



Newsletter December 2011

**Next Meeting - Monday 23rd April 2012 - London
Basic Sciences in Relation to CPD**

This meeting is kindly being organised By Jon Bennett and will be held at the **British Orthodontic Society**. The role of basic sciences in CPD is a field which, despite its importance, has received very little attention, both in the UK and elsewhere in Europe. The aim of this meeting is to redress the problem. More information about the programme and registration will be available early in the new year.

The **2012 AGM** will also be held at this meeting, as this will be our only UK meeting next year. So please make a note of this in your diary now and make a special effort to attend.

Meeting Report:

**Basic Sciences: The New Frontier in Oral Disease
7th September 2011, Antalya, Turkey**

This meeting held on Wednesday 7th September 2011, was held in conjunction with the ADEE meeting in at the Gloria Resort Centre in Antalya, Turkey.

After an introduction to the subject overall by **Jon Bennett** (Peninsula, UK), **Paul Anderson** (London) talked about **Nanotechnology for Graduating Dentists** which included nano particles, nano composites and osseo-integration. **John Jansen** (Nijmegen) gave the meeting a history of **Innovations in Dentistry: Tissue Engineering** which ranged from the 15th century 'holy healers' to implants, regenerative medicine, embryonic and adult stem cells, and fully functional bioengineered teeth!

Alan Mighell's talk (Leeds) was entitled '**The \$1,000 Genome**' starting from the discovery of the DNA double helix in 1953, via the Human Genome project (2003), publication of the first individualised genome in 2007 and next generation gene sequencing as we now look forward to DNA sequencing of single cells and personalised medicine and its impact on the dental team, training and expectations. **Josie Beeley** (Glasgow) in a paper entitled **Proteomics and the Human Proteomic Project - the Key to Oral Health** explained the basis of this science being the entire protein complement expressed by the human genome or a cell or tissue. It is these proteins which affect human cell function and reflect changes in human disease. The aim of the Human Proteome Project is characterise all of the products of the genome and build a chromosome based map of the protein architecture of the human body which would become a resource to help elucidate biological and molecular function and advance diagnosis and treatment of disease (HUPO 2010).

Şükran Atamer-Şimşek (Marmara) discussed the problem of **Drug Induced Oral Disease**. She not only cited the oral disorders which are caused by prescription drugs, she also addressed the problem of doctors being unaware of the problem and its consequences and asked how we could get this topic and more general aspects of oral health introduced into medical curricula. **New perspectives in Oral Lichenoid Disease** was the topic featured by **Sertan Ergun** (Istanbul), including its presentation, cause and treatment, as well as differences and similarities between the subgroups of this disease. The meeting concluded with a presentation from **Andreea Didilescu** (Bucharest) entitled **Statistical Genomics - A Need in Oral Research?** With the accumulation of a vast amount of genomic data, and with many oral diseases also having a genetic component, statistical genomics may lead to the identification of aberrant patterns, especially in premalignant and malignant lesions, many of which are unpredictable or with poor prognosis.

The meeting concluded with a general discussion focusing on the impact of research in the biomedical and basic sciences on the future of dentistry, how equip our graduates for these changes and how to achieve this within the dental curriculum. (A brief report on the ABSTD meeting has been published in the December 2011 ADEE Newsletter (Vol 7, Issue 3) and a more detailed report will appear shortly in the European Journal of Dental Education).

ADEE Meeting Report:

Research and its Impact on Dental Education Antalya, Turkey, 7 - 10 September 2011

The meeting focused on the impact of research on dental education in a very broad sense, including both basic research and research in education. The clear message that emerged from the meeting was that current research in the biological and biomedical sciences will transform the understanding of oral and dental disease, as well as treatment and patient care during the working career of our current undergraduates. But how best can we prepare them for this?

The opening lecture was by **Charles Shuler** (UBC, Vancouver) entitled **Transfer of Scientific Knowledge into the Dental Curriculum**. In an outstanding presentation, he stressed that dental schools must be/become part of the scholarly environment, clinical thinking and research are the same, and decisions must be based on the best available evidence which is based on research. Skilled clinicians must be able to obtain and evaluate new scientific advances and appropriately integrate them into their practices. In no area is current research advancing more rapidly than in the basic sciences. Every symptom which a patient presents with is because of basic science not working properly.

Most recently we have the human genome project which will have profound applications on oral health care. These include genetic disorders, genetic differences, genetic risk, environmental risk and protective factors, a genetic understanding of craniofacial development, birth defects, and much more.

He then asked if our students are ready for this. Are curricula focused on 'training dentists' or educating them? Will students be prepared to incorporate new findings into their practice? Do we have the staff to prepare students for this? Dental schools and students need a culture in which basic science is accepted as integral in patient care, not just to pass exams.

The meeting left delegates in no doubt as to the integral role of basic science in the future of dental treatment and patient care, but how can we bring this into the clinical curriculum and the clinic? The challenge which lies ahead is enormous – but we in ABSTD are already preparing for it.

A European Core Curriculum in Cariology: the knowledge base,

P. Anderson, J. Beeley, P. Manarte Monteiro, H. de soet, S. Andrian, B. Amaechi, & M-C Huysmans
European Journal of Dental Education, 15, Suppl 1., 2011 (18 – 22)

<http://onlinelibrary.wiley.com/doi/10.1111/j.1600-0579.2011.00709.x/abstract>

ABSTD members contributed to this publication which summarises the key knowledge in the basic sciences relevant to the teaching of cariology. Every basic science teacher should be familiar with it!

Annual General Meeting: Tuesday 13th September 2011

The **Annual General Meeting** was held at the BSODR meeting at the University of Sheffield on **Tuesday 13th September at 1.00 pm** in The Edge Conference Centre. The following were elected:

President Elect: Jon Bennett (Peninsula)

Councillors: Tracey de Peralta (Peninsula), Marcello Riggio (Glasgow),
Paul Anderson (Queen Mary, London, co-opted)

Membership: subscriptions for next year 2011 - 2012 (£5.00 or €10.00) were due on 1st October (unless your subscription is paid by Standing Order). Membership is open to all those interested in dental education. Application / renewal forms can be downloaded from the website: <http://www.abstd.org> Further information from: Dr. Roger Shore (Hon Sec, Treasurer), Oral Biology, Leeds Dental Institute, Leeds, LS2 9LU. R.C.Shore@leeds.ac.uk.

And for more news, see www.abstd.org

