

Department Seminar Series

UC DAVIS
**FOOD SCIENCE AND
TECHNOLOGY**

4:10 PM, Wednesday 18th, 2022

Attend in person in room 1207 RMI-South, or remotely by Zoom:

<https://ucdavis.zoom.us/j/98032142511>



LC-MS analysis and identification of plant- sourced proteins

Truc Pham

First Year M.S. Student
Barile lab

Truc received her B.A in Chemistry from Colorado College and her Culinary Arts certification from the Art Institutes of Colorado. She has worked in bioanalytical chemistry research at the University of Colorado Anschutz Medical Campus and Cayman Chemical over the last 5 years. She joined the Barile lab in 2021 to pursue an interest in plant-based proteins.

SUMMARY: There is a need for more sustainable sources of protein to mitigate the environmental impacts of our food system and feed the growing global population. This research utilizes proteomics methods to identify plant-sourced proteins and guide optimization of plant protein extractions. The aim of this work is to increase yield and utilization of plant extracts, and diversify the plant sources used to produce meat and dairy alternatives.



Impact of environment & genotype on starch gelatinization of malting barley

Maany Ramanan

First Year Ph.D. Student
Fox & Diepenbrock lab

Maany received her M. Biotech from University of Queensland, Australia and her B.Tech. from Anna University, India with a university gold medal. She then spent over 7 years in the Australian food industry in Quality Assurance, New Product Development and Project Management roles before joining UC Davis in 2021.

SUMMARY: With the recent record low 2021 harvest, climate change has been a major contributor to malting barley quality. Given the number of quality traits that affect starch gelatinization in malting barley, this parameter needs investigation in the context of genotype, environment and management. . This seminar will discuss the assessment of starch gelatinization temperature in 12 malting barley genotypes, across nine locations and four seasons in California with varied management conditions, and the impact of starch texture and granule size on gelatinization.