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Welcome back to The Pill Press! This month, we're getting into the excitement of October, with fresh faces joining our pharmacy family and upperclassmen ready to share their wisdom.

in this months issue we dived into GLP-1 agonists, an interview with one of our lab assistants, and a took a look at the latest in gene therapy. Plus, don't miss our fun recipe section!

Let's face it, you're not gonna read the entirety of this issue, but that's fine! Pick and choose whatever piques your interest and be sure to send some feedback our

> way. Happy reading!

Breast cancer awareness & combating techniques



On October 27th, the University of Kurdistan-Hewler held a meaningful event for Breast Cancer Awareness Month, bringing together students, staff, and medical professionals to discuss the latest in breast cancer care.

The event started with opening remarks from Dr. Teshk, dean of the school of med, reminding us of the importance of raising awareness and standing together in support of those affected by breast cancer.

The highlight was a keynote by Dr. Sadiq Aziz, a highly regarded surgeon in the field, who shared some of the latest advancements in research and treatment. His talk included statistics of breast cancer as well as risks & prevention techniques.



Following that, a panel of four experts, including Dr Kamaran Hasan, Dr Narmeen Taha and Dr Saman Salah. They discussed everything from prevention tips and early detection to support systems that can make all the difference for patients. Their insights helped us understand how complex and collaborative breast cancer care really is.

But the most touching part of the event was hearing from a breast cancer survivor, who opened up about her journey —the struggles, the moments of doubt, and ultimately, the hope and strength that got her through. Her story was a powerful reminder of the courage it takes to fight this disease and the support that's so essential.

Overall, the event was a memorable gathering, blending science with human stories. We left with more awareness, a better understanding of breast cancer care, and a sense of hope for the future.

A trip to Barzan

This month, we organized a trip to Barzan, giving us a chance to explore, and create memories in one of the most beautiful areas of Kurdistan.



Our first stop was a local market, where we stocked up on "essentials' (aka snacks). With two buses loaded up, we were off to our next destination, the restaurant in Rezan. There we ate way too much, took loads of photos, and fed fish... fish. Yep, full-on fish cannibalism!

After lunch, we visited the Barzani Memorial Museum, where we had a moment of reflection. The girls wore scarves as a sign of respect, and the guys tried their best to act mature. It was a nice change of pace, and visiting the museum gave us all a reminder of the history and culture of our home. As the day wore on, we found a beautiful spot to set up our camp. A fire was quickly started, and we got the grill ready, only to realize we'd forgotten a couple of essentials, naan and drinks. But that didn't slow us down. We improvised, making s'mores over the fire, grilling what we had, and enjoying being out in nature.



Oh, and it's worth mentioning the two buses that brought us on this adventure. Let's just say, one bus was definitely the "party bus," while the other, well, it was... quieter.



GLP-1 AGONISTS

WHAT ARE THEY?



GLP-1 (glucagon-like peptide-1) agonists were originally used to help people with type 2 diabetes manage their blood sugar levels, but now they're also being used for weight loss. Drugs like Ozempic and Wegovy fall into this group and have become super popular because they help with both blood sugar control and weight management.

HOW DO THEY WORK?

GLP-1 agonists act like a natural hormone which your gut releases when you eat. They help your body release insulin, keeping your energy levels in check, they also stop glucagon from raising your blood sugar. GLP-1 agonists can make your stomach empty slower, which means sugar from food is released gradually into the blood. work on your brain's hunger centers, making you

feel fuller sooner and for longer after meals.

OZEM

GLP-1 AGONISTS FOR WEIGHT LOSS

The FDA has approved some GLP-1 agonists, like semaglutide, as weight-loss treatments. For people with obesity or health issues tied to their weight, these medications can make a big difference.
A major study from the new England journal of medicine, found that, combined with diet and exercise, semaglutide helped people lose around 15% of their body weight over a year. In comparison, those only changing their lifestyle lost just 2.4%. However, people often gain some weight back if they stop taking the drug, so lifestyle habits still matter.

POSSIBLE SIDE EFFECTS

Most people handle semaglutide well, although they can have some side effects like digestive Issues with Nausea, vomiting, diarrhea, constipation, and bloating. Headaches and Tiredness may also be experienced. To help reduce these issues, we can start with a low dose and gradually increase it.





This month, we had the pleasure of interviewing Dr. Sara, a dedicated and inspiring lab assistant. With a her passion for pharmacy, Dr. Sara has not only excelled in her studies but also continues to inspire students with her journey. Here's what she shared about her journey in pharmacy.

Interview with Dr Sara

WHAT INSPIRED YOU TO PURSUE A CAREER IN PHARMACY?

I chose pharmacy because I was born into a family that values education and hard work. Seeing my mother and father thrive as dedicated professors, always working hard, inspired my love for learning and dedication to making a difference. Additionally, my aunt, a pharmacist who works with Merck Pharmaceuticals, has always been a role model. Her accomplishments, including numerous awards and her active participation in international conferences, inspired me greatly. Her lifestyle as a strong, independent woman, traveling and contributing to her field, motivated me to pursue a career in pharmacy and follow a similar path.

★ WHAT WERE THE BIGGEST CHALLENGES YOU FACED WHILE STUDYING PHARMACY, AND HOW DID YOU OVERCOME THEM?

One of the biggest challenges I faced was having so many exams with very little time to fully cover each subject. On top of that, studying abroad brought extra responsibilities, which made managing everything even harder. Spending time in the library became essential; it was my primary space to stay focused and effectively work through these challenges.

★ WHAT IS ONE THING YOU WISH YOU KNEW WHEN YOU STARTED PHARMACY SCHOOL?

I wish I had known that everything we learn, no matter how small, is valuable. During university, it's easy to question why we're studying certain material, but it all becomes relevant later on. Remembering that would have made the journey smoother.

CAN YOU SHARE ANY SKILLS OR TRAITS THAT HELPED YOU TRANSITION FROM BEING A STUDENT TO A PHARMACIST?

Practicing has significantly improved my skills as a pharmacist. Although I had considerable experience prior to graduation, it was not sufficient. Shortly after graduating, I began working in two positions, and now I can confidently say that I see daily improvements in my abilities.

★ IF YOU COULD REVISIT ONE YEAR OF UNIVERSITY, WHICH WOULD IT BE AND WHY

I would return to the last two years because I felt more confident and knowledgeable during that time. I enjoyed studying pharmacy, and I had a wonderful experience alongside my best friend, Dr. Shna

GENE THERSPY Advancments in treatmentof genetic disorders

Gene therapy has become one of the most promising fields in medicine, offering new hope for those affected by rare genetic disorders. Unlike traditional treatments that manage symptoms, gene therapy targets the root cause by correcting defective genes, enabling the body to function more normally. The recent rise of tools like CRISPR-Cas9, a precise "cut and paste" gene-editing technology, has revolutionized this approach, allowing scientists to make exact adjustments to DNA and craft therapies tailored to specific mutations.

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Rare genetic disorders, which often have devastating impacts on small patient populations, have seen some of the most remarkable benefits from gene therapy. Conditions like spinal muscular atrophy (SMA) and Duchenne muscular dystrophy (DMD) are now experiencing life-changing advances. For example, Zolgensma, the first gene therapy approved for SMA, works by delivering a functional copy of the faulty SMN1 gene. This one-time treatment has enabled children with SMA to gain strength and lead significantly improved lives transforming a diagnosis that once meant a

limited lifespan into one filled with potential. A

N — H

Beyond single-gene disorders, researchers are exploring gene therapy for complex conditions such as certain cancers and autoimmune diseases. Advances in gene-delivery systems, including adeno-associated viruses (AAVs) and lipid nanoparticles, have increased the safety and efficiency of these therapies, broadening their potential applications. For instance, in hemophilia a disorder that disrupts blood clotting gene therapy has allowed patients to produce clotting factors naturally, reducing their reliance on frequent, costly treatments.

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Two primary approaches have emerged in the field: in vivo and ex vivo gene therapies. In vivo involves delivering genes directly into the body, while ex vivo involves modifying cells outside the body before reintroducing them. Each approach offers unique advantages for specific diseases, making gene therapy adaptable and effective.

Gene therapy has made significant progress, yet challenges remain. Long-term safety is uncertain, with risks of unintended mutations, and ethical debates persist, particularly around "designer" genetic modifications. Tackling these issues is crucial to gain public trust and keep gene therapy focused on health.

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UG1 updates

Watching the new UGIs stumble through their first month has been a mix of nostalgia and pure entertainment for us, but let's see what pharmacy school has been like for them!

A lot of them walked in thinking that they d just study drugs and go home. Nope–surprise! They re in deep with the human Anatomy now. Lets just hope they can manage to stay awake in class, because most of the UG2s couldn't.

Apparently Terminology and Medical Physics are giving them a hard time. They're not thrilled about trying to make sense of a whole new language. It's a struggle, but they're hanging in there, one headache at a time.

In the lab, they've even started to make aspirin! We're so proud of the mini drug dealers.

UG1 updates

Their perception of pharmacy is already changing. Most of them came in thinking it was just about drug dispensing. A few weeks in, they're realizing how it's such a broad field

According to them, keeping up with doctors who talk at the speed of light has been rough. Notetaking is turning into a marathon, and they're still trying to keep pace.

Luckily, the doctors and upperclassmen are all super supportive, which helps with the learning curve. It's clear they're in it together, even if they're all a bit lost.



October immediately brings to mind flavors like cinnamon, nutmeg, caramel, and apple. Desserts such as pumpkin pie, cinnamon rolls, and spiced cakes are staples of the season. These flavors and desserts often symbolize warmth, comfort, and the transition into colder months



Although where we live autumn may not have the same cold weather and changes in greenery as some other countries, the concept of autumn can still be embraced through flavors and traditions. Spices like cinnamon, cardamom, As well as inseason vegetables like pumpkins can give us a sense of warmth and coziness, even without the typical cool autumn weather. Did you know that cinnamon may help regulate blood sugar levels, potentially improving diabetes management? It also may reduce the risk of heart disease by lowering cholesterol and triglyceride levels. With so many benefits, it'd be a shame not to use it for a cozy autumn treat!

Cinnamon * rolls *

INSTRUCTIONS

In a large bowl, combine warm milk, sugar, and yeast. Let it sit for 5-10 minutes until the yeast becomes foamy. Add melted butter, egg, yogurt, and vanilla. Gradually add the flour and salt, mixing until a soft dough forms. Knead for about 5 minutes until smooth and elastic. Let the dough rise for about an hour, or until it doubles in size. Once risen, punch down the dough and roll it out into a rectangle. Mix together the sugar & cinnamon and

spread the butter over the rolled-out dough, then sprinkle the cinnamon mixture on top. Roll up the dough & slice into equal pieces. Place them in a baking dish, cover them & let it rise for a second time. after about 30 mins, they should be ready to bake in a preheated oven (180°C) for about 25 mins. Let them cool slightly before serving.

RECIPE

For the Dough: 3 1/4 cups all-purpose flour 2 1/4 tsp active dry yeast (1 packet) 1/4 cup sugar 1/2 tsp salt 1/2 cup warm milk 1/2 cup warm milk 1/2 cup melted butter 1 large egg 1 tbsp yogurt 1/2 tsp vanilla powder For the Filling: 1/2 cup brown sugar 4 tbsp cinnamon 1/2 cup softened butter



Down

1.GLP-1 medication used for diabetes management

2. October is the awareness month for this type of cancer

4. Chemical in cinnamon said to lower blood sugar

8. Common flu symptom

9.The 'good' cholesterol

10.Class of diabetes medications that mimic incretin hormones to lower blood glucose

Across

- 3. Breast cancer screening method
- 5. Drug class that reduces cholesterol in blood
- 6. Vitamin often prescribed for flu prevention
- 7. Enzyme inhibited by NSAIDs
- 9. Hygiene habit important for flu prevention

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