Medical Imaging : Techniques & Clinical Applications

3rd & 4th April, 2015

Organized by
Centre for Biomedical Engineering
Indian Institute of Technology Delhi

Venue:
LT-204, 2nd floor, Vishwakarma Bhawan
Indian Institute of Technology Delhi
Hauz Khas, New Delhi – 110 016 India

Program Objective:
The course is designed for students and faculty members interested in understanding the concepts of medical imaging and their clinical applications. The course will cover meticulous details on two imaging modalities CT and MRI.

Course Content:
- Human anatomy
- CT imaging
- MRI
- Clinical applications
- Current clinical problems in imaging
- Recent protocols on image analysis

Schedule:
Day 1 – Teaching Session
- Overview of Human anatomy and Imaging
- Computed Tomography (CT)
  - Physics and Instrumentation
  - Reconstruction and Post processing
  - Clinical Applications and Artifacts
- Lunch Break
- Magnetic Resonance Imaging (MRI)
  - Physics and Instrumentation
  - MRI Reconstruction and Post processing
  - MR Clinical Applications and Artifacts

Day 2 – Workshop
- Overview of Current Clinical Imaging Scenario
- Technicalities of Imaging

Panel Discussion
- Clinical Diagnostic protocol
- Current clinical problems
- Image processing current protocol (models) technical problems

Lunch Break
- Clinical Overview - Specialties
- Neurology, Abdomen, Musculo-skeletal, Cardiac
- Imaging Technical Specialties
  - Perfusion (DCE+DSC+ASL)
  - Molecular (MTR+CEST)
  - Diffusion
  - fMRI
  - Contrast in Imaging

Program:
- Special lecture on Biomedical Signals

Vote of Thanks and Closing

Registration:
Registration form is available on website.
Website: http://medimg.iitd.ac.in
Email: MedImgReg.iitd@gmail.com
Last date of registration: 15th March, 2015

Teaching Faculty:
IIT Delhi Faculty:
Dr. Amit Mehndiratta (CBME, IITD)
Dr. Anup Singh (CBME, IITD)
Dr. Sneh anand (CBME, IITD)
Dr. Veena Kouli (CBME, IITD)
Dr. Kedar B. Khare (Physics, IITD)
Dr. Rahul Garg (CSE, IITD)

Faculty From Other Institutions:
- Dr. Ajay Garg (NeuroRadiology, AIIMS)
- Dr. Devasenathipathy Kandasamy (Radiology, AIIMS)
- Dr. N.R. Jagannathan (NMR, AIIMS)
- Dr. Raju Sharma (Radiology, AIIMS)
- Dr. Rakesh Kumar Gupta (Fortis, FMRI, Gurgaon)
- Dr. S. Senthil Kumaran (NMR, AIIMS)

Organized by:
Centre for Biomedical Engineering, IIT Delhi:
Dr. Amit Mehndiratta, Assistant Professor
Dr. Anup Singh, Assistant Professor

Organizing students:
- Anirban Sengupta (M.Tech, Ph.D Scholar)
- Ayan Debnath (B.Tech, Ph.D Scholar)
- Esha Baidya (M.Tech, Ph.D Scholar)
- Sneka Sehrawat (M.Tech, Ph.D Scholar)

Contact Details:
Website:
http://medimg.iitd.ac.in
Email:
MedImg.iitd@gmail.com
Phone: +91 95996 91500