

# Emergency Medicine Research & Academic News



# Announcements and Congratulations



Congratulations to **Jeremy Cushman** for being awarded the 2011 Rochester RHIO Leadership Award for his tireless efforts in developing the Regional Health Information Organization and physician education. Dr. Cushman has dedicated enormous time and effort to connecting the EMS community to the Rochester RHIO. He has helped define how EMS information could better inform ED physicians and how EMS users could benefit from RHIO access in life threatening situations. This is a great honor and highlights yet another aspect of Dr. Cushman's commitment to

emergency medicine, EMS, and the community.

The Department of Emergency Medicine has been chosen as one of only 13 institutions in the country to have its Research Fellowship certified by the Society for Academic Emergency Medicine's (SAEM). This recognition validates the rigorous training and education fellows will receive as they become productive clinical scientists. We would like to congratulate **Manish Shah** on his efforts and achievement of this distinction. We would also like to recognize **Bill Sheahan** for his work, as well as our core researchers for their support of the application and future fellows.

Congratulations to **Erik Reuckmann** who was appointed to a 2-year term as Vice Chair and then Chair of the 3rd and 4th year instructional committee at the Medical School.

Congratulations to the graduating residents: Ryan Bodkin, Katie Burk, Colin Davis, Arthur Jey, Nina Allan, Jawwad Khan, Thomas Morgan, Julie Pasternack, Desiree Shroeder, Kevin Smeenk, Amy Taylor and Anwar Wilson. We wish them luck in their future endeavors!

Welcome to first year residents: Stephanie Abraham, Nicholas Aloisio, Ryan Barnes, Joseph Bettendorf, William Daya, David Hart, Evan Leventhal, Katharine Liegel, Ryan McBeth, Shuoluan Ruan, Timothy Salib and Mark Smith.

We also Welcome the following new members or our research team:

- ♦ Kirsten Ross, Health Project Coordinator working with Jeff Bazarian on his mild TBI research projects.
- ♦ **Emily Terho**, Laboratory Technician working with **Jeff Bazarian** and **Brian Blyth** in their TBI laboratory.
- ♦ Students joining us for the summer (and some beyond): **Brandon Stein, Dave Williams, Dylan Morris, Shirley Li, Luis Ruffolo & Steve O'Donnell**

# **Upcoming Events / Meetings:**

July 1 1-2pm
NCBI Blast: an Introduction
Nesbit Classroom
(G-7545)

July 11 3-5pm
CTSI Consultation Clinic
Saunders Research Bldg
Room 1,416

July 21 11a-noon

Quality of Care, the Market
and Government

Regulation: the Good, the
Bad and the Ugly
Helen Wood Hall
Auditorium

## August 8

CTSI Consultation Clinic Saunders Research Bldg Room 1.416

Click on event or deadline for more information (electronic version)

Department of Emergency Medicine 601 Elmwood Avenue, Box 655 Rochester, NY 14642 Phone: (585) 463-2970 Fax: (585) 473-3516 EMResearch@urmc.rochester.edu

# **Emergency Medicine**

#### Research & Academic News

# Announcements and Congratulations (continued)

Congratulations to **David Adler** on his promotion to Associate Professor of Emergency Medicine. Dave has an NIH K23 grant related to HPV and HIV with international collaboration in South Africa. Dave also serves as the Director of our International Emergency Medicine Fellowship, with additional interests in emergency ultrasound and residency teaching.

Congratulations to **Linda Spillane** on her promotion to Professor of Emergency Medicine. Dr. Spillane has spent many years of her career here at the University of Rochester, and this promotion is a testament to her dedication and hard work on behalf of our Department and Institution. As you know Linda has led our residency, leads Simulation Medicine at the University and has also been academically productive over her years. She is an excellent teacher who has taught and trained many of our faculty.

**Jeff Bazarian** was interviewed by the Rochester Democrat and Chronicle and News 10 NBC in two separate stories related to student athletes and head injuries. These stories tie closely to Dr. Bazarian's current research with athletes receiving sub-concussive and concussive blows during participation in sports. <a href="D&C Story">D&C Story</a>
<a href="News 10 NBC Story">News 10 NBC Story</a>

**Anne Brayer** is quoted on the safety issues with portable pools on ABC.com. This topic is of great importance as we enter into warmer weather and pools are used more frequently. ABC.com story

Grant New	ws				
Investigator(s)	Status	Sponsor	Title/Description		

Investigator(s)	Status	Sponsor	Title/Description	
Jeff Bazarian Co-investigator	Awarded	University of Rochester Provost's Multidisciplinary Award	"New Interdisciplinary Approach to Improve Diagnosis of TBI: Combining Physics with Medical Imaging" To validate the wild bootstrapping approach to DTI image analysis by quantitative correlation with helmet impact forces acquired from football players at the University of Rochester.	
Jeff Bazarian Co-PI	Submission	NIH/ NIBIB	"Improving the Diagnosis and Mitigation of Repetitive Impact induced Brain Injury" This study aims to identify key biomechanical determinants of brain injury incurred from multiple subconcussive head blows while playing football and to suggest practical improvements in helmet design. We will combine MR diffusion tensor imaging (DTI) and fully 3-D high fidelity computational simulations of head impacts. The biomechanical modeling and parameters for the simulated impacts will be informed and refined by data acquired from football players from the University of Rochester.	
Peter Crane	Submission	NYS ECRIP	"Empire Clinical Research Investigator Program" A study using informational flow within workflow systems to quantify and qualify system complexity. The study looks at nursing, providers, app's, and will eventually provide the pilot work for an NIH grant.	
Manish Shah	Submission	NIH R03	Our overall goal is to assess the current Field Triage Decision Scheme's ability to id older adults who need trauma center care and determine whether creating guideline specifically for older adults would improve its accuracy. We will use existing data fro prospective, multi-center study of 11,892 injured EMS patients enrolled in the emerg department and followed to hospital discharge. In our proposal, we specifically aim to compare the classification accuracy of the Decision Scheme to identify patients who require trauma center care between younger and older adults; 2) derive a new triage decision scheme specifically for older adults; and 3) compare the classification accuracy of the new, older adult-specific decision scheme to the Decision Scheme in place.	

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#### Publications Click on 'citations for full text of published articles

\*Martin H. The possible consequences of combining lorazepam and buprenorphine/naloxone: A case review. J of Emergency Nursing, 2011, 37 (2): p 200 - 201.

Wang H E, Shah MN, Allman RM, Kilgore M. Emergency Department Visits by Nursing Home Residents in the United States. In Press

\*Edwardson EA, Pless NA, LeRoux HD, Fiscella K. Improving Identification and Management of Partner Violence: Examining the Process of Academic Detailing: A Qualitative Study. *BMC Medical Education* 2011, **11**:36

#### **New Studies**

Manish Shah Jeremy Cushman Kirsten Rindal <u>Barriers and Enablers of Prehospital Analgesia For Pediatric Patients</u>-Our goal for this study is to explore and investigate perceptions of pre hospital advanced life support providers regarding pain medication administration among pediatric patients. Specifically, we will conduct in-depth interviews with EMS providers to: 1) Evaluate their overall beliefs and attitudes about pediatric analgesia administration in the field. 2) Gain an understanding of the types of medical barriers to pre-hospital pediatric analgesia administration. 3) Determine what might help enable EMS providers to administer pain medication in the field.

**Manish Shah** 

A Qualitative Investigation of an At Home Telemedicine Consultation Program for Older Adults- This study will use qualitative research methods to evaluate patient, family and provider comfort and satisfaction following treatment through acute-care telemedicine instead of standard care received at the URMC Geriatrics outpatient clinics or the Emergency Department. Knowledge gained from this research will inform the developing acute care telemedicine program for older adults and the ongoing "Telemedicine Consultation at Home for Older Adults" study.

Jeff Bazarian

Changes in Bain White Matter after Multiple Sub-Concussive Head Blows- Head blows that do not result in a concussion are a common occurrence in contact sports and are generally thought to be harmless to the athlete. However, a recent study performed by the Bazarian and Blythe Lab identified significant brain white matter changes on diffusion tensor imaging (DTI) after multiple sub-concussive head blows among a group of high school football and hockey players. This study seeks to confirm these findings in a group of college football players and to increase the understanding of the nature of this type of brain injury so that it can be prevented.

Sandy Schneider Ben Newman Whole Blood vs. Urine for Bedside Pregnancy Testing- To compare the performance of whole blood against urine on a bedside urine pregnancy test for the detection and exclusion of pregnancy.

Mona Mittal

<u>HIV Risk Reduction for Women Reporting Intimate Partner Violence</u>- The purpose of the study is to conduct formative research to obtain information that will be used to adapt an Information-Motivation-Behavior (IMB)-based HIV risk reduction intervention for women.

Linda Spillane Katie Burk Julie Pasternack <u>Use Of household materials to simulate ultrasound guided procedures</u>- To evaluate a new simulator to train novice practitioners to perform an ultrasound guided internal jugular catheterization.

Jefferson Svengsouk Thomas Morgan <u>Distractions in the Emergency Department</u>The aim of this study will be to quantify the number of interruptions to providers during patient care transitions aka 'sign out' then implement a visual barrier device (VBD) and measure the outcome. The goal of this study is to improve an ongoing clinical process at Strong Memorial Hospital ED, therefore the study is a quality assurance (QA) project.

Dave Adler Steve O'Donnell International Educational Exchanges in Emergency Medicineeducational exchanges in the field of Emergency Medicine. It is hypothesized that these educational exchanges provide positive benefits to both parties involved. This study will aim to classify and describe these benefits by utilizing qualitative research analysis tools.