PURPOSE AND CONTENT

The purpose of this meeting is to provide state of the art clinical research and vascular biology knowledge relating to vascular disease, with a special emphasis on surgical and endovascular therapy. The program will include presentations of original research by investigators interested in vascular disease. A portion of the program is dedicated to question and answer interaction between the presenters and the audience.

EDUCATIONAL OBJECTIVES

At the end of this activity, participants will be able to:

- 1) Recognize the importance of quality improvement and physician engagement in improving clinical outcomes.
- 2) Identify the factors that lead the need for lower extremity amputation.
- 3) Describe the anatomic factors that are associated with optimal outcomes of endovascular aortic interventions.
- 4) Identify the value of telemedicine in promoting patient communication.
- 5) Explain the significant of incidental findings on cross sectional imaging.

ACCREDITATION STATEMENT

Accreditation Statement



In support of improving patient care, this activity has been planned and implemented by Indiana University School of Medicine and the Midwestern Vascular Surgical Society. Indiana University School of Medicine is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education

(ACPE), and the American Nurses Credentialing Center (ANCC), to provide continuing education for the healthcare team.

Physicians

Indiana University School of Medicine designates this live activity for a maximum of **6.5 AMA PRA Category 1 Credits™**. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Indiana University School of Medicine (IUSM) policy ensures that those who have influenced the content of a CE activity (e.g. planners, faculty, authors, reviewers and others) disclose all relevant financial relationships with commercial entities so that IUSM may identify and resolve any conflicts of interest prior to the activity. All educational programs sponsored by Indiana University School of Medicine must demonstrate balance, independence, objectivity, and scientific rigor. *Indiana University School of Medicine (IUSM) defines a commercial interest as any entity producing, marketing, re-selling, or distributing health care goods or services consumed by, or used on, patients.

MOC-SELF ASSESSMENT

The Midwestern Vascular Surgical Society is pleased to offer Self-Assessment Credit that meets the ABS requirements for MOC Part 2. The number of qualifying credit will be confirmed soon.

PRELIMINARY SCHEDULE

(All times are in Central Standard Time)

Wednesday, September 9

Session 1A – 4:00 PM Session 1B – 5:15 PM

Thursday, September 10

Session 2B – 4:00 PM Session 2B – 5:00 PM

Friday, September 11

Virtual Poster Competition Session – 5:00 PM

Saturday, September 12

Session 3A – 9:00 AM Session 3B – 10:00 AM MVSS Member Business Meeting - 11:30 AM (Open to Members of the Society)

[†] Szilagyi Award, § Guthrie Award, ♦ Pfeifer Award

MIDWESTERN VASCULAR 2020 44th Annual Meeting September 9-12, 2020 VIRTUAL MEETING

2020 SCIENTIFIC PROGRAM

WEDNESDAY, SEPTEMBER 9, 2020

4:00 PM WELCOME/INTRODUCTORY REMARKS

Kellie R. Brown, President

SESSION 1A MODERATORS: Patrick E. Muck and Gregory Kasper

♦1. Activated Partial Thromboplastin Time (aptt)-based Clot Waveform Analysis: Elevated Markers Are a Potential Global Hemostatic Test in the Management of Thrombotic Disorders

Indrani Sen, Melissa Stuart, Sherwin Chanakarnjanachai, Thomas Bower, Gustavo Oderich, Manju Kalra, Rajiv Pruthi *From:* Mayo Clinic, Rochester, MN

†2. Outcome of Explanted Aortic Endografts-a Single Center Experience

Mohammad Khasawneh, Manju Kalra, Jill Colglazier, Gustavo Oderich, Randall DeMartino, Bernardo Mendes, Thomas Bower *From:* Mayo Clinic, Rochester, MN

†3. A Statewide Quality Collaborative Significantly Improves Quality Process and Physician Engagement in Vascular Surgery

Robert J. Beaulieu¹, Jeremy Albright¹, Erin Jeruzal¹, M. Ashraf Mansour², Abdulhameed Aziz³, Nicolas J. Mouawad⁴, Nicholas H. Osborne¹, Peter K. Henke¹ *From:* ¹University of Michigan, Ann Arbor, MI, ²Spectrum Health Medical Group, Grand Rapids, MI, ³St. Joseph Mercy Health Center, Ann Arbor, MI, ⁴Bay Heart & Vascular, McLaren Bay Region, Bay City, MI

§ 4. Allogeneic Mesenchymal Stromal Cells Increase In Vivo Muscle Function and Promote Muscle Fiber Regeneration in A Diabetic Mouse Model of Critical Limb Threatening Ischemia

Justin R. King, Katherin E. Leckie, Amy Y. Sato, Teresita M. Bellido, Marlee Yancey, Leni Moldovan, Michael P. Murphy, Steven J. Miller

From: Indiana University School of Medicine, Indianapolis, IN

[†] Szilagyi Award, § Guthrie Award, ♦ Pfeifer Award

Suction Thrombectomy of Large Volume Ilio-Caval DVT In Patients Contraindicated for Chemical Thrombolysis

Gerald Richard Fortuna¹, Sami Abdulnabi², Mohammad Helwani², Luis Sanchez³, Mohamed Zayed³

From: Section of Vascular Surgery, Department of Surgery, St Louis, MO, ²Washington University School of Medicine, Department of Anesthesiology, St Louis, MO, ³Washington University School of Medicine, Section of Vascular Surgery, Department of Surgery, St Louis, MO

§ 6. Computational Analysis of Endoanchor Effectiveness in Dilating AAA Neck

Erin Abbott, Nhung Nguyen, Ross Milner, Luka Pocivavsek, M, *From:* Department of Surgery, U Chicago Medicine, Chicago, IL

†7. Clinical Outcomes Differ After Femoropopliteal Artery Treatment Between Individual Paclitaxel (PTX)-Coated Balloons

Alexander H. King, Ravi N. Ambani, Saideep Bose, Jason Turner, Vikram S. Kashyap, Jones Thomas, Jae Cho, Karem C. Harth, Benjamin Colvard, Norman H. Kumins

From: Vascular Surgery and Endovascular Therapy, UH Cleveland Medical Center, Cleveland, OH

10 MINUTE BREAK

5:15 PM

SESSION 1B MODERATORS: Patrick E. Muck and Gregory Kasper

§8. Jmjd3 Influences Macrophage-mediated Inflammation in abdominal Aortic Aneurysms

Frank M. Davis, Liam Tsoi, Aaron Dendekker Amrita Joshi, Christopher Audu, William J. Melvin, Steve Kunkel, Jonathan Eliason, Johann Gudojonsson, Katherine Gallagher *From:* Vascular Surgery, University of Michigan, Ann Arbor, MI

[†]9. Effect of Stent-graft Active Fixation and Oversizing on Aortic Neck Degeneration After Endovascular Aneurysm Exclusion for Infrarenal Aortic Aneurysm

Lillian Malach, Nader Tehrani, Shipla Kolachina¹ Karolina Krawczyk, Amy Wozniak, Michael Soult, Bernadette Aulivola, Carlos Fares Bechara

From: Loyola University Health System, Stritch School of Medicine, Maywood, IL

[†] Szilagyi Award, § Guthrie Award, ♦ Pfeifer Award

[†]10. Long-term Survival After Thoracoabdominal Aneurysm Repair

Mitri Khaled Khoury, Charles Wynn Acher, Martha M. Wynn, Charles W. Acher *From:* Vascular Surgery, University of Wisconsin, Madison, Madison, WI.

†11. Utility of Single Branched Thoracic Endograft in Patients Requiring Zone 2 Seal During Thoracic Endovascular Aortic Repair (TEVAR)

Ravi N. Ambani, Saideep Bose, Alexander H. King, Vikram S. Kashyap, Jae Cho, Karem Harth, Wong Virginia, Benjamin Colvard, Norman H. Kumins *From:* Vascular Surgery and Endovascular Therapy, UH Cleveland Medical Center, Cleveland, OH

§ 12. Prediction of Walking Performance After Revascularization of Arteries Supplying the Lower Extremities of Claudicating Patients with Peripheral Artery Disease

Shuai Li¹, Jonathan Thompson¹, Sara Myers², Julian Kim¹, Mark Williams³, Gleb Haynatzki¹, Molly Schieber¹, Gregory Willcockson¹, Iraklis I. Pipinos¹, George P. Casale¹

From: ¹University of Nebraska Medical Center, Omaha, NE, ²University of Nebraska Omaha, Omaha, NE, ³Creighton University School of Medicine, Omaha, NE

†13. Morbid Obesity and Dialysis Access (MODA)

Benjamin G. Crisp¹, Jimmy B. Ibrahim¹, Heather A. Jagoda¹, , Ester S. Deschenes², Joseph N. Gabra,², Loren L. Masterson³, Jill N. Zink³ *From:* ¹Cleveland Clinic - Akron General, Department of General Surgery, Akron, OH, ²Cleveland Clinic - Akron General, Department of Research, Akron, OH, ³Cleveland Clinic - Akron General, Department of Vascular Surgery, Akron, OH

†14. Long Term Survival Outcomes Following Endovascular and Open Repair of Ruptured Aortic Aneurysms: An Institutional 10-year Experience

Ayokunle S. Olowofela, Neel A. Mansukhani, Robert A. Hieb, Abby Rothstein, Michael J. Malinowski, Brian D. Lewis, Kellie R. Brown, Peter J. Rossi *From:* Medical College of Wisconsin, Milwaukee, WI

†15. Peri-procedural Hemoglobin Levels Affect Amputation Rates in Patients Undergoing Interventions for Critical Limb Ischemia

Christopher William McQuinn¹, Robert Tamer², Allison Mohr², Kara Hessel², S. Elissa Altin³, Timur Sarac², Kristine Orion, MD²¹ *From:* Surgery, The Ohio State University, Columbus, OH, ²The Ohio State University, Columbus, OH, ³Yale University, New Haven, CT

THURSDAY, SEPTEMBER 10, 2020

4:00 PM WELCOME/INTRODUCTORY REMARKS

Raghu Motaganahalli, President-Elect

SESSION 2A MODERATORS: Peter J. Rossi and Robert F. Cuff

16. Outcomes Using Uncovered Stents (UCS) And Covered Stents (CS) Are Similar for Management of Chronic Mesenteric Ischemia: A Single Center Retrospective Experience

Kush Sharma, M Ashraf Mansour

From: Spectrum Health/Michigan State University College of Human Medicine, Grand Rapids, MI

17. (CASE REPORT) Trans-carotid Endovascular Exclusion of An Ascending to Descending Aortic Bypass Pseudoaneurysm

Katherine Holzem, Gayan De Silva, Connor Callahan, Westley Ohman

From: Washington University in St. Louis, St Louis, MO

18. Contemporary Management of Aberrant Right Subclavian Artery

Siwei Dong, Abdul Q. Alarhayem, Jarrad Rowse, Francis J. Caputo, David Hardy,

Sean P. Lyden, Behzad S. Farivar

From: Vascular Surgery, Cleveland Clinic, Cleveland, OH

19. (CASE REPORT) Giant Cell Aortitis Masquerading as Intramural Hematoma

Melanie McCormick, Jing Li, Luke Monteagudo, Parastoo Fazeli, Amy B. Reed,

Rawson J. Valentine, Surgery

From: University of Minnesota, Minneapolis, MI

20. Aortic Endograft Sizing and Endoleak, Reintervention and Mortality Following EVAR

Matthew R. Smeds¹, Matthew Bokamper², Kristofer Charlton-Ouw³

From: ¹Department of Surgery, Division of Vascular and Endovascular Surgery, Saint Louis University, Saint Louis, MO, ²Saint Louis University, Saint Louis, MO, ³University of Texas Health Science Center at Houston, TX

[†] Szilagyi Award, § Guthrie Award, ♦ Pfeifer Award

21. (CASE REPORT) Preloaded Contralateral Gate Techniques During EVAR For Aneurysms and Occlusive Disease

Aleem Khalid Hussain Mirza¹, Jesse Manunga², Clark Schumacher³, Monica Stassi-Fritz². Nedaa Skeik²

From: ¹Vascular and Endovascular Surgery, Minneapolis Heart Institute, Minneapolis, MN, ²Minneapolis Heart Institute, Minneapolis, MN, ³Abbott Northwestern Hospital, Minneapolis, MN

10 MINUTE BREAK

5:00 PM

SESSION 2B MODERATORS: Peter J. Rossi and Robert F. Cuff

22. Racial Disparities in Major Amputation Rates are Associated with more Advanced WIFI Score at Initial Presentation amongst Blacks

Melissa D'Andrea, Sofia Rojasova, Kaavya Adam, John-Luke Rivera, Tiffany Ku, Neal Sethi, Janice Nam, Bernadette Aulivola *From:* Loyola University Medical Center, Maywood, IL

23. (CASE REPORT) The Use of Absorbable Antibiotic Beads for Synthetic Graft Salvage

Visharad Patel, Mark Mattos

From: Vascular Surgery Fellow, Michigan State University- McLaren, Flint, Flint, MI

24. Machine Learning Driven Quality Improvement Protocol to Reduce Length of Stay Following Elective EVAR Using the Vascular Quality Initiative Database

Neel A. Mansukhani, Ayokunle S. Olowofela, Robert A. Hieb, Michael J. Malinowski, Rodney Sparapani, Brian D. Lewis, Joseph P. Hart, Peter J. Rossi

From: Medical College of Wisconsin, Milwaukee, WI

25. (CASE REPORT) Mycotic Aneurysm Following Metallic Foreign Body Ingestion

Ali Rteil, Scott Bendix, Chinmayee Potti, Themistokles Chamogeorgakis, Brian Lace, Ann Woodward, Loay Kabbani

From: Henry Ford Health System, Detroit, MI

26. Optimal Timing of Surveillance Ultrasounds in Small Aortic Aneurysms

Jarrad Rowse, Daniel Harris, David Hardy, Lee Kirksey, Christopher Smolock, Sean Lyden, Francia Copyte

Lyden, Francis Caputo

From: Cleveland Clinic, Cleveland, OH

27. (CASE REPORT) Non-operative Management of Thrombosed Infantile Axillary Artery Aneurysm

Santiago Rolon¹, Rory Loo², Dawn Coleman³, Max Wohlauer⁴ *From:* ¹Vascular Surgery, Medical College of Wisconsin, Wauwatosa, WI, ²Medical College of Wisconsin, Wauwatosa, WI, ³University of Michigan, Section of General Surgery, Department of Surgery, Ann Arbor, MI, ⁴Division of Vascular Surgery, Department of Surgery, University of Colorado School of Medicine, Aurora, CO

28. The Impact of Pre-existing Blood Pressure Control in Patients with Acute Aortic Dissections

Amy B. Reed, R James Valentine, Rumi Faizer *From:* University of Minnesota, Minneapolis, MN

29. (CASE REPORT) Transgluteal Coil Embolization of Internal Iliac Artery Aneurysm

Shoaib Shafique, Jeffery Cooke, Kate Dell, Vincent Flanders *From:* Ascension St Vincent Hospital, Indianapolis, IN

SATURDAY, SEPTEMBER 12, 2020

9:00 AM WELCOME/INTRODUCTORY REMARKS

Jeffrey Jim, MD

SESSION 3A MODERATORS: John E. Rectenwald and Michael Go

30. Televascular Consultation Is the Answer to Rural Vascular Surgery Shortage

Jing Li,³Amy B. Reed¹, Derrick Green,², Steve Santilli,², Dan Ihnat,², Paul Orrechia.², R J. Valentine³.

From: ¹Surgery, University of Minnesota, Minneapolis, MN, ²Minneapolis VAMC, Minneapolis, MN, ³University of Minnesota, Minneapolis, MN

31. Contemporary Outcomes Following Multiple Chimney Endografts For Hostile Neck Complex Aneurysm Repair

Jonathan Bath¹, Stefano Fazzini², Todd R. Vogel³, Martin Austermann⁴, Konstantinos P. Donas⁵, Giovanni Torsello⁴.

From: ¹Vascular Surgery, University of Missouri, Columbia, MO, ²Sapienza University of Rome, Rome, Italy, ³University of Missouri, Columbia, MO, ⁴St. Franziskus Hospital, Munster, Germany, ⁵Asklepios Clinic Langen, Goethe-University of Frankfurt, Langen, Germany

[†] Szilagyi Award, § Guthrie Award, ♦ Pfeifer Award

32. Impact of Adjunctive Peripheral and Visceral Artery Interventions During Tevar for Complicated Type B Aortic Dissection

Matthew Chia, Rhami Khorfan, Mark K. Eskandari *From:* Division of Vascular Surgery, Northwestern University Feinberg School of Medicine, Chicago, IL

33. Computational Methods to Automate the Initial Interpretation of Lower Extremity Arterial Doppler And Duplex Carotid Ultrasound

Alan P. Sawchuk^{3,} Xiao Luo¹, Lena Ara¹, Haoran Ding¹, Dave Rollins², Raghu Motaganahalli³, *From:* ¹Indiana University Purdue University Indianapolis, Indianapolis, IN, ²Indiana University Health, Indianapolis, IN, ³Indiana University School of Medicine, Indianapolis, IN

34. ANNOUNCEMENT OF POSTER COMPETITION WINNER/PRESENTATION

ANNOUNCED BY: Raghu Motaganahalli, President-Elect

PRESENTATION OF RESEARCH AWARDS Kellie R. Brown, President

10 MINUTE BREAK

10:00 AM

SESSION 3B RAPID REPORTS

MODERATORS: John E. Rectenwald and Michael Go

34. Fast and Non-invasive Evaluation Of *In Vivo* Pressure in Stenosed Aortoiliac Arteries

Alan P. Sawchuk³, Huidan Yu¹, Chenbin Rong¹, Xin Jin¹, Yousheng Xu², Michael Murphy³, Raghu Motaganahalli³,

From: ¹Indiana University Purdue University Indianapolis, Indianapolis, IN, ²Zhejiang University, Hangzhou, China, ³Indiana University School of Medicine, Indianapolis, IN

35. Frailty Remains Highly Correlated with Mortality After EVAR in Octogenarians

Lily E. Johnston, Mario D'Oria, Jill J. Colglazier, Bernardo C. Mendes, Fahad Shuja, Thomas C. Bower, Gustavo S. Oderich, Randall R. DeMartino *From:* Mayo Clinic, Rochester, MN

[†] Szilagyi Award, § Guthrie Award, ♦ Pfeifer Award

Outcomes of Catheter-directed Thrombolysis of Autogenous Vein Bypass Vs. Prosthetic Bypass for Acute Leg Ischemia

Shuchi Zinzuwadia, Michael Wesolowski, Michael Soult, Pegge Halandras, Paul Crisostomo, Bernadette Aulivola, Carlos Fares Bechara

From: Vascular Surgery, Loyola University, Stritch School of Medicine, Maywood, IL

37. The Clinical Impact of Incidental Findings in Neck CT Angiograms

Gabrielle N. Scariano, Ann H. Kim, Alexander H. King, Jason T. Turner, Jae S. Cho, Norman H. Kumins, Karem C. Harth, Vikram S. Kashyap

From: University Hospitals Cleveland Medical Center, Cleveland, OH

38. Feasibility of Bent Knee Prosthesis for Early Ambulation After Below Knee Amputation

Troy D. Decker, Jason Q. Alexander, Senthil N. Jayarajan, Joseph Karam, Jesse M. Manunga, Aleem K. Mirza, Nedaa Skeik, Timothy M. Sullivan, Xiaoyi Teng, Jessica M. Titus

From: Vascular Surgery, Minneapolis Heart Institute/Abbott Northwestern, Minneapolis, MN

39. Neurogenic Thoracic Outlet Syndrome: The Case for A Multidisciplinary Approach

Sarah Burger, Maen Aboul Hosn

From: Vascular Surgery University of Iowa Hospital and Clinics, Iowa City, IA

40. Claudication Distances, the Walking Impairment Questionnaire, and Muscle Heme-Oxygen Saturation Best Describe the Home Daily Activity of Claudicating Patients with Peripheral Artery Disease

Molly N. Schieber, Matthew Fuglestad, Hernan Hernandez, Adam Stein, Yue Gao, Katyarina Brunette, Holly DeSpiegelaere, Sara A. Myers, George Casale, Iraklis I. Pipinos, Surgery

From: University of Nebraska Medical Center, Omaha, NE

41. Anatomic Feasibility of Off-the-shelf Thoracic Single Side-branched Endograft In Patients with Blunt Traumatic Thoracic Aortic Injury

William J. Yoon, Victor M. Rodriguez, Matthew Mell

From: Vascular Surgery, University of California Davis Medical Center, Sacramento, CA

42. Benchmarking A Center of Excellence in Vascular Surgery: Using Apache II to Validate Outcomes in A Tertiary Care Institute

David J. Laczynski¹, Joshua Gallop², Sean P. Lyden¹, Jarrad Rowse¹, Christopher J. Smolock¹, Levester Kirksey¹, David Hardy¹, Francis J. Caputo¹ *From:* ¹Cleveland Clinic Foundation, Cleveland, OH, ²Cleveland, Clinic Lerner College of Medicine, Cleveland, OH

43. 1 Year Carotid Duplex Results Following Trans Carotid Artery Revascularization Correlated with Retrospective Blinded Preoperative CTA Calcium Severity

Brent Robertson, Brian Kuhn, Patrick Muck, Matthew Recht, Aaron Kulwicki, Mark Broering, Evan Neville, Graham Rucker, Michael Wolujewicz

From: Vascular Surgery, Trihealth -Good Samaritan Hospital, Cincinnati, Ohio

44. Contemporary Outcomes of Anterior Spine Exposure: The Influence of Prior Abdominal or Spine Surgery and Exposure Level and Extent

Ehsan Benrashid, John W. Ohman, Luis A. Sanchez, Jeffrey Jim *From:* Vascular Surgery, Washington University St Louis/Barnes-Jewish Hospital, St Louis. MO

45. Outcomes Following Endovascular Reintervention for Aortic Interventions

Amit Kainth, Adam Ring, Michael Williams, Matthew Smeds *From:* Saint Louis University, St. Louis, MO

10 MINUTE BREAK

11:30 AM MVSS MEMBER BUSINESS MEETING