

Henry Schein celebrates

## Opening of new UK headquarters



Almost a year after construction started, Henry Schein opened its new headquarters in the Gillingham Business Park at the beginning of October. The new state-of-the-art and energy-efficient facility, which includes two floors of office space and a warehouse, will serve as the main office and distribution centre for the company's dental and medical customers in the UK.

The new facility was built adjacent to the existing Henry Schein UK facility at the site, which was established in 1991. Its new warehouse includes an education centre with a showroom for product

demonstrations featuring a wide range of innovative high-tech digital technology. The company is also planning to develop additional warehouse space if more storage capacity is needed.

"This new, outstanding facility is a source of great pride for our company, underscoring our commitment to environmental sustainability, as the project's planning and construction has taken into account the impact on the surrounding environment," said Stanley M. Bergman, Chairman of the Board and CEO of Henry Schein, at the opening on 8 October, which was attended by over 500 people.

FDI opens online

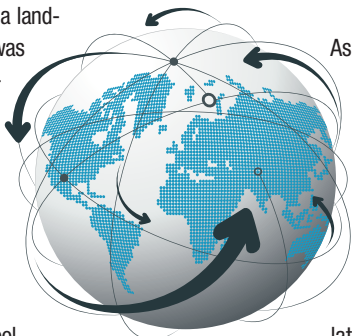
## Hub for global oral data

The FDI has opened its 'data hub for global oral health', an evolving online database of oral health statistics and indicators. It has started out with a limited amount of information but it is anticipated that the content will expand and deepen in the coming months.

The 'hub' has been developed under the guidance of the FDI Oral Health Atlas Task Team. The Oral Health Atlas has proved to be a landmark achievement since it was published in 2009; nevertheless, with data dating back, in some cases, to the 1990s, and only a limited number of indicators available, its information is now in need of an update.

From the perspective of health policy, the lack of oral health data has ham-

pered the World Health Organisation's (WHO) efforts to develop, for oral health, a comprehensive global monitoring framework including a set of indicators to monitor trends and to assess progress in the implementation of health care strategies and plans. Thus, it is anticipated that the 'data hub for global oral health' created by FDI will also help to provide a sound basis for a future global oral health monitoring framework.



(PICTURE: © SARUNYU\_FOTO)

As for content, the 'data hub' will cast the net much wider for information. For example, the crucial role of social determinants in oral health will make socio-economic data a key component. So will the data on incidence of Non-Communicable Diseases such as diabetes where a close relationship with oral disease has been clearly established.

Dental care may reduce

## Respiratory infection risk in ICU patients

In order to evaluate whether dental treatment may enhance oral antisepsis, thus preventing lower respiratory tract infections among critically ill patients more effectively, researchers at the University of São Paulo analysed data from 294 adult patients who had spent at least 48 hours in a general ICU. In addition to routine oral hygiene care, half of the patients in the study received enhanced dental care provided by a dental surgeon four to five times a week, while the control group received routine oral care only, which included the use of chlorhexidine as a mouth-rinse and was performed by ICU nursing staff three times a day. Enhanced dental care included tooth-brushing, tongue scraping, the removal of calculus, atraumatic restorative treatment of caries, and tooth extraction.



(PICTURE: © SFAM\_PHOTO)

Overall, dental treatment was considered to be safe and effective for the prevention of lower respiratory tract infections. The researchers suggested that the treatment provided by the dental surgeon helped prevent 56 per cent of infection episodes in the experimental group. In addition, the advent of death related to such infections was 38.1 per cent less in the experimental group than in the control group (3.9 per cent compared with 6.3 per cent).

Usually, oral care in ICUs around the world is performed by nursing staff. However, they do not have sufficient training or the legal authority to treat caries, remove calculus, drain intraoral abscesses, or perform tooth extractions, the researchers stated.

"This study suggests that having a dentist provide weekly care as part of the ICU team may improve outcomes for vulnerable patients in this setting," concluded lead author Dr. Fernando Bellissimo-Rodrigues.

UK dental industry pushes

## Campaign to contain influx of fake products



According to figures from the Medicines and Healthcare Products Regulatory Agency (MHRA) in London, over 12,000 individual pieces of counterfeit and unapproved dental products were seized in the UK up to April this year. At the BDIA Dental Showcase in October, the British Dental Industry Association (BDIA) announced that it will partner with major dental and general media outlets, including the BBC, to heighten awareness among dental professionals and the general public of the dangers these products can potentially pose. While they still represent a small market share, the number of substandard devices pur-

chased by dental professionals has steadily grown in recent years across all segments.

"We are now seeing copies and substandard versions of more complex devices, such as dental X-ray machines and handpieces, being increasingly purchased through the Internet and other sources," Bruce Petrie from the MHRA said. In order to address the situation, the agency in partnership with the BDIA launched the Counterfeit and substandard Instruments and Devices Initiative earlier this year, which aims to make more dentists aware of the problem and to report questionable products to the relevant authorities.

BDIA Executive Director Tony Reed commented, "We are pleased with the very positive reception that our initiative has received and the next step in growing awareness amongst the dental team is the launch of our advertising campaign."

BPA exposure may contribute to

## Asthma development in children

In the past, bisphenol A (BPA), an endocrine-disrupting chemical that can also be found in dental composites and sealants, has been linked to a number of health conditions, including obesity, allergies and cancer. Now, researchers have found evidence that prenatal exposure to BPA is associated with diminished lung function and the development of persistent wheeze in children, which are indicators for asthma, one of the most common chronic childhood disorders.

In order to examine the effect of BPA on lung function and wheeze in children, researchers at the University of Maryland School of Medicine followed women through pregnancy and their children through age 5. In total, the study included 398 mother-infant dyads. They collected maternal urine samples at 16 and 26 weeks of pregnancy and maternal urine samples annually to assess BPA exposure.

According to the study, prenatal BPA exposure during early pregnancy was associated with diminished lung function, increased likelihood of wheeze, and a persistent wheeze phenotype in young children.

According to estimates by the Centres for Disease Control and Prevention, about 7 million children under the



age of 18 are affected. Although secondhand smoke and air pollution have been identified as factors for the development of asthma in children, the reasons for increasing rates of the disease in the past decades are still poorly understood by scientists. The present study thus provides new evidence that BPA may contribute to this development.

Sirona and Boston University form

## First all-digital dental school

Sirona, the world's largest manufacturer of dental technology, has announced that it has recently entered into a unique digital dentistry partnership with the Boston University Henry M. Goldman School of Dental Medicine. Through the agreement, the school will become the first all-digital dentistry school in the US, providing dental students with the opportunity to learn about the current digital dentistry landscape in fully equipped operatories. The university will purchase digital equipment exclusively from Sirona in order to provide its dental students with access to a complete digital dentistry workflow, including both dental and laboratory techniques and applications. In addition, the school's Patient Treatment Centre, at which students provide affordable dental treatment, will be furnished with equipment from Sirona's CEREC, Schick, GALILEOS and inLab product lines.



In May 2013, the university established a special task force to implement digital dentistry at the dental school. With the goal of providing students with the tools to deliver the highest level of oral health care using digital dental technologies, the task force evaluated the facilities, equipment and technical support required to create a seamless all-inclusive system. Sirona was chosen as a partner in this project because the company offers a comprehensive product portfolio, strong technical support and seamless technology integration capabilities, the university stated.

"We are honoured to enter into this first of its kind endeavour with Boston University," said Sirona president and CEO Jeffrey Slovin. "Students will get to experience the true workings of a current dental practice environment and we commend the University for leading the way towards educating its students on using digital dentistry techniques. We are pleased to collaborate with Boston University in setting the stage for the future of dental education."



## FDI launches World Oral Health Day “Smile for life” campaign



Over 90 per cent of the world's population will suffer from some form of dental disease in their lifetime, but many of these diseases can easily be treated or prevented with a good oral care routine. The WOH 2015 “Smile for life” campaign includes a call to action (“It’s time to ...”), which campaigners can adapt to their local needs and circumstances.

Dentists at the FDI Annual World Dental Congress in New Delhi in September endorsed the “Smile for life” campaign both literally and figuratively when they

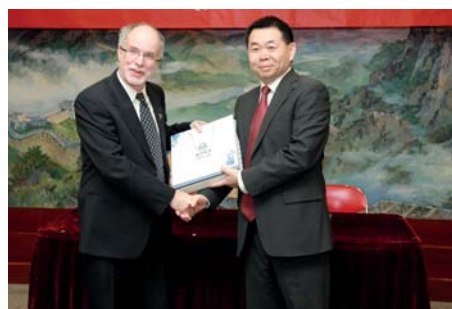
took turns to “Smile for life” in front of WOH 2015 campaign poster. FDI President Dr Tin Chun Wong commented, “The ‘Smile for life’ campaign reminds us that oral disease can be prevented by practising good oral hygiene throughout life, from childhood to mature adulthood. After tripling the number of countries celebrating World Oral Health Day between 2013 and

2014, we are now looking to reach an even larger audience in even more countries, as well as online.”

FDI Executive Director Jean-Luc Eiselé added, “We want to encourage everyone to celebrate this important day. Participants can download materials such as logos, posters and toolkits to plan their activities from the ‘Smile for life’ campaign website—where they can also read inspiring stories from last year’s campaign to help them plan their World Oral Health Day 2015.”

## First dental laser multi-centric research agreement

### Signed between dental schools from China and Israel



November 14, 2014, the first dental laser multi-centric research agreement was signed between Peking University School of Stomatology in China and The Hebrew University, Hadassah School of Dental Medicine the leading Dental University from Jerusalem, Israel. Initiated by Prof. Adam Stabholz, Prof. Chuanbin Guo and Mr. Ira Prigat, with a strong vision to offer better dentistry to patients, reduce dental fear, enhance prevention awareness and improve overall health of human being, the research collaboration between two coun-



tries will bring significant impact on both dental and healthcare industry.

A special ceremony was hosted in the PKU School of Stomatology VIP reception room, Dean Prof. Chuanbin Guo and Dean Prof. Aharon Palmon signed the agreement. After the signing ceremony, an impressive academic symposium on dental laser application was held with outstanding lectures from both Israeli and Chinese dental laser professionals.

## Massive patient recall after Breach by dentist in Nottinghamshire

Thousands of patients treated by a dentist at Daybrook Dental Surgery in Gedling near Nottingham have been recalled by NHS England in Nottinghamshire to be tested for blood-borne viruses. Dr Desmond Jude D’Mello was recently suspended for 18 months by the General Dental Council for violation of cross-infection control standards in multiple cases.



Police are also investigating the death of a woman believed to have been treated by the dentist and who died of viral acute myocarditis last year. Charges against D’Mello arose after a whistle-blower sent secretly filmed footage to the NHS. Overall, he is believed to have treated more than 20,000 patients since he started practising at the clinic in the early 1980s.

While NHS investigations found that he did not carry blood-borne viruses himself, the patients he saw could have been placed at low risk of being exposed to Hepatitis B or C and HIV, Medical Director for NHS England in Nottinghamshire Dr Doug Black said. He said that his organisation is currently working with Public Health England and the General Dental Council to resolve the issue. Support is also being provided by Southern Dental, which has been running D’Mello’s former practice since August, according to Black. Patients believed to have been treated by the dentist are advised to contact the authorities for further advice. NHS has set up a community clinic at the health centre in Arnold, as well as a telephone line, to support patients treated by the dentist.

“Effective treatments are available for all blood-borne viruses,” Dr Vanessa MacGregor, Consultant in Communicable Disease Control for Public Health England in the East Midlands, said.

People with hair disorders

## May be prone to dental caries

US researchers have found that certain variants of keratin, proteins that are key structural components of hair, also help in the formation of tooth enamel. In order to establish a connection between hair disorders and susceptibility to dental caries, the researchers used genetic and oral examination data from 386 children and 706 adults. For their study, they focused on the protein keratin 75, because mutations in its genes have been linked to certain hair disorders, such as shaving bumps, persistent irritation caused by shaving.

The researchers observed that participants carrying mutations in keratin 75 had an increased



[PICTURE: © FILMFOTO]

number of cavities. In addition, they found that these participants had altered enamel structures and showed a marked reduction in enamel hardness, suggesting that hair keratins stabilise enamel tufts and rod sheaths to support enamel rods during their formation, which is similar to their function in supporting the hair shaft. Thus, they concluded that tufts and rods destabilised by the presence of the mutant protein have a reduced capacity to protect against caries.

These insights may help in the development of new strategies for combating tooth decay, the scientists believe. The disease affects 60–90 per cent of schoolchildren and nearly 100 per cent of adults worldwide.

Location of oral cancer

## Varies in smokers and non-smokers

Smoking and alcohol abuse are the most recognised factors in the causation of cancers of the oral cavity. However, a new 10-year study has shown that non-smokers too are at significant risk of oral squamous cell carcinoma. The study suggests that chronic dental or denture irritation in particular could be an important causative factor.

In order to determine whether oral cavity cancers occurred more commonly at sites of dental trauma, a comprehensive analysis of the medical records of 334 patients diagnosed with oropharyngeal cancer and 390 with oral cavity cancer was undertaken at Princess Alexandra Hospital in Brisbane between 2001 and 2011. Of the oropharyngeal cancer patients, almost 86 per cent were smokers or ex-smokers and about 14 per cent were non-smokers. Of the 390 patients with mouth cancer, 80 per cent were current or ex-smokers and about 20 per cent were non-smokers.

The researchers found that overall most mouth cancers occurred on the edge of the tongue.



[PICTURE: © MARC DIETRICH]

A significantly higher proportion of non-smokers (66 per cent, compared with 33 per cent in smokers), however, had mouth cancer in this location. In addition, they observed a higher incidence of mouth cancer in female non-smokers compared with male non-smokers.

As oral cavity cancers occurred predominantly at sites of potential dental and denture trauma, especially in non-smokers without other risk factors, the researchers concluded that the irritant effect of chronic dental trauma may induce the development of oral cavity cancers on the lateral tongue.

Google Glass may

## Obstruct peripheral vision

Interest in wearable head-mounted display systems such as Google Glass is increasing, even in the dental setting. However, their effect on vision is still largely unknown. Now, researchers from the University of California, San Francisco, have found that the glasses partially obstructed peripheral vision.

In order to assess the effect of the head-mounted device on visual function compared with regular eyewear, the researchers performed perimetric visual field tests with three healthy individuals who used Google Glass in accordance with the manufacturer's instructions for 60 minutes. Afterwards, the test was repeated with the participants wearing a control frame of similar colour and temple width.



[PICTURE: © HATTANAS KUMCHAI]

According to the researchers, the testing demonstrated significant scotomas, also known as blind spots, in all three participants while wearing the device, creating a visual field obstruction in the upper right quadrant. The scotomas were due to the frame design only and not to software-related interference, they said.

In addition, 132 photographs of people wearing Google Glass were analysed to assess how the device is worn by general consumers. The researchers stated that many wear the device almost overlapping their pupillary axis, which may induce scotomas and thus interfere with daily activities (such as driving), pedestrian safety, and sports.