24th International Congress and Exhibition on Computer Assisted Radiology (CAR) Co-chair: Bernt Manfred, MD (CH)

- Medical Imaging, e.g. CT, MR, US, PET, SPECT, Molecular Imaging, and Virtual Endoscopy
- CT, MR, US, SPECT, PET, DR, Molecular Imaging, and Virtual Endoscopy
- Image Processing and Display
- Medical Workstations
- Interventional Radiology
- Image Guided Surgery
- Navigated Control
- Surgical Workplace – Ergonomics

14th Annual Conference of the International Society for Computer Aided Surgery (ISCAS) President: Gino Struzzi, MD (CH)

- Computer Applications for e.g. Neurosurgery, Head and Neck, Orthopaedics, Ear Nose and Throat, Cardiovascular and Thoracocardiobiliary Surgery, and Plastic/Reconstructive Surgery
- Image Guided Therapy
- Image Processing and Visualization
- Surgical Robotics and Instrumentation
- Surgical Navigation
- Image Processing and Visualization
- Surgical Education and Training
- Image Quality Issues and Evaluation
- New Imaging Devices and Novel Applications
- Radiological Images
- Medical Workstations
- Image Distribution, Storage and Archiving Strategies
- DICOM in PACS Environment

16th Computed Maxillofacial Imaging Congress (CMIC) Chairman: Allan G. Fromme, PhD, DSc (USA)

- Computer Applications for e.g. Neurosurgery, Head and Neck, Orthopaedics, Ear Nose and Throat, Cardiovascular and Thoracocardiobiliary Surgery, and Plastic/Reconstructive Surgery
- Image Guided Therapy
- Image Processing and Visualization
- Surgical Robotics and Instrumentation
- Surgical Navigation
- Image Processing and Visualization
- Surgical Education and Training
- Image Quality Issues and Evaluation
- New Imaging Devices and Novel Applications
- Evidence-based Selection Criteria in Digital Maxillofacial Imaging
- Radiometamorphic Computer-Aided Diagnosis
- Maxillofacial Image Enhancement Algorithms
- Cranial and Maxillofacial Image Guided Surgery
- Image Navigated Dental Implantology
- Orthopedic Applications of Computed Imaging
- Endodonic Applications of Computed Imaging
- Endodontic Imaging and Modelling for Maxillofacial Prosthetics
- Cone Beam CT
- 3D and 4D Imaging
- Multi-dimensional Maxillofacial Modelling
- Virtual Reality and Dental Robotics
- Interoperability
- Maxillofacial Applications in Integrating the HealthCare Enterprise

12th International Workshop on Computer-Assisted Diagnosis (CAD) 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 Quantification of 3D Images
- Intelligent Workstations and Decision Support Systems
- Observer Performance Studies and ROC Analyses
- Clinical Evaluation and Prospective Studies
- Image Quality Issues and Evaluation

28th International EuroPACS Meeting President: Osman M. Ratib, MD, PhD (CH)

- PACS Architecture and Workflow
- PACS Workstation Designs and Ergonomics
- PACS Integration in Surgical and Interventional Suites
- Open Source Software for e.g. Image Distribution, Storage and Archiving Strategies
- PACS Planning and Purchasing Strategies
- PACS Beyond Radiology (Cardiology, Endoscopy, Ophthalmology, etc.)
- PACS Planning and Purchasing Strategies
- PACS Evaluation and Economical Aspects
- PACS and Emerging Technology and Medical Sciences

11th CARS/SPIE/EuroPACS Joint Workshop on Surgical PACS and the Digital Operating Room Chairman: James A. Artis, MD, PhD (CH)

- Surgical Workflow
- Digital Operating Room
- Therapy Imaging and Model Management Systems
- Surgical PACS
- DICOM in Surgery
The CARS congress with its associated journal is a facilitator of innovation and an important contributor to modern medicine on a worldwide basis. Founded in 2000, CARS with its focus on research and development for computer assisted systems and their applications in radiology and surgery has played a leading role in medical informatics for 25 years. Its growth and impact is due to CARS’s close collaboration with the ISCAS, EuroPACS, CAD and CMR societies. Following the long term successful cooperation, they will jointly hold their annual meetings with CARS in Geneva in 2010.

The CARS Congress Organizing Committee invites you to be part of this extraordinary scientific/medical community which gives medicine a new perspective. Join us in Geneva in June 2010, if you work in the fields of radiology, surgery, engineering, informatics and healthcare management and have an interest in, such as:

- Image guided interventions
- Medical imaging
- Image processing and visualization
- Computer aided diagnosis
- Surgical simulation
- Surgical navigation and robotics
- Model guided therapy
- Personalized medicine

New PACS applications, including IT infrastructures adapted for surgery as well as related results from the DICOM and IHE working groups are also within the scope of CARS. Clinical specialties represented at CARS include:

- Image Guided Tumor Ablation Therapies
- Cardiovascular Imaging
- Computer Assisted Radiation Therapy
- Computer Assisted Orthopaedic Surgery and Spinal Surgery
- Computer Assisted Head and Neck and ENT Surgery
- Image Guided Neurosurgery
- Minimally Invasive Cardiovascular and Thoracosurgical Surgery

Please note that the deadline for paper and abstract submissions for CARS 2010 in Geneva is Wednesday, June 23, 2010. Please submit your manuscript at www.editorialmanager.com/jcars

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CARS Congress Organization Overview Special Events

Workshops and Special Sessions

- 4th CARS / IUCIA / DCMIT Joint Workshop on Model Guided Therapy
  - F. Wüthrich, MD (CH); H. U. Lemke, PhD (D); R. Dolash, PhD (D)
- 3rd CARS / TICAM / EuroPACS Educational Course on the Operating Room
  - J. Hermsdorf, MD (D); C. Govoni, MD (D); R. Volder, MD (D)
- 2nd EPMA / CARS Workshop on Personalised Medicine and ICT
  - O. G. Mühlbachner, MD (A); H. U. Lemke, PhD (D)
- IFCARS – Japanese Institutes of CARS – Special Session
  - T. Doi, PhD (D); K. Iwamura, PhD (D)
- 2nd EuroNOTES / TDK / CARS Workshop on NOTES: An Interdisciplinary Challenge
  - F. Visconti, MD (D)
- CADDemo@CARS – Demonstration Workshop on Computer-Aided Detection and Diagnosis
  - H. Feusner, MD (D); R. Taylor, PhD (USA); K. Mori, PhD (J)
- Special Session on Human Computer Interaction

Co-located Conference

The first conference on Information Processing in Computer-Assisted Intervention (IPCAI), 2004, USA, organized by General Chairs N. Navab, PhD, P. Johnson, PhD, E. Taubin, PhD, Y. Konishi, PhD, and co-organized with IFCARS – The International Foundation for CARS.