Year: 2023
Type of Awards: Elite
Name of Principal Investigator: Spyridon Papageorgiou
Affiliated Institution: University of Zurich

About of the PI

- Introduction & Education:

Completed his orthodontic specialty training / doctorate in Bonn, Germany, completed a MSc in Medical Research Methodology in Thessaloniki, Greece, and a Certificate of Advanced Studies in Orthognathic Surgery.

- Career Trajectory:

Has received multiple awards from various societies (American Association of Orthodontist, British Orthodontic Society, European Orthodontic Society) and many consensus-workshops (European Association for Osseointegration, European Federation of Periodontology, Italian Society of Orthodontics).

- Research Contributions, Impact & Recognition:

Main contributions include evidence-based recommendations about the efficacy / adverse effects of several therapeutic protocols and identifying sources of bias in clinical research.

- Personal Insights:

Highly values balance between work and personal quality of life. Balance is attained professionally through interdisciplinarity with other dental specialties and personally through travels, music, and sport.

- Future Directions:

To enrich the evidence-base of clinical orthodontic protocols regarding their efficacy/adverse effects, as well as biological implications to local or systemic health.

Brief Summary of the Project:

In the present study, saliva samples of patients treated either with Invisalign® or 3D-printed aligners and resin attachments will be analyzed with Liquid Chromatography-Ionization-tandem Mass Spectrometry to determine the presence / quantity of BPA, HEMA, TEGDMA, UDMA, bis-GMA and DCGMA at various timepoints before and after appliance / attachment insertion. Additionally, an untargeted analytical approach using liquid chromatography–untargeted High-Resolution Mass Spectrometry with data-dependent acquisition to identify any other released monomers or byproducts without the use of standard reference molecules.