International Team for Implantology awards André Schroeder Research Prize

BASEL, Switzerland: The International Team for Implantology (ITI) has awarded Dr Nikola Saulacic, dentist, oral surgeon and researcher at the University of Bern, Switzerland, with the 16th André Schroeder Research Prize. Mid-June, Prof. Daniel Buser, president of the academic organisation dedicated to the promotion of evidence-based education and research in the field of implant dentistry, presented the prize at the ITI Congress Benelux in Amsterdam in the Netherlands.

Forty-two-year-old Saulacic was selected by the ITI Research Committee through an anonymous evaluation process. The committee honoured the researcher for his experimental study on "Bone apposition to a titanium-zirconium alloy implant surface" which is aimed at determining the early healing events of titanium-zirconium (TiZr) implants in comparison with titanium implants, both with a modified sandblasted and acid etched (SLActive) surface, and an implant material with additional strength (Ti6Al4V). The study concluded that TiZr implants showed comparably fast early osseointegration than titanium implants supporting their use for more challenging clinical situations in which implants with a reduced diameter are indicated.

The André Schroeder Research Prize was established almost 20 years ago and is presented annually in honour of the late Prof. André Schroeder (1918–2004), founding ITI President, who pioneered implant dentistry and whose lifework contributed significantly to modern dentistry. It is worth CHF 20,000 (US$24,000) in cash. According to the ITI, it is one of the most prestigious awards in implant dentistry.

US scientists measure dino blood

Daniel Zimmermann

NEW YORK, USA: New findings using dinosaur teeth could help to explain how the reptiles were able to regulate their body temperature, researchers from the California Institute of Technology in the US have reported. By measuring subatomic particle concentrations in fossil teeth in two of the largest dinosaur species, they claim to have found that the animals' body temperatures were much higher than that of other reptiles and comparable to mammals.

Since the first species was officially classified, anthropologists have quarreled over whether dinosaurs were cold- or warm-blooded. The latest research suggests that they were warmer than originally expected and probably able to reduce body heat through special physiological features. Scientists, however, were not able to determine the body temperature of the creatures except through indirect methods, such as measuring the spacing of dinosaur tracks.

The new approach developed by geochemist Robert Eagle and geologist Prof. John Eiler is able to determine body temperature to within one or two degrees, the researchers say. It measures the concentration of rare carbon and oxygen particles that clump and form minerals called bioapatites, a process that is dependent on heat. The researchers analysed the clumps in 11 teeth of the Brachiosaurus brancai and Camarasaurus species found in different locations in the US and Tanzania.

"Nobody has used this approach to look at dinosaur body temperatures before so our study provides a completely different angle on the long-standing debate about dinosaur physiology," Eagle commented. He and Prof. Eiler announced that they would be applying the method to other dinosaurs and extinct animals, including mammals, in order to find out more about how they evolved.

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New portable chair could aid dental treatment

Daniel Zimmermann

NEW YORK, USA: Design and Engineering students from Purdue University in West Lafayette in the US have developed a new kind of portable medical chair that can also be used for dental treatment. The device, named the Mantis owing to its ability to transform into various shapes, does not have any gears or motors and can be folded into a dolly to suit different medical uses. It is intended to help carry out treatment in underdeveloped countries, where operating traditional surgical equipment can be difficult.

The idea came from Industrial Design student Leah Kenttämää-Squires following several visits to a dental office. In order to realise her concept, she teamed up with Mechanical Engineering graduate Kyle Amick, who helped to build the first prototype. According to Kenttämää-Squires, the Mantis is extremely lightweight for carrying by commercial airliners and can store additional medical and dental equipment.

Inventors Kyle Amick (left) and Leah Kenttämää-Squires demonstrate the Mantis reclining chair they developed. (DTI/Photo courtesy of Purdue University, USA)

The students are currently seeking to license and commercialise the chair through the Purdue Research Foundations Office of Technology Commercialization, an office that protects and promotes the university’s intellectual property. Kenttämää-Squires said that once patented the chair could be available to dental professionals worldwide within two years.

European doctors use Wikipedia and Co.

LONDON, UK: Sixty per cent of European doctors use the online encyclopaedia Wikipedia for professional purposes, a report has revealed. Furthermore, 69% use social media sites like Facebook, LinkedIn, YouTube and Twitter. For the survey, 300 general practitioners across Europe were interviewed.

The findings show that it is not only young doctors who use the Internet for this purpose. Across all markets, 75% of doctors in the 51 to 60 age groups stated that they regularly consulted Wikipedia for professional use.

According to the London-based Insight Research Group, who carried out the survey, the new statistic surprised many in the industry. Not only did the doctors surveyed use the Internet as a source for their research, but half of them also recommended specific websites for their patients to visit following their consultations. Eighty-seven per cent advised certain sites for further background or education on their condition, 70% for additional support and advice, and 69% for more information regarding treatment and medication.

According to the Insight Research Group, the findings reinforce the popular view that we are now living in the era of the “e-patient”, for whom the web has become a trusted tool for health-related matters, as well as daily tasks.

“The e-patient is here to stay. But we have to investigate whether patients are accessing the right type of websites when it comes to health issues they or their loved ones are facing,” continued Damian Eade, Director of Insight Research Group. “Whether it’s researching illnesses, sharing experiences, making recommendations or providing moral support for other patients around the world, the social web has reinvented health advice.”