

aligners

international magazine of aligner orthodontics



technique

Boosting facial aesthetics through a hybrid approach of the Carriere Motion appliance and Reveal clear aligners

case report

Proper curve of Spee levelling as a key factor in the treatment of deep bite with aligners

case series

Mini-implant-borne sliders and expanders to overcome aligner limitations

orthocaps®

creating smiles

Orthocaps Clinical Meeting Munich 06.05.2023 • 09:00-18:00 h Orthocaps - The TwinAligner® System

Speakers: Dr. Wajeeh Khan and Dr. Achille Farina - Customer service: Stefanie Keltz



Hotel Vier Jahreszeiten Kempinski
Munich, Maximilianstraße17, Munich
Phone: +49 89 21252201
(for room reservation)



Course fee: 259€ (incl. VAT).
The course fee covers expenses, lunch and snacks. Payment is due 4 weeks before the course starts. If a cancellation is made within 2 weeks before the start of the course, the full fees are payable.
Course language: English

Main topics:

- Advantages of the TwinAligner® system
- How does the Orthocaps system differ from conventional aligner systems?
- Why is it essential to carry out treatment evaluation during treatment? (Treatment Evaluation Report)
- How to use different Orthocaps service features for a better treatment result? (e.g. direct case-related communication with Dr. Khan)
- When is it necessary to combine aligners with fixed appliances (Hybrid Aligner Treatment - HAT)?
- The most critical clinical tips from an experienced Orthocaps user - Dr. Achille Farina (Italy)

Speakers:



Dr. Wajeeh Khan

Dr. Khan is the founder and managing director of Ortho Caps GmbH. Since January 2006, Dr. Khan has led the company he founded, Ortho Caps GmbH, as Managing Director. Under his leadership, the company has grown, and orthodontists use its services and products in more than 35 countries worldwide.



Dr. Achille Farina

Over the last 14 years, Dr. Farina has published several scientific papers and given more than 170 lectures on orthodontic treatment with invisible aligners in Italy, France, Spain, Germany, the United Kingdom, the Republic of Malta, Kenya, Norway and Malaysia. He has a private orthodontic practice in Brescia, Italy. In addition, Dr. Farina has been the clinical advisor of orthocaps® in Italy since 2015.



Dr Tommaso Castroflorio

President of EAS



EAS is linking science, technology and education in Turin

The fourth congress of the European Aligner Society (EAS), which will be held in Turin in Italy from 11 to 13 May, will be a good opportunity for the profession, the scientific community, companies and university authorities to evaluate the present and the near future of aligner orthodontics and digital orthodontics.

Aligner orthodontics is a mature orthodontic technique with huge potential and some limitations. Concerning the limitations, some aspects of the congress are worth pointing out. Basic or fundamental science involves the generation of knowledge and provides the seeds that can grow into technology and innovation. Whereas in the past the orthodontist was subjected to the in-house research of companies and there was not a good understanding of how to relate basic science and technology for the benefit of our profession, in recent years, there has been a strengthening perception that innovation in digital orthodontics and aligner orthodontics must come from independent research. Therefore, for the first time in the history of EAS, this will be a congress where research and clinical applications meet, because only by working together can clinical experience and clinical research advance aligner orthodontics.

Aligner orthodontics is more than pieces of plastic; it is more than thermoforming procedures or plastic transparency—it is an orthodontic technique with a therapeutic purpose. We are treating patients, we are not collecting numbers. We are care providers, not simply providers. Taking care of patients emphasises objective and professional care. We are living in the era of technological convergence which aims at science–technology unification, based on the combination of nanotechnology, biotechnology, information technology and cognitive science. In

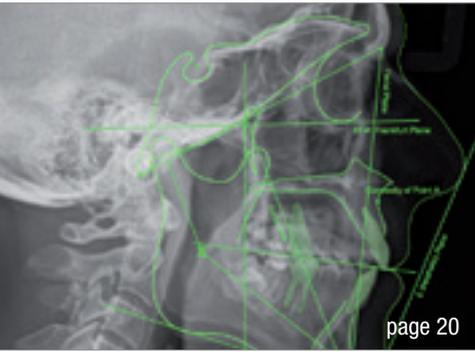
this sense, the introduction of artificial intelligence, direct 3D printing of aligners and new materials is overcoming the limitations of aligners and represents a natural jump to the next level of aligner orthodontics. In this new scenario, on the one hand, the main challenge for EAS is putting together an agenda for education, science, technology, innovation and sustainability in the aligner world along with relevant developmental programmes to support merit, competence and creativity in orthodontic research. On the other hand, it is worth emphasising that orthodontic qualification is the key to scientific and technological development. There is considerable agreement about the view that research is becoming increasingly interdisciplinary and that the future demands the synergy of both experience and theory.

We need to educate to innovate and innovate to educate. EAS is supporting innovation, interdisciplinarity and sustainability. This trinomial will only become possible with the strengthening of the connections of science with education and of science with technology and innovation.

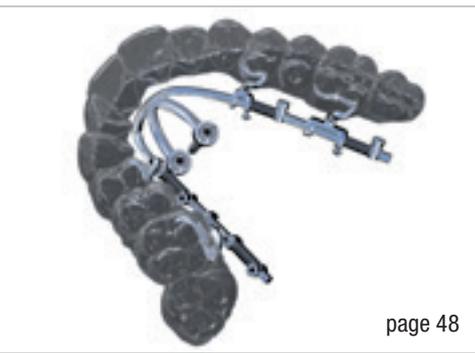
Let us jump to the next level of aligner orthodontics! Join us in Turin to discover what orthodontics is today and what orthodontics will be in the near future.

Dr Tommaso Castroflorio

President of EAS



page 20



page 48



page 64

Cover image: DynaFlex
www.dynaflex.com



editorial – Dr Tommaso Castroflorio	03
interview	
Our vision is to provide postgraduate orthodontic education of a high quality – An interview with Prof. Athanasios E. Athanasiou	06
When your habits hinder your productivity , replace them with new ones – An interview with Dr Ben Bernstein	08
technique	
Boosting facial aesthetics through a hybrid approach of the Carriere Motion Appliance and Reveal clear aligners – Dr Luis Carrière	12
case report	
A Class II open bite case with missing mandibular right central incisor, managed with a hybrid aligner treatment approach – Drs Achille Farina & Wajeeh Khan	20
Proper curve of Spee levelling as a key factor in the treatment of deep bite with aligners – Dr Alessandro Greco	32
industry report	
Invisalign Smile Architect introduces combined orthodontic and restorative treatment planning capability to dentists worldwide – Align Technology	40
product analysis	
All buttoned up! Styling your plastic with elastics – Dr Chris Cetta	42
case series	
Mini-implant-borne sliders and expanders to overcome aligner limitations – Prof. Benedict Wilmes	48
Pushing the boundaries with clear aligners: Multidisciplinary treatment planning – Dr John Hagiliassis	54
clinical research	
New summary of antimicrobial prescription guidelines available	64
Scientists analyse bacteria on clear aligners	65
feature	
“Alone we can do so little , together we can do so much ” – Jerko Bozikovic	66
company report	
DynaFlex, a true partner to the orthodontic profession – DynaFlex	70
industry news	
ClearCorrect: Your partner in orthodontics – ClearCorrect	71
“ Connect to the (work-)flow ” – Amann Girschbach connects the workflow of laboratories and dental practices for restorations – Amann Girschbach	72
Rapid Shape stands for automated 3D printing – Rapid Shape	73
meetings	
A clear world vision of the future at the annual congress of the European Aligner Society in Turin	74
International events	76
about the publisher	
submission guidelines	77
international imprint	78



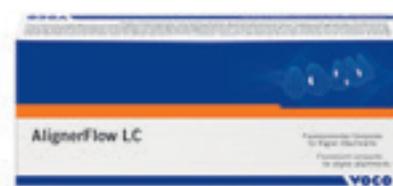
FLUORESCENT COMPOSITE FOR ALIGNER ATTACHMENTS

- Secure grinding and removal under UV-A light
- Precise application with perfect flow
- Light-curing through the transparent template
- Stable and abrasion resistant throughout the entire treatment period
- Pleasant aesthetic in tooth shades



scan QR code
to learn more

AlignerFlow LC



Available from 1 May 2023

Our vision is to **provide** post-graduate orthodontic education of a **high quality**

Anisha Hall Hoppe, Dental Tribune International

A new MSc in Orthodontics programme offered by the European University Cyprus (EUC) will enable clinicians in the country to train and specialise without having to go abroad. Completely accredited across Europe, the programme promises to attract students from across the continent as well. Prof. Athanasios E. Athanasiou, the dean and professor of orthodontics at the School of Dentistry at EUC, talks about what it takes to develop, accredit and launch such a programme.

Prof. Athanasiou, advanced dental education programmes are offered nowadays in many countries. Could you share why the announcement of the new orthodontic programme of your university starting in September 2023 is important?

EUC has boosted the country's health education sector through the establishment of the most comprehensive studies in the fields of medicine, dentistry and health sciences and serves as a beacon attracting academics and students from around the globe. The MSc in Orthodontics programme at EUC is the first in the country that provides the didactic and clinical training to prepare dental graduates to become orthodontic specialists. This postgraduate specialty training programme will contribute to the provision of advanced orthodontic services in the country and is expected to attract international applicants, as is the case with our undergraduate programme that is attended by students of more than 30 nationalities.

Could you give our readers an overview of what goes into developing a new dental programme?

Those who design a new orthodontic specialty programme and create materials and a curriculum for it require extensive knowledge and experience in postgraduate education. In addition, much administrative work is necessary for preparing and submitting the application to the university and governmental authorities for accreditation and approval. This includes the detailed preparation of the structure, curriculum, course distribution per semester, timetable, and outline and syllabi of each course, as well as academic faculty assignments. Our preparation started two years ago, and after an ex-

hausting evaluation review process involving university committees and the site visit of an external committee consisting of university experts in dental education from the Netherlands, Spain and the UK, in June 2022, the Cyprus Agency of Quality Assurance and Accreditation in Higher Education approved and accredited the programme. In parallel, the EUC School of Dentistry has started the preparation of all necessary state-of-the-art infrastructure for the educational, laboratory and clinical training of the orthodontic residents.

Does EUC have a specific vision for graduates of this new programme?

Our vision is to provide postgraduate orthodontic education of a high quality through a comprehensive evidence-based academic programme combined with extensive clinical experience so that our graduates will be prepared to practise as specialists using contemporary techniques at an advanced level. The MSc in Orthodontics includes all the features of the European Erasmus training programme and fulfils the requirements of the European Commission directives regarding the education of orthodontic specialists. It also fulfils the requirements of the UK Specialist Advisory Committee in Orthodontics and the World Federation of Orthodontists guidelines for postgraduate orthodontic education. Consequently, our graduates will be qualified to apply for specialty recognition in their respective countries according to the existing regulations.

Would you like to share anything else about this announcement with our readers?

The orthodontic academic faculty of the programme includes specialists with extensive academic and professional experience. This group of teachers will be supplemented by a number of specialists in dento-maxillofacial radiology, oral and maxillofacial surgery, paediatric dentistry, periodontics and restorative dentistry as well as experienced teachers for the courses on biomedical sciences such as biostatistics, embryology, and oral physiology. I will have the honour and responsibility of coordinating the programme.



Partners
in excellence.
United
by smiles.

clearcorrect
A Straumann Group Brand

ClearCorrect®, the Straumann Group's flagship orthodontic brand, is excited to announce **new products and clinical features**, an improved digital workflow, added support, and treatment planning services to help doctors treat more complex cases.

To become a partner
or learn more visit:
clearcorrect.com

When your habits hinder your productivity, replace them with new ones

Nathalie Schüller, *Dental Tribune International*

Dr Ben Bernstein is a clinical psychologist and veteran educator specialising in optimal performance. Known as the “Stress Doctor”, he is the author of four books on how stress affects performance and writes a popular blog for the Psychology Today website. As a national speaker for the American Dental Association, he has travelled extensively offering talks and workshops on reducing stress in dentistry. He lectures worldwide, live and online, on stress and performance to audiences of healthcare professionals, business executives, athletes, teachers and parents at conventions, corporations, universities, schools and hospitals.

Dr Bernstein, reading about your story, interests and projects made me so look forward to talking to you. In interviewing people, I first like to ask how the person I’m talking to came to find his or her calling. With you, it seems like the answer might be quite complicated! Is it?

I think that life chooses your choosing, circumstances line up, you get moved in a certain direction. When I graduated from college, it was the height of the Vietnam War, 1969, and I had intended to go on and study theatre, being very active in acting and directing. At that time, I would have been drafted to go to Vietnam, and though I believed very strongly in national service, I did not want to serve in that war. There was an option open to men my age to teach in very poor areas of cities and I chose that option, which led me to education and being exposed to some amazing people and wonderful ideas that led me to psychology.

Connecting to my creative interests, in my internships, I wanted to do creative projects with patients in psychiatric hospitals, so I ended up making films with these patients and getting them to write plays that were performed for the public.

When it was time to open a private practice, I wanted to be more engaged than just listening to patients. I wanted to help bring forth what wanted to come out in my patients, so I started to coach people, which 30 years ago was not the big thing it is now, especially for a licensed

psychologist. I started coaching people and ended up working mostly with people in high-stress, high-performance careers, such as CEOs, athletes, and stage-performers, and then after being invited to give a talk about stress in healthcare at the University of California San Francisco, I became involved with dentistry and medicine.

Do you feel that the fear you had in performing music and the stress it brought came to be a blessing in switching direction from music as a career to psychology and helping people confront their fear?

I did not completely switch careers, but I think that we are all here to serve other people and that all your life experiences build you more and more towards becoming a person who can serve other people. Everything that happens to us is an opportunity to grow. We are part of nature.

What really underlies my work is a progression of three things to find your path to optimal living. The first is to accept what is coming to you in your life, rather than fighting it. The second, once you accept this, is to grow, asking yourself how you can grow from what is happening to you and not why it is happening to you or what you did to deserve this. The third is to appreciate and honor the point of growing. It is to serve other people.

To quote you, “When I work with people, I see what they are capable of, what binds them to unproductive habits, and I train them to be their best”. It seems to be such a blessing to have this ability, but it cannot be so easy, right?

I have been doing this for 40 years. It takes a lot of work on myself. It has been a lifetime of work to be able to be of service, to be able to see and pick up on all the things that are happening. I have had in my life the most extraordinary teachers and trainers, people who saw something in me and trained me in different ways to be able to have that ability in myself.

We are here to cultivate each other really; we are all gardeners. If you want to find out what someone is capable

ASIGA®

3D printers for dentistry.

For when quality assurance and patient safety matter.



500+ materials available.

Free and unlimited access to the Asiga Open Material Library online.

3D print monitoring for consistency.

Asiga SPS™ Technology, Internal radiometer and 385nm LEDs as standard.

Trusted globally.

For good reason. Request a sample print or product demonstration today.



www.asiga.com