



MMI 291 Seminar Series

Current Theme: Interdisciplinary Research
Spring Quarter 2020 – CRN 73287



Friday Seminar – 12:10-1 p.m.

“Peptide-based Specific Immunotherapy to Control Allergies”

Research

Currently, I hold an appointment as full professor at the Federal University of Uberlandia. I am currently the Chair of the National Institute of Science and Technology in Theranostics and Nanobiotechnology (NIST-TeraNano) in Brazil. The NIST-TeraNano is a government funded institute that involves 16 Federal Universities, 11 international Institutions and 15 companies, with more than 350 researchers. The discovery of biomarkers for theranostic applications is the main focus of my research group. Emphasis has also been placed on the identification of novel bioactive peptides and agents that are able to modulate the immune and inflammatory responses. My ultimate goal is to solve major disease hurdles using an arsenal of technologies, including combinatorial technologies (Phage Display and Selex), immunology, genomics, mass spectrometry, cell biology, *in vivo* imaging, biophotonics (RAMAN, FTIR, Surface plasmon resonance), electrochemistry, tissue engineering, syntheses of nanomaterials, and drug delivery systems. The talk will cover the development of three peptides for immunomodulation of allergy and a combined strategy to control specific allergies in mouse model.

Publications

TGFβ1 mimetic peptide modulates immune response to grass pollen allergens in mice. Araujo, GR Et al. Allergy Nov, 2019

A Short Peptide That Mimics the Binding Domain of TGF-β1 Presents Potent Anti-Inflammatory Activity. Vaz ER, Et al. Plos One Aug, 2015

How relevant is panallergen sensitisation in the development of allergies
Mckenna OE, Et. al Pediatric Allergy and Immunology Sept, 2016

May
15



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May 15, 2020
12:10 – 1 p.m.
ZOOM Meeting

Medical Microbiology &
Immunology
School of Medicine

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We hope to see you there!