Vascular Surgery (AAA) MS 2  
Mini-Elective  
Spring 2010

**Course Dates:** March 1, 8, 15, 22  
Mondays, 1:00-3:00 PM

**Maximum Students:** 4

**Class Year:** MS2

**Course Director:** Donald Baril, MD  
Assistant Professor of Surgery

**Contact Information:** Kathy Haupt, Medical Student Coordinator  
F675 UPMC Presbyterian  
412-647-5314  
hauptkg@upmc.edu

**Registration:** Betsy Nero, Office of Medical Education  
betsy@medschool.pitt.edu

**Description:**  
ABDOMINAL AORTIC ANEURYSM (AAA)  
There are four sessions in this elective course. Each will be two hours. In the first session, there will be a general introduction into the problem of AAA. This lecture will discuss the pathogenesis of AAA, the findings on history and physical examination, the variations in AAA, the morbidity and mortality associated with the disease and surgical correction, and the genetic inheritance pattern of this disease. The second session will present the diagnostic tools used to find AAA and characterize it including ultrasound, CT scan, MR, and angiography. The student will have the opportunity to visit the non-invasive vascular laboratory to see a diagnostic ultrasound performed. In the third session, the student will visit a state-of-the-art basic science laboratory studying AAA and see the methods used to characterize the stress-strain characteristics of an AAA including finite element analysis. In the fourth session the student will have the opportunity to go into an operating room to view an endovascular aneurysm repair. There will be a required reading assignment (10-15 pages) before each session.

**Objectives:**  
- To understand the pathogenesis of aneurysm disease of the aorta.  
- To identify patients at increased risk for AAA.  
- To learn the use of the common diagnostic tools to determine if an AAA is present.  
- To appreciate when to repair an AAA.  
- To comprehend the difference in risks and benefits between open and endovascular repair of an AAA.  
- To see an AAA repair.

**Requirements:**  
Complete pre-session reading and participate actively in all sessions.
Course Outline

Vascular Surgery (AAA) MS2

Course Director:
Donald Baril, MD
Assistant Professor of Surgery
Course Director

Faculty:
Donald Baril, MD
Assistant Professor of Surgery

Luke Marone MD
Assistant Professor of Surgery

Jae Cho MD
Assistant Professor of Surgery

David A Vorp PhD
Professor of Surgery and Bioengineering

Douglas W. Chew
Instructor in Surgery

Michel S Makaroun MD
Professor of Surgery
Chief, Division of Vascular Surgery

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- To see an AAA repair.

Location:
Various locations listed below.

Session I – Monday, 3/1/2010
A1011 UPMC Presbyterian
Luke Marone MD
Introduction to AAA

Session II – Monday, 3/8/2010
A1011 Presbyterian and UPMC Vascular Laboratory
Jae Sung Cho MD
AAA: Diagnostic Tools
Required reading: Upchurch G and Schaub T, Abdominal aortic aneurysm, Amer Fam Phys 73 (7), 1198-1204

Session III – Monday, 3/15/2010
Bridgeside Point 2, Vorp Laboratory
David A Vorp PhD, Associate Professor of Surgery and Bioengineering
Basic Science and Bioengineering Research on the Structural Integrity of AAA

Session IV – Monday, 3/22/2010
UPMC Operating Room
Michel S Makaroun MD
*Observation of an Endovascular Aneurysm Procedure*

**Pre-Requisites:**
None.