

## BIOENGINEERED SALIVARY GLAND COULD TREAT XEROSTOMIA

Scientists in Tokyo have provided proof-of-concept for bioengineered salivary gland regeneration as a potential treatment of xerostomia.<sup>1</sup>

Results from the study showed that the regenerated glands, which had been developed in gland-defective mice via orthotropic transplanted organ germs, were fully functional; formed correct tissue structures able to secrete saliva in response to neural stimulation; bore a cleansing function, inhibiting bacterial growth and preventing dryness; and restored normal swallowing function.

The organ germs were able to mature into parotid,

submandibular and sublingual glands, which could be transplanted and developed *in vivo*. Significantly, saliva flow between the natural mice and bioengineered gland-grafted mice did not differ.

Xerostomia can induce various oral health problems, such as bacterial infection, caries, swallowing dysfunction and dysgeusia. Traditional treatments such as saliva substitutes help to reduce the symptoms of dry mouth but cannot restore salivary gland function altogether. Bioengineered replacement could therefore be a very important therapeutic strategy, though further research is needed into the identification and characteristics of adult tissue stem cells for salivary gland regeneration therapy in humans.

1. Ogawa M, Oshima M, Imamura A *et al*. Functional salivary gland regeneration by transplantation of a bioengineered organ germ. *Nature Commun* 2013; **4**: 2498.

By Laura Pacey

## UNIQUE DECONTAMINATION UNIT OPENED

The University of Portsmouth's Dental Academy has officially opened a brand new, unique decontamination training suite, sponsored and supplied by Eschmann, designed to close the gap between learning and modern practice. Students training to become dental hygienists, therapists and dental nurses now have the opportunity to learn the crucial protocols of flow process decontamination in a safe, controlled and realistic environment.

David Gibson, Marketing Manager from Eschmann, said: 'As the first and only one of its kind in the UK, this is a truly ground-breaking educational initiative. We want to help these students learn about decontamination in the right way, so that they have the practical skills to work safely and effectively in the dental industry.'



## WHY DO DENTAL PATIENTS COMPLAIN?

According to the Dental Defence Union (DDU), the most common reason for complaints among dental patients is dissatisfaction about treatment. The other most common reasons are:

- Failed/delayed diagnosis, most often of dental decay
- Communication/rudeness
- Fees/charges
- Adverse incident during treatment
- Adverse reaction.

The most common treatments with which patients were dissatisfied, in a study of 415 complaints, were the fitting of a crown (35 cases), fillings (30 cases), ill-fitting or broken dentures (22 cases), root canal work (17 cases) and orthodontic treatment (13 cases).

## DIARY

**BDA Seminar: Building strong foundations: Achieving consistent outcomes in periodontal and endodontic treatment**

Date: 6 December 2013

Venue: BDA, Wimpole Street, London

Email: [events@bda.org](mailto:events@bda.org)

Telephone: 020 7563 4590

[www.bda.org/seminars](http://www.bda.org/seminars)

**The Dental Operating Microscope in Restorative Dentistry – Seeing beyond Loupes**

Date: 6 December 2013

Venue: UCL Eastman Dental Institute

Email: [marjorie.kelly@ucl.ac.uk](mailto:marjorie.kelly@ucl.ac.uk)

Telephone: 020 7950 1234

**The Dental Operating Microscope in Endodontics**

Date: 7 December 2013

Venue: UCL Eastman Dental Institute

Email: [marjorie.kelly@ucl.ac.uk](mailto:marjorie.kelly@ucl.ac.uk)

Telephone: 020 7950 1234

**9th International Vienna Orthodontic Symposium (IVOS)**

Date: 6-7 December 2013

Venue: Österreichische Akademie der Wissenschaften, Vienna

[www.ivos.at](http://www.ivos.at)

**ESAO Conference: How to practise aesthetic orthodontics safely, ethically and legally as a GDP**

Date: 14 December 2013

Venue: RCOG, London

<http://esao.co.uk/event-registration/>

**BDA Seminar: White, whiter, whitest: successful strategies for predictable teeth whitening**

Date: 31 January 2014

Venue: BDA, Wimpole Street, London

Email: [events@bda.org](mailto:events@bda.org)

Telephone: 020 7563 4590

[www.bda.org/seminars](http://www.bda.org/seminars)

**IDEM Singapore – International Dental Exhibition and Meeting**

Date: 3-6 April 2014

Venue: SUNTEC Convention and Exhibition Centre, Singapore

[www.idem-singapore.com](http://www.idem-singapore.com)

## DENTOPHOBIC WOMEN GROSSED OUT BY TREATMENT

In a published article entitled *Can you read my pokerface? A study on sex differences in dentophobia*,<sup>1</sup> researchers discovered that female patients scared of the dentist were

six times more likely to be disgusted by pictures of dental treatment compared with non-dental phobic women.

Although both men and women

failed equally when asked about their feelings towards the dentist, women afraid of the dentist were more repulsed than their male counterparts.

1. Leutgeb V, Übel S, Schienle A. Can you read my pokerface? A study on sex differences in dentophobia. *Eur J Oral Sci* 2013; **121**: 465-470.