Meet the 2018 **Balint Orban** winners

Winners of the Balint Orban Competition share their research, interests, and plans for the future.

Katherine Roll – Balint Orban Clinical Science Winner, University of Washington, Seattle, WA

Bone Marrow Adiposity and Microvascular Density in The Alveolar Bone Changes in Diabetes (ABCD) Study

Explain the results of your winning research.

Our research study, which is a three-year study, and still ongoing, compares alveolar bone changes in conjunction with the safety and efficacy of implant placement, in well controlled (WC) vs. poorly controlled (PC) Type 2 Diabetics (T2DM). After an initial screening, the participants in both groups underwent implant placement. Bone cores were obtained intra-operatively from both the WC and the PC groups and several parameters of bone quality and integrity were analyzed. Clinical measures were also used to evaluate the survival and success of the implants. Our results show that chronic hyperglycemia in T2DM results in pathophysiologic changes of the alveolar bone. PC diabetics had increased alveolar bone density and decreased vascularity, but these changes did not compromise implant stability and success. The safety and efficacy of implant placement is supported by our study, even without ideal glycemic control.

How will winning this award affect your work going forward?

I feel very honored to have won the Balint Orban Memorial Competition for Clinical Research and fortunate to have had Dr. Georgios Kotsakis as my mentor. I was humbled to see people in the audience, whose work has laid the foundations of periodontology, listening to me talk about my research.

I am presently an associate in a periodontics private practice, but hope to work part time in an academic setting in the future. I found clinical research to be one of the most rewarding parts of my residency, and I recognize the contributions it has on the way that we practice periodontology on a day-to-day basis. I hope to be able to further our knowledge in the field by continuing to be involved in answering questions that truly impact the health and treatment options for our patients.

Looking back, what was it that first sparked your interest in this field?

My interest in periodontology is stemmed from the combination of having had a gingival graft prior to college, going to the AAP Annual Meeting my second year of dental school, and being interested in microbiology. I love that periodontics is a detail-oriented field that incorporates an evidence-based approach to save teeth and surgically treat patients.

What do you like to do when you're not working on your research?

I love spending time outdoors and staying active (hiking, running, skiing). I enjoy traveling and experiencing different cultures, exploring local food, cooking, going to concerts, reading, and spending time with my family and friends.