

#GettingToKnowDOS— Dr. Patrick Javid (cont.)



Patrick with Russell Wilson during one of Wilson's visits to Seattle Childrens Hospital

this or that

Hot or cold weather? **HOT**
Sweet or savory? **SWEET**
Sweet—Cookies or cake? **CAKE**
iPhone or Android? **IPHONE**
Tablet or Desktop? **DESKTOP**
Tea or coffee? **COFFEE**
Text or call? **TEXT (but with complete sentences!)**
Cats or dogs? **DOGS**
Movie or book? **MOVIE**
Mountains or beach? **BEACH**
Cardio or Weights? **CARDIO**
Big Party or Small Gathering? **SMALL GATHERING**
Facebook or Twitter? **NEITHER**
Online Shopping or Shopping in a Store? **ONLINE SHOPPING**
At a movie: Candy or Popcorn? **POPCORN**
Pancakes or Waffles? **(neither) FRENCH TOAST**
Movie at Home or Movie at the Theater? **MOVIE AT HOME**
City or Countryside? **CITY**

Faculty Researcher Highlight—Dr. Sam Arbabi



Saman Arbabi, MD, MPH, FACS

**Professor, Division of Trauma, Burn,
and Critical Care Surgery**

**Acute Care Section Head Harborview Injury
Prevention and Research Center**

Dr. Arbabi is Professor of Surgery in the Division of Trauma, Burn, & Critical Care Surgery at Harborview Medical Center. He is also the Acute Care Section Head at [Harborview Injury Prevention and Research Center \(HIPRC\)](#). Dr. Arbabi's areas of active research are in trauma outcomes, long-term critical care outcomes, trauma systems, wound healing, burn wound healing, inflammatory signaling, and inflammatory response to injury. His early research focused on inflammatory response after trauma and burn injury, and was funded by the American Association for Surgery of Trauma and the Surgical Infection Society. He subsequently obtained an NIH K08 grant, followed by an NIH R01 and DOD funding, and maintains multiple areas of investigation:

Long-term trauma patient outcomes: Much of the research in this area has focused on short-term outcomes, but Dr. Arbabi and his colleagues have shifted focus to the long-term outcomes of trauma patients, which includes outcomes of patients discharged to in-patient rehabilitation centers or skilled nursing facilities (SNF). He and colleagues demonstrated for the first time that outcomes of patients discharged to in-patient rehabilitation centers are significantly improved as compared to patients that qualified for rehabilitation but did not receive it. These patients had improved mortality with significantly decreased readmission rates. In addition

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Faculty Researcher Highlight—Dr. Sam Arbabi (cont.)

to some patient-specific outcomes, SNF characteristics such as nursing to patient ratio were found to impact patient long-term outcomes. The team has also shown that SNFs specialized in caring for surgical patients had better outcomes.

Trauma systems and health policy issues that impact outcomes of the injured patients: In conjunction with HIPRC faculty, Dr. Arbabi is involved in examining health policy and trauma system issues that impact outcomes of trauma patients. He is specifically interested in statewide trauma systems, opioid dependence, and gun violence policies.

Geriatric trauma and burns: Geriatric trauma is a significant and growing public health concern. As the Baby Boomer generation reaches retirement, the percentage of the United States population that is elderly (65 years and older) will increase rapidly. Elderly trauma patients are at increased risk for poor outcomes such as delirium, respiratory complication, and aspiration. Dr. Arbabi, along with a team of collaborators, is examining care pathways to improve both in-hospital and long-term outcomes of these patients.

Inflammatory response and wound healing to burn and trauma: Dr. Arbabi's group is investigating a novel topical therapy that is easy to apply and can be used by a wider range of health care-providers. The team's central hypothesis is that controlling the inflammatory signaling at the burn site prevents the release of inflammatory mediators and avoids the subsequent sequelae of thermal injury. They have identified p38 Mitogen Activated Protein Kinase (MAPK), an important inflammatory signaling pathway, as the therapeutic target. Previously, Dr. Arbabi's group demonstrated that application of topical p38MAPK inhibitors on burn wounds attenuates the systemic inflammatory response, improves organ function, and preserves the local/systemic immunocompetence and ability to resist

infections. They also demonstrated that topical p38MAPK inhibition is equally effective in partial or full-thickness burns. They continue to investigate the role of p38MAPK signaling in wound healing and scar formation. The results of these studies will be critical to the implementation of a potential paradigm shift in the clinical treatment of challenging dermal injuries. The ultimate goal is to develop a highly effective, safe topical treatment for patients with burn injuries and surgical wounds.

Dr. Arbabi's research is highly collaborative, and his contributions to the field are due to partnerships with multiple groups and individuals. He is most thankful for his mentors, residents, and fellows. Some of his UW faculty collaborators are:

Harborview Injury Prevention and Research Center (HIPRC)

SORCE

Eileen Bulger, MD, Professor, Chief of Trauma, Division of Trauma, Burn & Critical Care Surgery

Joseph Cuschieri, MD, Professor of Surgery & Adjunct Professor of Orthopaedics and Sports Medicine, Division of Trauma, Burn & Critical Care Surgery

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Fredrick Rivara, MD, MPH, Chief of General Pediatrics, Vice Chair of Pediatrics, the Children's Hospital Guild Association Endowed Chair in Pediatrics Health Outcomes research, Professor of General Pediatrics and adjunct Professor of Epidemiology and Pediatric Dentistry

Monica Vavilala, MD, MPH, Director of Harborview's Injury Prevention and Research Center, Professor of Anesthesiology and Pain Medicine and Pediatrics, and Adjunct Professor of Neurological Surgery and Radiology

Funding

Agency for Healthcare Research and Quality

Central Region EMS & Trauma Care Council

Department of Surgery
Research Reinvestment Fund

US Army Medical Research and Materiel Command

National Institute of General Medical Sciences

National Institutes of Health