

JANUARY

2020

SYNAPSE

ARIZONA HOSA

COMPETITION SEASON

Regional Conferences,
Studying Tips and More

HEALTH ADVANCEMENTS

Relevance, Research, and
Impact

LEADERSHIP LOWDOWN

Using Leadership
Language

COMPETITION SEASON !



SUP ARIZONA HOSA !

Competition season is approaching very quickly! We know that you have been studying hard for the SLC and Regional online tests. In this article, we will cover what you can expect at the regional conferences, tips on how to prepare for competition, and much more!

WHAT ARE REGIONAL CONFERENCES?

Similar to online testing, regional conferences are held to help determine which HOSA members will compete at the State Leadership Conference. Regionals are day long conferences filled with competitions, leadership activities, and opportunities to showcase HOSA skills!



HOW MANY REGIONAL CONFERENCES ARE THERE? WHEN ARE THEY?

Arizona HOSA will be hosting four regional conferences. The conference you attend is based on the region your school belongs to. To learn more about what region you will be competing in and to learn more about the regional conferences, you can visit www.azhosa.org/regional-conferences and click on the "Regional Conference Competition Information Sheet" which includes the region assignments.

Below are the dates and locations for each of the regional conferences!

Region One

Date: Friday, February 7, 2020

Location: Heritage Middle School, 1076 N. Rd. 1 W., Chino Valley, AZ 86323

Region Two

Date: Monday, February 3, 2020

Location: West-MEC NE, 1617 W. Williams Dr., Phoenix, AZ, 85027

Region Three

Date: Thursday, February 13, 2020

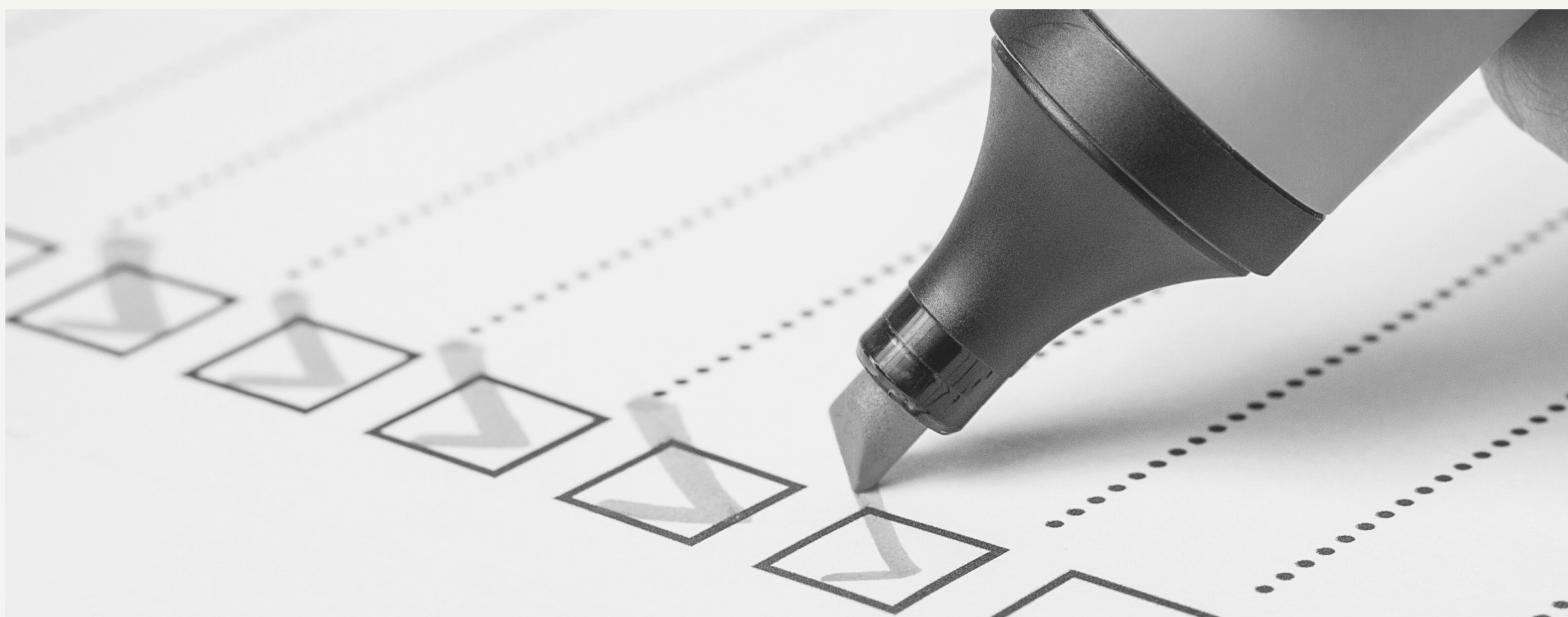
Location: East Valley Institute of Technology, 1601 W. Main St., Mesa, AZ 85201

Region Four

Date: Friday, February 14, 2020

Location: Pima Medical Institute Tucson Campus, 2121 N. Craycroft Rd., Building 1 Tucson, AZ 85712





TIPS ON HOW TO PREPARE FOR COMPETITIONS

Whether this is your first or fourth time, preparing for competition can be stressful. Managing stress so that you can study in the most effective way can help make sure you do your best during the regional and state conferences. Here are some important tips!

- Read the event guidelines! Understanding the rules of your competition and what to expect is the best way that you can prepare. Event guidelines can be found at both azhosa.org and at hosa.org under competitions.
- Take advantage of all available resources! Your guidelines outline all the necessary resources including different websites, books and manuals to ensure that you are able to succeed.
- Bring your "A" Game! Go to bed early the night before your competition and grab a healthy breakfast or snack the morning of your competition. This will increase your energy and focus during your competition.
- Stay organized! Make sure that the materials you need for your competition are organized at least three days before your competition. Be sure to refer back to the list of materials the night before to ensure that you have everything ready to go for the next day.
- Practice, practice, practice! Practicing will help make sure that you feel more confident with the material and that you know what to expect during competition. Review with friends for motivation and to keep each other accountable!
- Finally, know that at the end of the day as long as you try your best, it doesn't matter where you place, as long as you enjoy, have fun and perform your best.

LEADERSHIP LOWDOWN

This month's article is dedicated to the importance of Leadership Language.

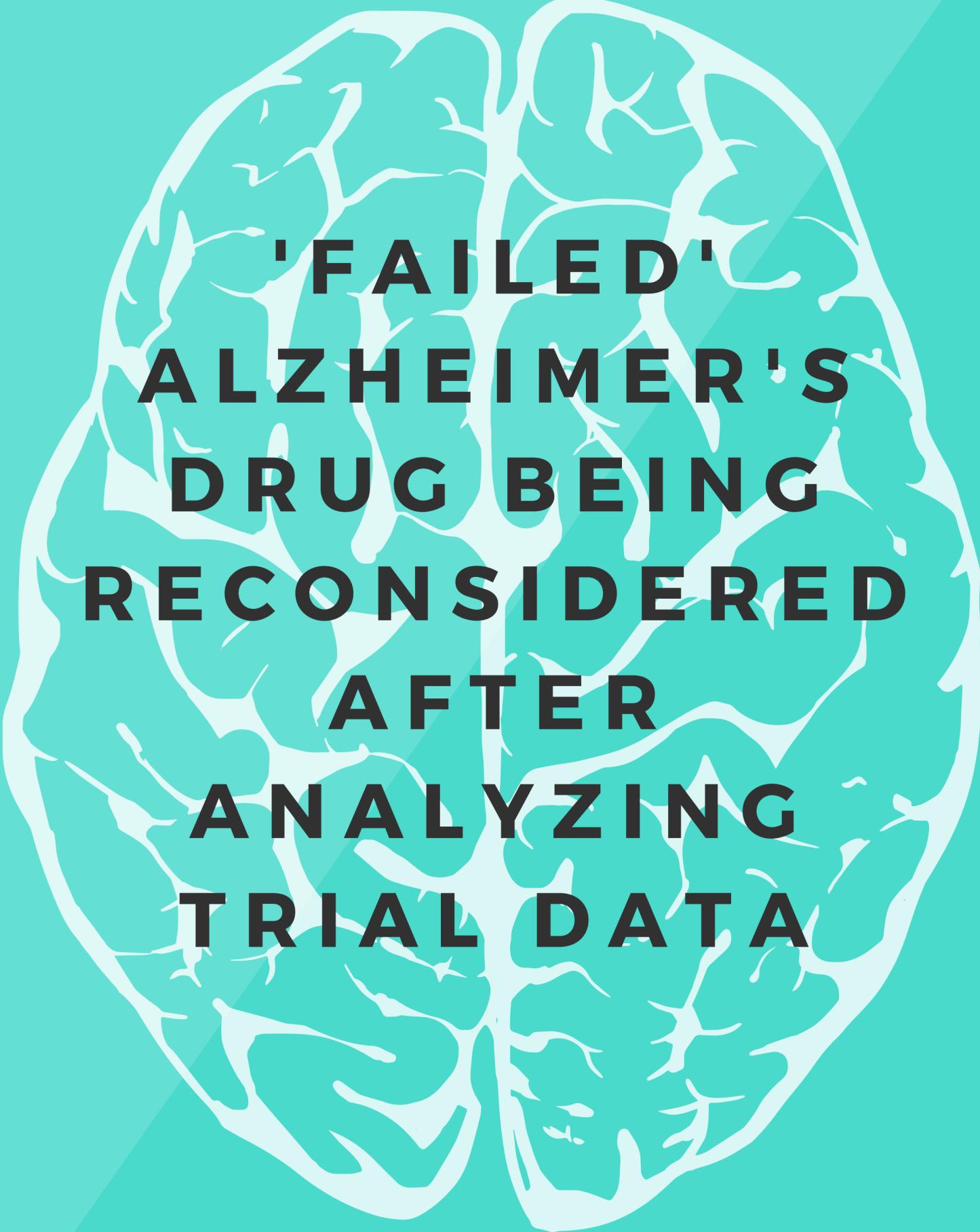
As a leader, your words carry power and influence. The words you choose to use with your peers and those who follow you directly affects how you are perceived as a leader. Language impacts your level of professionalism and slang, curse words, or words of defamation will cause you to gain a negative reputation. In an ever growing world, we as leaders need to be more cautious of our reputation. We need to be leaders that have a positive influence and positive reputation.

A big part of HOSA is networking and creating connections with Future Health Professionals across the state, country, and globe. Creating a positive first impression is important in achieving that goal. This means that clean, powerful, and positive language must be used in all professional settings. Imagine you are an employer interviewing a candidate for a position at your company. What language and leadership etiquette would you look for? Would you want to hear slang or curse words? No, it is unprofessional and not an indicator of a successful employee.

With this in mind, be sure to keep your language
CLEAN, POWERFUL, and POSITIVE!

#azhosaleads

Health Advancements



**'FAILED'
ALZHEIMER'S
DRUG BEING
RECONSIDERED
AFTER
ANALYZING
TRIAL DATA**

**Biogen's Amyloid-Beta Antibody
Drug May Go Back in the Pipeline**

Read about it below!

Alzheimer's Disease

Alzheimer's disease is the most common form of dementia. It is a neurodegenerative condition in which the neurons in someone's brain degrade with time, causing various adverse side effects. During the initial stages, people often forget things and appear confused. Over time, the severity increases as memories fade, talking becomes more difficult, and, eventually, life-sustaining bodily functions stop.

Researchers have been trying to treat these symptoms, slow the progression, and ultimately stop the disease. One company based in Cambridge, Massachusetts named Biogen specifically targets beta-amyloid plaques that form in the brain that are thought to be a major contributor to Alzheimer's. However, inconsistent clinical trial results have caused the pharmaceutical giant to stop research. That all changed last month when Biogen found that "the drug, called aducanumab, did make a difference for patients who took the highest dose for the longest period of time-but only in one of two studies" (Weintraub, 2019).

Aducanumab

Aducanumab is just one of a series of drugs that are trying to use this same pathway to slow the development of Alzheimer's. Eli Lilly, among other companies, have also researched drugs that target the amyloid-beta protein. These drugs are antibodies that "preferentially [bind] to the aggregated A β (amyloid-betas) to theoretically "reduce the number of amyloid plaques present in the brain" (Flavell). This approach tries to limit the negative effect of this protein aggregation since these A β clumps "disrupt communication between brain cells and cause their death" (Flavell).

Biogen's fourth clinical trial gained some attention. In this study of 192 patients with either early-stage or current dementia, it was concluded that "all doses..were seen to significantly reduce amyloid plaques in the brain in a time- and dose-dependent manner" as compared to initial PET imaging. In addition, this plaque reduction was not consistent with the placebo group, indicating that the results were due to pharmaceutical treatment. Aside from the directly-observable data, it was also seen that the drug lowered cognitive decline, as determined by the clinical dementia rating sum of boxes and mini-mental state examination (Flavell).

Phase 3 Clinical Trials

Despite this promising data, Biogen's two Phase 3 clinical trials are the studies that have been driving the current news, and that's not just because of their fancy names. Both the ENGAGE trial and EMERGE trial have the same general setup as the previously mentioned phase one trial.

The major difference is the scale is much larger. These trials were expected to end in 2022, and they "were aimed at assessing the efficacy of aducanumab, given once a month at low and high doses by infusion into the bloodstream" (Flavell). However, these trials were halted when a committee decided that the data from this study was not meeting drug efficacy objectives.



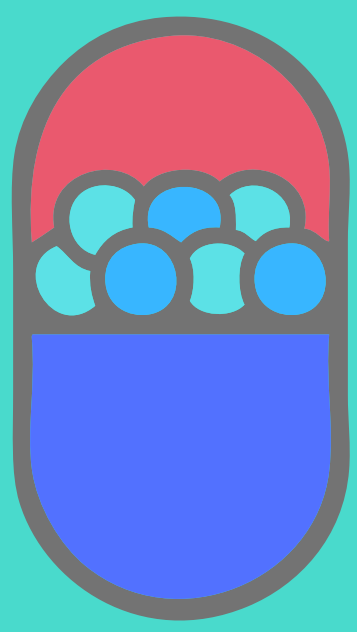
Reinvestigation Controversy



At the conclusion of 2019, this decision is being reconsidered. This is causing a great deal of debate as to why the data should either encourage or discourage further testing. Proponents argue that the drug did seem to help patients in one of the two phase three trials, and more testing could validate this. Sharon Cohen, the current medical director of the Toronto Memory Program, is one proponent who is excited by this relook. She specifically notes that the trial showed that disease progression was 40% slower in patients who took the highest dose of aducanumab when compared to the placebo.

Others are not so optimistic. They argue that other similar drugs have failed in the pipeline. In addition, the amyloid-beta plaque formation causing Alzheimer's is not a law. It is a theory, and the failure of this drug and others that target this same protein may simply suggest that this protein is the wrong target.

Despite these concerns, Biogen made a decision. In their late October news release, Biogen stated that "the phase 3 EMERGE Study met its primary endpoint showing a significant reduction in clinical decline, and Biogen believes that results from a subset of patients in the Phase 3 ENGAGE Study who received sufficient exposure to high dose aducanumab support the findings from EMERGE" (Biogen).



Opposition



This concerns many professionals. One researcher is confused on why Biogen should go off of one study's results and ignore the fact that the other phase 3 trial had no positive results. This same person is also concerned that the double-blind nature of the trial was being compromised since the people taking the high drug doses had the most severe side effects. Consequently, the researchers collecting data on the patients may unconsciously be skewing the data since they were possibly aware of which patients were and were not taking the placebo. As such, this researcher notes that he would not be "convinced to offer this treatment to [his] patients on the basis of tiny benefits and the clear side effects and risk and expense and inconvenience of having the treatment" (Weintraub).

Your Future!

Despite this debate, researchers are still actively looking for new approaches to the ongoing Alzheimer's battle. If research interests you, or if you have a connection to someone with Alzheimer's consider working as a physician, researcher, or pharmacist!

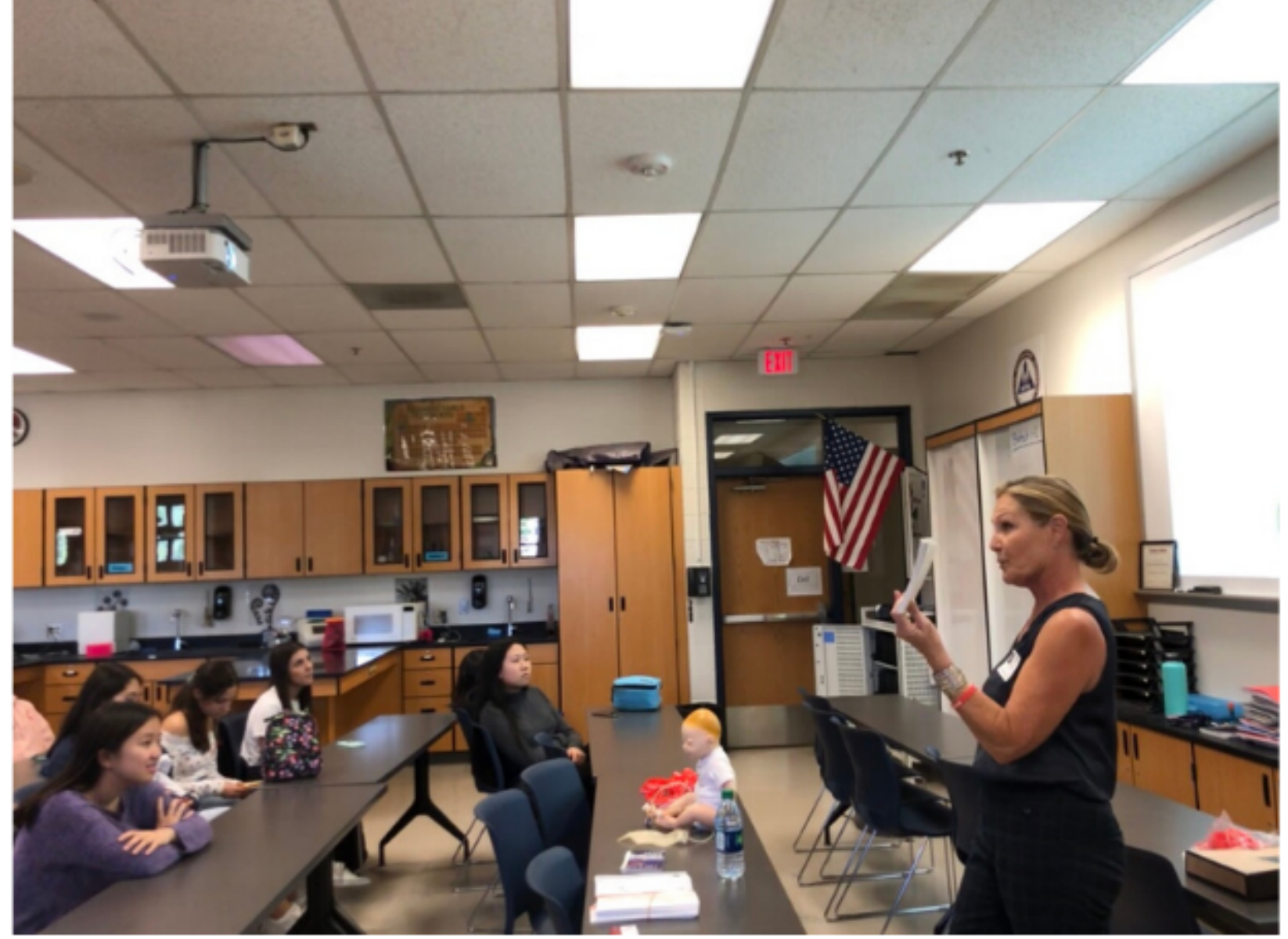
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DESERT VISTA HIGH SCHOOL'S HOSA CHAPTER



LEADING STUDENTS INTO THE FUTURE OF HEALTH

Report by Desert Vista HOSA Officers

HOSA is all about providing fun and interesting opportunities for students to learn from health professionals. Last week, Charis Ober of the Save the Cord Foundation came in to educate our chapter about umbilical cord blood as a vital biomedical resource. In essence, cord blood is rich with fresh stem cells that are changing the industry and changing lives by providing treatment for patients who had previously run out of options. The Save the Cord Foundation collaborates with the Arizona Department of Health as well as the Arizona Biomedical Research Association in order to spearhead research on umbilical cord blood in the Southwest. The reason cord blood is so critical, particularly in Arizona, is because patients with a diverse or blended ethnic background often face extremely low odds of a perfect HLA match from bone marrow transplants. Cord blood allows for some margin of mismatch, allowing indigenous tribes who used to have very few matches to finally get treatment in the form of cord blood transplants. Thank you so much to Charis for coming to our chapter and spreading the word about cord blood!


Mr. Williams has been an amazing adviser for our HOSA chapter. Offering his personal time to help us develop strong interviewing skills, Mr. Williams is always there to help us grow into leaders of the health community. Additionally, he ensures that all of us are always receiving and seeking out opportunities to explore health care by keeping us updated with the most recent information related to HOSA and the field of health.



**HAPPY NEW
YEAR**



**SEIZE
THE
DAY**



**NEVER STOP
BELIEVING IN
WHAT YOU CAN DO**

NEW YEAR: NEW YOU

With the start of a new year, many of us create a new year's resolution list. For some, it's just another list that will be written down on a piece of scratch paper and will be long forgotten within a week. But this year, it **WILL BE DIFFERENT**. While that is something we say to ourselves every year. This time you can use these tips to help you put a check mark next to each and every one of your goals.

1. MAKE IT ATTAINABLE

Making a promise you know you cannot achieve sets you up for failure right from the beginning. When making your resolutions, set attainable goals to track and achieve success in your resolutions!

2. PLAN AHEAD

Really think about what you want on your list. Writing things down just to have something to do will make it difficult for you to get anything done. Therefore, think thoroughly and clearly about your goals.

3. HAVE A PLAN

Iron Man would never go into battle without a plan. Thinking like Iron Man and having a concrete plan in place can help to make sure that your goals become a reality.

4. LIST ALL THE BENEFITS

Staying motivated throughout the year can prove difficult. In fact, motivation is the main reason why most of us never complete our resolutions. Therefore, make a list of reasons why you set the goal in the first place to remind yourself of the benefits you will reap. This will keep you motivated every time you feel like giving up.

5. TALK ABOUT IT

One of the best ways to make sure you keep up with your list is to talk about it. Sharing what you plan to achieve will help you stay accountable for it.

6 TREAT YOURSELF

Giving yourself a reward after you complete a goal or task is a great way to stay focused on what you want to achieve.

7. TRACK YOUR PROGRESS

Part of what motivates us is seeing progress. Keeping a journal or other form of tracker to watch progress can help you stay motivated.

8. DON'T BE TOO HARSH

People have a tendency to be much harder on themselves than others. Make sure you don't beat yourself up for a slight slip up. We are all human and we are not perfect. Always keep in mind, that in order to succeed one must occasionally fail.



BE THE PERSON YOU WANT TO HAVE IN YOUR LIFE

9. STICK WITH IT

Rome was not built in a day you know. So remember that your goal is a long-term thing it will not happen within a week. A habit takes 21 days to create, so make sure to stick with your goal until it becomes a habit.

10. KEEP TRYING

Some dreams take longer than others. Some take days, others months, many years. So do not give up on yourself and be patient. Everything comes at the right time.



THANKS FOR READING
AZHOSA!

HAPPY
2020
NEW YEAR



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