

# THE OHIO STATE UNIVERSITY WEXNER MEDICAL CENTER

## DEPARTMENT OF SURGERY GRAND ROUNDS

Research presentation in partial fulfillment for the Master of Medical Science degree:



### **Natalie Eisert, MD, MS**

PGY-3, General Surgery Residency Training Program, OSU

Medical School: University of Michigan, Ann Arbor MI

Undergraduate: Stanford University, Palo Alto CA

Research Advisors: Mitchel R. Stacy, PhD

### **“PET/CT Imaging of Peripheral Arterial Disease”**

#### **Manuscripts in Preparation:**

**SN Eisert**, TH Chou, AJ Bobbey, MR Go, MR Stacy. Non-invasive detection of active vascular microcalcification in a popliteal artery aneurysm using  $^{18}\text{F}$ -NaF PET/CT imaging. Anticipated case report submission to: *Circulation: Cardiovascular Imaging*

**SN Eisert**, TH Chou, T Wolfe, R Tricarico, A Bobbey, T Sarac, MR Go, MR Stacy.  $^{18}\text{F}$ -NaF PET/CT imaging for dual quantitative assessment of calcium burden and active vascular microcalcification in below-the-knee vessels of patients with peripheral arterial disease. Anticipated submission to: *Circulation: Cardiovascular Imaging*

TH Chou, T Wolfe, **SN Eisert**, R Tricarico, Y Matsuzaki, R Iwaki, MR Stacy. Quantitative assessment of skeletal muscle perfusion using dynamic  $^{18}\text{F}$ -NaF PET imaging: Method and validation in a porcine model of peripheral arterial disease. Anticipated journal: *Radiology*

#### **Research Publications:**

Begandt D, Brader A, Dreyer L, **Eisert N**, Reeck T, Ngezahayo A. Biphasic increase of gap junction coupling induced by dipyridamole in the rat aortic A-10 vascular smooth muscle cell line. *J Cell Commun Signal* 2013 Jun; 7(2): 151-60.

#### **Book Chapters:**

Go M, **Eisert SN**, (In preparation) 'Chapter 38: Acute Mesenteric Ischemia (AMI)' Nazzal M, Blebea J, Osman M. *Lange Vascular and Endovascular Surgery: Clinical Diagnosis and Management*. McGraw-Hill.

## **Research Oral & Poster Presentations Accepted to Date:**

**Eisert SN**, Stacy MR. "Evaluating Regional Perfusion Responses to Lower Extremity Revascularization Using PET/CT Imaging" James King Presentation, Columbus 2019

Chou TH, **Eisert SN**, Wolfe T, Tricarico R, Matsuzaki Y, Iwaki R, Sarac T, Go MR, Stacy MR. "Quantitative assessment of skeletal muscle perfusion using a novel first-pass PET imaging technique: Application in pig model of hind limb ischemia and translation to PAD patients." Ohio State University College of Medicine 2020 Trainee Research Day.

Tricarico R, Chou TH, **Eisert SN**, Reinhardt J, Shah K, Matsuzaki Y, Zakko J, Shinoka T, Breuer CK, Stacy MR. "Non-invasive molecular imaging of inflammation in tissue-engineered vascular grafts using <sup>18</sup>F-FDG PET/CT." American College of Cardiology 2020 Scientific Sessions. Chicago, IL 2019.

**Eisert N**, East J, Card J, Cohn A, Macy M. "From Healthy in the Hospital to Home: A Comparison between Emergency Department and Inpatient Care for Pediatric Asthma Patients." 59<sup>th</sup> Annual Fall Research Forum, University of Michigan 2013.

**Eisert N**, Maier CM, Crandall T, Griffard RG, Chan PH. "The effect of Geldanamycin on a model of cerebral ischemia." Achauer Honors Symposium, Stanford, 2011.

Maier CM, Goeders C, **Eisert N**, Xu L, Narasimhan P, Chan P, Griffard R. "Geldanamycin protects against ischemia/reperfusion-related cerebrovascular injury." Society of Neuroscience, San Diego, 2010.



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