

# AVID

Advances in **Vascular Imaging and Diagnosis**

Friday - Saturday, November 20-21, 2015

PRE-SYMPOSIUM  
ULTRASOUND  
STUDENTS  
COURSE  
THURSDAY  
NOV. 19, 2015

## 26<sup>th</sup> Symposium & Workshops on Management and Clinical Issues

Symposium Chair

**George L. Berdejo, BA, RVT, FSVU**

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

Symposium Co-Chair

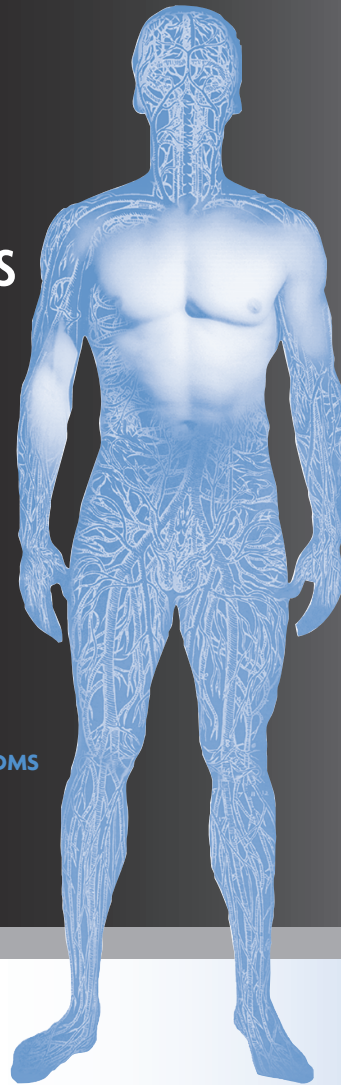
**Nicos Labropoulos, BSc (Med), PhD, DIC, RVT**

**Laurence Needleman, MD**

**Frank J. Veith, MD**

Honorary Chair

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



Sponsored by



**Cleveland Clinic**



[www.AVIDsymposium.org](http://www.AVIDsymposium.org)



Welcome to

**A**DVANCES IN  
**V**ASCULAR  
**I**MAGING AND  
**D**IAGNOSIS

26<sup>TH</sup> SYMPOSIUM AND WORKSHOPS  
ON MANAGEMENT AND CLINICAL ISSUES





Dear Colleague:

Welcome to the 26th Annual Advances in Vascular Imaging and Diagnosis (AVID) Symposium and Workshops on Clinical and Management Issues in Vascular Ultrasound! This year we have highlighted the “Expanding Role and Reach” of vascular ultrasound in clinical medicine today. This year’s meeting will encompass:

**A**dvances in technology that have increased the diagnostic capabilities of vascular ultrasound and its increasing role not only in diagnosis, but also in planning and performing interventions and in patient follow-up and surveillance after intervention.

**V**ascular ultrasound and its role and transition to increasing numbers of specialists who are employing both traditional and newer cutting edge methods and techniques to improve patient care and management.

**I**nteresting case-based learning in the form of “real” clinical cases in what promises to be an engaging Venous Session on Saturday morning.

**D**iscussion and debate of the current clinical and philosophical controversial issues in Vascular Ultrasound.

**2015** also brings with it an array of other educational opportunities at the AVIDsymposium. They have been organized into thematic tracks that vary not only in content, but also learning methods. In addition to the case-based learning we have planned early morning didactic lectures in the form of a “Principles of Ultrasound Tune-up”, Hands-On Real Time Imaging with the Experts sessions, lectures on emerging new technology and clinical applications of vascular ultrasound, debates, and special lunchtime lectures. We have included a “Practical Principles” session as well as a session that will go “Beyond the Core Concepts” in vascular testing that offer not only disease-based imaging fundamentals, but also advanced imaging techniques for diagnostic dilemmas. Back this year is an Ultrasound Students Pre-Symposium Course to be held on Thursday.

The AVIDsymposium faculty prides itself on being accessible to attendees. We do this via planned “discussion” periods for each of the sessions as well as in pre and post lunch Workshops Friday and Saturday that will provide excellent opportunities for “one-on-one” discussion. Finally, we offer networking opportunities with leaders in the field, colleagues, and our partners in industry with opportunity to evaluate the most recent advances in ultrasound technology.

The AVIDsymposium program committee is dedicated to the delivery of quality care to its patients and the education of the medical community at large. We anticipate that this will be an enjoyable and educational experience for all involved. Welcome to New York City!

Sincerely,

A handwritten signature in black ink, appearing to read "George L. Berdejo".

George L. Berdejo, BA, RVT, FSVU

*Natalie*

Natalie A. Marks, MD, RVT, RPVI



# GENERAL INFORMATION

## 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 age-matched 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 26th 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 diagnosis and treatment of vascular disease.

## **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 18.5 *AMA PRA Category 1 Credits™*. 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 CREDENTIALLED 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/registant\\_resources/cme\\_general\\_information/cme\\_general\\_information](http://www.ardms.org/registant_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](http://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 29, 2016.***

## **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 this activity syllabus.

## **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](http://www.AVIDsymposium.org) after the meeting. Abstracts will be available on the web site for one full year.

## **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 advise a staff member in the registration area in the Rhinelander Gallery on the 2nd floor.

## **GENERAL SESSIONS**

General Sessions are held in the Murray Hill Suites East and West, located on the 2nd floor.

## **WORKSHOP SESSIONS**

Please consult the Workshop Schedule in this syllabus.

## **FOOD SERVICE**

Coffee, lunch and refreshments breaks will be served in the South Corridor on the 2nd Floor on Friday and Saturday.

## **EXHIBITS/PAVILIONS**

Exhibitors will display their products in the South Corridor on the 2nd floor, on the 2nd floor Promenade, in the 3rd floor Foyer and Promenade, and in other designated areas.

## **NAME BADGES**

For the convenience of our exhibitors and attendees, the magnetic stripe on your name badge includes your name, address, telephone and fax numbers, and e-mail address. Exhibitors can scan your name badge for this information. Please wear your name badge at all times.



**FLOOR PLAN**

A Floor Plan of the New York Hilton-Midtown is included in this syllabus to help you find your way more easily.

**HOSPITALITY DESK**

The staff will be happy to answer any questions you have, or to make any arrangements that you may require. Staff members are located in the Rhinelander Gallery on the 2nd floor.

**CELL PHONES AND PAGERS**

As a courtesy to other attendees, please turn off your cell phones and pagers, or set to vibrate.

**COAT CHECK**

Coat Check is located on the 2nd floor.

**DISCLAIMER**

The information in this educational activity is provided for general medical education purposes only and not meant to substitute for the independent medical judgment of a physician relative to diagnostic and treatment options of a specific patient's medical condition. The viewpoints expressed in this CME activity are those of the authors/faculty. They do not represent an endorsement by The Cleveland Clinic Foundation or VEITHsymposium LLC. In no event will The Cleveland Clinic Foundation or VEITHsymposium LLC be liable for any decision made or action taken in reliance upon the information provided through this CME activity.

We have made every effort to ensure that the syllabus is accurate. We cannot take responsibility for errors, deletions or omissions.



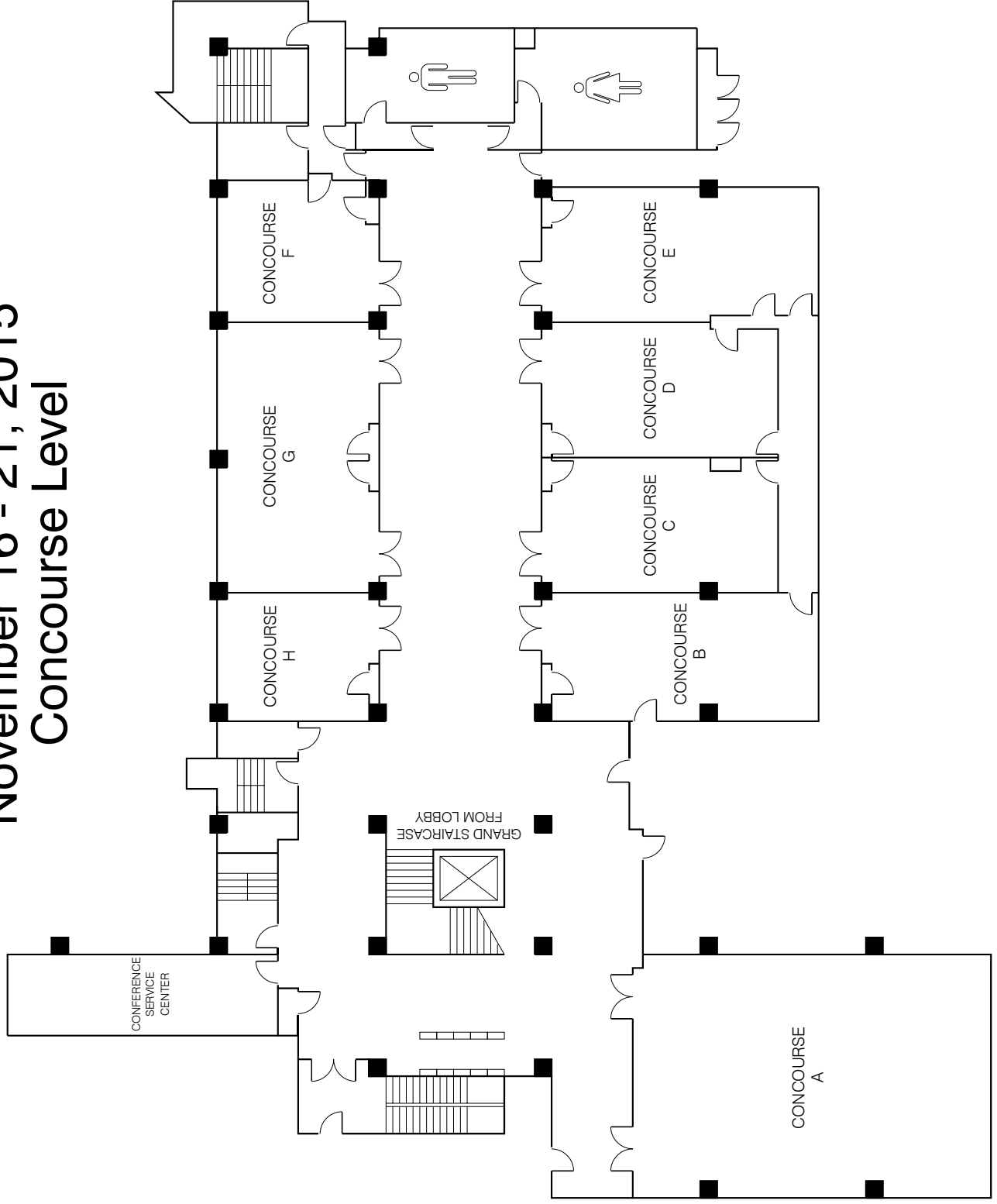
# **FLOOR PLANS**

AVIDsymposium  
**2015**  
Syllabus

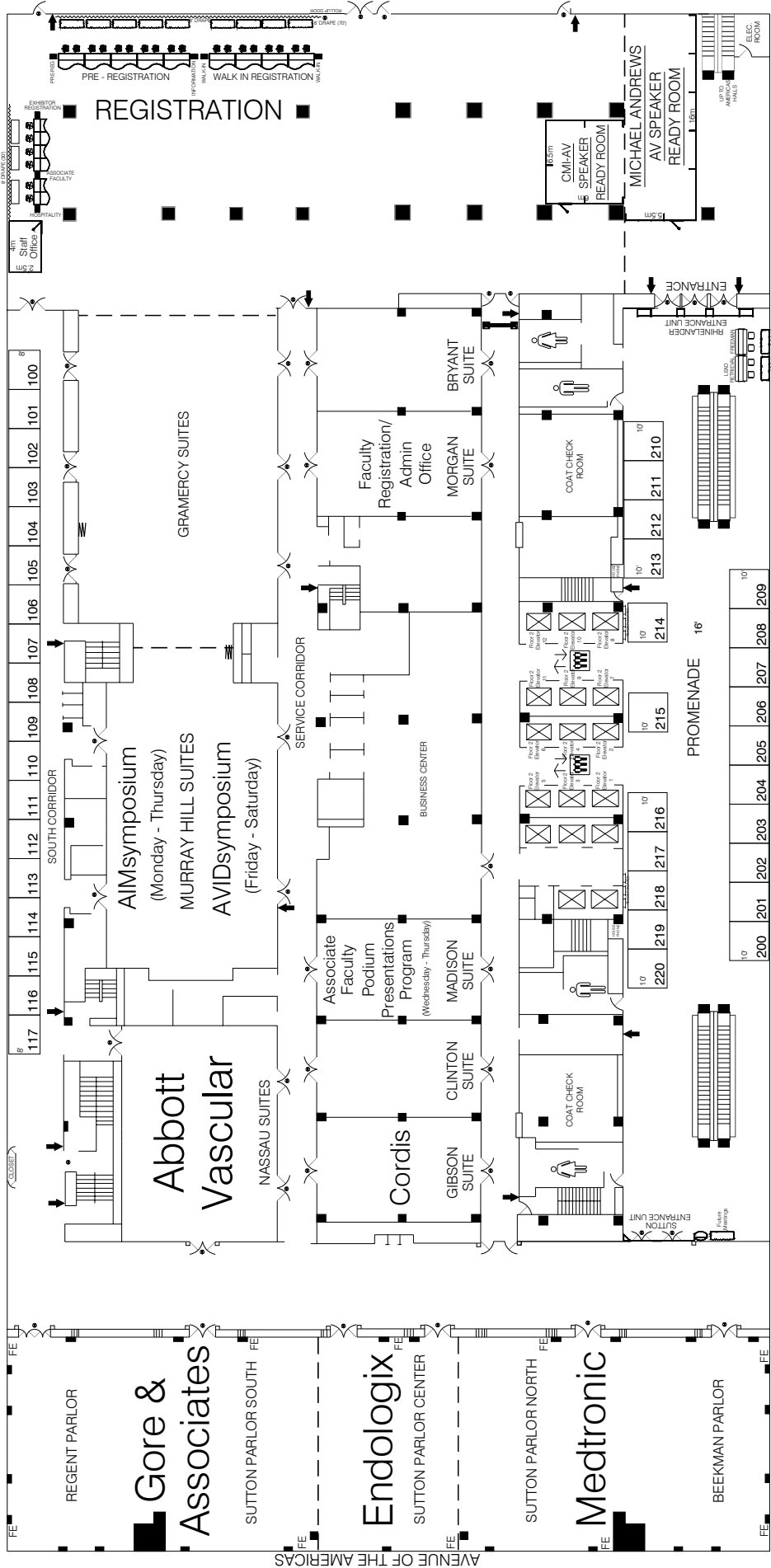
# VEITHsymposium/AIMsymposium/AVIDsymposium

November 16 - 21, 2015

## Concourse Level



VEITHsymposium/AIMsymposium/AVIDsymposium  
 November 16 - 21, 2015  
 2nd Floor Promenade and South Corridor



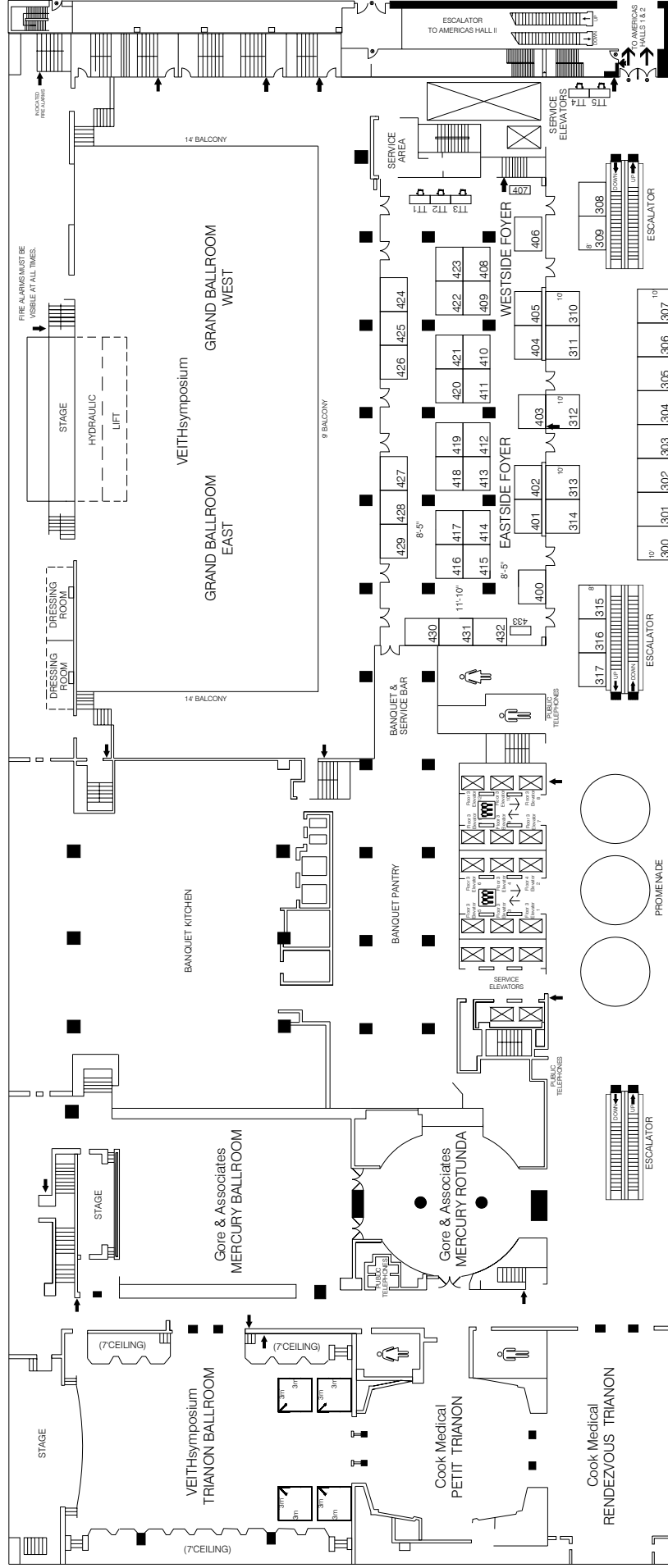
- ← FIRE ALARMS MUST BE VISIBLE AT ALL TIMES.
- INDICATED FIRE EXITS
- FE - FIRE EXTINGUISHER

54th STREET

New York Hilton Midtown

AVENUE OF THE AMERICAS

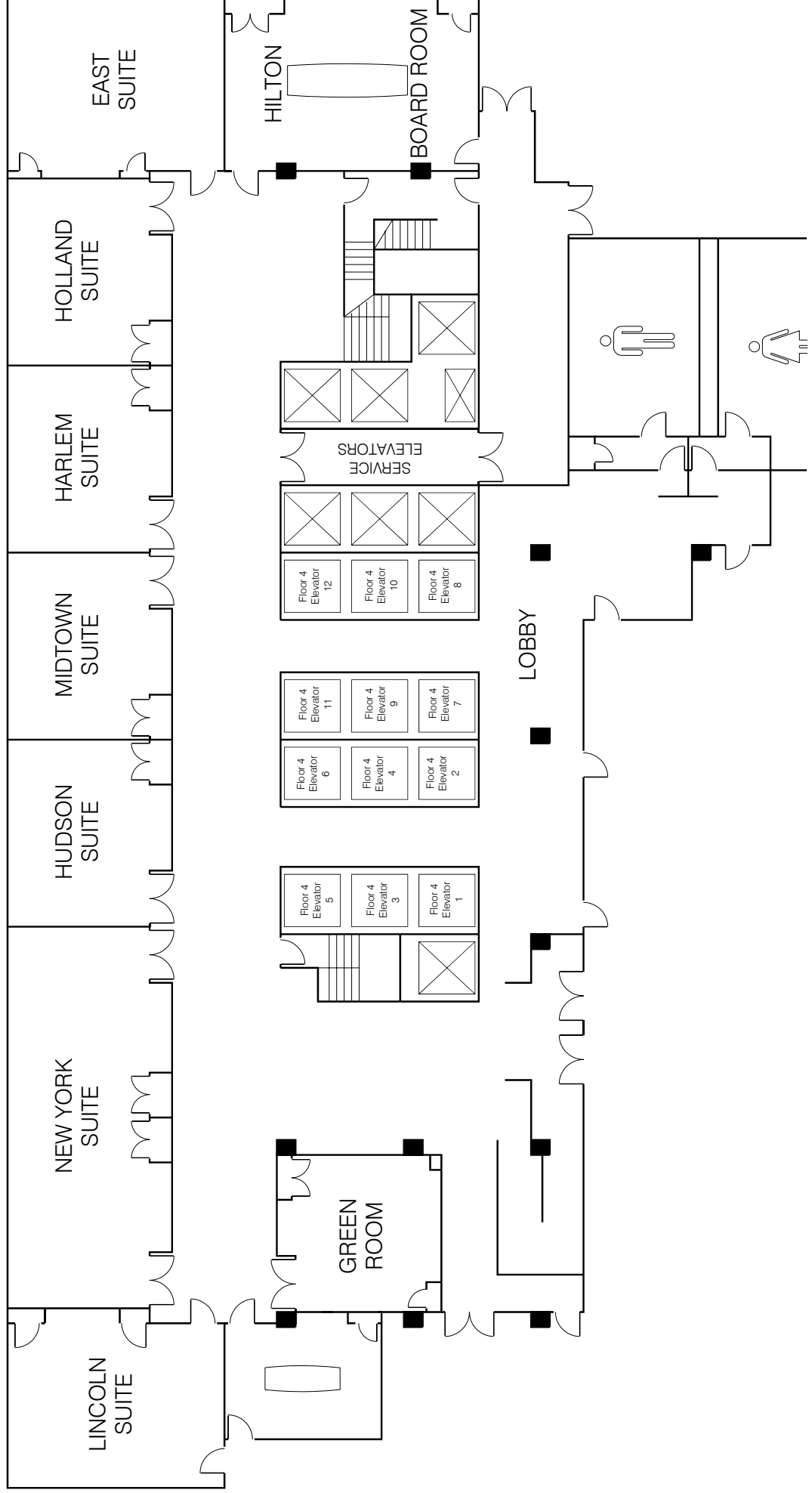
VEITHsymposium/AIMsymposium/AVIDsymposium  
 NOVEMBER 16 - 21, 2015  
 3rd Floor Promenade and Ballroom Foyer



New York Hilton Midtown  
 3rd Floor Promenade and Ballroom Foyer

# VEITHsymposium/AIMsymposium/AVIDsymposium

November 16 - 21, 2015  
4th Floor







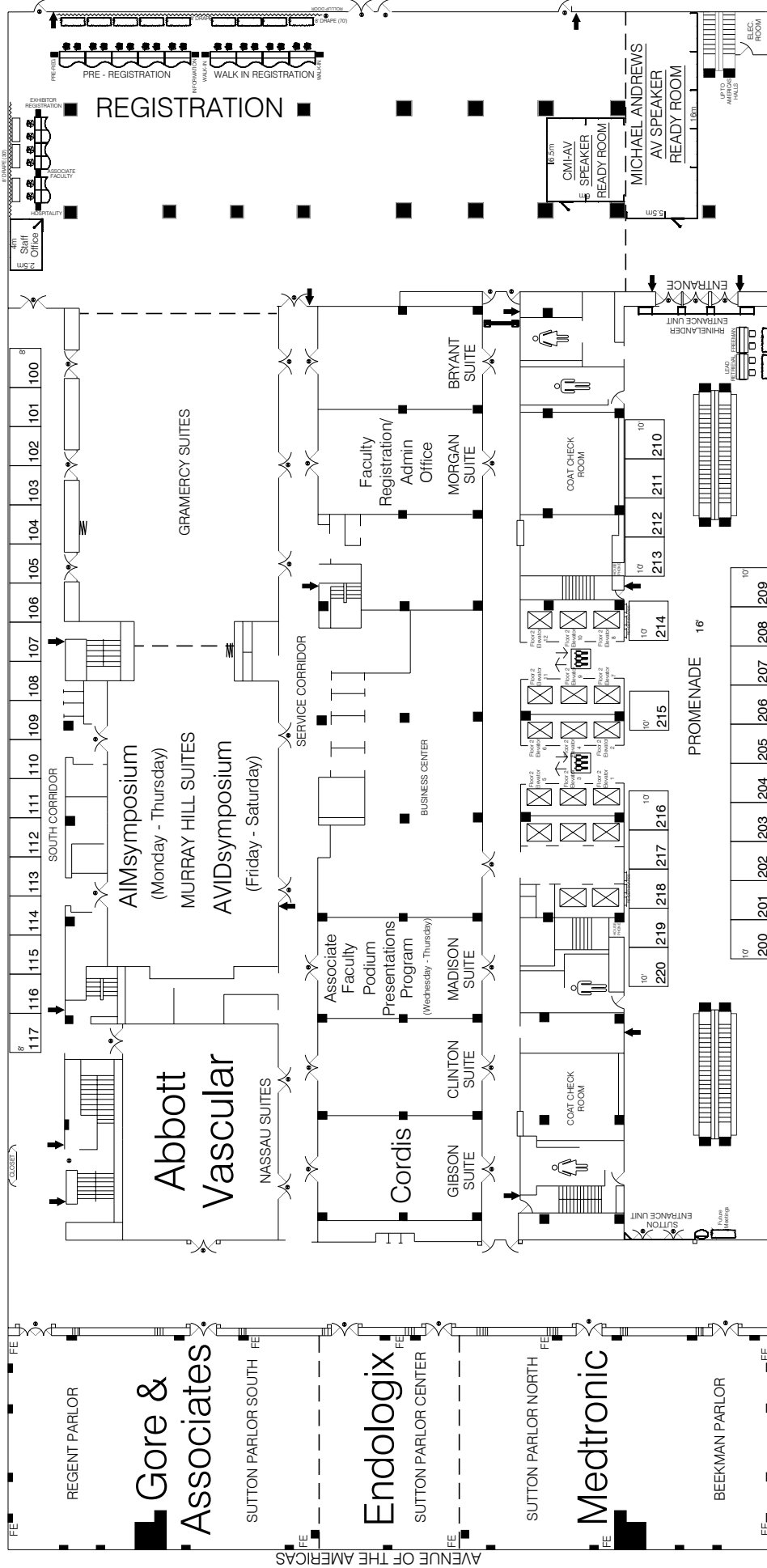
# **EXHIBITS AND PAVILIONS**

AVIDsymposium  
**2015**  
Syllabus

# VEITHsymposium/AIMsymposium/AVIDsymposium/AVIDsymposium

## November 16 - 21, 2015

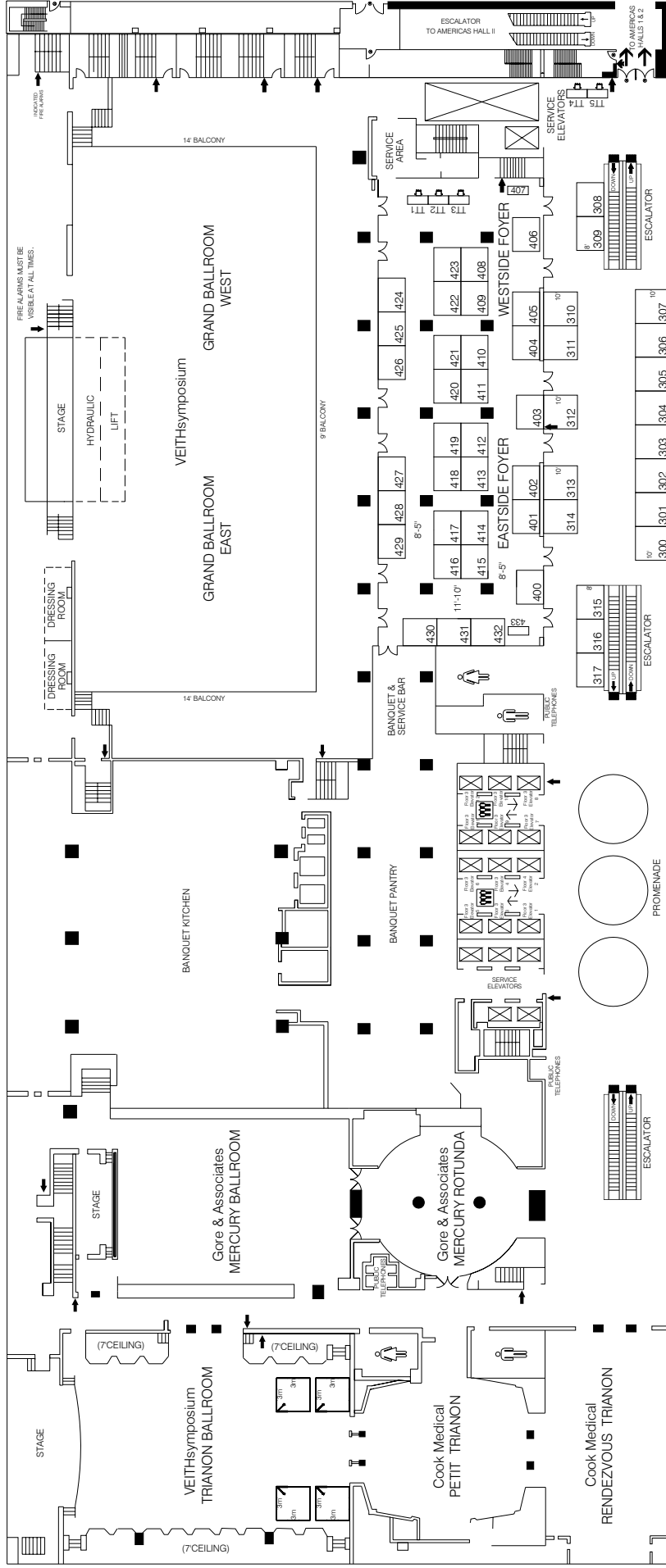
### 2nd Floor Promenade and South Corridor



EXHIBITOR	BOOTH	EXHIBITOR	BOOTH	EXHIBITOR	BOOTH
3D Systems, Simbionix Products	214 - 2nd Floor Promenade	Cook Medical	200	Medtronic	210
Abbott Vascular	Nassau Suites East and West - 2nd Floor	Cordis Corporation	201	Medtronic	211
Alma Lasers	216 - 2nd Floor Promenade	CorMatrix Cardiovascular	202	Merck	212
APRIMS	117 - South Corridor - 2nd Floor (Friday and Saturday)	Edwards Lifesciences	203	Microvention Inc.	213
Avinger, Inc.	207 - 2nd Floor Promenade	Elsevier	204	NeuWave Medical	214
B. Braun Interventional Systems Inc.	110 - South Corridor - 2nd Floor	Endologix	205	Parks Medical Electronics	215
Bard Peripheral Vascular	116 - South Corridor - 2nd Floor (Monday)	Freseus Vascular Care	206	Scanlan International	216
BTG	115 - South Corridor - 2nd Floor	GE Healthcare	207	Styxer Medical	217
Cardinal Health	113 - South Corridor - 2nd Floor	Gene & Associates	208	Tactile Medical	218
Cardinal Health	217 - 2nd Floor Promenade	Medtronic	209	Telerex Medical	219
Cardio-Vascular Evaluation Systems	107 - South Corridor - 2nd Floor (Monday)			Ventili	220
Cardiva Medical	113 - South Corridor - 2nd Floor (Friday and Saturday)			Zonare Medical Systems, Inc.	
	202 - 2nd Floor Promenade				

# VEITHsymposium/AIMsymposium/AVIDsymposium

NOVEMBER 16 - 21, 2015  
3rd Floor Promenade and Ballroom Foyer



- |                  |   |                  |  |                  |   |                  |  |                  |  |                  |   |
|------------------|---|------------------|--|------------------|---|------------------|--|------------------|--|------------------|---|
| <b>EXHIBITOR</b> | AngioDynamics<br>Bard Peripheral Vascular<br>Biolas Health Technologies<br>Blue Dop Medical<br>Bolton Medical<br>Boston Scientific Corporation<br>BTG International<br>Cardiats S.A.<br>Cardiovascular Systems Inc.<br>Charing Cross Symposium, 2016 Vascular News<br>Cook Medical<br>Cordis Corporation<br>CryoLife Inc. | <b>EXHIBITOR</b> | DIVINE ID / OAC/VS / MEET<br>Endologix<br>Endovascular Today<br>Gore & Associates<br>Hansen Medical<br>Incatlab<br>International Society for Vascular Surgery<br>LeMaitre Vascular<br>LINC 2016, The Leipzig Interventional Course<br>Lombard Medical Technologies<br>Mequet Medical Systems, USA<br>ORSIF | <b>EXHIBITOR</b> | Oscar Inc.<br>Penumbra, Inc.<br>SAGE<br>Siemens Medical Solutions USA Inc.<br>Silk Road Medical<br>Spectranetics<br>TriVascular Inc.<br>Vascular Flow Technologies<br>Vascular Insights<br>Vascutek Ltd<br>Vital Access Corp.<br>Volcano / Philips<br>Ziemann Imaging | <b>EXHIBITOR</b> | 402 - 3rd Floor Foyer<br>430, 431 & 432 - 3rd Floor Foyer<br>424 - 3rd Floor Foyer<br>421 - 3rd Floor Foyer<br>414 & 415 - 3rd Floor Foyer<br>304 & 305 - 3rd Floor Promenade<br>313 & 314 - 3rd Floor Promenade<br>420 - 3rd Floor Foyer<br>404 & 405 - 3rd Floor Foyer<br>3rd Floor<br>412 & 413 - 3rd Floor Foyer<br>422 - 3rd Floor Foyer (Saturday) | <b>EXHIBITOR</b> | Mercury Rotunda & Ballroom - 3rd Floor<br>416 & 417 - 3rd Floor Foyer<br>T14 - 3rd Floor Promenade<br>407 - 3rd Floor Foyer<br>409 - 3rd Floor Foyer<br>T12 - 3rd Floor Foyer<br>300, 301 & 302 - 3rd Floor Promenade<br>427, 428 & 429 - 3rd Floor Foyer<br>T15 - 3rd Floor Promenade | <b>EXHIBITOR</b> | 312 - 3rd Floor Promenade<br>310 & 311 - 3rd Floor Promenade<br>T11 - 3rd Floor Foyer<br>422 & 423 - 3rd Floor Foyer<br>418 & 419 - 3rd Floor Foyer<br>403 - 3rd Floor Foyer<br>400 & 401 - 3rd Floor Foyer<br>418 - 3rd Floor Foyer (Saturday)<br>303 - 3rd Floor Promenade<br>306 & 307 - 3rd Floor Promenade<br>419 - 3rd Floor Foyer (Saturday)<br>425 & 426 - 3rd Floor Foyer<br>410 & 411 - 3rd Floor Foyer |
|------------------|---|------------------|--|------------------|---|------------------|--|------------------|--|------------------|---|

# EXHIBITORS

COMBINED EXHIBIT HALL FOR  
VEITHsymposium, AIMsymposium and AVIDsymposium  
(MONDAY – FRIDAY/SATURDAY)

We acknowledge the participation of the following companies as exhibitors:

3D Systems, Symbionix Products	214 - 2nd Floor Promenade
Abbott Vascular	Pavilion - Nassau Suites East and West - 2nd Floor
Alma Lasers	216 - 2nd Floor Promenade
AngioDynamics, Inc.	402 - 3rd Floor Foyer
ARDMS	117 - South Corridor - 2nd Floor (Exhibiting on Friday and Saturday Only)
Avinger, Inc.	207 - 2nd Floor Promenade
B. Braun Interventional System Inc.	110 - South Corridor - 2nd Floor
Bard Peripheral Vascular	430, 431 and 432 - 3rd Floor Foyer
Bard Peripheral Vascular	116 - South Corridor - 2nd Floor (Exhibiting on Monday Only)
Biolas Health Technologies Co.	424 - 3rd Floor Foyer
Blue Dop Medical	421 - 3rd Floor Foyer
Bolton Medical	414 and 415 - 3rd Floor Foyer
Boston Scientific Corporation	304 and 305 - 3rd Floor Promenade
Boston Scientific Corporation	115 - South Corridor - 2nd Floor
BTG	113 - South Corridor - 2nd Floor
BTG International	313 and 314 - 3rd Floor Promenade
Cardiatis S.A.	420 - 3rd Floor Foyer
Cardinal Health	217 - 2nd Floor Promenade
Cardinal Health	107 - South Corridor - 2nd Floor (Exhibiting on Monday Only)
Cardio-Vascular Evaluation Systems, Inc.	113 - South Corridor - 2nd Floor (Exhibiting on Friday and Saturday Only)
Cardiovascular Systems, Inc.	404 and 405 - 3rd Floor Foyer
Cardiva Medical, Inc.	202 - 2nd Floor Promenade
Charing Cross Symposium 2016 / Vascular News	408 - 3rd Floor Foyer
Cook Medical	Pavilion - Petit Trianon and Rendezvous Trianon - 3rd Floor
Cook Medical	108 - South Corridor - 2nd Floor
Cordis® A Cardinal Health company	Pavilion - Gibson Suite - 2nd Floor
Cordis® A Cardinal Health company	412 and 413 - 3rd Floor Foyer
Cormatrix Cardiovascular, Inc.	218 - 2nd Floor Promenade
CryoLife, Inc.	422 - 3rd Floor Foyer (Exhibiting on Saturday Only)
DIVINE ID/CACVS/MEET	TT3 - 3rd Floor Foyer
Edwards Lifesciences	200 - 2nd Floor Promenade
Elsevier	201 - 2nd Floor Promenade
Endologix, Inc.	Pavilion - Sutton Parlor Center - 2nd Floor
Endologix, Inc.	315, 316 and 317 - 3rd Floor Promenade
Endovascular Today	433 - 3rd Floor Foyer
Fresenius Vascular Care	215 - 2nd Floor Promenade
GE Healthcare	211 - 2nd Floor Promenade
Gore & Associates	Pavilion - Mercury Rotunda and Ballroom - 3rd Floor
Gore & Associates	Simulation Pavilion - Regent Parlor and Sutton Parlor South - 2nd Floor
Hansen Medical	416 and 417 - 3rd Floor Foyer
Incathlab	TT4 - 3rd Floor Promenade
International Society For Vascular Surgery (ISVS)	407 - 3rd Floor Foyer
LeMaitre Vascular	409 - 3rd Floor Foyer
LINC 2016, The Leipzig Interventional Course	TT2 - 3rd Floor Foyer
Lombard Medical, Inc.	300, 301 and 302 - 3rd Floor Promenade
Maquet Medical Systems, USA	427, 428 and 429 - 3rd Floor Foyer
Medstreaming	406 - 3rd Floor Foyer
Medtronic	Pavilion - Beekman Parlor and Sutton Parlor North - 2nd Floor
Medtronic	111 - South Corridor - 2nd Floor
Merck	213 - 2nd Floor Promenade

Merit Medical Systems, Inc.	107 – South Corridor – 2nd Floor (Exhibiting on Wednesday Only)
Microvention, Inc.	109 - South Corridor - 2nd Floor (Exhibiting on Thursday Only)
Mindray/Zonare Medical Systems	110 – South Corridor – 2nd Floor (Exhibiting on Friday and Saturday Only)
NeuWave Medical	114 - South Corridor - 2nd Floor
ORSIF	TT5 - 3rd Floor Promenade
Oscor Inc.	312 - 3rd Floor Promenade
Parks Medical Electronics	109 - South Corridor - 2nd Floor (Exhibiting on Friday and Saturday Only)
Penumbra, Inc.	310 and 311 - 3rd Floor Promenade
SAGE	TT1 - 3rd Floor Foyer
Scanlan International, Inc.	220 - 2nd Floor Promenade
Siemens Medical Solutions USA Inc.	422 and 423 - 3rd Floor Foyer
Silk Road Medical	418 and 419 - 3rd Floor Foyer
Sirtex Medical Inc.	109 - South Corridor - 2nd Floor
Spectranetics	403 - 3rd Floor Foyer
Stryker Neurovascular	106 - South Corridor - 2nd Floor
Surefire Medical Inc.	108 – South Corridor – 2nd Floor (Exhibiting on Tuesday Only)
Tactile Medical	210 - 2nd Floor Promenade
Teleflex Medical	112 - South Corridor - 2nd Floor
TriVascular, Inc.	400 and 401 - 3rd Floor Foyer
Vascular Flow Technologies	418 - 3rd Floor Foyer (Exhibiting on Saturday Only)
Vascular Insights	303 - 3rd Floor Promenade
Vascutek Ltd.	306 and 307 - 3rd Floor Promenade
Veniti, Inc.	219 - 2nd Floor Promenade
Vital Access Corp.	419 - 3rd Floor Foyer (Exhibiting on Saturday Only)
Volcano/Philips	425 and 426 - 3rd Floor Foyer
Ziehm Imaging	410 and 411 - 3rd Floor Foyer



# PAVILIONS

VEITHsymposium, AIMsymposium and AVIDsymposium  
(TUESDAY – FRIDAY/SATURDAY)

## COMPANY

Abbott Vascular

Cook Medical

Cordis® A Cardinal Health company

Endologix, Inc.

Gore & Associates

Gore & Associates (Simulation)

Medtronic

## LOCATION

Nassau Suites East and West, 2nd Floor

Rendezvous and Petit Trianon, 3rd Floor

Gibson Suite, 2nd Floor

Sutton Parlor Center, 2nd Floor

Mercury Rotunda and Mercury Ballroom, 3rd Floor

Sutton Parlor South and Regent Parlor, 2nd Floor

Beekman Parlor and Sutton Parlor North, 2nd Floor

AVIDsymposium  
**2015**  
**Syllabus**





# **PROGRAM SCHEDULE**

AVIDsymposium  
**2015**  
Syllabus

# THURSDAY, NOVEMBER 19, 2015

## PRE-SYMPOSIUM ULTRASOUND STUDENTS COURSE

LOCATION: AMERICAS HALL 2, 3RD FLOOR

- 8:00 – 8:05 **Welcome And Introduction**  
*Fernando Amador, RVT*  
*Joshua Cruz, BS, RVT*  
*Richard Dubin, AAS-DMS, RVT, RDMS*

### SESSION 1

#### BASIC TECHNICAL PROTOCOLS FOR THE PRIMARY AREAS OF TESTING

**Moderators:** *Fernando Amador, RVT*  
*Joshua Cruz, BS, RVT*  
*Richard Dubin, AAS-DMS, RVT, RDMS*

- 8:05 – 8:35 **Physiologic Testing: Theory And Application**  
*William N. Del Valle, RVT*
- 8:35 – 9:05 **Lower Extremity Venous Imaging For Deep Vein Thrombosis And Chronic Venous Insufficiency: Protocols, Pitfalls And Pearls**  
*Nicos Labropoulos, BSc (Med), PhD, DIC, RVT*
- 9:05 – 9:35 **Basic Cerebrovascular Testing: Protocols, Pitfalls And Pearls**  
*Richard Dubin, AAS-DMS, RVT, RDMS*
- 9:35 – 9:50 **Break**
- 9:50 – 10:20 **Upper Extremity Venous Imaging: Protocols, Pitfalls And Pearls**  
*Joshua Cruz, BS, RVT*
- 10:20 – 10:50 **Rational Use Of Duplex Ultrasound For Evaluation Of The Patient With Suspected Arterial Occlusive Disease**  
*George L. Berdejo, BA, RVT*
- 10:50 – 11:20 **Hemodialysis Access: Preoperative Mapping And Postoperative Surveillance**  
*Susan M. Gustavson, RVT*
- 11:20 – 11:40 **Questions And Answers**
- 11:40 – 1:00 **Lunch On Your Own**

### SESSION 2

#### A REVIEW OF HEMODYNAMIC PRINCIPLES

*This half-day lecture is a dynamic review and application of the laws of hemodynamics. In the first part of the lecture, we develop the hemodynamic equations in an interactive and intuitive manner. In the second part of the lecture, we learn how to apply these equations and how they predict the compensatory mechanisms of the body to stress. Specifically, we will review how the body can compensate for the stress of both exercise and disease.*

**Moderator:** *Frank Miele, MSEE*

- 1:00 – 2:25 **Hemodynamic Equations**
- 2:25 – 2:45 **Break**
- 2:45 – 4:10 **Practical Applications To Diagnostic Testing**
- 4:10 – 4:30 **Questions And Answers**

# FRIDAY, NOVEMBER 20, 2015

## MAIN MEETING

### 7:45 – 7:55 **Welcome And Opening Remarks**

Navigating The Meeting: Getting The Most And What To Expect

*George L. Berdejo, BA, RVT*

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

## SESSION 3

### PRACTICAL PRINCIPLES, SOUND STRATEGIES, AND FLOW FUNDAMENTALS IN VASCULAR ULTRASOUND

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

7:55 – 8:06 **A Good Physical Examination Is Half The Battle: Physical Examination Of The Vasculopath With Relevance To Diagnostic Testing**

*Phillip J. Bendick, PhD, RVT*

8:07 – 8:18 **Recognizing And Compensating For Common Ultrasound And Doppler Artifacts: Case Study Presentations**

*Frederick Kremkau, PhD*

8:19 – 8:30 **A Discussion Of Doppler Waveform Descriptors: Nomenclature And Rationale**

*David M. Williams, MS, RDCS, RVT*

8:31 – 8:42 **The Effect Of Temperature And Vasodilatation On Arterial Blood Flow Waveform Analysis: Pulsatility And Large Arteries vs. Diastolic Flow And Capillary Network**

*Sergio X. Salles-Cunha, PhD, RVT*

8:43 – 8:54 **Impact Of Cardiac Dysfunction On The Vascular Ultrasound Examination – Common And Uncommon Occurrences In Common And Uncommon Findings**

*Carol Miranda, RVT, RDMS, RDCS*

8:55 – 9:06 **The Triad Of “Hemodynamically” Significant Stenosis: The Proof Is In The “Putting” It All Together**

*Laurence Needleman, MD*

9:06 – 9:15 **Panel Discussion**

9:15 – 9:40 **Break – Visit Exhibits (South Corridor, 2nd Floor)**

## SESSION 4

### BEYOND THE CORE CONCEPTS IN VASCULAR TESTING: ARE YOU MEETING THE STANDARD: HOW TO DO IT CORRECTLY

*This session will venture into advanced imaging related to the “big 3” areas of vascular testing as it relates to post-intervention follow-up and patient evaluation and will describe appropriate use, standard protocols, standard and non-standard image acquisition and other components that define the “complete” vascular examination.*

**Moderator:** *Natalie A. Marks, MD, RVT, RPVI*

9:40 – 9:52 **Physiologic Testing After Revascularization Procedures: Why And How; Controversies And Contraindications**

*Ann Marie Kupinski, PhD, RVT*

9:53 – 10:05 **Lower Extremity Imaging After Venous Procedures (Vein Excision, Thermal Venous Ablation, Saphenous Vein Harvesting): What To Expect And How To Report Your Findings**

*William B. Schroedter, BS, RVT, RPhS*

10:06 – 10:18 **Carotid Artery Imaging After Stenting And/Or Endarterectomy: Not Just The Usual Protocol**

*Phillip J. Bendick, PhD, RVT*

## SESSION 5

### HANDS-ON REAL TIME IMAGING WITH THE EXPERTS – CAROTID AND LOWER EXTREMITY VEIN IMAGING

*This will be a live scanning session designed to allow the audience opportunity to pose questions and interact with the speaker while the patient is being scanned.*

**Moderators:** *George L. Berdejo, BA, RVT*

*Joshua Cruz, BS, RVT*

10:18 – 10:30 **Lower Extremity Vein Imaging**

*William B. Schroedter, BS, RVT, RPhS*

**AVIDsymposium  
2015  
Syllabus**

Thursday

- 10:31 – 10:43 Intervention Carotid Artery Imaging  
*Natalie A. Marks, MD, RVT, RPVI*
- 10:43 – 10:55 Panel Discussion (Combined Sessions 4 and 5)

SESSION 6

CEREBROVASCULAR I: CONSENSUS OR CONTINUED CHAOS AND CONTROVERSY IN CAROTID CRITERIA

**Moderators:** *Ann Marie Kupinski, PhD, RVT*  
*Laurence Needleman, MD*

- 10:55 – 11:05 Update On The Ongoing Carotid Criteria Project: I'm All For It  
*Heather L. Gornik, MD*

**COMMENTARIES**

- 11:05 – 11:10 I Agree But I'm Not So Sure It's Worth The Effort Or We Will Get The Buy-In That Is Needed  
*Joseph P. Hughes, RVT, RVS*
- 11:10 – 11:15 Errors In Carotid Stenosis Quantification: Estimation Of Stenosis Based On Doppler Derived Velocity Is Not The Correct Measurement In The Majority Of Cases: We Need More Emphasis On Imaging Measurements  
*Sergio X. Salles-Cunha, PhD, RVT*
- 11:15 – 11:20 Will Technologist, Technique And Equipment Challenges Pose A Problem?  
*Ann Marie Kupinski, PhD, RVT*
- 11:20 – 11:25 Will Interpretive Challenges Pose A Problem?  
*Michael J. Singh, MD*
- 11:25 – 11:30 What About Criteria For The CCA, ECA And Vertebrales...Or Does It Matter?  
*Laurence Needleman, MD*
- 11:30 – 11:50 Panel Discussion
- 11:50 – 12:10 Lunch - Visit Exhibits (Pick up Lunch in the Exhibit Area, South Corridor, 2nd Floor)

SESSION 7

LUNCHEON LECTURE: PRINCIPLES TUNE-UP: HOW SHARP ARE YOU - PART I

**Moderator:** *Joshua Cruz, BS, RVT*

- 12:10 – 1:00 Principles Tune-Up – How Sharp Are You?  
*Frederick Kremkau, PhD*
- 1:00 – 1:05 Transition to Workshops (Americas Hall 2, 3rd Floor)

SESSION 8

WORKSHOP ROTATION I

1:05 – 2:00

- MURRAY HILL SUITE 1. Interpreting With The Masters: Clinical Conundrums In Carotid Imaging: A Case Study Review  
*Laurence Needleman, MD*  
*Richard C. Pennell, MD*  
*Heather L. Gornik, MD*
- ROOM 1 2. Interpreting With The Masters: Adventures In Unusual Abdominal And Upper Extremity Vein Cases  
*Leslie M. Scoutt, MD*  
*Bhagwan Satiani, MD, MBA*
- ROOM 2 3. Interpreting With The Masters: Lower Extremity Arterial And Venous Cases  
*Natalie A. Marks, MD, RVT, RPVI*  
*Nicos Labropoulos, BSc (Med), PhD, DIC, RVT*
- ROOM 3 4. More On Cardiac Effects On Peripheral Imaging: Cardiac Influence On Peripheral Vascular Arterial, Venous And Carotid Studies – A Case Study Analysis  
*Carol Miranda, RVT, RDMS, RDCS*  
*David M. Williams, MS, RDCS, RVT*
- ROOM 4 5. Billing And Coding  
*Joseph P. Hughes, RVT, RVS*  
*William B. Schroedter, BS, RVT, RPhS*
- ROOM 5 6. Test Taking Strategies  
*Frank Miele, MSEE*
- ROOM 6 7. IAC Vascular Testing: New QI Requirements  
*Sandra L. Katanick, RN, RVT, CAE*
- 2:00 – 2:10 Transition to Plenary Sessions  
(Murray Hill Suites East and West, 2nd Floor)

SESSION 9

VASCULAR ULTRASOUND: CURVEBALLS AND CONTROVERSIES

*Moderators: Anne M. Jones, RN, BSN, RVT, RDMS  
Richard C. Pennell, MD*

- 2:10 – 2:20 TCD And Sickle Cell Anemia: Comparison Between Duplex Doppler And Classical Non-Imaging Doppler Used In Most Significant Research: Can We Use The Same Criteria?  
*Sergio X. Salles-Cunha, PhD, RVT*
- 2:20 – 2:30 Venous And Arterial Manifestations And Complications Of Thoracic Outlet Syndrome  
*Gregory L. Moneta, MD*
- 2:30 – 2:40 Should Point Of Care Ultrasound (POCUS) Be Incorporated In The Vascular Lab Practice?  
*Nicos Labropoulos, BSc (Med), PhD, DIC, RVT*
- 2:40 – 2:50 It's Not Always Cardiac... How Do you Know: Hemodynamic Changes Seen In Innominate, Proximal Common Carotid And Subclavian Artery Stenosis  
*Cindy A. Owen, RVT, RDMS*

SESSION 10

SCREENING FOR VASCULAR DISEASE PROCESSES

*Moderators: Anne M. Jones, RN, BSN, RVT, RDMS  
Richard C. Pennell, MD*

- 2:51 – 3:01 What About Vascular Screening Programs In The Era Of ACOs?  
*John (Jeb) W. Hallett, MD*
- 3:02 – 3:12 ABI And Cardiovascular Screening: Thresholds For Positive Findings, Highest Or Lowest Index, Posterior vs. Anterior Tibial ABI: Should All Patients Get An ABI?  
*Sergio X. Salles-Cunha, PhD, RVT*
- 3:13 – 3:23 Screening For AAAs: What Are The Gender Differences? Is It Worthwhile In Women?  
*Andrew N. Nicolaides, MS*
- 3:24 – 3:34 **DEBATE:** We Should Screen For Asymptomatic Carotid Stenosis: It Is Justified... In Some Patients  
*Glenn Jacobowitz, MD*
- 3:35 – 3:45 **DEBATE:** Should We Screen For Asymptomatic Carotid Stenosis? Maybe... Maybe Not  
*Nicos Labropoulos, BSc (Med), PhD, DIC, RVT*
- 3:45 – 4:00 Panel Discussion (Combined Sessions 9 and 10)
- 4:00 – 4:15 Break – Visit Exhibits (South Corridor, 2nd Floor)

SESSION 11

HANDS-ON REAL TIME IMAGING WITH THE EXPERTS – THE CAROTID ARTERIES

*This will be a live scanning session designed to allow the audience opportunity to pose questions and interact with the speaker while the patient is being scanned.*

*Moderators: George L. Berdejo, BA, RVT  
Fernando Amador, RVT*

- 4:15 – 4:25 Carotid Duplex Imaging – Screening Protocol And Pre-Operative Mapping  
*Natalie A. Marks, MD, RVT, RPVI*

SESSION 12

PRACTICE ENHANCEMENTS: ISSUES RELATED TO EDUCATION, PRODUCTIVITY AND QUALITY

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

- 4:25 – 4:35 Measuring Quality In The Vascular Laboratory  
*Michael P. Lilly, MD*
- 4:36 – 4:46 Vascular Lab Reporting That Makes Sense  
*Laurence Needleman, MD*
- 4:47 – 4:57 Improving Efficiency In The Vascular Laboratory  
*Bhagwan Satiani, MD, MBA*
- 4:58 – 5:08 Role Of The Vascular Lab In A Modern Telemedicine Practice  
*Richard C. Pennell, MD, MBA*
- 5:09 – 5:19 Ultrasound Guided Access For Endovascular Therapy  
*Deepak G. Nair, MD, MS, RVT*
- 5:20 – 5:30 What The Data Says: A Statistical Look At What Students Do And Do Not Know  
*Frank Miele, MSEE*
- 5:30 – 5:40 Panel Discussion (Combined Sessions 11 and 12)

## **SATURDAY, NOVEMBER 21, 2015**

### SESSION 13

#### **PRINCIPLES TUNE-UP: HOW SHARP ARE YOU - PART II**

**Moderator:** *Joshua Cruz, BS, RVT*

7:00 – 7:45 Principles Tune-Up  
*Frederick Kremkau, PhD*

### SESSION 14

#### **LEARNING THROUGH REAL CLINICAL CASES**

*This session will cover most subjects on venous disease through clinical cases. It will be very interactive as the faculty will engage with the participants. The focus will be on history, physical exam, diagnosis, treatment and follow-up of the patients. Many pearls, tips and tricks will be given by renowned world experts. Emphasis will be given on applying such knowledge to routine practice.*

**Moderator:** *Nicos Labropoulos, BSc (Med), PhD, DIC, RVT*

7:45 – 7:53 Superficial Venous Crossroads  
*Steve Elias, MD*

7:53 – 8:01 The Nervous Side Of The Veins  
*Nicos Labropoulos, BSc (Med), PhD, DIC, RVT*

8:01 – 8:09 I Have Good Pulses But My Left Leg Hurts When I Walk  
*Antonios P. Gasparis, MD*

8:09 – 8:17 Connecting The Pelvis With The Lower Extremity  
*Mark H. Meissner, MD*

8:17 – 8:25 This Is Not An Inguinal Hernia  
*Luis R. Leon, MD, RVT*

8:25 – 8:33 Arm Swelling That Recently Became Worse  
*David L. Gillespie, MD*

8:33 – 8:41 Swelling And Veins: How Good Is Your Physical Exam?  
*Peter J. Pappas, MD*

8:41 – 8:49 Having Pain In The Left Flank  
*Thomas S. Maldonado, MD*

8:49 – 8:57 Having A Belly Ache After A Remote DVT  
*Apostolos K. Tassiopoulos, MD*

### SESSION 15

#### **HANDS-ON REAL TIME IMAGING WITH THE EXPERTS – CHRONIC VENOUS INSUFFICIENCY IMAGING (CVI)**

*This will be a live scanning session designed to allow the audience to pose questions and interact with the speaker while the patient is being scanned.*

**Moderators:** *George L. Berdejo, BA, RVT*  
*Josh Cruz, BS, RVT*

8:57 – 9:10 How To Perform The Examination For CVI  
*William B. Schroedter, BS, RVT, RPhS*

9:10 – 9:20 Panel Discussion (Combined Sessions 14 and 15)

9:20 – 9:40 Break – Visit Exhibits (South Corridor, 2nd Floor)

### SESSION 16

#### **EFFECTS OF THE CHANGING HEALTHCARE ENVIRONMENT ON VASCULAR ULTRASOUND**

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

9:40 – 9:48 What Happened To The CARE Bill And Where Do We Go From Here?  
*Anne M. Jones, RN, BSN, RVT, RDMS*

9:48 – 9:56 Financial Impact Of The ACA To Date And In The Future: What Will It Mean To Vascular Ultrasound And Surgery And The New Physician Fee Schedule (PFS) Issues?  
*Robert M. Zwolak, MD, PhD*

9:56 – 10:04 Update On Coding And Reimbursement Issues For Vascular Surgery: Now, In 2016 And Beyond  
*Sean P. Roddy, MD*

- 10:04 – 10:12 How Will IAC Enforce And Implement Mandatory Credentialing: What Will The Impact Be On Reaccreditation And LCDs?  
*Sandra L. Katanick, RN, RVT, CAE*
- 10:12 – 10:20 Sonography Credentialing: Recertification And “Advanced Practice” Status: What Is On The Horizon For The Sonography Professional  
*Michael P. Lilly, MD*
- 10:20 – 10:28 Lessons Learned From An Appeal Process With First Coast Insurance In Florida: What To Do If It Happens To You  
*William B. Schroedter, BS, RVT*
- 10:28 – 10:40 Panel Discussion
- 10:40 – 10:45 Transition to Workshops (Sutton Complex, 2nd Floor)

SESSION 17

WORKSHOP ROTATION II: IMAGING ESSENTIALS

10:45 – 11:45

- |                      |  |
|----------------------|--|
| REGENT PARLOR        | 1. Carotid Imaging<br><i>Richard Dubin, AAS-DMS, RVT, RDMS</i>   |
| MADISON SUITE        | 2. LE Venous – DVT<br><i>William B. Schroedter, BS, RVT, RPhS</i><br><i>Kelvin Portalatin, AA, RVT</i>         |
| SUTTON PARLOR CENTER | 3. LE Venous – Chronic Venous Insufficiency Testing<br><i>Nicos Labropoulos, BSc (Med), PhD, DIC, RVT</i>      |
| NASSAU SUITE WEST    | 4. Hemodialysis Access<br><i>Susan M. Gustavson, RVT</i>   |
| NASSAU SUITE EAST    | 5. Lower Extremity Arterial Imaging<br><i>Natalie A. Marks, MD, RVT, RPVI</i>                                  |
| SUTTON PARLOR SOUTH  | 6. Renal Artery Imaging<br><i>Cindy A. Owen, RVT, RDMS</i>   |
| GIBSON SUITE         | 7. Basic Echocardiography For The Vascular Sonographer/Technologist<br><i>David M. Williams, MS, RDCS, RVT</i> |
| CLINTON SUITE        | 8. Transcranial Doppler<br><i>Joseph P. Hughes, RVT, RVS</i>   |
| MURRAY HILL SUITE    | 9. Case Interpretation Potpourri<br><i>Laurence Needleman, MD</i>  |
- 11:45 – 11:50 Lunch - Visit Exhibits (Pick up Lunch in the Exhibit Area, South Corridor, 2nd Floor)

SESSION 18

LUNCHEON PROGRAM: HEMODIALYSIS ACCESS

*Moderators: George L. Berdejo, BA, RVT*  
*William D. Suggs, MD*

- 11:50 – 12:00 Planning A Successful Dialysis Access Procedure: Strategic Use Of The Ultrasound Findings Is Paramount But It’s A Multidisciplinary Collaborative Effort  
*William D. Suggs, MD*
- 12:01 – 12:11 Ultrasound Evaluation Of AVF And Prosthetic Graft Complications - Vascular And Otherwise  
*Leslie M. Scoutt, MD*
- 12:12 – 12:22 AVF For Hemodialysis: Is There A Relationship Between Very High Flow And Cardiac Damage?  
*Sergio X. Salles-Cunha, PhD, RVT*
- 12:23 – 12:33 Balloon Assisted Maturation Of The Newly Created Arterio-Venous Fistulas In The Office  
*Natalie A. Marks, MD, RVT, RPVI*
- 12:34 – 12:45 Transition to Workshops (Sutton Complex, 2nd Floor)

SESSION 19

WORKSHOP ROTATION III: IMAGING ESSENTIALS

12:45 – 1:40

- REGENT PARLOR 1. **Carotid Imaging**  
*Richard Dubin, AAS-DMS, RVT, RDMS*
- MADISON SUITE 2. **LE Venous Reflux**  
*William B. Schroedter, BS, RVT, RPhS*
- SUTTON PARLOR CENTER 3. **LE Venous - DVT**  
*William N. Del Valle, RVT*
- NASSAU SUITE WEST 4. **Hemodialysis Access**  
*Susan M. Gustavson, RVT*
- NASSAU SUITE EAST 5. **Lower Extremity Arterial Imaging**  
*Ann Marie Kupinski, PhD, RVT*
- SUTTON PARLOR SOUTH 6. **Renal Artery Imaging**  
*Cindy A. Owen, RVT, RDMS*
- GIBSON SUITE 7. **Basic Echocardiography For The Vascular Sonographer/Technologist**  
*David M. Williams, MS, RDCS, RVT*
- CLINTON SUITE 8. **Transcranial Doppler**  
*Joseph P. Hughes, RVT, RVS*
- MURRAY HILL SUITE 9. **Case Interpretation Potpourri**  
*Laurence Needleman, MD*
- 1:40 – 1:45 **Transition to Plenary Sessions**  
**(Murray Hill Suites East and West, 2nd Floor)**

SESSION 20

VENOUS DISEASE CHALLENGES

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

- 1:45 – 1:54 **Challenging The Paradigm: How The Vein Valves Really Work**  
*Mark H. Meissner, MD*
- 1:54 – 2:03 **Manifestations Of Venous Hypertension In The Extremities: Unusual Venous Disease**  
*Phillip J. Bendick, PhD, RVT*
- 2:03 – 2:12 **Detection Of Chronic Venous Obstruction**  
*Nicos Labropoulos, BSc (Med), PhD, DIC, RVT*
- 2:12 – 2:21 **Calf Vein DVT Controversies**  
*Laurence Needleman, MD*
- 2:21 – 2:30 **Common Non-Thrombotic Pathology Encountered During The Leg Vein Evaluation: How To Evaluate And Report Your Findings**  
*Leslie M. Scoutt, MD*
- 2:30 – 2:39 **Evaluation Of Pelvic Congestion Syndrome**  
*Mark H. Meissner, MD*
- 2:39 – 2:48 **IVC Filters...Friend Or Foe?**  
*Richard C. Pennell, MD*
- 2:48 – 2:57 **How Long To Anticoagulate After DVT: Duplex Imaging Guides Treatment Duration**  
*Gregory L. Moneta, MD*
- 2:57 – 3:10 **Panel Discussion**
- 3:10 – 3:20 **Break – Visit Exhibits (South Corridor, 2nd Floor)**



SESSION 21

ULTRASOUND BEFORE, DURING AND AFTER ENDOVASCULAR INTERVENTIONS

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

- 3:20 – 3:29 Rational Use Of Duplex Ultrasonography For Surveillance Post-Endovascular Aneurysm Repair (EVAR)  
*Robert M. Zwolak, MD, PhD*
- 3:30 – 3:39 Ultrasound Imaging For EVAR Surveillance: Focus On Endoleak Or Aneurysm Size: Can The Examination Be Streamlined And Technical Tips To Facilitate The Exam  
*Phillip J. Bendick, PhD, RVT*
- 3:40 – 3:49 Endovenous Thermal Ablation: Lessons Learned Over A 12-Year Period  
*Anil P. Hingorani, MD*
- 3:50 – 3:59 Ultrasound Guided Foam Sclerotherapy: The Next Frontier For Endovenous Therapy  
*Natalie A. Marks, MD, RVT, RPVI*
- 4:00 – 4:09 Assessment And Treatment Of Iliac Vein Obstructions With IVUS And Venography  
*Enrico Ascher, MD*

SESSION 22

NOVEL TECHNIQUES AND EVOLVING CONCEPTS RELATED TO CEREBROVASCULAR CLINICAL ISSUES

*Moderator:* Phillip J. Bendick, PhD, RVT

- 4:10 – 4:20 Using Ultrasound To Diagnose Fibromuscular Dysplasia: Interesting Cases  
*Heather L. Gornik, MD*
- 4:21 – 4:31 Carotid Duplex Surveillance Is Over-Utilized And Is Not Necessary After CEA With Patch Closure  
*Ali F. AbuRahma, MD*
- 4:32 – 4:42 Contrast Enhanced 3D Duplex And Carotid Artery Flow Dynamics To Detect Plaque Changes And Identify High Risk Asymptomatic Patients For Invasive Treatment  
*Brajesh K. Lal, MD*
- 4:43 – 4:53 The Promise Of 3D Carotid Ultrasound And The Value Of Carotid Plaque Motion Analysis  
*Andrew N. Nicolaides, MS*
- 4:54 – 5:04 Alternate Parameters For Detecting Intracerebral Vasospasm Using Transcranial Doppler  
*Steven M. Hertz, MD, RVT*
- 5:05 – 5:25 Panel Discussion (Combined Sessions 21 and 22)
- 5:25 – 5:35 Closing Remarks And Raffle Drawing (You Must Be Present To Win)  
*George L. Berdejo, BA, RVT*  
*Natalie A. Marks, MD, RVT, RPVI*
- 5:35 Symposium Ends



# **WORKSHOP ROTATIONS**

AVIDsymposium  
**2015**  
Syllabus



**AVIDsymposium 2015**  
**WORKSHOP ROTATIONS SCHEDULE**  
**FRIDAY - SATURDAY, NOVEMBER 20-21, 2015**

**WORKSHOP ROTATIONS**

	MURRAY HILL SUITE (2ND FLOOR) ROOM 1	ROOM 2	ROOM 3	ROOM 4	ROOM 5	ROOM 6	ROOM 7		
FRIDAY, NOVEMBER 20 <sup>TH</sup> 1:05 PM – 2:00 PM <b>ROTATION 1</b> Americas Hall, 2nd Floor	Interpreting with the Masters: Clinical Conundrums in Carotid Imaging: A Case Study Review  L. Needleman R. Pennell H. Gornik	Interpreting with the Masters: Adventures in Unusual Abdominal and Upper Extremity Vein Cases  L. Scoutt B. Sariani	Interpreting with the Masters: Lower Extremity Arterial and Venous Cases  N. Marks N. Labropoulos	More on Cardiac Effects on Peripheral Imaging: Cardiac Influence on Peripheral Vascular Arterial, Venous and Carotid Studies – A Case Study Analysis  C. Miranda D. Williams	Billing and Coding  J. Hughes W. Schroedter	Test Taking Strategies  F. Miele	IAC Vascular Testing: New QI Requirements  S. Katanick		
SATURDAY, NOVEMBER 21 <sup>ST</sup> 10:45 AM – 11:45 AM <b>ROTATION 2</b> SUTTON Complex, 2nd Floor	Case Interpretation Potpourri  L. Needleman	Carotid Imaging  R. Dubin	LE Venous – DVT  W. Schroedter K. Portlatin	LE Venous – Chronic Venous Insufficiency Testing  N. Labropoulos	Hemodialysis Access  S. Gustavson	Lower Extremity Arterial Imaging  N. Marks	Renal Artery Imaging  C. Owen	Basic Echocardiography for the Vascular Sonographer/ Technologist  D. Williams	CLINTON SUITE  CLINTON SUITE  CLINTON SUITE  CLINTON SUITE  CLINTON SUITE
SATURDAY, NOVEMBER 21 <sup>ST</sup> 12:45 PM – 1:40 PM <b>ROTATION 3</b> SUTTON Complex, 2nd Floor	Case Interpretation Potpourri  L. Needleman	Carotid Imaging  R. Dubin	LE Venous Reflux  W. Schroedter	LE Venous – DVT  W. Del Valle	Hemodialysis Access  S. Gustavson	Lower Extremity Arterial Imaging  A. Kupinski	Renal Artery Imaging  C. Owen	Basic Echocardiography for the Vascular Sonographer/ Technologist  D. Williams	CLINTON SUITE  CLINTON SUITE  CLINTON SUITE  CLINTON SUITE



**FACULTY LISTING AND  
FACULTY DISCLOSURE STATEMENT**

AVIDsymposium  
**2015**  
Syllabus





## A

---

**Ali F. AbuRahma, MD**  
*Charleston, West Virginia*

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

**Enrico Ascher, MD**  
*Brooklyn, New York*

## B

---

**Phillip J. Bendick, PhD, RVT, FSVU**  
*Royal Oak, Michigan*

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

## C

---

**Joshua Cruz, RVT**  
*New Haven, Connecticut*

## D

---

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

**Richard Dubin, AAS-DMS, RVT, RDMS.**  
*Bronx, New York*

## E

---

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

## G

---

**Antonios P. Gasparis, MD**  
*Stony Brook, New York*

**David L. Gillespie, MD**  
*Fall River, Massachusetts*

**Heather L. Gornik, MD**  
*Cleveland, Ohio*

**Susan M. Gustavson, RVT**  
*New York, New York*

## H

---

**John (Jeb) W. Hallett, MD**  
*Charleston, South Carolina*

**Steven M. Hertz, MD, RVT**  
*Livingston, New Jersey*

**Anil P. Hingorani, MD**  
*Brooklyn, New York*

**Joseph P. Hughes, RVT, RVS, FSVU**  
*Taunton, Massachusetts*

## J

---

**Glenn Jacobowitz, MD**  
*New York, New York*

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

## K

---

**Sandra L. Katanick, RN, RVT, CAE, FSVU**  
*Ellicott City, Maryland*

**Frederick Kremkau, PhD**  
*Winston-Salem, North Carolina*

**Ann Marie Kupinski, PhD, RVT, FSVU**  
*Albany, New York*

## L

---

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

**Brajesh K. Lal, MD**  
*Baltimore, Maryland*

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

**Michael P. Lilly, MD**  
*Baltimore, Maryland*

## M

---

**Thomas S. Maldonado, MD**  
*New York, New York*

**Natalie A. Marks, MD, RPVI, RVT**  
*Brooklyn, New York*

**Mark H. Meissner, MD**  
*Seattle, Washington*

**Frank Miele, MSEE**  
*Forney, Texas*

**Carol Miranda, RVT, RDMS, RDCS, FSVU**  
*Richmond, Virginia*

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

## N

---

**Deepak G. Nair, MD, MS, RVT**  
*Sarasota, Florida*

**Laurence Needleman, MD**  
*Philadelphia, Pennsylvania*

**Andrew N. Nicolaidis, MS, FRCS**  
*Nicosia, Cyprus*

## O

---

**Mark A. Oliver, MD, RVT, RPVI, FSVU**  
*Morristown, New Jersey*

**Cindy A. Owen, RVT, RDMS, FSDMS**  
*Powhatan, Arkansas*

## P

---

**Peter J. Pappas, MD**  
*Brooklyn, New York*

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

**Kelvin Portalatin, AA, RVT**  
*Bronx, New York*

## **R**

---

**Sean P. Roddy, MD**

*Albany, New York*

## **S**

---

**Sergio X. Salles-Cunha, PhD, RVT, FSVU**

*Itanhaem, SP, Brazil*

**Bhagwan Satiani, MD, MBA**

*Columbus, Ohio*

**William B. Schroedter, BS, RVT, RPhS, FSVU**

*Venice, Florida*

**Leslie M. Scoutt, MD**

*New Haven, Connecticut*

**Michael J. Singh, MD**

*Pittsburgh, Pennsylvania*

**William D. Suggs, MD**

*White Plains, New York*

## **T**

---

**Apostolos K. Tassiopoulos, MD**

*Stony Brook, New York*

## **W**

---

**David M. Williams, MS, RDCS, RVT**

*Florence, South Carolina*

## **Z**

---

**Robert M. Zwolak, MD, PhD**

*Lebanon, New Hampshire*

# FACULTY DISCLOSURE STATEMENT

ADVANCES IN VASCULAR IMAGING AND DIAGNOSIS  
(AVIDsymposium)  
NOVEMBER 20-21, 2015

In accordance with the Standards for Commercial Support issued by the Accreditation Council for Continuing Medical Education (ACCME), The Cleveland Clinic Foundation Center for Continuing Education requires resolution of all faculty conflicts of interest to ensure CME activities are free of commercial bias.

**The following faculty have indicated that they may have a relationship which, in the context of their presentation(s), could be perceived as a potential conflict of interest:**

**Heather L. Gornik**

*Company(ies): IAC Vascular Testing Society of America, Summit Doppler Systems, Flexlife Health*

*Relationship(s): Board Membership*

**The following faculty have indicated they have no relationship which, in the context of their presentation(s), could be perceived as a potential conflict of interest:**

Ali F. AbuRahma	Frederick Kremkau	Kelvin Portalatin
Fernando Amador	Ann Marie Kupinsk	Sean P. Roddy
Enrico Ascher	Nicos Labropoulos	Sergio X. Salles-Cunha
Phillip J. Bendick	Brajesh K. Lal	Bhagwan Satiani
George L. Berdejo	Luis R. Leon	William B. Schroedter
Joshua Cruz	Michael P. Lilly	Leslie M. Scutt
William N. Del Valle	Thomas S. Maldonado	Michael J. Singh
Richard Dubin	Natalie A. Marks	William D. Suggs
Steve Elias	Mark H. Meissner	Apostolos K. Tassiopoulos
Antonios P. Gasparis	Frank Miele	David M. Williams
David L. Gillespie	Carol Miranda	Robert M. Zwolak
Susan M. Gustavson	Gregory L. Moneta	
John (Jeb) W. Hallett	Deepak G. Nair	
Steven M. Hertz	Laurence Needleman	
Anil P. Hingorani	Andrew N. Nicolaides	
Joseph P. Hughes	Mark A. Oliver	
Glenn Jacobowitz	Cindy A. Owen	
Anne M. Jones	Peter J. Pappas	
Sandra L. Katanick	Richard C. Pennell	

AVIDsymposium  
**2015**  
**Syllabus**



**CME CERTIFICATE AND  
COURSE EVALUATION FORM**

AVIDsymposium  
**2015**  
**Syllabus**



# CME CERTIFICATES AND COURSE EVALUATION FORM

Your CME certificate will be available online immediately following the meeting. Please refer to the instructions below on how to obtain your certificate and complete a brief, optional course evaluation.

## How to Apply for AVIDsymposium *AMA PRA CATEGORY 1 CME Credit™* using My CME:

**Step 1:** Go to: [www.cfcme.org/AVID2015-live](http://www.cfcme.org/AVID2015-live)

**Step 2:** Login using your existing 'My CME' login

Please note: If you can't remember your password, please use the 'forgot password' link

Forgot your password? Please click the following link to reset: [Click here](#)

EXAMPLE Login:

Email Address: [johndoe@aol.com](mailto:johndoe@aol.com) Password: 999999

PLEASE NOTE: If you did not provide an email address at registration please login using:

Email Address: [johndoe@noemail.com](mailto:johndoe@noemail.com) Password: 999999

If both of these login options fail please create a new account by clicking on the following link and completing the information: [cfcme.org/newprofile](http://cfcme.org/newprofile). Once your account has been created you will be returned to the login page.

Please login with the email address and password you chose.

**Step 3:** Select the number of credits you are claiming from the dropdown list. Complete the Evaluation form and click 'submit'. You will see your certificate displayed on screen. You may then print it. The database will store it for reprinting at a future date as required.

You can log in to: [cfcme.org/cmelogin](http://cfcme.org/cmelogin) at any time to access your certificates, transcript and self-report other CE items to the 'My CE' Log. Etc.

**Step 4:** Please take the time to click on the 'Edit Profile' button after logging in and verify that all your information is correct (as well as change your password for future logins if desired). It is important to note that your certificate type (Physician/Non-Physician) is dependent on the 'Professional Category' field. If you are seeing the wrong certificate type, switch your category. This will automatically update the certificate which you can view by clicking on the 'MyCME home' button to refresh the page and then click on the 'participation date' of the certificate that you wish to print/reprint.











Handwriting practice lines consisting of 24 horizontal lines spaced evenly down the page.

**NOTES**









# AVID

Advances in Vascular Imaging and Diagnosis

## SAVE THE DATE!

Friday - Saturday, November 18-19, 2016

# 27<sup>th</sup> Symposium & Workshops

on Management and Clinical Issues

Symposium Chair

**George L. Berdejo, BA, RVT, FSVU**

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

Symposium Co-Chair

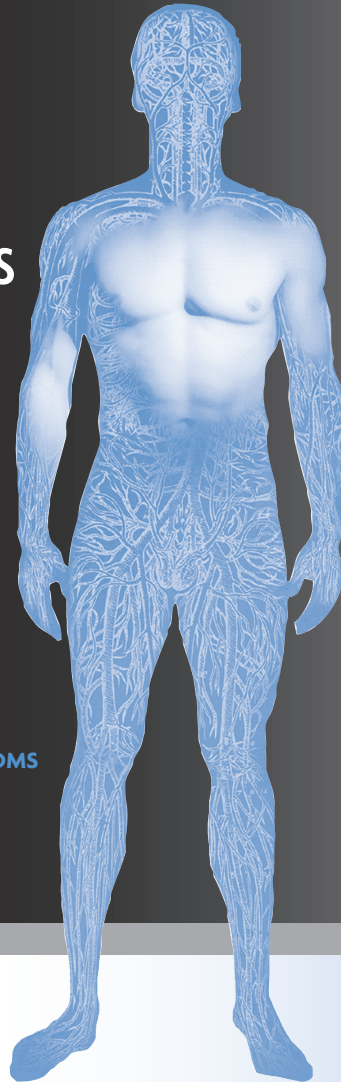
**Nicos Labropoulos, BSc (Med), PhD, DIC, RVT**

**Laurence Needleman, MD**

**Frank J. Veith, MD**

Honorary Chair

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



Sponsored by



**Cleveland Clinic**



**Hilton**

[www.AVIDsymposium.org](http://www.AVIDsymposium.org)