FINAL PROGRAM

July 21–28, 2018

Seven-Night Alaskan Cruise from Seattle, WA

Four Stops: Juneau, Skagway, Ketchikan, and Victoria, B.C.

Course Chair
Steven J. Lester, MD, FASE
Mayo Clinic
Scottsdale, AZ

Course Highlights:

• Assessment of systolic and diastolic function, quantitative Doppler, and stress echo
• Acquisition and processing of newer imaging techniques including strain and 3D imaging
• In depth review of valvular heart disease and new structural heart disease interventions
Welcome Message

Welcome to the maiden voyage of Echo Alaska, a premier program organized by the American Society of Echocardiography.

Echo Alaska is designed to provide a practical review of the current uses of echocardiography in a relaxed and informal environment. Traditional topics in the field of echocardiography, including the assessment of systolic and diastolic function, quantitative Doppler, and stress echocardiography will be presented. In addition, there will be a focus on newer imaging acquisition and processing techniques such as strain and 3D imaging. We will have both formal discussions and workshops allowing for a detailed understanding of both the clinical and practical applications of these techniques. In keeping with the emerging field of structural heart disease and catheter-based valve interventions there will be detailed discussion on the “morphophysiological” aspects of valvular heart disease and what we, the echocardiographer, need to know to support these interventions.

Alaska is beautiful in the summer allowing for amazing outdoor activities. The Ruby Princess is a beautiful luxury ship. I am confident that we will have an amazing experience together learning and exploring. Welcome aboard!

Faculty

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Mayo Clinic
Scottsdale, AZ

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Echo on the Inside Passage of Alaska

The Inaugural Echo on the Inside Passage of Alaska will take place on an Alaskan cruise as a new educational opportunity that differs from ASE’s other courses by providing attendees with a small, intimate environment to learn from the experts.

Target Audience

Echo on the Inside Passage of Alaska’s program is designed for adult and pediatric cardiologists, cardiovascular surgeons, anesthesiologists, radiologists, nurses, sonographers, and fellows in training. Participants should have a practical knowledge of echocardiography.

Learning Objectives

Upon completion of this program, participants will be better able to:

• Utilize 2D and 3D echocardiography in the assessment of mitral, aortic, and tricuspid valve disease.
• Demonstrate how to evaluate left ventricular diastolic function.
• Analyze left ventricular function with state-of-the-art echocardiographic technology including strain and 3D imaging.
• Facilitate implementation of information presented into clinical practice.

Disclaimer

The information provided during this CME activity is for continuing education purposes only and is not meant to substitute for the independent medical judgment of a healthcare provider relative to diagnostic and treatment options of a specific patient’s condition.

Accreditation and Designation

The American Society of Echocardiography is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

The American Society of Echocardiography designates this live activity for a maximum of 22 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity. Successful completion of this CME activity enables the participant to earn up to 22 MOC points in the American Board of Internal Medicine’s (ABIM) Maintenance of Certification (MOC) and the American Board of Anesthesiology’s (ABA) Maintenance of Certification in Anesthesiology (MOCA) program. Participants will earn MOC points equivalent to the amount of CME credits claimed for the activity.

Daily breakdown of CME credits:

Sunday, July 22, 2018 = 7.0 hours
Monday, July 23, 2018 = 2.5 hours
Wednesday, July 25, 2018 = 2.0 hours
Thursday, July 26, 2018 = 4.0 hours
Friday, July 27, 2018 = 6.5 hours

The ACCME and the European Board of Accreditation in Cardiology (EBAC) recognize each other’s accreditation systems as substantially equivalent. To obtain EBAC credit for participation in this activity, submit evidence of participation directly to EBAC (www.ebac-cme.org).

ARDMS, CCI, and Sonography Canada recognize ASE’s certificates and have agreed to honor the credit hours toward their registry requirements for sonographers.

All or a portion of this educational activity may meet the CME requirement for IAC Echocardiography accreditation.

This activity is eligible for Section 1 credits in the Royal College of Physicians and Surgeons of Canada’s Maintenance of Certification (MOC) Program. Participants must log into MAINPORT to claim this activity.

Disclosure

ASE is committed to ensuring that its educational mission and all educational programs are not influenced by the special interests of any corporation or individual, and its mandate is to retain only those speakers whose financial interests can be effectively resolved to maintain the goals and educational integrity of the program. While a monetary or professional affiliation with a corporation does not necessarily influence a speaker’s presentation, the Essential Areas and Policies of the ACCME require that any relationships that could possibly conflict with the educational value of the program be resolved prior to the educational session and disclosed to the audience. In accordance with these policies, ASE implemented mechanisms prior to the planning and implementation of this CME activity to identify and resolve conflicts of interest for all individuals in a position to control content. Disclosure information is referenced and can be found on page 7 of this program.
How to Obtain CME

To claim your CME for the Inaugural Echo on the Inside Passage of Alaska, please follow the steps below using your Mozilla Firefox, Google Chrome or Safari browser. Internet Explorer will not work. The deadline to claim credit is August 29, 2018.

ASE Members:
1. Go to ASEcho.org and log in to the Member Portal with your username (email) and password.
   a. If you forget your password, simply click "Retrieve" under the login.
2. Click on ASEUniversity. This will take you directly to your ASEUniversity account.

Nonmembers:
1. Go to ASEUniversity.org.
2. Log into your existing account or create a new one.

To Claim Credit:
3. On the ASEUniversity homepage, click My Account at the top right of the page.
4. Under My Account, click Add Access Code on the left sidebar and enter the code, “ALASKA2018”
5. Verify your registration information. Please be sure to use the same information that you used to register for the event.
6. Once verified, click CE Information tab and Take Exam button to claim your CME credit. CME credits are not earned until the entire evaluation has been completed.
7. Your certificate will be available for immediate download and can also be found under My Account in the My Transcripts.

Remember to enter your ABIM number and birthdate if you choose to have MOC points for this meeting submitted to ABIM. There is a space for this information on the first page of the evaluation.

Cruise schedule and things to experience while on your Alaska Inside Passage Cruise:

Saturday, July 21 – Depart Seattle, Washington
- Pike Place Market
- Space Needle
- Pioneer Square
- Wine Tasting
- Boeing’s Future of Flight Aviation Center
- Hiram Chittenden Locks
- International District
- Lake Union

Sunday, July 22 – At Sea

Monday, July 23 – Juneau, Alaska
- Mendenhall Glacier
- Outdoor Adventures
- Whale Watching
- Glacier Flightseeing
- Macaulay Salmon Hatchery
- Glacier Gardens
- Dog Sledding
- Mount Roberts Tramway

Tuesday, July 24 – Skagway, Alaska
- White Pass & Yukon Route Railroad
- Outdoor Adventures
- Klondike Summit
- Gold Rush History
- Yukon (Canada)
- Haines
- Red Onion Saloon
- Dog Sledding

Wednesday, July 25 – Glacier Bay National Park (Scenic Cruising)

Thursday, July 26 – Ketchikan, Alaska
- Outdoor Adventures
- Totem Bight State Park
- Saxman Native Village
- Alaska Rainforest Sanctuary
- Misty Fjords National Monument
- Great Alaskan Lumberjack Show
- George Inlet Lodge
- Creek Street

Friday, July 27 – Victoria, British Columbia
- Butchart Gardens
- Legislative Buildings
- Fairmont Empress Hotel
- Beacon Hill Park
- Victoria Butterfly Gardens
- Craigdarroch Castle
- Victoria Pub
- Whale Watching

Saturday, July 28 – Arrive back in Seattle, Washington

Onboard Experience
- Movies Under the Stars®
- The Sanctuary (Adults-only retreat)
- Lotus Spa® & Fitness Center
- Casino gaming
- Top-headliner comedians
- Broadway-style production shows
- Alaska Enrichment programs
- Freshly prepared cuisine

For more information and itinerary highlights, please visit princess.com/learn/cruise-destinations/alaska-cruises/roundtrip/seattle/index.jsp. Please note that all shore excursions are at your own expense.
Schedule of Events

SUNDAY, JULY 22, 2018
Fiesta Deck 6 Conference Center

7:00 AM  Registration
7:45 AM  Welcome and Course Introduction
S. Lester

AORTIC VALVE DISEASE
Moderator: S. Lester

8:00 AM  Echocardiographic Evaluation of Aortic Stenosis
Severity
W. Zoghbi

8:30 AM  Aortic Stenosis: How to Define Severity When There
is Area Gradient Mismatch
S. Lester

9:00 AM  TAVR: What Does the Imager Need to Know Pre-
Implant, During Implant, and Post-Implant
S. Mankad

9:30 AM  Aortic Regurgitation: Get with the Guidelines
T. Binder

10:00 AM  Break

MITRAL VALVE DISEASE
Moderator: S. Lester

10:15 AM  Echocardiographic Evaluation of Mitral
Regurgitation: How to Characterize Both the
"Anatomy" and Severity of Regurgitation
W. Zoghbi

10:45 AM  Percutaneous Options to Treat Mitral Regurgitation:
What Does the Imager Need to Know?
S. Mankad

11:30 AM  No Longer the Forgotten Valve: How to Characterize
Both the “Anatomy” and Severity of Regurgitation
S. Lester

12:00 PM  Let’s Better Understand the New Frontier for
Percutaneous Intervention
V. Rigolin

12:30 PM  Lunch Break

TRICUSPID REGURGITATION
Moderator: S. Lester

11:30 AM  No Longer the Forgotten Valve: How to Characterize
Both the “Anatomy” and Severity of Regurgitation
S. Lester

12:00 PM  Let’s Better Understand the New Frontier for
Percutaneous Intervention
V. Rigolin

12:30 PM  Lunch Break

PROSTHETIC VALVES
Moderator: V. Rigolin

2:00 PM  Evaluation of Aortic Valve Prostheses: A Case-
based Approach
V. Rigolin

2:30 PM  Evaluation of Mitral Valve Prostheses: A Case-
based Approach
T. Binder

3:00 PM  Endocarditis: Evaluation and Management
R. Mankad

3:30 PM  Break

3:45 PM  Read with the Experts: Review Interesting and
Complex Valve Disease Cases
T. Binder, S. Lester, R. Mankad, V. Rigolin, W. Zoghbi

5:00 PM  Adjourn

MONDAY, JULY 23, 2018
READ WITH THE EXPERTS: INTERESTING CASES INCLUDING
CASES WHERE 3D IMAGES MADE A DIFFERENCE
Moderator: S. Mankad

8:00 AM  T. Binder, S. Lester, R. Mankad, S. Mankad, V. Rigolin, W.
Zoghbi

10:30 AM  Adjourn

WEDNESDAY, JULY 25, 2018
DIASTOLOGY 101
Moderator: S. Lester

4:00 PM  Echocardiographic Evaluation of Diastolic Function
S. Lester

4:30 PM  Pericardial Disease: Constriction and Tamponade
R. Mankad

5:00 PM  Diastology: Cases and Practice Review
S. Lester

6:00 PM  Adjourn
## THURSDAY, JULY 26, 2018

### LEFT VENTRICLE
**Moderator: T. Binder**

1:00 PM  
**How Should I Evaluate and Report Left Ventricle Size and Function?**  
T. Binder

1:30 PM  
**Myocardial (Strain) Imaging: What Is This? Research Tool or Real Clinical Application?**  
S. Lester

2:00 PM  
**3D Evaluation of Left Ventricular Volume and Ejection Fraction: Show Me How to Do This?**  
T. Binder

2:30 PM  
**Contrast Echocardiography: What, When, and How to Use Ultrasonic Enhancing Agents?**  
V. Rigolin

3:00 PM  
**Break**

### RIGHT VENTRICLE
**Moderator: R. Mankad**

3:30 PM  
**How Should I Evaluate and Report Right Ventricle Size and Function?**  
R. Mankad

4:00 PM  
**Right Heart Hemodynamics: Echocardiographic Evaluation of Right Heart Hemodynamics**  
S. Mankad

4:30 PM  
**Read with the Experts: Interesting and Complex Cases**  
R. Mankad, S. Mankad, V. Rigolin

5:30 PM  
**Adjourn**

## FRIDAY, JULY 27, 2018

### STRESS ECHOCARDIOGRAPHY
**Moderator: R. Mankad**

8:00 AM  
**Indications and Interpretation**  
W. Zoghbi

8:30 AM  
**Beyond Coronary Artery Disease**  
V. Rigolin

9:00 AM  
**Read with the Experts: Case Examples in Stress Echocardiography**  
V. Rigolin, W. Zoghbi

9:30 AM  
**Strain: How to Acquire and Measure Strain**  
T. Binder, S. Mankad

10:30 AM  
**Break**

### CARDIOMYOPATHIES AND SYSTEMIC DISEASE
**Moderator: S. Lester**

11:00 AM  
**Hypertrophic Cardiomyopathy: Evaluation and Management**  
W. Zoghbi

11:30 AM  
**Hypertrophic Cardiomyopathy or Phenocopy? The Walls of the Left Ventricle are Thick. Why?**  
S. Lester

12:00 PM  
**Echocardiography in Systemic Disease**  
S. Mankad

12:30 PM  
**Lunch Break**

### ECHO EMERGENCIES
**Moderator: V. Rigolin**

2:00 PM  
**Acute Aortic Syndromes**  
V. Rigolin

2:30 PM  
**Complications of Myocardial Infarction**  
R. Mankad

3:00 PM  
**Break**

### ECHO POTPOURRI
**Moderator: V. Rigolin**

3:30 PM  
**Watchman Device: For Whom and What Does the Imager Need to Know?**  
S. Mankad

4:00 PM  
**LVADs: Basic Approach to Imaging and What to Report**  
T. Binder

4:30 PM  
**Imaging For Cardiovascular Risk Prediction**  
S. Lester

5:00 PM  
**Adjourn**
Faculty Disclosures

The following faculty members do not have any relationships with industry/commercial supporters to disclose:

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Rekha Mankad, MD, FASE
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American Energy Industries (Stock Ownership); Myriad Genetics (Stock Ownership)
Douglas Shook, MD, FASE – Edwards Life Sciences (Research Grant Support, Including PI); Liva-Nova (Education); Boston Scientific (Education); Edwards Lifesciences (Consultant/Advisor)
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