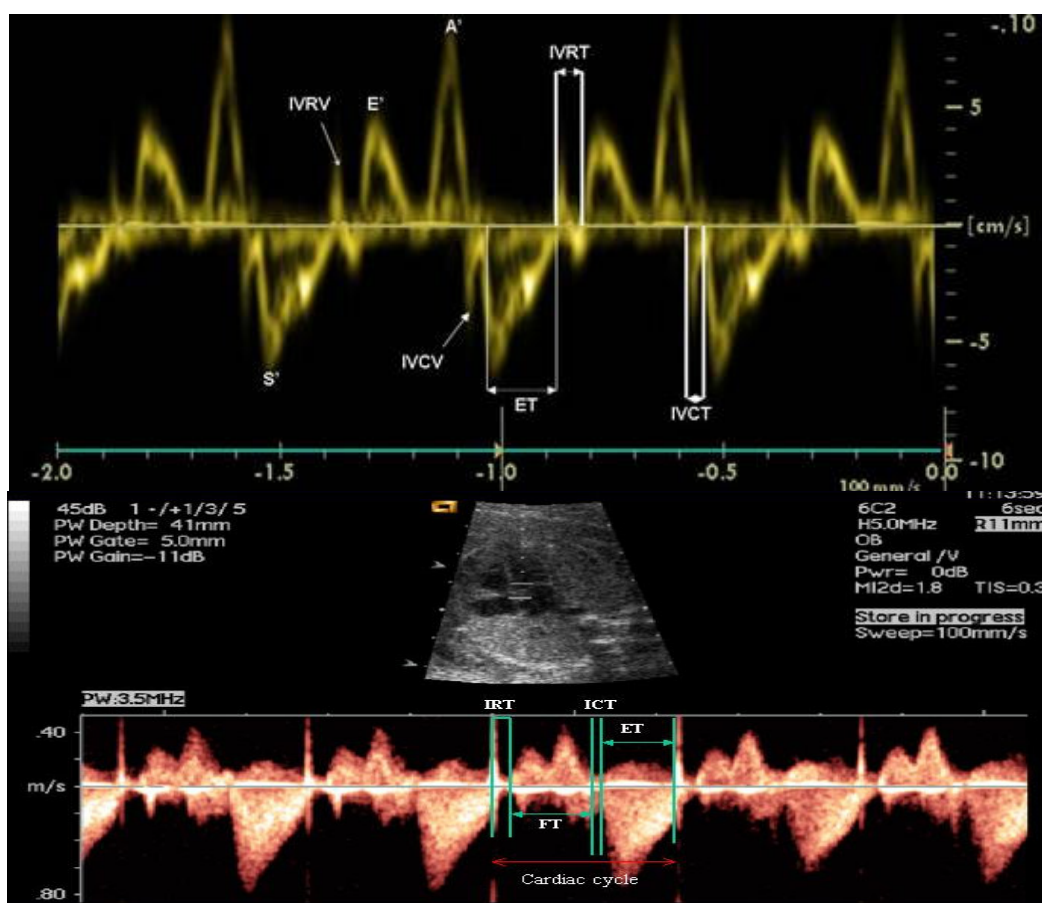




## Tromsø Course on Perinatal Cardiology

17. – 19. September 2008



University Hospital of Northern Norway and  
University of Tromsø, Norway

Course organisers

Ganesh Acharya and Vasilis Sitras

## **Invited Faculty**

### **Gurleen Sharland**

Director of Fetal Cardiology, Evelina Children's Hospital, Guy's and St. Thomas' NHS Trust, London, UK

### **James C Huhta**

Professor, Daicoff-Andrews Chair in Perinatal Cardiology, University of South Florida and All Children's Hospital, St. Petersburg, USA and  
Adjunct Professor, Department of Obstetrics and Gynaecology,  
University of Tromsø

### **Sven-Erik Sonesson**

Consultant Paediatric Cardiologist, Karolinska Hospital, Stockholm, Sweden

### **Kersti Linask**

Mason Professor of Cardiovascular Development, Children's Research Institute, University of South Florida, St. Petersburg, USA

### **Torvid Kiserud**

Professor of Obstetrics and Gynaecology, University of Bergen and Haukeland University Hospital, Norway

### **Juha Räsänen**

Associate Professor, Department of Obstetrics and Gynaecology, Oregon Health and Science University, Portland, USA

### **Harald Lindberg**

Senior Consultant, Department of Paediatric Cardiac Surgery, Rikshospitalet National Hospital, Oslo, Norway

### **Stanislav Timofeev**

Senior Pediatric and Fetal Echocardiographer, Tampa General Hospital, Tampa, USA

## **Local Faculty**

### **Jan Martin Maltau**

Professor and Chairman of the Department of Obstetrics and  
Gynaecology, University of Tromsø

### **Pål Øian**

Professor and Chairman of the Department of Obstetrics and  
Gynaecology, University Hospital of Northern Norway

### **Per Lunde**

Senior Consultant, Department of Cardiology

### **Per Ivar Kaaressen**

Senior Consultant Department of Paediatrics

### **Assami Rösner**

Cardiology Research Fellow

Department of Cardiology and Cardio-thoracic Surgery

### **Terje Larsen**

Professor

Department of Medical Physiology, University of Tromsø

## Preliminary Course programme

### 17. September

#### **Session I Moderator: Ganesh Acharya**

- 09:00 Registration/Coffee
- 09:30 Welcome and introduction
- 10:00 Early heart morphogenesis: Cellular and molecular perspectives  
*Kersti Linask*
- 10:30 Sequential fetal heart scanning  
*Sven-Erik Sonesson*
- 11:00 Sequential neonatal heart scanning  
*Stanislav Timofeev*
- 11:30 – 12:00 Break and discussion
- 12:00 Epigenetic modulation of cardiogenesis leading to cardiac birth defects  
*Kersti Linask*
- 12:30-13:30 *Lunch*

#### **Session II Moderator: Jan Martin Maltau**

- 13:30 Abnormalities of the four-chamber view  
*Gurleen Sharland*
- 14:00 Embryonic Dopplers  
*Juha Räsänen*

- 14:30-15:00    *Break*
- 15:00            *Abnormalities of the outflow tracts*  
*Gurleen Sharland*
- 15:30            *Complex cardiac malformations*  
*Stanislav Timofeev*
- 16:00            *End*

## **18. September**

### **Session I            Moderator: Jan Martin Maltau**

- 09:00            *Noninvasive assessment of fetal cardiac function*  
*Ganesh Acharya*
- 09:30            *Distribution of fetal cardiac output: role of pulmonary*  
*circulation and aortic isthmus*  
*Juha Räsänen*
- 10:00-10:30    *Break and discussion*
- 10:30            *Cardiac output and its distribution to the placenta in*  
*normal and compromised fetuses*  
*Torvid Kiserud*
- 11:00            *Assessment of systemic circulation in the neonates*  
*Per Ivar Kaaresen*
- 11:30            *Right ventricular function in hypoplastic left heart*  
*syndrome*  
*Stanislav Timofeev*
- 12:00 –13:00    *Lunch*

**Session II**      **Moderator: Pål Øian**

- 14:00              Ductus venosus Doppler: Techniques and interpretation  
*Torvid Kiserud*
- 14:30              Cardiac function in fetal growth restriction  
*Juha Räsänen*
- 15:00-15:30      Break and discussion
- 15:30              Fetal Liver perfusion and consequences of its failure  
*Torvid Kiserud*
- 16:00              End

**19. September**

**Session I**      **Moderator: Ganesh Acharya**

- 09:00              Diagnosis and management of fetal arrhythmias  
*Sven-Erik Sonesson*
- 9:45                Gold standard invasive measures of cardiac function  
*Terje Larsen*
- 10:15 -10:30      Break and discussion
- 10:30              Heterotaxy  
*Stanislav Timofeev*
- 11:00              Update on fetal cardiac intervention  
*James C Huhta*
- 11:30              Abnormalities of the aortic arch  
*Gurleen Sharland*

*12:00-13:00 Lunch*

**Session I I Moderator: Per Lunde**

09:00 Fetal congestive heart failure: diagnosis and management  
*James C Huhta*

09:30 Surgical management of duct dependent pulmonary circulation  
*Harald Lindberg*

10:00 Surgical management of duct dependent systemic circulation  
*Harald Lindberg*

*10:30 –11:00 Break and discussion*

11:00 Strain and strain rate imaging: a critical appraisal of the technique  
*Assami Rösner*

11:30 Tissue Doppler and related techniques in the assessment of fetal heart function  
*Ganesh Acharya*

*12:00 –13:00 Lunch*

**Session II Moderator : Ganesh Acharya**

13:00 Management of pregnancy in women with surgically corrected of congenital heart disease  
*Per Lunde*

13:30 Case presentations: congenial heart defects in the fetuses  
*Sven-Erik Sonesson*

14: 00            Case presentations: congenial heart defects in the  
                      neonates  
                      *Stanislav Timofeev*

14:30            Evaluation and end of the course  
                      *Ganesh Acharya*