

The *BDJ* News section accepts items that include general news, latest research and diary events that interest our readers. Press releases or articles may be edited, and should include a colour photograph if possible. Please direct your correspondence to the News Editor, Arveen Bajaj at the *BDJ*, The Macmillan Building, 4 Crinan Street, London N1 9XW or by email to bdj@bda.org

Chewing gum with added bite

A chewing gum that can destroy the bacteria that cause tooth decay could be in the shops soon according to the Society of Chemical Industry. The gum is one of several products being developed by German chemical company BASF using the bacteria *Lactobacillus*, which is normally found in live yoghurt.

BASF has discovered a new strain of *Lactobacillus* called *L. anti-caries*, which binds to *Streptococcus mutans*, the bacteria responsible for tooth decay. *S. mutans* sticks to the surface of teeth, where it produces an aggressive acid that breaks down the enamel. The friendly bugs in the gum will make the *S. mutans* clump together, preventing them from becoming attached to the tooth surface. The company's tests reveal that the chewing gum can reduce the amount of bacteria in the mouth by fifty times.

"With *Lactobacillus anti-caries* we have found an antagonist which effectively binds to the caries bacteria and prevents them adhering to the surface of the teeth", explains Dr Andreas Reindl, Project Leader at BASF Future Business. Although the company has said a *Lactobacillus* product is due to hit the supermarkets in 2007, it will not confirm whether it is the chewing gum and a new range of toothpastes and mouth-washes using *L. anti-caries* are also in the pipeline.

Other potential uses of *Lactobacillus* include the prevention of body odour and BASF are looking into producing a deodorant based on *L. aladoris*, which can inhibit odour-producing bacteria in the armpit. Similarly, tests have shown another strain, *L. ala-odoris* can reduce odour formation in feet.

Review prize awarded



The Evidence-based Dentistry Network Systematic Review Prize has been awarded to Huan Lu, Assistant Professor at the Department of Restorative Dentistry, Center for Dental Research, Loma Linda University School of Dentistry, California, and his review team of Holy Koh, from Singapore, María Graciela Rasines Alcaraz, from Argentina, Patrick Schmidlin from Switzerland and Dell Davis from USA.

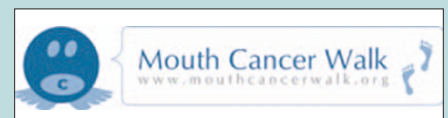
The award of £7,000 was for a Cochrane systematic review protocol entitled, *Direct composite resin fillings versus amalgam fillings for permanent or adult posterior teeth*. The involvement of researchers from several different countries illustrates the collaborative nature of the Cochrane Collaboration. The award was presented at the recent International Dental Association for Dental Research (IADR) meeting in Brisbane, and is sponsored by Nature, publishers of *Evidence-based Dentistry*.

Pictured above, Patrick Schmidlin (right) collecting the Evidence-based Dentistry Network Prize from Kim Black Totham, Publishing Manager, *Evidence-based Dentistry*. Nature and *Evidence-based Dentistry* will be sponsoring the award in 2007 and details of how to apply will be announced shortly.

Walk for mouth cancer awareness

The Mouth Cancer Foundation is organising a 10k walk in Hyde Park, London, on Sunday 19 November 2006 to coincide with the end of Mouth Cancer Awareness Week (Sunday 12-Saturday 18 November). The organisation is encouraging all in the dental profession (dentists, dental students, and dental care professionals) to make this their event by participating. Participants don't have to walk, they can also jog or run if they prefer and cos-

tumes are invited for those feeling brave. There will be 1st, 2nd and 3rd place prizes as well as 10 runner-up prizes for the top individual and team fundraisers. For more information visit the Mouth Cancer Walk website at www.mouthcancerwalk.org.



DIARY

September

The British Society of Paediatric Dentistry
Annual Scientific Conference
'The Art & the Science'
Venue: The Hilton, Leeds City
Date: 12–15 September 2006
www.bspd.co.uk/conf-2006.html

European Society for Oral Laser Applications/
Hellenic Society for Oral Laser Applications
1st Mediterranean Laser Congress
Venue: Hilton Hotel Rhodes Resort, Greece
Date: 21–23 September 2006
Email: esola2006@medacad.org
www.esola.at

FDI Annual World Dental Congress
Venue: Shenzhen, China
Date: 22–25 September 2006
Email: congress@fdiworldental.org
www.fdiworldental.org

October

BDTA London Dental Showcase 2006
Venue: ExCeL, London
Date: 5–7 October 2006
Tel: 01494 729959
www.dentalshowcase.com

Preparing for retirement
Venue: Cedar Court Hotel, Harrogate
Date: 6 October 2006
www.bda-events.org

Community Dental Services Group Annual
Presidential and Scientific meeting
Venue: Marriott Forest of Arden Hotel,
Birmingham
Date: 12–13 October 2006
www.bda-events.org

The American Dental Association (ADA)
147th ADA Annual Scientific Session and
Marketplace Exhibition
Venue: Mandalay Bay Resort and
Convention Center, Las Vegas
Date: 16–19 October 2006
www.ada.org

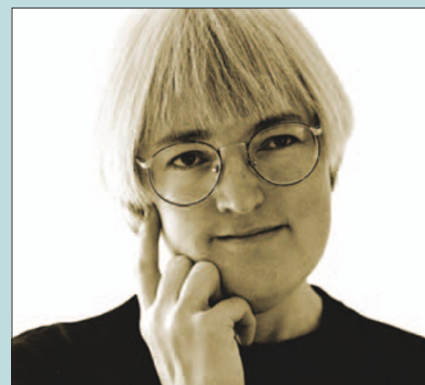
Hospitals Group Annual Presidential and
Scientific meeting
Venue: Portmeirion, North Wales
Date: 26–27 October 2006
www.bda-events.org

New Patron appointed

The National Oral Health Promotion Group (NOHPG) has appointed a new Patron. The Group's members invited Catherine Stillman-Lowe, independent oral health promotion advisor, to take up the honorary position for the next three years.

Known to many as co-author of *The Scientific Basis of Oral Health Education*, published by BDJ Books, Cathy said, "It is a great honour to be asked to support the NOHPG by taking on this role. The Group provides a valuable service to its members by promoting evidence-based oral health promotion and advocating policies that will result in sustainable improvements in oral health. By sharing good practice between oral health promoters across the

UK, the Group helps to reduce professional isolation and raise standards at the grass-roots level".



September is Colgate Oral Health Month

Colgate Oral Health Month, now in its fifth year, is once more campaigning for establishing and promoting improved oral health habits. Colgate, in association with the British Dental Association, partners with dental professionals in delivering specific key oral health messages to patients. This campaign is designed to promote the benefits of good oral health, inform the general public of the importance of looking after their teeth and to encourage communication between dental professionals and patients. The ongoing theme 'Fighting Together for Better Oral Health' builds on the successes of previous years and includes key messages for the general public which are brush your teeth twice a day with a fluoride toothpaste, change your toothbrush every three months, visit your dentist regularly and avoid sugary foods, especially between meals.



Colgate Oral Health Month provides dental professionals with the opportunity to get involved in a nationwide campaign and also to participate in the Colgate Oral Health Month CPD programme that runs throughout September. The second in the series of verifiable CPD programmes includes practical examples, exercises and tips on communication strategies for delivering effective preventative advice in the surgery.

Awareness week

This year's Mouth Cancer Awareness Week, 12–18 November, focuses on the early warning signs associated with the disease. The campaign is advising people to be aware of changes in their mouth and look out for early warning signs such as mouth ulcers that don't heal and red or white patches in the mouth as being aware of these early warning signs could save lives. In association with the British Dental Health Foundation who co-ordinate the week and the Mouth Cancer Awareness Week committee, Denplan has once again produced a poster supporting the campaign, helping to raise awareness of mouth cancer and these associated warning signs.



Digital images help toddlers with oral disease

Dental researchers are combining the ease of digital photography with the internet to develop a new and inexpensive way to screen for a common childhood oral disease that predominantly plagues America's inner city toddlers.

According to the University of Rochester Medical Center, USA, early childhood dental caries (ECC), or as it is commonly called, "baby bottle tooth decay" where cavities are caused by prolonged exposure to sweetened juices often from sleeping with a bottle, tend to be overlooked by parents.

Then the pain becomes so severe, and the teeth so decayed, that the only option for these toddlers – often under the age of four – is sedation and extraction.

A specially outfitted digital camera is used to take photos of children's teeth by a child care centre health assistant. The photos are then sent electronically to paediatric dentists, who review the files in batches, identifying those toddlers with ECC.

Dentists believe that this new screening system is the first of its kind, and will pave the way for earlier identification of the cavities before they become a painful problem for young toddlers – and a costly one for states across the US footing the bill for Medicaid.

"We have identified a very simple, cost-effective method to screen for this common childhood disease before it becomes a much larger problem," said Dorota Kopycka-Kedzierawski, Assistant Professor of Dentistry at the University of Rochester Medical Center, and author of the study. "By catching ECC at its earliest stage, we will effectively save the patient and parent toothache and heartache, decrease use of emergency room services, and increase the usage of dentists by this underserved population."

In total, 162 children from one to five years of age in six Rochester inner-city

child care centres were screened, with almost 40 per cent shown to have ECC. Once identified, parents received a letter alerting them to their child's oral disease, and were provided with a referral so the problem could be treated.

Three months later, all children were rescreened to determine how many had actually seen a dentist to correct the problem.

About 25 per cent of children did receive dental services, though the sample size in this study is too small to make generalised conclusions.

Now, researchers are focused on finding grants to help support follow-up efforts so that all toddlers identified with ECC will receive the much needed dental care.



Tissue engineering developed

Researchers from UCL Eastman Dental Institute have developed a process which could be used to grow bone and other maxillofacial applications.

Professor Jonathan Knowles, working with scientists from Korean universities, has applied a process known as electro-spinning to a sol-gel to shape the material into a nanofibre structure with a high bioactivity.

The work, *Production and potential*

of bioactive glass nanofibers as a next-generation biomaterial, published in *Advanced Functional Materials* describes *in vitro* trials showing that the new material has high bioactivity (the promotion of cell growth), which means that it can be used effectively for growing bone and other maxillofacial applications. Professor Knowles suggests that it is because the fibres in the material are of similar size to collagen, that the material is so bioactive.

BDJ CPD online approaches 10,000th registrant

The *BDJ* online CPD programme was launched in July 2003 and is now fast approaching the registration of its 10,000th participant. In honour of this event, a trophy is to be awarded as soon as the magic number is reached.

Between a third and half of UK dentists have registered and almost one in every eight dentists actively submits answers and uses the site each month. Two articles are selected in each journal and four multiple choice questions are set on each article. One hour of verifiable CPD is allowed for reading each article and answering the related questions. The articles are often outside a participant's usual area of interest – so a whole new area is either learnt about or updated.

The success of the programme has been attributed to the support of the Editors of the *BDJ* and Nature Publishing together with past and present sponsors, 3M and Denplan. The team at the Eastman led by Dr Maurice Faigenblum and supported by Ms Marjorie Kelly as well as Pat Cannon and colleagues at Smile-on ensure a smooth and efficient running of the programme on a daily basis. One new participant to the programme, Tony Crystal of Manchester, said, "I have just started



using the site for CPD and have found it to be absolutely brilliant! I can read the articles, tick the questionnaire and then upload online. It's a great way of gaining CPD hours and gives me a wider overview of current trends. Well done *BDJ* and the Eastman!" Visit www.bdjeastmancpd.com to register.

Funding secured

The Facial Surgery Research Foundation known as Saving Faces has secured £2 million funding for dedicated facial surgery researchers. The sum of £1 million has been donated by Elliott Bernerd, the property entrepreneur who has had



mouth cancer, through his Charitable Foundation while Cancer Research UK is giving £1m for a clinical trial. They will work with and support the research effort of some of the UK's most senior oral and maxillofacial surgeons to collect and exchange data on their patients. The organisation believes that as surgeons alone do not have the time or resources to perform scientific research, this funding will enable the improvement of treatment practice.

In a statement, the Facial Surgery Research Foundation-Saving Faces said, "UK oral and maxillofacial (OMF) surgeons treat people who suffer mutilating facial injuries, or who are born with facial deformities, or who suffer from disfiguring mouth and face diseases such as mouth cancer. About 60 of the top UK OMF surgeons are desperate to do research and improve treatment for people with these conditions and only with dedicated researchers can this research be conducted. They will collect and analyse data on patients to determine best treatment practice and find new and better ways to treat these diseases and injuries."

Overseas dentists boost NHS dentistry

Nearly half of all new dentists working in England last year qualified abroad, and Poland contributed the most entrants, making up 17 per cent of all new NHS dentists, according to statistics recently released by The Information Centre for Health and Social Care.

The trend was reflected in recruitment figures for 2005–2006, which show that 46 per cent of all new dentists qualified overseas. This is higher than the previous year, where the level of non-UK qualified entrants was 40 per cent.

The figures showed that more than 2,200 new dentists increased the number of NHS practitioners in England to a high of over 21,000, between March 2005 and March 2006 and that these figures are 28 per cent higher than in 1997 when 16,500 dentists were contracted to provide NHS dental care. All NHS dentists also have the option to provide private treatment to patients.

The number of dental practices has also increased over the decade, rising by 7 per cent to over 9,000 at the end of March 2006. The statistics also showed that more young women are joining the dental profession. While just over a third (37 per cent) of all dentists are female, figures for dentists under 30 reveal over a half are women (53 per cent).

Professor Denise Lievesley, The Information Centre's Chief Executive, commented, "These figures provide a long term view on dental workforce and activity under the old NHS dental contract. Major changes in the NHS contract came into force from 1 April 2006 and the impact of this on dental provision will be reflected in a report to be published by The Information Centre in October."

However, the British Dental Association sounded a note of caution in response to the numbers and its chief executive, Peter Ward said, "These figures don't tell the full story with many patients still struggling to find a dentist. We welcome dentists from overseas but this is only a short-term solution to the shortage of dentists caused by poor workforce planning in the past. We must also wait to see the impact of the new NHS contract, given that one in 10 of the new contracts were rejected by dentists and around one in four are in dispute." For the full report visit www.ic.nhs.uk.

Hearing loss and high-speed dental tools

Researchers at Oregon Health and Science University, USA are looking into whether high-speed dental tools contribute to long-term hearing loss. According to Professor Robert Folmer, one of the study leaders, published research is mixed about whether high-speed dental tools contribute to noise-induced hearing loss over time.

“Over the years, we have seen dentists in the OHSU Tinnitus Clinic who were convinced that long-term exposure to sound from high-speed hand pieces contributed to their high-frequency hearing loss and tinnitus,” says the Associate Professor of Otolaryngology/Head and Neck Surgery, School of Medicine, and chief of clinical services at the OHSU Tinnitus Clinic, Oregon Hearing Research Center.

“These anecdotes, in combination with the research being divided about high-speed hand pieces playing a role in hearing loss, prompted our study. We hope the study is a good first step toward scientific evidence behind the anecdotes we’ve been hearing.”

Tinnitus, or ringing of the ears, can be constant or intermittent and can include buzzing, hissing or sizzling sounds. Many people experience momentary tinnitus, a high-pitched tone that lasts up to 30 seconds.

Acute tinnitus, however, can last days or weeks and is most commonly caused by exposure to loud noise such as music at a rock concert, power tools or gunfire. The subsequent ringing indicates damage to the tiny hair-like structures within the inner ear and if exposure to loud noise continues, permanent hearing loss is likely.

Most of the current high-speed hand pieces, such as high-speed drills and scalers used by dental professionals, are between 90 to 100 decibels, says Professor Folmer. That’s the equivalent of a gas lawnmower or other power tools, which are loud enough to cause hearing loss over time. He adds that while hand pieces have actually become “quieter” over the years with the advent of modern technologies, very few dental professionals or students interviewed for the study so far wear earplugs to protect themselves from this noise.

The team will investigate noise-induced



hearing loss by conducting hearing tests with a portable audiometer, examining ear canals with an otoscope and asking participants to answer questions about occupational and recreational noise exposure. They also have measured the sound levels of different hand pieces while they’re used on patients.

“We want to compare the hearing tests of dentists, dental assistants, and dental hygienists to those of dental students and people of comparable age in other professions,” says Professor Folmer. “We also want to examine whether there’s a correlation between hearing thresholds and the amount of time that dental professionals are exposed to loud devices at work. And if dental professionals exhibit evidence of noise-induced hearing loss, can it be correlated with occupational or recreational noise exposure? Our hypothesis is that if dental professionals utilise hearing protective devices, they will exhibit less noise-induced hearing loss than dental professionals who do not protect their ears.”

So far, about 40 School of Dentistry professionals and students have had their hearing tested and more data is needed before any conclusions can be drawn.

Bristol Dental Alumni Association

This year’s Newsletter of the Bristol Dental Alumni Association has recently been published and distributed to members.

Members not receiving a copy, or non-members interested in joining, please contact the Clinical Dean’s office

by post (Dental School, Lower Maudlin Street, Bristol BS1 2LY), by telephone (0117 928 4308), or by email (Theresa.Munns@bristol.ac.uk).

Membership details can be found on the website www.dentalschool.bris.ac.uk/postgraduate/alumni.