

PEN

MARSHALL UNIVERSITY JOAN C. EDWARDS SCHOOL OF MEDICINE

Professional Enhancement Newsletter

KEEPING YOU CONNECTED

Education for the educators: JCESOM adopts Teaching for Quality program



"Anyone who stops learning is old, whether at twenty or eighty."

— Henry Ford

The Te4Q faculty and staff participants are as follows: James Becker, Kathryn Bell, Denise Stombeck, Josh Dorsey, Brian Gallagher, Jo Perry, Rodhan Khthir, Farid Mozaffari, Nancy Munn, Kelli Pasquale, Eva Patton-Tackett, Darshana Shah, Franklin Shuler, Ellen Thompson, Maria Tirona, Paulette Wehner, and Jo Ann Raines.

In August, JCESOM implemented an innovative faculty development program called Teaching for Quality (Te4Q). Created by the American Association of Medical Colleges (AAMC), Te4Q trains clinical faculty and staff on effectively teaching quality improvement and patient safety to medical students, residents, and other clinicians.

Paulette S. Wehner, M.D., vice dean of graduate medical education, spoke about the importance of this training: "By building these educational experiences in health care improvement and stressing the importance of quality improvement, we can ultimately impact patient care outcomes as our trainees emerge into practice." Dr. Wehner and her peers understand that, through the implementation of this program, JCESOM is demonstrating a commitment to learning beyond medical school and residency; life-long learning is the standard, not just for medical students and residents, but for everyone at JCESOM. Expert faculty and staff members, by participating in the Te4Q program, were demonstrating that commitment to life-long learning.

In Memoriam



Stephen J. Kopp, Ph.D.,
Marshall University president, 2005 - 2014

It is with great sadness that the JCESOM community says goodbye to our university president, Dr. Stephen J. Kopp. This is a devastating loss for our community, the University and, most of all, his family. Our deepest sympathies are with his family and loved ones.

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Together Everyone Achieves More (TEAM)

JCESOM continues to work together to help our students, our patients, and our community to optimize the opportunities and meet the challenges of our region. Through multidisciplinary focus and diverse educational backgrounds, JCESOM faculty and staff cultivate a proactive and passionate learning environment while developing creative solutions to the complex challenges academia faces today. This issue of the PEN highlights the collaboration and creativity in our school: We are one of the few medical schools in the nation to incorporate AAMC's inaugural quality improvement program Te4Q. We convened a Biomedical Research Retreat to foster teamwork across the schools and highlight medically relevant research. We held a Patient Safety Summit and Rural Research Day to address how best to care for our community. We are the Joan C. Edwards School of Medicine, and together we embrace all the coming opportunities and challenges that our new year brings.

— Darshana Shah, Ph.D., associate dean,
office of faculty affairs and professional development

From the Dean's Desk



Dear Colleagues,

As the year 2014 comes to a close, I could focus on the many wonderful accomplishments of our students, faculty and staff. However, it is difficult for me to get past the untimely death of our President, Stephen J. Kopp, Ph.D. just a few days before the Christmas season which dominates my thoughts. The loss of Dr. Kopp is profound for the community, the University, the school of Medicine and the many who knew him as a friend.

I was one of those fortunate to know Steve Kopp. He was brilliant, generous and honest. He had a wonderful sense of humor as well as impeccable integrity. His energy was absolutely

incredible. I've never seen anyone work consistently so hard, and I've known some hard-working people! In this regard, Steve was in a class by himself. He was also extremely loyal and committed to Marshall and extremely supportive of the Joan C. Edwards School of Medicine. He will be missed by all of us.

Please join me in reaching out to his family with our deepest sympathies. Our greatest tribute to this remarkable person will be to carry out the noble mission of our school, and I know we will all do just that.

Sincerely,

Joe

A handwritten signature in black ink, appearing to read "Joe".

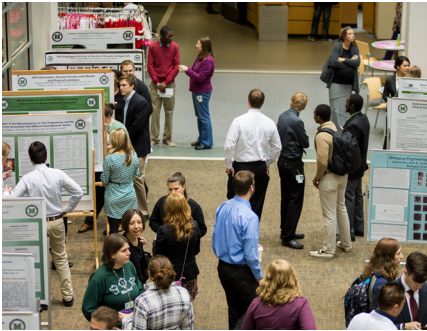
Dean, Joan C. Edwards School of Medicine
Professor of Medicine
Marshall University



Please visit the web site for the Office of Faculty Affairs & Professional Development to view a range of educational opportunities and professional development to suit your needs!



Rural Health Research Day



Participants study and discuss presentations during JCESOM's first Rural Health Research Day on October 31st. The inaugural summit provided a common platform for JCESOM students, residents, faculty, and staff to share vital information about health issues that are unique to our state and rural regions. Participants spoke enthusiastically on the successful summit:

"[The summit] was a great showcase for the work being done in Rural Health here at Marshall. Was inspiring to see the diverse projects and enthusiasm for the healthcare of WV."

– participant comment from Rural Health Research Day

"[Research Day] provides an excellent opportunity to hear from researchers that directly relates to rural health. It was wonderful to meet with and discuss ideas with each of the doctors and ask additional questions about their research projects. Please continue this event!"

– participant comment from Rural Health Research Day



"Working hand-in-hand with the Appalachian Clinical and Translational Center at Marshall and the Higher Education Policy Commission, we are able to facilitate collaborative research projects that really can have a direct impact on our area."

– **Jennifer Plymale, M.A.**, director of the Robert C. Byrd Center for Rural Health and associate dean for admissions

Dining with the Dean

Dining with the Dean provides opportunities for all junior faculty to share their experiences with **Dr. Joseph I. Shapiro** and their peers. The office of faculty affairs and professional development hosted three dinners during the fall semester, and participants were quick to share their enthusiasm for the program:

"The experience was wonderful to me. Many thanks to Dr. Shapiro for taking the time and sharing with us his thoughts on many relevant issues. It was nice meeting everyone. Thank you."

– **Rodhan Khthir, M.D.**, assistant professor, department of internal medicine

"Thank you so much for organizing this session! It was great to meet everyone, and I really enjoyed the discussion. I really appreciate the time that Dr. Shapiro took out of his schedule to talk with us. Speaking for myself, it was a great way to motivate us to keep 'plugging along.' Thanks again."

– **Maria Serrat, Ph.D.**, assistant professor, department of anatomy and pathology

Senior and junior researchers share perspectives on grant success with PEN



Gary O. Rankin, Ph.D.,

chairman of the department of pharmacology, physiology, and toxicology, shared some of his knowledge with PEN about biomedical research, grant writing and application, and the work behind his success.

PEN: *You are the principal investigator for a \$17 million NIH grant for the WV IDeA Network of Biomedical Research Excellence (WV-INBRE). How is this grant important and what do you hope to accomplish?*

Dr. Rankin: The WV-INBRE grant is important for West Virginia in so many ways. It is primarily an infrastructure grant to help build the biomedical research base in West Virginia and to provide opportunities for undergraduate students to get experience conducting important biomedical research. WV-INBRE funds biomedical research projects at several different levels across the state, mainly at primarily undergraduate institutions (PUIs) but also at Marshall and WVU. These awards provide much needed funds for investigators to build research programs, develop their research skills and to train students in research techniques at their home institutions. Through our summer research program, we also provide a nine week research experience for students, PUI faculty and high school science teachers.

These experiences have strengthened the biomedical research knowledge and technical skills of the students, faculty and high school teachers, started new research collaborations, and exposed these folks to cutting edge research. In some cases, students who may have been headed for other careers have decided to become biomedical researchers after their summer research experience, so we are helping grow the pipeline of researchers into biomedical fields. We have some funds that support PUI researchers and students to travel to national meetings to present their research findings, meet their peers, learn about their research field, and form new collaborations. WV-INBRE helps fund and maintain the Genomics Core facility, which is used by researchers at Marshall University, West Virginia University and many of the (PUIs) around the state and, with the Bioinformatics Core, helps researchers analyze their data and interpret their findings. All of these areas that are touched by WV-INBRE will help our researchers become more experienced and competitive for external funding and help our students become more competitive for their chosen career paths.

What we hope to accomplish is to build on our last ten years of support from NIH to continue to enhance the biomedical research infrastructure of West Virginia and the research opportunities for our students. We are on a roll and I'm glad we have the opportunity to continue.

PEN: *How many grants have you received in your career? And to what do you attribute your success?*

Dr. Rankin: I started at Marshall University on July 1, 1978 and received my first research grant January 1, 1979. Since then, I have had continuous funding as a principal investigator totaling around \$58 million, with most of my funding

coming from NIH. The first WV-INBRE award was received in 2004 and fortunately, the program is now in its second competitive renewal, bringing in about \$54 million for this program in total. I have been very fortunate throughout my career and believe that there have been a lot of factors that have helped me. For my research grants, I usually had a good idea, a testable hypothesis, a logical approach and paid attention to details. I also was succinct and tried to keep things simple. And, I was a little lucky. That has worked for me time and time again. For WV-INBRE, I have a wonderful team of collaborators that have made the program a success. As the Principal Investigator, I'm just the quarterback, but it is the team of folks from Marshall and WVU that have helped make WV-INBRE the successful program that it is today.

PEN: *Tell us about your very first grant. When did you start applying for grants, and how did that make you feel?*

Dr. Rankin: When I came to Marshall in July, 1978, I didn't really have a laboratory. My "lab" was a storage closet that was emptied to make way for a small amount of equipment and supplies. Eventually, I got space at the Building No. 5 at the VA in late 1978 to use for my laboratory. But, I was hired to teach and do research and service, so I knew that I needed to get external funding to support my research program. Dr. Donald Robinson, our first Chair, told me about the PhRMA Foundation Research Starter Grant program and encouraged me to apply. So, I spent the month of July writing the grant application on mechanisms of renal toxicity of succinimide drugs and agricultural agents, ordering supplies to start experiments and working on lectures. The grant was submitted for the August 1 deadline, and to my surprise, it got funded! I was amazed (as was everyone else,

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Perspectives on Success



Vincent Sollars, Ph.D.,

associate professor of biochemistry and microbiology, sat down with PEN to discuss his research accomplishments and goals and to share his perspectives on grants and research at JCESOM.

PEN: *You recently received a large grant—\$432,000 from the National Cancer Institute—to study the progression of cancer. Tell us more about this grant and what you hope to study.*

Dr. Sollars: The Question: “What are the processes that enable a normal cell to start misbehaving and become cancer cells?” The process that cells in our bodies undergo to become cancer cells all end up producing a cell that ceases to listen and cooperate with its neighbors, which is necessary for the complex mixture of cell our bodies are. This grant will investigate a process

known as “canalization,” which much like a canal for water directs the flow of water, directs a cell as it matures to the necessary type of cell the body requires. Disrupting this “canalization” process can cause a cell to change and lose its direction, potentially pushing it down paths that lead to cancer.

Research Goals: The research will use both cells grown in the laboratory and animal models of human leukemia, along with advanced scientific methods to test the role of canalization in the process of maturing cells and cancer development. The research will allow students at Marshall University the opportunity to participate in cutting edge research in preparation for careers in science.

Benefit: This highly innovative project can have a great impact on our understanding of how canalization drives cancer. Our increased understanding of this process in cancer progression will facilitate the development of new combinatorial therapeutic strategies for most cancers.

PEN: *How do you feel about receiving this grant and studying cancer?*

Dr. Sollars: I am happy to be working in a field of research that is exciting and pertinent to human disease.

PEN: *How will this grant involve Marshall University students? What do you hope they learn and take away from the process?*

Dr. Sollars: The grant program that is funding my research targets students at universities that are under-represented as far as NIH funding to allow them the opportunity to conduct cutting edge research pertinent to NIH’s research goals. I already provided research opportunities to an undergraduate student, a medical student, and an aspiring Ph.D. student.

PEN: *How was the application process for the grant? Do you have any advice for other researchers applying for grants?*

Dr. Sollars: All grant application processes can be harrowing experiences. A tremendous amount of work is involved in the process that is often not appreciated. My advice to others applying for grants is to consider the present economic climate as far as the availability of research funds. Do not bother submitting something that is not 100%. Make sure your new ideas and thoughtfulness in considering your scientific approach are readily apparent.



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I think). I have thanked the PhRMA Foundation many times since then for helping get my research career started. Recently, I was asked to be a member of their Basic Pharmacology Advisory Committee, and as a result, I now review Research Starter Grant and other pharmacology applications for them to review.

PEN: *Now tell us about a grant that was turned down. How did you feel about that?*

Dr. Rankin: Like everyone else, I have had several grant applications that weren't funded. One in particular that I remember was related to our succinimide-induced kidney injury research. I had been funded for 16 years for this project and my competitive renewal for five more years of funding didn't get scored. It was at a time that NIH was reorganizing study sections and their emphasis on research. My application went to a study section that had been only recently formed, and I could tell from the reviews that the reviewers weren't kidney experts. But I also realized that the basic research I was conducting on this project probably never would be funded again, as the emphasis on what would be funded was shifting at NIH. I was saddened that the grant wasn't renewed, but more saddened by the shift away from funding basic research that I was seeing at NIH.

PEN: *What would you tell a young researcher who is apprehensive about applying for a grant?*

Dr. Rankin: It is clearly harder to get external grants now than it was in the past. But, it is like the lottery – you can't win if you don't play. No granting agency is going to just give you money and say "Go do what you want." Most apprehension about writing grants comes from the fear of rejection and the hardest page to write is the

first one (it gets easier once you get started). Unfortunately, rejection is just part of the process of getting funding. Only a small portion of grants submitted are going to be funded, so you need to remember that and do the things that increase the likelihood that you will be one of the ones who gets the money. It also helps for junior faculty to get an experienced mentor. A good mentor can really help junior faculty be successful.

PEN: *Can you share some pearls of wisdom for other doctors and researchers at JCESOM?*

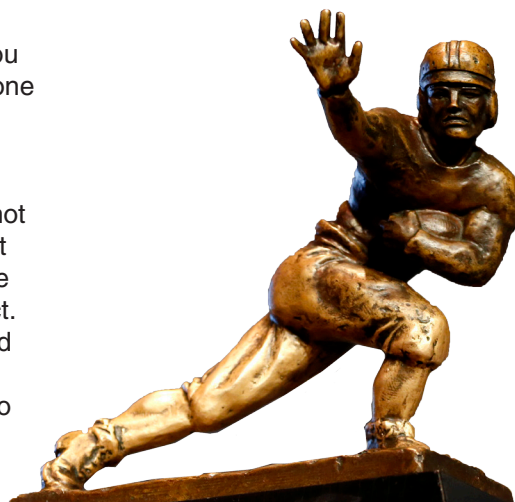
Dr. Rankin: I'm not sure that I have any pearls of wisdom, but I'll share some common sense thoughts about increasing your chances of getting funding. Grantsmanship is a word we often hear about. It means doing the things that put your application in the best light that is possible to increase your chances of getting funded. So, you want to have good grantsmanship skills. First, look at a recently funded application if you can and learn from how the successful investigator organized and presented the components of the application. As for preparing your application, you have to start with a significant problem to study. If what you are studying isn't important, then why should anyone fund you? The thing you want to study might be interesting, but is it a significant health problem? Make sure you point out how really significant the problem is and back it up with data. Be innovative – you lose points if you are doing the same old thing everyone else is doing with older techniques. Have a strong testable hypothesis (and highlight it) with independent aims and make sure you point out not only what you expect to happen, but any pitfalls and interpretations of the results if they aren't what you expect. Don't use the smallest font permitted and don't just have page after page of text (really turns off reviewers). Do

have someone else read your grant – if they can't understand what you have written, then reviewers probably can't either. Seek out mentors – either here or elsewhere- who can advise you. A good mentor is worth their weight in gold.

Persist! It is rare that a grant gets funded the first submission anymore. Learn from the reviews and don't be afraid to address their issues and resubmit in a timely way. If you need help to do so – go find it. Lastly, when you get the award letter – buy a lottery ticket!

*"I'm just the quarterback,
but it is the team of folks
from Marshall and WVU
that have helped make
WVINBRE
the successful program
that it is today."*

– Gary O. Rankin, Ph.D.



Inaugural Biomedical Research Retreat



Second from left, **David Jude, M.D.**, and, right, **Larry Dial M.D.**, discuss research and collaboration during the Biomedical Research Retreat in July.

JCESOM's inaugural Biomedical Research Retreat brought together researchers across Marshall University, and included representatives from the College of Information Technology and Engineering, the College of Health Professions, the College of Science, Marshall University Research Corporation, and the School of Pharmacy. By bringing together researchers across departments and schools, the retreat cultivated cooperation and teamwork, developing and deepening relationships among the participants. **Uma Sundaram, M.D.**, vice dean for clinical and translational sciences, said that he hopes the gathering will spark better collaboration and synergies across Marshall University.

The summit ultimately hoped to improve the health of central Appalachia through the spirit of cooperation, using purposeful, clinically relevant research and the guided education of the next generation of clinical scientists.



As participants in the Biomedical Research Retreat, (from left) **Richard Crespo, Ph.D.**, **Todd Gress, M.D.**, **Alfred Cecchetti, Ph.D., M.Sc., M.Sc.IS.**, **Darshana Shah, Ph.D.**, John V. Schloss, Ph.D., and (standing) **Todd Davis, Ph.D.**, display the collaboration, communication, and energy generated during the event.

“Look Closer”

Photograph by Rebecca Creel, MUSOM class of 2017, published in the 2014 edition of *Aenigma Medicorum*.

By shooting an unusual subject from an unlikely perspective, Rebecca Creel's photograph reminds us that “the world is filled with people, each with their own subjective view of their surroundings and situations.” She also says, “I believe as representatives of the medical field, we need to be true observers—meaning we need to consider not only our own perspectives but those of others as well. Anything can be ‘seen’ in a multitude of ways, each of which is just as significant as the next.”

View other artwork and the entire *Aenigma Medicorum* publication at <http://musom.marshall.edu/>.

Feeling inspired? Go to the website above for information on how to submit your artwork or literature to the editorial board of *Aenigma Medicorum*.



Honoring Achievements

Three School of Medicine graduates were honored at the MU Alumni Association's 77th annual Alumni Awards Banquet.



Eric R. George, M.D., a hand surgeon practicing medicine in Louisiana, was presented with the Distinguished

Alumnus Award. Dr. George owns his own practice, the Hand Center of Louisiana, and a multitude of other medical service centers, to include hospitals, surgery centers, urgent care clinics, and assisted living centers. Dr. George is more than a successful doctor, however. His philanthropic endeavors are many and varied, and include funding a Marshall University Society of Yeager Scholarship in honor of his late brother, a fighter pilot who was killed in a crash.

A native of Huntington, Dr. George earned his undergraduate degree in chemistry and graduated from JCESOM in 1989. Dr. George completed his general trauma surgery residency at Michigan State University, then completed a fellowship in plastic and reconstructive surgery at Grand Rapids Area Medical Education Center in Grand Rapids, MI.



Adam M. Franks, M.D., earned the Carolyn Hunter Faculty Service Award. A 1994 graduate of JCESOM, Dr.

Franks completed his residency in family medicine at Marshall and a fellowship in advanced maternal care (surgical obstetrics) at the University of Tennessee-Memphis. He is an associate professor in the department of family and community health, and he was nominated for this award as a dedicated physician, outstanding scholar, and committed community volunteer. Dr. Franks has served in a variety of service roles beyond his role as a primary care provider, from assistant scoutmaster and medical officer for the Tri-State Area Boy Scout Council to volunteer coach for the Wayne County Youth Soccer League. He continues his practice at Marshall Family Medicine in Layalette in Wayne County.



R. Mark Hatfield, O.D., M.D., a Charleston-based retina specialist, has been honored with numerous awards

and prominent positions over his career. Last year, Dr. Hatfield received the Illinois Eye and Ear Infirmary Distinguished Alumnus Award and was named by JCESOM's Alumni Association as the 2013 Distinguished Alumnus. In July, he was appointed administrative chairman of Marshall University's department of ophthalmology. Dr. Hatfield began his career by earning a doctor of optometry degree from Illinois College of Optometry before graduating from the Marshall University School of Medicine in 1983. He completed a surgical internship at Marshall, an ophthalmology residency at the University of Illinois School of Medicine, and a vitreoretinal fellowship at Rush Presbyterian St. Luke's in Chicago. He is the founder of Retina Consultants, which has five locations in West Virginia.



Kelly E. Melvin, M.D., has been awarded an Association for Academic Psychiatry (AAP) Early Career Development Award, a national award created to facilitate career development and recognize young faculty who are innovative in their teaching techniques and skills. Dr. Melvin joined JCESOM in 2012 and

is an assistant professor in the department of psychiatry and behavioral medicine. A 2005 graduate of JCESOM, he completed his residency in child psychiatry and general adult psychiatry at Vanderbilt University.



Amy M. Smith, BSN, M.Ed., has been selected as assistant dean of student affairs. Ms. Smith has worked as the assistant director of medical education since 2009, specifically directing the clinical skills center and standardized patient program. She had previously served as the director of women's and children's services

at Cabell Huntington Hospital (CHH), as well as nurse manager for the neonatal intensive care unit at CHH.

→ Congratulations



Charles L. Yarbrough, M.D., has been named inaugural chairman of the newly formed department of dermatology. Dr. Yarbrough, a longtime Huntington dermatologist, has served as a clinical professor with JCESOM since 1977. Dr. Yarbrough graduated from the Medical College of Virginia

and completed a residency in dermatology at Emory University. He is board-certified in dermatology by the American Academy of Dermatology and also is board-certified by the American Boards of Pathology and Dermatology in Dermatopathology.



Darshana Shah, Ph.D., is the new chair-elect of the Association of American Medical College's (AAMC) Group on Faculty Affairs (GFA) Steering Committee. The mission of the national committee is to build and sustain faculty vitality in medical schools and teaching hospitals. Dr. Shah, associate dean for faculty

affairs and professional development, is also a JCESOM professor and has been with the school of medicine since 1997.

Advancing Scholarly Productivity in Research and Education (ASPIRE)

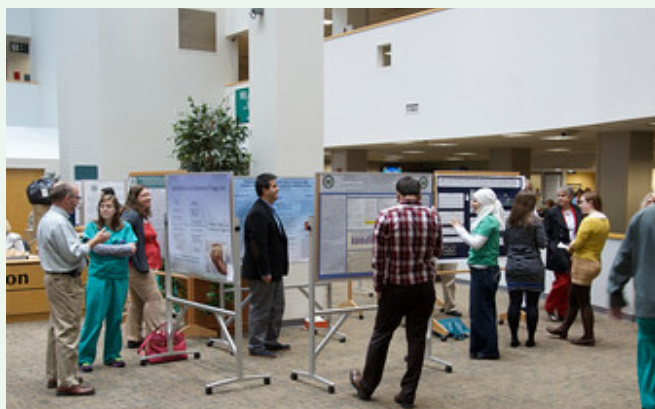
Sign up for ASPIRE today!

This program, initiated by the Office of Faculty Affairs and Professional Development, promotes and enhances scholarly productivity among JCESOM faculty, residents, and students.

ASPIRE is an active writing program designed to support academic publication through personal, in-depth assistance. Participants work on the publication of their choice, such as case-reports, review articles, journal manuscripts, chapters, and clinical reports and learn writing strategies and techniques to improve their writing. Program facilitators and peer mentors work together to ensure that writers receive the feedback and encouragement necessary to prepare manuscripts for submission. If you are interested in participating in ASPIRE, please contact Dr. Darshana Shah at

shah@marshall.edu.

Patient Safety & Quality Improvement Summit



Poster presentations line the Medical Center Atrium during JCESOM's Patient Safety and Quality Improvement Summit in November. The event brought awareness to JCESOM student, faculty, and staff about the importance of improving health care and patient outcomes through the quality improvement process.



Frank Shuler, M.D., and **Maria Tirona, M.D.,** present their poster "Designing a Patient Safety/Quality Improvement Curriculum for Graduate Medical Education." The presentation, as part of the Patient Safety and Quality Improvement Summit, examined the Teaching For Quality (Te4Q) seminar held in August for JCESOM faculty and discussed the objectives and applications of the Te4Q program.

Strengthening our Pipeline

STEM careers showcased to high school students



From left, medical students Shayne Gue, Steven Nakano, and Sarah Johnson assist high school students during a suturing workshop as part of the Health Care Pipeline Initiative in June at JCESOM.

Marshall University's summer program, called the Health Care Pipeline Initiative, held a week-long camp for high school students from around the region. The showcased an array of careers available in the science, technology, engineering, and mathematics (STEM) sectors. Lecture sessions during the week encompassed topics like rural health, aging and health, computer science, engineering, safety technology, health informatics, and health disparities. The initiative also included hands-on experience for participants in computer mapping, pharmacy compounding, suturing, heart sounds, and ear exams.

The camp was sponsored by JCESOM, the School of Pharmacy, and the Bluegrass Community and Technical College in Lexington, KY. Partners included the Marshall University Office of Intercultural Affairs, Southern West Virginia Area Health Education Center, West Virginia Higher Education Policy Commission (diversity grant), Walgreens (diversity grant), and the National Partnership For Action to End Health Disparities.

Project PREMED brings diversity and opportunity together



In September, more than a dozen undergraduate students from universities across the US participated in JCESOM's Project P.R.E.M.E.D. (Providing Real World Experiences for future Marshall Educated Doctors). Now in its fourth year, the week-long pipeline program aims to immerse students of color in the world of JCESOM's medical school students. **Shelvy L. Campbell, Ph.D.**, assistant dean for diversity, had strong words to share about the program: "We are pleased to offer this program at Marshall. Our diversity initiatives promote an inclusive environment by attracting, recruiting and retaining individuals who represent varying backgrounds. This pipeline program helps us build that environment by exposing students of color to what we do." This year's agenda included mock medical school interview sessions, robotic surgery demonstrations, and discussions with current medical students and residents about life as a physician.



Project P.R.E.M.E.D. participants enjoy their time together as they learn about life and education in the JCESOM medical school community. The undergraduate students hailed from the University of Virginia, University of Louisville, Hampton University, and Stony Brook, as well as Ohio University and Marshall University.

Book and Book Chapters

Biochemistry & Microbiology

Rounak Nande, **Pier P. Claudio**. "Ultrasound Contrast Agents in Cancer Therapy." Chapter in *Cutting Edge Therapies for Cancer in the 21st Century*. Published April 2014; Oak Park, IL: Bentham Science Publishers Ltd.

Family Medicine

Rondinelli R, **Mohammed I. Ranavaya**. "Current American Medical Association Guidelines for Evaluating Musculoskeletal Impairment at Maximum Medical Improvement." *Handbook of Musculoskeletal Pain and Disability Disorders in the Workplace*. Published May 2014.

Internal Medicine

Shirley M. Neitch, Weiner C, Nunley B, Elliott D. "Healthcare Professionals." Chapter in *Aging in Rural Places: Programs, Policies, and Professional Practices*. Published September 2014.

Hala M. Alshayeb, Sprague SM, Josephson M. "Management of Transplantation Renal Bone Disease: Interplay of Bone Mineral Density and Decisions Regarding Bisphosphonate Use." Chapter in *Kidney Transplantation: Practical Guide to Management*. Published 2014.

Peer-Reviewed Publications

Anatomy & Pathology

Darshana Shah, Ferrari N. "Reaching New Heights Together in West Virginia: Bringing Humanism to the Medical Community." *West Virginia Medical Journal*. Published July 2014;110: 64-65.

Holloway WL, Claeson KM, **F. Robin O'Keefe**. "A virtual phytosaur endocast and its implications for sensory system evolution in archosaurs." *Journal of Vertebrate Paleontology*. Published 2014; DOI:10.1080/02724634.2013.780953.

Biochemistry & Microbiology

Han MJ, **Emine C. Koc**, and Koc H. "Post-translational modification and mitochondrial relocalization of histone H3 during apoptosis induced by staurosporine." *Biochemical and Biophysical Research Communications*. Published July 2014;450(1):802-7.

De Regt AK, Yin Y, Withers TR, Wang X, Baker TA, Sauer RT, **Hongwei Yu**. "Overexpression of CupB5 activates alginate overproduction in *Pseudomonas aeruginosa* by a novel AlgW-dependent mechanism." *Molecular microbiology*. Published June 2014.

Barr TL, VanGilder R, Rellick S, Brooks SD, Doll DN, Lucke-Wold AN, Chen D, **James Denvir**, Warach S, Singleton A, Matarin M. "A Genomic Profile of the Immune Response to Stroke With Implications for Stroke Recovery." *Biological Research for Nursing*. Published August 2014.

Wanda Elaine Hardman. "Diet components can suppress inflammation and reduce cancer risk." Review in *Nutrition Research and Practice*. Published June 2014;8(3):233-240.

Family Medicine

Dilip Nair. "Travelers' diarrhea: prevention, treatment, and post-trip evaluation." Review in *Clinician Reviews*. Published May 2014;24(5):30-34,36.

Liaw W, Bazemore A, Xierali I, **John B. Walden**, Diller P. "Impact of Global Health Experiences During Residency on Graduate Practice Location: A Multisite Cohort Study." *Journal of Graduate Medical Education*. Published September 2014;6:(3).

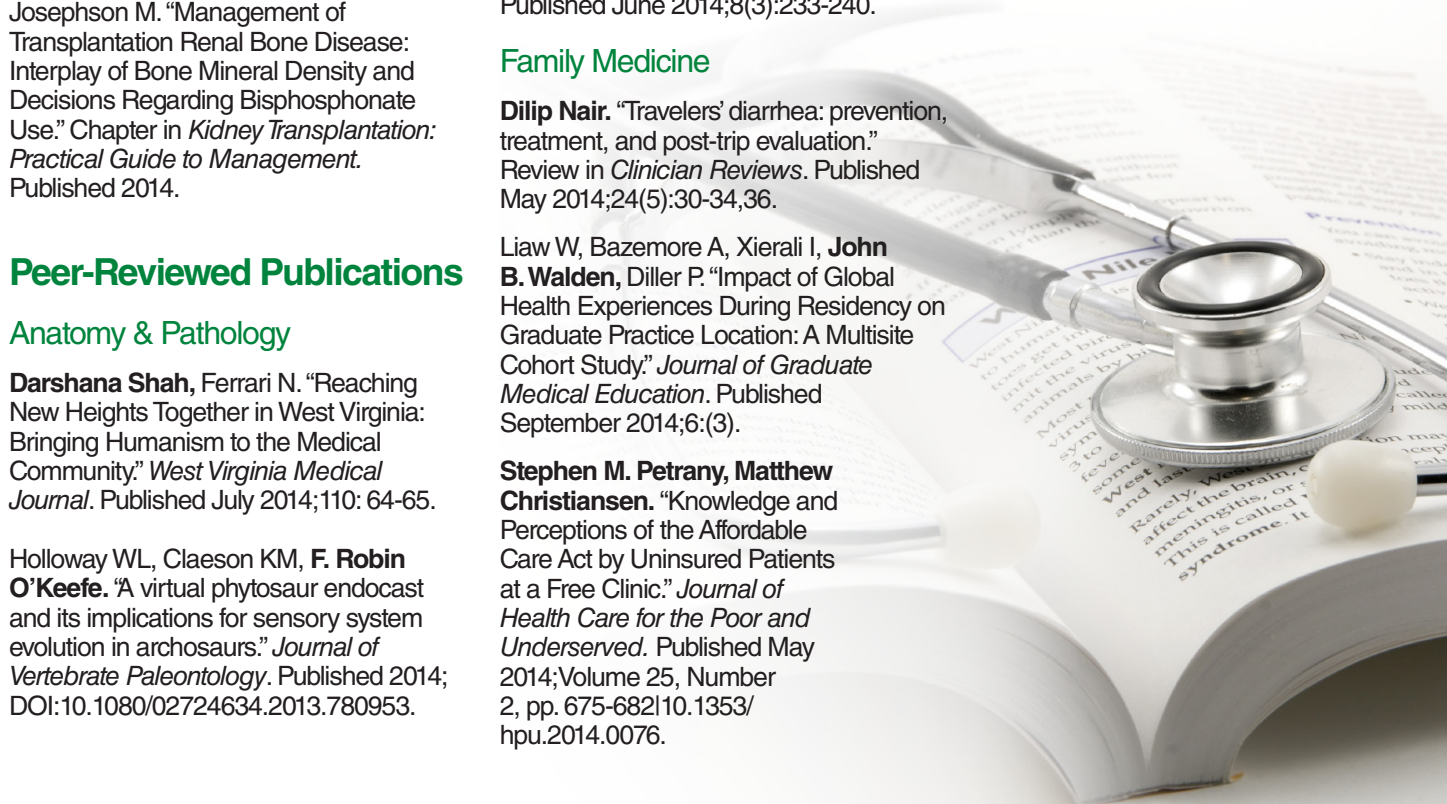
Stephen M. Petrany, Matthew Christiansen. "Knowledge and Perceptions of the Affordable Care Act by Uninsured Patients at a Free Clinic." *Journal of Health Care for the Poor and Underserved*. Published May 2014;Volume 25, Number 2, pp. 675-682|10.1353/hpu.2014.0076.

Prasanna Santhanam, Yanal Masannat. "Body mass index, mortality, and the obesity paradox in type 2 diabetes mellitus: the effect of hypertension." *Southern Medical Journal*. Published June 2014;107(6):361.

Hala M. Alshayeb, Showkat A, Wall BM, Gyamlani GG, David V, Quarles LD. "Activation of FGF-23 Mediated Vitamin D Degradative Pathways by Cholecalciferol." *Journal of Clinical Endocrinology and Metabolism*. Published June 2014;jc20141308.

Hala M. Alshayeb, Sprague S. "Bone Biopsy in the Diagnosis and Management of Bone Disease in Dialysis Patient." Review in *Therapeutics and Medical Management; Current Osteoporosis Reports*. Published July 2014.

Fahrman E, Adkins L, Loader C, Rice K, **Henry K. Driscoll**. "Mild Hypoglycemia, Heart Rate and Autonomic Nervous System in the Diabetes Control and Complication Trial (DCCT) and the Epidemiology of Diabetes Interventions and Complications (EDIC) Trial." Abstract in *Diabetes*. Published 2014;63(Suppl.1):A124.



Prasanna Santhanam, Henry K. Driscoll, Todd W. Gress, Rodhan A. Khthir.

"Metabolic disease and shift work: Is there an association? An analysis of NHANES data for 2007-2008." *Occupational and Environmental Medicine*. Published July 2014;10.1136/oemed-2014-102352.

Sun Y, Mills D, Ing TS, **Joseph I. Shapiro**, Tzamaloukas AH. "Body sodium, potassium and water in peritoneal dialysis-associated hyponatremia." *Peritoneal Dialysis International*. Published May 2014;34(3):253-9.

Tzamaloukas AH, **Joseph I. Shapiro**, Raj DS, Murata GH, Glew RH, Malhotra D. "Management of Severe Hyponatremia: Infusion of Hypertonic Saline and Desmopressin or Infusion of Vasopressin Inhibitors?" *The American Journal of the Medical Sciences*. Published September 2014.

Xie JX, Shapiro AP, **Joseph I. Shapiro**. "The Trade-Off between Dietary Salt and Cardiovascular Disease; A Role for Na/K-ATPase Signaling?" *Frontiers in Endocrinology*. Published July 2014;5:97.

Keyser M, **Lynne J. Goebel**. "Update on Adolescent Tobacco Cessation." *West Virginia Medical Journal*. Published July 2014;110(4):46-52.

Sanford Z, **Lynne J. Goebel**. "E-cigarettes: an up-to-date review and discussion of the controversy." *West Virginia Medical Journal*. Published July 2014;110(4):10-15.

Kusmic C, Barsanti C, Matteucci M, Vesentini N, Pelosi G, **Nader G. Abraham**, L Abbate A. "Up-regulation of heme oxygenase-1 after infarct initiation reduces mortality, infarct size and left ventricular remodeling: experimental evidence and proof of concept." *Journal of Translational Medicine*. Published April 2014;12(1):89.

Prasanna Santhanam, Masannat Y. "BMI, mortality and the "Obesity Paradox" in type 2 diabetes—the effect of hypertension." Letter in *Southern Medical Journal*. Published June 2014;107(6):361.

Rodhan A. Khthir. "The Metabolic Syndrome in Rural UAE: The Effect of Gender, Ethnicity and the Environment in its Prevalence." *The Journal of Metabolic Syndrome*. Published 2014.

Neuroscience

Sedney CL, **Terrence D. Julien**, Manon J, Wilson A. "The effect of craniectomy size on mortality, outcome, and complications after decompressive craniectomy at a rural trauma center." *Journal of Neurosciences in Rural Practice*. Published July 2014;5(3):212-7.

Obstetrics & Gynecology

Ryan A. Stone, Anne M. Silvis, David C. Jude, David G. Chaffin, Jr. "Increasing body mass index exacerbates inflammation in obese gravidas." *Obstetrics and Gynecology*. Published May 2014;123 Suppl 1:81S.

Jennie L. Yoost. "Understanding benefits and addressing misperceptions and barriers to intrauterine device access among populations in the United States." *Patient Preference and Adherence*. Published July 2014;8:947-57.

Orthopedic Surgery

Jeffrey D. Kim, Franklin D. Shuler, Ali Oliashirazi. "How to manage periprosthetic fractures in TKA." *International Congress for Joint Replacement Online Journal*. Published 2014.

Franklin D. Shuler, Schlierf T, Matthew K. Wingate. "Preventing falls with vitamin D." *The West Virginia Medical Journal*. Published May 2014;110(3):10-2.

Pediatrics

Alabd Alrazzak B, Husien T, Preston D, **Yoram Elitsur**. "Upper endoscopy in children: Do symptoms predict positive findings?" *Clinical Pediatrics*. Published 2014;53: 470- 474.

Pharmacology, Physiology, & Toxicology

Elsa I. Mangiarua, Delamere NA. "Association of Chairs of Departments of Physiology 2013 Survey Results." Technical report in *The Physiologist*. Published April 2014;57:159-164,2014.

Mao X, Dillon KD, McEntee MF, Saxton AM, and **Jung Han Kim**. "Islet insulin secretion, β -cell mass, and energy balance in a polygenic mouse model of Type 2 diabetes with obesity." *Journal of*

Inborn Errors of Metabolism & Screening. Published April 2014;1-6.

Cooke JD, Cavender HM, Lima HK, **Larry M. Grover**. "Antidepressants that inhibit both serotonin and norepinephrine reuptake impair long-term potentiation in hippocampus." *Psychopharmacology*. Published April 2014;231(23), 4429-4441.

Brown JM, Kuhlman C, Terneus MV, Labenski MT, Lamyathong AB, Ball JG, Lau SS, **Monica Valentovic**. "S-adenosyl-L-methionine protection of acetaminophen mediated oxidative stress and identification of hepatic 4-hydroxynonenal protein adducts by mass spectrometry." *Toxicology and Applied Pharmacology*. Published September 2014.

Richard D. Egleton, Abbruscato T. "Drug abuse and the neurovascular unit." *Advances in Pharmacology*. Published August 2014;71:451-80.

Surgery

Lawrence M. Wyner. "A magnetic pull: The case against Buckyballs." Case report in *Consultant*. Published August 2014;54(8):656-657.

Lawrence M. Wyner. "Bladder "Geodes." An Unusual Manifestation of Cystolithiasis." Case report in *The Journal of Urology*. Published June 2014;191(6):1874-1875.

Lawrence M. Wyner. "Compassion in medicine." *West Virginia Medical Journal*. Published May 2014;110(3):9.

Multi-disciplinary

Fahrmann ER, Adkins LA, Loader CJ, Han H, Rice KM, **James Denvir** (Biochemistry & Microbiology), **Henry K. Driscoll** (Internal Medicine). "Severe Hypoglycemia and Coronary Artery Calcification During the Diabetes Control and Complications Trial/Epidemiology of Diabetes Interventions and Complications (DCCT/EDIC) Study." *Diabetes Research and Clinical Practice*. Published 2014;doi:10.1016.

Bobby L. Miller (Pediatrics), Dzwonek B, **Aaron M. McGuffin** (Pediatrics), **Joseph I. Shapiro** (Internal Medicine). "From LCME Probation to Compliance: The Marshall University Joan C Edwards School of Medicine Experience." *Advances in Medical Education and Practice*. Published August 2014.

Travis B. Salisbury (Pharmacology, Physiology, & Toxicology), Tomblin JK, **Don A. Primerano** (Biochemistry & Microbiology), Boskovic G, Fan J, **Inderjit Mehmi** (Internal Medicine), Fletcher J, **Nalini Santanam** (Pharmacology, Physiology, & Toxicology), Hurn E, Morris GZ, **James Denvir** (Biochemistry & Microbiology). "Endogenous aryl hydrocarbon receptor promotes basal and inducible expression of tumor necrosis factor target genes in MCF-7 cancer cells." *Biochemical Pharmacology*. Published June 2014;91(3):390-9.

Drummond CA, Sayed M, Evans KL, Shi H, Wang X, Haller ST, **Jiang Liu** (Pharmacology, Physiology, & Toxicology), Cooper CJ, Xie Z, **Joseph I. Shapiro** (Internal Medicine), Tian J. "Reduction of Na/K-ATPase affects cardiac remodeling and increases c-kit cell abundance in partial nephrectomized mice." *American Journal of Physiology*. Published April 2014;306(12):H1631-43.

Mathis SE, **Anthony M. Alberico** (Neuroscience), Nande R, Neto W, Lawrence L, McCallister DR, **James Denvir** (Biochemistry & Microbiology), Kimmey GA, **Mark J. Mogul** (Pediatrics), **Gerard J. Oakley, III** (Anatomy & Pathology), **Krista L. Denning** (Anatomy & Pathology), **Thomas H. Dougherty** (Anatomy & Pathology), Valluri JV, **Pier P. Claudio** (Biochemistry & Microbiology). "Chemo-predictive assay for targeting cancer stem-like cells in patients affected by brain tumors." *PLoS One*. Published August 2014;9(8):e105710.

Lau JK, Brown KC, Dom AM, Witte TR, Thornhill BA, Crabtree CM, Perry HE, Brown JM, Ball JG, Creel RG, Damron CL, Rollyson WD, Stevenson CD, **Wanda Elaine Hardman** (Biochemistry & Microbiology), **Monica Valentovic** (Pharmacology, Physiology, & Toxicology), **A. Betts Carpenter** (Anatomy & Pathology), **Piyali Dasgupta** (Pharmacology, Physiology, & Toxicology). "Capsaicin induces apoptosis in human small cell lung cancer via the TRPV6 receptor and the calpain pathway." *Apoptosis*. Published August 2014;19(8):1190-201.

Belalcázar AD, Ball JG, Frost LM, **Monica Valentovic** (Pharmacology, Physiology, & Toxicology), **John Wilkinson IV** (Anatomy & Pathology). "Transsulfuration Is a

Significant Source of Sulfur for Glutathione Production in Human Mammary Epithelial Cells." *ISRN Biochemistry*. Published April 2014;2013:637897.

Alaa Gabi (Internal Medicine), **Rebecca S. Wolfer** (Surgery). "Abdominal Necrotizing Fasciitis due to *Pasturella Multocida* Infection." Case report in *West Virginia Medical Journal*. Published 2014;110,6(32-34).

Zeid J. Khitan (Internal Medicine), Harsh M, **Komal Sodhi** (Surgery), **Joseph I. Shapiro** (Internal Medicine), **Nader G. Abraham** (Internal Medicine). "HO-1 Upregulation Attenuates Adipocyte Dysfunction, Obesity, and Isoprostanol Levels in Mice Fed High Fructose Diets." *Journal of Nutrition and Metabolism*. Published September 2014;2014:980547.

Nader G. Abraham (Internal Medicine), **Komal Sodhi** (Surgery), **Anne M. Silvis** (Obstetrics & Gynecology), Vanella L, Favero G, Rezzani R, Lee C, Zeldin DC, Schwartzman ML. "CYP2J2 Targeting to Endothelial Cells Attenuates Adiposity and Vascular Dysfunction in Mice Fed a High-Fat Diet by Reprogramming Adipocyte Phenotype." *Hypertension*. Published September 2014.

Garla V, **Eduardo Pino** (Pediatrics), Coulon R, **Rebecca S. Wolfer** (Surgery). "Acute Ischemic Stroke in a 19 month old Following Mild Head Trauma: Case Report and Review of Literature." Case report in *West Virginia Medical Journal*. Published June 2014;110,3.

Journal Reviewers and Editors

Biochemistry & Microbiology

Wei-ping Zeng serves as a journal editorial board member in *Austin Journal of Clinical Immunology*, November 2013.

James Denvir was an article reviewer, *BMC Genetics*, April 2014.

Wei-ping Zeng has served as a journal reviewer/contributor for *The Open Nutrition Journal*, January 2013; for *Cancer Informatics*, May 2014; *Journal of Immunology*, *American Association of Immunologists*, November 2013.

Orthopedic Surgery

Franklin D. Shuler works as a reviewer for *Journal of Orthopedic Trauma and Postgraduate Medical Journal*, October 2013.

Pediatrics

Aaron M. McGuffin is a member of the editorial board for *Journal of Medical Education and Curriculum Development*, April 2014.

Pharmacology, Physiology, & Toxicology

Piyali Dasgupta is a reviewer for *Biochimica et Biophysica Acta*, 2013, and *Pharmacological Research*, 2014.

Grants Funded

Anatomy & Pathology

Maria A. Serrat. "Temperature effects on limb growth and IGF-I delivery to mouse bones - Miles Gray (undergraduate)," NASA WV Space Grant Consortium, \$5,000, May 2014 - May 2015. "Unilateral heating to increase IGF-I uptake and bone length in mice - Holly Tamski (graduate student)," NASA WV Space Grant Consortium, \$12,000, May 2014 - May 2015.

Biochemistry & Microbiology

Emine C. Koc, Sarah L. Miles. "Characterization and mechanism of serum factor(s) causing melanocytic proliferation in Bilateral Diffuse Uveal Melanocytic Proliferation syndrome," Clinical and Translational Science Award (CTSA), \$25,000, August 2014 - January 2016.

Hongwei Yu. "Investigation of Cystic Fibrosis mixed biofilms through deep sequencing," UK- MU collaborative award (CCTS), \$25,000, August 2014 - February 2016.

Wei-ping Zeng. "RNA seq analyses of genes for Treg cell-mediated immune suppression in vivo," WV-INBRE, \$10,000, July 2014 - June 2015.

Family Medicine

Richard D. Crespo. "Benedum School-Based Health Centers FY14-15 214150," Benedum Foundation, \$175,000, April 2014 - June 2015.

Richard D. Crespo. "Economic Analysis of Contracting Peer Support Models," American Academy of Family Physicians Foundation, \$13,420, June 2014 - September 2014.

Obstetrics & Gynecology

Melissa Rowe, Ryan A. Stone, Anne M. Silvis. "Evaluation of risk factors during pregnancy for long term cardiovascular disease in the female rural Appalachian population," Center for Rural Health and the Clinical Research Center, Marshall University, \$25,000, October 2014.

Pediatrics

Susan L. Flesher, Jenna B. Dolan, Ashley R. Jessie (Med/Peds), Audra L. Pritt, Shea Goodrich. "MS 1 Summer Stipend Project," Marshall University, \$2,000, June 2014 - August 2014.



Multi-disciplinary

Gary O. Rankin (Pharmacology, Physiology, & Toxicology), **Elsa I. Mangiarua** (Pharmacology, Physiology, & Toxicology), **James Denvir** (Biochemistry & Microbiology), **Nalini Santanam** (Pharmacology, Physiology, & Toxicology), **Don A. Primerano** (Biochemistry & Microbiology). "West Virginia IDeA Network of Biomedical Research Excellence (WV-INBRE)," National Institute of General Medical Sciences, \$17,581,101, September 2014 - August 2019.

Richard D. Egleton (Pharmacology, Physiology, & Toxicology), **Anne M. Silvis** (Obstetrics & Gynecology), **David G. Chaffin, Jr** (Obstetrics & Gynecology). "Evaluating Buprenorphine Metabolism in Opiate-Addicted Mothers and Fetal Tissue as a Predictor of Neonatal Abstinence Syndrome in Rural Appalachia," Center for Rural Health and the Clinical Research Center, Marshall University, \$25,000, October 2014.

John Wilkinson IV (Anatomy & Pathology), **Vincent E. Sollars** (Biochemistry & Microbiology). "Phenotypic plasticity associated with inhibition of HSP90," NIH/NCI, \$435,300, June 2014 - May 2017.

Nader G. Abraham (Internal Medicine), **Komal Sodhi** (Surgery). "Hormonal regulation of blood pressure," NIDDK, \$350,625, April 2014 - March 2015.

OBG Anne M. Silvis (Obstetrics & Gynecology), **Nalini Santanam** (Pharmacology, Physiology, & Toxicology), **Ryan A. Stone** (Obstetrics & Gynecology). "Endothelial Dysfunction during Pregnancy," Center for Rural Health and the Clinical Research Center, Marshall University, \$25,000, October 2014.

Grant Reviewers and Study Sections

Anatomy & Pathology

Maria A. Serrat served as a grant reviewer, Leakey Foundation, August 2014 - September 2014.

Biochemistry & Microbiology

Hongwei Yu served as a contributor to NASA Space Biology (Microbiology) Study Section, NASA Research & Education Support Services (NRESS), May 2014.

Richard M. Niles served as a member of Integration Panel for the Department of Defense Breast Cancer Research Program, US Department of Defense, May 2014.

Vincent E. Sollars was a grant application reviewer, West Virginia IDeA Network of Biomedical Research Excellence, April 2014; and a grant application reviewer, CURE program, Oak Ridge Associated Universities, April 2014.

Wanda Elaine Hardman is a JCESOM grant review committee member, June 2014.

Pharmacology, Physiology, & Toxicology

Jung Han. Kim was a study section member, LipidsBSc2, American Heart Association, April 2014.

Monica Valentovic was a study section member, NIH NIG NIDDK1 GRB-B (M1), February 2014 - April 2014.

Nalini Santanam is a member of EMNR (Endocrinology, Metabolism, Nutrition and Reproductive Sciences) IRG Special Emphasis Panel, National Institutes of Health (NIH), January 2013; and a member of Mentored Patient Oriented Research, K23/K24/K25, NIH/NHLBI, January 2014.

Service: National/International

Anatomy & Pathology

Darshana Shah is serving as chair, Communication Committee, Group on Faculty Affairs (GFA), American

Association of Medical Colleges (AAMC), July 2014 - July 2015; chair, National Professional Development Conference, AAMC, GFA Annual conference, July 2013 - July 2014; and steering committee member, Group on Diversity Affairs (GDI), AAMC, July 2014.

Maria A. Serrat is the annual meeting symposium chair and organizer, American Association of Anatomists, July 2014 - April 2015.

Biochemistry & Microbiology

Pier P. Claudio served as an organizing officer for the 5th RHAMS International Meeting, Cyprus, January 2013 - August 2014.

Information Technology

Michael J. McCarthy, M.A., served as president, Allscripts Academic User Group, August 2013 - July 2014, and serves as past president, Allscripts Academic User Group, August 2014 - July 2015.

Neuroscience

Terrence D. Julien is a NASS advocacy committee member and NASS guidelines committee member, North American Spine Society (NASS), October 2013 - October 2015.

Pediatrics

Sherrie N. Miranda serves as a pediatrician for the Tri-State Medical Missions 2015 Hands for Haiti, June 2014 - June 2015.

Pharmacology, Physiology, & Toxicology

Monica Valentovic is the communications liaison officer, Division of Toxicology, American Society for Pharmacology and Experimental Therapeutics (ASPET), January 2014.

Nalini Santanam is a member of the American Heart Association (Great Rivers Affiliate) Research Committee, 2013 - 2015.

Piyali Dasgupta is chair of the mini-symposium, "Lung Cancer," Experimental Biology Conference, American Society for Investigative Pathologist, 2014; co-chair, Special Interest Group, Neoplasia,

American Society of Investigative Pathology, 2014; member of British Pharmacological Society, 2014.

Service: Regional/State

Cardiology

Mehair O. El-Hamdani serves as a member of West Virginia Mission: Lifeline Physician STEMI Leadership, American Heart Association, July 2013.

Neuroscience

Mitzi Payne is a member of the Early Childhood Advisory Council of West Virginia, September 2014.

Psychiatry

Kelly E. Melvin is a member of the WV State Fatality Review Team, Supreme Court of Appeals of West Virginia, June 2014.

Surgery

Bonnie L. Beaver is a member of the West Virginia State Trauma Advisory Committee (STAC), the West Virginia State Office of Emergency Medical Services (OEMS), Division of Trauma, Designation and Categorization, August 2014.

Service: Local

Pediatrics

Susan L. Flesher is a member of the Physician's Advisory Council Hoops Family Children's Hospital, Cabell Huntington Hospital, 2013.

Surgery

Rebecca S. Wolfer serves as a volunteer for the Cabell Huntington Hospital Therapy Dog program, June 2014.

Meeting Presentations: National/International

Biochemistry & Microbiology

King A, Miller-Lee JL, Koc H, **Emine C. Koc**. "PINK1 A Ribosome-Associated Kinase." Poster presentation at STEM Research and Career Symposium, Atlanta GA, March 2014.

Hongwei Yu. "Modeling lung infection through exposure to bacteria-loaded droplets." Invited lecture at School of Pharmaceutical Sciences, Wuhan University, Wuhan, China, September 2014.

Hongwei Yu. "Regulation of the Exopolysaccharide Alginate Biosynthesis in *Pseudomonas aeruginosa*." Invited lecture at Innovation Talk 2014-007, Institute of Hydrobiology, The Chinese Academy of Sciences, September 2014.

Pier P. Claudio. "Chemosensitivity assay for targeting cancer stem-like cells in malignant brain tumors." Invited lecture and poster presentation at Cancer Stem Cell Conference, Cleveland, OH, August 2014. Invited lecture at Taussig Cancer Institute, Cleveland Clinic, Cleveland, OH, August 2014; at Case Comprehensive Cancer Center and University Hospitals, Case Comprehensive, Cleveland, OH, August 2014; at Jackson Comprehensive Cancer Center, Jackson Comprehensive Cancer Center, September 2014; at Cancer Ground Rounds, Comprehensive Cancer Center and University Hospitals, University of Cincinnati, OH, September 2014.

Pier P. Claudio. "Novel chemosensitivity assay for targeting cancer stem-like cells in brain tumors." Invited lecture at 5th RAHMS Conference, Cyprus, July 2014.

Wei-ping Zeng. "Structure-functional analysis of Foxp3." Poster presentation at Immunology 2014 (American Association of Immunologists annual meeting), Pittsburgh, PA, May 2014.

Family Medicine

Dilip Nair. "Current Questions about Traveler's Diarrhea." Oral presentation at AAFP 2014 Global Health Workshop, San Diego, CA, September 2014.

James B. Becker. "West Virginia Experience with Neo-Natal Abstinence Syndrome." Poster presentation at MED Conference, Portland, Oregon, May 2014.

John B. Walden. "Working with Indigenous Peoples." Oral presentation at Uniformed Services University Military Tropical Medicine Course, Bethesda, MD, July 2014.

Mohammed I. Ranavaya. “Invited Keynote lecture: Return to work and Stay at Work—Strategies that work.” Invited lecture at Asian (SOCSCO) return to work conference 2014, Kuala Lumpur, Malaysia, June 2014. “Return to Work.” Expert panel member at Asian (SOCSCO) Return to Work conference, Kuala Lumpur, Malaysia, June 2014.

Mohammed I. Ranavaya.

“Musculoskeletal disorder in the workplace – How to deal with impairment and disability claims using the AMA guides to the evaluation of permanent impairment 6th edition.” Invited lecture at two-day seminar for senior orthopedic surgeons, Kuala Lumpur, Malaysia, June 2014.

Richard D. Crespo. “The Evolution of Electronic Management for School-Based Oral Health Programs in West Virginia.” Oral presentation at National School-Based Health Care Convention: School-Based Health Alliance annual conference, June 2014.

Richard D. Crespo. “Community Engagement Models for Chronic Disease Self-Management.” Invited lecture at CDC University, Centers for Disease Control and Prevention, Atlanta, GA, September 2014.

Internal Medicine

Yanal Masannat, Omolola Lola Olajide. “A Case of Nephrogenic DI after 6 years of Cessation of Lithium Therapy.” Poster presentation at AACE Scientific and Clinical Meeting, Las Vegas, Nevada, May 2014.

Lataifeh A, **Mohammed M. Al-Ourani, Todd W. Gress, Yousef R. Shweihat, Fuad M. Zeid.** “Safety of Clopidogrel in Thoracentesis.” Oral presentation at National American College of Physicians, San Francisco, CA, April 2014.

Yousef A. Hattab, Fuad M. Zeid. “A Case of Severe Acquired Methemoglobinemia Secondary to Aniline Dye.” Oral presentation at The American Thoracic Society International Conference, San Diego, CA, May 2014.

Carey L, **Shirley M. Neitch, Guillermo Madero Garza.** “Myasthenia Gravis in the Elderly: Diagnostic Enigma.” Poster presentation at AGS National Meeting, May 2014.

Fahrmann E, Adkins L, Loader C, Rice K, **Henry K. Driscoll.** “Mild Hypoglycemia, Heart Rate and Autonomic Nervous System in the Diabetes Control and Complication Trial (DCCT) and the Epidemiology of Diabetes Interventions and Complications (EDIC) Trial.” Poster presentation at American Diabetes Association Scientific Sessions, San Francisco, CA, June 2014.

Mohammed M. Al-Ourani, Lataifeh A, Al-Jaroushi H, Yousef R. Shweihat, Nancy J. Munn. “Efficacy of Chest CT in Management of Patients with CAP.” Poster presentation at American Thoracic Society International Conference, San Diego, CA, May 2014.

Gyamfi R, Sloan D, **Prasanna Santhanam.** “A Case of Primary Hyperparathyroidism in pregnancy.” Poster presentation at Endocrine Society Annual Meeting, Chicago, June 2014.

Obstetrics & Gynecology

Jennie L. Yoost. “Long Term Follow up of Adolescents Treated for Endometriosis.” Poster presentation at NASPAG, Philadelphia, April 2014.

Orthopedic Surgery

Cook SE, **Franklin D. Shuler.** “Smartphone mobile applications to enhance diagnosis of skin cancer: a guide for the rural practitioner.” Poster presentation at Global Health Workshop, 11th Annual AAFP Family Medicine, San Diego, CA, July 2014.

John J. Jasko, Schenck R, Amendola N, Willits K. “Ankle Injuries in Athletes.” Invited lecture and oral presentation at American Orthopaedic Sports Medicine Society Annual Meeting 2014, Seattle, WA, June 2014.

Pediatrics

Aaron M. McGuffin. “Advantages of Universal Notes.” Invited lecture at Integration of Basic Science into the Clinical Years, Dominica, September 2014.

Yoram Elitsur, Preston D. “The rate of celiac disease in WV children: The view from the endoscopy suite.” Poster presentation at 47th annual meeting of the European Society for Pediatric (SPGHAN), Jerusalem, Israel, June 2014.

Yoram Elitsur, Abdel-Razeck B, Preston D, Demetieva Y. “Does Helicobacter pylori protect against Eosinophilic esophagitis in children?” Poster presentation at 47th annual meeting of the European Society for Pediatric Gastroenterology, Hepatology, and Nutrition (ESPGHAN), Jerusalem, Israel, June 2014.

Pharmacology, Physiology, & Toxicology

Ahmad T, Richards-Waugh L, Sabet S, **Gary O. Rankin.** “Contribution of CYP2B6 alleles in sudden death of methadone users: A CYP2B6 genetic polymorphism study.” Poster presentation at Society of Toxicology Annual Meeting, Phoenix, AZ, March 2014.

Racine C, Anestis D, **Gary O. Rankin.** “Exploration of the role of renal biotransformation in 3,4,5-trichloroaniline nephrotoxicity in vitro.” Poster presentation at Society of Toxicology Annual Meeting, Phoenix, AZ, March 2014.

Gary O. Rankin, Anestis D, Racine C. “Role of renal biotransformation in 3,4,5-trichloroaniline nephrotoxicity in vitro.” Poster presentation at Experimental Biology, San Diego, CA, April 2014.

Vu LK, Hedrick H, Ball JG, **Monica Valentovic, Gary O. Rankin.** “The natural product resveratrol attenuates doxorubicin cytotoxicity in human kidney (HK-2) cells.” Poster presentation at National IDeA Symposium for Biomedical Research Excellence, Washington, DC, June 2014.

Vu LK, **Gary O. Rankin, Hedrick H, Ball JG, Monica Valentovic.** “Resveratrol reduces doxorubicin cytotoxicity in human kidney (HK-2) cells.” Poster presentation at Society of Toxicology Annual Meeting, Phoenix, AZ, March 2014.

Siriwardhana N, **Jung Han Kim.** “Role of Wnt5b in fatty acid synthesis in primary cultured mouse hepatocytes.” Poster presentation at Experimental Biology 2014, San Diego, CA, April 2014.

Schnelle A, Wright MS, Hedrick H, Brown J, Ball JG, **Monica Valentovic.** “Acetaminophen (APAP) Induced Hepatic Protein Modifications in Liver and Mitochondria of C57/BL6 Mice are reduced by S-Adenosylmethionine (SAME).” Poster presentation at Society of Toxicology, Phoenix, Arizona, March 2014.

Monica Valentovic, IDeA Book. "Resveratrol Reduces Cisplatin Associated Oxidative Stress and Oxidative Modifications of Proteins in Rat Renal Tissue Independent of TNF α ." Poster presentation at 5th Biennial IDeA, Washington, D.C., June 2014.

L.K. Vu, **Gary O. Rankin**, H. Hedrick, J.G. Ball, **Monica Valentovic**. "Resveratrol Reduces Doxorubicin Cytotoxicity in Human Kidney (HK-2) Cells." Poster presentation at Society of Toxicology, Phoenix, Arizona, March 2014.

Nalini Santanam, Cook C. "Omega-3 and 6 fatty acids modulate microRNA profile in microgravity cultured adipocytes." Poster presentation at ICE/ENDO 2014, Chicago, IL, June 2014.

Brown KC, Lau JK, Thornhill BA, Perry HE, Stevenson CD, Rollyson WD, McNees CA, Stover CA, **Piyali Dasgupta**. "Role of the acetylcholine signaling system in human non-small cell lung cancers." Invited lecture at Experimental Biology Conference, San Diego, CA, April 2014.

Piyali Dasgupta, Brown KC, Perry HE, Lau JK, Jones DV, Pulliam JF, Thornhill BA, Crabtree CM, Chen YC. "Long-term nicotine exposure elevates the expression of $\alpha 7$ -nicotinic receptors ($\alpha 7$ -nAChRs) in human squamous cell lung cancer cells via Sp1/GATA proteins." Oral presentation at Experimental Biology, San Diego, CA, April 2014.

Piyali Dasgupta. "Nicotine/Acetylcholine Signaling Pathway: Effects on town and gown." Oral presentation at Thirteenth Scientific Symposium, Flight Attendant Medical Research Institute, Miami FL, May 2014.

Perry HE, Brown KC, Stevenson CD, Rollyson WD, Stover CA, **Piyali Dasgupta**. "Capsaicin sensitizes small cell lung cancer cells to the apoptotic effects of camptothecin." Oral presentation at Experimental Biology Conference, San Diego, CA, April 2014.

Multi-disciplinary

Jung Han Kim (Pharmacology, Physiology, & Toxicology), Neff D, **James Denvir** (Biochemistry & Microbiology), **Don A. Primerano** (Biochemistry & Microbiology), Boskovic G, Fan J, Mao X, Dillon K. "The Missense Polymorphism

R46S in Cell Death-Inducing DNA Fragmentation Factor-Alpha (DFFA)-like Effector c (Cidec/Fsp27) May Influence the Obesity Mediated By Mouse Locus *tabw2a*." Poster presentation at 16th International Congress of Endocrinology & the Endocrine Society's 96th Annual Meeting & Expo, Chicago, IL, June 2014.

Nalini Santanam (Pharmacology, Physiology, & Toxicology), Davis M, **James Denvir** (Biochemistry & Microbiology), Boskovic G, **Don A. Primerano** (Biochemistry & Microbiology), Cook C, Adams C. "Expression profiling of miRNA and its targets in epicardial fat from patients with coronary artery disease." Poster presentation at NIH IDeA-NISBRE annual meeting, Washington, DC, June 2014.

Travis B. Salisbury (Pharmacology, Physiology, & Toxicology), Tomblin JK, **Don A. Primerano** (Biochemistry & Microbiology), Boskovic G, Fan J, Chaudhry AR, Morris G, **James Denvir** (Biochemistry & Microbiology). "Endogenous Aryl Hydrocarbon Receptor Promotes Basal and Inducible Expression of Tumor Necrosis Factor Target Genes in MCF-7 Cancer Cells." Poster presentation at National IDeA Symposium for Biomedical Research Excellence (NISBRE) Biennial Meeting, Washington, DC, June 2014.

Rollyson WD, Stover CA, Brown KC, Perry HE, Stevenson CD, Crabtree CM, Dom AM, Lau JK, Witte TR, **Wanda Elaine Hardman** (Biochemistry & Microbiology), **Piyali Dasgupta** (Pharmacology, Physiology, & Toxicology). "The anti-cancer dietary compound capsaicin shows higher bioavailability in the lung than other organs." Poster presentation at Experimental Biology, San Diego, CA, April 2014.

Stevenson CD, Crabtree CM, Dom AM, Lau JK, Brown KC, Creel RG, Damron CL, Chen YC, Witte TR, **Wanda Elaine Hardman** (Biochemistry & Microbiology), **Piyali Dasgupta** (Pharmacology, Physiology, & Toxicology). "Capsaicin causes apoptosis of human small cell lung cancers cells via the TRPV6/calpain pathway." Poster presentation at Experimental Biology Conference, San Diego, CA, April 2014.

Dom AM, Brown KC, Lau JK, Thornhill BA, Crabtree CM, Witte TR, **Wanda Elaine Hardman** (Biochemistry & Microbiology), McNee CA, Stover CA, **A. Betts Carpenter** (Anatomy & Pathology), Chen YC, **Piyali Dasgupta** (Pharmacology, Physiology, & Toxicology). "Vesamicol, an inhibitor of vesicular acetylcholine transporter, causes apoptosis in human lung adenocarcinomas." Oral presentation at Experimental Biology Conference, San Diego, CA, April 2014.

Kathleen M. O'Hanlon (Family Medicine), **Maria Guadalupe Lopez Marti** (Pediatrics), **Yoram Elitsur** (Pediatrics). "20-HETE and Circulating Endothelial Cells, a Unique Vascular Profile Related to CVD in Morbidly Obese Appalachian Women" and "The Existence of a Strong Correlation Between Leptin, TNF- α Levels and BMI in Morbidly Obese Appalachian Females." Poster presentation at American Heart Association/High Blood Pressure Council, San Francisco, CA, September 2014.

Yasser M.K. Etman (Internal Medicine), **Mostafa Shalaby** (Internal Medicine), **Linda G. Brown** (Anatomy & Pathology), **Rebecca S. Wolfer** (Surgery), **Fadi W. Alkhankan** (Internal Medicine). "Sarcoidosis in Association with Multiple Myeloma." Oral presentation at American Thoracic Society International Conference, San Diego, CA, May 2014.

Joseph I. Shapiro (Internal Medicine), **Jiang Liu** (Pharmacology, Physiology, & Toxicology). "Protein Carbonylation of the Na/K-ATPase Regulates Renal Proximal Tubular Na/K-ATPase signaling and Sodium Transport." Oral presentation at 14th International ATPase Symposium: Na, K-ATPase and Related Transport ATPases: Structure, Mechanism, Cell Biology, Health and Disease (2014 ASBMB Special Symposia Series), Lunteren, Netherlands, September 2014.

Yan Y, Shapiro AP, Haller S, Liu L, Tian J, Xie Z, **Joseph I. Shapiro** (Internal Medicine), and **Jiang Liu** (Pharmacology, Physiology, & Toxicology). "Protein Carbonylation of the Na/K-ATPase Regulates Renal Proximal Tubular Na/K-ATPase signaling and Sodium Transport." Poster presentation at 14th International ATPase Symposium: Na, K-ATPase and Related Transport ATPases: Structure, Mechanism, Cell Biology, Health

and Disease (2014 ASBMB Special Symposia Series), Lunteren, Netherlands, September 2014.

Drummond CA, Shi H, Sayed M, Evans KL, Wang X, Haller S, **Jiang Liu** (Pharmacology, Physiology, & Toxicology), Cooper CJ, Xie Z, **Joseph I. Shapiro** (Internal Medicine), Tian J. "Na/K-ATPase in Regulating Cardiac Remodeling and Cardiac Progenitor c-kit Cell Abundance." Poster presentation at 14th International ATPase Symposium: Na, K-ATPase and Related Transport ATPases: Structure, Mechanism, Cell Biology, Health and Disease (2014 ASBMB Special Symposia Series), Lunteren, Netherlands, September 2014.

Drummond CA, **Jiang Liu** (Pharmacology, Physiology, & Toxicology), Cooper CJ, Xie Z, **Joseph I. Shapiro** (Internal Medicine), and Tian J. "Inhibition of Na/K-ATPase Signaling Regulates Cardiac Remodeling Induced by Partial Nephrectomy in Mice." Poster presentation at Experimental Biology, San Diego, CA, April 2014.

Goodrich SM, **Joe E. Evans** (Pediatrics), **Todd W. Gress** (Internal Medicine), **Joseph W. Werthammer** (Pediatrics). "After-hours pediatric care compared to emergency department care: a retrospective charge analysis." Poster presentation at Pediatric Academic Society, Vancouver, May 2014.

Nalini Santanam (Pharmacology, Physiology, & Toxicology), Yaqub A, Cook C, **Todd W. Gress** (Internal Medicine). "Longitudinal changes in CX3CL1 targeting microRNAs in patients with T2DM." Poster presentation at ICE/ENDO 2014, Chicago, IL, June 2014.

Meeting Presentations: Regional/State

Anatomy & Pathology

Krista L. Denning. "Overview of Pap Tests and HPV Testing." Oral presentation at Edwards Comprehensive Cancer Center/Cabell Huntington Hospital 8th Annual Regional Cancer Nursing Symposium, Pullman Plaza Hotel, Huntington, WV, April 2014.

Biochemistry & Microbiology

Katrib A, Dillon R, **Beverly C. Delidow**. "Regulation of Wnt Signaling Pathways in Melanoma Cells." Poster presentation at INBRE Summer Symposium, Huntington, WV, July 2014.

Lehosit KE, Withers TR, **Hongwei Yu**. "The Effects of FDA Approved Drugs on Biofilm Formation of *Pseudomonas aeruginosa*." Poster presentation at 13rd Annual WV-INBRE Summer Research Symposium, Morgantown, WV, July 2014.

Internal Medicine

Espiridion M, Mulinti R, **Lynne J. Goebel**. "Patient satisfaction with the annual wellness visit." Poster presentation at West Virginia Geriatric Society Annual Meeting, Charleston, WV, September 2014.

Prahbu A, Sheikh F, **Lynne J. Goebel**. "Focal motor deficit, a rare complication of shingles." Poster presentation at West Virginia Geriatric Society annual conference, Charleston WV, September 2014.

Rao A, **Lynne J. Goebel**. "Is subclinical hypothyroidism associated with decreased mortality among octogenarians?" Poster presentation at West Virginia Geriatric Society, Charleston, WV, September 2014.

Shah M, **Lynne J. Goebel**. "An unusual pulmonary complication of statin medication." Poster presentation at West Virginia Geriatric Society annual conference, Charleston WV, September 2014.

Riley E, Weaver K, **Rezwana Ahmed**, **Yaser M. Rayyan**. "Primary Intestinal Lymphangiectasia in a Patient with 6q Duplication Syndrome." Poster presentation and poster finalist at ACP, Orlando, FL, April 2014.

Shirley M. Neitch. "Review and Update of Alzheimer's Disease for Primary Care Physicians." Oral presentation at Mississippi Academy of Family Physicians, Jackson, MS, April 2014.

Shirley M. Neitch. "Review and Update of Alzheimer's Disease for Primary Care Physicians." Oral presentation at NASW/ WV Chapter Annual Meeting, Charleston, WV, April 2014.

Neuroscience

Paul B. Ferguson. "Multiple Sclerosis: A Clinical Update." Invited lecture at West Virginia Nurse Practitioners Conference, Huntington, WV, May 2014.

Pediatrics

Aaron M. McGuffin. "Integration of Basic Science into the Clinical Years: Advantages of Universal Notes." Invited lecture at Ross University School of Medicine, Miami, FL, June 2014.

Eduardo Pino. "Diabetic ketoacidosis in pediatric patients: a survey of guideline compliance and a retrospective review of a guidelines based approach to management." Oral presentation at Great Lakes Residency Pharmacy Conference, Indianapolis, IN, April 2014.

Pharmacology, Physiology, & Toxicology

Paniagua S, **Jung Han Kim**. "Hepatic Gene Expression Analysis of Nuclear Receptor Subfamily 0, Group B, Member 2 (Nr0b2) in Type 2 Diabetic Mice, TALLYHO." Poster presentation at 13th Annual WV-INBRE summer research symposium, Morgantown, WV, July 2014.

Wright SR, **Jung Han Kim**. "Evaluation of Interferon Activated Gene 202B (Ifi202b) and Dual Specificity Phosphatase 12 (Dusp12) as Potential Candidate Genes For The Obesity Susceptibility QTL on Mouse Chromosome 1." Poster presentation at 13th Annual WV-INBRE summer research symposium, Morgantown, WV, July 2014.

Urbanic JJ, **Larry M. Grover**. "Effects of the Antidepressant Imipramine on Long Term Potentiation (LTP) and Brain Derived Neurotrophic Factor (BDNF) in the Rat Hippocampus." Oral presentation at WV-INBRE 2014 Summer Research Symposium, Morgantown, WV, July 2014.

Vu LK, **Monica Valentovic**, Ball JG, Lamyathong AB, Shaver K, Murphy R, Mahatara R. "Resveratrol protects human kidney cells from doxorubicin toxicity." Invited lecture at NIH Summer INBRE Symposium West Virginia, Morgantown, WV, July 2014.

Mahatara R, **Monica Valentovic**, Ball JG, Lamyathong AB, Vu LK, Thompson RM, Shaver K, Murphy R. "Examination of Resveratrol Protection of Cisplatin cytotoxicity and ER-Stress in Rat Renal Cortical Slices." Poster presentation at NIH INBRE WV Program book, Morgantown, WV, July 2014.

Thompson RM, **Monica Valentovic**, Ball JG, Vu LK, Lamyathong AB, Shaver K, Murphy R, Mahatara R. "Investigation of Utilization of Urinary Biomarkers for In vitro Cisplatin Nephrotoxicity." Poster presentation at NIH Summer INBRE Symposium, Morgantown, WV, July 2014.

Kinder JT, Perry HE, Brown KC, **Piyali Dasgupta**. "Effect of capsaicin on the expression of TRPV receptors on human small cell lung cancer cells." Poster presentation at WV-INBRE Summer Research Conference, Morgantown, WV, July 2014.

Mazagri HR, Proper NA, O'Toole WL, Halaibeh M, **Richard D. Egleton**. "Buprenorphine Regulation of Brain Endothelial Cells." Poster presentation at Interweaving Advances in Brain-Barriers Pharmacology with Clinical Problems: Implications for Treatment, Sunriver Resort in Sunriver, Oregon, March 2014.

Surgery

Rebecca S. Wolfer. "Management of Malignant Pleural Effusions." Invited lecture at West Virginia College of Surgeons Annual Meeting, May 2014.

Meeting Presentations: Local

Family Medicine

John B. Walden. "Health Care in the Amazon." Oral presentation at Cabell County Medical Society, Huntington, WV, May 2014.

Orthopedic Surgery

Charles E. Giangarra. "Controversies in ACL Surgery, Double Bundle vs Single Bundle." Oral presentation at 5th Annual Assessment of Athletic Injuries, Huntington, WV, June 2014.

Charles E. Giangarra. "Differential Diagnosis of Shoulder Injuries." Invited lecture at Athletic Training Undergraduate Curriculum, Huntington, WV, April 2014.

Pediatrics

Eduardo Pino. "Pediatric Urgencies and Emergencies," "Transport of the Critically Ill Child," "Diabetic Ketoacidosis," and "The Pediatric Airway." Invited lectures at HealthNet, Charleston, WV, April 2014.

Milestones and Achievements

Jenna (Vance) Kerby, Marshall University undergraduate, won the Outstanding Research Presentation Award for the poster presentation "Utilization of unilateral heat to increase extremity bone length in mice," Research and Practice Day, College of Health Professionals, Marshall University, Huntington, WV, April 2014.

Internal Medicine

Lynne J. Goebel was awarded the David Z. Morgan Award for excellence in geriatric education in WV, September.

Obstetrics & Gynecology

Kevin J. Conaway became certified in Female Pelvic Medicine and Reconstructive Surgery by the American Board of Obstetrics and Gynecology, June 2014.

*"The turning of the year
brings an opportunity
to look both behind
us, at what we have
accomplished, and to
look ahead, at what
we will achieve."*

– Dr. Joseph I. Shapiro



MILESTONE

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