japan with Professors Borchardt, Stella, Forrest and Schöneich to give presentations as part of the Japan Alumni Conference celebrating the Department of Pharmaceutical Chemistry’s 50th Anniversary. In early June, graduate student Solomon Okbazghi successfully defended his dissertation and began working at Ventria Biosciences based in Kansas. Shortly afterward, in late June, Ishan Shah also successfully defended and moved to Massachusetts to begin work at Sartorius Stedim Biotech. In early July Khalid Al-Kinani also successfully defended and moved back to Iraq to begin as an Assistant Professor in the Department of Pharmaceutics at The University of Baghdad. Publications for 2017 include a collaborative paper with the Siahaan laboratory with Derek White as first author describing BPI-Fc fusion proteins ability to suppress autoimmune responses, and the first human IgG3 Fc crystal structure published in Molecular Immunology with Ishan Shah as first author. In October, Professor Tolbert travelled to the FDA White Oak campus in Maryland with Professors Deeds and Forrest to present at the Office of Pharmaceutical Quality (OPQ) Extramural Science Day. Finally, in November, Professor Tolbert travelled to San Diego, CA to attend the Stella Symposium and the Department of Pharmaceutical Chemistry’s 50th Anniversary US celebration.

Professor David Volkin (see joint update with Professor Middaugh).

Professor Zhuo (Michael) Wang joined the department in August 2011 and he was promoted to Associate Professor with tenure in 2016. His group currently has three graduate students, Mei Feng (4th year), Laura Drbohlav (4th year) and Iris Qiu (3rd year). Laura was selected to give an oral presentation at the Gordon Research Conferences-Drug Metabolism this past July. In addition, he advises an undergraduate student Sarah Schaefer (Chemical Engineering, Junior) who volunteers and conducts research in the lab. His lab hosted a summer URP student Rebecca Clark (California State University Fullerton) this past summer. In 2017, Professor Wang received a J.R. and Inez Jay Fund award to develop an immunoaffinity-based approach to isolate liver-derived exosomes in the blood. In addition, his group is working on an NIH-fund project to develop and validate a label-free LC-MSE quantitative proteomic method for the absolute quantification of drug metabolizing enzymes and drug transporters on a proteome scale. Professor Wang continues to collaborate with Professor Werbovetz (Ohio State University) to develop azole-arylimidamide combination therapy against leishmaniasis. The collaboration now extends to develop high throughput screening assays to identify selective CYP5122A1 inhibitors and better understand the biochemical role of this protein in Leishmania biology. On the
family side, Jenny is now nearly 4 years old and Jacob is 9 years old in 4th grade. His wife Judy continues to teach Medicinal Biochemistry (lecture and lab) and Pharmacy Skills in our PharmD Professional Program.

See the Wang lab picture below.

Michael, Mei, Sarah, Iris, Laura and Rebecca