

Peter Briggs

Prof Daniel Edelhoff

IN CONVERSATION with Professor Daniel Edelhoff

Professor Daniel Edelhoff (DE), Munich, Germany, a world authority on CAD/CAM and all-ceramic systems is in discussion with Peter Briggs (PB), President of the British Society of Prosthodontics (bsspd) prior to their London Conference .

Daniel is due to present two lectures at the **2015 BSSPD Conference titled: ‘Confronting the Grey Areas’** on Friday 27th and Saturday 28th March 2015. The scientific parts of the conference are taking place at the British Library Conference Centre, in central London, with the next door Pullman - St Pancras Hotel providing the venue for the social components of the conference including the launch of the bsspd young practitioner group.

Daniel is coming to the UK to present two lectures titled:

- **‘Is CAD/CAM Technology and all-ceramic restorations the answer to all of our problems?’**
- **‘The Potential and Clinical Indications of the Newer Indirect Ceramic and Glass Materials’**

PB – Hello Daniel - bsspd and I are really looking forward to welcoming you to our London conference. I was very impressed by your presentation at the 2012 bsspd conference in Liverpool and thought that you should be invited back to teach us more.

Can you please briefly take me through your dental career, which I understand included time working as a dental technician? Who were your major influences along the way?

DE - After High School I qualified as a Dental Technician. After working for one and a half years in a Dental Lab, I started my studies in Dentistry at the University of Aachen, Germany where I graduated in 1991 and earned my Doctor of Medical Dentistry degree in 1994. After

several years as Assistant Professor in the Department of Prosthodontics I became Visiting Professor at the Dental Clinical Research Center of the Oregon Health and Sciences University (OHSU), Portland, Oregon from 1999 to 2001.

I was awarded my Ph.D. in June 2003 at the University of Aachen and I am currently Director and Chair at the Department of Prosthodontics and Dental Material Sciences at the Ludwig-Maximilians-University in Munich.

My major influences along the way was firstly a two-year scientific grant at OHSU in Portland, where I had excellent clinical and in vitro research options and also the opportunity to work with John Sorensen on new all-ceramic materials.

I had the opportunity of early contact with new digital technologies starting in 1998 at the University of Aachen. This was continued from 2006 working at the University of Munich. The combination of new tooth-colored restorative materials with improved adhesive techniques had initiated a paradigm shift in the treatment concepts of Prosthetic Dentistry which was really exciting. Based on scientific evidence we started to include these modern concepts within our education of undergraduate dental students.

PB – Why did you choose to be a Professor in Prosthodontics and what clinical, teaching and research responsibilities do you have in your current job?

DE - Based on my education as C.D.T., a career in Prosthodontics was my natural focus with it most relevant to my background in Dental Technology. I think this is the area of dentistry that over the last decade has seen incredible digital revolution. Our Departmental team consists now consists of around 60 employees (including 20 Dentists, 2 Engineers, 2 M.D.T.s and 9 C.D.T.s).

I spend about 3.5 days of the week personally treating patients as part of clinical studies or private practice. The remaining time I teach undergraduate students, conduct research projects and write scientific articles. Of course I spend my evenings and early mornings doing my administration and our team can also be asked to provide special postgraduate teaching weekend courses – so life is busy.

PB – There are now many new technologies available to replace conventional cast metal and porcelain fused-to-metal crowns and bridges. Most dentists in the UK are not using clinical digital scanning alternatives to conventional impressions. Is this situation different in Germany and other European countries? Without giving away too many details of your presentations are you now comfortable with these techniques? You hinted in 2012 of using thin adhesive ceramic restorations to restore worn teeth in a very minimally-invasive fashion – have you found these restorations to perform predictably?

DE – With regard to intra-oral digital scanning the situation might be slightly different in Germany and Switzerland compared to UK. The number of users in these countries is apparently higher, predominantly because of the use of the Cerec Chairsides System, which now has almost a 30-year track record.

Although these techniques have improved significantly in recent years, there are still limitations in clinical application and as we often say: Everybody talks about digital impressions, but only a few dentists finally buy these systems.

With regard the use of thin adhesive ceramic restorations to restore worn teeth in a very minimally-invasive fashion; I will present first clinical data over a time period up to 78 months. According to these data we have found these restorations to perform predictably. Although 10 years data will be more reliable, beside clinical studies, I have included this type of restorations into my private practice.

The goal is always to provide good looking predictable restorations but remove less tooth structure in the process.

PB – For clinicians interested in tooth wear that sounds exciting and definitely worth coming to the conference for. What are your research interests and achievements?

DE - I think my most famous and quoted articles are:

1. Edelhoff, D., Sorensen J.A: Tooth structure removal associated with various preparation designs for anterior teeth. J Prosthet Dent 2002;87:503-509.
2. Edelhoff, D., Sorensen J.A.: Tooth structure removal associated with various preparation designs for posterior teeth. Int J Periodont Restorative Dent 2002;22:241-249.

My primary research interest is in the fields of Rehabilitation of the worn dentition, Tooth colored restorative materials, Digital Dentistry, Implant-Superstructures

PB – The two papers you mention are much quoted in the UK - where there has been much debate in recent years about the appropriateness of destructive tooth preparation compared to direct additive options. What advice do you give to young dentists starting-out on their dental career?

DE -To define your professional destination, you should respect your inner voice. In the beginning of your dental career do not try to touch the stars. You will be successful in the different fields of Dentistry if you fulfil the following prerequisites: keep modest and enjoy small progresses in your professional work.

In the initial phase of your profession your main focus should be associated with the gain of knowledge, and further improvements of your practical skills. University education could offer you only the basics, from where you can start to higher levels. Try to save your enthusiasm and your curiosity for learning more, since you have chosen one of the most interesting and fast developing professions.

Growing knowledge by Continual Education is the key factor of success, as well as a stringent concept for your private practice, in the sense of a unique and convincing treatment concept.

In Germany we say every dentist ends up with the patients that they deserve.

PB – Well said Daniel could not have put it better myself - finally what do you do away from dentistry to relax?

DE I like to enjoy my very rare leisure time with my family, jogging, and travelling. My hobbies are photography, hiking, art and reading.

PB Daniel, very many thanks for taking time from your very busy schedule to talk to me. bsspd looks forward to welcoming you to London and hearing your clinical wisdom together with the knowledge and evidence behind it.

‘Confronting the Grey Areas’ - Conference and Booking details on bsspd.org

other conference speakers include: Professor Paul Tipton, Kevin Lewis, Lloyd Searson, Shakeel Shahdad, Professor Trevor Burke, Phil Taylor and many more.