

The Lion Ledger

☀ Summer 2026 ☀



Summer Cover Art by Sarah Hoagland, 1st year Anatomy PhD Student

Note from the Editors:

Sweating on your way up from the parking lot? Then it must be summer! This edition of the Lion Ledger is packed with articles you'll want to read poolside with a popsicle in hand. Jay's piece on sunscreen will help you pick the best option for protecting your skin, and Allison's article on summer molting will finally answer why it feels like you're vacuuming nonstop this time of year. Fair warning: after reading Habiba's piece on the gut-brain axis, you'll probably need an extra coffee run. And Seth's article is sure to make you question everything you thought you knew about science! We're also spotlighting two great pieces on the grad student food bank by Paige, plus a fortuitous industry internship opportunity from Jessi. And if you need ideas for your next beach bash, Zoe, Katie, Jeniece, and Ceyda have you covered with four unique (and amazing) recipes guaranteed to be a hit. Have an idea for a future Lion Ledger piece? Reach out to us at lionstalkscience@gmail.com — we'd love to feature it in our next (Fall) edition!

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This Season in Science

Sunscreening Out Vitamin D?

By: Jay Kang

The number one recommendation from dermatologists during these hot summer days is to always wear sunscreen when going outdoors. Skin cancer is [the most common form of cancer](#) in the United States despite most cases being [largely preventable](#). However, can protecting ourselves from the sun cause some unintentional consequences?

Vitamin D is an essential nutrient that helps our bodies absorb calcium and phosphorous from our diet. That calcium and phosphorous is then sent to our bones to support mineralization, or supplementing our bones with minerals, and strong bone health. Vitamin D is a unique vitamin because our bodies can naturally produce it when [exposed to sunlight or specifically UV-B light](#). When skin cells are exposed to UV-B light, 7-dehydrocholesterol is converted into specifically vitamin D₃ where it moves into the blood and [eventually to the gut](#). On a sunny summer day, a human can produce enough [vitamin D for the day in 10 minutes](#). However, factors such as skin color, age, and cloudy weather could require people to stay in the sun longer to produce enough vitamin D.

What if we're being good and following our doctor's prescription of sunscreen? Sunscreen blocks the sun's rays one out of two ways: [physical blockers or chemical blockers](#). Physical blockers,

commonly referred to as mineral sunscreens, contain either [zinc oxide](#) or [titanium oxide](#) that absorb UV rays before it reaches your skin. Chemical blockers use a combination of ingredients to absorb the sun rays before it reaches your skin. Many might prefer a chemical blocker due to being more water-resistant and transparent on the skin, but some have found that the chemical absorbed by the sunblock can cause an [allergic reaction or irritation and is not immediately effective](#). The compounds found in chemical sunscreen include avobenzone and oxybenzone which are a type of carcinogen known as benzenes. While some sunscreen is better than no sunscreen, try to use a mineral sunscreen to keep your skin happy and healthy. However, if sunscreen is blocking out the UVB rays, are we still producing enough vitamin D?

Different SPF levels block different percentages of UV light – [SPF 15 blocks 93% of UVB rays and SPF 50 blocks out 98% of UVB rays](#). This leaves approximately 2-7% of UV for your skin to convert into vitamin D, and that's not accounting for sunscreen washing away from sweat or imperfect application. Moreover, even though our bodies produce

vitamin D, we can still supplement our diet with vitamin D rich foods such as [fatty fishes like salmon](#). Common grocery items like milk and orange juice are also fortified with vitamin D. It should be noted that vitamin D is a fat-soluble vitamin, so it is possible to achieve vitamin D toxicity. If you are worried you are not producing enough vitamin D, especially for female bodies where osteoporosis is a common concern, bring it up with a health care provider! They can test whether you have a vitamin D deficiency and discuss steps you can take to keep your bones healthy.

UV rays can cause skin damage in as little as [15 minutes](#), and skin cancer takes 130,000 lives every year. There is misinformation swarming around the internet stating the sunblock can actually cause cancer or increase your likelihood of developing cancer, but these are not true. Sunblock is an easy preventative method to protect us from the trauma of a cancer diagnosis. Even if it means we'll have to eat a little more fish (which in my opinion is not a bad thing), it's worth taking the extra minute or two to apply sunscreen and be safe outdoors.

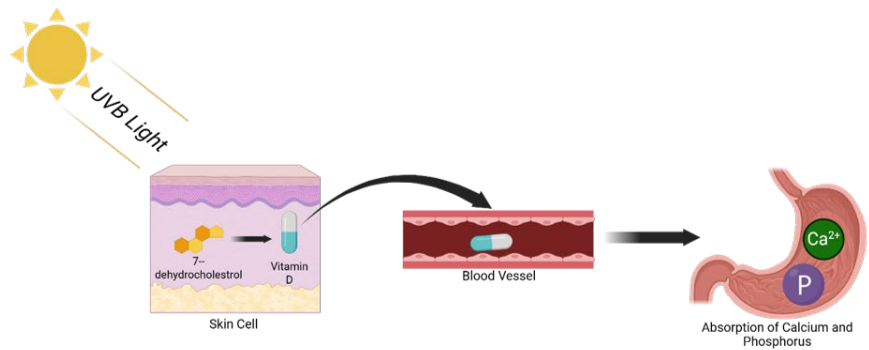


Figure 1. UVB rays convert 7-dehydrocholesterol into vitamin D which eventually moves into the blood and is transported into the gut to assist in calcium and phosphorus absorption. Figure made in BioRender.

Nature's Summer Wardrobe Change

By: Allison Krebs

As summer arrives, it can seem like animals everywhere are leaving pieces of themselves behind. Pet owners find clumps of fur collecting in the corners of their homes, feathers appear in piles beneath backyard bird feeders, and deer trade their shaggy winter coats for sleek summer fur. While it may seem that animals simply shed because they are hot, the biology behind seasonal shedding is much more sophisticated.

Known as [molting](#), seasonal shedding is a carefully regulated process that helps animals replace old or damaged body coverings with new ones better suited for the months ahead. Mammals shed hair and birds replace feathers, but their overall goal is remarkably similar: maintaining a healthy, functional body covering while adapting to seasonal changes.

Surprisingly, the primary cue that tells animals it's time to shed isn't temperature: it's daylight.

The Eyes Have It

Many animals use changes in the [photoperiod](#), the length of daylight throughout the year, as nature's calendar. As the days grow longer in the spring and early summer, specialized light-sensitive cells in the retina detect these changes. These cells relay the information to the brain's master clock, a tiny region of the hypothalamus called the [suprachiasmatic nucleus](#), or SCN. The SCN then communicates through the sympathetic nervous system to the pineal gland, a small pinecone-shaped endocrine gland within the brain ([Figure 1](#)).

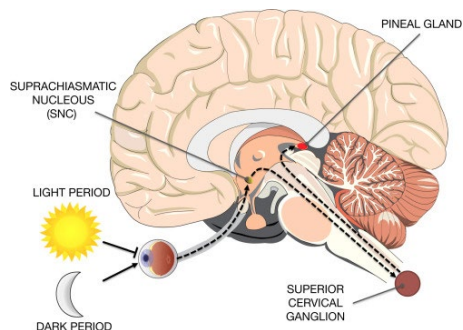


Figure 1. Pathway of electrical impulses from the retina to the pineal gland.

The pineal gland produces [melatonin](#), often called the “nighttime hormone” because it is secreted exclusively during darkness. Here's the key: the duration of melatonin secretion each night changes with the seasons. On long winter nights, the pineal gland pumps out melatonin for many hours; on short summer nights, the secretion window shrinks. This seasonal change in melatonin duration acts as the body's internal seasonal calendar, encoding the time of year into a chemical signal the body can read.

Melatonin itself doesn't directly cause hair or feathers to fall out. Instead, it acts as a seasonal signal that influences downstream endocrine pathways. In mammals, one of its primary targets is prolactin, which helps regulate the [hair follicle cycle](#). Seasonal changes in these hormonal signals synchronize thousands of follicles, so that old hairs are released as new summer hairs begin to grow. In birds, melatonin similarly serves as a seasonal signal, but [feather molt is coordinated through thyroid hormones](#), which assist in initiating feather replacement.

Day length is a much more reliable seasonal cue than temperature alone. An unusually warm week in February doesn't necessarily mean

that winter is over, but steadily increasing daylight consistently indicates that seasons are changing. By relying on photoperiod, animals can begin preparing for summer before temperatures have fully shifted.

Fur and Feathers

Different groups of animals have evolved unique strategies for molting, but the underlying photoperiodic trigger is highly conserved. In mammals, many species grow thick, insulating coats to survive winter and then shed them as warmer weather approaches. Dogs and cats with double coats often “blow” their undercoat during the spring and early summer, replacing dense winter insulation with a lighter summer coat. White-tailed deer undergo a similar transformation, exchanging their grayish, thick winter fur for the shorter, reddish coat commonly seen throughout the summer ([Figure 2](#)). Researchers have even demonstrated that [artificially extending daylight suppresses melatonin secretion in horses](#), accelerating the transition to a summer coat or delaying winter coat growth.



Figure 2. White-tailed deer coat comparison in summer (left) and winter (right)

Birds face a unique challenge because feathers are no longer living tissue once they are fully formed. Unlike hair follicles, damaged feathers cannot repair themselves after exposure to sunlight, weather,

parasites, or the repeated stresses of flight. Instead, birds must replace their feathers entirely through molt. Most bird species do this gradually, shedding corresponding feathers from each wing in a carefully coordinated sequence that preserves balance and maintains flight, known as a sequential molt ([Figure 3a](#)). Flightless birds, as well as a few flying species such as waterfowl, shed all their flight feathers through a simultaneous (non-sequential) molt ([Figure 3b](#)). This renders flying species temporarily flightless.

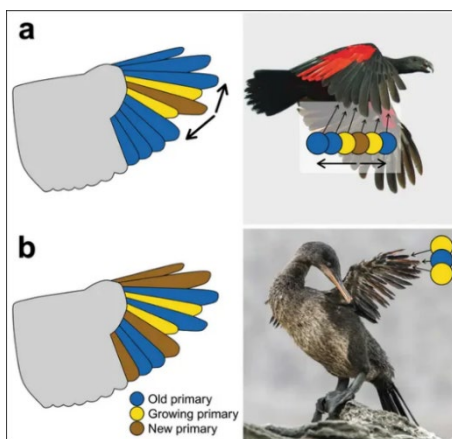


Figure 3. a) Sequential, directional molt and b) Non-sequential molt

Ancient Adaptations

Seasonal molting is more than a messy inconvenience for pet owners and a source of nesting material for backyard birds: it's an elegant example of how animals synchronize their biology with the changing environment. However, this reliance on photoperiod also created a vulnerability. Because the system evolved to track predictable seasonal light cycles, animals that live under artificial lighting or in a rapidly changing climate may experience mismatches between their molt timing and actual environmental conditions.

So, the next time you find another tumbleweed of pet hair drifting across

your floor or notice a feather floating in the air, remember that you're witnessing an ancient neuroendocrine adaptation at work—one that begins with changing daylight and ends with hormone signals that prepare animals for the season ahead. What may seem like a little extra work for your vacuum cleaner is actually one of nature's most precisely timed adaptations, ensuring that animals are prepared long before summer truly arrives.



Science in the News

Percolating Thoughts: How Coffee Rewires Your Gut and Brain

By: Habiba Abdelhalim

If you're one of the millions of people who can't function without a morning cup of coffee (iced coffee season is upon us!), new [research](#) suggests your daily habit is doing more than just waking you up. Researchers found that regular coffee drinking reshapes the trillions of [bacteria](#) living in your gut, and those changes appear to ripple outward to affect mood, memory, and impulse control.

Researchers in Ireland followed 62 healthy adults, comparing people who drank several cups of coffee a day with those who had never drank

coffee before. The coffee drinkers weren't just chemically different, their gut bacteria looked different too, with higher levels of certain microbial species such as *Cryptobacterium curtum* and *Eggerthella* and lower levels of compounds like [GABA](#), a calming neurotransmitter, and other substances linked to gut and brain health.

Behaviorally, the two groups also stood apart. Coffee drinkers scored higher on measures of impulsivity and emotional reactivity, meaning they were quicker to act on impulse and more sensitive to emotional ups and downs. Non-coffee drinkers, on the other hand, performed better on memory tests. Interestingly, when habitual coffee drinkers gave up their coffee for two weeks, their impulsivity and emotional reactivity scores dropped, edging closer to those of lifelong abstainers.

Then came the twist test: after the two-week coffee-free period, during which the coffee-drinking group gave up coffee entirely, participants started drinking coffee again, but some got the real thing while others unknowingly drank decaffeinated, or decaf, in a carefully blinded design. This allowed researchers to separate the effects of caffeine itself from the hundreds of other compounds coffee contains. Both groups saw shifts in their gut bacteria, including a rise in *Veillonella* species, though it is not yet clear whether this shift is a health benefit. Both caffeine-containing and decaf coffee also lead to improvements in participants' mood and stress levels, showing that coffee's benefits are not just about the caffeine buzz. But there were differences too: caffeinated coffee eased anxiety and sharpened attention, while decaf improved sleep quality, physical activity, and memory performance. The researchers also

tracked dozens of [metabolites](#), chemical byproducts of digestion, in blood, urine, and stool samples. Analysis revealed multiple associations between coffee compounds and their breakdown products, gut bacteria, and cognitive and emotional test scores. For instance, certain metabolites were correlated with better memory performance while others were associated with higher self-reported stress and anxiety scores. These findings came from questionnaires and cognitive tests, not a lab-based facial emotion-recognition task (which showed no difference between groups), so the "emotional" link reflects self-reported mood rather than objectively measured emotion processing. Overall, these results paint a picture of a three-way conversation between what you drink, the microbes in your gut, and how your brain functions, a communication system also referred to as the gut-brain axis, depicted in Figure 1 below.

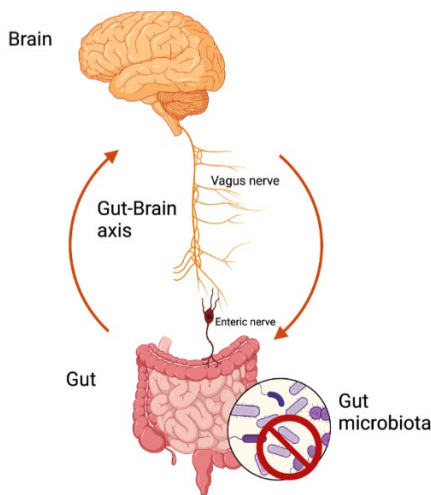


Figure 1. [Gut-Brain Axis](#)

Coffee also seemed to calm inflammation in the body, with coffee drinkers showing lower levels of [inflammatory markers](#) such as CRP, IL-6 and IL-10 compared to non-drinkers, though these effects shifted

again once people stopped and restarted drinking coffee.

It's worth noting this was an observational and intervention study in generally healthy adults, not a test of whether coffee causes long-term harm or benefit. The sample size was modest, and the researchers themselves note that non-coffee drinkers seemed to enjoy some advantages, like more stable mood and blood pressure, that may simply come from avoiding a stimulant like caffeine altogether.

Still, the findings add to a growing understanding that what we eat and drink doesn't just nourish us directly, it also feeds the ecosystem of microbes inside us, which may in turn shape how we think, feel, and behave. Your coffee cup, it turns out, might be part of a much larger conversation happening inside your body!

Ribozymes: The Chicken and the Egg of Biology

By: Seth Kabonick

Scientists broadly search for order in nature to derive meaning from observations. We enjoy findings with a small amount of variation and large effect size. Even more so, we often try to surmise universal principles that are useful to apply to daily work. An elegant example is the central dogma of biology, which simply states that DNA begets RNA that is used as a template for protein synthesis. There are very few exceptions to this dogma, and those which do exist are far too complicated to explain here. In fact, this principle is so fundamental that it was introduced during my very first lecture in undergraduate.

While the central dogma is useful to explain the general flow of information necessary for life, it does have a flaw similar to the classical chicken and egg conundrum: the synthesis of DNA largely requires proteins and thus is unidirectional and cyclical. This flaw does not affect present day studies because life begets more life but becomes problematic when considering the origins of life. How is it that DNA and RNA could be synthesized and maintained without proteins? This fundamental question has been sought since the publishing of *On the Origin of Species* by Charles Darwin in 1859.

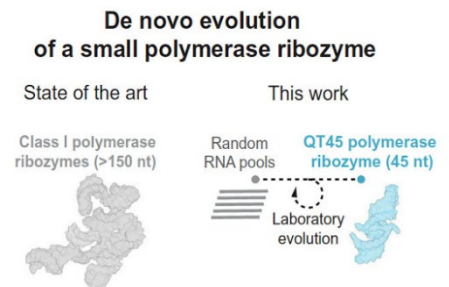


Figure 1. [The discovery of the self-replicating ribozyme, QT45.](#) Using a library of random RNA pools, researchers identified a short, low-efficiency RNA ribozyme capable of replicating itself and its template, called QT45, which illustrates a potential mechanism for primordial protein synthesis.

Recently, researchers at Medical Research Council in Cambridge have put forth a potential explanation to this conundrum. Using systematic screening of random RNA sequences, they identified a 45-nucleotide long RNA strand, called QT45, that could replicate itself and its template. This molecule belongs to a class called ribozymes, which are a unique class of RNA molecules capable of catalyzing macromolecule synthesis without proteins. Importantly,

ribozymes are a primary component of protein synthesis in nearly every organism. Thus, ribozymes could have been used in early life forms to replicate RNA as a template for protein production. Prior to this publication in Science, ribozymes were thought to be too large and inefficient for early life because they could not replicate themselves to produce RNA. Even the ribozyme QT45 resulted in a remarkably low yield of ~0.2% in 72 days; however, these findings indicate that self-replicating RNAs could have arisen in primordial systems given enough time and optimal conditions, meaning that RNA could serve as both the chicken and the egg of the central dogma.

What's With All the Wildfires?

By: Chris Pallés

Many across the United States have been sharing their experiences of the scorching summer heat alongside flash floods and torrential rains. Yet, another danger hangs in the air: wildfire. Indeed, just two weeks ago those of us in the south-central Pennsylvania region were facing the consequences of [around 90 fires burning across Canada in one of Canada's most intense wildfire seasons ever recorded](#). For about 48 hours, much of Pennsylvania was under a rare Code Purple air quality alert, signifying that the air was “very unhealthy” and people should remain indoors as much as possible. Although the recent Canadian wildfires were the [result of natural causes](#) — lightning strikes in dry, wooded areas — due to the accelerated pace of climate change, [modern wildfires are occurring more frequently, over longer periods, and](#)

[burning more land than before](#). The subarctic forests of Canada are no exception: the intensity and area burned by fires in Canada have [increased significantly](#) in recent years. Unfortunately, the damage isn't just devastating for environmental conservation but poses a very significant risk for human health as well.



Figure 1. Haze from the Canadian wildfires blankets the Lancaster skyline in mid-July. Image Credit: [Blaine Shahan](#)

The link between wildfire smoke and increased risk of respiratory and cardiovascular disease, particularly for sensitive populations like the elderly, children, and chronically ill, has been [well documented](#) for over a decade, although the differences between wildfire smoke and other forms of smoke was unknown. [More recent research](#) suggests that it is the composition of wildfire smoke that makes it so dangerous. Unlike smoke from campfires that is a result of burning wood, wildfires indiscriminately burn houses, gas stations, vehicles, and a plethora of other man-made materials, releasing dangerous chemicals into the air. [Common examples of these Hazardous Air Pollutants \(HAPs\)](#) include carbon monoxide, formaldehyde, acetaldehyde, and nitrogen oxides. The combination of the [organic compounds and nitrogen oxides can react to form ozone, causing health issues](#) such as respiratory and cardiovascular diseases and increasing the risk of

neurological issues, decreased fertility, and premature death. Another dangerous HAP in wildfire smoke is [particulate matter of diameter 2.5 microns or smaller](#) (PM_{2.5}), which can cause significant respiratory and cardiovascular health issues when inhaled—even if you're otherwise healthy. At around 30 times smaller than the width of human hair, when inhaled these particles travel deeply into the lungs where they either remain trapped or can enter the bloodstream. Adding to the threat of wildfire smoke is the fact that the [smoke and its pollutants cover large swaths of land](#), posing a serious health risk to people even thousands of miles away from the wildfires themselves (as we know well here in Hershey). As our understanding of the toxic components of wildfire smoke, their long-term health effects, and the breadth of their impact continues to grow, it becomes increasingly clear that wildfires must be addressed not only as an environmental and ecological issue but also as a significant public health threat.

With the threat of climate change ever-looming, it is imperative that governments and public health organizations work to find better ways of mobilizing healthcare and protecting their populations from the damaging effects of wildfires. Education, of health professionals and the public, can help both the health care systems and the people they serve mount a more proactive response towards wildfire smoke and avoid being caught off guard, as many of us were with the recent Canadian fires. In addition to education, policies and standards that could increase the quality of air filters in buildings and cars could also help protect more people from the dangerous effects. Regardless, we

should all make plans to protect our health each summer, otherwise the health of our lungs and heart could disappear like smoke in the wind.



Get Involved

Student Resources: The Lion's Pantry

By: Paige Bond

Let's get the obvious out of the way, the cost of living is increasing, and our graduate student stipend is not keeping up. Luckily, the Penn State College of Medicine has the Lion's Pantry on campus at 922 West Governor Road (Figure 1). From 4:30 to 6:00 p.m. on the first and third Wednesday each month, any College of Medicine student with their Penn State Health ID can access the pantry. The Lion's Pantry has many different resources from nonperishable needs like toothpaste, to canned food, to fresh produce and meat, and while students can visit both days that the pantry is open, they are encouraged to only take what they need.

Excitedly, the Lion's Pantry has a new collaboration with the Farmers Market in Hershey and the Schlegel Fruit Farm. Visitors to the pantry can sign up for a free produce bag for the following week on Thursday at the Farmers Market located next to Englewood at 1215 West End Ave., Hummelstown, PA.



Figure 1. Inside of the food pantry.

This past week, I picked up a free produce bag that contained apples, peaches, cucumbers and a tomato (Figure 2). Although free produce is available every Thursday, everyone is limited to twice a month. For students, that means you can go to the pantry the first and third Wednesday of each month, and you can pick up the produce bag the second and fourth Thursday of each month. Only a signature is needed to pick up the free produce bag, no Penn State Health ID needed. Free transportation for students is also available via the College of Medicine Shuttle Service from 2:30 to 6:30 pm.

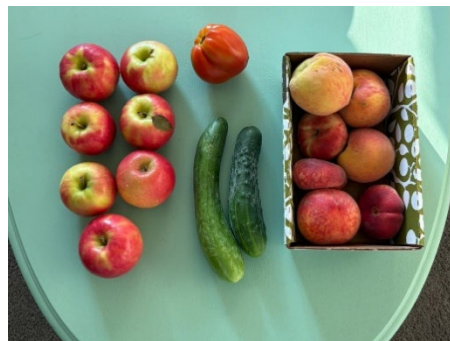


Figure 2. Contents in the free produce bag from [Schlegel Fruit Farm](#).

There is no better way to celebrate summer than with a bag of free seasonal produce. Although access to the pantry will not solve all our problems as graduate students, this wonderful resource certainly helps to alleviate some of the worries of everyday life. The Lion's Pantry is

completely free, so if you have any interest, I recommend taking full advantage.

What My Summer Internship Actually Taught Me

By: Jessi Gaydos

In my second year of my PhD, I was excited to receive notice of a cross-campus opportunity for microbiome studies through the One Health Microbiome Center (OHMC). It aligned perfectly with my interests, and I was thrilled to be accepted into the Biotechnological & Integrative Opportunities in Microbiome Sciences (BIOMS) T32 predoctoral program. The BIOMS program was created to train students enrolled in the world's first dual title PhD program in Microbiome Sciences, offered at Penn State University Park and College of Medicine, and its real-world applications through biotechnology, industry, and academic research.

My only hang-up was the requirement to complete an internship exploring industry or biotech over the summer. A summer away from the bench felt like a detour, but I slowly began to see it as a small price to pay for the bioinformatics training, professional development workshops, and networking opportunities the T32 program offered.

Little did I know I would meet my future boss at one of those very networking events while giving a flash talk on my work investigating the role of the microbiome in Parkinson's Disease. Dr. George Perry, or simply PJ, is a Penn State anthropology professor who studies evolutionary biology and medicine and who also

happens to be the President and Founder of boisei labs, a tech-for-good venture studio based in State College.

PJ's passion and conviction that basic science should translate into something immediately useful to society was refreshing and inspiring. He described building boisei labs as his own effort to untether scientific progress from bureaucracy, using his scientific knowledge, tools, and resources to benefit the world and the people in it. I was hooked.

This June, I started as an Analyst Intern at boisei labs. I found a team of motivated, conscientious innovators with scientific drive and deep convictions. This group of software engineers, strategists, and ethics experts welcomed me despite my having zero industry experience and enthusiastically shared their own.

I've spent the summer contributing to emerging technology rooted in sustainability and benefiting humanity; built for people rather than profit. I've picked up new technical skills from market research to user interface (UI) design, and learned a lot about entrepreneurship and the challenges of building and growing a startup, but my most important takeaways from this internship won't show up on a CV.



Figure 1. Jessi Gaydos (far left) with the 2026 boisei labs summer intern team, learning and growing together

What I initially viewed as an obstacle has quickly become one of the strongest growing points of my academic journey. Once pushing past my discomfort, I learned to cultivate ingenuity, think differently, and communicate outside of academia. I've had to apply logic and analysis to abstract, dynamic concepts about what's truly good, effective, and achievable, which pushed me to think philosophically and critically in ways my academic training rarely demands.

Surprisingly, the same iterative patience I practice at the bench, through countless rounds of optimization and replication, translated directly into creative innovation and design, a wildly different space, with that same rewarding sense of accomplishment.

Despite my early misgivings, this opportunity has fostered growth in me both personally and professionally, expanding my graduate training in directions I never would have considered on my own. I've also gotten to contribute to a meaningful project that I'll get to see impact society before I even defend my thesis.

Most importantly, this summer has reminded me that growth always lies beyond my comfort zone and there's real reward in taking risks. I'm returning to my PhD program with a newfound confidence that, if I support what I believe in and chase what I'm passionate about, I'll find success and fulfillment both in and outside of the lab.



Summer Recipes

Vegetable Soup for the Summer

By: Zoe Katz

You may be thinking to yourself, "Isn't it too hot for soup? We're going through a heatwave and you're telling me to cook something hot?" Yes. I am. Because soup should always be considered for all seasons. It is a great way to incorporate seasonal vegetables—farmer's markets galore are open around Hershey. It is also a great way to bulk cook for the week. If you are anything like me—busy but unfortunately love cooking—soup is a great way to accomplish a hearty meal in large portions that will keep you satisfied throughout the week.



Image Credits: [Eat Well](#)

Ingredients

- 1 tablespoon vegetable or olive oil
- Mirepoix: one large yellow onion, three large carrots, three stalks of celery, diced small
- Green zucchini, 1, sliced in quarters
- Sliced mushrooms, 1 small package
- One russet potato, sliced in quarters

- One sweet potato, sliced in quarters
- 2 tablespoons tomato paste
- 1 can cannellini beans (or any white bean), drained and rinsed
- 1 can kidney beans, drained and rinsed
- 1 28-ounce can Hunt's roasted tomatoes, keep juices
- 3 cloves garlic (or go by your heart)
- 1 box (around 4 cups) vegetable stock
- Salt and pepper to taste
- 2 tablespoons each garlic and onion powder
- 1 tablespoon paprika
- 1 teaspoon chili powder
- 1 teaspoon chili flakes (you can omit—this depends on if/how spicy you want the soup to be)
- 2-3 bay leaves

Instructions:

1. Heat a large pot to medium heat.
2. Add oil and let heat up slightly.
3. Add mirepoix and let cook until onions are translucent and vegetables are soft, about 5-7 minutes.
4. Add chili flakes and let cook through for 30 seconds.
5. Add chopped garlic and heat for one minute, stirring frequently to prevent burning.
6. Add tomato paste and warm, about 1-2 minutes.
7. Next, add the sliced zucchini, mushrooms, and potatoes cook until slightly browned and the moisture is released, about 5 minutes.
8. Add beans, roasted tomatoes, and spices, and mix to disperse evenly.
9. Add enough vegetable stock to cover the vegetables. If not enough, add water.
10. Taste the soup and add spices as you see fit.

11. Add bay leaves.
12. Bring to a simmer and let simmer uncovered for 30 minutes, stirring occasionally.
13. Remove bay leaves.
14. Your soup is done! Serve up with your favorite crusty bread and enjoy!

Popcorn Party Mix

By: Katie Kimbark

This popcorn mix is my go-to treat for just about any gathering and is always one of the first snacks to disappear. Despite being one of the simplest recipes I make, it's consistently a crowd favorite and is perfect for your next summer cookout. As the perfect balance of sweet and salty, it's irresistibly snackable and is easy to customize for any holiday, season, or craving. Best of all, it comes together in just minutes and is incredibly beginner-friendly – no baking expertise required!



Image Credits: [Live Craft Eat](#)

Ingredients:

- 8 cups of pre-popped popcorn (I use sea salt, but you can also use butter or kettle)
- 1 cup of mini pretzels
- 8-10 oz of melted chocolate (I bounce between white chocolate and semi-sweet, but you can use whatever kind is your favorite!)

- Optional add-ins:
 - M&Ms (my personal favorite – I like to chop them up into smaller pieces)
 - Sprinkles (a great way to add some holiday spirit)
 - Peanuts
 - Cereal (Chex, Cheerios, Fruity Pebbles, etc.)
 - S'mores (mini marshmallows, graham cracker pieces)
 - Dried fruit (cranberries, cherries, etc.)

Instructions:

1. Add popcorn and pretzels to a large bowl.
2. Melt chocolate in 30-second increments in a microwave-safe dish until completely melted and smooth, stirring in between each interval.
3. If you're using chocolate chips, add ~1 tsp of vegetable/canola oil.
4. Pour melted chocolate over popcorn mixture and mix with a large spoon or spatula until everything is evenly coated.
5. This is when I add the topping!
6. Add extra popcorn or pretzels to get a ratio that you like.
7. Dump out the mixture onto a large parchment-paper-lined cookie sheet and spread it out evenly. Cover with Saran Wrap or foil.
8. Let dry completely (at least 1 hour).
9. When the chocolate is fully dried, break up any larger clumps and serve.
10. Enjoy! The mix is best served fresh, but is still good for several days when stored in an airtight container.

Classic Guacamole

By: Jeniece Regan

With summer get-togethers happening, it's nice to have a side that is stable even outside in the summer heat. My personal go-to option is guacamole, especially this recipe I learned from the Food Network, which has a great mix of warm summer flavors. For parties, I usually quadruple the recipe to awe folks and make sure I get leftovers. I recommend toasting and grinding your own cumin for this recipe as it deepens the flavors. However, even with storebought ground cumin, this classic guacamole recipe is sure to please!



Ingredients:

- 3 Haas avocados, halved, seeded and peeled
- 1 lime, juiced or 3 tablespoons (not from concentrate) lime juice
- 1/2 teaspoon kosher salt
- 1/2 teaspoon ground cumin or 3/4 teaspoon cumin seeds
- 1/2 teaspoon cayenne
- 1/2 medium onion, diced
- 1/2 jalapeno pepper, seeded and minced
- 2 Roma tomatoes, seeded and diced
- 1 tablespoon chopped cilantro
- 1 clove garlic, minced or 1 teaspoon garlic paste

Instructions:

1. If toasting your own cumin: place desired volume of whole cumin seeds on a pan set to medium heat.
2. Stir the seeds rapidly until the color gets darker, making sure to keep a close eye on it as cumin burns quickly.
3. Grind the toasted cumin using a mortar and pestle or a coffee grinder and set aside.
4. In a large bowl, place the scooped avocado pulp and lime juice, toss to coat.
5. After all the avocados have been coated, drain avocado-lime juice mixture and reserve the lime juice.
6. Add salt, cumin, and cayenne and mash with gloved hands or a potato masher. Then, fold in the onions, tomatoes, cilantro, and garlic.
7. Add 1 tablespoon of the reserved lime juice.
8. Let sit at room temperature for 1 hour and then serve. If storing, store with plastic wrap touching the top of the guacamole to prevent browning.

Watermelon Feta Salad

By: Ceyda Yalcin

Summer is officially here, which means watermelon season is upon us, and if you have a balcony, patio, or even a tiny pot by your window, your mint plant is probably thriving. As someone from Turkey, I feel obligated to remind everyone of a recently social media-viral but Turkish summer longtime classic: watermelon feta salad. This delightful snack is perfect for the pool-side and only has three key ingredients-

watermelon, feta cheese, and mint- and there is no cooking (and very little chopping) required! The sweetness of the juicy watermelon, the saltiness of the feta, and the freshness of mint all complement each other in a way that sounds a little odd until you try it. You can serve this summer salad at a picnic, bring it to a summer potluck, or just make a bowl for yourself. Enjoy one of the easiest summer dishes you will ever make!



Image Credits: [A Fork's Tale](#)

Ingredients:

- Watermelon
- Feta cheese
- Fresh mint.
- Optional add-ins:
 - A drizzle of olive oil
 - Thinly sliced red onions
 - A squeeze of lemon or lime
 - A little balsamic glaze
- Cucumber for extra crunch

Instructions:

- Cut your watermelon into bite-sized cubes.
- Chop feta cheese into mid-size chunks and drizzle it over the watermelon.
- Finely chop or tear fresh mint leaves and scatter them over everything.
- Add any of your desired mix-ins, mix until the watermelon and feta are evenly coated, and dig in!



Thank you for reading the
Summer 2026 Edition of the
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