General Information

Preclinical Imaging in Small Laboratory Animals

Module I:

Animal Use & Care (3h)

- Animal Protection Law (EU & Germany)
- Animal Use and Care – General Aspects for Imaging Science
- Monitoring of Vital Parameters in Rodents
- Biosafety (S1/S2)

Module II:

Non-Invasive Small Animal Imaging (7h)

- Biological Basics of Imaging Probe Distribution
- Optical Imaging
- Optical Probes
- Computed Tomography (CT)
- Nuclear Imaging: SPECT, PET
- Nuclear Imaging: Image Reconstruction and Correction
- Nuclear Imaging: Data analysis
- Magnetic Resonance Imaging: Image Generation
- Magnetic Resonance Imaging: fMRI, DWI, ASL
- Magnetic Resonance Imaging: Contrast Agents
- Ultrasound & US Probes

Module III:

Specific In-Depth Practical Training (5 days)

- Animal Handling
- Study Planning, SOPs
- Image Analysis
- Choose two Imaging Applications:
  - MRI
  - PET
  - SPECT
  - Optical Imaging
  - Ultrasound
  - CT

Module IV:

Quantitative Image Analysis & Application Specific Imaging (5 days)

- Quantitative image analysis
- Corrections
- Kinetic Modelling
- Atlas Based Image Analysis
- Advanced Imaging Analysis
- Imaging Probes and RadioTracer
- Image Reconstruction
- Application Specific Imaging
- Oncology
- Neurology
- Cardiology
- Inflammation, Gynaecology, Infectious Disease

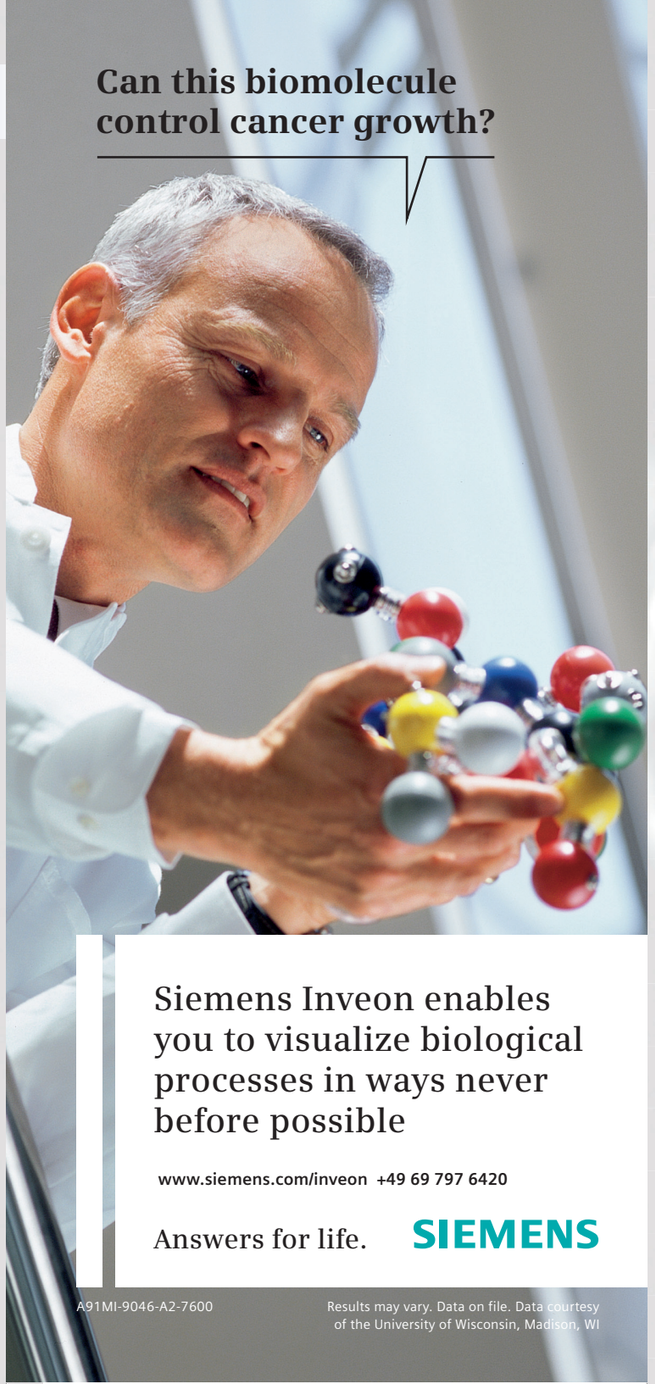
Further Details:

Written Examinations after Modules I&II and Module IV

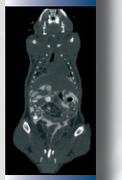
"Basic Certificate in Preclinical Imaging" after Completion of Modules I, II and III

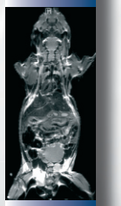
"Advanced Certificate in Preclinical Imaging" after Completion of Module IV

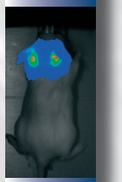
Costs:		
	Module I & II:	140 €
	Module III:	700 €
	Module IV:	500 € (starting next year)

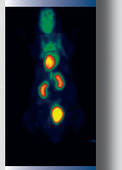


Curriculum









Preclinical Imaging in Small Laboratory Animals

Module I & II

April 22 / April 23, 2010
Congress Center Leipzig
Room M5

at the

NuklearMedizin 2010

Deutsche Gesellschaft für Nuklearmedizin e.V.

Module I & II

Module I & II

The German Society of Nuclear Medicine (DGN) is establishing a curriculum for Preclinical Molecular Imaging. The objective is to train scientists and technologists in preclinical molecular imaging covering current technologies available to monitor rodents in vivo. The curriculum covers basic and advanced theory, including kinetic modelling, and quantitative image analysis as well as basic and advanced imaging practice and animal handling. The curriculum is subdivided into 4 modules. Upon successful completion, the attendee will receive a certificate of attendance. Modules I & II will be offered during the DGN congress in April 2010. The curriculum (module I, II and IV) will be offered at future DGN congresses to ensure continuity. Practical training (Module III) will be offered by various imaging labs.

The curriculum targets the following groups:

* Biologists
* Physicians
* Physicist
* Chemists
* Biochemists
* Technologists

Module I & II:

Venue:
Congress Center Leipzig
Seehausener Alle 1
D - 04356 Leipzig
Room: M5

Date:
Thursday, April 22, 2010
Friday, April 23, 2010

Registration fee:
140.00 EUR

Scientific Organisation:
DGN Committee „Molecular Imaging in Preclinical Research“
Chair: Prof. Dr. Bernd Pichler, Tübingen

Information/Organisation:
vokativ GmbH
Nikolaistr. 29
D - 37073 Göttingen
phone: 0049.(0) 551 / 488 57-409
nukmed@vokativ.de

Programme

Programme

Module I

Thursday, April 22

Welcome Notes

C. Reiners
Congress President of the NuklearMedizin 2010

2:00 pm– 4:00 pm
Monitoring of vital & physiological parameters in small rodents
(NN)

- Anaesthesia
- Animal use and care
- Biosafety (S1/S2)

4:00 pm – 4:15 pm
Coffee break

4:15 pm – 5:15 pm
Animal protection law; specific items related to imaging
(C. Jäger)

Module II

Friday, April 23

8:00 am – 9:00 am
Biological principles of imaging probe distribution
(T. Lammers)

9:00 am – 10:00 am
Nuclear imaging technology, image reconstruction & correction
(S. Ziegler)

10:00 am – 10:15 am
Coffee break

10.15 am – 11:30 am
MRI
(D. Stiller)

11:30 am – 12:00 am
CT and contrast media
(W. Kalender)

12:00 am– 2:00 pm
Lunch & Industrial exhibits

2:00 pm – 3:00 pm
Optical imaging & probes
(R. Schulz)

3:00 pm – 3:45 pm
Ultrasound (F. Kiessling)

3:45 pm – 4:00 pm
Coffee break

4:00 pm – 5:00 pm
Data handling of image data: conceptual and technical issues
(F. Hofheinz)

5:00 pm – 5:20 pm
Final Examination for Modules I & II

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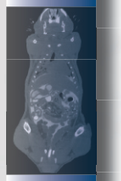

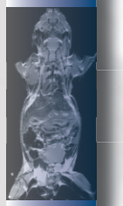

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