

# Focused Ultrasound Study

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Centre Hospitalier Universitaire de Montréal



**3rd LATIN AMERICAN COURSE ON  
PERIOPERATIVE ECHOCARDIOGRAPHY AND ULTRASOUND  
Bogota 2012**

Université   
de Montréal



# Disclosure

- Research grant



Instituts de recherche  
en santé du Canada

Canadian Institutes  
of Health Research



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MONTREAL  
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- Unrestricted research grant



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- Speaker fees



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# Objectives

- 1-Develop an approach in the presence of a shock state or hypoxia
- 2-Diagnose at the bedside using ultrasound the most common causes of perioperative shock and hypoxia
- 3-Perform the basic cardiac, pulmonary, vascular and abdominal views

## Lectures

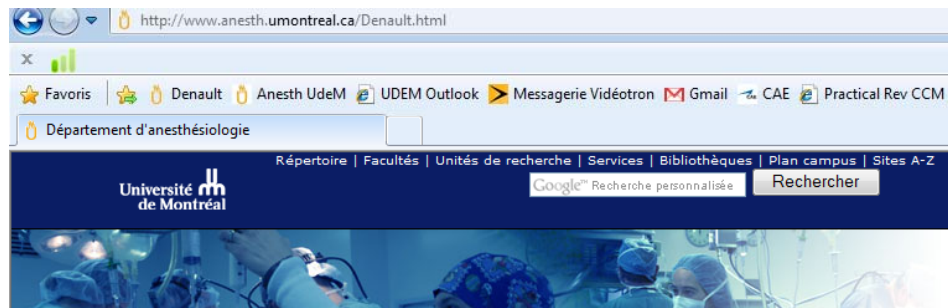
- 08:00-08:30 Focus Cardiac Ultrasound in ICU
- 08:30-09:00 Focus Lung Ultrasound in ICU
- 09:00-09:30 Focus Abdominal Ultrasound in ICU
- 09:30-10:00 Hemodynamic Instability in ICU

## Workshop

- 10:30-12:30 Workshop Focus Ultrasound in ICU Part I
- 13:30-15:00 Workshop Focus Ultrasound in ICU Part II
- 15:00-15:30 Mock exam

# Ressources

[www.anesth.umontreal.ca/Denault.html](http://www.anesth.umontreal.ca/Denault.html)



**2012 Septembre**

**3rd Latin American course on Perioperative Echocardiography and  
Ultrasound  
(Bogota, Columbia)**

Formation prof. continue
Ressources
Nos partenaires
Réalisation



Pour **MAC** [Utiliser ce lien](#) pour installer Flip2Mac

**Présentations**



**2012 Septembre**  
**3rd Latin American course on Perioperative Echocardiography and**  
**Ultrasound**  
**(Bogota, Columbia)**

## GUIDELINES AND STANDARDS

# Guidelines for Performing Ultrasound Guided Vascular Cannulation: Recommendations of the American Society of Echocardiography and the Society of Cardiovascular Anesthesiologists

Christopher A. Troianos, MD, Gregg S. Hartman, MD, Kathryn E. Glas, MD, MBA, FASE, Nikolaos J. Skubas, MD, FASE, Robert T. Eberhardt, MD, Jennifer D. Walker, MD, and Scott T. Reeves, MD, MBA, FASE, for the Councils on Intraoperative Echocardiography and Vascular Ultrasound of the American Society of Echocardiography, *Pittsburgh, Pennsylvania; Lebanon, New Hampshire; Atlanta, Georgia; New York, New York; Boston, Massachusetts; and Charleston, South Carolina*

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(J Am Soc Echocardiogr 2011;24:1291-318.)

**Keywords:** Anatomy, Artery, Cannulation, Femoral, Guidelines, Internal jugular, Pediatric, Peripheral, Subclavian, Ultrasound, Vascular, Venous

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# LES ÉCHOGRAPHIES CIBLÉES RÉALISÉES À L'URGENCE PAR DES MÉDECINS NON RADIOLOGISTES

## Lignes directrices

du Collège des médecins du Québec

*« L'utilisation de l'échographie ciblée par le médecin exerçant à l'urgence est indiquée dans les conditions cliniques suivantes :...*

*évaluation du patient en choc  
ou en arrêt cardiaque..... »*

JANVIER 2008

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COLLÈGE DES MÉDECINS  
DU QUÉBEC

*Une médecine de qualité  
au service du public*





# CHEST

## Consensus Statement

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### **American College of Chest Physicians/ La Société de Réanimation de Langue Française Statement on Competence in Critical Care Ultrasonography\***

*Paul H. Mayo, MD; Yannick Beaulieu, MD; Peter Doelken, MD;  
David Feller-Kopman, MD; Christopher Harrod, MS; Adolfo Kaplan, MD;  
John Oropello, MD; Antoine Vieillard-Baron, MD; Olivier Axler, MD;  
Daniel Lichtenstein, MD; Eric Maury, MD; Michel Slama, MD;  
and Philippe Vignon, MD*

**(CHEST 2009; 135:1050–1060)**

[Home](#) » [ACCP Certificate of Completion Critical Care Ultrasonography Program](#)

## ACCP Certificate of Completion Critical Care Ultrasonography Program

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### Overview

Advance your critical care ultrasonography competence with this all-new program for intensivists seeking structured training.

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3. Pass final test given at CHEST 2011.

# Focused Cardiac Ultrasound in the Emergent Setting: A Consensus Statement of the American Society of Echocardiography and American College of Emergency Physicians

Arthur J. Labovitz, MD, FASE, Chair,\* Vicki E. Noble, MD, FACEP,\*\* Michelle Bierig, MPH, RDCS, FASE,\*  
Steven A. Goldstein, MD,\* Robert Jones, DO, FACEP,\*\* Smadar Kort, MD, FASE,\*  
Thomas R. Porter, MD, FASE,\* Kirk T. Spencer, MD, FASE,\* Vivek S. Tayal, MD, FACEP,\*\*  
and Kevin Wei, MD,\* *St. Louis, Missouri; Boston, Massachusetts; Washington, District of Columbia; Cleveland, Ohio;  
Stony Brook, New York; Omaha, Nebraska; Chicago, Illinois; Charlotte, North Carolina; Portland, Oregon*

**Table 1** Goals of the focused cardiac ultrasound in the  
symptomatic emergency department patient

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Assessment for the presence of pericardial effusion  
Assessment of global cardiac systolic function  
Identification of marked right ventricular and left ventricular  
enlargement  
Intravascular volume assessment

# La leçon d'anatomie du Professeur Tulp



Rembrandt 1632

Antoine Vieillard-Baron  
Michel Slama  
Bernard Cholley  
G rard Janvier  
Philippe Vignon

## **Echocardiography in the intensive care unit: from evolution to revolution?**

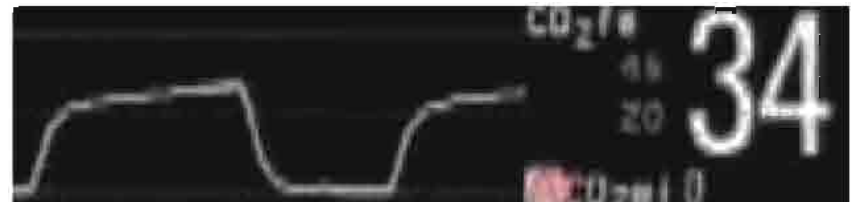
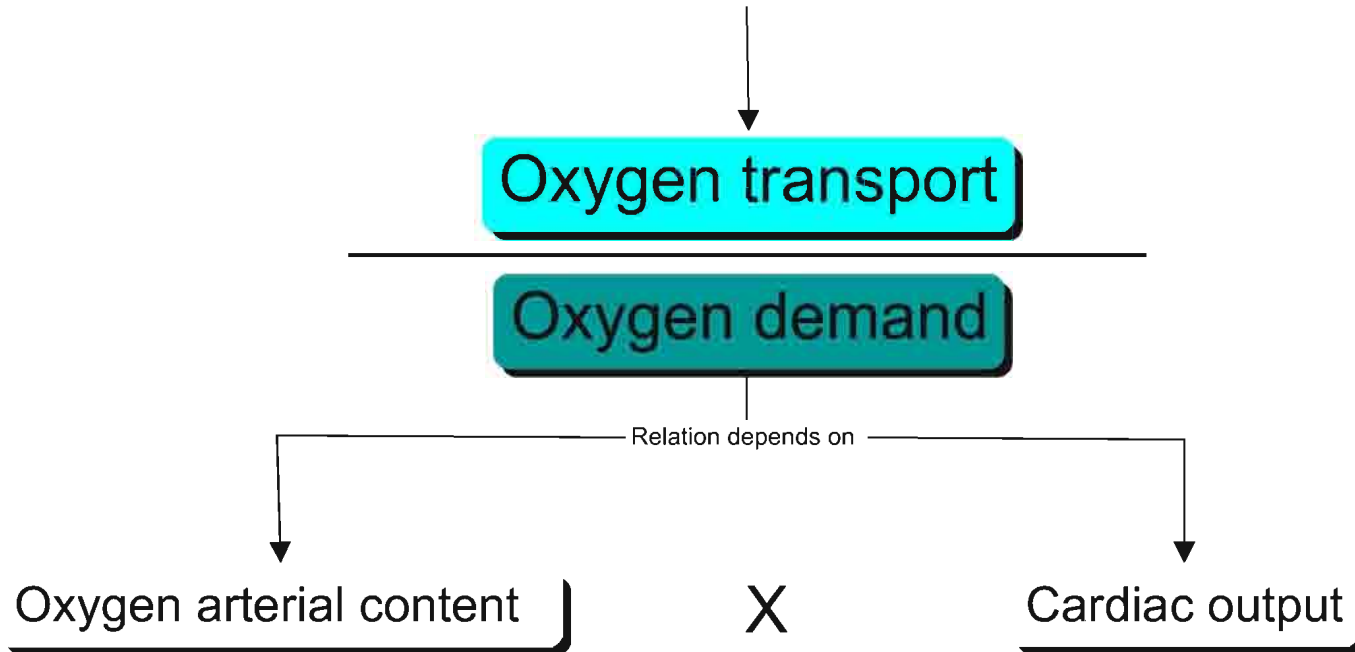




# Bangkok: November 2009



# Hypoxia and hemodynamic instability



# Arthur C. Guyton



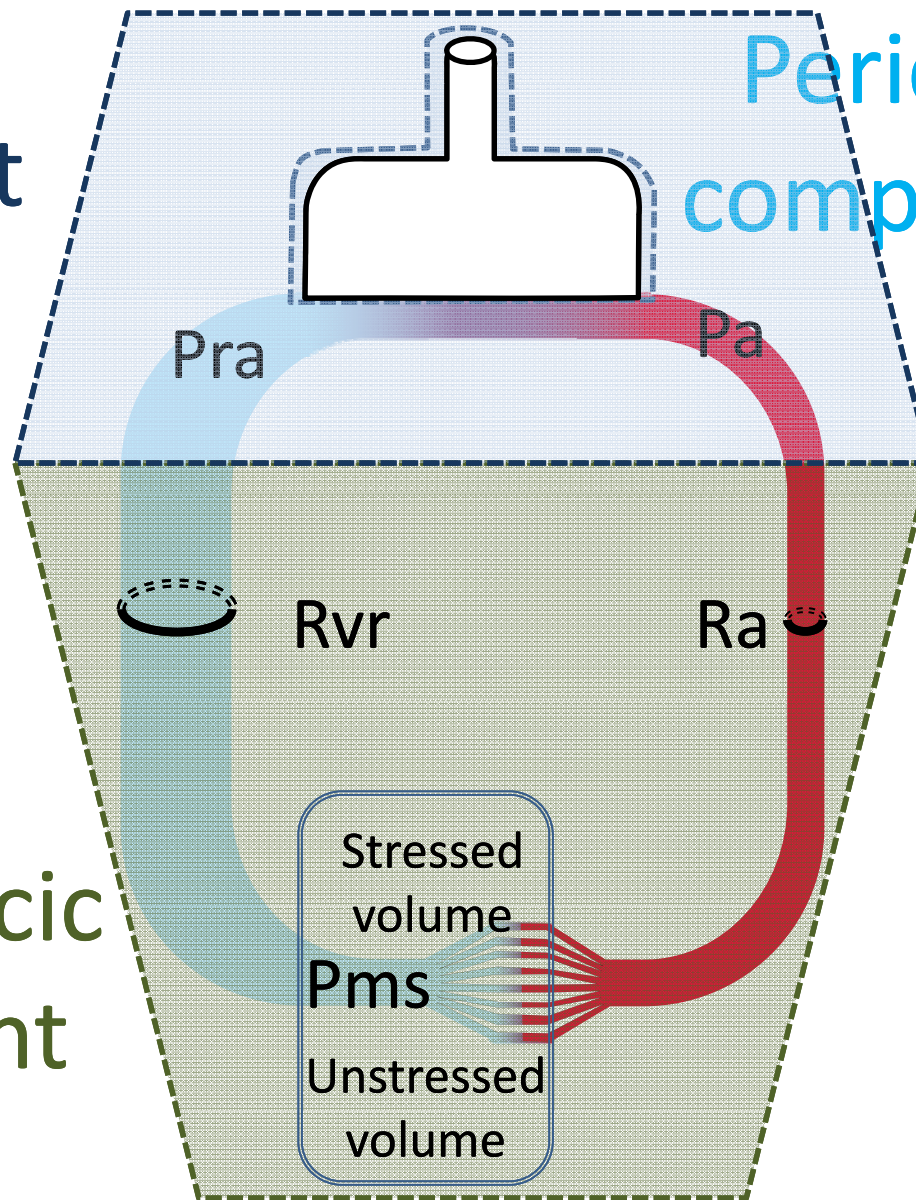
1919 - 2003



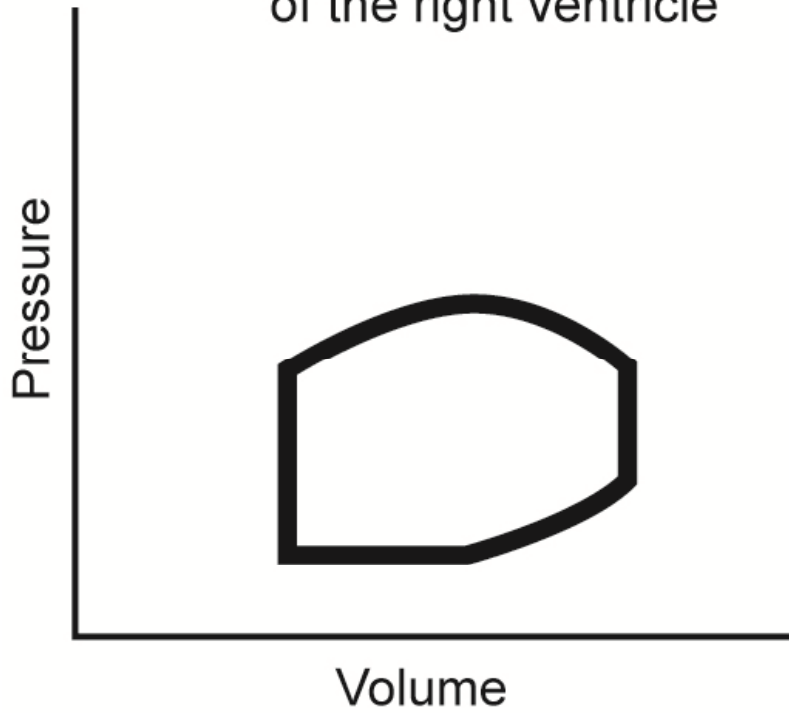
Intrathoracic  
compartment

Pericardial  
compartment

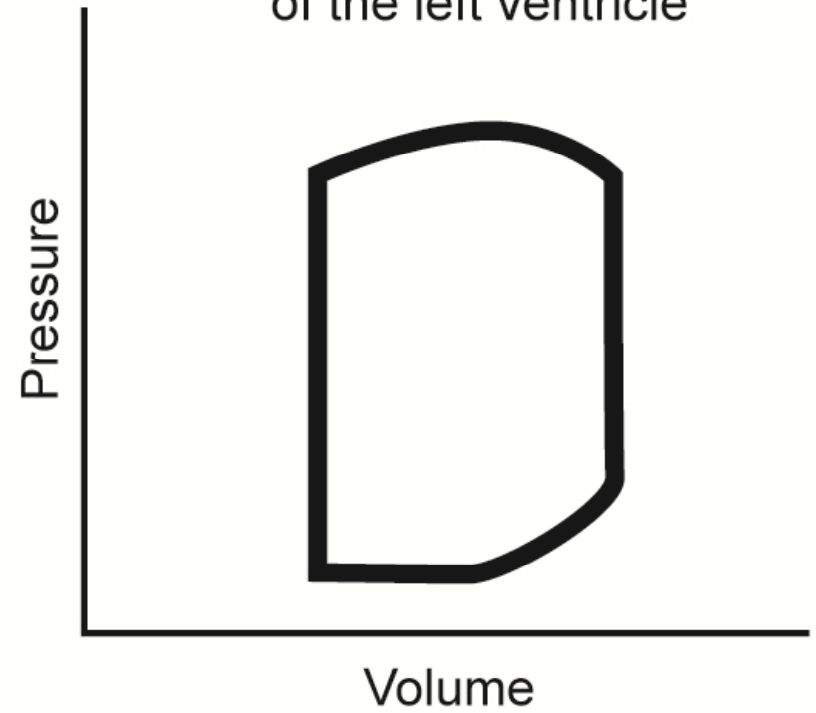
Extrathoracic  
compartment

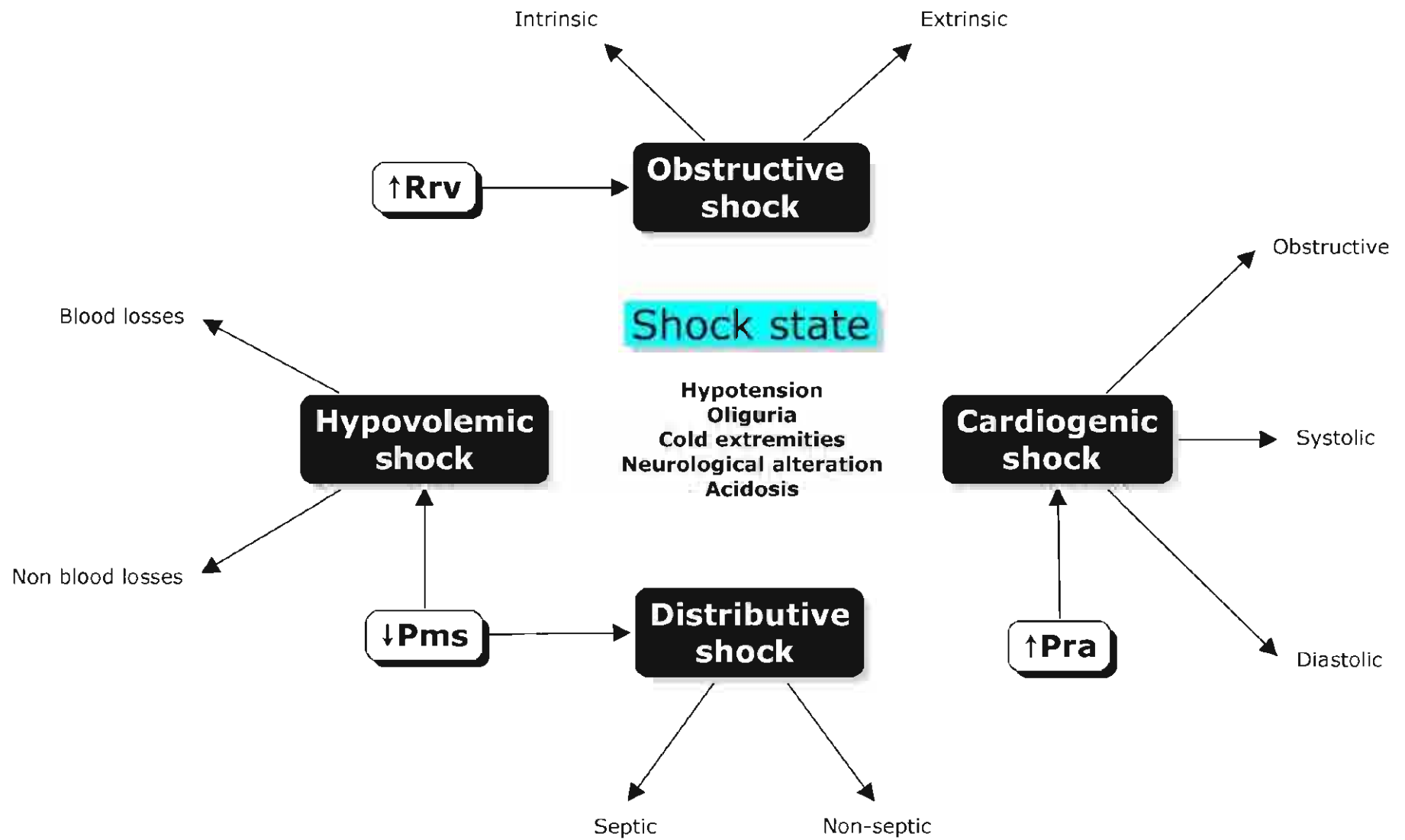


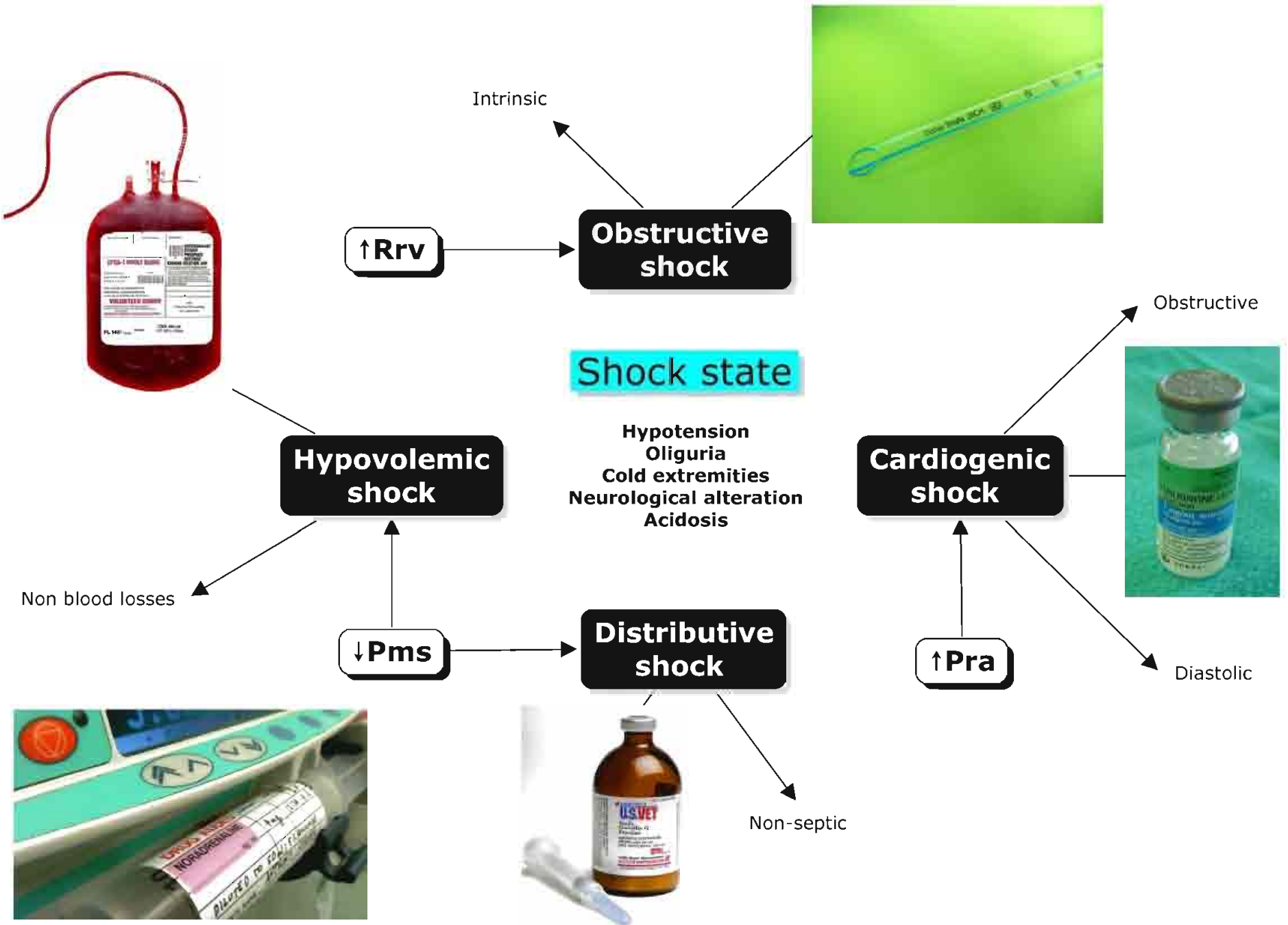
Pressure-volume relationship  
of the right ventricle

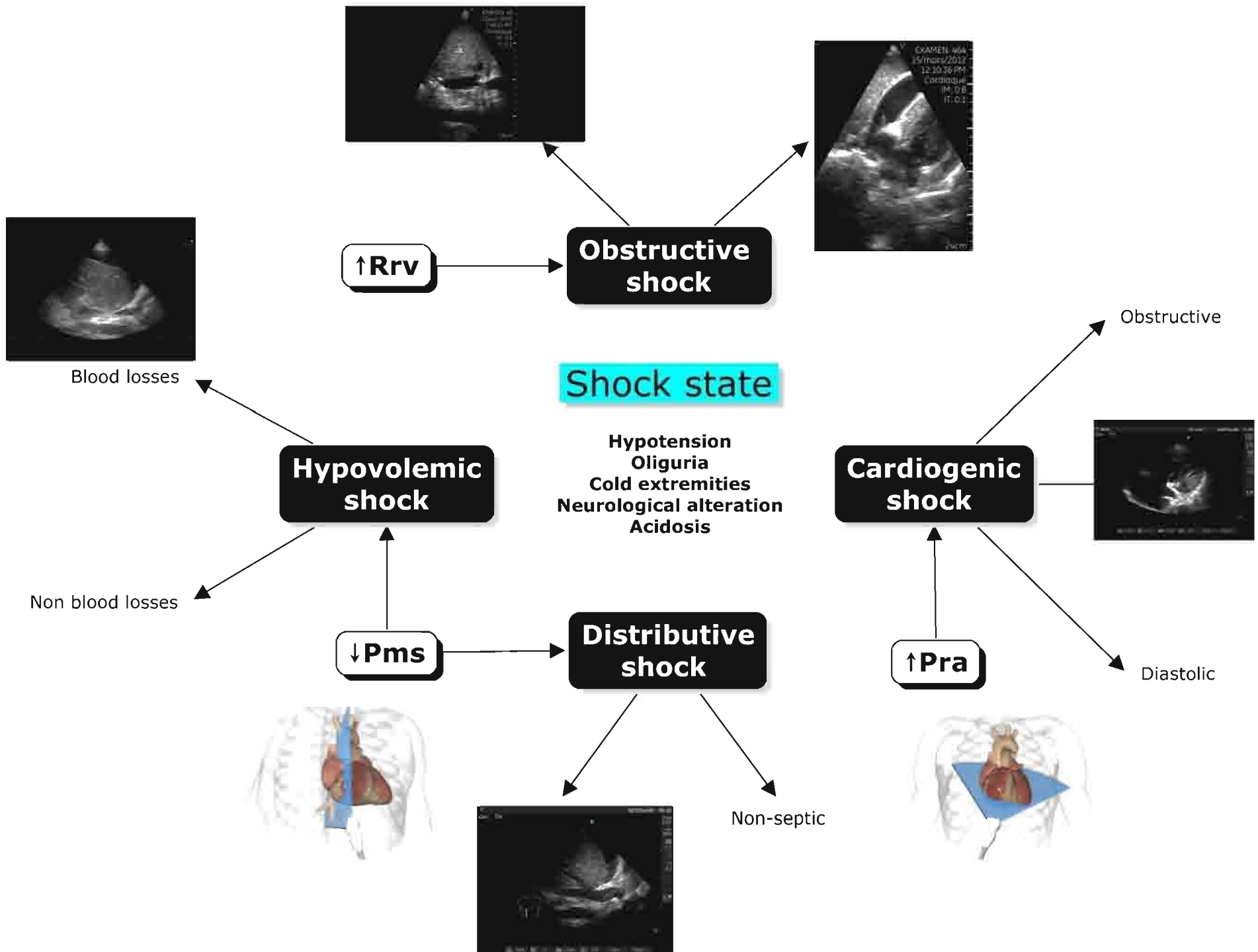


Pressure-volume relationship  
of the left ventricle









# Stethoscope

Stethos = chest wall

Scopein = to observe



Ultrasound = bodyscope  
of the 21<sup>st</sup> century

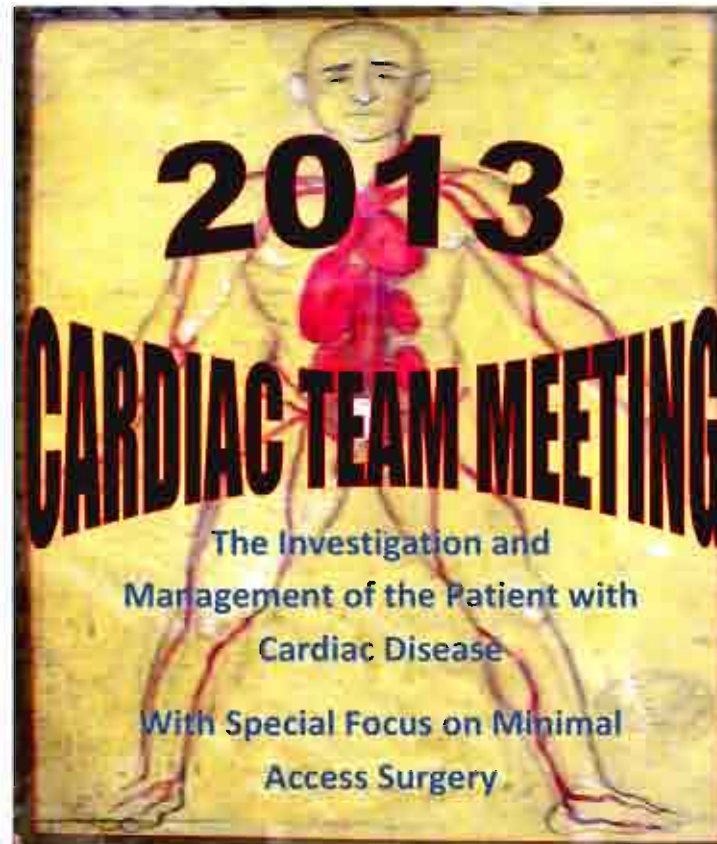
Les agradezco calurosamente  
por su invitación











**THE 7<sup>TH</sup> ANNUAL CANADIAN WINTER CARDIAC TEAM  
MEETING**

**&**

**RESIDENT/FELLOW ABSTRACT COMPETITION**

**March 8<sup>th</sup> – 10<sup>th</sup>, 2013**

Fairmont Tremblant  
Mont-Tremblant, Quebec

For information and updates: [www.cardiacteam.com](http://www.cardiacteam.com)