Sun Valley Stroke Conference

Keeping Pace with Rapid Changes in Stroke Treatment

January 9-12, 2020

St Luke's®

THE UNIVERSITY OF TENNESSEE HEALTH SCIENCE CENTER

A partnership of St. Luke's Neurosciences and the University of Tennessee Health Science Center

Courtesy of Sun Valley Resort

Welcome to the 2nd Annual Sun Valley Stroke Conference

Welcome to Sun Valley and to Idaho! Our goal in creating this meeting was to provide provocative discussion and informative education in an intimate setting, while also offering world class recreation. In our second year, we have again assembled thought-leaders from across North America in both ischemic and hemorrhagic stroke. The disciplines of Neurology, Neurosurgery, Neuroradiology, History of Medicine, and Cardiology are all represented.

We live in an exciting period for stroke and have witnessed a paradigm shift in the way patients are treated. Yet, it is important to realize how far we have come, and the historical context in which recent advances have been made. The meeting opens Thursday evening with exciting talks from neurology and neurosurgery pioneers, as well as an esteemed historian of medicine. After setting the stage, Friday will focus on real world solutions for patients that don't neatly match the criteria on which many landmark trials have been based. Old debates are rekindled, competing treatment strategies argued, and less common scenarios considered. Saturday will be focused on systems of care, which vary regionally. What works in Manhattan may not apply in Minneapolis, Memphis or Idaho! Assembling teams, stroke center certification, and decreasing time to treatment will be some of the exciting topics discussed. Lastly, stroke care has benefited greatly from technology, and physician engagement is crucial to creating innovation. Our final session Sunday morning is devoted to what advances are coming to fruition and those just over the horizon.

Partnership with industry is also essential for putting on an educational conference such as this, and we are grateful to the sponsors who have graciously supported our venture. Please make sure to visit with them during breakfast and après ski opportunities in order to exchange ideas.

We trust you will take advantage of the free time each day! Sun Valley is known for skiing, but indoor and outdoor family-friendly activities abound at the resort and nearby. Don't miss out on our social programming, including an opening wine and cheese reception, daily après ski, and ice skating!

The meeting format is designed to be interactive; we encourage audience participation with ample time for discussion as well as live polling. Lastly, please make sure to complete evaluations at the end of the meeting to help us make the Third Annual Sun Valley Stroke Conference even better!

Sincerely,

Edward A.M. Duckworth, MD, MS
On Behalf of SVSC Organizing Committee

Intended Audience

- Neurologists
- Neurosurgeons
- Primary care providers
- Emergency physicians
- Hospitalists
- Interventional neurologists
- Interventional neuroradiologists
- EMS providers
- Nurses
- Stroke coordinators

Learning Objectives

- Review the history of treatments for hemorrhagic and ischemic stroke.
- Describe the latest treatment strategies for cerebrovascular disease.
- Identify important aspects of effective stroke systems of care.
- Discuss complex cases involving surgical, endovascular and medical management of stroke.

Conference Check-in

Check-in is located in the Limelight Lobby at the Sun Valley Inn, and will be open **Thursday, January 9, from 1:30-7:30 p.m.** Check-in will also be available outside of Limelight B **every morning from 7-8 a.m. and Friday and Saturday afternoons from 3-4:30 p.m.**

Conference Organizing Committee

Dan Abenroth, MD

Andrei Alexandrov, MD

Anne Alexandrov, APN, PhD

Edward Duckworth, MD, MS

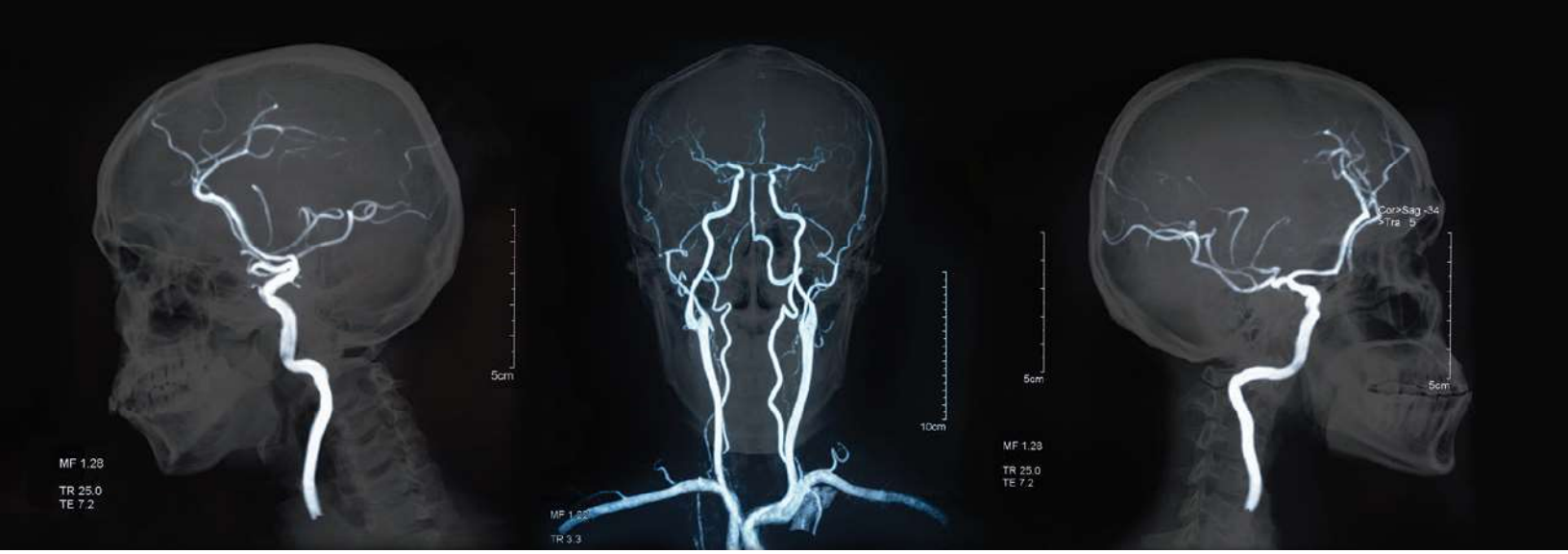
Lucas Elijovich, MD

John Perl II, MD

Special thanks to the invaluable contributions of:

Ben Slee, RN

Aimee Borders



Scientific Program

The program is designed to be dynamic, with short lectures in the morning punctuated by roundtable discussions, followed by case presentations, hot topics, and head to head debates during the evening sessions. The meeting will cover the entire spectrum of stroke care including discussions on the history of stroke, treating difficult patients who don't fit trial criteria, examining stroke systems of care, and exploring emerging technology and treatments for stroke.

All conference meetings will be held in the Limelight B room.

Thursday, January 9, 4-7 p.m.		
The Historical Context of Stroke Treatment *Moderator: Edward Duckworth*		
4-4:05 p.m.	Introduction and Welcome	*Dr. Edward Duckworth*
4:05-4:40 p.m.	History of Cellular Therapy for Stroke	*Dr. Andy Grande*
4:40-5:15 p.m.	A Personal and Historical Account of Aneurysm Treatment	*Dr. Nick Hopkins*
5:15-5:50 p.m.	The Promise of Clot Busting: The History of Intravenous Thrombolysis	*Dr. David Liebeskind*
5:50-6:25 p.m.	A History of Intraarterial Techniques for Thrombectomy	*Dr. Adnan Siddiqui*
6:25-7 p.m.	Becoming Impatient: Historical Accounts of the Self After Stroke	*Dr. Brian Dolan*
7-8 p.m.	**Opening Wine and Cheese Reception Sponsored by Medtronic and Viz.ai**	

Friday, January 10, 7:30-10:30 a.m.

Dealing with Cases That Don't Fit Trial Criteria
Moderator: Andrei Alexandrov

7-7:30 a.m.	Breakfast with Exhibitors	
7:30-7:53 a.m.	Imaging Beyond the Trials in Acute Ischemic Stroke	*Dr. David Liebeskind*
7:53-8:16 a.m.	Resuming Anticoagulation after Intracranial Hemorrhage	*Dr. Brian Jankowitz*
8:16-8:39 a.m.	Innovation in Cardiovascular Disease and Stroke	*Dr. Nick Hopkins*
8:39-9:06 a.m.	**Roundtable Discussion:** What Changes in Ischemic Stroke Treatment Should We Expect in the Next Five Years?	*Dr. Andrei Alexandrov* *Dr. David Liebeskind* *Dr. Adnan Siddiqui*
9:06-9:21 a.m.	Coffee Break	
9:21-9:44 a.m.	Submaximal Angioplasty for Symptomatic Intracranial Atherosclerotic Disease	*Dr. Adnan Siddiqui*
9:44-10:07 a.m.	Extended Time Windows for Acute Reperfusion Therapies	*Dr. Dan Abenroth*
10:07-10:30 a.m.	2020 Stroke Prevention Toolkit	*Dr. David Hinchman*
10:30 a.m.-4 p.m.	*Free Time for Recreation*	

Friday, January 10, 4-7 p.m.

Real World Dilemmas in the Care of the Stroke Patient
Interactive Case Presentations, Hot Topics and Debates
Moderator: Adam Arthur

3-4 p.m.	Après Ski with Exhibitors Sponsored by NeuroLogic	
4-4:30 p.m.	**Head-to-Head Debate:** ADAPT vs. Stentriever as First Line for Thrombectomy	*Dr. Jon Lena vs.* *Dr. Lucas Elijovich*
4:30-4:53 p.m.	**Hot Topic:** Acute Stroke in Pregnancy	*Dr. Anna Irwin*
4:53-5:16 p.m.	**Hot Topic:** Urgent Treatment of Hemorrhagic Stroke	*Dr. Brian Jankowitz*
5:16-5:37 p.m.	Interactive Case: Superior Sagital Sinus Dural Arteriovenous Fistula	*Dr. Edward Duckworth*
5:37-5:58 p.m.	Interactive Case: Imaging Beyond the Trials in Acute Ischemic Stroke	*Dr. David Liebeskind*
5:58-6:19 p.m.	Interactive Case: Interesting Revascularization Case	*Dr. Andrei Alexandrov*
6:19-6:40 p.m.	Interactive Case: Utilization of the Stroke Prevention Toolkit	*Dr. David Hinchman*
6:40-7 p.m.	Interactive Case: AI and Stroke Care	*Dr. Lucas Elijovich*

Saturday, January 11, 7:30-10:30 a.m.

Refining Systems of Care to Adapt to Changing Practice Patterns
Moderator: Dan Abenroth

7-7:30 a.m.	Breakfast with Exhibitors	
7:30-7:53 a.m.	The Current State and Expected Evolution of Mobile Stroke Units	*Dr. J Mocco*
7:53-8:16 a.m.	The Evolving Role of the Stroke Coordinator	*Dr. Anne Alexandrov*
8:16-8:39 a.m.	Anticoagulation Reversal Strategies	*Dr. Katie Vuong*
8:39-9:06 a.m.	**Roundtable Discussion:** Training and Call Coverage for Thrombectomy and Stroke Coverage in General	*Dr. Nick Hopkins* *Dr. Lucas Elijovich* *Dr. John Perl II*
9:06- 9:21 a.m.	Coffee Break	
9:21-9:44 a.m.	Stroke Center Certification: Considerations in Outcomes and Certifying Bodies	*Dr. Dan Abenroth*
9:44-10:07 a.m.	Nationwide Utilization Trends for Endovascular Therapy in Acute Ischemic Stroke	*Dr. J Mocco*
10:07-10:30 a.m.	The Role of Team-Based Neurologic Care in Today's Emerging Health Care Systems	*Dr. Andy Grande*
10:30-4 p.m.	*Free Time for Recreation*	

Saturday, January 11, 4-7 p.m.

Refining Systems for the Best Outcomes
Interactive Case Presentations, Hot Topics and Debates
Moderator: Anne Alexandrov

3-4 p.m.	Après Ski with Exhibitors	
4-4:30 p.m.	**Head-to-Head Debate:** Does Certification Make Any Difference?	*Dr. Andrei Alexandrov* *vs. Dr. J Mocco*
4:30-4:53 p.m.	**Hot Topic:** Post-CVA Cognitive Screening vs. Comprehensive Neuropsychology Evaluation: Which is Most Appropriate for Whom and When?	*Dr. Audie Black*
4:53-5:16 p.m.	**Hot Topic:** Acute Stroke Patients' Perception of What Constitutes High Quality Hospital Stroke Services: Development and Validation of the STROKE Perception Report	*Dr. Anne Alexandrov*
5:16-5:37 p.m.	"Got Van" Dramatically Decreasing Time to Treatment in Rural Ischemic Stroke	*Stephanie Shawver, RN*
5:37-5:58 p.m.	Interactive Case: To Do or Not To Do: That is the Question for Low NIH Patients	*Dr. John Perl II*
5:58-6:19 p.m.	Interactive Case: Team-Based Neurological Care	*Dr. Andy Grande*
6:19-6:40 p.m.	Interactive Case: Stroke Systems of Care	*Dr. Adam Arthur*
6:40-7 p.m.	Interactive Case: Neuroendovascular Stroke Care	*Dr. Jon Lena*
7:15-8:15 p.m.	Social Activity: Ice Skating at the Lodge	

Sunday, January 12, 7:30-10:30 a.m.		
Emerging Technology and Treatments for Ischemic and Hemorrhagic Stroke *Moderator: John Perl II*		
7-7:30 a.m.	Breakfast with Exhibitors	
7:30-7:53 a.m.	Artificial Intelligence for Case Selection	*Dr. Lucas Elijovich*
7:53-8:16 a.m.	Transradial Approach for Neurointervention	*Dr. Edward Duckworth*
8:16-8:39 a.m.	Device Evolution for Thrombectomy	*Dr. Adam Arthur*
8:39-9:06 a.m.	**Roundtable:** Hospital Bypass for Patients with LVO (Rural and Urban Considerations)	*Dr. Adam Arthur* *Dr. Andrei Alexandrov* *Dr. J Mocco* *Peder Humlin-Ahearn, MPSLA* *Steve Blados, MEd, NRP*
9:06-9:21 a.m.	Coffee Break	
9:21-9:44 a.m.	Endovascular Robotics, Virtual or Reality	*Dr. John Perl II*
9:44-10:07 a.m.	Novel Devices for Wide Neck Bifurcation Aneurysms	*Dr. Jon Lena*
10:07-10:30 a.m.	Childhood Stroke and Endovascular Recanalization	*Dr. Raymond Grams*
Adjourn – Enjoy Sun Valley!		

CME Information: This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Utah Medical Association (UMA) through the joint providership of the Ada Canyon Medical Education Consortium and St. Luke's. The Ada Canyon Medical Education Consortium is accredited by the Utah Medical Association to provide continuing medical education for physicians. The Ada Canyon Medical Education Consortium designates this live activity for a maximum of 17 *AMA PRA Category 1 credit(s)™.* Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Claiming CME: You will be able to obtain a total of 17 CME for this conference. In order to get credit for all of the CME offered, please sign in before each session to record your attendance. Sign-in will be located outside of Limelight B in the lobby. There will be a required conference evaluation after the conference. You can access this survey at: surveymonkey.com/r/sunvalleystrokeconference2020

Conference Attire: Mountain casual or ski clothing. Business attire discouraged.

Method of Instruction: This will be a live presentation with oral presentations and interactive discussions. We will be using Poll Everywhere for live audience participation. Download the Poll Everywhere app from the App Store or Play Store or access URL: pollev.com/SVSC or text: SVSC to 22333

Breakfast and Refreshments: Breakfast is offered each day at 7 a.m., and après ski refreshments each afternoon at 3 p.m., both located in Limelight C with the exhibitors.

Conference Social Agenda: It is our goal to not only provide an excellent educational opportunity at the Sun Valley Stroke Conference, but to also offer several recreational and interactive social events throughout the conference.

Planned Social Events

Thursday, January 9
7 p.m. Welcome reception with hors d'oeuvres and hosted bar (in the foyer outside of Limelight B & C)

Friday, January 10
3-4 p.m. Après ski with exhibitors

Saturday, January 11
3-4 p.m. Après ski with exhibitors

7:15-8:15 p.m. Ice skating at the Lodge

Sun Valley Stroke Conference Recreational Activities

There are ample opportunities for fun and adventure in Sun Valley and at the Sun Valley Resort, including downhill skiing/snowboarding, snowshoeing, Nordic skiing, and ice skating. For those of you who don't want to brave the snowy terrain, there are multiple fun activities indoors as well.

There are heated swimming pools at both the Sun Valley Lodge and Sun Valley Inn.

The spa at the Sun Valley Lodge offers an extensive array of treatments for relaxation and rejuvenation.

For a comprehensive list of recreational opportunities, please visit: sunvalley.com/things-to-do

Discounted lift tickets: These can be purchased on the day of skiing from any Sun Valley Resort lift ticket retail outlet with a conference badge or other proof of identification.

Courtesy of Sun Valley Resort

Featured Speakers

Daniel Abenroth, MD is a board-certified vascular neurologist and specializes in the care of stroke, transient ischemic attack, intracranial atherosclerosis, cerebral venous sinus thrombosis and other diseases of cerebral vasculature. He is a neurohospitalist who provides care for the breadth of neurological diseases on an inpatient basis and has specific clinical interest in neurocritical care. He is Co-director of the St. Luke's Health System Stroke Program.

Andrei Alexandrov, MD earned his medical degree in 1989 from the 1st Moscow Medical Institute (Sechenov), and specialized in clinical neurology at the Institute of Neurology, Russian Academy of Medical Sciences in Moscow. He completed his fellowship training in stroke and cerebrovascular ultrasound at the University of Toronto with Dr. John W. Norris and at the University of Texas with Dr. James C. Grotta. He also received mentoring from Drs. Dmitry K. Lunev, Patrick M. Pullicino, and Sandra E. Black. Dr. Alexandrov is listed by U.S. News & World Report among Best Doctors, America's Top Doctors in Neurology, in 2011-2014, and by Castle Connoly in the top 1% of specialists in neurology in 2011-2017.

Anne Alexandrov, PhD is a Professor of both Nursing and Neurology, as well as the Mobile Stroke Unit Chief Nurse Practitioner at the University of Tennessee Health Science Center in Memphis. She is also Professor and Program Director for NET SMART at the Health Outcomes Institute, LLC in Fountain Hills, Arizona. Developed in 2007, NET SMART (Neurovascular Education & Training in Acute Stroke Management & Reperfusion Therapies) is the world's first and only post-graduate fellowship training program for advanced practice nurses (APN) in acute stroke, and Dr. Alexandrov has mentored more than 100 APNs from across the U.S. and internationally in this program.

Adam Arthur, MD, MPH attended the University of Virginia, and after college joined the University of Virginia Department of Neurosurgery, where he did research on aneurysms and cerebral vasospasm. He completed his internship and residency at the University of Utah, where he also completed his master's degree in public health with a focus on clinical trials methodology. After finishing his Neurosurgery residency, he joined the Semmes Murphey Clinic and the University of Tennessee Department of Neurosurgery. During his first two years in Memphis he completed a fellowship in Endovascular and Cerebrovascular Neurosurgery. He is one of the first neurosurgeons in the country to develop a busy practice in both open cerebrovascular surgery and endovascular neurosurgery.

Joseph "Audie" Black, PhD, ABN is a board-certified clinical neuro-psychologist who provides comprehensive cognitive, behavioral and emotional assessments to adults, with a particular emphasis on working with adults age 50 and older. He joined St. Luke's Health System in 2018 to provide outpatient and inpatient evaluations to patients with a wide variety of neurological conditions such as CVA, TBI, brain tumors and neurodegenerative disease. Dr. Black also supports St. Luke's Neurosurgery normal pressure hydrocephalus (NPH) program. He is the former Associate Director of Training for the psychology internship at Allegheny General Hospital in Pittsburgh. He recently completed his term on the Executive Board of Directors for the American Board of Professional Neuropsychology (ABN) and is an examiner for candidates pursuing board certification.

Brian Dolan, PhD is Professor of Medical Humanities and Chair in the Department of Anthropology, History & Social Medicine in the School of Medicine at UCSF. He is Director of the UC Medical Humanities Consortium, linking research and activities among faculty and students in medical centers at UCSF, UC Davis, UC Berkeley and UC Irvine. He is founder and managing editor of the UC Medical Humanities Press, which has published more than 16 books since 2011 and has helped establish an international peer-review publishing community advancing scholarship in the medical humanities.

Edward Duckworth, MD, MS, FAANS is an intracranial-focused neurosurgeon, specializing in the treatment of complex cranial disorders, including the surgical treatment of hemorrhagic and ischemic stroke. He is Director of Neurosurgery for St. Luke's Health System. Dr. Duckworth holds the distinction of being "dual-fellowship trained," having completed fellowship training in open cerebrovascular and cranial base surgery at Northwestern University, and in endovascular neurosurgery/interventional neuroradiology at Semmes-Murphey Neurologic and Spine Institute/ University of Tennessee Health Science Center. He has particular stroke expertise in the treatment of complex aneurysms, and in cerebral revascularization.

Lucas Elijovich, MD, FAHA earned his bachelor's degree in biology from Tufts University and his medical degree from the University of Texas in Galveston. He completed his neurology residency at New York University, where he served as Chief Resident. He pursued advanced interests in cerebrovascular disease, neurocritical care and interventional neuroradiology, completing fellowship training in stroke and neurocritical care at the University of California San Francisco and training with Dr. Alejandro Berenstein, one of the pioneers of interventional neuroradiology, in New York. Dr. Elijovich joined Semmes-Murphey Clinic in 2010 and is an Associate Professor in the Departments of Neurology and Neurosurgery at the University of Tennessee Health Sciences Center. He also serves as Director of Neurocritical and Neurointerventional Surgery for LeBonheur Children's Hospital in the Neurosciences Institute, and as Director of the LeBonheur Vascular Anomalies Center.

Raymond Grams, DO specializes in the treatment of ischemic and hemorrhagic strokes, transient ischemic attack, cerebral venous thrombosis, and intra- and extra-cranial atherosclerotic disease. His clinical interests include cardioembolic sources of stroke, arterial dissection, and other causes of stroke in young people; evaluation for carotid stenting or endarterectomy; and neurosonology. Dr. Grams has been a co-investigator of nine stroke trials and has published and presented original research on the use of perfusion MRI in acute stroke imaging. He was a clinical instructor at the University of Utah and Stroke Medical Director of Dixie Regional Medical Center—Intermountain Healthcare prior to joining St. Luke's, where he now serves as Director of the Neurohospitalist program.

Andrew Grande, MD earned his bachelor's degree in chemistry from St. Olaf College and his medical degree from the University of Minnesota. He completed his neurosurgical training at the Mayfield Clinic and University of Cincinnati and his fellowship in both endovascular and cerebrovascular neurosurgery at the University of Cincinnati. During his residency and continuing into his fellowship, Dr. Grande was involved in stem cell research with Dr. Masato Nakafuku at Cincinnati Children's Hospital. His research focused primarily on reprogramming cells within the cerebral cortex to form neurons following stroke. Dr. Grande joined the University of Minnesota Department of Neurosurgery in 2011. His clinical interests are in treating cerebral vascular diseases, using either open vascular or endovascular techniques. He has specific interests in treating complex aneurysms, moyamoya disease and trigeminal neuralgia. He also directs the Earl Grande, Vel, V. Richard Zerling Stroke, Stem Cell and Neuroimaging Laboratory at the University of Minnesota.

David A. Hinchman, MD, FACC is Medical Director of Quality for St. Luke's Health System's Cardiovascular service line. He is a fellow of the American College of Cardiology and is board certified in cardiovascular disease. He specializes in cardiac prevention, stress testing, hyperlipidemia, anticoagulation and clinical research. Dr. Hinchman earned his medical degree from the University of Colorado School of Medicine. He completed his residency at the University of California, San Francisco and his fellowship at the University of Washington School of Medicine

L. Nelson "Nick" Hopkins, MD, FACS is Distinguished Professor of Neurosurgery and Radiology and Director of the Toshiba Stroke Research Center at the University at Buffalo, State University of New York. He earned his undergraduate degree from Rutgers University and his medical degree cum laude from Albany Medical College. His post-graduate training included a surgical internship at Case Western Reserve, followed by neurology and neurosurgical training at the University of Buffalo. Dr. Hopkins pioneered endovascular neurosurgery and has trained a new generation of neurosurgeon leaders skilled in catheter-based technology for minimally invasive neurosurgery. He has been the principal investigator of several national clinical trials testing catheter-based technologies for the treatment of neurovascular diseases. He is a member of the editorial boards of Neurosurgery and World Neurosurgery and the author of more than 400 publications centered on the prevention and treatment of stroke.

Anna Irwin, MD is board certified in neurology and sleep medicine. Her special interests include cerebrovascular disease, multiple sclerosis and headache disorders. She earned her medical degree from The Ohio State University College of Medicine and completed her residency and fellowship training at the Cleveland Clinic. She has been practicing clinical neurology and sleep medicine at St. Luke's Health System since 2012.

Brian Jankowitz, MD earned his bachelor's degree from the University of Notre Dame and his medical degree from Temple University School of Medicine. He completed his surgical internship, neurosurgical residency and fellowship in cerebrovascular surgery at the University of Pittsburgh Medical Center. He is board certified in neurological surgery and CAST-certified (Committee on Advanced Subspecialty Training) in neuroendovascular surgery. He is Director of the Cerebrovascular Program at the Cooper Neurological Institute and primary investigator for numerous clinical trials in the U.S. Prior to joining Cooper, Dr. Jankowitz was Associate Professor of neurological surgery at the University of Pittsburgh School of Medicine and served as faculty of the UPMC Neurosurgery Department and UPMC Stroke Institute, where he specialized in both open and endovascular neurosurgery.

Jonathan Lena, MD is board certified in neurological surgery and an Assistant Professor in Neurological Surgery at the Medical University of South Carolina. He earned his bachelor's degree in biology from the University of Virginia and his medical degree from Eastern Virginia Medical School. He completed his general surgery internship and neurological surgery residency at the Medical University of South Carolina, where he was Chief Resident and then went on to complete his fellowship in neuroendovascular surgery.

David S. Liebeskind, MD, FAHA, FAAN, FANA is Professor of Neurology at the University of California, Los Angeles (UCLA), where he is Director of Outpatient Stroke and Neurovascular Programs. He is Director of the Neurovascular Imaging Research Core, leading global efforts to advance data science and precision medicine of stroke imaging for prevention, acute therapies and recovery after stroke. He is Director of the UCLA Cerebral Blood Flow Laboratory, Associate Director of the UCLA Stroke Center, and Director of the UCLA Vascular Neurology Residency Program, training the next generation of vascular neurologists and stroke experts.

J Mocco, MD, MS has dedicated his career to improving treatment options for acute stroke patients and advancing stroke systems of care. He serves on the Joint Commission Technical Advisory Panel for thrombectomy capable stroke centers and the AHA/ASA Quality Accreditation Science Committee. He also serves as an international PI for THERAPY and COMPASS, two landmark trials evaluating aspiration thrombectomy for ELVO. Dr. Mocco has published over 400 peer-reviewed papers on stroke care. He is immediate past chair of AANS/CNS CV Section and is a board member of the SNIS.

John Perl II, MD is a board-certified neurointerventional radiologist and Co-director of St. Luke's Health System Stroke Program. He completed his diagnostic radiology residency at the University of Alabama. He completed fellowships in neuro-radiology at the Cleveland Clinic and neurointerventional radiology at the University of Wisconsin. In addition to working at some of the most prestigious facilities in the country, Dr. Perl has been part of extensive research programs and has been published in medical journals including the Journal of Neurotrauma, Radiology, American Journal of Neuroradiology, Journal of Endovascular Surgery and others. He has been a featured presenter and guest lecturer at conferences throughout the U.S., Canada and Europe.

Stephanie Shawver, BSN, RN, SCRN has served as Primary Stroke Program Manager with St. Luke's Health System since 2011. She also moonlights as an Idaho Time-Sensitive Emergency Program state surveyor who evaluates Idaho hospitals for Level 2 and 3 Stroke Center Designation. She holds a nominated volunteer position on the American Stroke Association Western States Affiliates Taskforce.

Adnan Siddiqui, MD, PhD, FAANS, FACS, FAHA is Vice-Chairman and Professor of Neurosurgery and Radiology in the Jacobs School of Medicine & Biomedical Sciences at the University of Buffalo. He earned his medical degree from Aga Khan University in Pakistan and his PhD in neuroscience from the University of Rochester. He completed his neurosurgical residency at Upstate Medical University and his fellowship training in interventional neuroradiology, cerebrovascular surgery and neurocritical care at Thomas Jefferson University in Philadelphia. Dr. Siddiqui has special interest and expertise in the performance of complementary microsurgical, radiosurgical and endovascular techniques for the comprehensive management of cerebrovascular conditions. He has special interests in acute stroke management with intra-arterial thrombolysis, as well as endovascular and microsurgical management of extracranial and intracranial vascular occlusive disease. Dr. Siddiqui serves as Director of Neuroendovascular Research, Kaleida Health Stroke Service as well as the University at Buffalo Canon Stroke and Vascular Research Center. He also serves as the Chief Medical Officer for the Jacobs Institute. He is a reviewer for Stroke, Neurosurgery, Journal of Neurosurgery and Journal of NeuroInterventional Surgery as well as many others.

Katie Vuong, PharmD is a board-certified pharmacotherapy specialist and a Director of Clinical Pharmacy Services for St. Luke's Health System. She serves as Co-chair of St. Luke's Health System Thrombology Committee and a member of the Pharmacy & Therapeutics Committee. Dr. Vuong earned her doctorate degree from Idaho State University and completed her pharmacy practice residency at St. Luke's Boise Medical Center. She previously worked as a clinical pharmacist in the cardiology and critical care areas.

Speaker Disclosures

A.) Grant/Research Support B.) Consultant C.) Stockholder D.) Speakers Bureau E.) Other

NAME:	DISCLOSURE:
Alexandrov	**D.)** Genentech
Arthur	**A.)** Siemens, Balt, Microvention, Stryker; **B.)** Siemens, Styker, Balt, Cerenovus, Microvention, Medtronic, Penumbra; **C.)** Vascular Simulation, Synchron, Cerebrotech, Magneto, Bendit, Endostream, Marblehead, Scientia, Serenity, Triad Medical, Neurogami
Elijovich	**B.)** Balt USA, Cerenovus, Codman Neuro, Medtronic/Covidien, Microvention, Penumbra, Scientia Vascular, Seimens-Healthineers, Stryker Neurovascular
Grande	**D.)** Medtronic, Integra
Hopkins	**A.)** Canon Medical; **C.)** BSCI, Ocular, Silk Road, Ostial, Cerebrotech, Imperative Care, Nxtgen, Endostream, Vastrax
Mocco	**A.)** Medtronic, Microvention, Penumbra, Stryker; **B.)** Cerebrotech, Endostream, Imperative Care, Rebound Therapeutics, Viseon, Vastrax, Corindus, Synchron Investor; **C.)** Cerebrotech, Endostream, Imperative Care, Rebound Therapeutics, Viseon, Blink TBI, Cardinal Consulting, Neurvana, NTI, Serenity, Corindus, Synchron Investor, Echovate, RIST, Spinaker
Siddiqui	**A.)** NIH; **B.)** Amnis Therapeutics, Boston Scientific, Canon Medical Systems USA Inc., Cerebrotech Medical Systems Inc., Cerenovus, Corindus Inc.,Endostream Medical Ltd., Guidepoint Global Consulting, Imperatie Care, Integra LifeSciences Corp., Medtronic, Microvention, Northwest University-DSMB Chair for HEAT Trial, Penumbra, Q'Apel Medical Inc., Rapid Medical, Rebound Therapeutics Corp., Serenity Medical Inc., Silk Road Medical, StimMed, Stryker, Three Rivers Medical, Inc., VasSol, W.L. Gore & Associates; **C.)** Amnis Therapeutics, Apama Medical, Blink TBI, Buffalo Technology Partners Inc., Cardinal Consultants, Cerebrotech Medical Systems, Inc. Cognition Medical, Endostream Medical Ltd., Imperative Care, International Medical Distribution Partners, Neurovascular Diagnostics Inc., Q'Apel Medical Inc, StimMed, Synchron, Three Rivers Medical Inc., Vision Spine Inc; **E.)** Principal investigator/ steering comment of the following trials: Cerenovus NAPA and ARISE II; Medtronic SWIFT PRIME and SWIFT DIRECT; MicroVention FRED & CONFIDENCE, MUSC POSITIVE: Penumbra 3D Separator, COMPASS, and INVEST.

Commercial Support and Exhibitors

The Sun Valley Stroke Conference committee gratefully acknowledges the following companies for their generous support of this conference.

Platinum Exhibitors

Siemens Healthineers
Medtronic

Exhibitors

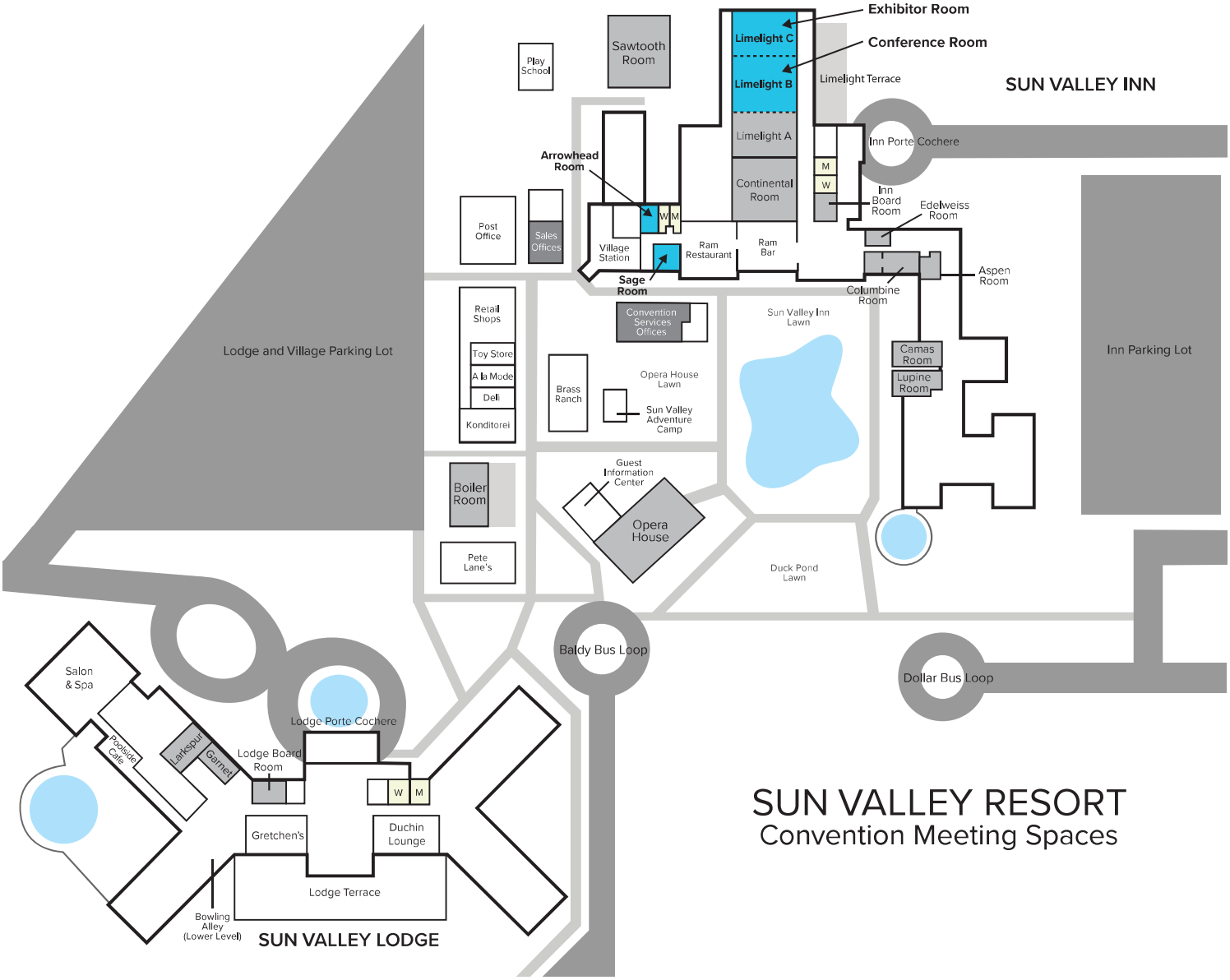
BK Ultrasound
BrainLab
Bristol-Myers Squibb
Cerenovus Neurovascular
Chiesi
CSL Behring
DAY Surgical
Genentech
Integra Life
iSchemaView
Janssen
Medtronic Neurovascular
Microvention
Penumbra
Pfizer
Portola Pharmaceuticals
Q'Apel Medical
Stryker CMF
Stryker Neurovascular
Sutter
Viz.ai

Educational Grants

The Sun Valley Stroke Conference committee gratefully acknowledges the following companies for their educational support of this conference.

State of Idaho EMS TSE
Chiesi USA Inc.
Medtronic

Conference and Exhibitor Floor Plan



Sun Valley Stroke Conference

Keeping Pace with Rapid Changes in Stroke Treatment

January 9-12, 2020

PRESENTATION _____ **DATE** _____

NOTES

QUESTIONS

Sun Valley Stroke Conference

Keeping Pace with Rapid Changes in Stroke Treatment

January 9-12, 2020

PRESENTATION _____ **DATE** _____

NOTES

QUESTIONS

Sun Valley Stroke Conference

Keeping Pace with Rapid Changes in Stroke Treatment

January 9-12, 2020

PRESENTATION _____ **DATE** _____

NOTES

QUESTIONS

St. Luke's Health System Stroke Program

St. Luke's Comprehensive Stroke System of Care encompasses our nine hospitals. Three of our sites are Joint Commission Primary Stroke Centers and our main Boise hospital is designated as a Level 1 Stroke Center with the Idaho TSE Program.

St. Luke's has a robust neuroendovascular program led by three fellowship-trained neuroendovascular specialists, including a dual-fellowship-trained vascular neurosurgeon. St. Luke's was the first in the country to acquire the Zeiss Kinevo robotic operating microscope, which utilizes cutting-edge augmented reality and fluorescence technology for open cerebrovascular surgical procedures. In 2019, St. Luke's opened a new Siemens advanced biplane hybrid neurovascular operating suite at our Boise hospital and a biplane neuroendovascular suite at our Meridian hospital.

Two board-certified vascular neurologists provide both emergency department and inpatient care at our Boise and Meridian sites. St. Luke's has standardized the emergent evaluation of transient ischemic and stroke patients, including implementing protocols for the work-up, imaging and destination of these patients at all hospitals. St. Luke's has two longstanding TIA observation centers as part of our Treasure Valley Emergency Departments, where rapid evaluation and treatment take place. In addition to coordinating care across our multiple sites, we also have strong collaborative working relationships with other hospitals in our region and work closely with EMS to improve transport times from area facilities.

Please join us for the 3rd Annual Sun Valley Stroke Conference, March 11-14, 2021