Columbia University announces break-through in tooth regeneration

Daniel Zimmermann

NEW YORK, USA/LEIPZIG, Germany: Dental implants could soon become a secondary choice for replacing natural teeth. According to new research from the College of Dental Medicine at Columbia University in New York, three-dimensional scaffolds infused with stem cells could yield an anatomically correct tooth in as soon as nine weeks once implanted. The new technique, developed by Columbia University professor Jeremy Mao, has also shown potential to regenerate periodontal ligaments and alveolar bone, which could make way for re-grow natural teeth that fully integrate into the surrounding tissue.

Previous research on tooth regeneration has been focusing on harvesting stem cells directly on dental implants to improve osseointegration or outside the body where the tooth is grown under laboratory conditions and implanted once it has matured. Mao’s technique, which has been tested on animal models, is moving the harvesting process directly into the socket where the tooth can be grown ‘orthotopically’.

People who have poor oral hygiene have an increased risk of heart disease compared to those who brush their teeth twice a day. That’s according to research published in the British Medical Journal. There has been increased interest in links between heart problems and gum disease over the past 20 years.

While it has been established that inflammation in the body (including mouth and gums) plays an important role in the build up of clogged arteries, this is the first study to investigate whether the number of times individuals brush their teeth has any bearing on the risk of developing heart disease, says the research. The authors, led by Professor Richard Watt from University College London, analysed data from more than 11,000 adults who took part in the Scottish Healthy Survey. The research team analysed data about lifestyle behaviours such as smoking, physical activity and oral health routines.

Individuals who were asked how often they brushed their teeth (twice a day, once a day or less than once a day). On a separate visit, nurses collected information on medical history and family history of heart disease, blood pressure and blood samples from consenting adults. The samples enabled the researchers to determine levels of inflammation that were present in the body.

The results demonstrate that oral health behaviours were generally good with six out of ten (62%) of participants saying they visit the dentist every six months and seven out ten (71%) reporting that they brush their teeth twice a day. Once the data were adjusted for established cardio risk factors such as social class, obesity, smoking and family history of heart disease, the researchers found that participants who reported less frequent toothbrushing had a 70% extra risk of heart disease compared to individuals who brushed their teeth twice a day, although the overall risk remained quite low. Professor Watt says: “Our results confirmed what is generally good with six out of ten (62%) of participants saying they visit the dentist every six months and seven out ten (71%) reporting that they brush their teeth twice a day.”...
**Did you see the STARS Twinkle in Alexandria?**

**By all measures, figures and Statistics, the Stars meeting (AOA 2010) was the most successful Implantology meeting the history of the Middle East and Africa.**

The AOA was honored to have the brightest stars in the field of Oral Implantology gathering to achieve its aim of spreading the knowledge and getting people together.

The Super Star, Dr. Henry Salama, a main member of Team Atlanta, conducted a half day course “Minimally Invasive Implants protocols and Management of risk factors in Esthetic therapy: Success by design” which received a magnificent applaud by the attendants who reached 2000 registrations on the first day. Dr. Salama, a main member of Team Atlanta, conducted a half day course “Minimally Invasive Implants protocols and Management of risk factors in Esthetic therapy: Success by design” which received a magnificent applaud by the attendants who reached 2000 registrations on the first day. “I feel like part of the family,” the Congress was also enlightened by the presence of Dr. Kenneth Judy, the ICOI co-founder & co-chairman, Dr. Morten Perel the chief editor of Implant Dentistry journal, ICOI & Mr. Craig Johnson the ICOI Executive Director coming specially to reward our fellow-ship recipients.

The scientific program hosted other stars like Dr. Gerald A. Nunn, Prof. Nahil Barakat, Dr. Mohamed Hassan, Prof. Atef Par-

At lunch held on 24th March during the Gala Dinner in Crystal palace where 26 dentists received their ICOI fellowships. And many others...

**Dr Henry Salama: “I would like to personally thank all those who made it possible.”**

While in Saudi Arabia, Dr Rachid Salama was speaking about Latest Advances in Implantology, classifications of bonding systems, compared the advantages and disadvantages of Total etch Vs Self etch adhesives, the features of nanocomposites and the use of the layering technique for the challenging anterior cases.

Filtek Z550 XT universal restorative delivers even better esthetic qualities through an expanded range of body shades. This offers more universal options for creating easy, natural-looking, one-shade restorations, while maintaining the composite’s versatili-

ity for dual or multi-layering techniques (four opacities are available). Additional advances include improved polish retention of dentin, body and enamel shades, as well as improved handling of translucent shades. Beyond the product attributes, additional simplification is seen in the form of new, bold labeling and color-coded opacities, which sim-

Dr. Mao’s study has been published in the recent Journal of Dental Research and will be presented at this year’s International Associa-

ation of Dental Research congress in Barcelona, Columbia has also announced to have filed patient applications in relation to the engi-

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