

Science Days: Anatomy for All

Saturday & Sunday, June 28-29, 2014 / 10 AM-6 PM / Ars Electronica Center

(Linz, June 25, 2014) The Ars Electronica Center's Science Days series is staged four times a year at to give young people—and grown-ups too!—an opportunity to get hands-on experience with high-tech innovations. This weekend, June 28-29, the focus is on human anatomy. In Deep Space, three chief physicians at Linz General Hospital (LGH) will compare virtual and real images of the lungs and show that leading-edge technology even makes it possible to take a virtual journey through the bronchial tubes and the large intestine. Gerhard Nussbaum of the Competence Network Information Technology to Support the Integration of People with Disabilities (KI-I) will present technical aids that provide support to people with disabilities, and go into this equipment's uses, benefits and limitations. Plus, visitors can use mouth-based interfaces to remote-control drone helicopters and racecars, try out devices to measure lung function, and find out how functional magnetic resonance imaging works.

Program overview:

Deep Space LIVE: The Rivalry of the Organs / Saturday, June 28 / 2-3 PM

Three chief physicians at LGH-Dr. Franz Fellner, head of the Department of Radiology, Dr. Bernd Lamprecht, director of pulmonology (diseases of the respiratory tract), and Dr. Andreas Shamiyeh, director of surgery-will compare virtual and real views of the lungs and abdomen, and show that modern technologies even make it possible to take a virtual journey through the bronchial tubes and the large intestine.

Special guided tour: Come closer! When Technology Touches the Human Body / Saturday & Sunday, June 28-29 / 3-4 PM

Machines have long since become a part of our lives—not only as useful implements but also as medical devices like prostheses and lifestyle products that are now omnipresent and taken completely for granted. They react to human beings and to their environment. And human beings react to them.

Speech: Assistive Technologies / Saturday & Sunday, June 28-29 / 4-5 PM

Gerhard Nussbaum, deputy CEO and technical director of KI-I, presents technical aids designed to help people with disabilities to compensate for their limitations in certain areas. They're important means for handicapped men and women to gain and maintain independence and to take part in Digital Society. In his speech, Gerhard Nussbaum will present various groups of assistive technologies—ranging for low-tech to high-tech products—elaborate on their areas of use, and explain their benefits and limitations.

Assistive Technology in Use: Drone Air Show / Saturday & Sunday, June 28-29 / 11 AM, 1 & 5:30 PM

Gerhard Nussbaum will use a mouth-controlled interface to pilot a drone and drive a remote-controlled racecar.



See It, Touch It, Try It Out

Device to measure pulmonary function: Sunday, June 28 / 1-2 & 3-4 PM

Visitors can try out this device in the Ars Electronica Center's Lobby.

Functional magnetic resonance imaging (fMRI): Saturday, June 28

Dr. Kaveh Akbari and Dr. Alexandra Barthol of LGH's Department of Radiology will explain how fMRI works.

Head-controlled dart arcade game: Saturday & Sunday, June 28-29, 10 AM-6 PM, Lobby

Head-controlled computer games, interior environment control, music engine: Saturday & Sunday, June 28-29, 10 AM-6 PM, Main Gallery (Level -3)

Ars Electronica Center: http://www.aec.at/news/en/

Radiology at LGH (in German): http://www.linz.at/akh/439.asp

Pulmonology and Pneumology at LGH (in German): http://www.linz.at/akh/1007.asp

2nd Surgical Department at LGH (in German): http://www.linz.at/akh/8793.asp

KI-I: http://www.ki-i.at/index.php?id=home&L=1