Greetings from the Chair

To our Food Science Alumni, Friends and Family,

I sincerely hope that this newsletter finds you well and healthy in these especially challenging times. For a variety of diverse reasons, this era in time contains significant elements that will remain points of focus for years to come. Please find enclosed in this newsletter examples and indications of what these challenges have meant relative to the Food Science department – efforts, initiatives and resources applied to navigate through these challenges and map a course for success and vibrancy in the years that follow. In particular, we note the retirement of many great personnel from our ranks as well as the introduction of new faces with new ideas, energies and efforts that will help guide the course of our department towards prosperous outcomes ahead.

Over this past year, we have all gained capabilities in the realm of online instruction and worked to respond to the challenges presented from the effects of social distancing. COVID-19 testing regimes and locked doors are slowly giving way as a result of aggressive vaccination campaigns and thoughtful “re-opening” protocols.

While many of the challenges of this year will hopefully fade away, we also sense that the world of Higher Ed is forever changed and that that we are well down the path of establishing a new normal for instruction, rather than a return to normal, pre-COVID conditions. A new normal, but a better normal where instruction and all of the experiences entailed in the campus experience will be more understandable, more accessible and more impactful to those facing a world of even greater challenges ahead.

I invite you to join us on that journey through this newsletter and, as always, to please stay in touch.

Kind regards and

On Wisconsin!

Scott A. Rankin
Professor and Chair
The Department of Food Science welcomed Abigail Thiel to her new position as full-time lecturer in Fall of 2020. Dr. Thiel joined the Department under unusual circumstances but has adapted fantastically. As someone with a passion for teaching, she has taken advantage of online learning tools and gone the extra mile to support students. Dr. Thiel is currently teaching Food Science 603 (Senior Capstone) and Food Science 514 (Food Functionality).

Dr. Thiel is well-liked by her students as demonstrated by their comments:

“Dr. Thiel did a great job of keeping us involved and not just talking to a screen.”
— Cameron Zalewski

“Dr. Thiel presented the information in a way that was easily digestible.”
— Jordan Ishizu

“Dr. Thiel did a great job involving students in lecture with fun questions at the beginning of class and quick quiz questions about lecture material! That way we got to have some actual interaction with her, but were also held accountable to pay attention to lecture and apply the information.”
— Liz James
How do you think COVID has affected the needs of your students?

I think COVID has affected each student a little differently and this can change day by day. We all have days where we feel motivated and like we are able to handle the changes only to feel entirely overwhelmed the next day. For this reason, I've tried to be lenient when it comes to due dates whenever someone reaches out. As long as the student and I can make an alternative plan that meets their needs, and the work is turned in I feel like that's a win especially this year.

I've also tried to make attending lecture as easy and convenient as possible. This year, every lecture I've given has been recorded and posted for students to watch on their own time if they couldn't log on during class. I know many of my students never went home during the semester and waited to see family until a longer break, so everyone is looking for a little extra support.

What teaching tools do you use in the classroom?

I tried a lot of different tools to break up lectures. I've become a big fan of breakout groups although you have to make sure you have prepared a question worth the students discussing and working on. One of my favorite ways to start lecture is with the white board up so that everyone can type and let me know how they're doing.

I'll usually ask a fun question like "How'd you enjoy the nice weather this weekend" to talk about life before jumping into the material for the day. I've also tried out a website called Mentimeter which allows students to text in answers to make a word cloud, answer a poll, and a whole variety of other activities.

With classes both in-person and online during spring semester there's been some new hiccups. It's challenging to plan class activities that are beneficial for both students present in the lecture or joining from home.

I've tried to integrate short, 5-minute experiments into lectures that students can do at their desks to act as a break. I'll bring in all the supplies for the students in class but can only post a list of supplies needed for the students online. Since I wasn't sure if the at-home students were doing the experiments or had the necessary supplies, I started recording myself doing the experiment and playing the video during lecture as the in-person students did the experiment themselves. Overall, I think there's certain strategies that work better for online teaching and others that are suited for in-person teaching.
What advantages and disadvantages are there to online learning?

I think the main advantage to online learning is the flexibility to log in to class from anywhere. But I do think that flexibility comes at a cost. I really miss in-person interactions and getting to know the students. I also think the students miss out on some valuable opportunities by not having as much interaction with the professors. Although learning the material is obviously key to being a successful food scientist, many of my best opportunities have arisen from the professors acting as my mentors, introducing me to someone in their network, or offering me the chance to work in their lab. I think it's hard to grow these types of relationships on a purely online format.

Do you think COVID will restructure the way classes are taught in the future?

I could see COVID forever altering how large lecture classes are taught like your chemistry or biology courses where there's hundreds of students enrolled and very little direct interactions with the professor anyways. I don't think streaming class online has a huge disadvantage in this case.

On the other hand, I don't think it will change small classes like ours that have only 20-40 students enrolled. I think there's too much benefit to the students directly meeting their food science professors who are experts in the field.

Are there any funny/awkward moments of online teaching that come to mind?

There have been quite a few awkward moments learning to online teach on the fly. I cannot even count how many times I've started a lecture while still on mute.

One lecture I had just sent all the students into breakout groups when my brother-in-law came downstairs to workout thinking the silence meant I was done with lecture. Luckily, we sorted it out before any students came back into the main room. I've also had my fair share of dogs barking during my lectures, but it's pretty hard to control what's happening outside so you just learn to roll with it.

How do you teach outside of the classroom?

As an undergraduate I did a lot of outreach events through the food science club and have such fond memories of teaching children (and adults!) about the science behind their food. During COVID times I've had to be a little more creative on how to do this type of outreach, so a little over a year ago I started my own YouTube channel. I really enjoy the challenge of breaking down complex topics into smaller, bite-sized pieces that are more easily understood. Most recently I've posted videos on how to make your own butter at home and a short introduction to chocolate bloom. I'm hoping it helps the general public understand all the science behind their food supply and inspires others to become food scientists.
What will they Come Up with Next?
UW-Madison Product Development: Self-Cooling Milk, Moz-ZOO-rella Sticks, Banana Halos, and ¡Nadas!

With spring semester coming to an end, the product development teams have been patiently awaiting scores for their creations that they put so much effort into all year. This year, four different teams submitted proposals and two of those teams have already finished their competitions.

New to this year is the Dairy Innovations competition created by the Dairy Innovation Hub and Hyper Innovation. This competition focused on improving the dairy industry by enhancing the shelf life of a Wisconsin dairy product, encouraging dairy consumption by students, or utilizing technology to enhance operations. The UW-Madison team (Neve Blanz, Mikayla Haack, Caroline Lunning, and Nathan Riehle) focused on improving the shelf life of milk by creating an ultra-filtered UHT aseptic milk pouch with an integrated cold pack. Their team won “Most Creative Idea” and “Best of the 2020 Dairy Summit”.

Another competition that just finished up in February was the American Society of Baking Competition. This competition focuses on utilizing a food waste ingredient. This year’s team (Mallorie Arndt, Neve Blanz, Jordan Ishizu, and Claire McMonagle) created “Banana Halos” which are vegan mini doughnuts made from upcycled banana peel flour with notes of cinnamon and nutmeg. They placed third nationally in the 100% virtual competition.

Two teams that recently submitted their preliminary proposals and advanced to finals are the IFTSA Smart Snacks for Kids team (Tori Budin, Tyler Schroepfer, Kaitlyn Younger, Cameron Zalewski, and Rachel Zuern) and the IFTSA Mars team (Adrienna Donlevy, Amber Huen, Anna Larson, Nathan Riehle, and Claire Sipple). The Smart Snacks team created a product called “Moz-ZOO-rella Sticks” which are low-fat mozzarella sticks coated with brown rice crisps and rice flour and served with marinara sauce. The Mars team created “¡Nadas!” which are allergen-free frozen empanadas that use sorghum flour as a gluten free alternative. Their product comes in two flavors including cinnamon apple and buffalo lentil.

All of the teams this year that decided to continue competing despite the pandemic have done an outstanding job of utilizing household materials and limited lab access to create award winning products. We can’t wait to see the results of the final two teams and look forward to competing again next year!

-Neve Blanz, Product Development Chair
The Department of Food Science is excited to have Victor Ujor as an Assistant Professor in Fermentations. Dr. Ujor joins us from the Agricultural Technical Institute at The Ohio State University where he was an Assistant Professor in the Bioenergy and Water Treatment Management Program. Dr. Ujor earned his Ph.D. in applied microbiology and biotechnology from the University of Westminster London.

Dr. Ujor has certainly had a full schedule since joining the Department. His current roles include: conducting research in fermentation science and synthetic biology, training graduate students and postdocs, teaching fermentation-based and related classes, advising students, and providing service-based support to the Department. Outside of fulfilling these roles, you might find Dr. Ujor playing a mean game of ping pong, or either playing or watching soccer; one of his ultimate passions.

Dr. Ujor's research explores metabolic engineering, synthetic biology, and bioprocess design for enhancing the production of biofuels and bio-derived chemicals, bio-based waste-to-energy technologies, and recovery of water from liquid waste streams. We asked Dr. Ujor about his passions, research, vision for the program and career path.

What are you most passionate about studying and teaching?

I have a huge passion for bioconversions, wherein microorganisms consume organic substrates—food and agricultural residues—leading to accumulation of a final value-added product. This led me to pursue graduate studies in Biotechnology and has since informed my career path and teaching interests. Research wise, understanding and improving the ability of microorganisms to more efficiently produce and tolerate high concentrations of biofuels and other chemicals of industrial and agricultural importance never cease to grab my interest. Additionally, I have a keen interest in bioremediation, which deploys microbes and in some cases their enzymes to detoxify wastes/pollutants. My teaching interests lie in similar areas, namely fermentation technology, biotechnology and food microbiology.

What is your vision for the fermentations program at UW-Madison?

My vision is to grow the fermentation program into one that is recognized across the State and country for providing exciting and cutting-edge training for students in fermentation science and adequately preparing them for careers in fermentation and ancillary fields.

What are your research interests? What is the ultimate goal of your research? How have you been working towards your goals?

Specifically, I use metabolic engineering and bioprocess design to enhance the ability of select microorganisms to convert organic residues such as whey and other food processing wastes, corn cobs, forest residues, and wheat straw into important industrial bulk chemicals and fuels. Given our growing population, against a backdrop of the finite nature of fossil fuels and concerns over climate change, it is imperative that we develop technologies that sustainably produce fuels and chemicals for making materials such as auto parts, mobile phone components, computers, fabrics, etc. from renewable resources. Towards this, my research efforts have sought to increase the fermentation titers of butanol and 2,3-butanediol from renewable agricultural residues, with a view to achieving commercialization of bioderived butanol and 2,3-butanediol. Going forward, I plan on pursuing this goal in addition to producing high enough titers of 1,2-propanediol, lactate, and 1,3-propanediol to warrant commercialization of the fermentative routes for making these compounds.
Research Spotlight (continued)

**What has been surprising about coming to Madison?**
**What do you like to do outside of work?**

As cold as it has been so far, it has not quite been as cold as I had envisaged. So, I find that pleasantly surprising. Secondly, people have been very helpful. When you are in a new environment, you find that there is so much you need to figure out. Having people ask and genuinely make far reaching efforts to support and help you along the way make things a lot easier. That has been the case since I have been here, so I thoroughly appreciate that. Outside work and family, I am “abundantly passionate” about soccer. With the pandemic, it feels like centuries since I last played. In the absence of that, I try to catch as much soccer games as I can on TV over the weekends. Also, I consider myself a feisty ping pong player. You’d be right to say that I am passionate about ping pong - albeit not quite as much as soccer.

**What are the benefits to studying the science of fermentations?**
**How do students and the community benefit?**

Fermentation science cuts across a variety of important areas in society, from food processing to medicine and pharmaceutical science and from biofuels and chemicals to beverages. Many people do not realize that in addition to fermented foods and beverages, diagnostic and therapeutic antibodies and enzymes, as well as antibiotics, are produced using microbial or cell-based conversion processes. Thus, skills acquired in fermentation science are applicable in multifarious industries, which enhances employability. Also, growing interests in healthy foods, increasing need to preserve foods longer, given our growing population, increasing demand for bio-based materials such as flavoring agents in food processing and preservation, and the need to biologically convert food processing wastes to value-added products have conspired of late to accentuate the growing relevance of fermentation to society, especially as we strive to create and sustain a circular economy. According to a McKinsey Group report, it is projected that a $4 trillion investment will be poured into the bioeconomy over the next 10 to 20 years. Notably, fermentation is primed to continue contributing significantly to society. Indeed, studying fermentation stands to benefit students given this trend.

**How do your experiences as an assistant professor of bioenergy and Water Treatment management at The Ohio State University feed into your current work?**
**How about your postdoctoral work?**

My time at Ohio State provided me with extensive research and teaching experiences in bioconversion systems that perfectly align with the principles of fermentation science. Some of the research work I did there as an assistant professor will continue here at UW, thus directly informing and shaping my research aspirations and efforts. Also, I taught classes at Ohio State that share considerable similarities with most of the ones I will be teaching here. Overall, my experience at Ohio State offered me salient tools that I am sure will greatly come in handy in my new position.
This past January, assistant professor **Tu-Anh Huynh** along with colleagues, Justin Chow, Aaron Gall, and Alexander Johnson, published a paper in the Journal of Dairy Science. The paper addresses antibiotic resistance in Listeria monocytogenes cultures isolated from Wisconsin dairy cows. Because Listeria monocytogenes is a prominent foodborne pathogen and a leading cause of hospitalization and mortality among foodborne illnesses, it is important to observe the characteristics of its transmission. A unique challenge in controlling Listeria monocytogenes is its ubiquitous presence in the environments. To control Listeria transmission, the team sought to understand how it spreads from agricultural production to the human food production chain. Dairy cows have been shown to be a major reservoir of Listeria, so the research team specifically examined them for Listeria shedding and genetic diversity. For their experiment, the team selected a group of healthy lactating dairy cows in Wisconsin and collected fecal samples over a month. After they identified and isolated Listeria from the feces, they characterized those Listeria isolates for different traits, including antibiotic resistance and mammalian cell infection. The team found a strikingly high incidence of Listeria shedding among sampled animals, although all cows appeared healthy. This finding confirms that cattle are a major source of Listeria transmission, even when they are not overtly ill.

The Listeria isolates obtained are genetically diverse. Some isolates are potentially hyper-virulent, and most are antibiotic resistant, including antibiotics used for treating listeriosis in humans. Listeria is notorious for being highly adaptable and resilient to harsh conditions, which helps them thrive in agricultural and food processing environments. By understanding the genetic diversity and different traits of Listeria isolates from dairy cattle, Tu Anh and her team hope to develop control strategies that are tailored to those isolates. They are quite concerned about antibiotic resistance in several Listeria isolates because infection by those isolates might require a different treatment. They are also concerned that antibiotic resistance genes might be transferred to other pathogens in dairy farms. The team is currently analyzing the genomes of the resistant isolates to understand the genetic determinants of resistant traits.

The Department is proud of the research our junior faculty does and congratulates Tu Anh and everyone else on their new publication in the Journal of Dairy Science.

With all the work Tu Anh does with foodborne pathogens, one may think she'd be wary of foods; however, she simply ensures her meats are well done and her vegetables are cooked. She loves food too much to give up anything!
Cozying up with the Food Science Club: January Hot Chocolate Social

To kick-off the start of the spring semester, the Food Science Club hosted a virtual hot chocolate social in which students had the opportunity to talk with Department Chair, Dr. Scott Rankin.

Dr. Rankin opened the welcome party with some words of wisdom. He reminded students to stay in contact with professors and peers, especially during these unusual times. In the spirit of “On Wisconsin!”, he assured everyone that we will all get through the semester together.

Each attendee was asked to share a variation on hot chocolate for the chance to win a gift card. The winning hot chocolate (shown below), was created by Food Science senior Amber Heun. There were definitely some interesting creations. Bella Ludwig presented her Keto hot chocolate and Anastasia Mills spiced up a regular powdered milk hot chocolate with Nutella and mini-marshmallows. Dr. Rankin himself had the Nestlé Abuelita hot chocolate. Joe Mitchell rebelled against convention by showing up with chocolate milk!

Attendees then played some interactive games for more chances at winning gift cards. Participants listened to theme songs from major movies and earned points by being the first to guess the movie. Turns out the Food Science Club needs to brush up on their Batman and Superman soundtracks and learn the difference between the scores of Titanic and Lord of the Rings! The spirited competition was neck-and-neck from start to finish.

The event was a fantastic kick-off to the semester! With many classes and events being held virtually again, it was unifying to come together at the start of the semester and see all the friendly faces of students, faculty and staff of the Department of Food Science.
Chats and Charcuterie:  
FSC 2021 Wine and Cheese Social

On Friday, April 24th, the Food Science Club hosted our annual Wine and Cheese Social. This was the second year in a row that this event was celebrated via Zoom. Department Chair Dr. Scott Rankin, opened the event with a welcome and a big congratulations to the seniors. Dr. Rankin noted that the event is just not the same over Zoom but it is still a moment of celebration and togetherness before finals.

Dr. Rich Hartel presented the Doug Hyslop Academic Award. This special recognition is sponsored by Doug Hyslop, a former professor in the Department. It is awarded to a senior who meets Dr. Hyslop’s values of intellectual curiosity and excellence in academics and above all else, a strong desire to discover. The recipient receives a check and an etched crystal bowl. Former recipient, Dr. Abigail Thiel, attended the event and noted she still uses her bowl (to hold her keys!). Recipients’ names are engraved on a plaque outside Babcock Hall room 201. The Scholarship Committee named Annika K. Madler as the 2021 scholarship recipient. Annika expressed her gratitude and proudly showed off her new bowl!

The attendees then shifted their attention to Wine and Cheese. Participants had an opportunity to pick up a variety of cheeses from Babcock Hall ahead of this event. Some chose to select their own. Individuals presented and described their cheese boards. Images of these boards were then posted to Instagram and featured on the Food Science Instagram page. A vote was taken to choose the best charcuterie board. The students blew the competition out of the water, as many of the professors had been hung-up in the office. There seemed to be some animosity towards traditional wine: Dr. Thiel had an Old Fashioned in hand while Joseph Mitchell was posted up with a beer. A few students did stick with tradition, with a variety of red and white wines consumed. After all the boards were presented, attendees joined breakout rooms to chat and enjoy their wine and cheese.

Food Science Club President Amber Heun concluded the festivities by sharing a few words about how much she has appreciated her time at UW-Madison. She also applauded all the work that senior lecturer Monica Theis has accomplished. Monica has announced her retirement and it was clear just how much she will be missed by students, faculty and staff.
OPPORTUNITY

Food Science Outreach Programming

Here at UW-Madison, we center ourselves around the Wisconsin Idea by ensuring that the education people receive will extend further than just the classroom. With the wide range of different facilities at Babcock Hall, the Food Science Department offers a variety of outreach programming that allows for participants to utilize these facilities and gain a better understanding of a certain food science principle.

With multiple small-scale processing facilities available (such as the Babcock Hall Dairy Plant and Food Applications Lab), there are a large variety of courses offered including: Confectionary Technology, Food Safety and Health and Dairy Foods. In total, there are a dozen different short courses, all which can be found on our website. These short courses have been designed to utilize all of these spaces with hands-on experience so that participants develop critical thinking and skills that can be transferred to the world outside academia. Because these outreach programs are heavily centered around in-person and hands-on activities, COVID-19 has created some restrictions with the delivery of these courses.

A switch to a more lecture-based, online programming has been made, which has proved to be very successful. Some of the courses that are offered through these online systems include: Milk Pasteurization, a technical conference on Ice Cream Manufacturing, and the Nutrition and Snack Bar course.

As a department, we have gained a lot of experience through virtual delivery and look forward to continue implementing some of the elements from online classes in future years. Having an online presence with our short courses expands access to those who can participate; however, we are hopeful for increased face-to-face instruction in the fall with both Food Science and short courses. Whether online or in-person, the outreach programming hosted by the Food Science Department provides participants with useful knowledge and skills that reach further than just the classroom.

foodsci.wisc.edu
Alumni Spotlight:
Brandon Seiyu Yong and Sara Castellano

The Food Science Department makes a strong effort to stay in touch with graduates. Keeping in communication with our alumni and sharing what they have to say provides our community with useful insight into the food industry. Two previous students, Brandon Seiyu Yong and Sara Castellano wanted to share about their paths in the food industry.

Food Science Graduate Brandon Seiyu Yong (2018) summarizes his position at Ritual, reflects on his experiences as an international student, and provides advice to current students.

“I am originally from Malaysia (I was an international student) and I graduated in 2018 with a Food Science Degree. I was fortunate enough to start my career at a startup in bustling Los Angeles, California. I am currently a Product Development Manager at Ritual and being at a startup you learn to wear many hats. I lead plenty of research and development for new products, this includes benchtop work, stability and sensory but also do things like market research, legal reviews and profit and loss analysis. As a young professional, I love the startup environment as you are surrounded by brilliant people which allows you to learn a lot and no two days are the same. In my opinion, you learn more and faster in a startup which I highly encourage anyone to try it out.

To all the students, I understand how hard it is to find a job. This along with the pandemic is definitely depressing. I was in your shoes before sending out resume after resume, somedays I just wanted to pack my bags and go home. However, I encourage you to push on. As an international student, having a few years of experience here in the US will be invaluable to your entire career! For international students, we always dread that one question: "Do you now or in the future require sponsorship?". Yes, it is heartbreaking to get rejected just because you need sponsorship. But all it takes is one person to believe in you, so don't stop trying.

My advice to everyone is to get involved. Get involved in your Food Science Club, get involved in events and get involved in anything that comes your way. You learn more from getting out of your comfort zone. Also, internships, that is a must. Internships provide you so much insight into the industry not only for your interviews in the future but also it helps you decide which path in food science you would like to pursue. For me, I like to be up to no good in the lab hence, R&D was the path for me!”

-Brandon
Alumni Spotlight (continued)

Sara Castellano, (2019) talks about her experience here at UW Madison and her current position at Nestlé USA.

“My name is Sara Castellano and I graduated in 2019 with a double major in Food Science and Agricultural Business. I was part of the Varsity Tennis team, which made getting a degree in Food Science from UW Madison very challenging. I did not have a chance of exploring lab research or do any internships during the summer. I don’t know how Covid changed things, but for people very busy like me, working in the cheese plant on campus helped tremendously because they were very understanding with my schedule. I expressed to them that I was strongly interested in getting some work experience in a food plant and they were very flexible in finding times that worked for me. I also highly encourage being part of the Food Science Club, this is how I actually got a connection where I currently work.

I work for Nestlé USA, currently for the Frozen Foods division in South Carolina – Gaffney, as a QA Specialist. We produce STOUFFER’s, LEAN CUISINE, LIFE CHOICE and SWEET EARTH products for USA and CANADA. I like to define working as a QA specialist in a food plant as “expect problems and eat them for breakfast!” because every day is very unpredictable. Especially in big food plants that might be a little old with many products being produced at the same time, the main focuses are: investigations on possible foreign material in the product, ensuring that what is being produced gets produced right at the first attempt without having to rework it due to missing codes or something that went wrong in the process and reducing consumer complaints.

As surprising as it seems, those things happen almost on a daily basis and as a QA specialist you are involved in multiple projects to reduce all of the above and ensuring you are producing the best quality products for consumers.”

-Sara

photo of Sara Castellano in a food plant setting
The Department of Food Science congratulates Anastasia Tackett as our most recent inductee into the Food Science Honor Society, Phi Tau Sigma. Anastasia is a first-year graduate student in Dr. John Lucey’s lab. The focus of her work is evaluating how maternal diet and farm exposure could alter breast milk composition to prevent food allergy and atopic dermatitis in infants. When not in lab, Anastasia enjoys playing the oboe in band and orchestra.
CONGRATULATIONS!
DEPARTMENT OF FOOD SCIENCE
CLASS OF SPRING 2021

Tanner Bilstad
Elizabeth D’Auria
Adrienna Donlevy
Minty Gong
Katherine Helbig (MS)
Andrew Hermanson
Amber Heun
Victor Hinardi
Yinuo Jin
Grace Larson
Xueqi Jiang
Vera Li
Jiehua Lin
Isabella Ludwig
Annika Madler
Thomas Merz
Takoda Millonig
Joseph Michell
Samuel Saulig
Marie Shoemaker
Krysta Stroncek
Sarah Wagman
Mikala Weishair
Phoebe Zhao
Sarah, what was your research focus?
My research focused on Listeria monocytogenes control in high-moisture, low acid cheeses (e.g. queso fresco, ricotta, fresh mozzarella). My work aimed to identify combinations of organic acids and clean-label anti-microbials (bacterial fermentates, protective cultures) that could inhibit L. monocytogenes outgrowth over the product shelf-life to prevent consumers of these products from getting sick. My work also focused on eliminating L. monocytogenes and Shiga toxin-producing Escherichia coli from milk intended for unpasteurized milk cheeses through the use of thermalization treatments, like sub-pasteurization.

What are your future plans?
I started working at Kerry Ingredients in Beloit, WI in March 2021. I am a Principal Scientist in Kerry's Food Protection & Preservation group, working on microbial challenge and shelf-life studies using our clean-label antimicrobial portfolio across all food applications.

What did you gain from your experience at UW-Madison?
The University of Wisconsin provided me with a quality education that I felt was above and beyond what I could get from other institutions. The scientific rigor of UW-Madison is very high.

What was your favorite thing that you learned?
Learning how to mentor undergraduate students in the lab and through TAing was very rewarding and challenging. It also gave me a huge appreciation for those who have mentored and trained me over the years. At Kerry, I'm working with a few recent grads from the Food Science program (Christie Cheng, David Lang) and they've been training me in on their projects, so it's fun to see things come full-circle!

What are some triumphs and challenges of Graduate school?
I was an untraditional Graduate student in that I left following my M.S. from the department in 2012 and returned for my Ph.D. part-time in 2015 while working full-time at Oscar Mayer then at the Food Research Institute (on-campus). This was very chaotic and challenging, however, provided me insights from academia and industry and an appetite for collaboration that I hope will lead to further industry partnerships with UW-Madison.

The entire Ph.D. experience is overwhelming if you think of it in aggregate, but each experience (e.g. experiments, presentations, publications) builds to something great if you stick with it.
Introducing Hope Nicholson!

Hi! My name is Esperanza Nicholson. Growing up, everyone called me Hope, the English translation of my Spanish-given name. I am originally from Crystal Lake, IL, but I’ve lived in Wisconsin for more than half my life now, and I love it. I am married with one child. My husband Jay is a self-employed landscaper who can be found on one of Madison’s mountain bike trails when he is not at work. Benji is our eighteen-year-old young adult who started college last Fall at the University of Oregon. They are studying art history with aspirations of teaching someday. We have two dogs, Rory and Dean, and a cat named River. I have included a picture of the three of us at Haystack Rock in Cannon Beach, OR, and one of me trying to keep up with Jay on the mountain bike trail.

Before coming to UW CALS Department of Food Science, I worked at a trade association for the Dairy, Deli, and Bakery industry. I am excited to be working with such a great group of individuals at the forefront of the multi-disciplinary field of food science. I come from a large, hard-working family, and I’ve always found fulfillment in helping others. When I’m not at work, I enjoy spending my free time with family, riding my bike, listening to music, and reading. I look forward to working with you all!

Congratulations Bella Ludwig!

The UW-Madison Food Science Marketing team congratulates marketing intern Isabella (Bella) Ludwig on her graduation! We are delighted that Bella’s appointment was extended into June, but it will still be a tough good-bye. She has shown leadership, creativity, flexibility and organizational skills throughout her time interning.

Bella joined the Marketing team in September 2020 and quickly got up to speed writing articles, managing social media, taking photographs, along with filming and editing videos and doing voice-over work. She adds value to every meeting with a list of creative ideas and a positive attitude. Working alongside Bella is a fun, rewarding and productive experience. We can’t wait to see what’s ahead for Bella and what she will accomplish!
Glenda Jones Retires

You know someone made a huge difference to the climate of the workplace when an Instagram message launches 105 likes within a few hours. That is exactly what happened on February 26th when we said farewell to Glenda Jones. Glenda worked in the Dairy Store for 18 years, scooping “generous” portions of ice cream, making “beautifully wrapped” sandwiches and lifting our spirits with her good cheer and wonderful stories. She loved to listen to music as she prepared to open the store each day. In fact, those of us with offices close by had the pleasure of hearing her sing along to Whitney Houston!

Glenda fit right into our academic environment. She was a dedicated employee and committed herself to continuing education that added value to Babcock Hall. For example, she enrolled in a Food Safety Training program and became a Certified Food Manager. To earn this credential, Glenda studied after work, participated in review sessions and completed a 90-question exam. She passed with flying colors!

Glenda will obviously be missed but we are excited for her next adventures. For now, she plans to stay in Madison. Eventually she will move to Arizona to be closer to family. Glenda is devoted to her family. Her brightest smiles and warmest stories emerged when talking about her children, especially her grandchildren.

We wish you the very best, Glenda!
Meet Our New Intern!
Jordana Resnikoff

Although we are sad to see Bella go, the Marketing Team welcomes Jordana Resnikoff! Jordana joined as an intern this past winter and she will be a sophomore pursuing a Food Science degree in the fall. She enjoys combining her interest in food science with her love for cooking and baking. Jordana is so excited to be a part of this team and the amazing food science program that brought her to Wisconsin from New York.