

## General Information



**Universal Seminars** is dedicated to fulfilling your educational needs in ultrasound training. Our state-of-the-art classroom and scanning laboratory is located in our Bedford Hills, NY Training Facility (Near all 4 NYC Airports). Convenient on-site parking. Universal is recognized as the leader in ultrasound education for veterinarians and technicians, offering accredited education programs that address the rapid pace of change in technology and applications.

### FLIGHT ARRANGEMENTS

Each attendee is responsible for making his/her own flight arrangements. Please plan to arrive on the evening preceding the first day of class. Most classes end by 5:00 pm on the second day, therefore, please make sure you have ample time for travel and check-in for your return flights.

### HOTEL RESERVATIONS

Universal has made arrangements for a corporate rate for seminar attendees. Simply advise that you are attending under the "UNIVERSAL" Block.

Must reserve 20 days in advance to receive discounted hotel rate!

Holiday Inn, Mt. Kisco - (888)452-5771

Attendees are responsible for making their own reservations and for all hotel costs. Please plan to arrive on the evening preceding the first day of class and depart the morning of the last day of class.

### TRANSPORTATION TO THE HOTEL / CLASS

Rental Cars are advised for attendees arriving via plane. Car Services and Taxis are also available.

### TRANSPORTATION TO THE SEMINARS

Each attendee is responsible for his/her own transportation to and from the Seminars. **No shuttle service is available.**

### ATTIRE

Attire is casual. Keep in mind you will be scanning live animals.

### MEALS

Continental Breakfast and Lunch will be provided.

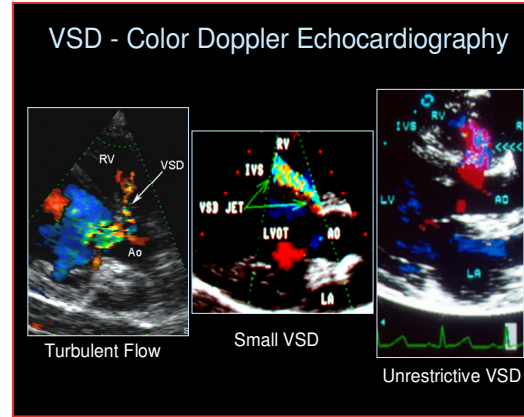
First Class Mail  
U.S. Postage Paid  
White Plains, NY  
Permit No. 8605



Universal Seminars, Inc.  
299 Adams Street  
Bedford Hills, NY 10507

# Small Animal Advanced Echocardiography

**A Comprehensive  
3-Day Course,  
Workshop & Laboratory**



### Instructed By:

**John D. Bonagura, DVM, MS, DACVIM**  
**Matthew Miller, DVM, MS, DACVIM**  
**Carl Sammarco, BVSc, MRCVS, DACVIM**  
**Jean-Paul Petrie, DVM, DACVIM**

**November 7-9, 2008**



299 Adams Street  
Bedford Hills, NY 10507  
Ph: 914-666-6200  
Fax: 914-666-2454

Email: [UniversalSeminars@UniversalUltrasound.com](mailto:UniversalSeminars@UniversalUltrasound.com)

REGISTRATION FORM - **Advanced Small Animal Echocardiography Course, Laboratory & Workshop**  
MAILING ADDRESS: Universal Seminars, 299 Adams Street, Bedford Hills, NY 10507  
**FAX TO 914 / 666-2454**

Name: \_\_\_\_\_ License Number for credits \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

Present Ultrasound System: \_\_\_\_\_

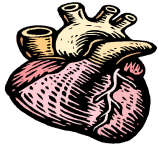
Check enclosed in amount of \$ \_\_\_\_\_ as payment for \_\_\_\_\_ attendees - Echocardiography Workshop  
**\$2,000—3 Full Days**

**Please make checks payable to "UNIVERSAL SEMINARS"**

Credit Card No. \_\_\_\_\_ Expiration: \_\_\_\_\_ MC / Visa / AmEx

Signature: \_\_\_\_\_

Cancellation Policy: Tuition non-refundable; full credit may be applied to the next course. But not guaranteed.



# ADVANCED ECHOCARDIOGRAPHY

## COURSE OBJECTIVES:

At the end of this course, the participant will be able to:

- ♥ Discuss, identify and perform a complete diagnostic study from the right and left hemithorax.
- ♥ Measure 2D, M-mode and Doppler echocardiograms to quantify cardiac size and function.
- ♥ Compare and contrast the usefulness of 2D and M-mode Echocardiography, and of PW, CW and color Doppler.
- ♥ Recognize clinical uses of Doppler for estimation of intravascular pressures.
- ♥ Describe a complete Doppler examination and obtain Doppler derived flow signals from the heart and great vessels.
- ♥ Discuss use of echo and Doppler in recognition, staging and management of congenital and acquired heart disease.
- ♥ Describe the typical imaging and Doppler echocardiographic findings of common acquired and congenital heart diseases.

## ACCREDITATION & CREDITS

*This course meets the requirements for 24 hours continuing education in jurisdictions which recognize AAVSBs RACE approval; however, participants should be aware that some boards have limitations on the number of hours accepted in certain categories and or restrictions on certain methods of delivery of continuing education.*

## Friday Agenda

- 7:30 Registration & Coffee  
Notes Distributed
- 8:00 Welcome—Review of Course Goals  
Class 1 - 2D & M-Mode Examinations  
Class 2 - Quantitation of 2D & M-Mode Studies  
Break - Discussion & Coffee  
Class 3 - 2D & M-mode Pattern Recognition  
Lunch & Informal Discussion  
Class 4 - Doppler Echocardiography  
Class 5 - Pericardial Diseases & Cardiac Related Tumors  
Break - Discussion & Coffee  
Class 6 - Valvular Heart Disease 1 (Mitral & Tricuspid Valves)
- 6:00 Adjourn - Informal Discussions & Reception
- 6:30 Optional PM Technical Session and Demonstration & Reception

## Saturday Agenda

- 7:30 Continental Breakfast
- 8:00 Preview of Workshops & Labs/  
Group Designations  
Workshop 1 - 2D & M-Mode Echocardiography  
Coffee Refill  
Workshop 2 - Doppler Echocardiography  
Coffee Break & Discussion  
Technical Demonstration  
Workshop 3 - Color Flow & Spectral Doppler Image Recognition and Artifacts  
Laboratory/Workshop Session I (2 Groups)  
Group A Lunch  
Laboratory/Workshop Session II (2 Groups)  
Group B Lunch  
Coffee Refill  
Laboratory/Workshop Session III (2 Groups)  
Laboratory/Workshop Session IV (2 Groups)  
Workshop 4 - Review of Self Assessment Examination  
Informal Discussion
- 6:00 Adjourn / Wine & Cheese Reception

## Sunday Agenda

- 7:30 Coffee & Informal Discussion
- 8:00 Class 1 - Canine Cardiomyopathies  
Class 2 - Feline Cardiomyopathies  
Break  
Class 3 - Pulmonary Hypertension/ Dirofilariasis  
Lunch & Informal Discussion  
Class 4 - Valvular Heart Diseases (Aortic & Pulmonic Valves)  
Class 5 - Common Cardiac Shunts
- 4:00 Course Evaluation & Adjourn

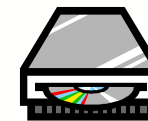
## WHO SHOULD ATTEND:

*Veterinarians and technologists with extensive experience in echocardiography; the course is intensive and not designed for beginners or novices*

**Tuition: \$2,000.00—Three Full Days**

## Includes:

- ▶ Continental Breakfast
- ▶ Luncheon
- ▶ Coffee Breaks
- ▶ Detailed Syllabus
- ▶ CD-Rom of Images and Video Files
- ▶ Hands-on Laboratory Experience
- ▶ Wine & Cheese Reception
- ▶ 24 CE Credits Awarded



## FACULTY

**John D. Bonagura, DVM, MS, DACVIM (Cardiology, Internal Medicine)-Course Director**  
Professor of Veterinary Clinical Sciences, Ohio State University, College of Veterinary Medicine. Dr. Bonagura has published numerous articles in the field of clinical cardiology, is coauthor of a Colour Atlas of Veterinary Cardiology, and he edits Kirk's Current Veterinary Therapy. He is the recipient of distinguished teaching awards both nationally and internationally.

**Matthew W. Miller, DVM, MS, DACVIM (Cardiology)** Associate Professor in the Department of Small Animal Medicine & Surgery, Texas A&M and Adjunct Assistant Professor in the Department of Pediatrics (Cardiology) at Baylor Univ. College of Medicine.

An outstanding educator, Dr. Miller has lectured nationally and internationally. He has published dozens of articles and textbook chapters in clinically relevant areas: echo, heart disease, interventional cardiology.

**Carl D. Sammarco, BVSc, MRCVS, ACVIM (Cardiology)** Dr. Sammarco conducts a cardiology specialty practice in Red Bank, New Jersey, with a clinical emphasis on cardiac imaging and interventional cardiology.

**Jean-Paul Petrie, DVM, DACVIM (Cardiology)** Dr. Petrie is a clinical cardiologist practicing in the Hudson Valley of New York. He holds specific interests in echocardiography and in Feline cardiomyopathies. Dr. Petrie lectures internationally and is involved in clinical echocardiography training. He has published several articles and book chapters.