

Department Seminar Series

UC DAVIS
**FOOD SCIENCE AND
TECHNOLOGY**

4:10 PM, Wednesday Oct 27, 2021

FST290 students meet in person in Room 1207 RMI-South

Others may attend remotely by Zoom:

<https://ucdavis.zoom.us/j/92208083430>



Challenges and Perspectives on Almond
Processing: Connecting extractability,
recovery, and functionality

**Juliana M.L.N.
de Moura Bell, Ph.D.**

Associate Professor
Food Science and Technology
Biological and Agricultural Engineering
UC Davis

BIO: Dr. de Moura Bell holds a Ph.D. in Food Technology from the State University of Campinas (UNICAMP), Sao Paulo, Brazil, and her research includes the development and application of environmentally friendly technologies to replace the incumbent technology for extracting and fractionating of major food components such as oil, protein, and carbohydrates. She has developed bio-guided processing strategies to extract food compounds with the desired properties.

SUMMARY: My laboratory research focuses on the use of structure and functionality as the benchmark for healthier, safer, and sustainable foods. We are elucidating the effects of unit operations/processes such as extracting, fractionating, modifying, and recovering on the structure and functionality of food components. Besides gaining an understanding of molecular functionality we also engineer strategies to scale up processes.



Enzyme Discovery and Design

Justin Siegel, Ph.D.

Associate Professor of Chemistry, Biochemistry
& Molecular Medicine
Faculty Director of the Innovation Institute for
Food and Health
Genome Center
UC Davis

BIO: Dr. Siegel received his B.S. in Biochemistry from UC Davis in 2005 and his Ph.D. in Biomolecular Structure and Design from the University of Washington in 2011. His scientific focus is the design and discovery of enzymes of interest to modern society. Through strong cross-disciplinary collaborations Dr. Siegel has engineered enzymes for a wide range of applications.

SUMMARY: Naturally evolved enzymes have been optimized over long periods of time to address challenges biological systems face in nature. To address societal challenges in food, energy and health, novel catalysts are needed. The Siegel lab focuses on the use of computational, genetic, and chemical tools to discover, build, and test enzyme catalysts tailored for today's challenges.