

2017 Faculty Promotions

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Nicole White, MD, FACS
Promoted to Clinical Associate Professor
Division of General Surgery
UW Medicine Northwest Hospital

Dr. White is board certified in general surgery. She is the Clinic Chief of UW Medicine Surgical Services and Hernia Center and the Division head of General Surgery at Northwest

Hospital. Her current focus is surgery for the treatment of gallbladder, hernia, gastroesophageal reflux disease and colon disease. Dr. White has a special interest in robotic surgery and recently reached the 600 case milestone.

She graduated with Alpha Omega Alpha honors from George Washington University School of Medicine in Washington, D.C., and completed a residency in general surgery at the Montefiore Medical Center, Albert Einstein College of Medicine in Bronx, New York. Dr. White completed a fellowship in 2005 in minimally invasive foregut surgery at the Ryan Hill Foundation at Swedish Medical Center in Seattle. She is a fellow and member of the **American College of Surgeons (ACS)**, the **Society of American Gastrointestinal Endoscopic Surgeons (SAGES)**, **American Hernia Society (AHS)** and **Seattle Surgical Society**.

Researcher Profile: Sherene Shalhub, MD, MPH



Dr. Sherene Shalhub

The aorta is the largest artery that carries oxygen-rich blood from the heart to the body; an aortic dissection, a tear in the innermost layer of the aorta, is a painful and life-threatening condition that demands immediate medical attention. A dissection impairs blood flow to vital organs and can lead to full aortic rupture and death. High blood pressure is a common culprit in aortic dissection, but genetically triggered diseases that affect aortic wall integrity—such as Marfan syndrome

and vascular Ehlers–Danlos syndrome—are also common factors. Although aortic dissection is somewhat rare, about 23,000 new cases of descending thoracic aortic dissection between the ages of 40 and 70 years old occur annually in the United States, making this the most common aortic catastrophe.

Dr. **Sherene Shalhub** is an Assistant Professor in the Division of Vascular Surgery and affiliate faculty at the **Surgical Outcomes Research Center (SORCE)**. She joined Department of Surgery in 2013 and has been working to investigate the effect of gene mutations on aortic and arterial disease, specifically the clinical effect of syndromic and non-syndromic gene mutations on the vasculature and treatment outcomes, with the goal of offering a personalized approach to the treatment of patients with aortic and arterial dissections and aneurysms. Dr. Shalhub's work utilizes a collaborative, multidisciplinary approach with multicenter collaborators from genetics, cardiology and cardiac surgery. This approach led to the creation of the Multidisciplinary Vascular Genetics Clinic, which is dedicated

to the evaluation and management of patients with suspected inherited or familial cardiovascular disorders.

Dr. Shalhub's primary project, ADAPTIVE (Arterial Dissections and Aneurysms Personalized Treatment Investigation), looks at the impact of the clinical features and genetic causes on the outcomes of aneurysms and dissections. A major area of focus is the natural history and the impact of the different heritable thoracic aortic disease mutations on type B aortic dissection. Her research goal is to define the clinical, anatomic, and genetic factors underlying progressive aneurysmal degeneration of the descending thoracic and abdominal aorta post aortic dissection. This research will lead towards better care algorithms to guide patient care in a way tailored to the individual patient. Additionally, she is studying the role of genetic mutations in detail as they affect vascular Ehlers–Danlos syndrome, a rare genetic mutation that frequently causes arterial dissections and ruptures.

Finally, by creating a comprehensive aortic dissection registry and databank that will include patients' full family histories, systemic inflammatory response markers, treatments and subsequent outcomes, Dr. Shalhub will be able to link this data and build a predictive model for future patients, one that will inform personalized treatment plans. The genetic alterations that may lead to aortic dissection are often found in young people. With the help of genetic testing and imaging technology, decisions can be made early in the aortic dissection disease process and managed not only medically but with potentially minimally invasive surgical procedures, such as thoracic endovascular aortic repair (TEVAR). While these procedures allow patients to live longer and healthier lives, knowing a patient's genetic history — including the likelihood of developing long-term complications such as dissection-related aneurysmal degeneration— is a critical part of a patient's comprehensive care.