

AUGUST

2019

SYNAPSE

ARIZONA HOSA

UPCOMING
EVENTS

STATE OFFICER
Q & A

HEALTH
ADVANCEMENTS

MEET YOUR 2019-2020 STATE OFFICER TEAM



Emily Hakes
President



Mac McGraw
Region 1 Vice President



Geethika Ameneni
Region 3 Vice President



Alexandro Lopez
Region 4 Vice President

MEET YOUR 2019-2020 STATE OFFICER TEAM



BriyaMarie Contreras
Post-Secondary/Collegiate
Vice President



Elizabeth Lopez
Secretary



Alaya Alshemari
Historian Reporter



Fatma Khalaf
Parliamentarian

UPCOMING
EVENTS



Chapter Leadership Camp

Registration for Chapter Leadership Camp opens: **August 5th, 2019!** Come join us for a weekend of networking, learning, and growth all at **Camp Pine Summit in Prescott, AZ.** Camp is a great place to unplug, connect with others, and of course, strengthen your leadership skills. Join us at camp **October 3rd - 5th** and get in on the excitement. Click **here** for more details about this exciting event! See you there!





Collaborate

Achieve

Motivate

Positivity



CHAPTER ADVISOR SPOTLIGHT

"THE INFLUENCE OF TEACHERS EXTENDS BEYOND THE CLASSROOM, WELL INTO THE FUTURE."

- F. SIONIL JOSE



NOMINATE YOUR ADVISOR!



The endless support from our advisors is one reason that HOSA members are able to achieve their goals. Arizona HOSA would like to honor our advisors each month for their devotion to HOSA and, most importantly, their students. If you would like your advisor to be featured in a future edition's spotlight, nominate them by filling out the form below!

<https://azhosa.wufoo.com/forms/z1axl9h30xfmfxn/>

LEADERSHIP LOWDOWN

#azhozaleads

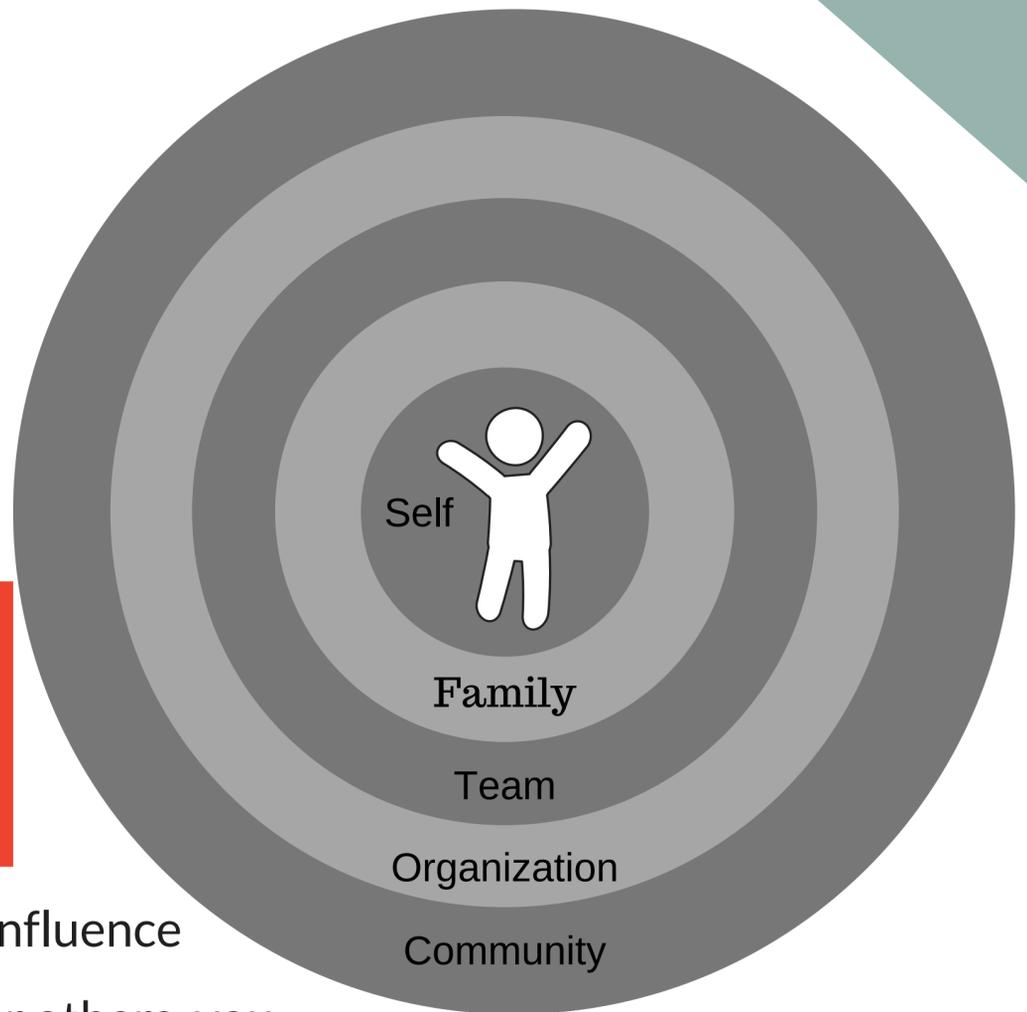
LEAD YOURSELF

Before You Lead Others

"Before you are a leader, success is all about growing yourself. When you become a leader, success is all about growing others" -Jack Welsh

The Five Circles of Influence are who you can affect just by being you. Leadership is all about influence! As leaders we want to have a positive impact on our family, teams, organizations, and the community, but it all starts with you.

How can you be a great leader to others if you can't lead yourself? The answer is that you can't.



The first ring in the Circle of Interpersonal Influence is *yourself!* To have a powerful influence over others, you have to be able to have influence and lead yourself. The next ring in the circle is *family*. Your family has a huge impact on you and can affect your leadership when you have family conflicts. But remember, you also have a leadership influence over your family. Use this to lead within your family and create positive change. The next ring is your *team*. This can be your officer team, your friends, your sports team, etc. Your team dynamic affects the ability of your influence to be used efficiently. Everyone on the team has to feel heard and believe they are a necessary part of the team. For most people, the *family* and *team* rings are very closely related and it is important to resolve conflicts quickly in these areas. With the three innermost rings free from conflict, you can become an incredible leader in your *organization* and *community*. Don't forget that interpersonal influence in leadership all starts with changing who you want to be and leading yourself there.

After all, changed people, change people.

#azhozaleads



**MONTHLY Q&A
BROUGHT TO YOU BY
THE OFFICERS!**

Do you have any questions you want to ask the state officers? While you have the opportunity to ask questions and communicate with the state officers at chapter visits and conferences, you might have questions at other times too.

Don't worry though! In this year's Synapse, we will be answering your questions! All you have to do is submit your questions through the form below!

When you submit your question, the officer team will respond through this new Q&A section! Be sure to check the monthly Synapses throughout the year to see the answers to your questions!

<https://azhosa.wufoo.com/forms/z1htyakv07wwl61/>

RESTORING BALANCE WITH GENE THERAPY

*Stanford University Fixed
Vestibular Deficiencies in Mice*

THE CENTRAL DOGMA OF MOLECULAR BIOLOGY DICTATES THAT PROTEINS ARE MADE FROM THE INSTRUCTIONS FOUND IN GENETIC MATERIAL. RESEARCHERS AT STANFORD USED THIS PRINCIPLE TO REGROW SPECIFIC HAIR CELLS IN MICE BY FIXING THE ISSUE AT THE SOURCE.

The Science

Many people recognize that some individuals are more prone to dizziness than others, but the reason why may come as a surprise. Within the inner ear, a region known as the utricle, houses a series of hairs that hold a variety of responsibilities. They are associated with eye movement and the vestibular sense. This vestibular sense gives people balance, but a deficiency of these hairs can lower this sense and, consequently balance, causing dizziness. With age, this increased dizziness is especially dangerous since a fall can cause sometimes fatal complications.



These tiny yet important hair cells normally deplete with age, but some individuals are more susceptible to hair loss due to genetic conditions or use of antibiotics. In the United States alone, 69 million individuals suffer from impaired vestibular sense (Erikson, 2019). Many researchers are working on solutions. Stanford University has made the most recent attempt.

The Atoh1 transcription factor is on the 4th chromosome, and it helps produce a gene that assists in the differentiation of neural cells. This gene normally is required to generate the hair cells. Using gene therapy, Dr. Alan Cheng and his team intentionally overexpressed Atoh1 in mice deficient in utricle hair cells. The therapy worked and the researchers found that 70% of hair cells regenerated in mice exposed to the treatment (Erikson, 2019).



Impact

This success is extremely important and promising for people suffering with this condition since there are currently no treatment options other than therapy. Coping mechanisms can only go so far and a physical solution with observable changes is exciting and promising. Hopefully, the treatment works just as well or better in humans.

hope

Dr. Cheng is not alone. In 2015, researchers at Columbia University also used gene therapy in order to regenerate hair cells in order to diminish hearing loss in humans. Other universities and hospitals are continuing their research to regenerate these cells for a variety of solutions to problems similar to this one.



Opportunity

Gene therapy is an increasingly popular field of study for researchers and advancements such as CRISPR make this scientific fantasy a reality. People can now get personalized and effective treatments for a variety of issues using pharmacogenetics and other knowledge from a variety of genetic disciplines.

If this field excites you, consider it as a career! Genetic counselors, researchers, pharmacists, and physicians are just a few examples of professions that already or will require a strong basis of genetics.

Citations

ATOH1 atonal bHLH transcription factor 1 [Homo sapiens (human)] - Gene - NCBI.

Retrieved July 15, 2019, from <https://www.ncbi.nlm.nih.gov/gene/474>

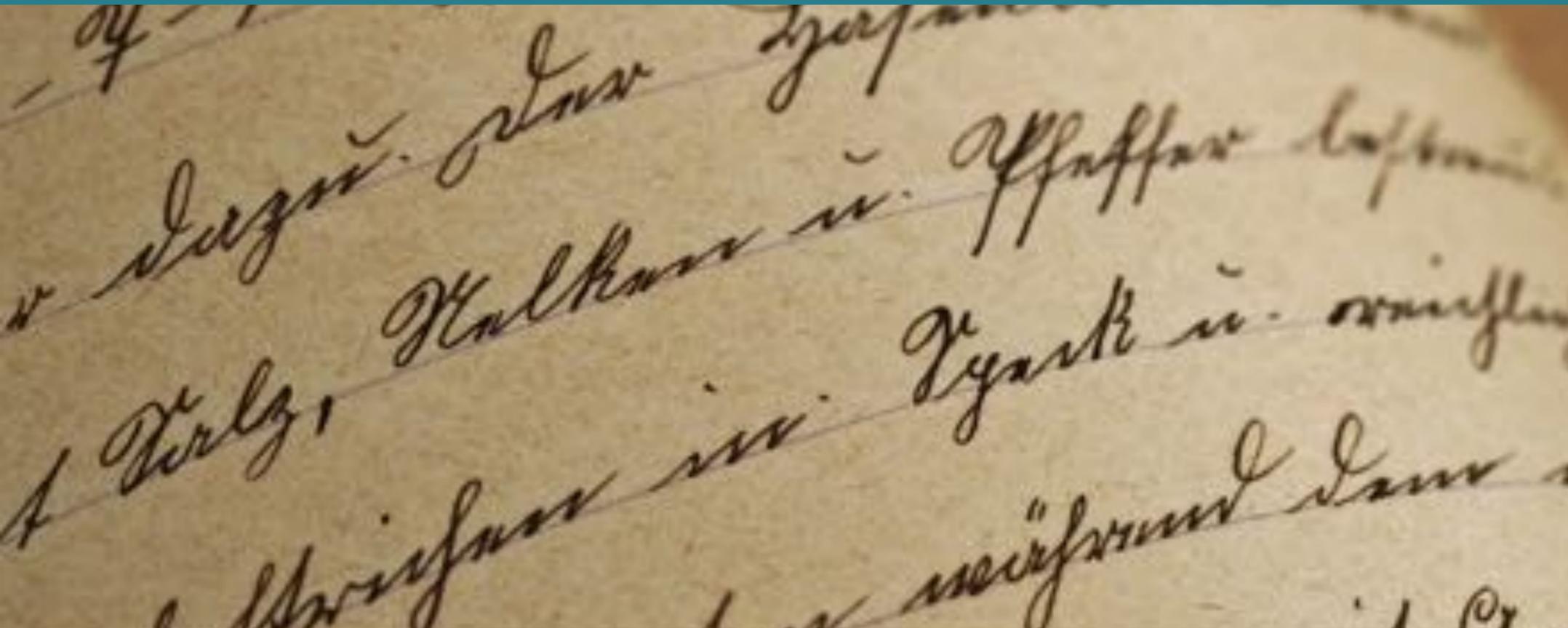
ATOH1 Gene. Retrieved July 15, 2019, from <https://www.genecards.org/cgi-bin/carddisp.pl?gene=ATOH1>

Erickson, M. (2019, July 9). Discovery in mice points to potential treatment for vestibular disorders. Retrieved July 15, 2019, from <http://med.stanford.edu/news/all-news/2019/07/discovery-in-mice-points-to-potential-treatment-for-vestibular.html>

Protein atonal homolog 1. (2019, May 08). Retrieved July 15, 2019, from <https://www.uniprot.org/uniprot/Q92858>

World's First Gene Therapy Trial for Hearing Loss. (2015, December 07). Retrieved July 15, 2019, from <http://www.entcolumbia.org/world-s-first-gene-therapy-trial-hearing-loss>

PARLIAMENTARY PROCEDURE



SUP ARIZONA HOSA !

I hope you are having a great summer and are excited for school to start again in August. My name is Fatma Khalaf and I am excited to serve as the Arizona HOSA Parliamentarian this year. Just like last year, the Synapse will continue to have articles discussing the basics of Parli Pro to help members and HOSA chapters understand the basic procedures of running a meeting. With that said, let's begin!



To understand the concept of parliamentary procedure, it helps to understand what the "parliamentary procedure" is. Parliamentary procedure is defined as the set of rules and traditions that are used to govern meetings and other operations such as clubs. Think of it as the rules that make sure everything runs smoothly during meetings.

Not everyone realizes that when you elect officers or board members for any organization, such as your local HOSA chapter, these elected members are similar to legislative assemblies in a way. They meet to decide on actions that need to be taken. This meeting of members is known as **deliberative assembly**.

When you elect a group of people to represent your local HOSA chapter, one of the people elected is the presiding officer, also known as the chairman or president. This officer is responsible for presiding over meetings and leading discussion with the aid of the Parliamentarian. Although the presence of a parliamentarian isn't required to use parliamentary procedure it helps as the president or chairman is responsible for running the meeting with the aid of Robert's Rules of Order.

Robert's Rules of Order Newly Revised (RONR) is a common tool used to run meetings. There is also Robert's Rules of Order In Brief (RRIB), which is a shorter version of Robert's Rules that can be used in meetings since it is easier to understand and use.

Parliamentary procedure is valuable as it provides solutions to some of the common complaints about meetings and helps meetings run smoothly. It outlines rules for the group which can help them to come to decisions efficiently.

That concludes this month's edition of parliamentary procedure. Hopefully this helped you understand what parliamentary procedure is and how it can be beneficial. In the next session, we will talk about parliamentary procedure skills for you to utilize in your chapter meetings!



UNTIL NEXT TIME!

Arizona HOSA

MEMBER CRUSH MONTHLY

What on earth is a "Member Crush"? Well, we know that our members are doing great work, so we wanted to take the chance to recognize our members for their hard work and service to HOSA and the community in the monthly synapse.

Do you know a HOSA member who deserves to be recognized?

FOLLOW THESE THREE EASY STEPS TO RECOGNIZE A MEMBER YOU KNOW!

1. Nominate someone you know or perhaps yourself self, by filling out this form <https://azhosa.wufoo.com/forms/z36qyho1bv74k4/> Be sure to answer all of the required questions and submit a photo.
2. Check Instagram on the first Monday of each month to see if the member you nominated made it on the Arizona HOSA page. If not, check out future issues of the Synapse!
3. Spread awareness about MCM by sharing the nominee's HOSA story! #supazhosa

Medical

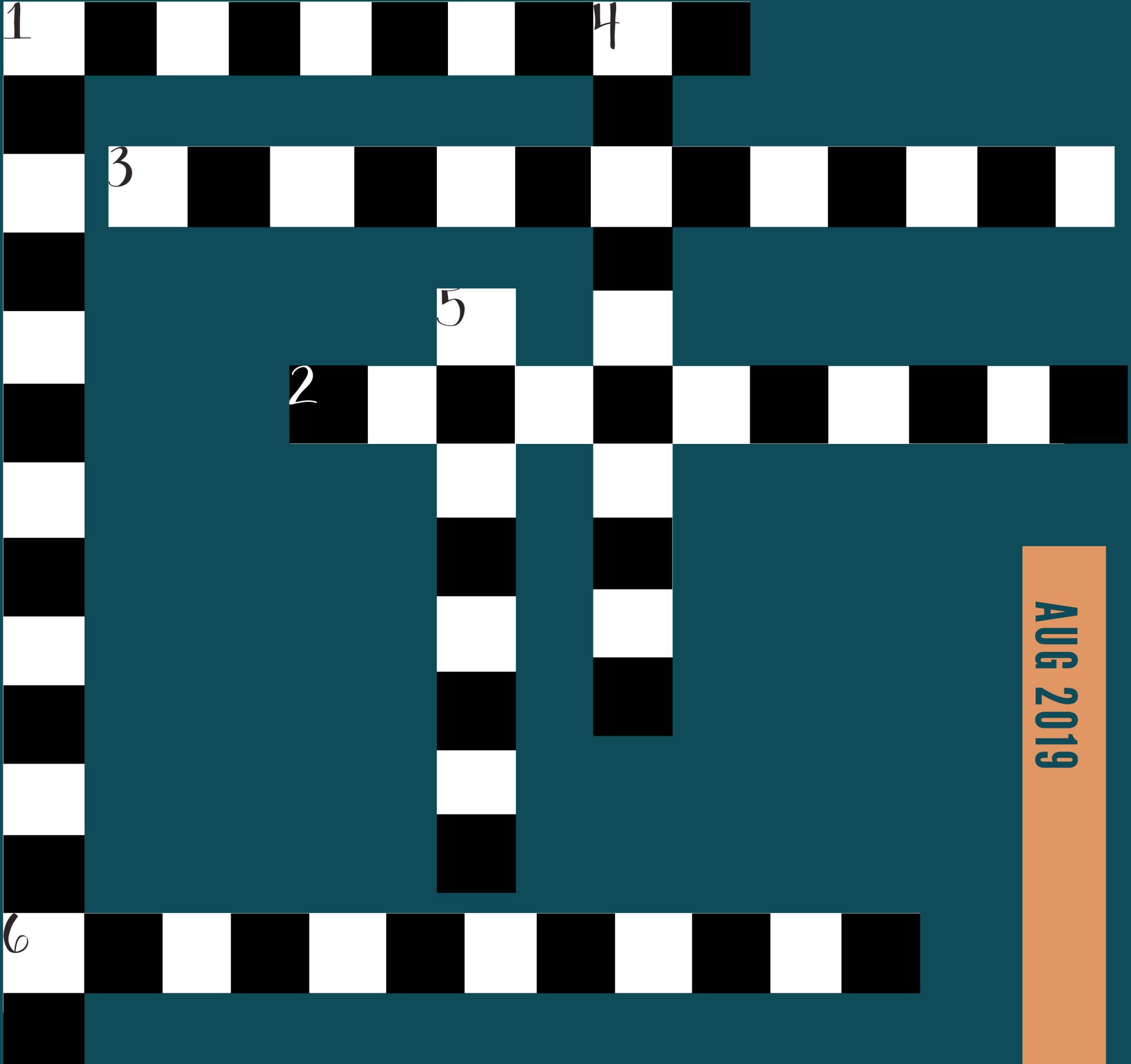


Crossword

AUG 2019

CROSSWORD PUZZLE

HEART CONDITIONS/DISEASES



AUG 2019

ACROSS

1. An abnormality in the heart that develops before birth. One of the most common types of birth defects.
2. A blockage of blood flow to the heart muscle.
3. Damage or disease in the heart's major blood vessels. Usually caused by plaque buildup. (The second word is missing the last letter.)
6. A chronic condition in which the heart doesn't pump blood as well as it should. Can affect blood pressure if the heart cannot pump (systolic pressure) or fill (diastolic pressure) adequately.

DOWN

1. An acquired or hereditary disease of heart muscle, this condition makes it hard for the heart to deliver blood to the body, and can lead to heart failure.
4. Improper beating of the heart, whether irregular, too fast, or too slow.
5. Conditions that include diseased vessels, structural problems, and blood clots. Think general rather than specific.

AUG 2019

Hint: The words disease and heart were omitted for some answers.

See You Next Time!



#SUPAZHOSA

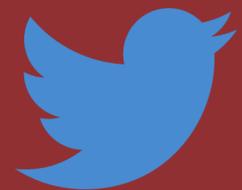
— GET CONNECTED —



@azhosa



@Arizona HOSA



@ArizonaHOSA

SUBSCRIBE TO THE
SYNAPSE AT AZHOSA.ORG