ICCAS INNOVATION CENTER COMPUTER ASSISTED SURGERY

NEWSLETTER 2/2018

HIGHLIGHTS

Girl's Day 2018 – High School Pupils Visited ICCAS

On the occasion of the nationwide Girl's Day in April 2018, pupils from the 8 - 10th grades visited the University Medicine to learn more about the application fields of medical informatics. At the ICCAS, Claire Chalopin and Lisa Landgraf explained how they work in science. The two group leaders are researching in physics and biology on new diagnoses and treatment methods using imaging techniques. The pupils got excited with the insights into the digitized working world in medical technology.



Pupils of the Girls' Day while measuring their face temperature with infrared camera. | © ICCAS

Thomas Neumuth spoke at WHO-Conference

In April, Thomas Neumuth presented research results on the development and applicability of digital patient records for Emergency Medical Teams (EMTs) at the World Health Organization - Regional Conference in Brussels. The presentation was related to the cooperative work in the EU-project Modular Field Hospital (EU-MFH), which aims at a significant improvement of medical care during missions of the European civil protection. The electronic patient documentation generated at ICCAS is intended to facilitate the workload on medical staff from diagnosis to therapy and documentation in the newly designed modular emergency hospital.

RESEARCH

Final Presentation of Project BIOPASS

At the end of April, the final presentation of the Federal Ministry of Education and Research (BMBF) founded joint project BIOPASS took place in Siegburg. During the workshop the final demonstrator was presented and questions of applications discussed.



Website BIOPASS

Launch of ZIM-Projekt "ENSEMBLE"

On April 1st, the joint project "ENSEMBLE" launched. It deals with the development of a scalable and magnetic resonance capable blood circulation model. The project is funded by the Federal Ministry for Economic Affairs and Energy (BMWi) in the scope of the "Central Innovation Programm Mittelstand". ICCAS's cooperation partner is the Phacon GmbH.

PAST EVENTS

Invited Lectures in Berlin and Korea

At the 135th Congress of the German Society for Surgery in the CityCube Berlin, Andreas Melzer gave an invited lecture on "Innovations in Oncological Surgery". At the 42nd Congress of the Korean Society of Endoscopic & Laparoscopic Surgeons (KSELS) in Jeju (Korea) he held an invited keynote lecture on "Artificial and Machine Intelligence in the OR of the Future" and chaired the session "Artifical Intelligence in Minimally Invasive Surgery".

ICCAS at ConhIT 2018

At this year's ConhIT congress, Thomas Neumuth chaired the session "Intelligent Technology in Hospitals – Convergence of Medical Technology and IT". The session provided a view toward the near and distant future of medical and surgical technology combined with medical IT.

Expert Function at DGBMT Focus Workshop

In the focus workshop of the German Society for Biomedical Engineering (DGBMT) in Frankfurt a. M., Thomas Neumuth presented the basic idea, objectives and variants of model-based personalized medical technology, such as generic patient-, processand system models for therapeutic decision support. He was one of three experts who gave a greater inside into the state of research, regulation, implementation and clinical application in the field of model-based therapy from different perspectives.

Lecture at Senior's Academy

On April 10, Thomas Neumuth introduced the topic "Robots in Medicine" to participants of the Senior's Academy of the Leipzig University. The talk opened the lecture series of the Senior Citizens' College in this summer semester. Neumuth explained how robots are already be used in medical care and outlined the state of the art and the developments to be expected in the future in this exciting field.

DPM-contribution at Medical Informatics Europe

Scientists of the Digital Patient Model research group attended the 29th Medical Informatic Europe Conference in Gothenburg from April 24 - 26, 2018. Jan Gaebel enriches the program in the session "Knowledge-Based Decision Support" with a lecture on "System Infrastructure for Probabilistic Decision Models in Cancer Treatment".

SONO-RAY at ISTU in Nashville

Andreas Melzer and Lisa Landgraf represented the project group SONO-RAY at this year's ISTU – one of the most important international meetings in the field of focused ultrasound therapy in Nashville (USA). Both chaired the "Thermal Therapies" session and presented research results on "In Vitro Effects of Ultrasound Hyperthermia and Radiation Therapy on Glioblastoma, Prostate and Head and Neck Cancer Cell Lines: Preliminary Studies" and "Towards Integrating Robotics for Combined Focused Ultrasound and Radiation Therapy into the Treatment Process". Andreas Melzer was elected a co-chair of the 18th ISTU / 5th EUFUS joint symposium taking place from June 12-15, 2019 in Barcelona.



Dr. Lisa Landgraf during the poster session at ISTU 2018. | © ICCAS

UPCOMING EVENTS

Warm Invitation to this Year's ICCAS Open Day June 7, 2018 | Leipzig, Semmelweisstraße 14

For the 3rd time, we open our doors to showcase exciting exhibits of all research areas. Interested parties are cordially invited to expierence our working spectrum. This event is free of charge.

Registration & Info

Long Night of Sciences – Visit our Booth at BIO CITY! June 22, 2018 | Leipzig, BIO CITY, Deutscher Platz 5c

At the ICCAS booth, visitors can observe their own lung function in live videos. A device for measuring the electrical impedance tomography in combination with a special measuring belt is used. The scientists will experimentally explain how this gentle imaging method works and present clinical applications.



Link

Sono-Ray Group Takes Part in Robot Challenge

June 24, 2018 | Imperial College London, UK

The SONO-RAY group will compete with some of the leading surgical robotics groups from around the world at the Surgical Robot Challenge of this year's prestigious Hamlyn Symposium in London. The exhibit is a robotic system for ultrasound assisted needle targeting in biopsies. The group will showcase novel ideas to operate collaboratively with a KUKA lbr iiwa robot in surgery including concepts for touch gesture interaction and an augmented-reality based tablet application for treatment planning.

Link

35 European CME-Credits for DORS 2018

August 27 - 31, 2018 | Leipzig, Semmelweisstraße 14

ICCAS's 5th Digital Operating Room Summer School with its unique interdisciplinary interaction of medical and technical aspects will take place in August 2018. International experts meet participants from all over the world to share their knowledge about newest developments and trends in digital medicine. DORS 2018 has been accredited by the European Accreditation Council for Continuing Medical Education (EACCME[®]) with 35 European CME-Credits (ECMEC[®]s). This increases the attractiveness of the event especially for clinicians, whose participation is much welcomed.

Registration & Info

PhD Workshop "Future Med Technologies" – Register Now!

September 12, 2018 | Leipzig, Medical Campus, Liebigstraße

This event allows PhD students from Saxony, Saxony-Anhalt and Thuringia to present their technology-related research topics and to gain information about job offers or future working environments from partners of the accompanying industrial exhibition. Workshops on scientific writing, patent issues and third-party funding extend the scientific program.

Registration & Info

CURAC 2018 -

Extended Paper Submission until June, 11 September 13 - 15, 2018 | Leipzig, Medical Campus, Liebigstraße

ICCAS is hosting the 17th Annual Meeting of the German Society for Computer and Robotic Assisted Surgery guided by the motto "Connected into the Future". You are invited to submit your paper until June 11, 2018. This event will be located in the heart of the Medical Campus of Leipzig University Hospital. We look forward to your participation!

Info & Submission



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