The Orange County Section of the American Chemical Society

February Dinner Meeting

Thursday, February 15th, 2018

The Doubletree Club Hotel
7 Hutton Centre Drive, Santa Ana
Phone: 714-751-2400

Social:	5:30PM
Dinner:	6:00PM
Presentation:	7:20PM

Interleukin-15 as a Mediator of Skeletal Muscle Metabolism

Marcia J Abbott, PhD.
Associate Professor of Health Science,
Crean College of Health and Behavioral Sciences, Chapman University, Orange

Reservations

Please contact us at ocacs@sbcglobal.net as soon as possible, but no later than noon on Tuesday, February 13, 2018. Indicate if you will be attending the dinner and program, or the program only. Also, please list all the names of the attendees.

Dinner cost is $30 for members and member's significant others; $35 for non-members or those without reservations. Cash/check at the door (no cards) or in advance to: OCACS, P.O. Box 211, Placentia CA 90871.
The first five students who register for a meeting will receive a $10 discount on their dinner.
Note: OCACS pays the hotel on the basis of the number of dinner reservations made. Your RSVP for dinner is a commitment to pay for dinner.

Directions

Take the Costa Mesa Freeway (55), exit at MacArthur Blvd. and go west (towards South Coast Plaza). Turn left on to MacArthur Place. The DoubleTree Club Hotel is straight ahead on the left. *(Do not turn right at MacArthur Place to the DoubleTree Hotel, which is easily mistaken for the DoubleTree Club Hotel.)*
Park in front of the hotel, or follow the signs. If the parking lot is full, ask the valet staff where to park.

Abstract
Recently it is proposed that alterations in the intracellular environment, in SKM cells, are the culprit for loss of SKM function. In this regard, studies have been launched to examine molecular contributors to the "quality" of SKM. Substantial evidence implicates mitochondrial activity as playing a primary role in maintaining SKM function. Therefore, it is essential to examine modulators of SKM mitochondrial function. SKM has been identified as an endocrine organ with the ability to secrete factors, termed "myokines," to exert beneficial metabolic effects on systemic tissues and on surrounding SKM cells. Indeed, many myokines have been identified and proven to play major roles in promoting mitochondrial processes in SKM cells. One myokine, interleukin-15 (IL-15), shows promise as a potential mediator of SKM function and mitochondrial activity. Although IL-15 has been strongly linked to SKM function, the mechanism by which it exerts its beneficial actions remains elusive.

Biography
Dr. Marcia Abbott completed her doctoral work at the University of Southern California (USC) in Los Angeles, CA in the Integrative and Evolutionary Biology Graduate Program. Dr. Abbott's research focused on the role of exercise and skeletal muscle contraction on fatty acid metabolism. Following graduation Dr. Abbott joined the Sul Lab at the University of California (UC), Berkeley in the Department of Nutritional Sciences and Toxicology, as a post-doctoral fellow. While at UC Berkeley, she carried out studies aimed at examining to role of lipases in regulation of obesity and insulin secretion. Following her time as at UC Berkeley, Dr. Abbott accepted a position as a Research Scholar in the Endocrine Research Unit, VA Medical Center, UC San Francisco. Her work at UCSF focused on the examination of potential regulators of mesenchymal stem cell commitment towards adipocyte lineages.
In 2014, Dr. Abbott joined Chapman University in the Crean College of Health and Behavioral Sciences as an Assistant Professor. She is pursuing studies aimed at examining the role of skeletal muscle and its relation to obesity. Overall, Dr. Abbott hopes to contribute to the growing body of research aimed at preventing and/or treating obesity.