

# The Mortar & Pestle

Black Student Pharmacist Organization  
Quarterly Newsletter

## WHAT THE HEALTH: A PHARMACIST'S ROLE IN COVID-19 VACCINE ADMINISTRATION

Written by: Angelle Newman

According to the Centers for Disease Control and Prevention, nearly forty-five million Americans have been fully vaccinated against COVID-19, and over eighty million have received at least one dose of a COVID-19 vaccine [1]. While many of these vaccinations are performed at doctor's offices and health departments throughout the United States, a significant number of vaccinations are being administered in community pharmacies. Understaffing in community pharmacies is not a new phenomenon, so it comes as no surprise that the additional responsibility of administering hundreds of vaccinations per day would take a toll on pharmacists' mental health.

In January, Walgreens co-chief operating officer, Alex Gourlay, asserted that Walgreens has the capacity to "certainly vaccinate 20, 25 million people a month" in its pharmacies [2]. However, Walgreens pharmacy manager, Marilyn Jerominski, does not share the same optimistic sentiment. Jerominski operates a 24-hour Walgreens pharmacy in Palm Desert, California. When reflecting on her daily responsibilities, Jerominski stated, "There's so much stress. You're not only running to the drive-thru, but to the front, to the vaccination station to give a vaccination, then to the phone. ... It's almost impossible for any human to keep that momentum day in and out" [3]. Pharmacists like Marilyn Jerominski will have to somehow keep this momentum going for several more months as vaccine rollouts continue throughout the United States.

Since the beginning of the pandemic, patients with non-COVID concerns have relied heavily on community pharmacists for information and guidance. As one of the most accessible health care professionals, community pharmacists are readily available and equipped with the knowledge to assist patients. However, the added responsibilities of information dissemination and patient triage can become increasingly taxing for overwhelmed pharmacists [4]. In countries such as Canada and the United Kingdom, pharmacists have reported increased harassment and verbal abuse from patients that are frustrated with delayed service [4,5]. Pharmacists have also been targets for anti-vaxxers propagating conspiracy theories about vaccines [5].

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Workplace stress and burnout can have lasting effects on pharmacists. It is important to develop healthy responses to stressors. Exercise and yoga can be beneficial stress relievers and are much healthier than indulging in junk food or alcohol. Another stress management tool is to create work-life boundaries. Pharmacists should have a set time each day where they stop thinking about work and focus their time and energy on things that make them feel relaxed or happy [6].

Sources:

1. Centers for Disease Control and Prevention. (2021, March 21). COVID-19 Vaccinations in the United States. <https://covid.cdc.gov/covid-data-teacher/vaccinations>  
2. Jelen, Sarah. (2021, March 21). How CVS and Walgreens Help Biden Get to 200 Million Covid-19 Shots. <https://www.forbes.com/sites/sarahjelen/2021/03/21/how-cvs-and-walgreens-help-biden-get-to-200-million-covid-19-shots/>  
3. Kaplan, A., Nguyen, V., & Goffe, M. (2021, March 16). Overworked, understaffed: Pharmacists say industry in crisis puts patient safety at risk. NBC News. <https://www.nbcnews.com/health/health-care/news/overworked-understaffed-pharmacists-say-industry-crisis-puts-patient-safety-risk-n1251151>  
4. Elmadfa, A., Wenz, C., & Tappin, C. (2020). Mental health issues impacting pharmacists during COVID-19. *Journal of Pharmaceutical Policy and Practice*, 13(46). <https://jppp.biomedcentral.com/track/pdf/10.1186/s12940-020-00523-6.pdf>  
5. Lavin, A. (2021, January 28). Pharmacists among medical professionals reporting rising rates of workplace harassment. *Pharmacy Times*. <https://www.pharmacytimes.com/news/medical-professionals-reporting-rising-rates-of-workplace-harassment>  
6. American Psychological Association. (2018, October 14). Coping with stress at work. <https://www.apa.org/topics/healthy-workplaces/work-stress>  
<https://www.fda.gov/news-events/press-announcements/fda-approves-targeted-treatment-rare-duchenne-muscular-dystrophy-mutation-9>

# BLACK-OWNED BUSINESS SPOTLIGHT: COOL WORLD ICE CREAM SHOP

It's only right that we spotlight Cool World Ice Cream Shop. This ice cream shop is owned by a local teenager, Victor "Beau" Tracy Shell. He is Athens' youngest entrepreneur and he is the youngest person ever to become a member of the Athens Area Chamber of Commerce! They hosted us for Mad Tip Monday's and we had a blast. We want to thank everyone who came to support and hope you all enjoyed yourselves as much as we did!

Check them out!

1040 Gaines School Rd #218, Athens, GA  
30605



## SPRING IS IN THE AIR!

Spring has sprung and creativity was in the air for our Spring Paint & Sip event hosted outside RC Wilson. Students were able to paint their own mortar and pestles and relax before finals. Check out some of the awesome designs!



# NEW DRUG ON THE BLOCK

Written by: Dayana Pimentel



AMONDYS 45 (Casimersen) by Sarepta Therapeutics, received FDA approval on February 25, 2021, for a new treatment of Duchenne Muscular Dystrophy for patients who have an exon 45 amenable mutation [4]. It is an antisense oligonucleotide, skipping exon 45, that allows shorter but functional dystrophin.

**SAREPTA**  
THERAPEUTICS

Sarepta Therapeutics originated in Massachusetts but is a worldwide biopharmaceutical company whose mission is to “engineer precision

genetic medicine for rare diseases that devastates lives and cut futures short.”[1]. Muscular dystrophy is a rare genetic muscular disease, 1 in every 3,500 people, depicted by progressive muscle degeneration that leads to decreased mobility [2]. Duchenne (DMD) is the most common type of muscular dystrophy. Duchenne onset is around the age of 2 and leads to premature death within 10-20 years due to other DMD pathological effects such as lung failure and heart problems.

## Indication

Amondys 45 is a weekly intravenous injection indicated for the treatment of Duchenne Muscular Dystrophy for patients with dystrophin mutation at exon 45.2 Duchenne muscular dystrophy is due to low production of a protein that is vital for muscle strength called dystrophin. DMD was originally treated with corticosteroids, however, there is a new class of drugs, antisense oligonucleotide, which works at the mRNA level to assist in dystrophin production. With DMD being a disease that mainly targets the younger population, little is known about its usage and benefits in geriatric populations [3].

## Precautions and Major Warnings

Other antisense oligonucleotides have caused nephrotoxicity. During the treatment of Amondys 45, monitoring kidney function is vital such as serum cystatin C, GFR, and urine protein to creatinine ratio. There are no contraindications with Amondys 45 [3].

## Adverse Effects

The common adverse drug reactions are upper respiratory tract infection, cough, pyrexia, headache, arthralgia, oropharyngeal pain [3]. Some less common effects were ear pain, ear infection, dizziness, and headache [3]. With this medication approval, 30% of DMD patients can now be treated to stabilize or slow the progression of the disease.

### Sources

1 About Us. (2021). Retrieved March 31, 2021, from Sarepta.com

Website: <https://www.sarepta.com/about-us>

2 Duchenne Muscular Dystrophy. (2021). Retrieved March 31, 2021, from Sarepta.com

Website: <https://www.sarepta.com/disease-areas/duchenne-muscular-dystrophy>

3 Drugs@FDA: FDA-Approved Drugs. (2021). Retrieved March 31, 2021, from Fda.gov

Website: <https://www.accessdata.fda.gov/scripts/cder/daf/index.cfm?event=overview.process&ApplNo=213026>

4 FDA Approves Targeted Treatment for Rare Duchenne Muscular Dystrophy Mutation.

Retrieved March 31, 2021, from U.S. Food and Drug Administration website: <https://www.fda.gov/news-events/press-announcements/fda-approves-targeted-treatment-rare-duchenne-muscular-dystrophy-mutation-0>





# A YEAR IN COVID-19

Written by: Kyra Leonard

As we reflect on a year that has claimed more than 3 million lives [1], we're seemingly at the end of a tunnel of grief with approved vaccines here to relieve us of our "pandemic fatigue". However, for members of the Black community, the vaccine did not come quickly enough. In most medical studies, your average American figure is based on the health statistics of a 30-year-old white male with no serious health concerns. Taking a look at the numbers, an average American has a 29%-60% chance of contracting the Coronavirus depending on external factors such as location, proximity to other people, enforcement policies, etc. According to the CDC, the mortality rate for such a diagnosis stood at 6% at the peak of the pandemic in the United States [3]. But what was the outlook for those that weren't a part of the "average American" populations?

In an article published by the American Psychological Association Services, Inc., Sarah Rose investigated how discrimination has impacted the overall health of Black Americans during the pandemic. Looking at the beginning of the COVID-19 pandemic that put an entire year on pause, it was found that counties with a higher percentage of African-American citizens ( $\geq 13\%$ ) were more heavily impacted by the effects of COVID-19 [4]. Although such areas only contribute to 20% of United States counties, Black Americans from these groups made up an astounding 52% of confirmed cases and 58% of subsequent deaths [4]. With such disparities, it would seem that this subpopulation would be racing to receive the newly developed vaccine, but according to the CDC, that isn't the reality we're facing.

Fast forward to a new year where many of us have passed the anniversary of the COVID-19 safety mandates, and we are now seeing over 2 million vaccines administered per day. Although there remains hesitancy from those populations who are suspicious of the fast-tracked vaccine approval process and minority groups who have fallen victim to unethical medical practices in the past, it is estimated that 31% of the United States population is now fully vaccinated [1]. However, if we take a closer look at demographics, we'll see that only 8.7% of Black Americans have received a first dose of the COVID-19 vaccine even though this ethnic group makes up roughly 13% of the country's total population. And it comes as no surprise that white Americans are being vaccinated at a rate 3 times higher than Black Americans [5]. As of March 1st, 2021, Black Americans maintain their hold on having the highest death rate of any other demographic. The answer to vaccine opposition sadly lies in the aforementioned history that Black Americans have had with health care providers, political influence, and overall lack of scientific and clinical knowledge [5].

Looking ahead, with vaccine administration in full swing many are wondering when will pandemic restrictions lighten up and when we can return to our sense of everyday normality. Dr. Anthony Fauci, Chief Medical Advisor to the president, says that it's possible mask-wearing might be enforced well into 2022 to protect against contraction of the virus and new variant strains that may emerge [2]. It is also important to note that the vaccines, regardless of the manufacturer, are not 100% effective in protecting an individual from contracting the virus. In a year where most of us have lost loved ones, jobs, and our way of life, it's important to remember that we are still in this fight against COVID-19 and until an absolute prophylactic is developed, we must keep appropriate safety measures in place if we ever want to return to our sense of normalcy.

## Sources

1Centers for Disease Control and Prevention. (2021, May 2). CDC COVID Data Tracker. Centers for Disease Control and Prevention. <https://covid.cdc.gov/covid-data-tracker/#vaccinations>.

2Cole, D. (2021, February 21). Fauci: 'Possible' Americans will be wearing masks in 2022 to protect against Covid-19. CNN. <https://www.cnn.com/2021/02/21/politics/anthony-fauci-mask-wearing-2022-cnn/index.html>.

3Ritchie, H., & Ortiz-Ospina, E. (n.d.). Coronavirus (COVID-19) Vaccinations - Statistics and Research. Our World in Data. <https://ourworldindata.org/covid-vaccinations#source-information-country-by-country>.

4Rose, S. A. (2021, October 28). Research roundup: How COVID-19 impacts African Americans. <https://www.apaservices.org/practice/ce/expert/covid-19-african-americans>.

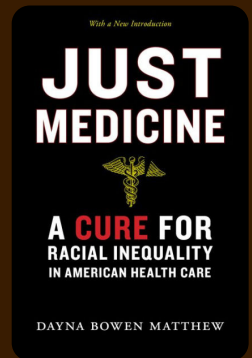
5Young, S. (2021, February 2). Black Vaccine Hesitancy Rooted in Mistrust, Doubts. WebMD. <https://www.webmd.com/vaccines/covid-19-vaccine/news/20210202/black-vaccine-hesitancy-rooted-in-mistrust-doubts>.

# GOOD READS

## Just Medicine: A Cure for Racial Inequality in American Healthcare

By Tierra Jackson

In *Just Medicine*, Author Dayna Matthews evaluates the root causes of inequitable healthcare and its outcomes that have plagued minority communities throughout American History. During the author's accounts, she highlights exactly how implicit biases are developed, and how these biases correlate directly with the development of health disparities, and clinical outcomes. Matthews is a lawyer who also heavily emphasized the importance of political adjustments, and the impact that that legal regulations have on correcting these disparities. She starts by describing how social, and legal regulations were crucial in ending the direct racisms experienced during the Jim Crow era. She then goes on to describe how it's imperative that we encourage new laws that will create repercussions for unchecked biases as well. Moving forward, Matthews describes ways to check implicit biases in a professional healthcare setting, and what is needed to provide a structural solution.



## IT'S NOT JUST COVID-19

Written by: Adesuwa Utomwen

Outbreaks are not novel, yet they remain a shock to the world time and time again. As of February 2021, the Dominican Republic of Congo announced yet another outbreak of the Ebola virus in the North Kivu province. This is the country's twelfth outbreak, totaling 11 confirmed cases and 4 deaths [1]. In conjunction with this saddening news, it was reported that in the same month, the country of Guinea, was also hit with a new outbreak of the Ebola virus [2]. With its emergence, there have been 17 cumulative cases and 8 deaths [3].

It has been noted by WHO, that the Zaire ebolavirus species is most known to cause outbreaks such as the one seen now [4]. After conducting several rounds of genomic analyses, scientists from Georgetown University and the University of Montpellier concluded that this Ebola strain is very similar to that from previous outbreaks [5]. It has been believed that these outbreaks are due to past survivors, who were harboring dormant forms of the virus. This has been a shock to the scientific world due to the known fact that humans rarely stimulate the onset of outbreaks.

Doctors without Borders, a non-governmental organization known for its international healthcare assistance, are actively responding to the outbreaks. They are triaging immediate Ebola cases, providing preventative measures to families, and administering vaccines throughout the region. As of March 3rd, it has been reported by WHO, that 800 people in the Dominican Republic of Congo, have successfully been vaccinated [1]. The four prominent international health organizations - UNICEF, WHO, IFRC, and MSF - have also announced the establishment of a global Ebola vaccine stockpile [4]. This swift and prudent response will allow a means of which to contain and limit the spread of the Ebola outbreaks. In addition, other countries and regions will now be able to respond timely to future outbreaks, ensuring that all individuals, including frontline workers, have the opportunity of being vaccinated.

Although the Ebola virus has emerged again, it is being relentlessly combated by a team of healthcare professionals, volunteers, scientists, and health-centered organizations. It is our hope that the devastation and hardship once caused by the Ebola Virus in West and Central African communities years ago, will never be seen nor experienced again.

Sources:

1. Medecins Sans Frontieres. DRC's twelfth Ebola outbreak. Updated March 5, 2021. Accessed March 19, 2021. <https://www.msf.org/drc-ebola-outbreak-crisis-update>

2. Centers for Disease Control and Prevention. Ebola (Ebola Virus Disease) 2021 Guinea, N'Zérékoré Prefecture. Page last reviewed March 15, 2021. Accessed March 19, 2021. <https://www.cdc.gov/vhf/ebola/outbreaks/guinea/2021-february.html>

3. International Organization for Migration. Flash Appeal: Ebola - Guinea, February - July 2021. Published March 4, 2021. <https://reliefweb.int/report/guinea/om-flash-appeal-ebola-guinea-february-july-2021-published-4-march-2021>

4. World Health Organization. UNICEF, WHO, IFRC and MSF announce the establishment of a global Ebola vaccine stockpile. Updated January 12, 2021. Accessed March 20, 2021. <https://www.who.int/news/item/12-01-2021-unicef-who-ifrc-and-msf-announce-the-establishment-of-a-global-ebola-vaccine-stockpile>

5. Kupferschmidt K. Science AAAS. New Ebola outbreak likely sparked by a person infected 5 years ago. Published online March 12, 2021. doi:10.1126/science.abi4876

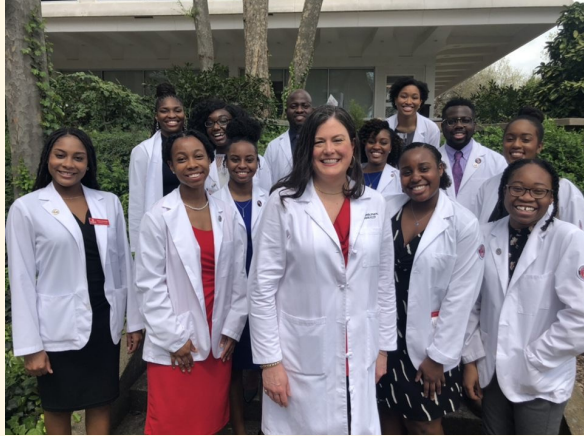
# SUMMER SEND OFF!

Written by: Kyra Leonard

After a challenging academic year of mainly virtual classes, we did it! We finally reached the end of the school year. For most of us, this year has been especially challenging due to the restrictions imposed on the College of Pharmacy due to the pandemic. While our safety was the first priority, we have all been drained by ZOOM fatigue and suffer from feelings of isolation as we haven't been able to socialize with our peers.

This year's P1 class had to have a delayed white coat ceremony with no family attendees allowed in person, and likewise, the P3 class had to forgo guests at their pinning ceremony. However, it's important to focus on the larger picture of such a somber situation.

Even with the implications COVID-19 placed on student organizations here at the COP, we were still able to put on representative programming and inclusive social events all thanks to our amazing members. As a new, minority organization it means a lot to us that we've received so much support from faculty and the student body. Throughout all of the barriers that we might have faced academically, we made it through. The BSPO Executive Board wishes everyone the best of luck on their respective rotations. Have a safe summer and see you this fall!



## TIPS FOR A COVID SAFE SUMMER

- Get vaccinated!
- Continue to wear your mask!
- Practice good hand hygiene
- Maintain social distancing
- Limit unnecessary travel
- Avoid crowds and poorly ventilated spaces

## INSPIRATIONAL QUOTE

**"It always seems impossible, until it is done."**

**- Nelson Mandela**



**Scan the QR code to enjoy a  
Summer Jams playlist created by  
our Treasurer, Stanley Otiwu!**

# LOCAL MINORITY OWNED BUSINESSES

## Restaurants

**Punta Cana Latin Grill**

367 Prince Ave Ste 1, Athens, GA 30601  
Phone: (706) 850-8960

**Dawg on Good BBQ**

224 W Hancock Ave, Athens, GA 30601  
Phone: (706) 613-9799

**Weaver D's**

1016 E Broad St, Athens, GA 30601  
Phone: (706) 353-7797

**Food for the Soul**

1965 W Broad St, Athens, GA 30606  
Phone: (706) 546-0052

**Cool World Ice Cream**

1040 Gaines School Rd #218, Athens, GA 30605  
Phone: (706) 850-8306

## Hair Care

**Studio 74**

145 Epps Bridge Rd, Athens, GA 30606  
Phone: (706) 543-9144

**Jet's Cuts**

400 Hawthorne Ave, Athens, GA 30606  
Phone: (706) 850-3379

## Businesses

**Eric's Tailor Shop**

630 Hawthorne Ave, Athens, GA 30606  
Phone: (706) 247-6446

**Barbara's Alterations**

100 Northcrest Dr, Athens, GA 30601  
Phone: (706) 548-2440

**McRae Family Dental**

995 Baxter St, Athens, GA 30606  
Phone: (706) 480-9410