

HIGHLIGHTS

DEAN OPENS ICCAS STATUS SEMINAR 2018

JANUARY 24, 2019 | ICCAS, LEIPZIG

On January 24, the Dean of the Medical Faculty Prof. Dr. Christoph Josten opened the ICCAS Status Seminar 2018. It was attended by numerous guests from science, politics and associations, the health industry as well as the members of the boards. Prof. Josten praised the view of the institute for the implementation of scientific results to direct patient care. The guests were able to convince themselves of the 2018 successes on the basis of the group leaders' reports and the subsequent live demonstrations of the projects MoVE, IMPACT, AutoSON and the Digital Patient Model group. Furthermore, the progresses of the SONO-RAY project as well as an application of medical robotics were presented.



Prof. Christoph Josten, Dean of the Medical Faculty, opens the ICCAS Status Seminar 2018 | © ICCAS

FMT DOCTORAL WORKSHOP AND TRANSFER MEETING

MARCH 05, 2019 | UKL/ICCAS, LEIPZIG

On March 5, ICCAS hosted the doctoral workshop 'Future Med Technologies' (FMT) at the medical campus with the support of the Economic Development Corporation of Leipzig City. The workshop addressed regional companies with their products and job offers as well as PhD students, who presented their current research topics and innovative approaches in the field of medical- and biotechnology. The network event was also accompanied by the Department for Research and Transfer Services, the Career Service of Leipzig University and the start-up initiative Smile.

In the afternoon, the University's Prorector for Development and Transfer Prof. Thomas Lenk opened the FMT TransferMeeting which took place at ICCAS. In front of representatives of regional companies, local municipalities and science, he emphasized that the bridge between science and industry is already lived par excellence at ICCAS. The guests explored the ICCAS projects and common interests during guided tours and at the subsequent get-together. The event was supported by the Leipzig Chamber of Commerce and Industry and the University's Department for Research and Transfer Services.

[Press Release](#)

PAST EVENTS

SENIOR ACADEMY ON EXCURSION AT ICCAS

JANUARY 16, 2019 | ICCAS, LEIPZIG

14 interested seniors visited ICCAS's demo- OR and had decision support systems explained by the scientists. The interested audience asked many critical questions about the ambivalence of artificial intelligence, the responsibility of the clinicians, debates concerning patient's maturity and the economization of the health care system.



Richard Bieck explains the function and developments at the Demo OR to visitors of the Senior Academy. | © ICCAS

'KUNSTSTOFF TRIFFT MEDIZINTECHNIK' AT ICCAS

JANUARY 30, 2019 | ICCAS, LEIPZIG

For the second time, ICCAS welcomed participants of the conference "Kunststoff trifft Medizintechnik" organized by the Kunststoff-Zentrum Leipzig. Dr.-Ing. Stefan Franke presented ICCAS's intelligent OR and discussed current developments and perspectives in the medical technology industry with the visitors.



Dr. Stefan Franke discusses current OR developments and their advantages for surgeons. | © KUZ gGmbH

MEFALE KIDS AT ICCAS

FEBRUARY 20, 2019 | ICCAS, LEIPZIG



Biopsy procedure with a model under the supervision of Annekathrin Pfahl. | © ICCAS

Children from university staff members visited ICCAS in the frame of the holiday offer 'Winter-MEFALE' to learn more about the application fields of medical informatics and new technologies. A wide range of insights was presented from cell culture to biopsy and experiments in the research OR. The kids were very pleased with the insights into the digitized working world.

ICCAS AT 25TH ECR CONGRESS

MARCH 04, 2019 | VIENNA

Prof. Andreas Melzer and Dr. Lisa Landgraf were invited to the leading European congress in the field of medical image processing and image guided therapy (ECR). Prof. Melzer talked about MR-guided focused ultrasound of liver under respiratory motion. Dr. Lisa Landgraf presented her poster: 'In vitro investigation of combined focused ultrasound (FUS) hyperthermia and radiation therapy (RT) for future use of image guided FUS and RT in the clinic'.



RESEARCH

ICCAS ANNUAL REPORT 2018

Information about ICCAS's results and activities in 2018 can be read in the new Annual Report 2018. A look inside is worthwhile!

[Download](#)

NEW PROJECTS

Three new BMBF-funded projects have launched at ICCAS. The joint project [CURE OR](#) develops the first commercially available high intensity focused ultrasound (HIFU) and radiotherapy platform specifically designed for combinational cancer therapy. Aim of the joint project [MR-Stents](#) is the worldwide first Magnetic Resonance (MR)-guided stent implantation. Furthermore, ICCAS is involved in the joint project [MR-Thrombosis-Theragnostics](#). The aim is the research and development of the worldwide first Magnetic Resonance (MR)-guided diagnosis and minimally-invasive therapy of thromboses.

RECERTIFICATION ACCORDING TO EN ISO 13485:2016

ICCAS's certification according to the medical device law EN ISO 13485 has been extended. This quality management system is a necessary requirement for the cooperation with partners from industry to transfer research results into medical products.



NEW PAPERS PUBLISHED

New results of the research group Image Guided Interventions have been published:

Paper title: 'Evaluation of hyperspectral imaging (HSI) for the measurement of ischemic conditioning effects of the gastric conduit during esophagectomy'

Medium: *Journal 'Surgical Endoscopy and other Interventional Techniques' of the European Association for Endoscopic Surgery (EAES)*

[Link](#)

Paper title: 'Determination of the transection margin during colorectal resection with hyperspectral imaging (HIS)'

Medium: *International Journal of Colorectal Disease*

[Link](#)

GUESTS FROM BRUSSELS AT ICCAS

MARCH 06 – 07 | 2019, LEIPZIG

Prof. Thomas Neumuth welcomed guests from the Free University of Brussels and the Belgium Government at ICCAS for a discussion about new cooperations in the field of medical civil protection.



ICCAS COLLOQUIUM

MARCH 21, 2019 | UKL, LEIPZIG

Dr. Ernst Marlinghaus, director of Medical Research at STORZ MEDICAL AG and Dr. med. Henning Lohse-Busch, specialist for physical medicine and rehabilitation in the Rheintalklinik Bad Krozingen presented the newest results of the treatment of brain diseases with Transcranial Pulse Stimulation (TPS) at the ICCAS Colloquium. A discussion on further treatment options in the neurological rehabilitation followed.

[Abstracts](#)

HIGH SCHOOL PUPILS VISITED ICCAS

MARCH 29, 2019 | ICCAS, LEIPZIG

On the occasion of the nationwide Girl's Day, pupils from grade 8-10 visited the university medicine to learn more about the application fields of medical informatics. At the ICCAS, the girls could explore the work on medical robots with Juliane Neumann. Annekatri Pfahl showed them the research with heart catheter models. Together with Marianne Maktabi they experienced a technique to measure the temperature of skin areas via 3D and thermal imaging camera.

PEOPLE



JAN GAEBEL

With his Poster on 'Integrated System Architecture for Model-Based Decision Support in ENT' Jan Gaebel won the poster prize at the 15th Leipzig Research Festival for Life Sciences 2019 in the category Computer Assisted Surgery.



JULIANE NEUMANN

Juliane Neumann received the Best Paper Award of the 'Future Med Technologies' doctoral workshop. She presented her research on optimizing work processes in operating rooms. The prize was awarded by the Economic Development Corporation of Leipzig City.

UPCOMING EVENTS

ICCAS INVOLVED IN DMEA

APRIL 09 – 11, 2019 | BERLIN

ICCAS will present a modular test and validation platform for open networked medical devices of the project MoVE at the joint booth of the association OR.NET e.V. at DMEA 2019. Furthermore, the OR.NET e.V. plans a special showcase of its newly developed open standard 'Service-oriented Device Connectivity' (SDC). The software solution paves the way for the dynamic networking of tomorrow's medical technology. OR.NET e. V. is based on the results of the BMBF project OR.NET (2012-2016) where ICCAS was one of over 50 nationwide partners. One of the board members is Prof. Thomas Neumuth.

[Showcase OR.NET e.V.](#)

ISTU/EUFUS JOINT SYMPOSIUM

JUNE 13 – 15, 2019 | BARCELONA

At this year's joint symposium of the International Society for Therapeutic Ultrasound (ISTU) and the European Focused Ultrasound Charitable Society (EUFUS) several scientists from the project group SONO-RAY will present their status quo of research. Prof. Andreas Melzer is congress co-chair.

[Info and registration](#)

JOIN ICCAS SUMMER SCHOOL - DORS

AUGUST 26 – 30, 2019 | LEIPZIG

For the 6th time, ICCAS's Digital Operating Room Summer School opens its doors. The international training course consists of five day modules containing lectures, hands-on sessions, workshops and visits to operating rooms. It gives an extensive overview of medical technology in digital operating rooms from different angles along with insights into current research projects and requirements. This year's special focus is on the application of artificial intelligence in biomedical technology.

[Info and registration](#)

MEDIA

ICCAS'S OR OF THE FUTURE IN MDR SCIENCE

MDR Aktuell | February 19, 2019



Senior Physician and Otolaryngologist Dr. Markus Pirlich (UKL) explains the OR's operation mode to journalist Stefan Marx. | © MDR

A TV team from Mitteldeutscher Rundfunk (MDR) filmed ICCAS's intelligent research OR. In addition to the unique interaction of high tech in the operating theatre, a robotic application for the precise removal of tumor tissue can also be discovered.

[View video](#)

ICCAS IN HEALTH TV

'Dr. Digital' is the title of a report series of the TV channel health tv. One short film takes place in ICCAS's intelligent OR and reports about its digital innovations and advantages for physicians.

[View Video](#)

ONLINE DEBATE ABOUT ARTIFICIAL INTELLIGENCE

The initiative 'Science in Dialogue' (WiD) has called a debate on artificial intelligence. It is preceded by an expert opinion of Prof. Thomas Neumuth on artificial intelligence in medicine. The mission of WiD is to bring science with its processes and findings into public discussion. Join in the debate!

[Link](#)

GEFÖRDERT VOM



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