

COEUR Course Cardiovascular Imaging and Diagnostics

Course organizers: Prof dr. A. van der Lugt and Dr. J.G. Bosch

Aims of the program

- ✓ To give all COEUR PhD students basic knowledge of imaging techniques.
- ✓ To indicate where imaging techniques are used in cardiovascular medicine.
- ✓ To provide the opportunity to acquire in-depth understanding of current imaging techniques for cardiovascular research.

- ✓ Format
- ✓ Lectures will be given on Thursday and Friday. Research papers for self-study are included in the course material and should be studied in advance (estimated study load: 16 hours). On Friday afternoon, a self-test will estimate the acquired knowledge on cardiovascular imaging.

Imaging techniques

Thursday,

08:55-09:00	Introduction COEUR course <i>Dr. R.J.M. van Geuns/ Prof. A. van der Lugt</i>
09:00-09:45	Magnetic Resonance Imaging (MRI) Cardiac + Vascular <i>Dr. A. Moelker</i>
09:45-10:30	Multislice Computer Tomography Cardiac + Vascular <i>A. Rossi/Prof A. van der Lugt</i>
11:00-11:45	Cardiac Ultrasound Basics <i>Dr. J.G. Bosch</i>
11:45-12:30	Nuclear Imaging <i>Dr. R. Valkema</i>

Clinical Cardiac Imaging

13:30-14:15	Anatomy and Physiology of heart and blood vessel <i>Dr. D. Merkus</i>
14:15-14:45	Non-invasive imaging for ischemic heart disease (Echo, Nuclear) <i>Dr. A.F.L. Schinkel</i>
14:45-15:30	Non-invasive imaging for ischemic heart disease (MSCT, CMR) <i>Dr. K. Nieman, Dr. R.J. van Geuns</i>
16:00-16:45	Congenital heart disease (Clinical) <i>Prof. W.A. Helbing</i>
16:45-17:15	Valvular disease (Clinical) <i>Dr. F.J. ten Cate</i>

Advanced Cardiac Imaging

Friday,

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| 09:00-09:45 | Ultrasound Contrast Agents (UCA)
<i>Prof. N. de Jong</i> |
| 09:45-10:30 | Molecular imaging
<i>Dr. M. Bernsen</i> |
| 10:30-11:00 | Coffee/tea break |
| 11:00-11:30 | 3D-Echo
<i>Dr. M.L. Geleijnse</i> |
| 11:30-12:00 | Ultrasound imaging post-processing
<i>Dr. J.G. Bosch</i> |
| 12:00-12:45 | Cardiovascular image (post)-processing: X-ray and MRI
<i>Prof. W.J. Niessen</i> |

Advanced Vascular Imaging

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| 13:45-14:30 | Advanced intravascular imaging (OCT, Raman/spectroscopy)
<i>Dr. G.J. Puppels</i> |
| 14:30-15:15 | Intravascular ultrasound-techniques
<i>Prof. A.F.W. Van der Steen</i> |
| 15:45-16:15 | Plaque imaging MRI/CT
<i>Prof. A. van der Lugt</i> |
| 16:15-16:45 | Image based stroke management
<i>Dr. D.J. Dippel</i> |
| 16:45-17:15 | Self test and course evaluation
<i>Coordinator(s)</i> |