

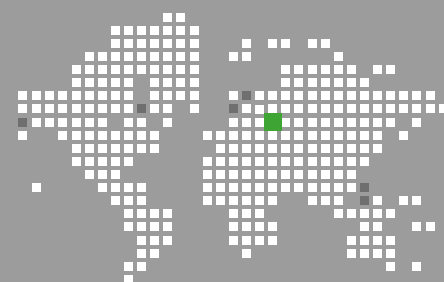
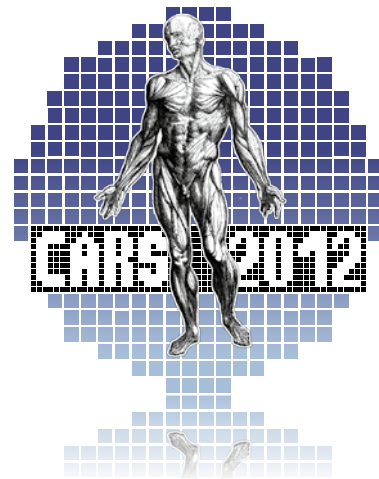
1ST ANNOUNCEMENT



CARS 2012

COMPUTER ASSISTED RADIOLOGY AND SURGERY

26th International Congress and Exhibition



June 27–30, 2012
Pisa, Italy

A journal for interdisciplinary research, development
and applications of image guided
diagnosis and therapy

Main Themes

- Medical Imaging
- Computed Maxillofacial Imaging
- Image Processing and Visualization
- PACS and IHE
- Telemedicine and E-Health
- Computer Aided Diagnosis
- Computer Assisted Radiation Therapy
- Image and Model Guided Therapy
- Personalized Medicine
- Surgical Navigation
- Surgical Robotics and Instrumentation
- Surgical Simulation and Education
- Computer Assisted Orthopaedic and Spinal Surgery
- Computer Assisted Head and Neck, and ENT Surgery
- Image Guided Neurosurgery
- Minimally Invasive Cardiovascular and Thoracoabdominal Surgery
- Digital Operating Room



IJCARS website: www.springer.com/11548
Manuscript Submissions:
www.editorialmanager.com/jcars

*Deadline for abstract/paper
submission: 10th January 2012*

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26th International Congress and Exhibition on Computer Assisted Radiology (CAR)

Chairman: Stanley Baum, MD (USA)

- Medical Imaging, e.g. CT, MR, US, SPECT, PET, DR, Molecular Imaging, and Virtual Endoscopy
- Computer Assisted Cardiovascular Imaging
- Image Processing and Display
- Medical Workstations
- Interventional Radiology
- Minimally Invasive Spinal Therapy
- Image Guided Diagnosis and Therapy of the Prostate
- Ablation Therapies
- Image Guided Radiation Therapy
- Nanotechnology for Imaging and Therapy
- Telemedicine, E-health and Multimedia EPR
- Expert Systems and Computer Assisted Education
- Economic and Management Issues
- Security, Legal and Ethical Aspects

16th Annual Conference of the International Society for Computer Aided Surgery

President: Kevin Cleary, PhD (USA)

- Computer Applications for e.g. Neurosurgery, Head and Neck, Orthopaedics, Ear Nose and Throat, Cardiovascular and Thoracoabdominal Surgery, and Plastic/Reconstructive Surgery
- Image Guided Therapy
- Image Processing and Visualization
- Surgical Robotics and Instrumentation
- Surgical Navigation
- Surgical Simulation
- 3D Modelling and Rapid Prototyping
- Postoperative Result Assessment
- Surgical Education and Training
- Haptics and Multimodal Devices in Medical Applications
- Methods of Validation and Verification
- Computer-Assisted Planning
- Decision Management
- Navigated Control
- Surgical Workplace – Ergonomics

14th International Workshop on Computer-Aided Diagnosis

Chairman: Kunio Doi, PhD (USA)

Co-chair: Ulrich Bick, MD (D)

- CAD for Breast, Chest, Colon, Skeletal, Liver, Brain and Vascular Imaging
- CAD for Cancer Screening
- CAD for 3D Imaging
- CAD for Differential Diagnosis
- CAD for CT, MRI, Ultrasonography, PET and Nuclear Medicine Imaging
- Image Databases for CAD
- Computer Vision, ANN and Modelling
- Computerized Detection and Characterization of Lesions in Radiological Images
- Quantitative Analysis of Image Information
- Visualization and Quantitation of 3D Images
- Intelligent Workstations and Decision Support Systems
- Observer Performance Studies and ROC Analysis
- Clinical Evaluation and Prospective Studies
- Image Quality Issues and Evaluation
- CAD in PACS Environment

18th Computed Maxillofacial Imaging Congress

Chairman: Allan G. Farman, PhD, DSc (USA)

- New Imaging Devices and Novel Applications
- Evidence-based Selection Criteria in Digital Maxillofacial Imaging
- Craniomaxillofacial Computer-Aided Diagnosis
- Maxillofacial Image Enhancement Algorithms
- Cranial and Maxillofacial Image Guided Surgery
- Image Navigated Dental Implantology
- Orthodontic Applications of Computed Imaging
- Endodontic Applications of Computed Imaging
- Imaging and Modelling for Maxillofacial Prosthodontics
- Cone Beam CT
- 3D and 4D Imaging
- Multi-dimensional Maxillofacial Modelling
- Virtual Reality and Dental Robotics
- Interoperability
- Maxillofacial Applications in Integrating the Healthcare Enterprise

30th International EuroPACS Meeting

President: Osman M. Ratib, MD, PhD (CH)

- PACS Architecture and Workflow
- PACS Workstation Design and Ergonomics
- PACS Integration in Surgical and Interventional Suites
- Open Source Software for PACS
- PACS Planning and Purchasing Strategies
- PACS Evaluation and Economical Aspects
- PACS Beyond Radiology (Cardiology, Endoscopy, Ophthalmology, etc.)
- Image Distribution, Storage and Archiving Strategies
- PACS/RIS/HIS Integration Issues
- Regional PACS and Teleradiology
- Security and Privacy, Quality Assurance, Legal Aspects
- Standardization (DICOM, HL7, IHE)
- PACS and E-Learning in Radiology and Medical Sciences

13th CARS / SPIE / EuroPACS Joint Workshop on Surgical PACS and the Digital Operating Room

Chairmen: Osman M. Ratib, MD, PhD (CH), Heinz U. Lemke, PhD (D)

- Surgical Workflow
- Digital Operating Room
- Therapy Imaging and Model Management Systems
- Surgical PACS
- DICOM and IHE in Surgery
- Management and Assessment of OR Systems Integration
- Architectures of ORs and Imaging Suites

4th EPMA / IFCARS Workshop on Personalized Medicine and ICT

Olga Golubnitschaja, MD (D), Heinz U. Lemke, PhD (D)

- Model-Guided Medicine
- Patient-Specific Modelling
- Model Management
- Clinical Examples of Personalized Medicine for Diabetes

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