

OCTOBER

2019

# SYNAPSE

ARIZONA HOSA

POSITIVE HEALTH  
PRACTICES

STRENGTH, UNITY,  
AND PASSION

PARLIAMENTARY  
PROCEDURE

# 15 OPPORTUNITIES TO GET INVOLVED IN ARIZONA HOSA

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1. RUN FOR LOCAL/STATE OFFICE.
  2. HOST A NATIONAL PEDIATRIC CANCER FUNDRAISER (NPCF).
  3. RAISE AWARENESS FOR ORGAN DONATION THROUGH DONATE LIFE AZ.
  4. LEARN LEADERSHIP SKILLS AT THE VARIOUS CONFERENCES THIS YEAR.
  5. ATTEND EDUCATION SYMPOSIUMS AT FALL LEADERSHIP CONFERENCE.
  6. PRACTICE SKILLS AND TEST YOUR KNOWLEDGE IN COMPETITIVE EVENTS.
  7. APPLY FOR THE INDIVIDUAL MEMBERSHIP AWARDS.
  8. HAVE YOUR CHAPTER APPLY FOR A CHAPTER AWARD.
  9. TRAVEL TO THE INTERNATIONAL LEADERSHIP CONFERENCE IN HOUSTON, TX.
  10. MEET MEMBERS FROM ALL AROUND THE WORLD.
  11. APPLY FOR INTERNSHIPS AT NPCF.
  12. RUN FOR EXECUTIVE COUNCIL.
  13. DEVELOP CLOSE RELATIONSHIPS WITH MEMBERS FROM YOUR CHAPTER.
  14. TAKE PART IN STOP THE BLEED TRAINING.
  15. APPLY FOR SCHOLARSHIPS THROUGH TALLO.
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# COMMUNICATION

The best leaders are great communicators. Without communication, nothing can be accomplished, making it difficult to lead. One of the most important aspects of communication is knowing how the people you work with like to communicate. Some people prefer to have difficult news or criticisms to be sugar coated or in a more kind matter while others would prefer to get straight to the point. Neither side is better than the other, they are just different forms of communicating.

When asking people how they communicate and how they would like you to communicate with them, you can use a 1 to 5 system with a kinder tone rated as a 1 and the blunt way a 5. One way to improve communication is to have the people you work with rate how they want to receive critique and how they plan to give critiques. This allows everyone to be able to communicate freely without the worry of offending someone. Using this technique both increases the use of healthy communication and provides an environment for everyone to succeed. We challenge you to apply this within your chapters and get ready for healthy communication!

AGUA FRIA HOSA MEMBER SHINES

# Nadia Kostic

Over the course of this year, we want to emphasize that, as members, you are the most important part of HOSA. After all, HOSA is a “student-led organization” for a reason. This month, we are highlighting one member who has gone above and beyond to represent her chapter and HOSA. Nadia Kostic, a member of the Agua Fria High School HOSA Chapter, earned the honor of serving as the social media marketing leader at the Ketogenic Conference cohosted by the Phoenix Children’s Hospital and Barrow Neurological Institute. Nadia and her chapter worked for this opportunity by volunteering at tabling events, assisting in Q&As, and networking with medical professionals during this last year.



If you see Nadia at any of our upcoming conferences, please congratulate her for this honor.

Once again, we'd like to congratulate Nadia for her hard work and look forward to seeing the social media posts from the conference!



# WHAT HAVE YOU GAINED AS A STATE OFFICER?

## Alaya Alshemari (Historian/ Reporter)

Becoming an Arizona state officer has allowed me to get out of my comfort zone and connect with members. I have also created strong relationships with the officer team by spending quality time with them and developing my leadership skills.

## BriyaMarie Contreras (Postsecondary/Collegiate Vice President)

I have been fortunate to gain great networking skills as a state officer. Traveling to different conferences and meeting other passionate students has been a highlight of my term. The fact that my leadership skills have improved is the direct result of being a state officer.

## Geethika Ameneni (Region 3 VP)

As a state officer, I have had the opportunity to connect with other members interested in the same career paths as I am and who have similar goals! This has helped me to create a network that I can use moving forward!

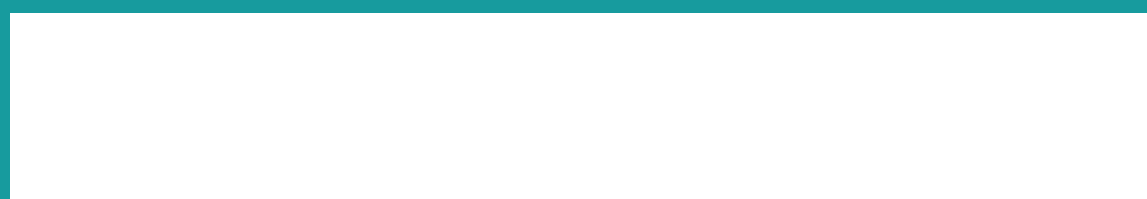




• ARIZONA HOSA •

# DOES YOUR ADVISOR SHINE?

LET THE REST OF ARIZONA HOSA KNOW BY EMAILING ONE OF  
THE STATE OFFICERS! YOUR ADVISOR MAY SHOW UP IN OUR  
SYNAPSE!



*End the stigma. Reach out.*



**DON'T  
LET YOUR  
MIND TRICK  
YOU INTO  
THINKING  
YOU'RE  
ALONE**

October 10 is Mental Health Day

# Mental Health 101

We all know that school, life, and our other obligations can be overwhelming. Sometimes we just need a break from our everyday routine to take a mental health day. With October 10 being Mental Health Day, here are some tips to help you maintain positive mental health.



## **DON'T look at the whole staircase. Take it one step at a time.**

When you look at everything you have to do, it can be overwhelming. By focusing on one task at a time you'll be able to do things more effectively and with less stress.



## **Make time for self-care.**

When you're busy, it can be easy to forget about ourselves and push self-care off until later. By taking time to do a face mask, go out with friends, or eat your favorite snack, you'll be able to give yourself a self-esteem boost and help your mind stay healthy.



## **Feeling down? Pick up a pen.**

When you feel upset, writing down your feelings and putting them on paper can help you feel better and can help relieve feelings of depression. Pick up a pen next time you're down!



## **Become an explorer for a day!**

The monotony of doing the same thing can be tiresome which can lead to feelings of distress. Break out of your routine by taking time to explore nature or do something new will help put your mind at ease and help you relax.



## **Smile!**

When you aren't at your best, smiling can become a chore. By making yourself smile, it's much harder to feel upset. In fact, smiling releases endorphins into your body that help to make us feel happy! By smiling, you actually help yourself feel better!

***Fun Fact: Smiling is contagious!  
Infect others with smiles.***



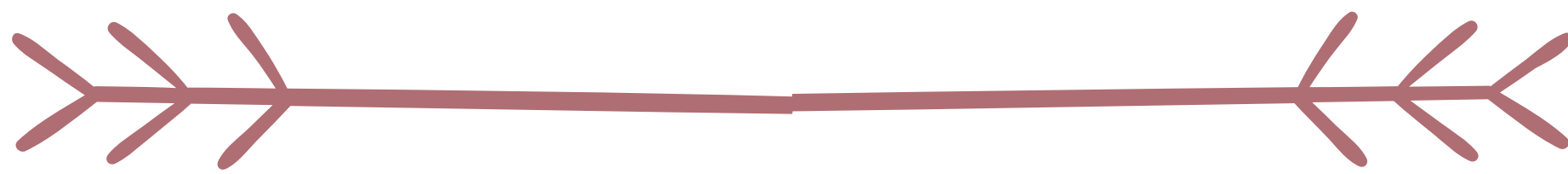
# PARLIAMENTARY PROCEDURE



## **SUP Arizona HOSA!**

Welcome back to this month's session of parliamentary procedure! I hope by now your chapter is up and running with elected officers who are excited for the year ahead! In our last parli-pro session, we defined what parliamentary procedure is and introduced key terms to help better understand how these procedures work. In this session, we are going to dive deeper into what happens at a meeting.

To recap, the president or chair is the elected officer who enforces the rules and decides the order of discussion at any given point during the meeting. Alongside the president or chair, there is an elected secretary to ensure the meeting is properly recorded.



The first meeting will most likely have the highest attendance as potential members come to see if HOSA is something they want to pursue. As you move forward, fewer and fewer people might attend meetings until your membership levels out. Making sure you have enough members is critical when it comes to taking votes and making decisions for your chapter. This ensures that it's not a small sub-section of the chapter making all the decisions. In order to prevent this, a quorum has to be set in place. A **quorum** is defined as a set number of members that must be present in order to conduct a meeting and vote on business.

In a situation where there are too few members present, those present might not represent the values of the majority. Since there isn't a quorum, official business cannot be conducted and the values of the majority are protected.

When you have a quorum present, the president or chair can call the meeting to order and business can proceed. This usually begins with the president or chair calling the meeting to order.

There is a sequence the meeting follows that is outlined to the right. We'll go in depth with the order of business and what to include at your chapter meetings.



1. READING & APPROVAL OF MINUTES
2. REPORTS
3. UNFINISHED BUSINESS
4. NEW BUSINESS

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### **Reading and Approval of Minutes:**

At the beginning of each meeting, the secretary will read the minutes from the last meeting. After the minutes have been read, the chair or president allows for the members to make corrections to the minutes. This is useful in cases where an item may have been missed from the last meeting. If there is no objection, the correction can be accepted without debate. It is important to note that minutes are not official until they are approved by the voting body.

### **Reports:**

Reports are presented by members, officers, and committees providing information about specific business discussed at prior meetings or new business for the members. Reports can be recommendations for different actions that can be debated and voted on. Common reports may include the treasurer's report for an update on finances or a committee report.

### **Unfinished business:**

After reports are discussed, the next item is unfinished business. These are any items carried over from the previous meeting. Unfinished business generally falls into two categories - items that were considered before the meeting was adjourned or items that weren't addressed because of the adjournment of the meeting..

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### **New Business:**

If there is any new business, the president or chair will hear it last in the order of business. This is when any member can bring up new items that might need a vote or which will be carried over into the next meeting.



**UNTIL NEXT TIME !**

# Health Advancement



**THE DISCOVERY OF A NEW PLANT  
ENZYME COULD MAKE PHARMA  
MANUFACTURING MORE EFFICIENT**

**OCTOBER 2019 | NO. 3  
HEALTH ADVANCEMENT**



When pharmaceuticals are manufactured, the molecular structure of the compound is extremely important. This is because compounds that are mirror images of each other, known as isomers, may actually work differently even though they have identical chemical formulas. This is a critical difference because, as you may have heard countless times in your biology class, “form determines function,” and a new enzyme discovered in plants may help create more effective drugs and a more efficient drug manufacturing process.

Louis Pasteur was the first person to discover chiral compounds when he separated isomers of sodium ammonium tartrate in the mid nineteenth century (Nguyen, 2006). Chiral translates to hand, which makes sense since a hand held in front of a mirror creates an inverted image. Isomers are normally characterized by cis and trans as a way of describing the location of certain components of the compounds. Trans describes components that are on opposite sides of each other, while cis describes components on the same side. These small differences in location are critical since “chiral drugs exhibit marked differences in biological activities” (Nguyen, 2006). The following image is an example of chiral molecules.

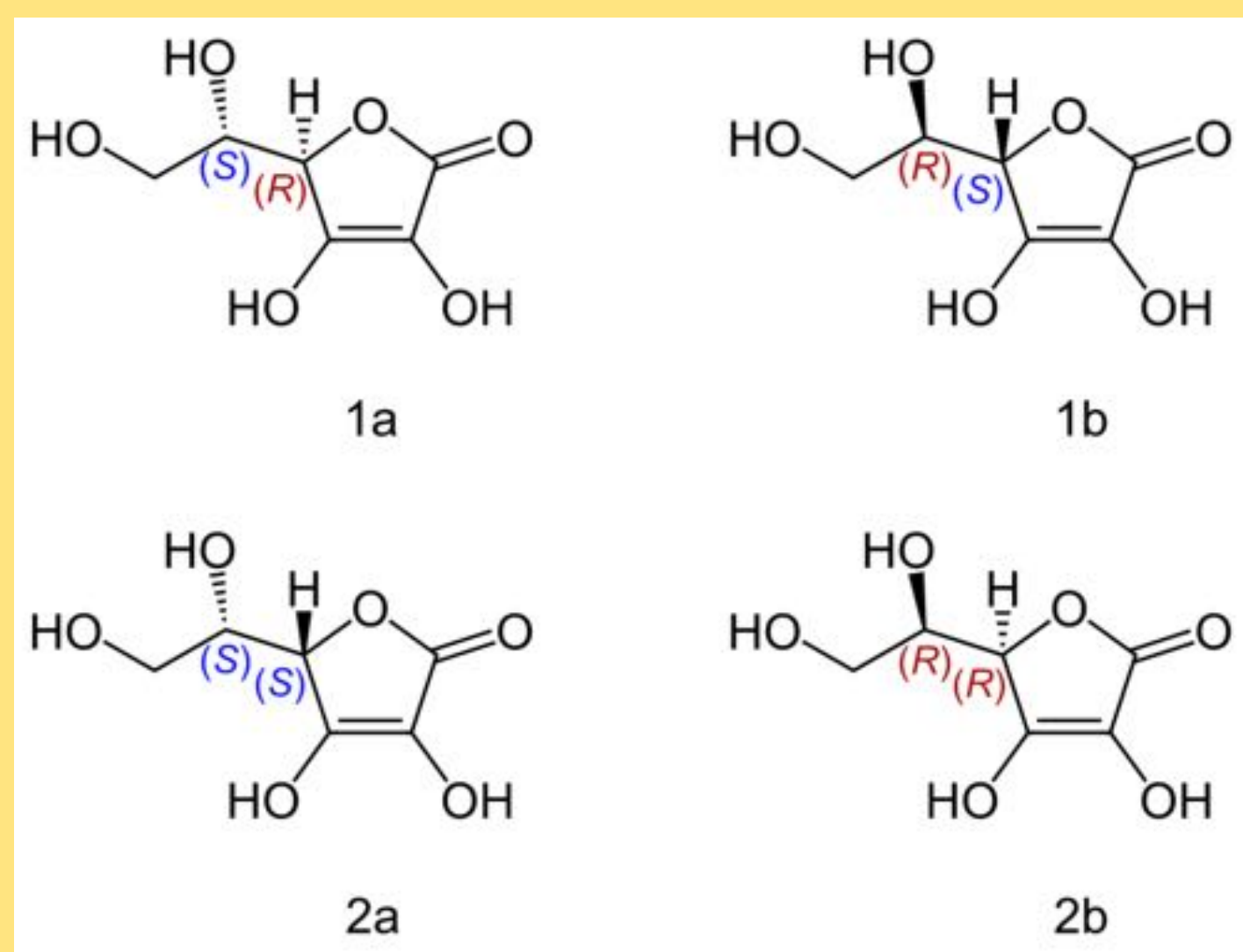


Figure 1. Yikrazuul. (2012, February, 19). Ascorbic acid isomers. [Digital Image].

Researchers at the Salk Institute studied plants and their ability to synthesize compounds that have a variety of important biological functions. After many years, they found an interesting enzyme with big potential called chalcone isomerase. Aside from the typical abilities of an enzyme, this isomerase ensures that the compounds are made in the right form, eliminating chiral errors.

Dr. Joseph Noel, a professor and director of Salk’s Jack H. Skirball Center for Chemical Biology and Proteomics noted that studying this enzyme further can allow pharmaceutical manufacturers to “learn more about how to accelerate the manufacture of the correct isomers of pharmaceuticals and other products that may be important to human health” (Salk Institute, 2019).



While doing molecular analysis of chalcone isomerase, arginine, an amino acid, was found to play a critical role in the enzyme's metabolic process. Jason Burke, a former researcher at the lab, said that chalcone isomerase would not work the same without arginine. He specifically noted that this type of enzyme is very attractive to chemists since “this is an example of nature already solving a problem that chemists have been looking at for a long time” (Salk Institute, 2019).

The implications of this discovery go far beyond pharmaceuticals since this knowledge can help create better crops. Since “56% of the drugs” today “are chiral products” (Nguyen, 2006) this could help improve the drug making process for a majority of medications and possibly lower prices.



Can you think of any other benefits of this research? Let us know with the hashtag SUPAzHOSA! Does pharmacology, biomanufacturing, research, chemistry, botany, or agriculture interest you? If so, read more about this using the links in the works cited.

### Works Cited

Salk Institute. (2019, September 6). Key enzyme found in plants could guide development of medicines and other products. Retrieved from <https://phys.org/news/2019-09-key-enzyme-medicines-products.html>

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OCTOBER  
MEMBER  
CRUSH  
MONTHLY

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**REX DYER**

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Rex Dyer has always been fascinated by all facets of science. This led him to place 3rd in the National Geographic Physics exam at ILC this past summer. He also holds a student researcher position in the Center for Bright-Beams lab at Arizona State University. *Rex is our member crush for October because of his dedication to HOSA and to becoming a future health professional!*

# SEE YOU NEXT TIME!



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