

Advances in Vascular Imaging and Diagnosis

## Friday and Saturday, November 18-19, 2016



# **th** Symposium & Workshops

on Management and Clinical Issues

Symposium Chairs: George L. Berdejo, BA, RVT, FSVU Natalie A. Marks, MD, RPVI, RVT

Symposium Co-Chairmen: Nicos Labropoulos, BSc (Med), PhD, DIC, RVT Laurence Needleman, MD Frank J. Veith, MD

Honorary Chair: **Anne M. Jones, RN, BSN, RVT, RDMS, FSVU** 

Sponsored by:



# () Hilton

# www.AVIDsymposium.org



# 27<sup>™</sup> SYMPOSIUM AND WORKSHOPS ON MANAGEMENT AND CLINICAL ISSUES

FRIDAY AND SATURDAY NOVEMBER 18 – 19, 2016

#### SYMPOSIUM CHAIRS

George L. Berdejo, BA, RVT, FSVU Natalie A. Marks, MD, RPVI, RVT

#### SYMPOSIUM CO-CHAIRS

Nicos Labropoulos, BSc (Med), PhD, DIC, RVT Laurence Needleman, MD Frank J. Veith, MD

## HONORARY CHAIR

Anne M. Jones, RN, BSN, RVT, RDMS, FSVU, FSDMS

SYMPOSIUM MANAGING DIRECTOR Jacqueline M. Simpson, BBA

SYMPOSIUM ASSOCIATE DIRECTOR Steven J. Feld, MSW

#### WORKSHOP COORDINATORS

Fernando Amador, RVT Joshua Cruz, BS, RVT Kelvin Portalatin, AA, RVT

CENTER FOR CONTINUING MEDICAL EDUCATION Steven M. Kawczak, PhD

# CONTENTS

General Information	4
Accreditation Statement	5
Faculty Disclosure	5
Program Information	7–14
Faculty Listing	
Save the Date	16
Registration Form	17–18

#### NEEDS ASSESSMENT

Peripheral Vascular Disease (PVD) in the U.S. affects approximately 8 million to 12 million patients a year; some experts in the field believe this may be underestimated. The disease is associated with significant cardiovascular morbidity and mortality, with a high rate of fatal and non-fatal cardiovascular events such as myocardial infarction, stroke, renal failure, limb amputations, abdominal aortic aneurysms, pulmonary embolus and progressive ischemic end-organ dysfunction.

Since atherosclerosis is the most common cause of PVD, patients with PVD have a rate of cardiovascular mortality that is 3 to 4 times higher than agematched controls. The cardiac mortality in symptomatic PVD is estimated to be 50% at 10 years. The reduction in quality of life from global vasculopathy in many patients can thus be significant.

Prompt and accurate diagnosis of these disease processes is of utmost importance. The AVIDsymposium is designed to address this need by providing the vascular community with continuing medical education in this area. The latest pharmacologic, radiologic, surgical and endovascular techniques and technologies will be presented, along with discussions of when these treatments are justified and indicated and when they are not. Updates on clinical trials and opportunities for dialogue with experts in the field provide insight along with the latest data on the results of the various diagnostic and treatment modalities.

#### EDUCATIONAL OBJECTIVES

Advances in Vascular Imaging and Diagnosis 27th Symposium and Workshops on Management and Clinical Issues is an intensive two-day course designed to provide a comprehensive update on the diagnosis of vascular disease using real time B-mode imaging, color and spectral Doppler and other noninvasive techniques. The course will also address important issues in the area of Vascular Laboratory management, vascular ultrasound education, reimbursement and laboratory accreditation. An internationally renowned faculty has been assembled to provide the latest in their respective areas of expertise. This will be accomplished via didactic lectures and will be enhanced by ample time for faculty panel discussions designed to provide interaction with the audience. In addition, live scanning demonstrations and hands-on workshops will be supervised by known experts in their fields and will utilize leading edge equipment.

Following this continuing medical education activity, the participants will:

- Describe recent developments in vascular ultrasound technology
- Incorporate the Vascular Laboratory into the management of patients with vascular disease
- Identify and compare noninvasive tests that are available to aid in the diagnosis of vascular disease
- Identify current therapy and their roles for the effective management of peripheral arterial/venous disease; and carotid artery disease
- Utilize duplex ultrasound prior to, during and after endovascular procedures
   Apply issues regarding Vascular Laboratory management, reimbursement and accreditation to their practice.

#### TARGET AUDIENCE

This course is intended for:

- Vascular Technologists
- Sonographers
- Vascular Surgeons
- Radiologists
- Neurologists
- Vascular Nurses
- Vascular Interventionalists
- Medical and Ultrasound Students
   and other physicians and allied health professionals with an interest in the
- and other physicians and allied health professionals with an interest in the diagnosis and treatment of vascular disease.

#### ONLINE ACCESS TO ABSTRACTS

Presentation slides will be used as abstracts and will be available on the program page of the AVIDsymposium web site at www.AVIDsymposium.org after the meeting. Abstracts will be available on the web site for one full year.

#### ACCREDITATION STATEMENT

The Cleveland Clinic Foundation Center for Continuing Education is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

The Cleveland Clinic Foundation Center for Continuing Education designates this live activity for a maximum of 17.75 *AMA PRA Category 1 Credits*<sup>TM</sup>. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Participants claiming CME credit from this activity may submit the credit hours to the American Osteopathic Association for Category 2 credit.

#### FOR ARDMS AND CCI CREDENTIALED VASCULAR TECHNOLOGISTS AND SONOGRAPHERS

For Vascular Technologists and Sonographers, Continuing Medical Education credit hours are available on an hour-for-hour basis and may be used to fulfill the continuing medical education requirements necessary to retain certification with the American Registry for Diagnostic Medical Sonography (ARDMS) <sup>1</sup> and Cardiovascular Credentialing International (CCI) <sup>2</sup> or for accreditation with the Intersocietal Accreditation Commission (IAC).

- 1. http://www.ardms.org/registrant\_resources/cme\_general\_information/
- cme\_general\_information
- 2. http://www.cci-online.org/content/ceu-providers

#### CME CERTIFICATES AND COURSE EVALUATION FORMS

CME certificates will be available online at www.AVIDsymposium.org. An e-mail with a unique password and instructions on how to obtain the certificate and complete a brief, optional course evaluation will be sent to all registered attendees after the meeting. The e-mail will be sent to the e-mail address that was used to register the attendee. **Please note that CME Certificates must be claimed by February 28, 2017.** 

#### FACULTY DISCLOSURE

The Cleveland Clinic Foundation Center for Continuing Education has implemented a policy to comply with the current Accreditation Council for Continuing Medical Education Standards for Commercial Support requiring resolution of all faculty conflicts of interest. Faculty declaring a relevant commercial interest will be identified in the activity syllabus.

#### ADA STATEMENT

The Cleveland Clinic Foundation Center for Continuing Education complies with the legal requirements of the Americans with Disability Act. If any participant of the AVIDsymposium requires special assistance, please send written request at least one month prior to the activity to admin@ AVIDsymposium.org, or by fax to (845) 368-2324.

# HOTEL AND TRAVEL

A block of rooms has been reserved at the conference rate of \$399 plus taxes per night. This rate is available until the block is filled or until October 9, 2016. *Please request the VEITH rate when reserving your accommodations.* 

#### New York Hilton-Midtown (Symposium Site)

1335 Avenue of the Americas New York, NY 10019 (212) 586-7000 or 1-800-HILTONS (toll free U.S. only)

#### American Express Global Business Travel at The Cleveland Clinic

- Phone: (800) 955-6111, prompt #5 (U.S. toll free) (216) 444-2564 (U.S. and International)
- Fax: (623) 748-4341
- E-mail: Diane.M.Geneva@aexp.com

# SOCIAL EVENTS

#### FIRST HAND TICKETS

The love of live entertainment is what drives us. Specializing in hard to find, and sold out events - our mission is to get everyone a great seat. With a seasoned staff, we guarantee to exceed your expectations. Most importantly we ensure a safe and friendly transaction. At **First Hand Tickets** we are proud to be the leading Ticket Agency in New York focusing in all Sports, Theater and Concert events around the world. From single tickets to large groups, we will accommodate your needs with professionalism and attention to detail. Experience a new level of entertainment with First Hand Tickets.

For more information or to arrange your social events while at AVIDsymposium, please contact: Warren Schreiber at wschreiber@firsthandtickets.com Zach Schreiber at zschreiber@firsthandtickets.com, Phone: 516-376-8092 or (866) 375-7591

# FRIDAY, NOVEMBER 18, 2016

7 50		0.0	n
7:50	_	8:0	U

Welcome And Opening Remarks Navigating The Meeting And Optimizing Your Experience

George L. Berdejo, BA, RVT Natalie A. Marks, MD, RPVI, RVT

SESSION 1

#### CASE-BASED LEARNING

During this session, the practice of clinical vascular sonography and its relationship to patient management will be highlighted and stressed by experts. This session will cover patient-centered care, time efficiency and "complex disease patterns in difficult" vascular disease patients. This will be an excellent learning opportunity facilitated by the presentation of pertinent clinical cases to set the stage for specific questions related to imaging and management.

#### Moderator: George L. Berdejo, BA, RVT

8:00 - 8:12	Lower Extremity Arterial George L. Berdejo, BA, RVT
8:12 - 8:24	Lower Extremity Venous Anne Marie Kupinski, PhD, RVT
8:24 - 8:36	Cerebrovascular David M. Williams, MS, RDCS, RVT
8:36 - 8:48	Hemodialysis Access Steven J. Knight, BSc
8:48 — 9:00	Abdominal Imaging Mani Montazemi, RDMS
9:00 - 9:15	Panel Discussion
9:15 - 9:35	Break – Visit Exhibits (2nd Floor)

SESSION 2

## VENOUS: THROMBO-EMBOLIC DISEASE

#### Moderator: Mark A. Oliver, MD, RPVI, RVT

9:35 - 9:45	Use Of D-Dimer And Ultrasound For DVT Evaluation <i>John Blebea, MD, MBA</i>
9:45 — 9:55	Calf Vein Imaging: Always, Never, It Depends: What Do The Society Guidelines And Standards Recommend And My Own Philosophy <i>Laurence Needleman</i> , <i>MD</i>
9:5510:05	Management Of Calf Vein Thrombosis After Venous Interventional Procedures Neil M. Khilnani, MD
10:05 10:15	Isolated Soleal And Gastrocnemius Vein Thrombosis Clifford M. Sales, MD, MBA
10:15 10:25	Duplex US Follow-Up Of DVT: How And Why, When Should And Should Not Do It <i>R. Eugene Zierler, MD, RPVI</i>
10:25 10:40	Panel Discussion
10:40 10:50	Break - Visit Exhibits (2nd Floor) Transition to Workshops (Americas Hall 2, 3 <sup>rd</sup> Floor)

#### Friday Session 3

#### SESSION 3 WORKSHOP ROTATION 1

10:50 12:00	
ROOM 1	<b>5.1 Color Optimization</b> <i>Frank Miele, MSEE</i>
	Color Doppler has some similarities to spectral Doppler, some similarities to B-mode imaging, and some unique characteristics. As such, optimizing color and understanding color artifacts is somewhat different than understanding imaging or spectral Doppler. In this lecture (workshop) you will be shown color situations and then asked how to best improve the image or eliminate the artifact(s).
<b>R00M 2</b>	<b>Quality Matters – Manage It Well</b> Rick Dubin, AAS-DMS, RVT, RDMS
	This lecture/workshop will discuss basic and advanced setup of presets for Venous, Arterial and Carotid Duplex examinations. What are the common B-Mode, Spectral and Color Doppler and basic dynamic optimization parameters and how to quickly adjust them for maximum performance. The setup for more advanced needs – Visceral, Dialysis Access, Transcranial Doppler Duplex and EVAR Duplex will also be covered.
R00M 3	<b>Cardiac Effects</b> David M. Williams, MS, RDCS, RVT
	Steven J. Knight, BSc The effect of cardiac pathologies on flow patterns in the venous and arterial circulations and their impact of the peripheral duplex examination and interpretation will be discussed. This will be a case study lecture/workshop.
MURRAY HILL SUITE	<b>Principles Of Duplex Diagnosis</b> Laurence Needleman, MD Richard C. Pennell, MD
	This workshop will discuss the step-by-step protocol for interpreting the vascular ultrasound study with attention to potential pitfalls in a variety of basic and difficult vascular cases.
ROOM 4	<b>The Writer's "Block"</b> (10-Minute Presentations And 24-Minute Discussion) <i>Moderator: Terence N. Needham, RVT</i>
	5.1 The Process: From Concept To Final Product George L. Berdejo, BA, RVT
	5.2 The Abstract And Manuscript Anne Marie Kupinski, PhD, RVT
	5.3 An Analysis Of The 2016 SVU Submissions Terence N. Needham, RVT
	Discussion
R00M 5	<b>Ergonomics</b> <i>Matthew Hernandez, B.Sc, DPT, CSCS</i>
	Work postures are the one solution over which sonographers have the most control. Regardless of the work schedule or the work station equipment, if sonographers fail to make changes in how they perform exams, they will continue to be at risk for occupational

	injuries. This workshop will provide practical solutions and advice for maximizing your ergonomic experience in order to reduce the long-term negative effects of WRMSDs.
12:00-12:10	Pick Up Lunch In South Corridor Exhibit Area (2nd Floor) and Return to Murray Hill Suites for Luncheon Program.

#### SESSION 4

## LUNCHEON PROGRAM: VENOUS - ILIO-FEMORAL VENOUS DISEASE

#### Moderators: George L. Berdejo, BA, RVT Nicos Labropoulos, BSc (Med), PhD, DIC, RVT

12:10 12:19	Presentation And Clinical Indications/Manifestations For Evaluating Pelvic Congestion Mark H. Meissner, MD
12:20 12:29	Technical Protocol And Tips For Evaluating Pelvic Pathologies Nicos Labropoulos, BSc (Med), PhD, DIC, RVT
12:30 12:39	IVUS For Iliac Vein Compression Paul J. Gagne, MD
12:40 -12:49	Duplex Ultrasound For Iliofemoral Venous Obstruction And Follow-Up After Stenting Michael R. Jaff, DO
12:49 - 1:00 1:00 - 1:20	Panel Discussion Break – Visit Exhibits (2nd Floor)

SESSION 5

ARTERIAL Moderator: Natalia

Moderator:	Natalie A. Marks, MD, RPVI, RVT
1:20 - 1:32	A Discussion Of Arterial Doppler Waveforms: The Confusion Continues <i>Steven J. Knight, BSc</i>
1:32 — 1:44	Characterization Of Tibial Velocities By Duplex Ultrasound In Severe Peripheral Arterial Disease And Controls <i>Gregory L. Moneta, MD</i>
1:44 – 1:56	Value Of Ultrasound In The Planning, Access And Control Of Angioplasty Above And Below The Knee <i>Natalie A. Marks, MD, RPVI, RVT</i>
1:56 - 2:08	Criteria For Duplex Follow-Up Of Lower Extremity Endovascular Interventions <i>R. Eugene Zierler, MD, RPVI</i>

SESSION 6

## PRACTICE ENHANCEMENTS I: ISSUES RELATED TO EDUCATION, PRODUCTIVITY AND QUALITY

Moderator:	George L. Berdejo, BA, RVT
2:08 - 2:20	Development Of A Duplex Ultrasound Simulator For Training And Assessment <i>R. Eugene Zierler, MD, RPVI</i>
2:20 - 2:32	The Ergonomically Correct Examination Room Matthew P. Hernandez, B.Sc, DPT, CSCS
2:32 — 2:34	The New Paradigm For Understanding And Teaching Sonographic Principles Required By The Massive Post-Processing In Contemporary Sonographic Instruments <i>Frederick Kremkau, PhD</i>

#### FRIDAY/SATURDAY SESSIONS 6-9

2:34 - 2:56	Moving The Lab From Paper To Digital Josh D. Lee, BS
2:56 - 3:15	Panel Discussion - Combined Sessions 5 And 6
3:15 - 3:45	Break - Visit Exhibits (2nd Floor)

#### SESSION 7 TEST YOUR VENOUS KNOWLEDGE

#### Moderator: Nicos Labropoulos, BSc (MED), PhD, DIC, RVT

3:45 - 3:54	Anatomic Relations In The Thoracic Outlet
	David L. Gillespie, MD
3:54 - 4:03	Venous Thrombosis Facts
	Mark H. Meissner, MD
4:03 - 4:12	Is It Or Is It Not What Appears To Be
	Steve Elias, MD
4:12 - 4:21	How Well Do You Know The Pelvic Veins
	Antonios P. Gasparis, MD
4:21 - 4:30	Venous Images: What Is The Correct Answer
	Nicos Labropoulos, BSc (Med), PhD, DIC, RVT
4:30 - 4:39	How Well Do You Know The Central Veins
	Luis R. Leon, MD, RVT
4:39 - 4:48	Get The Clinical Picture?
	Angela Kokkosis, MD, RPVI
4:48 - 4:57	What Kind Of Swelling Is This
	Thomas S. Maldonado, MD
4:57 - 5:06	Extraluminal Pathology
	Apostolos K. Tassiopoulos, MD
5:06 - 5:25	Panel Discussion
5:25 - 5:30	Summary Of The Day
	· · ·

# SATURDAY, NOVEMBER 19, 2016

#### SESSION 8 PRINCIPLES TUNE-UP: HOW SHARP ARE YOU -PART I

#### Moderator: Joshua Cruz, BS, RVT

7:00 - 7:55	Principles Tune-Up
	Frederick Kremkau, PhD

SESSION 9

## MORE ON VENOUS: CHRONIC VENOUS DISEASE

Moderator:	Nicos Labropoulos, BSc (Med), PhD, DIC, RVT
7:55 - 8:00	Introduction To The Day George L. Berdejo, BA, RVT
8:00 - 8:10	The Vernacular Of Chronic Venous Disease: From The Presentation To The Diagnostic Workup To Follow-Up Nicos Labropoulos, BSc (Med), PhD, DIC, RVT
8:10 - 8:20	The Physical Examination Of The CVI Patient Guides The Ultrasound Examination Natalie A. Marks, MD, RPVI, RVT
8:20 - 8:30	Simplifying Venous Reflux Studies: What I Really Want To Know <i>Richard C. Pennell, MD</i>
8:30 - 8:40	Non-Thermal Saphenous Vein Ablation: The Role For Duplex Ultrasound <i>Michael J. Singh, MD</i>

#### SATURDAY SESSIONS 9–11

8:40 - 8:50	The Argument Against Routine Duplex Ultrasound After Truncal Ablation: An Evidence-Based Cost-
	Benefit Analysis
	Thomas F. O'Donnell, Jr., MD
8:50 - 9:00	Panel Discussion
9:00 - 9:15	Break – Visit Exhibits (2nd Floor)

SESSION 10

#### THE CURRENT HEALTH CARE ENVIRONMENT EVOLVES: REIMBURSEMENT; IMPACT OF OBAMACARE (ACA), ACOs, ETC. AND THE IMPACT ON VASCULAR ULTRASOUND

#### Moderator: Anne M. Jones, RN, BSN, RVT, RDMS

9:15 – 9:24	Critical Issues For The Vascular Ultrasound Professional And Introduction To The Session Anne M. Jones, RN, BSN, RVT, RDMS
9:24 - 9:33	CMS Consolidation Of APCs: The Good, The Bad And The Ugly <i>Robert M. Zwolak, MD, PhD</i>
9:33 - 9:42	Major Changes Impacting Vascular Lab Reimbursement <i>Sean P. Roddy, MD</i>
9:42 — 9:51	IAC-Vascular: What The ACCs Departure Forebodes And Other Updates Laurence Needleman, MD
9:51 –10:00	The "New" ARDMS – What Does It Mean To You As A Physician And/Or Sonographer <i>R. Eugene Zierler, MD, RPVI</i>

#### SESSION 11

## PRACTICE ENHANCEMENTS II

Moderators.	: George L. Berdejo, BA, RVT Anne M. Jones, RN, BSN, RVT, RDMS
10:00 10:09	The CCI Advanced Cardiac Sonographer Credential: Implications For Vascular Ultrasound Professional Anne M. Jones, RN, BSN, RVT, RDMS
10:09 —10:18	A Single Laboratory's Experience With Task Analysis: Variances Between National Benchmarks And Local Practices <i>Richard C. Pennell, MD</i>
10:18 10:27	Focus On Quality Assurance And Appropriate Use Criteria Bettina McAlister, RVT
10:27 –10:36	What Is The Duty, If Any Of The Sonography Professional To Report Unethical/Routinely Inaccurate Or Overuse Of Procedures: Why It Does Not Happen And What To Do If Such Reporting Does No Good John Blebea, MD, MBA
10:36 10:50	Panel Discussion – Combined Sessions 10 And 11
10:50	Transition to Workshops (2nd Floor)

#### **SATURDAY** SESSIONS 12–14

#### SESSION 12 WORKSHOP ROTATION 2

11:00 -12:00	
MURRAY HILL SUITE	1. Great Vibrations Or Artifact And Am I Moving In The Right Direction: Challenging And Unusual Cases Frank Miele, MSEE
	IMAGING ESSENTIALS - GUIDANCE FROM THE GUIDELINES AND STANDARDS: PROTOCOLS IN VASCULAR IMAGING
	These workshop sessions will instruct practitioners on techniques of assessment and imaging in a variety of common and uncommon disease states. In addition, this practical session will discuss workflow and quality that you can incorporate into your lab when you return home.
REGENT PARLOR	2. Cerebrovascular Ultrasound Natalie A. Marks, MD, RPVI, RVT
MADISON SUITE	<b>3. Upper Extremity Vein Imaging</b> William N. Del Valle, RVT Fernando Amador, RVT
SUTTON PARLOR CENTER	<b>4. The Hemodialysis Access Examination</b> Anne Marie Kupinski, PhD, RVT
NASSAU SUITE WEST	5. The Mesenteric Evaluation Mani Montazemi, RDMS
NASSAU SUITE EAST	6. The Reflux Examination Joshua Cruz, BS, RVT
SUTTON PARLOR SOUTH	7. The Kidney And Renal Artery Examination Robert De Jong, RDMS, RVT
12:00 12:10	Pick Up Lunch In South Corridor Exhibit Area (2nd Floor) and Return to Murray Hill Suites for Luncheon Program.

#### SESSION 13

#### LUNCHEON PROGRAM: PRINCIPLES TUNE-UP: HOW SHARP ARE YOU – PART II

Moderators:	<sup>-</sup> Joshua Cruz, BS, RVT George L. Berdejo, BA, RVT
12:10 - 1:00	Principles Tune-Up II: How Sharp Are You Frederick Kremkau, PhD
1:00 - 1:10	Break – Visit Exhibits (2nd Floor) Transition to Workshops (2nd Floor)

SESSION 14 WORKSHOP ROTATION 3

1:10 - 2:10	
MURRAY HILL SUITE	1. Interpretation Of Vascular Studies: When It Does Not Make Sense: Putting The Pieces Together Laurence Needleman, MD R. Eugune Zierler, MD, RPVI
	IMAGING ESSENTIALS - GUIDANCE FROM THE GUIDELINES AND STANDARDS: PROTOCOLS IN VASCULAR IMAGING
	These workshop sessions will instruct practitioners on techniques of assessment and imaging in a variety of common and uncommon disease states. In addition, this practical session will discuss workflow and quality that you can incorporate into your lab when you return home.

## SATURDAY SESSIONS 14–17

REGENT PARLOR	<b>2. The Carotid Duplex Examination</b> Steven J. Knight, BSc Kelvin Portalatin, AA, RVT
MADISON SUITE	<b>3. Upper Extremity Vein Imaging</b> <i>Terence N. Needham, RVT</i> <i>Josh D. Lee, BS</i>
SUTTON PARLOR CENTER	<b>4. The Hemodialysis Access Examination</b> Anne Marie Kupinski, PhD, RVT Bettina McAlister, RVT
NASSAU SUITE WEST	<b>5. The Mesenteric Evaluation</b> Mani Montazemi, RDMS
NASSAU SUITE EAST	6. The Reflux Examination Joshua Cruz, BS, RVT
SUTTON PARLOR SOUTH	7. The Kidney And Renal Artery Examination Robert De Jong, RDMS, RVT
2:10 - 2:15	Transition to Plenary Sessions (Murray Hill Suites, 2nd Floor)

#### SESSION 15 CURVEBALLS AND CONTROVERSIES

Moderator:	George L. Berdejo, BA, RVT
2:15 – 2:24	Medial Wall Calcinosis Development And Accurate Blood Flow Measurement: When To Start Relying Solely On Duplex For Flow Assessment David M. Williams, MS, RDCS, RVT
2:24 - 2:33	Point-Of-Care Ultrasound And The Vascular Lab R. Eugene Zierler, MD, RPVI
2:33 - 2:42	Cardiovascular Risk Assessment In The Vascular Laboratory Sheila N. Blumberg, MD
2:42 – 2:51	Improving Visualization Of Needles (And Vessels) For Duplex Guided Interventions In Large And Small Vessel Access Frank Miele, MSEE

#### SESSION 16 ABDOMINAL

Moderator:	George L. Berdejo, BA, RVT
2:51 - 3:00	5 Top Tips On Renal Artery Imaging Robert De Jong, RDMS, RVT
3:00 - 3:09	5 Top Tips On Liver And TIPS Evaluation Mani Monazemi, RDMS
3:09 — 3:18	Characterization Of Endoleak, Especially Type 2 Endoleak By Duplex Ultrasound Nicos Labropoulos, BSc (Med), PhD, DIC, RVT
3:18 - 3:30	Panel Discussion – Combined Sessions 15 And 16
3:30 - 3:42	Break - Visit Exhibits (2nd Floor)

#### SESSION 17 MISCELLANEOUS TOPICS IN VASCULAR ULTRASOUND

Moderator:	George L. Berdejo, BA, RVT
3:42 - 3:54	Evaluation Of The Aortic Arch Vessels David M. Williams, MS, RDCS, RVT
3:54 - 4:06	Hemodialysis Access Evaluation Flow Velocity And Use Of Volume Flow Measurements Anne Marie Kupinski, PhD, RVT

# **Saturday** SESSIONS 17—18

4:06 - 4:18	Steal Syndrome Following Dialysis Access Creation:
	Expected Duplex Findings Before And After Intervention
	Michael J. Singh, MD
4:18 - 4:30	The Value Of Ultrasound Screening Of Femoral And
	Carotid Arteries To Predict Atherosclerotic Risk And
	What To Do About It
	Andrew N. Nicolaides, MS

#### SESSION 18 CEREBROVASCULAR

# Moderator: Laurence Needleman, MD

4:30 - 4:40	Update On The IAC Carotid Criteria Project: What Is It And Is This Any Closer To Reality Laurence Needleman, MD
4:40 - 4:50	One Lab's Quest For The Optimal Carotid Duplex Criteria: Challenges Faced Adapting The Consensus And Other Criteria In Search Of "The Holy Grail" <i>Richard C. Pennell, MD</i>
4:50 - 5:00	When Duplex Ultrasound Alone Is Not Enough Prior To Carotid Endarterectomy <i>Glenn M. LaMuraglia, MD</i>
5:00 - 5:10	Clinical Significance Of Duplex Detected Reversal Of Flow In A Vertebral Artery <i>Thomas S. Maldonado, MD</i>
5:10 - 5:25	Panel Discussion – Combined Sessions 17 And 18
5:25 - 5:30	Closing Remarks
	George L. Berdejo, BA, RVT
	Natalie A. Marks, MD, RPVI, RVT
5:30	Raffle Drawing – You Must Be Present To Win

#### Symposium Ends

# FACULTY



**Fernando Amador, RVT** Bronx, New York

B

George L. Berdejo, BA, RVT, FSVU White Plains, New York

**John Blebea, MD, MBA** *Tulsa, Oklahoma* 

**Sheila N. Blumberg, MD** Brooklyn, New York

## D

Robert De Jong, RDMS, RVT, FSDMS

Baltimore, Maryland

William N. Del Valle, RVT New York, New York

Richard Dubin, AAS-DMS, RVT, RDMS

Bronx, New York

E

G

**Steve Elias, MD** Englewood, New Jersey

Paul J. Gagne, MD Darien, Connecticut

Antonios P. Gasparis, MD Stony Brook, New York

David L. Gillespie, MD Fall River, Massachusetts

F

Matthew P. Hernandez, B.Sc, DPT, CSCS

New York, New York

## J

Michael R. Jaff, DO Boston, Massachusetts

Anne M. Jones, RN, BSN, RVT, RDMS, FSVU, FSDMS Charleston, South Carolina

# K

Neil M. Khilnani, MD New York, New York

Steven J. Knight, BSc Los Altos, California

Angela A. Kokkosis, MD, RPVI Stony Brook, New York

Frederick Kremkau, PhD Winston-Salem, North Carolina

Ann Marie Kupinski, PhD, RVT, FSVU

Albany, New York

Nicos Labropoulos, BSc (Med), PhD, DIC, RVT Stony Brook, New York

Glenn M. LaMuraglia, MD Boston, Massachusetts **Josh D. Lee, BS** Chattanooga, Tennessee

Luis R. Leon, MD, RVT, FACS Tucson, Arizona

# M

Thomas S. Maldonado, MD New York, New York

Natalie A. Marks, MD, RPVI, RVT, FSVM

Brooklyn, New York

**Bettina McAlister, RVT** *Chattanooga, Tennessee* 

Mark H. Meissner, MD Seattle, Washington

Frank Miele, MSEE Forney, Texas

**Gregory L. Moneta, MD** *Portland, Oregon* 

Mani Montazemi, RDMS Houston, Texas

# Ν

Laurence Needleman, MD Philadelphia, Pennsylvania

Andrew N. Nicolaides, MS, FRCS Nicosia, Cyprus

#### C

Thomas F. O'Donnell, Jr., MD Boston, Massachusetts

Mark A. Oliver, MD, RPVI, RVT, FSVU

Morristown, New Jersey

#### Ρ

Richard C. Pennell, MD, FACS St. Louis, Missouri

Kelvin Portalatin, AA, RVT Bronx, New York

#### R

Sean P. Roddy, MD Albany, New York

# S

Clifford M. Sales, MD, MBA, FACS Summit, New Jersey

**Michael J. Singh, MD** Pittsburgh, Pennsylvania

#### T

Apostolos K. Tassiopoulos, MD Stony Brook, New York

## W

David M. Williams, MS, RDCS, RVT Florence, South Carolina

# Z

**R. Eugene Zierler, MD, RPVI** Seattle, Washington

**Robert M. Zwolak, MD, PhD** Lebanon, New Hampshire



Advances in Vascular Imaging and Diagnosis

# **SAVE THE DATE!**

Friday - Saturday, November 17-18, 2017



on Management and Clinical Issues

Symposium Chairs: George L. Berdejo, BA, RVT, FSVU Natalie A. Marks, MD, RPVI , RVT

Symposium Co-Chairs: Nicos Labropoulos, BSc (Med), PhD, DIC, RVT Laurence Needleman, MD Frank J. Veith, MD

Honorary Chair: **Anne M. Jones, RN, BSN, RVT, RDMS, FSVU, FSDMS** 

Sponsored by:



# () Hilton

www.AVIDsymposium.org

# REGISTRATION



symposium®

Advances in Vascular Imaging and Diagnosis

## Friday - Saturday, November 18-19, 2016

NEW YORK HILTON-MIDTOWN 1335 Avenue Of The Americas New York, NY 10019

## **Meeting Registration**

(See Registration Form on reverse side)

Full Reg	Tuition				
□ Vascular Technologists □ Sonographers					
Practicing Physicians					
Practic	ing Physicians Combination Rate -				
AVIDsy	AVIDsymposium & VEITHsymposium \$1899				
(Tuesd	ay - Saturday)				
□ Nurse I	Practitioners 🗆 Physician Assistants	\$595			
Reside	ents 🗆 Nurses	\$500			
□ Medical & Ultrasound Students*					
(Friday - Saturday)					
	of verification from Dean must be faxed to				
888-4	18-7043.				
□ Allied I	□ Allied Health Care Professionals\$650				
Refund:	There is a \$95 cancellation fee if canceled by October 14, 2016. No refunds will be made th	nereafter.			
	October 14, 2016. No refunds will be made th	nereafter.			
Online:	October 14, 2016. No refunds will be made th http://www.AVIDsymposium.org				
	October 14, 2016. No refunds will be made the http://www.AVIDsymposium.org 800-987-9314, Ext. 200 or 718-549-3140 with				
Online:	October 14, 2016. No refunds will be made the http://www.AVIDsymposium.org 800-987-9314, Ext. 200 or 718-549-3140 with payment information	n your			
Online: Phone:	October 14, 2016. No refunds will be made the http://www.AVIDsymposium.org 800-987-9314, Ext. 200 or 718-549-3140 with	n your			
Online: Phone:	October 14, 2016. No refunds will be made the http://www.AVIDsymposium.org 800-987-9314, Ext. 200 or 718-549-3140 with payment information the reverse form with your credit card payment	n your			
Online: Phone: Fax:	October 14, 2016. No refunds will be made the http://www.AVIDsymposium.org 800-987-9314, Ext. 200 or 718-549-3140 with payment information the reverse form with your credit card payment 888-418-7043	n your			
Online: Phone: Fax:	October 14, 2016. No refunds will be made the http://www.AVIDsymposium.org 800-987-9314, Ext. 200 or 718-549-3140 with payment information the reverse form with your credit card payment 888-418-7043 this form with your payment to:	n your			
Online: Phone: Fax:	October 14, 2016. No refunds will be made the http://www.AVIDsymposium.org 800-987-9314, Ext. 200 or 718-549-3140 with payment information the reverse form with your credit card payment 888-418-7043 this form with your payment to: The Cleveland Clinic Educational Foundation	n your			

Additional Information

	AVIDsymposium
	4455 Douglas Avenue, Suite 11E
	Riverdale, New York 10471
Phone:	800-987-9314, Ext. 200 or 718-549-3140
E-mail:	registrar@avidsymposium.org or
	admin@avidsymposium.org

# Updates: www.AVIDsymposium.org

# REGISTRATION



Advances in Vascular Imaging and Diagnosis

<ul> <li>□ Vascula</li> <li>□ Practic</li> </ul>	<b>jistration T</b> ar Technologists □ Sonographers ing Physicians ing Physicians Combination Rate -	
AVIDsy	rmposium & VEITHsymposium ay - Saturday)	. \$1899
<ul> <li>Nurse F</li> <li>Resider</li> <li>Medication</li> <li>(Friday</li> <li>*Letter</li> </ul>	Practitioners	\$500
	18-7043. Health Care Professionals	\$650
First Name:		
Last Name (	(Surname)	
Degree:		
Specialty:		
Physician	n 🗌 Non-Physician Cleveland Clinic Employee? 🗌 Yes 🗌	No
Affiliation:		
Address Typ	be: 🗌 Home 🔲 Other	
Address:		
City:	State/Province	
Zip Code: _	Country	
E-mail:(A v	valid registrant's e-mail address is required for confirmation and CME ce	rtificate.)
Phone:	Fax	
Paymen	t Method	
Check:	Please make checks payable to the Cleveland C Educational Foundation and mail to: The Cleveland Clinic Educational Foundation Attn: AVIDsymposium 02010554 P.O. Box 931653 Cleveland, OH 44193-1082	Clinic
Name on Ca	ard:	
Credit Card	Number:	
Verification (	Code:Expiration Date	
Zip Code: _	Country	
Signature: _		

# Updates: www.AVIDsymposium.org



THE CLEVELAND CLINIC EDUCATIONAL FOUNDATION CLEVELAND, OH 44193-1082 PO BOX 931653



LECTURES AND WORKSHOPS INCLUDED



AVIDsymposium is not affiliated with or endorsed by Inteleos". ARDMS® and APCA" are part of the Inteleos" family of certification councils.





