



SEP 18TH, 2018  
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OUR WEBSITE: [aggiepremed.com](http://aggiepremed.com)

## TONIGHT'S MEETING

- Tonight we have 3 speakers! One will be our Philanthropy Chair, Jessica Kuzma, speaking on the details of the Philanthropy Committee and how to apply. We will also have a representative from UTMB speaking about shadowing opportunities! We'll also have a speaker from the Texas A&M Global Health Outreach program.

## ANNOUNCEMENTS

- Look into joining the Philanthropy Committee! The committee itself is a fun group to be a part of and is a great leadership opportunity! It's also a stepping stone into the officer team!
- Come out to our intramurals! We're doing flag football! You're not required to play, but it'll be more fun if you do!
- In order to officially become a member, you **MUST** fill out a membership form and pay dues!  
\*The cost is \$45 for the semester or \$65 for the year.
- **VOLUNTEERING: You must be a member to volunteer and are required to wear your pre-medical society shirt, long pants, and closed toed shoes. \*You are required to attend an orientation to volunteer at Phoebe's home. To volunteer anywhere you will also need a TB test and a current flu shot.**

### POINT OPPORTUNITIES

Pre-Med meeting attendance	3 Points
ECHO meeting attendance	2 Point
Pre-Med Shirt at ECHO Meeting	1 Points
Social/ intramural attendance	2 Points
One hour of community service	1 Point
Recruit a physician to speak or student to write an article	1 Point (max 3)

### MEMBERSHIP LEVELS

Exemplary	100 Points
Distinguished	75 Points
Honored	50 Points
Member	<50 points

The points system is used to determine our members' participation within the society. The various echelons of awarded membership allow one to truly benefit from all the society has to offer and to capitalize on this involvement during the medical school application process.



The Most Valuable Member of the Week is Dalia Soria! Dalia is a Senior Psychology major and long time member of the Pre-Medical Society! She's very sweet and can give a lot of advice about the pre-med track! Be sure to congratulate her!

## THE CADUCEUS

THE OFFICIAL NEWSLETTER  
OF THE TEXAS A&M  
PRE-MEDICAL SOCIETY

### OFFICERS

#### President

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#### Treasurer

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#### Historian

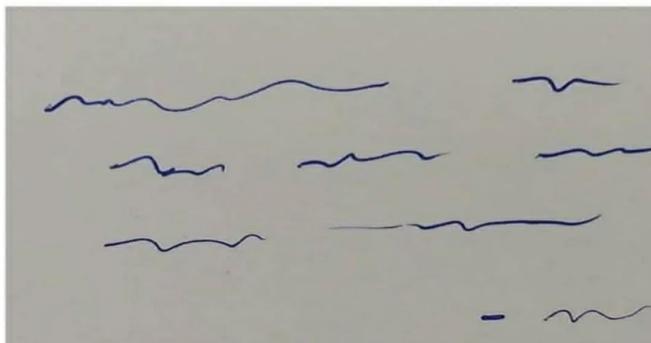
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## Joke of the week:

I just got my acceptance letter from medical school. So happy right now



## -Practice MCAT Question-

Lithium is a medication that is effective in the treatment of \_\_\_\_\_.

- a) schizophrenia
- b) panic disorder
- c) obsessive-compulsive disorder
- d) bipolar disorder
- e) post-traumatic stress disorder



For those applying to medical and dental school, you **must attend** a Medical/Dental Portal Workshop in the fall semester the year before you plan to apply. Therefore, if you plan to attend medical school in Fall 2020, you will need to attend a Portal Workshop in fall 2018/spring 2019, and apply in early summer 2019!

## UPCOMING EVENTS

## DUES AND T-SHIRTS

\$45 for one semester

\$65 for two semesters

\*includes T-shirt

Individual shirts are \$15

## UPCOMING OPSA WORKSHOPS/ EVENTS

### Medical/Dental Portal Workshops

- October 18th, 3:00pm-4:00pm
- October 24th, 12:00pm-1:00pm
- November 12th, 11:30am-12:30pm
- November 28th, 3:00pm-4:00pm

### Health Professions Interview Workshops

- December 6th, 3:00pm-4:00pm

### Sophomore Informational

- October 25th, 5:30pm-6:30pm

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		<b>Pre-Med Meeting</b> <b>7:00-8:00</b> Philanthropy Apps Open! 2	Phoebe's Home 5:00-7:00 3	TCM Resale Shop 9:00-6:00 Flag Football 9:45-10:45pm 4	St. Joseph's Manor 2:30-4:30 5	6
7	8	<b>ECHO Meeting</b> <b>7:00-8:00</b> 9	Phoebe's Home 5:00-7:00 10	TCM Resale Shop 9:00-6:00 Flag Football 9:45-10:45pm 11	St. Joseph's Manor 2:30-4:30 12	13
14	15	<b>Pre-Med Meeting</b> <b>7:00-8:00</b> Philanthropy Apps Close! 16	Phoebe's Home 5:00-7:00 17	TCM Resale Shop 9:00-6:00 Flag Football 9:45-10:45pm 18	St. Joseph's Manor 2:30-4:30 19	20
21	22	<b>ECHO Meeting</b> <b>7:00-8:00</b> 23	Phoebe's Home 5:00-7:00 24	TCM Resale Shop 9:00-6:00 Flag Football 9:45-10:45pm 25	St. Joseph's Manor 2:30-4:30 26	Walk to End Alzheimer's! 27

**Daily Volunteering:**  
MHMR Authority of Brazos Valley  
 on Wednesdays, Thursdays, and Fridays from 10-2pm. You may volunteer as long and as often as you'd like. Don't forget to sign in!

**NOTE:** These volunteering opportunities are meant for members to attend as they please. We will offer rides to Phoebe's Home and St. Joseph's, but not MHMR or the TCM Resale Shop.

If you need help finding a location, contact an officer!

# New cancer vaccine may tackle HER2-positive tumors

by: Ana Sandoiu

New research shows that a new cancer vaccine may be effective for treating a range of HER2-positive cancers, including the more aggressive HER2-positive breast cancer.

A new cancer vaccine showed promise in an early trial.

Cancer that is human epidermal growth factor 2 (HER2)-positive holds too much of the protein on the surface of its cells.

In HER2's role as a growth factor, normal levels of it help regulate the growth of cells.

That being said, excess amounts of the protein help cancer cells multiply and spread more quickly.

This makes HER2-positive breast cancer more aggressive than the HER2-negative type.

Breast is not the only cancer that can be HER2-positive; bladder, pancreatic, ovarian, and stomach cancers can also be HER2-positive. A new study posits a possible new treatment for this cancer. Scientists led by Dr. Jay A. Berzofsky, the chief of the Vaccine Branch at the Center for Cancer Research at the National Cancer Institute (NCI) in Bethesda, MD, have come up with a cancer vaccine that demonstrated clinical benefit for people with HER2-positive cancers.

## Vaccine worked in over half of the patients

The investigators used immune cells taken from the blood of 17 cancer patients, and they modified them in the laboratory. The final vaccine contained the patients' own dendritic cells that were genetically altered with an adenovirus to recreate fragments of the HER2 protein.

As part of the trial, the scientists administered the vaccine to the participants at the beginning of the study and at weeks 4, 8, 16, and 24. More specifically, one person with ovarian cancer had a complete response to the treatment, and the benefits lasted for 89 weeks. Another patient with stomach cancer responded partially to the treatment, benefiting from the vaccine for 16 weeks. Finally, four remaining participants had stable disease as a result of the treatment. Two of these patients had colon cancer, one had prostate cancer, and another one had ovarian cancer.

The vaccine did not cause any adverse reactions that required treatment.

"Based on the current safety and clinical benefit data," says Dr. Berzofsky, "the dose of the vaccine was increased to 40 million dendritic cells per injection, and the trial opened to patients who have previously been treated with a HER2-targeted therapeutic, including patients with breast cancer."

He continues to explain the benefits of using the immune system in the fight against cancer, saying, "Immunotherapy marshals the exquisite specificity of the immune system to destroy cancer, and some types may have potentially fewer side effects than traditional chemotherapy."

"We are using a vaccine approach to generate an immune response to HER2," he goes on, "which is found at high levels on and drives the growth of several types of cancer, including breast, ovarian, lung, colorectal, and gastroesophageal cancers."

"Our results suggest that we have a very promising vaccine for HER2-overexpressing cancers [...]. We hope that one day the vaccine will provide a new treatment option for patients with these cancers."

-Dr. Jay A. Berzofsky

The researcher, however, points out some limitations to the current trial, such as the small size of the sample and the lack of a placebo group.

"Moving forward, we would like to investigate whether we can increase the proportion of people who benefit from treatment with the vaccine by combining it with checkpoint inhibitor therapy," adds Dr. Berzofsky.

