

Musculoskeletal Immunology: Revolutionizing Periimplant Pathologies

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Time: 3:00 p.m.

Venue: B5-307, 5/F, Blue Zone, YEUNG

Abstract

Musculoskeletal immunology stands at the forefront of groundbreaking research, fundamentally transforming our comprehension of periimplant pathologies, including periprosthetic joint infection, aseptic implant failure, and osteomyelitis — complications with profound implications in orthopedic surgery. This innovative field not only explores the intricacies of the immune response within the periimplant environment but also propels our understanding of immune-mediated processes driving the pathogenesis of these critical complications.

This presentation delves into the current research landscape of musculoskeletal immunology, emphasizing its pivotal role in unraveling the molecular and cellular intricacies of periimplant pathologies. By shedding light on these dynamic processes, our research contributes to the foundation of knowledge essential for developing cutting-edge diagnostic tools and innovative treatment modalities.

Join us as we explore the revolutionary potential of musculoskeletal immunology, charting a course towards a deeper understanding of periimplant pathologies and paving the way for transformative advancements in orthopedic surgery.

Biography

The research focus of Professor Frank Alexander Schildberg lies in the field of osteo- and trauma immunology. The overall goal is to understand the cellular and molecular mechanisms of musculoskeletal immune responses to develop novel immunology-centered diagnostic and therapeutic options to better predict and treat musculoskeletal pathologies. Specifically, his current studies investigate immune responses in the context of implants and during bone homeostasis.