

PROFESSIONAL ENHANCEMENT NEWSLETTER

Keeping You Connected

State and National Leadership Activities

Anatomy and Pathology

Darshana Shah has been elected vice-president of the Group for Research in Pathology Education.

Family and Community Health

John Parker was elected secretary of the West Virginia Academy of Family Physicians.

Forensic Science

Graham Rankin is associate editor of the Journal of American Society and Testing and Materials, International.

Internal Medicine

Shirley Neitch is president of the West Virginia Geriatrics Society.

Office of Medical Education

Amy Smith has become vice-chair of the Educational and Professional Development Committee of the Association of Standardized Patient Educators.

Pharmacology, Physiology and Toxicology

Monica Valentovic was elected secretary/treasurer of the Division of Toxicology of the American Society of Pharmacology and Experimental Therapeutics. She also is on the editorial board of the Journal of Toxicology and Environmental Health.

Psychiatry and Behavioral Medicine

Steve Cody is president-elect of the West Virginia Psychological Association.

Awards, Honors & Service

Anatomy and Pathology

Maria Serrat was a 2010 participant in

Transformational leadership in action

JCESOM, as a fairly young institution, has come a long way in enhancing the capacity of its faculty in their efforts to serve students and society. It is not only fulfilling its academic mission but also serving as a catalyst for its faculty to bring change in the area of their research, teaching and service.

This issue provides you with several such examples of transformative faculty leaders. Dr. Kevin Yingling has expanded his leadership role by taking up the position of founding dean of the MU School of Pharmacy, Dr. Pier Paolo Claudio is leading a research team that is paving the way for more effective cancer treatment, and several faculty and staff members have undertaken new leadership roles at the state and national level.

Enjoy reading about these and other impressive faculty, staff and student accomplishments in this edition of PEN.

Darshana Shah

the United States Bone and Joint Decade Young Investigator Initiative. She was selected by competitive application to participate in a formal grant-mentoring program to help junior faculty successfully obtain external funding and she attended a program workshop in Toronto in October. Dr. Serrat was also a part of the outreach event: Skeletons in the Closet, Expanding Your Horizons, a science program for middle school girls, sponsored by Association for Women in Science.

Internal Medicine

Shirley Neitch received the 2010 David Z. Morgan Award from the West Virginia Geriatric Education Center for outstanding contributions to geriatrics education in the state.

Pharmacology, Physiology and Toxicology

Piyali Dasgupta was accepted as a member of the American Society of Pharmacology and Experimental Therapeutics. She also was among the Marshall scientists featured in a Feb. 25 West Virginia Public Television segment on the university's MU-ADVANCE program.

Nalini Santanam was the co-chair of the Russell Ross Memorial Lectureship at the 2010 American Heart Association Scientific Sessions in Chicago. She was also the chair of the Aging & Oxidative Stress session at the 10th Annual Meeting of the Society for Free Radical Research-International (India chapter) in January.



Pier Paolo Claudio works to improve cancer treatment

Pier Paolo Claudio, MD, PhD, is an associate professor in the Department of Biochemistry and Microbiology, with a secondary appointment in the Department of Surgery.



His early research focused on understanding the molecular mechanisms governing malignant transformation that could help design tailored anticancer therapeutic strategies. Toward this end, he has carried out in the past 20 years studies to understand the crosstalk between factors that contribute to cancer progression versus those that protect from it.

While on the Temple University faculty, Dr. Claudio expanded his research to develop a novel delivery system for safer gene therapy protocols that employ ultrasound contrast agents to deliver therapeutic genes to diseased tissue.

The ability to incorporate drugs or genes into detectable site-targeted nanosystems represented a new paradigm in therapeutics (also known as theranostics) that his laboratory continues to explore as a therapeutic alternative that will usher in an era of image-based drug delivery. Since joining the Marshall faculty in 2006, he has implemented the ultrasound-guided gene therapy system with the aid of two NIH grants, seeking to determine its effectiveness in delivering therapeutics to prostate and pancreatic cancers.

He also explores the effects of dietary products on cancer, focusing on the effects that various diet components have on cancer growth and metastasis. Recent observations indicate that, in several types of human cancer, a subset of cancer cells behaves similarly to stem cells. The capacity of these cells to self-renew and differentiate into heterogeneous, aberrant progeny makes them capable of both initiating tumor growth in animals and repairing tumors after chemotherapy. These studies are providing important mechanistic insight that in the future could translate into simple dietary changes during the course of anticancer treatments.

Dr. Claudio has published more than 100 scientific articles in peer-reviewed journals and written 13 book chapters on cancer therapeutics, and he is the editor of four books on cancer.

PROFESSIONAL DEVELOPMENT PROGRAM WEBSITE:
musom.marshall.edu/fdp/

Meeting Presentations

Multidisciplinary

Tracy LeGrow, Aaron McGuffin, and Marie Veitia will present in June at the Professional Development Conference for Student Affairs and Careers in Medicine. Their presentation title: **Introduction to the Medical Profession: An integrated approach to the orientation of new students to medical school and the development of their professional identity.**

Kevin Johnson, Chris Adams, Carla Cook, Jia Fei, Todd Gress, Paulette Wehner, Nepal Chowdhury, Arthur Mcunu, Edward Setser, and Nalini Santanam presented **Sex differences in epicardial fat microRNAs in patients with coronary artery disease** at the National IDeA Symposium of Biomedical Research Excellence in Washington, D.C., in June.

Nalini Santanam, Kevin Johnson, Chris Adams, Carla Cook, Jia Fei, Todd Gress, Paulette Wehner, Nepal Chowdhury, Arthur Mcunu and Edward Setser presented **Unique sex differences in epicardial fat microRNAs in patients with coronary artery disease – West Virginia Appalachian Heart Study** at the 11th International Congress on Obesity, Stockholm, Sweden, in July.

Christopher Adams, Carla Cook, Todd Gress, Nepal Chowdhury, Caitlin Kocher, Kevin Johnson, Paulette Wehner and Nalini Santanam presented **Perivascular fat biomarkers – Role in coronary artery disease – West Virginia Appalachian Heart Study** at the 10th Annual Meeting of the Society for Free Radical Research-International (India chapter) in January.

Anatomy, Cell and Neurobiology

Maria Serrat, Rebecca Williams and Cornelia Farnum gave an oral presentation on **Wheel running activity reverses the cold limb phenotype in mice** at the 9th International Congress of Vertebrate Morphology, Punta del Este, Uruguay, in July. She also did a poster presentation of the team's paper **Exercise mitigates the stunting effect of cold temperature on limb elongation in mice by increasing solute delivery to the growth plate**

Continued on page 3

Meeting Presentations

(continued from page 2)

at the 2010 Experimental Biology meeting in Anaheim, Calif. She gave an oral presentation entitled Building a professional career at Marshall with support from MU-ADVANCE at the MU-ADVANCE Pat Logan Symposium of Scholars.

Forensic Science

Graham Rankin was a co-author on four graduate student poster presentations at the 2011 American Academy of Forensic Science meeting in Chicago and made an oral presentation at Interflam 2010 in Nottingham, England, in July.

Invited Presentations

Multidisciplinary

Darshana Shah will be co-presenting a workshop on **The Outcomes Logic Model: An Approach for Program Planning and Evaluation** at the 2011 International Medical Science Educators meeting to be held in June. Co-presenters for the workshop are Nagaswami Vasan of New Jersey Medical School, Nehad El-Sawi of Central Michigan College of Medicine, and Susan Pasquale of University of Massachusetts School of Medicine. She presented **JCESOM Academy of Medical Educators; Model based on the principle of positive deviance and Leadership for pathology course directors** (the latter with Sebastian Alston, Florida State) at the Winter 2011 meeting of the Group for Research in Pathology Education.

Internal Medicine

Shirley Neitch gave invited talks to Hospice of Huntington, the Association of Directors of West Virginia Community Services Organizations, Mercer County Medical Society, Cabell County Medical Society, the West Virginia School of Osteopathic Medicine's Winter Geriatrics Symposium, and two statewide meetings of the West Virginia Society of Osteopathic Medicine.

Pharmacology, Physiology and Toxicology

Piyali Dasgupta was an invited speaker at a national Center for Drug Evaluation and Research (Food and Drug Administration)



Kevin Yingling expands his leadership role

Kevin Yingling, MD, RPh, FACP, has become dean of the developing Marshall University School of Pharmacy while remaining chair of the Department of Internal Medicine. A member of the Marshall faculty since 1990, he has contributed to medical education and the practice of medicine at the national, state and local levels. He has served on a Federated Council for Internal Medicine task force on residency curriculum, been a member of the Drug Utilization Review Board and the Formulary Committee of the West Virginia Department of Health and Human Services, and been a reviewer for the Annals of Internal Medicine and others. He also has been an honorary visiting academic fellow at Southampton University Hospitals in England, as well as a visiting scholar at Cambridge University.

Dr. Yingling has been president of the medical and dental staff at both Cabell Huntington Hospital and St. Mary's Hospital. He is a board member and former president of Doctors Care of Cabell County, a voluntary organization that provides free services to indigent patients. He also was among the Marshall and Huntington health professionals who provided medical care and disaster relief in Haiti in January and August of 2010.

He received the B.S. from the West Virginia University School of Pharmacy and the M.D. degree from Marshall. He completed the internal medicine residency program at the University of Cincinnati, where he went on to complete a research fellowship and be chief resident.

Dr. Yingling has been a fellow of the American College of Physicians since 1995, and the West Virginia chapter of the ACP honored him in 2010 with its Laureate Award. He is a member of Alpha Omega Alpha and the Rho Chi Society, the national pharmacy honorary.

meeting to discuss the risks and benefits of long-term use of nicotine replacement therapies. The meeting was in Washington, D.C., in October.

Monica Valentovic spoke at the University of Southern Maine Graduate Program in Environmental Toxicology on **Acetaminophen-associated liver damage: Attenuation by the nutraceutical SAME (S-adenosyl methionine)** and also spoke in July to the Marshall's INBRE summer students about **New interventions to reduce cancer chemotherapy adverse effects.**

Nalini Santanam gave three invited talks: at the 10th Annual Meeting of the Society

for Free Radical Research-International (India chapter) in January, the NIH-NCRR INBRE PI's meeting held at NIH in September (the preliminary findings from her research on **Epicardial fat biomarkers: West Virginia Appalachian Heart Study**), and the Marshall Women's Studies Colloquium Series in December (**Endometriosis and antioxidants**).

Surgery

Lawrence Wyner was an invited speaker in December at the 7th Annual Conference on Medical Dilemmas in Patient Care: Controversies in Cardiovascular, Urologic, Rheumatologic and Pulmonary Disease. The meeting was in New York, N.Y.

Staff & Student Accomplishments

Amy Smith has completed the University of Cincinnati's graduate-level Online Certificate in Medical Education, a 15-credit-hour program focusing on advanced knowledge in the field of medical education and educational research. She also has been accepted into the medical education master's degree program at Cincinnati.

Rezwan Ahmed, MSIII, presented at the 2010 West Virginia Rural Health Conference in Glade Springs on **Applying telemedicine to ophthalmology in McDowell County, West Virginia: Reducing costs, improving access, and standardizing care.** Lisa Krasnow, Robert Walker and Michael Krasnow were co-authors.

Jessica Brown, MSIV, presented research at the West Virginia Geriatric Society meeting and the West Virginia American College of Physicians meeting in October.

Holly King, a senior at Marshall University, received the NASA WV Space Grant Undergraduate Fellowship to perform her capstone project in Nalini Santanam's laboratory. She presented at Marshall's 2010 Sigma Xi Research Day on **The effects of oxidative stress on pain in endometriosis** (co-authored by Carla Cook and Nalini Santanam).

Johannes Fahrman, a BMS PhD student, presented at the American Society of Reproductive Medicine's 2010 annual meeting in Denver, Colo., on **Oxidized lipoproteins are the alleged pain molecules in the peritoneal fluid of women with endometriosis** (co-authored by Courtney Crain, Carla Cook, Brenda Dawley, Holly King, Richard Egleton and Nalini Santanam).

Student Awards to

Class of 2011

presented by SuSu Kapourales



*Best Clinical Rotation
Department of Pediatrics,
accepted by
Joe Werthammer*



*Resident of the Year
Ashley Bennett*



*Attending of the Year
Joseph Evans*

American Medical Student Association

presented by Matt Christiansen



*Golden Apple Award
Charles McCormick*

Faculty Fall 2010

Class of 2012

presented by Price Ward and Heather Butts



Best Professor 2009-2010
Jamie Allman



Dedicated Professor 2009-2010
Charles McCormick



Best Course: Clinical Skills
Charles McCormick, Amy Smith, Erica Hankins
and Kelly Webster-Fuller (not pictured)

Class of 2013

presented by Elias Salloum and Thomas Schlierf



Best Lecturer, Fall
Best Lab Instructor
Sasha Zill



Best Lecturer, Spring
Best Notes
Mitchell Berk

Best Overall Course, Anatomy

Most Inspiring, Charles McCormick

Faculty and staff earn research certificates



Faculty, staff participate in a December 2009 MERC workshop

Thirteen Marshall faculty and staff completed the six workshops required to earn the Association of American Medical Colleges' Medical Education Research Certificate. They are:

Bonnie Beaver
Surgery

Nesreen BenHamed
Internal Medicine

Cindy Dailey
CVS/GME

Yousef H. Darrat
Internal Medicine

Stephen R. Eaton
Surgery

Todd Green
Physiology

Stephen M. Petrany
Family & Community Health

Darshana Shah
Pathology

Tina Sias
Cardiovascular Services

Mary Kathryn Gould
Dietetics

Susan Jackman
Microbiology

Jo Ann Raines
Office of Medical Education

Kelli Williams
Dietetics

Grants

Anatomy, Cell & Neurobiology

Maria Serrat received an MU-ADVANCE mini grant to present research on growth plate regulation at the Gordon Conference on Cartilage Biology and Pathology in Ventura, Calif. She also received the MU-ADVANCE Faculty Fellowship for 2010-2011 for the project **Imaging skeletal growth plates using in vivo multiphoton microscopy**. She was also awarded two NASA West Virginia Space Grant Consortium Undergraduate Research Grants in the form of research stipends for undergraduate students Morgan Efaw and Laura Mader. The projects are **Effects of temperature and exercise on knee growth plates** and **The roles of temperature and exercise in facilitating wrist bone growth in mice**.

Forensic Science

Graham Rankin received a competitive grant for \$550,000 over two years from the National Institute of Justice.

Journal Reviewers

Biochemistry and Microbiology

Michael Moore: Journal of Clinical Endocrinology and Metabolism

Pharmacology, Physiology and Toxicology

Piyali Dasgupta: Biochemistry and Cell Biology, Breast Cancer Research and Treatment, and Journal of Oncology

Maria Serrat: International Journal of Environmental Research and Public Health, Yearbook of Physical Anthropology

Nalini Santanam: Atherosclerosis, Journal of Nutrition and Metabolism, and Brain Research

Grant Review Activity

Biochemistry and Microbiology

Michael Moore was a grant reviewer for the Department of Defense Breast Cancer Research Program: Postdoctoral Awards and IDEa Extension Awards.

Pharmacology, Physiology and Toxicology

Monica Valentovic was an NIH reviewer for two study sections in Fall 2010: meeting section NIDDK ZRG1 DKUS-E (10) B and National Cancer Institute Preclinical Pharmacology and Pharmacokinetic Studies of New Cancer Chemotherapeutic Agents (N01-CM-07014-39 r).

Nalini Santanam was a grant reviewer for the American Heart Association, Cardiovascular Committee 2B.

Research Symposium Successful

The first Research Symposium offered by the Office of Graduate Medical Education was well received. The Feb. 10 symposium addressed topics such as preparation for Institutional Review Board submission, aid in preparing abstracts and manuscripts, and assistance with biostatistics. Speakers included Yoram Elitsur, Henry Driscoll, Robert Walker, Todd Gress, Richard Niles, Larry Dial and Maurice Mufson. The symposium was developed by Wesam Bolkhair, a candidate in the Academy of Medical Educators.

Women in Medicine and Science

Dr. Linda Brown will be the host for the next Women in Medicine and Science luncheon. The event will be April 12, and more information will soon be available on the Faculty Development Program website, <http://musom.marshall.edu/fdp>

Peer Reviewed Publications

Anatomy and Pathology

Maria Serrat. **Measuring bone blood supply in mice using fluorescent microspheres.** Nature Protocols. 4(12): 1749-1758. 2009.

Maria Serrat, Rebecca Williams and Cornelia Farnum. **Exercise mitigates the stunting effect of cold temperature on limb elongation in mice by increasing solute delivery to the growth plate.** Journal of Applied Physiology. 109: 1869-1879. 2010.

Saroj Sigdel, Todd Gemind and Joseph Tomaszefski Jr. **The Movat pentachrome stain as a means of identifying microcrystalline cellulose among other particulates found in lung tissue.** February 2011. Archives of Pathology and Laboratory Medicine.

Internal Medicine

Jessica Brown, Lynne Goebel, Shirley Neitch, Harry Tweel, and Maurice Mufson. **Barriers to vaccinating the elderly with H1N1 vaccine.** American Journal of the Medical Sciences.

Shirley Neitch. **Standing in the gap: The primary care physician and Alzheimer's disease.** May/June 2011 issue of West Virginia Medical Journal.

Mumtaz Zaman. **Intact bronchogenic cyst provoking a pleural effusion.** West Virginia Medical Journal for the March/April 2012 issue.

Pharmacology, Physiology and Toxicology

Jia Fei, Carla Cook, Eric Blough and Nalini Santanam. **Age- and sex-mediated changes in epicardial fat adipokines.** Atherosclerosis, 212, 488-494 (2010).

Piyali Dasgupta, Wasia Rizwani, Smitha Pillai, Rebecca Davis, Sarmistha Banerjee, Kevin Hug, Mark Lloyd, Domenico Coppola, Eric Haura and Srikumar Chellappan. **ARRB1-mediated regulation of E2F target genes in nicotine-induced growth of lung tumors.** Journal of National Cancer Institute, 2011 Jan. 6.

Aaron Dom, Adam Buckley, Kathleen Brown, Richard Egleton, Aileen Marcelo, Nancy Proper, Donald Weller, Yashoni Shah, Jamie Lau and Piyali Dasgupta. **Nicotine promotes retinal angiogenesis via $\alpha 7$ -nicotinic receptor and a MMP-2/9 dependent pathway.** Investigative Ophthalmology and Visual Science, June 16, 2010.

Surgery

Lawrence Wyner. **Cello scrotum, 1974-2009: History of a medical hoax.** Medical Problems of Performing Artists 25(3):130-132, 2010.

PIES Events Set

The Art of Leading	Dr. Gary Rankin	3/23/2011	4 - 5 PM
Teaching at the bedside in a busy clinical setting	Dr. Eduardo Pino	4/19/2011	12 - 1 PM
Effective grand rounds	TBA	4/27/2011	4 - 5 PM
Evaluation: A Challenging Component of Teaching	Dr. Darshana Shah	5/17/2011	12 - 1 PM
A common sense approach to teaching	Dr. Paulette Wehner	5/25/2011	4 - 5 PM
Tips for running effective committee meetings	Dr. Shah	6/14/2011	12 - 1 PM
Manage your energy not your time; Work life balance	Dr. Shah	6/22/2011	4 - 5 PM

All sessions are in Byrd Clinical Center, Room 1022.

Register online at: <http://musom.marshall.edu/fdp/private/PIES2011/Default.asp>



C O N T A C T I N F O R M A T I O N

Darshana Shah, PhD
Professor of Pathology, Associate Dean
Byrd Clinical Center
1249 Fifteenth Street
Huntington, WV 25701
304.691.8639 | shah@marshall.edu



Beverly McCoy, MAJ
Director of Public Relations
Marshall University Medical Center
1600 Medical Center Drive
Huntington, WV 25701
304.691.1713 | mccoy@marshall.edu