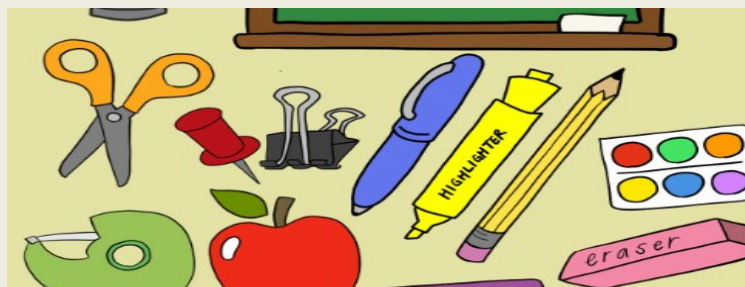




DEPARTMENT NEWS

Updates from the Department of Food Science and Technology



From the Desk of Dr. Martini

Hello!

I can't believe that summer is almost over! I am excited about the new semester and I am looking forward to seeing our students back in the classrooms, labs, and hallways! I can't wait to hear about the wonderful experiences that everybody had during the summer: internships, conferences, work in the lab, graduations, holidays!

At the office we've been working very hard to congratulate those that will be graduating this Summer and to welcome new and returning students! Our salute to graduates is on Aug 15th at 11 am and our Welcome Ice Cream Social is on Aug 27th. Please attend these events if you can! I am also excited about the upcoming retreat on Aug 22nd. We have a full day planned that I hope you will all enjoy!

I have some "personal" news to share. My USDA grant is in the last steps of being transferred to UNL and I will be (hopefully) starting with some experiments in Spring 2026. I will have an open position for a postdoc with experience in fat crystallization. So, if you know anybody, please send them my way. All this is really to tell you that as part of the grant we purchased a TD-NMR from Bruker. The equipment is in the building already and Bruker Engineers are working on it to make it operational. So, if you need to do experiments with a TD-NMR, come and get me! I'll show you where it is!

As usual, I'll close this letter with a list of papers published by our faculty. Please let me know if I miss anybody. This month's publications are:

- Drescher, K.M., Pflum, H.P., Nguyen, B.T., Auchtung, J.M. and Auchtung, T.A. 2025. Creatinine Alters the Gut Microbiome in a Mouse Model of Multiple Sclerosis. *Journal of the International Society of Sports Nutrition*. 2025. 22(Suppl 1):2533677. doi: 10.1080/15502783.2025.2533677
- Gustafson, C.R. Gitungwa, H., and Rose, D. J. Self-Reported Attention to Positive Versus Negative Nutrients During Breakfast Cereal Selection Is Associated With Healthier Food Choice. 2025. *Nutrition Bulletin*. DOI: 10.1111/nbu.70025
- Kim, H., Liu, L., Han, L., Park, K., Kim, H.J., Nguyen, T., Nazarens, T.J., Cahoon, R.E., Haslam, R.P., Ciftci, O., Napier, J.A., and Cahoon, E.B. 2025. Oilseed-based metabolic engineering of astaxanthin and related ketocarotenoids using a plant-derived pathway: Lab-to-field-to-application. *Plant Biotechnology Journal*. <https://doi.org/10.1111/pbi.70148>. This article was highlighted in the cover page of the journal! Congrats to the team!

Thanks everybody for all you do for the Department! Let the Fall semester begin!

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Navigating Change Together

As many of you are aware, our communications position is currently not being refilled. This means that some of the support you may have relied on—such as help with IT tickets and creative aspects—will now require a bit more self-service.

*Please remember to **submit your own IT tickets directly**, even for classrooms and labs. Sarah, Josh, and Susie have more on their plates, so let's cut out the middle man and contact IT directly. Know that we're doing our best to keep things running smoothly.*

We also recognize that the website needs attention. This is a priority, and once we have an update on how that will be navigated, we will let everyone know.

In the meantime, Susie will be posting on our social media platforms, so if you have any content, please send that to her.

Thank you for your patience and understanding as we navigate these transitions. Your continued support means a lot.

Together, we'll keep moving forward.



The UNL Staff Senate Engagement Award is an honor bestowed to an individual staff member who prioritizes engagement. The recipient is recognized for their commitment to building relationships with stakeholders for opportunities in partnership and impact. Ellie Watts, Director of Food Processing Center, nominated Julie Reiling, Senior Consultant, FPC for this award. Let's all congratulate Julie at this achievement.



Student News

The Wang Lab received two awards at the International Association for Food Protection (IAFP) Annual Meeting last week:

- **HACCP Utilization and Food Safety Systems Student PDG Award – 3rd Place** *Thermal Inactivation of Cronobacter sakazakii in Reconstituted Powdered Infant Formula: Systematic Review and Meta-Regression* **Recipient:** Jaber Ghorbani

Student Abstract Award by the 2025 Modelling and Risk Analysis PDG – 2nd Place

Evaluating the Reuse of Greywater for Irrigating Ground-Level Fresh Produce: A Microbiological Risk Assessment of Generic E. coli Contamination on Lettuce

Recipient: Andrew Stiven Ortiz Balsero



CLASS OF 2025 SALUTE TO GRADUATES



The Department of Food Science and Technology invites you to celebrate the achievements and successes of our Summer 2025 graduating students! All are welcome to attend, and light refreshments and barbecue will be served.

Friday, August 15th, 2025
11:00 a.m. - 12:00 p.m.
Food Innovation Center
Second Floor Deck

(FIC 111 IF WEATHER DOES NOT PERMIT)

Contact Joshua Russo at jrusso3@unl.edu if you have any questions.



FOOD SCIENCE AND TECHNOLOGY

Institute of Agriculture and Natural Resources

Welcome

Ice Cream Social

**Free UNL
Dairy Store
Ice Cream!**

Here's the Scoop

Date: Wednesday, August 27th, 2025

Time: 4:30 p.m. - 5:30 p.m.

Location: Food Innovation Center (FIC)
Second Floor Lobby

A Taste of What You'll Learn About

- Food Science Club
- Phi Tau Sigma
- Study Abroad at NWAUFU in China
- Food Processing Center Jobs
- Nebraska Gnotobiotic Mouse Program (NGMP) Jobs
- Food Allergy Research & Resource Program (FARRP)
- Nebraska Food for Health Center (NFHC)
- Participating in Clinical Studies
- Minor in Fermentation Sciences
- Minor in Food Technology for Companion Animals
- Major & Minor in Food Science & Technology

**All
undergraduates,
graduates,
faculty, & staff
are welcome!**

Contact Joshua Russo at jrusso3@unl.edu If you have any questions.

THE FACULTY FORUM: HIGHLIGHTS AND ANNOUNCEMENTS

Faculty Awards:

Investigators: Edward Deehan (PI), Devin Rose, Andrew Benson, Dmitriy Smolensky

Grant: USDA-NIFA A1811 (Commodity Board Co-funding Topic)

Title: Phenolic Dependent and Independent Effects of Whole Grain Sorghum on Immunometabolism: A randomized crossover trial in adults with excess weight.

Amount: \$ 455,700

Investigators: Edward Deehan (PI), Jonathan Clayton, Devin Rose

Grant: Layman Seed Award

Title: Advancing Nutritional Microbiology Research for Common Marmosets (*Callithrix jacchus*).

Amount: \$ 10,000

Exploring Global Collaboration: Faculty and Postdoc Visit Chile

This summer, Bing Wang and Andrew Ortiz from the FDST's Food Safety Risk Assessment Research Group embarked on an exciting academic journey to Chile, strengthening international ties and advancing research collaboration. Their visit, recently featured in Nebraska Today, focused on meeting with high-level Chilean officials. To read this article and learn more, please click the link below.

<https://news.unl.edu/article/unl-team-helps-shape-chilean-food-safety-policy-through-groundbreaking-research>

Faculty Publications:

Auchtung TA, Lerma AI, Schuchart K, Auchtung JM. Evaluating Effects of Antibiotics Across Preclinical Models of the Human Gastrointestinal Microbiota. Microbiologyopen. 2025 Aug;14(4):e70030. doi: 10.1002/mbo3.70030. PMID: 40668040; PMCID: PMC12265406.

THE FACULTY FORUM: HIGHLIGHTS AND ANNOUNCEMENTS

Food allergens pose significant health and food safety risks, and individuals with food allergies can experience severe, even life-threatening, reactions. Since 2020, the Food and Agriculture Organization and the World Health Organization of the United Nations (FAO and WHO) have conducted a series of expert meetings on food allergens at the request of Codex Alimentarius, the FAO/WHO body responsible for establishing international food standards. In June 2025, FAO/WHO organized an [expert consultation](#) aimed at developing science-based guidance for qualitative food allergen risk assessment.

Dr. Melanie Downs, Associate Professor with UNL's Department of Food Science and Technology and the Food Allergy Research and Resource Program (FARRP), participated in the consultation as an invited expert, along with 16 others from around the globe, and was selected to serve as rapporteur. The international reputation of individuals connected to FARRP and UNL's Food Science Department was also highlighted by the participation of Dr. Ben Remington, an alum of the program, who served as chair for the expert consultation.

The meeting reviewed current research and practices to create practical strategies that enhance food safety, support international trade, and assist both governments and food businesses in managing allergen-related risks. The [executive summary](#) of the meeting conclusions and recommendations has been published, and the full meeting report is expected in the coming months.



THE FACULTY FORUM: HIGHLIGHTS AND ANNOUNCEMENTS

Journal Publication

We had the attached cover of Plant Biotechnology Journal (IF 10.5) for August for this article: <https://onlinelibrary.wiley.com/doi/full/10.1111/pbi.70148>. It was a collaboration with the Department of Food Science and Technology...Ozan Ciftci and lab.

The cover shows oil from camelina seeds engineered with genes expressed in the Adonis flower (top left) and the engineered camelina in the field at ENREEC. The oil is enriched in astaxanthin and other ketocarotenoids that are used in aquaculture feed to make salmon and shrimp red. It is also a potential natural food coloring to replace synthetic dyes. Ozan showed that the oil can be used to make colored oleogels for food application and that the ketocarotenoids can enhance the oxidative stability of vegetable oils.



IN OUR GROUPME!

**DO YOU LIKE
FOOD? SO DO WE!**

FOOD SCIENCE CLUB

FIC 111

@UNLFOODSCICLUB ON INSTA



FIC 111

**COME FOR FREE FOOD EVERY
1ST AND 3RD WED OF THE MONTH @ 4**



THE FOOD PROCESSING CENTER

*Department of Food Science
and Technology*



Did you know the Food Processing Center is right here to support your research, teaching, and outreach efforts? Our team brings decades of expertise in food science, product development, food safety, regulatory compliance, sensory analysis, and pilot-scale processing. Whether you're looking to scale up a formulation, obtain nutritional composition data, or collaborate on a grant proposal, we have the tools and facilities to help bring your projects to life.

As a university service center, we're committed to helping you succeed by offering professional, dependable services at internal break-even pricing—designed to provide high value to FST faculty and staff.

We also offer support for workshops and events, including help with planning and coordination. We can take care of logistics like advertising, printing materials and certificates, assisting with registration, and arranging catering—so you can focus on creating and delivering the content. Additionally, our team can assist with lab management services such as ordering supplies, maintaining equipment, and streamlining lab operations if you're looking for support behind the scenes.

We're proud to be part of the FST department and aligned with the University of Nebraska–Lincoln's commitment to driving research, innovation, and impact. In Our Grit, Our Glory, we stand ready to collaborate with you in advancing the food industry and supporting the next generation of scientists.

If you're curious about how the FPC can assist with your work or support you or your students' projects, we'd love to connect. Stop by, reach out, or set up a meeting—we're here to help move your research and innovation forward.