

# A SHORT TERM COURSE ON CLINICAL MEDICAL IMAGING



August 1 & 2, 2009 (Saturday and Sunday) Venue: Indian Institute of Science, Bangalore - 560 012.

Clinical medical imaging is an important area of radiology. In the past decade, medical imaging has seen tremendous growth in terms of technology, imaging capabilities and clinical practice, enabling the physician to better understand the physiology of the human body starting from micro to macro level. This course covers all three aspects (physics, technology, and practice) of current diagnostic clinical imaging modalities. This course will have mainly two parts, first part, physics and technology, will be covered by the IISc faculty who are working on research areas related to medical imaging and second part will include the current clinical practice, also an demonstration of patient imaging in the clinic, covered by radiologists and radiation oncologists (medical doctors).

#### The main objectives of this course will be

- Develop skills to understand current medical imaging techniques and image formation.
- Develop knowledge to interpret and understand medical images.
- Learning the clinician language and understanding the clinical practice of diagnostic radiology.

### Topics that will be covered in this short term course include

- X-ray Radiography
- X-ray Computed Tomography (CT)
- Magnetic Resonance Imaging (MRI)
- Ultrasound Imaging, Positron Emission Tomography (PET)
- Single Photon Emission Computed Tomography (SPECT)
- Molecular Imaging
- Medical instrumentation

#### Diagnostic Radiology:

- Practice
- Diagnostic Imaging protocols
- Nuclear Medicine practice: PET/CT
- Oncological Imaging
- Image guided radiation therapy
- Medical Informatics



#### **Faculty**

Prof. Phaneendra K. Yalavarthy, Ph.D., Indian Institute of Science, Bangalore.

Prof. J. Nagaraju, Ph.D.,

Indian Institute of Science, Bangalore.

Prof. R. M. Vasu, Ph.D.,

Indian Institute of Science, Bangalore.

Prof. K. Rajan, Ph.D.,

Indian Institute of Science, Bangalore.

Dr. P. S. Sridhar, M.B.B.S., M.D.,

Consultant Radiation Oncologist,

Bangalore Institute of Oncology, Bangalore.

Dr. M. J. Govindarajan, M. B. B. S., M.D., Consultant Radiologist,

Bangalore Institute of Oncology, Bangalore

#### **Course Fee**

- The course fee is Rs. 5,000/- (10% concession for ISOI life members)
- The payment should be made in favour of "Instrument society of India", Bangalore
- Course Fee includes course materials, accommodation (2 nights in the Guest house), lunch and refreshments
- Last date for receipt for applications along with registration fee is 15 July 2009.

#### Organised by

## INSTRUMENT SOCIETY OF INDIA Indian Institute of Science

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#### **Course Coordinator**

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