SCIENTIFIC PROGRAM

33rd WESTERN VASCULAR SOCIETY ANNUAL MEETING
September 22 – 25, 2018
Eldorado Hotel
Santa Fe, NM
## SCHEDULE AT A GLANCE

### Saturday, September 22, 2018

- **12:00 PM - 8:00 PM** Prefunction Foyer: Registration Open
- **1:00 PM - 4:00 PM** Board Room: Executive Council Meeting
- **5:00 PM - 6:00 PM** Ballroom Foyer: ePoster Competition
- **6:00 PM - 7:30 PM** Ballroom B: Welcome Reception
- **7:00 PM - 8:30 PM** Chapel: Past Presidents’ Dinner - Invitation Only

### Sunday, September 23, 2018

- **6:00 AM - 2:00 PM** Prefunction Foyer: Registration Open
- **7:00 AM - 1:00 PM** Ballroom B: Exhibits Open
- **7:00 AM - 7:45 AM** Ballroom B: Continental Breakfast with Educational Exhibitors
- **8:00 AM - 8:10 AM** Ballroom A: Call to Order and Opening Announcements
- **8:10 AM - 10:00 AM** Ballroom A: Scientific Session I
- **9:00 AM - 10:30 AM** Chapel: Companion Breakfast and Turquoise Presentation (N/C)
- **10:00 AM - 10:30 AM** Ballroom A: Coffee Break
- **10:30 AM - 12:30 PM** Ballroom B: Scientific Session II
- **12:30 PM - 1:30 PM** Breakout Room: Diversity and Leadership in Vascular Surgery Lunch with Panel Discussion
- **1:30 PM - 2:00 PM** Lobby: Bus leaves for Towa Golf Course
- **2:00 PM - 5:30 PM** Ballroom B: Golf Tournament ($150 includes green fees and transportation)
- **3:30 PM - 5:30 PM** Casa Espana: 3 Museum Walking Tour ($40 includes admissions and docent tour)
- **5:30 PM - 7:30 PM** Reception in the Patio Foyer: Reception and Casual Dinner

### Monday, September 24, 2018

- **6:00 AM - 1:00 PM** Prefunction Foyer: Registration
- **6:00 AM - 1:00 PM** Ballroom A: Exhibits Open
- **7:00 AM - 8:00 AM** Victoria Room: Terumo Aortic Sponsored Breakfast Symposia
- **7:00 AM - 8:00 AM** Ballroom A: Continental Breakfast with Educational Exhibitors
- **7:30 AM - 9:10 AM** Ballroom B: Scientific Session III
- **9:10 AM - 9:30 AM** Ballroom A: Coffee Break
- **9:30 AM - 10:50 AM** Ballroom B: Scientific Session IV
- **10:50 AM - 11:20 AM** Ballroom B: Presidential Guest Lecture - Thomas Wakefield, M.D.
- **11:20 AM - 11:45 AM** Ballroom B: Society of Vascular Surgery Update - Kenneth Slaw, M.D.
- **12:30 PM - 1:30 PM** Santa Fe Cooking School: Salsa Cooking Demonstration ($100 per person)
- **11:45 - 12:15 PM** Ballroom B: WVS Business Meeting
- **1:30 PM - 3:30 PM** Ballroom B: Spine Access Symposium
- **3:30 PM - 5:30 PM** TBD: Trainee Symposium: Mock Oral Board Examinations
- **6:30 PM - 7:30 PM** Reception in the Patio Foyer: Reception in the Patio Foyer
- **7:30 PM - 10:00 PM** Presidential Patio: Western Vascular Society Presidential Patio Fiesta
### SCHEDULE AT A GLANCE

**Tuesday, September 25, 2018**

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<td>6:30 AM - 1:00 PM</td>
<td>Prefunction Foyer</td>
<td>Registration Open</td>
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<td>6:30 AM - 7:30 AM</td>
<td>TBD</td>
<td>Breakfast Symposium</td>
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<td>7:00 AM - 1:00 PM</td>
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<td>7:00 AM - 8:00 AM</td>
<td>Rooftop Patio</td>
<td>Sunrise Stretch and Meditation Class - free registration onsite</td>
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<td>7:00 AM - 8:00 AM</td>
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<td>Continental Breakfast with Educational Exhibitors</td>
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<td>7:30 AM - 9:00 AM</td>
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<td>9:00 AM - 9:30 AM</td>
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**Wednesday, September 26, 2018**

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<tr>
<td>Sunrise</td>
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<td>Hot Air Balloon Rides Albuquerque</td>
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SATURDAY, SEPTEMBER 22, 2018

1:00 – 4:00 p.m. EXECUTIVE COUNCIL MEETING

5:00 – 6:00 p.m. POSTER COMPETITION (8 posters—3 min presentation/3 min discussion)

5:00 – 5:06 p.m. P1 – 36 Preadmission Does Not Correlate with Fewer Complications, Reduced Failure to Rescue or Improved Survival in EVAR and OAAA Patients
Justin Inman, MD,1 Devin S. Zarkowsky, MD,1 Adam Z. Oskowitz, MD PhD1, Mohammad H. Eslami2, Philip P. Goodney, MD MS3, Shant M. Vartanian, MD1, Caitlin W. Hicks, MD MS4.
1University of California San Francisco, San Francisco, CA, USA, 2University of Pittsburgh, Pittsburgh, PA, USA, 3Dartmouth-Hitchcock Medical Center, Lebanon, NH, USA, 4The Johns Hopkins Hospital, Baltimore, MD, USA.

5:06 – 5:12 p.m. P2 – 22 Endovascular Removal of a Balloon Expandable Superior Mesenteric Artery Stent
Jeniann A. Yi, MD, MS, David Kuwayama, MD.
University of Colorado, Denver, CO, USA.

5:12 – 5:18 p.m. P3 – 40 Utility of Open Forefoot Amputation in the Management of Patients with Critical Limb Ischemia
Ramsey S. Elsayed, MD, Louis L. Zhang, MD, David G. Armstrong, MD, PhD, DPM, Gregory A. Magee, MD, Aria C. Woods, BS, Leonardo C. Clavijo, MD, PhD, Nallely Saldana-Ruiz, MD, Vincent L. Rowe, MD.
Keck School of Medicine, Los Angeles, CA, USA.

5:18 – 5:24 p.m. P4 – 50 Initial Experience with the Bolton TREO Device for Fenestrated EVAR
Benjamin W. Starnes, MD, Billi Tatrum, RN, Brenda Allen-Kline, ARNP, Niten Singh, MD.
University of Washington, Seattle, WA, USA.

5:24 – 5:30 p.m. P5 – 77 Traumatic Superior Mesenteric Artery Injuries: Analysis of Incidence, Morbidity and Mortality Compared to Other Visceral Arteries
Shelley Maithel, MD, Areg Grigorian, MD, Roy Fujitani, MD, Nii-Kabu Kabutey, MD, Samuel Chen, MD, Jeffry Nahmias, MD.
University of California, Irvine, Orange, CA, USA.

5:30 – 5:36 p.m. P6 – 93 Catheter-based Endovascular Interventions for Symptomatic Deep Vein Thrombosis in Children
Philip Lindsey, MD,1 Angela Echeverria, MD,1 Brian Thomas, MD,2 Stanley M. Duchman, MD,2 Mathew Cheung, DO,3 Peter H. Lin, MD,1,14.
Baylor College of Medicine, Houston, TX, USA.

5:36 – 5:42 p.m. P7 – 94 Practice Patterns of Endovascular Interventions for Peripheral Arterial Disease in the Medicare Population
Rhusheet Patel1, Karen Woo1, Laura Gascue2, Peter Lawrence1, John Romley2.
1UCLA, Los Angeles, CA, USA, 2Schaeffer Center for Health Policy, Los Angeles, CA, USA.

5:42 – 5:48 p.m. P8 – 28 Applicability of the Cook Inner Branched Arch Endograft
Christopher Burke, MD,1 Jarin Kratzberg, PhD2, Anthony Yoder, RT2, Jason Smith1, Gabriel Aldea1, Matthew P. Sweet, MD1.
1University of Washington, Seattle, WA, USA, 2Cook Research Incorporated, Bloomington, IN, USA.

*Best Poster Competition Winner will be awarded at the end of the meeting on Tuesday.
6:00 – 7:30 p.m.  WELCOME RECEPTION

7:30 p.m.  PAST PRESIDENTS DINNER (by invitation only)

SUNDAY, SEPTEMBER 23, 2018

7:00 a.m.  CONTINENTAL BREAKFAST WITH EDUCATIONAL EXHIBITORS

7:45 a.m.  Call to Order and Announcements
E. John Harris, MD, President WVS

8:00 – 9:40 a.m.  SCIENTIFIC SESSION I - PAD
Presiding: E. John Harris, MD, and Michael Conte, MD

8:00 – 8:20 a.m.
1. (21)* Delayed Revascularization After a Trial of Conservative Therapy is Safe and Effective for Ischemic Wounds in a Multidisciplinary Setting
Joshua Gabel, MD1, Isabella Possagnoli2, Udochukwu Oyoyo1, Ahmed Abou-Zamzam Jr.1, Theodore Teruya1, Sharon Kiang1, Vicki Bishop1, Diana Eastridge2, Christian Bianchi1,2.
1Loma Linda University, Loma Linda, CA, USA, 2Veterans Affairs Loma Linda Healthcare System, Loma Linda, CA, USA.
Discussant: Dr. Joseph Mills, Sr.

2. (56)* Lower Extremity Revascularization with Transmetatarsal Amputation Improves Healing and Reduces Major Amputation
Evan C. Werlin, MD, Melinda S. Schaller, MD, Charles B. Parks, DPM, Brooke A. Goodman, DPM, Blake T. Wallace, BS, Monara Dini, DPM, Michael S. Conte, MD, Alexander M. Reyzelman, DPM, Warren J. Gasper, MD.
UCSF, San Francisco, CA, USA.
Discussant: Dr. Charles Anderson

3. (24)* Endovascular Reconstruction Offers Non-Inferior Outcomes at Reduced Cost Compared to Surgical Bypass for TASC-II D Aorto-Iliac Occlusive Disease
Loma Linda University, Loma Linda, CA, USA.
Discussant: Dr. Gale Tang

4. (13)* Impact of Physician Owned Office Based Laboratories on Physician Practice Patterns and Outcomes after Percutaneous Vascular Interventions for Peripheral Artery Disease
Nathan Itoga, MD1, Laurence C. Baker, PhD1, Matthew W. Mell, MD2.
1Stanford University Medical Center, Stanford, CA, USA, 2UC Davis, Sacramento, CA, USA.
Discussant: Dr. Peter Lawrence

5. (72)* Preoperative Testing Among Patients Undergoing Arteriovenous Fistula Surgery
Brian Beckord, MD1, Lobsang Marcia2, Sarah Abdulla, MD1, Ashkan Moazzez, MD, MPH, FACS1, Christine Tung, MD1, Christian de Virgilio, MD, FACS1.
1Harbor-UCLA Medical Center, Torrance, CA, USA, 2David Geffen School of Medicine, Los Angeles, CA, USA.
Discussant: Dr. Eugene Zierler
9:40 – 10:00 a.m.  COFFEE BREAK WITH EDUCATIONAL EXHIBITORS

10:00 a.m. – 12:00 p.m.  SCIENTIFIC SESSION II - AORTIC

Presiding: E. John Harris, MD and Wei Zhou, MD

10:00 – 10:20 a.m.  6. (43)* Late Graft Failure is Rare After EVAR Using the Zenith Stent-Graft: Fifteen-year Outcomes in a Cohort of High-Risk Patients

Joel L. Ramirez, Melinda S. Schaller, MD, Bian Wu, MD, Linda M. Reilly, MD, Timothy A. M. Chuter, MD, Jade S. Hiramoto, MD.
University of California, San Francisco, San Francisco, CA, USA.
Discussant: Dr. Rodney White

10:20 – 10:40 a.m.  7. (55)* Lessons Learned from The Largest Cohort of Type 3 Endoleaks with the Endologix AFX Stent Graft

Andrew Barleben, MD MPH1,2, Abid Mogannam, MD1, Erik Owens, MD1,3, John S. Lane, MD1,3, Ariel Lee1.
1UCSD, San Diego, CA, USA, 2VA San Diego, La Jolla, CA, USA.
Discussant: Dr. George Lee

10:40 – 11:00 a.m.  8. (47*) Duplex Ultrasonography is a Clinically Useful Modality for Surveillance of Renal Branch Grafts After Fenestrated Endovascular Aneurysm Repair

Kenneth Tran, MD, Graeme Mcfarland, MD, Michael Sgroi, MD, Jason T. Lee, MD.
Stanford, Stanford, CA, USA.
Discussant: Dr. Gregory Landry

11:00 – 11:20 a.m.  9. (70)* Variation In Center-level Frailty Burden and its Impact on Long-term Survival in Patients Undergoing Repair For Abdominal Aortic Aneurysms

Elizabeth L. George, MD1, Kelly Blum, MS1, Amber W. Tricke, PhD, MS, CPH1, Benjamin Brooke, MD2, Larry Kraiss, MD2, Matthew W. Mell, MD3, Philip Goodney, MD4, Jason Johanning, MD5, Jason Hockenberry, PhD6, Shripa Arya, MD, SM, FACS6.
1Stanford University, Stanford, CA, USA, 2University of Utah, Salt Lake City, UT, USA, 3University of California - Davis, Sacramento, CA, USA, 4University of Nebraska, Lincoln, NE, USA, 5Emory University, Atlanta, GA, USA.
Discussant: Dr. Karen Woo

11:20 – 11:40 a.m.  10. (75)* A Reliable Method for Renal Volume Measurement and its Application in FEVAR

Jason R. Hurd, MD1, Xiyang Chen, MD1, Billi Tatum, RN1, Danielle Katsman1, Niten Singh, MD1, R. Eugene Zierler, MD1, Benjamin W. Starnes, MD1.
1University of Washington, Seattle, WA, USA, 2Sichuan University Division of Vascular Surgery, Chengdu, China.
Discussant: Dr. Omid Jazaeri

11:40 a.m. – 12:00 p.m.  11. (52) Anatomic Suitability for Standard, “Off-the-shelf” Thoracic Single Side-branched Endograft in Patients with Type B Aortic Dissection

Gregory A. Magee, MD MSc, Narek Veranyan, MD, Sung W. Ham, MD, Kenneth R. Ziegler, MD, Fred A. Weaver, MD MMM, Fernando Fleischman, MD, Michael Bowdish, MD, Sukgu M. Han, MD MS.
University of Southern California, Los Angeles, CA, USA.
Discussant: Dr. Stephen Cheng

12:00 – 1:00 p.m.  LEADERSHIP AND DIVERSITY IN VASCULAR SURGERY LUNCHEON

1:30 p.m.  Shuttle bus leaves for Towa Golf Course
2:00 p.m.  Museum Tour Group Meets in Lobby
6:00 p.m.  Casual Dinner at the Casa Espana
MONDAY, SEPTEMBER 24, 2018

7:00 a.m. CONTINENTAL BREAKFAST WITH EDUCATIONAL EXHIBITORS

7:30 – 9:10 a.m. SCIENTIFIC SESSION III

7:30 – 7:50 a.m.

12. (40)* The Effect of Combining Coronary Bypass with Carotid Endarterectomy in Patients with Unrevascularized Severe Coronary Disease

Linda J. Wang, MD, MBA¹, Emel A. Ergul, MA¹, Jahan Mohebali, MD, MPH¹, Philip P. Goodney, MD, MS², Virendra Patel, MD, MPH¹, Mark F. Conrad, MD, MMSc¹, Matthew J. Eagleton, MD¹, W. Darrin Clouse, MD¹.

¹Massachusetts General Hospital, Boston, MA, USA, ²Dartmouth-Hitchcock Medical Center, Lebanon, NH, USA, ³Columbia University Medical Center, New York, NY, USA.

Discussant: Dr. Niren Angle

7:50 – 8:10 a.m.

13. (41)* Carotid Stenosis: The Impact of Frailty Syndrome on Patient Outcomes

Ashton Lee, MD, Viraj Pandit, MD, Wei Zhou, MD.

Banner University Medical Center Tucson, Tucson, AZ, USA.

Discussant: Dr. Benjamin Brooke

8:10 – 8:30 a.m.

14. (44)* Prognostic Implications of Diagnosing Frailty and Sarcopenia in Vascular Surgery Practice: Form Versus Function

Amir A. Ghaffarian, UT, Wylie T. Foss, BS, Larry W. Kraiss, MD, FACS, Brigitte K. Smith, MD, Claire L. Griffin, MD, Mark R. Sarfati, MD, FACS, Benjamin S. Brooke, MD, PhD, FACS.

University of Utah School of Medicine, Salt Lake City, UT, USA.

Discussant: Dr. Misty Humphries

8:30 – 8:50 a.m.

15. (31)* Surgical Management of Functional Popliteal Entrapment Syndrome in Athletes

Kedar S. Lavingia, MD, Anahita Dua, Michael Fredericson, Jason T. Lee.

Stanford, Stanford, CA, USA.

Discussant: Dr. Hugh Gelabert

8:50 – 9:00 a.m.

16. (66) Factors Associated with Microembolization After Carotid Intervention

Joseph Sabat, MD PHD, Tze-Woei Tan, MD, Craig Weinkauf, MD PHD, Theodore Trouard, PhD, Gloria Guzman, MD, Wei Zhou, MD PHD.

University of Arizona, Tucson, AZ, USA.

9:00 – 9:10 a.m.

17. (34) Establishing a Carotid Artery Stenosis Disease Cohort for Comparative Effectiveness Research Using Natural Language Processing

Robert W. Chang, MD¹, Lue-Yen Tucker¹, Kara A. Rothenberg, MD¹, Andrew L. Avins, MD, MPH², Hui C. Kueang, RN, MS, CNS, NP-C³, Rishad M. Faruqi, MD³, Bradley B. Hill, MD³, Mai N. Nguyen-Huynh, MD, MPH³, ⁴.

¹Department of Vascular Surgery, Kaiser Permanente, South San Francisco, CA, USA, ²Division of Research, Kaiser Permanente, Oakland, CA, USA, ³University of California San Francisco - East Bay, Oakland, CA, USA, ⁴Department of Vascular Surgery, Kaiser Permanente, San Francisco, CA, USA, ⁵Department of Vascular Surgery, Kaiser Permanente, Santa Clara, CA, USA, ⁶Department of Neurology, Kaiser Permanente, Walnut Creek, CA, USA.

9:10 a.m. – 9:30 a.m. COFFEE BREAK WITH EDUCATIONAL EXHIBITORS
9:30 a.m. – 10:50 a.m.  SCIENTIFIC SESSION IV – DIALYSIS ACCESS
Presiding: E. John Harris, MD, and Roy Fujitani, MD

9:30 – 9:50 a.m.  18. (60) Cost Effectiveness of Repeated Interventions on Failing Arteriovenous Fistulas: When is it Time to Start Over?
Benjamin S. Brooke, MD, PhD, Richard E. Nelson, PhD, Claire L. Griffin, MD, Larry S. Kraiss, MD, FACS.
University of Utah School of Medicine, Salt Lake City, UT, USA.
Discussant: Dr. Jason Faulds

9:50 – 10:10 a.m.  19. (32)* Long Term Durability of Oakes Salvage Procedure to Preserve Forearm Dialysis Access in Patients with Failed Brescia
Anahita Dua, MD MS MBA, Kara Rothenberg, Kedar Lavingia, Vy T. Ho, David Oakes, Ehab Sorial, Manuel Garcia-Toca.
Stanford, Menlo Park, CA, USA.
Discussant: Dr. Wayne Gradman

10:10 – 10:30 a.m.  20. (92) Arteriovenous Fistulas Recruited with Regional Anesthesia Have Comparable Functional Outcomes
Bian Wu, MD1, Devin S. Zarkowsky, MD1, Justin Inman, BS1, Andrew T. Gray, MD1,2, Adam Z. Oskowitz, MD, PhD1,2, Shant M. Vartanian, MD1,2.
1University of California, San Francisco, San Francisco, CA, USA, 2Zuckerberg San Francisco General Hospital, San Francisco, CA, USA.
Discussant: Dr. Mark Langsfeld

10:30 – 10:50 a.m.  21. (96) Outcomes of Hemodialysis Vascular Access in Patients Initiating Dialysis with a Tunneled Catheter
Timothy Copeland, MPP, Peter Lawrence, MD, Karen Woo, MD.
UCLA, Los Angeles, CA, USA.
Discussant: Dr. Stephen Kubaska

10:50 – 11:20 a.m.  PRESIDENTIAL GUEST LECTURER
Thomas Wakefield, MD

11:20 – 11:45 a.m.  SOCIETY OF VASCULAR SURGERY UPDATE
Kenneth Slaw, MD

11:45 a.m. – 12:15 p.m.  WVS BUSINESS MEETING

12:20 p.m. – 1:20 p.m.  INDUSTRY SPONSORED LUNCH SEMINAR WITH COOK MEDICAL

1:30 – 3:00 p.m.  SPINE ACCESS SYMPOSIUM

3:00 – 5:00 p.m.  MOCK ORAL BOARD EXAMS

6:00 – 7:00 p.m.  RECEPTION

7:00 – 10:00 p.m.  PRESIDENT’S BANQUET WITH ENTERTAINMENT
TUESDAY, SEPTEMBER 25, 2018

7:00 a.m.  CONTINENTAL BREAKFAST WITH EDUCATIONAL EXHIBITORS

7:00 a.m.  INDUSTRY SPONSORED BREAKFAST WITH TERUMO AORTIC - Wilson Y. Szeto, MD

7:30 – 9:00 a.m.  SCIENTIFIC SESSION V
Presiding: York Hsiang, MD, MHSc and Vincent Rowe, MD

7:30 – 7:50 a.m.  22.  (46)* Disease-based Observation Cohort Study of Patients with Thoracoabdominal Aortic Aneurysm
Chulhi Kang, MD, Matthew A. Bartek, MD, MPH, Sherene Shalhub, MD, MPH, Derek P. Nathan, MD, Matthew P. Sweet, MD.
University of Washington, Seattle, WA, USA.
Discussant: Dr. Linda Riley

7:50 – 8:10 a.m.  23.  (63) Financial Analysis of Fenestrated Endovascular Aortic Aneurysm Repair at a High-Volume Medical Center
Warren B. Chow, MD, MS, Denise M. Leverentz, MBA, Billi Tatum, RN, Benjamin W. Starnes, MD, FACS.
University of Washington, Seattle, WA, USA.
Discussant: Dr. Bruce Gewertz

8:10 – 8:30 a.m.  24.  (58)* Percutaneous Approach to Endovascular Aortic Aneurysm Repair: A Cost-Minimization Study
Jonathan C. Hong, MD, MHS, Gary K. Yang, MD, PhD, Benjo A. Delarmente, MD, MS, MA, Rohan Khera, MD, Joel Price, MD, MPH, Jerry C. Chen, MD, MSc.
1University of British Columbia, Vancouver, BC, Canada, 2Johns Hopkins School of Public Health, Baltimore, MD, USA, 3UT Southwestern, Dallas, TX, USA.
Discussant: Dr. Sherene Shalhub

8:30 – 8:50 a.m.  25.  (78) Management of Moderate Thoracic Blunt Aortic Injuries in Patients with Intracranial Hemorrhage
Elina Quiroga, MD, FACS, Benjamin W. Starnes, MD, FACS, Nam T. Tran, MD, Niten Singh, MD.
University of Washington, Seattle, WA, USA.
Discussant: Dr. Nii-Kbu Kabutey

8:50 – 9:00 a.m.  26.  (15) Association of Vascular Surgery Board of the American Board of Surgery Examination Performance with Clinical Outcomes: Experience Matters
Larry W. Kraiss, MD, Ragheed Al-Dulaimi, MD MPH MSc, Angela Presson, PhD, Jack L. Cronenwett, MD, John F. Eitd, MD, Joseph L. Mills, MD, John (Jeb) Hallett, MD, K. Craig Kent, MD, Philip P. Goodney, MD MS, Benjamin S. Brooke, MD PhD.
1University of Utah, Salt Lake City, UT, USA, 2Dartmouth College, Hanover, NH, USA, 3Baylor Scott & White Health, Dallas, TX, USA, 4Baylor College of Medicine, Houston, TX, USA, 5Medical University of South Carolina, Charleston, SC, USA, 6Ohio State University, Columbus, OH, USA.

9:00 – 9:10 a.m.  27.  (17) Early Experience with the Octopus Endovascular Strategy in the Management of Thoracoabdominal Aneurysms
Anahita Dua, MD MS MBA, Kedar Lavingia, MD, Michael Dake, MD, Jason Lee, MD.
Stanford, University Menlo Park, CA, USA.

9:10 – 9:20 a.m.  28.  (18) Integrated Residency is Associated with an Increase in Women Among Vascular Surgery Trainees
Susanna Shin, MD, Sherene Shalhub, MD.
University of Washington, Seattle, WA, USA.

9:20 – 9:40 a.m.  COFFEE BREAK WITH EDUCATIONAL EXHIBITORS
9:40 – 11:30 a.m.  SCIENTIFIC SESSION VI
Presiding: York Hsiang, MD, MHSc and Venita Chandra, MD

9:40 – 10:00 a.m.  29. (76)* Experienced Operators Achieve Superior Primary Patency and Wound Complication Rates with Endoscopic Greater Saphenous Vein Harvest Compared to Open Harvest in Lower Extremity Bypasses
Matthew Kronick, MD, Enjae Jung, MD, Cherrie Abraham, MD, Timothy Liem, MD, Gregory Moneta, MD, Gregory Landry, MD.
Oregon Health & Science University, Portland, OR, USA.
Discussant: Dr. Vincent Rowe

10:00 – 10:20 a.m.  30. (98) Plant-Based Diet Reverses Vascular Endothelial Dysfunction in Patients with Peripheral Arterial Disease
Debra Leslie, MPH, RDN¹, Mary Levine, RD², Garth Davis, MD³, Caldwell B. Esselstyn, Jr, MD⁴, Heather Hamza, CRNA⁵, Peter H. Lin, MD⁶-⁷.
¹California State University Los Angeles, Los Angeles, CA, USA, ²California State University Channel Islands, Camarillo, CA, USA, ³University of Texas Health Science Center, Houston, TX, USA, ⁴Cleveland Clinic Wellness Institute, Cleveland, OH, USA, ⁵University Vascular Associates, Los Angeles, CA, USA, ⁶Baylor College of Medicine, Houston, TX, USA.
Discussant: Dr. Warren Gasper

10:20 – 10:30 a.m.  31. (29) Multi-vessel Tibial Revascularization Does Not Improve Outcomes in Patients with Critical Limb Ischemia
Kedar S. Lavingia, MD, Kenneth Tran, Nathan Itoga, Anahita Dua, Matthew Mell, Venita Chandra.
Stanford, Stanford, CA, USA.

10:30 – 10:40 a.m.  32. (61) Lower Extremity Revascularization (LER) in the Medicare Population: The Ongoing Rise of Office-Based Atherectomy Critical Limb Ischemia
Joy Walker, MD¹, Sean P. Roddy, MD², Michael S. Conte, MD1.
¹UCSF, San Francisco, CA, USA, ²The Vascular Group, PLLC, Albany, NY, USA.

10:40 – 11:00 a.m.  33. (57) Factors Influencing Accuracy of Volume Flow Measurement in Dialysis Access Fistulas: Analysis Based on Duplex Ultrasound Simulation
R Eugene Zierler, MD¹, Daniel Leotta, PhD¹, Kurt Sansom¹, Alberto Aliseda, PhD¹, Mark Anderson, MS², Florence Sheehan, MD².
¹University of Washington, Seattle, WA, USA, ²Sheehan Medical LLC, Mercer Island, WA, USA,
Discussant: Dr. Eugene Lee

11:00 – 11:10 a.m.  34. (45) Comparison of Bovine Carotid Xenograft versus ePTFE Grafts for Forearm Loop Hemodialysis Access
Benjamin Colvard, MD¹, Kedar Lavigia, MD¹, Vy T. Ho, MD¹, Nathan Itoga, MD¹, Anahita Dua, MD¹, E John Harris, MD¹, Matthew Mell, MD¹, Ehab Sorial, MD², Manuel Garcia-Tocha, MD².
¹Stanford University Hospital, Stanford, CA, USA, ²Stanford University Hospital, San Jose, CA, USA.

11:10 – 11:20 a.m.  35. (95) Leukocyte Phenotype is Altered in Peripheral Arterial Disease
Thomas A. Sorrentino, Melinda S. Schaller, MD, Mian Chen, MD, Marlene Grenon, MD, Michael S. Conte, MD.
University of California, San Francisco, San Francisco, CA, USA.

11:20 – 11:30 a.m.  36. (64) Initial Open vs Endovascular Treatment and Subsequent Limb Loss After Primary Minor Amputation
Jonathan H. Lin, MD, Sun Young Jeon, PhD, Patrick S. Romano, MD, Matthew W. Mell, MD, Misty D. Humphries, MD.
University of California, Davis, Sacramento, CA, USA.
PRESENTATION OF ROBERT HYE MEMORIAL RESIDENT PRESENTATION AWARD
COMPANION PROGRAM

Companions and spouses are an important part of the Western Vascular Society family. Member survey revealed unanimous support of the creation of optional events to honor their partners contributions to the members surgical practice. The following social events are scheduled concurrently with the scientific program. Sunday breakfast will be held in the AGAVE Lounge featuring a speaker who will discuss the legendary Turquoise Trail presenting the Santa Fe jewelry shopping opportunities with tips on where to find the best quality local crafts. Later in the day Sunday, we will have a group tour of local museums or you can hit the links for the golf tournament. On Monday, we will host a salsa cooking class at the famous Santa Fe Cooking School (registration required). Guest registration includes the Saturday Welcome Reception, Sunday reception at the Casa Espana, Monday Presidential Reception and this year’s Presidential Banquet that will be a Fiesta Dinner on the rooftop where we will enjoy the cooking class salsa and flamenco guitarist Calvin Hazen. On Tuesday morning, we have a free yoga class at sunrise on the patio. If a hot air balloon ride is on your bucket list be sure to plan to stay until Wednesday!

OPTIONAL EVENTS

Museum Tour
Thanks to planning and tips from Western Vascular Society Local Arrangements Chair, Dr. Langsfeld from the University of New Mexico, we look forward to offering a Museum Tour on Sunday afternoon at 3pm. For the cost of $40 we will visit the Palace of Governors originally constructed in the early 17th century as Spain’s seat of government for what is today the American Southwest, the Palace of the Governors chronicles the history of Santa Fe, as well as New Mexico and the region. This adobe structure, now the state’s history museum, was designated a Registered National Historic Landmark in 1960 and an American Treasure in 1999. New Mexico History Museum will also be part of the tour that ends at the Georgia O’Keefe Museum when the tour will be joined by the rest of the meeting attendees for a reception. IAIA Museum of Contemporary Native Arts also located in downtown Santa Fe, and is dedicated solely to advancing the discourse, knowledge and understanding of the unique culture of New Mexico.

Cooking School of Santa Fe
Learn from a professional chef to cook New Mexico style Monday afternoon at the Santa Fe School of Cooking. This two hour hands-on class will give you the opportunity to prepare four different salsas that spice up even the simplest of dishes. You will spend a few minutes learning about the history of salsa, then begin chopping and dicing! You will learn to make and taste; pico de gallo, chayote orange salsa, pineapple, red chile and ginger salsa, and apple, raisin and pine nut salsa. Class is limited to 12 people and there is a $95 fee that can be paid on the registration site.

Group Exercise
Stress management is vital to professional development. Come and learn new tools to help you be your best. On Tuesday, there will be a group gentle yoga class and guided meditation at 7:30am. Soak up the great energy of Santa Fe by greeting the morning on the rooftop patio. Class will be led by certified yoga instructor who will guide this 45-minute session. This class is included in your registration.
OPTIONAL EVENTS

Hot Air Balloon Excursion
See the beautiful New Mexico sunrise from the best vantage point. A typical balloon ride in Albuquerque will take you over the Rio Grande valley and may include the river itself, with El Bosque (the forest) on either side. You’ll enjoy views of the Sandia Mountains, the mountains surrounding the high desert, and maybe even the Petroglyph National Monument depending on the winds that particular day. Rides range in length from 45 minutes to an hour, but they may go as long as an hour and a half depending on weather and available landing sites. Group hot air balloon rides will be arranged for Wednesday morning in Albuquerque the day after the meeting concludes. Cost will be $169 per person. Trip does not include transportation to Albuquerque where we will meet at 6:00am. For those who want to arrange a ride on a different day, you can do so at http://www.rainbowryders.com/

Golf Tournament
Captains Choice Golf Scramble will be arranged for Sunday afternoon at the Towa Golf Resort. Named “Best Golf Resort in North America” as well as, “New Mexico’s Best Golf Hotel” by the World Golf Awards, Towa was designed jointly by twenty-time PGA winner Hale Irwin and noted golf course designer and landscape architect William Phillips. Nestled amidst the dramatic scenery of Northern New Mexico’s Pojoaque Valley, Towa Golf Club’s three independent nine-hole courses showcase dramatic elevation changes, seasonal weather conditions and scenery of such extraordinary beauty it threatens to distract the most focused golfer. Towa will test low handicappers, while offering an enjoyable experience for golfers of all levels. Cost to participate is $150 which includes green fees, lunch and transportation. Club rentals can be arranged for an additional fee.

Hiking
Hiking will be a choose your own adventure trip, and you can enjoy an incredible array of half day or full day trips out of Santa Fe. Historical Taos pueblo and the beautiful art / ski town of Taos are about 70 miles away. Los Alamos and its Bradbury Science Museum (atom bomb built in Los Alamos) are 30 minutes away and the Bandelier National Monument with its Native American history/caves/artifacts are 10 minutes away from there. Santa Fe has its own ski area on edge of town great for hiking, and that time of year the trees on the mountains will be turning color. Please let us know if you would like recommendations for trips for members and their guests before or after meeting.

Membership Information
Please feel free to invite a guest physician when you register for the meeting. After attending Western Vascular Society Annual Meeting they will be eligible to become a member. Check out the join WVS page for all the details!
VENUE INFORMATION

Eldorado – the fabled “City of Gold” – tempted countless explorers and adventurers to seek the riches they believed it beheld. This spirit of discovery lives on at Eldorado Hotel & Spa, where new treasures await. Enjoy the local treasures program that affords you 15% off local shops, restaurants and attractions.

Updated meeting rooms and guest rooms with fireplaces make this four-diamond property a great place to host the 33rd Western Vascular Society Annual Meeting. As part of the tradition of cultural preservation and support, The Eldorado Hotel donates a portion of every room night’s revenue to the Spanish Colonial Arts Society. This registered non-profit organization is on a mission to collect, preserve and display Spanish Colonial art of New Mexico and more, as well as educate the public about its related cultures and living traditions. Writer Mary Austin and artist/writer Frank G. Applegate founded the Spanish Colonial Arts Society (SCAS) in Santa Fe, New Mexico in 1925. Close to shopping, restaurants, museums and historic areas it offers our members all the amenities.

Eldorado Hotel and Spa
309 W San Francisco St.
Santa Fe, NM 87501
1.800.955.4455

Western Vascular Society Room Rate: $209 is valid until August 22 but rooms are limited.

For more details see www.westernvascularsociety.org

TRAVEL

Eldorado Hotel & Spa is only 60 minutes from the Albuquerque International Airport via shuttle or car. The Sandia Shuttle provides transfer service between the Albuquerque International Airport and Eldorado Hotel & Spa with frequent and convenient trips throughout each day. For reservations call 888-775-5696. Car rental is available at the airport. Flights can be arranged from Albuquerque into Santa Fe Municipal Airport landing you 20 minutes from Eldorado Hotel & Spa.

WHAT TO PACK

Weather in Santa Fe in September is average 70 degrees in the day with evenings low to 46 degrees. Some may find the elevation of over 7000 feet a challenge, so prepare to carry a water bottle, bring sunscreen and a hat. Altitude sickness can be avoided by limiting alcohol consumption on your first day, and planning to acclimatize before hiking. Packing is a breeze for this meeting and you will be comfortable in smart casual clothes at both the scientific sessions and receptions. Ties are definitely not required, and in fact discouraged at Western Vascular Society. Hotel restaurants do not have a dress code. Comfortable walking shoes and a light jacket are always a good idea.
REGISTRATION FORM

REGISTRANT INFORMATION  Please print

<table>
<thead>
<tr>
<th>FIRST NAME (as you want to appear on name badge)</th>
<th>LAST NAME</th>
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**EARLY BIRD REGISTRATION FEES**

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<td>• Invited Guest Physician</td>
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<td>• Resident/Fellow</td>
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<td>• Allied Health Professional</td>
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<td>• Medical Student</td>
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**Other Event Activities & Fees**

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<td>Museum Tour</td>
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<td>Cooking Class</td>
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<td>Hot Air Balloon Ride Wednesday</td>
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<td>Children</td>
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**GRAND TOTAL**

For onsite registration, please add $100

**PAYMENT INFORMATION**  Full payment must be received with the registration form via a check or by credit card

- **Check** — payable to Western Vascular Society and mailed to 1411 5th Street, Anacortes, WA 98221
- **Credit Card** — Indicate credit card to be charged and fax to 360-261-6077.

- AmEx  -  MC  -  VISA  -  Discover  NO BALANCE DUES ARE PERMITTED.

**Q U E S T I O N S**

Western Vascular Society
1411 5th St.
Anacortes, WA 98221

Heather Roderick
Telephone: 360-420-6906
Fax: 360-261-6077

**CONFERMATIONS** will be sent to the email addresses on this form

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This document is a registration form for the 33rd Annual Meeting of the Western Vascular Society, held in Santa Fe, NM from Sept. 22–25, 2018. It includes sections for registrant information, early bird registration fees, other event activities and fees, payment information, and questions. The form is designed to collect personal and contact information, along with payment details for the event. The fees include registration for different categories of attendees and additional event activities such as a golf tournament, museum tour, and cooking class. The form also provides contact information for the Western Vascular Society and includes payment instructions, with options for check or credit card payment. The form is signed by Heather Roderick and is ready for submission for the event registration.