



# ACSI 2010

**Advances in Cross-Sectional Imaging**

Mannheim, Congress Center Rosengarten

**Friday-Saturday, 25<sup>th</sup>-26<sup>th</sup> June 2010**



**Advances in Cross-Sectional Imaging**

[www.mr-pet-ct.com](http://www.mr-pet-ct.com)

**Chairmen:**

**Prof. Dr. med. Stefan O. Schönberg**

Department of Clinical Radiology and Nuclear Medicine  
University Medical Center Mannheim,  
Heidelberg University, Germany

**Dr. med. Romeu Côrtes Domingues**

Clínica de Diagnóstico Por Imagem (CDPI)  
Rio de Janeiro, Brazil

**Prof. Dr. med. Emerson Gasparetto**

Department of Diagnostic Radiology, University of Rio de Janeiro  
Rio de Janeiro, Brazil



Medizinische Fakultät Mannheim  
der Universität Heidelberg  
Universitätsklinikum Mannheim



In Cooperation with  
**Akademie**  
Für Fort- und Weiterbildung in der  
**Radiologie**

## Invitation

The Institute of Clinical Radiology and Nuclear Medicine of the Medical Faculty Mannheim and Clínica de Diagnóstico por Imagem (CDPI), Rio de Janeiro in conjunction with the Department of Diagnostic Radiology of the University of Rio de Janeiro are pleased to invite you to third meeting on Advances in Cross-Sectional Imaging (ACSI) in Mannheim, Germany, in June 2010. This transatlantic symposium is held annually, alternating between a transatlantic partner and Mannheim, Germany.

Numerous manufacturers of medical technologies are located in the State of Baden-Württemberg including Mannheim. In fact, the greater metropolitan region around Mannheim benefits tremendously from the growth and development potential of the medical engineering sector which generated a turnover of more than 3.5 billion in 2008. This enormous development potential also positively influences a technically highly developed medical discipline such as radiology. Radiological departments serve as an essential interdisciplinary link between medical technologies, informatics and economics. As key decision point in the patients' management radiology has to excel medically but also economically to foster an optimal diagnosis and treatment of the patient.

At Mannheim, the multi-disciplinary Institute of Medical Technology – represented by the departments of radiology, radiation oncology, computer-assisted clinical medicine, the Center for Medical Research and the University of Applied Sciences – offers a unique platform for translational research and the immediate application of novel technical approaches in a clinical setting. Furthermore the meeting benefits from the joint organization with the CDPI and the University of Rio de Janeiro, Latin America's leading imaging institutions with an excellent expertise in clinical high-field-MRI. CDPI is renowned for its radiological courses on state-of-the-art MRI and CT topics together with distinguished international partners.

Four topics (MRI, CT, PET and imaging economics) will be presented in a two day program by experts in clinical imaging as well as technical and economic developments. Central topics of the meeting are high-field magnetic resonance imaging beyond 1.5T and ultrafast imaging. The clinical use of novel contrast agents will be presented as well as modern disease specific concepts of MRI. Multi-detector CT systems, functional imaging with CT and the dual-energy-technique in computed tomography and related advances in cardiovascular diagnostics will be another focus. Furthermore, latest developments of PET-CT and molecular imaging - opening new horizons in oncologic imaging with an increasing clinical value - will be highlighted. Oncologic imaging will further be stressed by a special focus session on "Imaging of soft tissue and bone sarcomas" endorsed by the European Organization of Research and Treatment of Cancer (EORTC) and Conticanet. Finally, important clinical and economic aspects of workflow in radiology will be presented.

The meeting is accredited by the German medical association for continuous medical education (CME). Lectures will be given in English.

We are pleased to offer you a very attractive and innovative program and are looking forward to welcome you in Mannheim in June 2010.



Prof. Dr. med. Stefan Schönberg Dr. med. Romeu Côrtes Domingues Prof. Dr. med. Emerson Gasparetto

Friday, June 25<sup>th</sup> 2010

09:00 - 09:20 am

### Welcome Address

#### Welcome from the Medical Faculty Mannheim

K. van Ackern; Dean, Medical Faculty Mannheim

#### Welcome from the Institute for Medical Technology Mannheim

N. Gretz, Managing Director of the Institute for Medical Technology Mannheim

#### Welcome from the City of Mannheim and metropole region

Mayor

09:20 – 03:00 pm

### Advances in Magnetic Resonance Imaging

09:20 – 10:50 am

#### High-Field Imaging

Chairmen: S. Schönberg, Mannheim;  
Romeu C. Domingues, Rio de Janeiro

09:20 – 09:35 am

#### Impact of high-field MR-imaging on clinical accuracy and decision-making

S. Schönberg, Mannheim

09:35 – 09:50 am

#### Musculoskeletal imaging at 3T: from morphology to function

F. Costa, Rio de Janeiro

09:50 – 10:05 am

#### Multi-channel MRI and parallel transmission: a step forward towards higher image quality

H. Michaely, Mannheim

10:05 - 10:20 am

#### New contrast in high-field MRI: BOLD and SWI

M. Haacke, Detroit

10:20 - 10:35 am

#### What to gain from 7T?

M. Bock, Heidelberg

10:35 – 10:50 am

#### Discussion

10:50 – 11:10 am

#### Coffee Break

11:10 – 12:55 am

#### Technical Advances in MRI

Chairmen: C. Claussen, Tuebingen; L. Schad, Mannheim

11:10 - 11:20 am

#### Alternative k-space techniques: application to routine imaging

U. Attenberger, Mannheim

11:20 - 11:35 am

#### Fetal MRI: Clinical Applications

P. Daltro, Rio de Janeiro

11:35 - 11:50 am

#### Comprehensive cardiac MRI in less than 30 minutes

U. Kramer, Tuebingen

11:50 - 12:05 pm

#### DWI for breast cancer

F. Pereira, Rio de Janeiro

12:05 - 12:25 pm

#### Functional MRI in the evaluation of focal brain lesions

Romeu C. Domingues, Rio de Janeiro

12:25 - 12:40 pm

#### Move during scan: the next frontier in MRI?

D. Dinter, Mannheim

12:40 – 12:55 pm

#### Discussion

12:55 - 01:40 pm

#### Lunch Break

Friday, June 25<sup>th</sup> 2010

- 01:40 – 03:00 pm** **Contrast Mechanisms**  
Chairmen: E. Gasparetto, Rio de Janeiro; M. Langer, Freiburg
- 01:40 - 01:55 pm** **Hepatobiliary imaging with dedicated contrast agents**  
C. Zech, Munich
- 01:55 - 02:05 pm** **Sodium MRI: looking beyond morphology**  
S. Haneder, Mannheim
- 02:05 – 02:25 pm** **Multiparametric MRI and lymph node imaging in prostate cancer**  
J. Barentsz, Nijmegen
- 02:25 – 02:45 pm** **Clinical Applications with SWI**  
E. Gasparetto, Rio de Janeiro
- 02:45 – 03:00 pm** **Discussion**
- 03:00 - 03:20 pm** **Coffee Break**

**03:20 – 06:45 pm** **Advances in Computed Tomography**

- 03:20 – 04:25 pm** **Advances in Cardiovascular CT**  
Chairmen: C. Fink, Mannheim; I. Gottlieb, Rio de Janeiro
- 03:20 - 03:40 pm** **Comprehensive CT assessment of coronary artery disease**  
J. Schöpf, Charleston
- 03:40 - 03:55 pm** **Combined morphologic and functional CT imaging of pulmonary embolism using Dual Source CT**  
T. Henzler, Mannheim
- 03:55 - 04:10 pm** **Optimized CT angiography protocols for the assessment of cerebrovascular disease**  
D. Morhard, Munich
- 04:10– 04:25 pm** **Discussion**
- 04:25 - 05:30 pm** **Image Guided Therapy in Oncology**  
Chairmen: M. Vetter, Mannheim\* ; F. Wenz, Mannheim
- 04:25 - 04:40 pm** **Optimization of CT interventions in oncology using 3D planning**  
S. Diehl, Mannheim
- 04:40 - 05:00 pm** **C-arm computed tomography for transarterial chemoperfusion and chemoembolization**  
T. Vogl, Frankfurt
- 05:00 - 05:15 pm** **Radiotherapy planning in the era of on-line volume imaging**  
F. Lohr, Mannheim
- 05:15 - 05:30 pm** **Discussion**
- 05:30 - 05:45 pm** **Coffee Break**
- 05:45 - 06:45 pm** **Dual Energy in Clinical Practice**  
Chairmen: L. Grenacher, Heidelberg; J. Hesser, Mannheim
- 05:45 - 06:00 pm** **Dual energy CT in thoracic imaging**  
C. Fink, Mannheim
- 06:00 - 06:15 pm** **Dual energy CT in abdominal and urogenital imaging**  
A. Graser, Munich
- 06:15 – 06:30 pm** **Dual energy CT in cardiovascular imaging**  
S. Leschka, St. Gallen
- 06:30 - 06:45 pm** **Discussion**

\* invited

Saturday, June 26<sup>th</sup> 2010

**08:30 – 10:05 am** **Special focus session in conjunction with Conticanet and Functional Imaging Group of STBSG-EORTC: Imaging of soft tissue tumors and bone sarcomas**

Chairmen: P. Hohenberger, Mannheim; M. Reiser, Munich

- 08:30 – 08:45 am** **Interface of tumor therapy and imaging: a surgical oncologist's view**  
P. Hohenberger, Mannheim
- 08:45 – 09:05 am** **Imaging requirements for staging and response evaluation of soft tissue tumors**  
F. Costa, Rio de Janeiro
- 09:05 – 09:25 am** **Standard imaging approaches to soft tissue tumors including functional MRI**  
D. Vanel, Bologna
- 09:25 – 09:45 am** **Standards and new trends in sarcoma imaging with PET-CT**  
W. Oyen, Nijmegen\*
- 09:45 – 10:05 am** **Discussion and Conclusion**  
M. Reiser, Munich; P. Hohenberger, Mannheim

**10:05 – 10:25 am** **Coffee Break**

**10:25 – 01:00 pm** **Breakout Session: Challenges of soft tissue tumor and bone sarcoma imaging in clinical studies**

**10:25 – 01:00 pm** **Advances in positron emission tomography and molecular imaging**

- 10:25 – 11:50 am** **Current Applications in PET-CT Imaging**  
Chairmen: K. Hörmann, Mannheim; S. Schönberg, Mannheim
- 10:25 – 10:40 am** **High-resolution PET-CT for improved staging in oncology**  
M. Sadick, Mannheim
- 10:40– 11:00 am** **PET-CT with <sup>18</sup>F-FDG tracer: Oncology and beyond**  
M. Miederer, Mainz
- 11:00 – 11:20 am** **PET-MRI fusion for improved tumor detection**  
Roberto C. Domingues, Rio de Janeiro
- 11:20 – 11:35 am** **Hybrid PET MRI: the future of multimodal imaging?**  
H.-P. Schlemmer, Heidelberg
- 11:35 – 11:50 am** **Discussion**
- 11:50 – 01:00 pm** **Trends in Molecular Imaging**  
Chairmen: M. Taupitz, Berlin; K. Tatsch, Karlsruhe
- 11:50 – 12:10 pm** **Generator based tracer development - beyond <sup>18</sup>F nuclides**  
N. N.
- 12:10 – 12:30 pm** **From mouse to man - how much optical imaging, animal PET and MRI is implemented in clinical imaging?**  
B.-J. Krause, Munich
- 12:30 – 12:45 pm** **First multimodal embolization particles being visible in X-ray, CT and MRI**  
S. Bartling, Mannheim
- 12:45 – 01:00 am** **Discussion**

**01:00 – 01:45 pm** **Lunch Break**

\* invited

Saturday, June 26<sup>th</sup> 2010

**01:45 – 04:30 pm Imaging Economics**

**01:45 – 02:50 pm High-volume and multi-site data management in radiology**

Chairmen: G. Weisser, Mannheim; P. Schmücker, Mannheim

**01:45 – 02:05 pm Challenges of multi-site data management in hospital radiology**

M. Boos, Pfaffenhofen

**02:05 – 02:20 pm State-of-the art high-volume data management: faster throughput for superior results?**

G. Weisser, Mannheim

**02:20 – 02:35 pm Hand-held systems for access to radiological image data: a neurosurgeon's view**

C. Brenke, Mannheim

**02:35 – 02:50 am Discussion**

**02:50 – 03:05 am Coffee Break**

**03:05 – 04:30 pm Optimized clinical workflows and imaging economics**

Chairmen: A. Dänzer, Mannheim;

Romulo C. Domingues, Rio de Janeiro

**03:05 – 03:20 pm Decreasing scanner access time**

D. Terris, Mannheim

**03:20 – 03:30 pm How to reduce protocol variability in MRI?**

K. Lederle, Mannheim

**03:30 – 03:45 pm High productivity workflow in a private practice**

Romeu C. Domingues, Rio de Janeiro

**03:45 – 04:00 pm PET-CT vs. multi-step diagnostic algorithms for staging of breast cancer**

K. Wasser, Mannheim

**04:00 – 04:15 pm What is the impact of CT in the diagnosis of acute coronary syndrome: a cardiologist's view**

I. Gottlieb, Rio de Janeiro

**04:15 – 04:30 pm Discussion**

**Speakers**

**A**

Attenberger, U., Dr. med., Mannheim, Germany

**B**

Barentsz, J., Prof. Dr., Nijmegen, The Netherlands

Bartling, S., Dr. med., Mannheim, Germany

Bock, M., PD Dr. rer. nat. Heidelberg, Germany

Boos, M., Dr. med., Pfaffenhofen, Germany

Brenke, C., Dr. med., Mannheim, Germany

**C**

Claussen, C. D., Prof. Dr. med., Tuebingen, Germany

Costa, F., Dr. med., Rio de Janeiro, Brazil

**D**

Dänzer, A., Mannheim, Germany

Daltro, P., Dr. med., Rio de Janeiro

Diehl, S., PD Dr. med., Mannheim, Germany

Dinter, D., PD Dr. med., Mannheim, Germany

Domingues, Roberto C., Dr. med., Rio de Janeiro, Brazil

Domingues, Romeu C., Dr. med., Rio de Janeiro, Brazil

Domingues, Romulo C., Dr. med., Rio de Janeiro, Brazil

**F**

Fink, C., Prof. Dr. med., Mannheim, Germany

**G**

Gasparetto, E., Prof. Dr. med., Rio de Janeiro, Brazil

Gottlieb, I, Dr. med., Rio de Janeiro, Brazil

Graser, A., Dr. med., Munich, Germany

Grenacher, L. Prof. Dr. med., Heidelberg, Germany

**H**

Haacke, M., Prof. Dr. med., Detroit, USA

Haneder, S., Dr. med., Mannheim, Germany

Henzler, T., Dr. med., Mannheim, Germany

Hesser, J., Prof. Dr. med., Mannheim, Germany

Hörmann, K., Prof. Dr. med., Mannheim, Germany

Hohenberger, P., Prof. Dr. med., Mannheim, Germany

**K**

Kramer, U., PD Dr., Tuebingen, Germany

Krause, B.-J., Prof. Dr. med., Munich, Germany

## L

Langer, M., Prof. Dr. med., Freiburg, Germany  
Lederle, K., Dr. med., Mannheim, Germany  
Leschka, S. PD Dr. med., St. Gallen, Switzerland  
Lohr, F., Prof. Dr. med., Mannheim, Germany

## M

Michaely, H. J., PD Dr. med. Mannheim, Germany  
Miederer, M., Dr. med., Mainz, Germany  
Morhard, D., Dr. med., Munich, Germany

## O

Oyen, W., Dr. med., Nijmegen, The Netherlands

## P

Pereira, F., Dr. med. Rio de Janeiro, Brazil

## R

Reiser, M., Prof. Dr. med., Munich, Germany

## S

Sadick, M., PD Dr. med., Mannheim, Germany  
Schad, L. R., Prof. Dr. rer. nat. Mannheim, Germany  
Schlemmer, H.-P., Prof. Dr. med., Heidelberg, Germany  
Schmücker, P., Prof. Dr. sc. hum., Mannheim, Germany  
Schönberg, S., Prof. Dr. med., Mannheim, Germany  
Schöpf, J., Prof. Dr. med., Charleston, USA

## T

Tatsch, K. Prof. Dr. med., Karlsruhe, Germany  
Taupitz, M., Prof. Dr. med., Berlin, Germany  
Terris, D., Dr., Mannheim, Germany

## V

Van Ackern, K., Prof. Dr. med. Dr. h.c.  
Vanel, D., Dr. med., Bologna, Italy  
Vetter, M., Prof. Dr., Mannheim, Germany  
Vogl, T., Prof. Dr. med., Frankfurt, Germany

## W

Wasser, K., PD Dr. med., Mannheim, Germany  
Weisser, G., PD Dr. med., Mannheim, Germany  
Wenz, F., Prof. Dr. med., Mannheim, Germany

## Z

Zech, C., Dr. med., Munich, Germany

## Registration and Information

### Congress Venue

Congress Center Rosengarten, Rosengartenplatz 2, D-68161 Mannheim

### Scientific secretariat

Mrs. Renate Hubert  
Institute of Clinical Radiology and Nuclear Medicine  
University Medical Center Mannheim, University of Heidelberg  
Theodor-Kutzer-Ufer 1-3, D-68167 Mannheim  
Phone.: (+49) (+621) 383 - 3197  
Fax: (+49) (+621) 383 - 1910  
renate.hubert@umm.de

### Registration fee

Head of Department and Radiologist in private practice	Euro 250,-
Consultants*, Fellows*	Euro 150,-
Others*	Euro 150,-
Residents*	Euro 100,-
Technicians*, Students*	Euro 75,-

(\*please note that for these registrations a certificate of your employer is required).  
(inclusive 19 % of VAT)

### Registration online: [www.mr-pet-ct.com](http://www.mr-pet-ct.com)

### Registration onsite at the registration desk.

#### Opening hours registration desk:

25.06.2010 08:00 am - 07:00 pm

26.06.2010 08:00 am - 05:00 pm

In case of any questions, please get in contact with:

m:con - mannheim:congress GmbH, Isabel Peter

phone: +49 (0) 621/ 4106 174, isabel.peter@mcon-mannheim.de

### CME-Accreditation

The symposium is CME accredited in cooperation with the board of German Board Radiologists and the Roentgen Ray Society for continuous medical education.  
The Congress is estimated with 16 CME Points.

### Scientific organization Mannheim

Prof. Dr. med. Christian Fink  
PD Dr. med. Henrik Michaely  
PD Dr. med. Dietmar Dinter  
PD Dr. med. Dipl.-Phys. Gerald Weisser

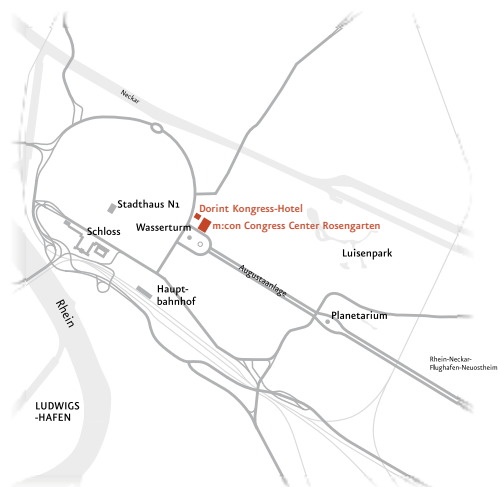
### Rio de Janeiro

Dipl.-phys. MSc. Thomas Döring

### Scientific advisory board Mannheim

Prof. Dr. med. Peter Hohenberger  
Prof. Dr. med. Christian Manegold  
Prof. Dr. med. Frederik Wenz

## Location Plan



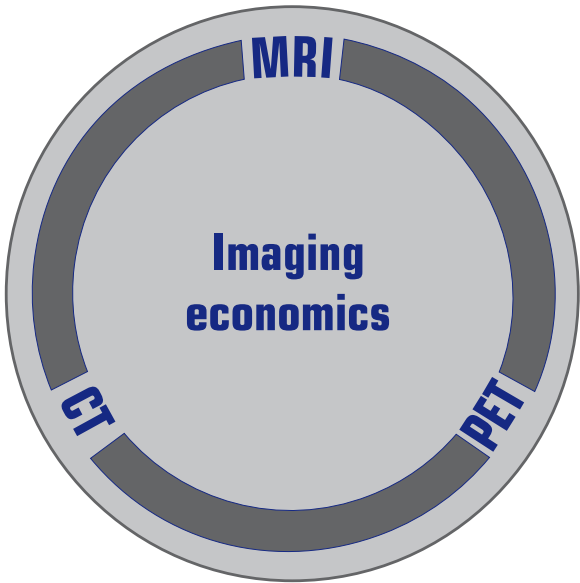
### How to approach the Congress Center Rosengarten

**By car:** From Autobahn A 6 or A5 towards "Mannheim Mitte".

Direct approach of Rosengarten via Augustaanlage.

**By train:** Mannheim ICE/IC station. It is 5 minutes walking distance from the railway station to the Congress Center Rosengarten.

**By air:** Take the Lufthansa bus from airport Frankfurt to Mannheim Lufthansa Terminal which is next to Rosengartenplatz.



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