

**SPRING 2018** Presídent's Letter

Dear Forum Members,

Spring is here, and summer is just around the corner! And with that, another Forum year comes to an end. I am amazed at how quickly it has come to a close, and remain grateful for the hard work of the trustees, and all that has been accomplished.

In February, the Forum hosted a special chair auction, offering guests the opportunity to buy original Argyle chairs to raise money for Texas Biomed. Cheers to CHAIRity was a huge success, raising approximately \$20,000 for Texas Biomed. Special thanks to event co-

chairs Adrianne Frost and Mallory Moorman for a lively, enjoyable, and most importantly successful evening.

In March, the Forum hosted its 24th Annual Science Education Awards and Lecture Luncheon. This year, we had great participation and interest from area teachers and science programs. There were five award recipients who shared \$20,000 in reward money. Winning first place was Justina Vidal of Saint Mary's Hall whose students will study the effect of a more acidified ocean on the oyster industry and surrounding ecosystems. Second place went to Frank Morales of Thomas Jefferson High School, and third place went to Sarah Thompson, who teaches at Earl Warren High School. Honorable Mentions were given to Colin Lange of Alamo Heights High School and Katelin Whittaker of the Advanced Learning Academy. These awards were generously funded by Mrs. Valerie Gunther of the V. H. McNutt Memorial Foundation and the Forum. The Forum thanks Amy Maverick and Heather de **Rojas** for their work on the Science Education Awards. We also thank Jody Lutz and Whitney Miller for their work on the Lecture Luncheon that featured Dr. Larry Schlesinger as our guest speaker. We are grateful for any opportunity to hear Dr. Schlesinger speak and value his vision for the future of Texas Biomed.

To finish out the year we hosted the always anticipated Forum Gala: Mariposa, which took place on May 5th at the Argyle. It was an extraordinary evening and an incredible success due to the efforts of our gala co-chairs Denise Mosser and Nicole McClane. These women worked tirelessly for a year to ensure a successful event and did a remarkable job planning an evening to remember. We are beyond grateful for their commitment to our organization.



Courtnev Percv

So as we share with you the final achievements of our year, we extend our thanks to Courtney Archer and Kim Johnson, our Newsletter co-chairs, who have worked hard all year to bring us this and other newsletters. We all enjoy reading these newsletters, as they keep us up to date on the latest news with the Forum and at Texas Biomed.

The Forum greatly values what a treasure Texas Biomed is to our community, and we are honored to work to educate that community about the importance of scientific work being accomplished, as well as the significance our

fundraising efforts have in supporting that great work. Thanks to our past leadership, the Forum continues to be a distinctive organization. With 47 Past Presidents paving the way, the future of the Forum is promising, and I am grateful to all those who have invested in this great organization of women.

I would like to acknowledge my advisors and former presidents Amanda Bezner, Kathryn Dehlinger, and Lisa Sechler for their support and encouragement throughout the year. Also, I have to give a very special thank you to former Forum President, Daniela Serna, who led this year's Nominating Committee. She and her committee helped usher in a new group of very talented women to serve as Forum Trustees for the next several years.

It is with great confidence and excitement that I pass the gavel to Jody Lutz, the 2018-2019 Forum President. The Forum is in very good hands with Jody, and I am confident she will lead the Forum into a new and exciting year full of great accomplishments! Finally, I would like to thank you for all your support throughout the year. It has been an honor and a privilege to serve as this year's President, and I look forward to all of the great things to come for the organization I hold so close to my heart.

With gratitude and in service,

Courtney Percy President 2017-2018

Texas Biomedical Forum



### FORUM PAST PRESIDENTS' LUNCHEON

t is always an honor to welcome our Forum Past Presidents to our Forum events. At the end of each Forum year, we especially enjoy hosting them at our May Past President Luncheon following the last Forum Board Meeting of the year at The Argyle. Our sincerest thanks to all of those that were in attendance on Wednesday, May 9th. Everyone enjoyed a delicious lunch as Forum Board Trustees shared with our past leaders the accomplishments of the year. Since the Forum's inception in 1970, there have been forty-seven presidents and we remain grateful for their continued support and participation in our hard-working organization and their role in paving the success of the Forum. We look forward to seeing you again next year!

-Courtney Percy, President

- 1970-1971 Dottie Block\*
- 1971-1972 Tena Gorman
- 1972-1973 Ruth Eilene Sullivan
- 1973-1974 Lois Yancy
- 1974-1975 Past Bristol
- 1975-1976 Neal Krause\*
- 1976-1977 Judy Cavender
- 1977-1978 Jane McFarlane
- 1978-1979 Jane Satel
- 1979-1980 Peggy Mays
- 1980-1981 Lois Jones
- 1981-1982 Laurin Cothren
- 1982-1983 Barbara Yu
- 1983-1984 Margaret Brannan\*
- 1984-1985 Maxine Farrimond
- 1985-1986 Barbara Dreeben
- 1986-1987 Gretchen Burkholder
- 1987-1988 Margie Rust\*

The purpose of the Texas Biomedical Forum is to support the Texas Biomedical Research Institute through community relations, volunteer service and fundraising.

- 1988-1989 Shirley Oliver
- 1989-1990 Claire Daviss
- 1990-1991 Alice Lynch
- 1991-1992 Mary Penaloza
- 1992-1993 Charlotte Leddy
- 1993-1994 Jerilyn Blanchard
- 1994-1995 Barbara Schneider
- 1995-1996 Rhonda Low
- 1996-1997 Walton Gregory
- 1997-1998 Caroline Walker
- 1998-1999 Cheryl Myers
- 1999-2000 Harriett Raney
- 2000-2001 Cari Hill
- 2001-2002 Maureen Mimari
- 2002-2003 Lisa Blonkvist
- 2003-2004 Lisa Sechler
- 2004-2005 Francie Calgaard
- 2005-2006 Kathryn Dehlinger
- 2006-2007 Brooke Bell
- 2007-2008 Allison Zeller
- 2008-2009 Laura Moorman
- 2009-2010 Terry Gouger
- 2010-2011 Karen Lee Zachry
- 2011-2012 Suzanne Dabbous
- 2012-2013 Julie Zacher
- 2013-2014 Cathryn Le Vrier
- 2014-2015 Melissa Morgan
- 2015-2016 Amanda Bezner
- 2016-2017 Daniela Serna

\*Deceased

As our Forum year comes to a close and our board transitions, we would be amiss not to pay tribute to our outgoing president Courtney Percy. Having spent eight years as a trustee, there are few jobs she has not handled, bringing her characteristic whit and charm to each assignment. Dolly Parton may have said it best, "*If your actions create a legacy that inspires others to dream more, learn more, do more and become more, then, you are an excellent leader.*" The Forum has been fortunate to have just that, an excellent leader in Courtney. From the Board of Trustees and the membership at large, collectively we thank you for your dedication and your exceptional management of our organization. – *Jody Lutz* 

### **2018 SCIENCE EDUCATION AWARDS**

The 24<sup>th</sup> annual Science Education Awards Ceremony and Spring Lecture Luncheon were held at The Argyle on Wednesday, March 7th, 2018. After the awards presentation, First Vice President, Jody Lutz introduced Larry S. Schlesinger, MD, President and Chief Executive Officer of Texas Biomedical Research Institute. Dr.

Schlesinger presented an interesting look at "How Team Science Will Cure Infection" and answered questions from the audience.

The Texas Biomedical Forum along with the V.H. McNutt Memorial Foundation awarded a total of \$20,000 to five area high school science teachers. Each of these projects



Larry S. Schlesinger, MD

demonstrated commitment to the scientific process and the further development of progressive science education programs. Applications are judged by a team including Forum Science Education chairs, Amy Maverick, MD and Heather de Rojas; Mrs. Valerie Guenther representing the V.H. McNutt Memorial Foundation, and volunteer scientists from the Texas Biomedical Research Institute, including Dr. Kendra Alfson, PhD, Post-doctoral Scientist, Raul Bastarrachea, MD, Staff Scientist in the Southwest National Primate Research Center and the Department of Genetics, and Dr. Chris Chen, PhD, Staff Scientist.

The judges reviewed many strong applications before unanimously selecting three winners and two honorable mentions recipients.



Lecture Luncheon 2018 Science Education Awards
Forum in Focus - Spring 2018

#### Congratulations to this year's winners!

1<sup>st</sup> Place Winner - \$7,000 Justina Vidal St. Mary's Hall "Ocean Chemistry and the effects of Carbon Dioxide Emissions on ocean wildlife"

> 2<sup>nd</sup> Place Winner - \$4,500 Frank Morales Thomas Jefferson High School "CSI: DNA Fingerprint Analysis"

**3<sup>rd</sup> Place Winner - \$3,500 Sarah Thompson Earl Warren High School** "What Lies Beneath: Investigating Water Quality Using Benthic Invertebrates"

#### Honorable Mentions - \$2,500 (2 awards) Colin Lang Alamo Heights High School

"Goddard High Altitude Blood Burst Test"

#### Katelin Whittaker

Advanced Learning Academy "Who Needs Energy? An interdisciplinary, project-based learning approach to energy conversion and empathy"

Over the last 24 years, local high school science teachers have received over \$480,000 in grants from this joint program. The 2019 Science Education Awards applications will be available on the Forum's website in early summer.

#### **STUDENT TOURS**

Student Tour Co-Chairs, Amelita Mauzé and Rebecca Nathan, were thrilled to welcome a total of 300 high school students to Texas Biomed during the 2017-2018 school year.

The tours were very well received by all who attended and there is already much interest for the upcoming school year. These dates have yet to be scheduled, but that information should be coming soon from Amy Maverick and Mary Labatt, 2018-2019 Student Tour Co-Chairs.

2018 Texas Biomedical Forum "Mariposa" Jala

The Forum was founded in 1970 by a group of inspiring and hardworking women with the same goal to support the life-changing and life-saving work being done at the Texas Biomedical Research Institute through community awareness and fundraising. Nearly 50 years after our inception, the mission has stayed the same, as has the enthusiasm and hard work of its members, specifically in regards to the Gala.

The Forum's annual Gala is our largest fundraising event and this year was held on May 5 at The Argyle. Gala Chair **Denise Mosser**, and Co-Chair **Nicole McClane** chose to celebrate the ongoing transformation within our Texas Biomedical Research Institute with a truly complementary and elegant theme of "Mariposa."

We began work on the Gala last fall with an elegant Reveal Reception at The Argyle and the early work of setting the theme, redesigning our crest and printed materials, soliciting for table sales and fundraising for Gala grants. Thank you to Invitations Chair **Kim Johnson**, Table Sales Chair **Emily Jones**, and Gala Grant Chair **Cynthia Kerby**. **Stephanie Dick** kept excellent financial records of all the funds raised throughout the year. Their hard work resulted in a sold out gala very early on, with a stellar year of Table Sales bringing in \$389,500, and Grants bringing in \$82,550, to date. We are so grateful to the families and corporations who have supported us every year, as well as our new supporters!

This year our Premium Sponsors were treated to a beautiful evening on April 4 at the home of **Dacia and Lanham Napier**. Guests enjoyed light bites, cocktails and great conversation amongst all present. Highlights included specialty cocktails by a mixologist and music by a classical guitarist.

The evening of the Gala began with cocktails, passed nibbles, and unique entertainment of all sorts as the guests entered The Argyle. Guests were greeted by acrylic butterflies and offered The Argyle's famous margaritas, in honor of Cinco de Mayo, all while being serenaded by an all-female Mariachi group. Many chose to pose and have their picture taken at the step and repeat, which was an original and beautiful handpainted stretched canvas adorned with florals, birds, and butterflies. Magically stilted butterflies strolled throughout the cocktail reception. Partygoers also had the opportunity to bid on several exclusive silent auction packages and purchase raffle tickets that were solicited by Silent Auction and Raffle Chair Kelly Wade Fry. Thank you to our generous silent auction and raffle donors and to Kelly and her committee for raising a record-breaking \$38,300!

Inside, the classic beauty of The Argyle was highlighted by the efforts of Decoration Chair **Raven Labatt**. Members surely recognized the many pieces of Argyle furniture that were incorporated into the design. Tables were set with sage green velvet and silk table linens, smoke grey lucite chiavari chairs and blush floral centerpieces accented with ginger jars and colorful butterflies. Guests were gifted with lovely favors from **Lee Michaels Fine Jewelry** at their seat secured by Favors Chair **Jessica Berg**. We are grateful to Lee Michaels for their generosity!

As always, the food and service at The Argyle was one of the evening's highlights. Menu Chair **Ashley Weaver**, received many compliments on the menu which featured classic Argyle favorites.

Following dinner, guests were joined by After Party guests in the blush draped, clear tent with crystal chandeliers and festoon lighting. Entertainment/ After Party Chair **Amy Garcia** made sure everyone danced the night away with the exciting, dueling DJs. When your feet were tired, there were many elegant seating areas throughout the tent, an espresso bar with delicious Mexican wedding cookies from Lily's Cookies, and passed bites (special thanks to **Chrissy and Thomas Labatt**). On their way home, guests enjoyed taquitos, compliments of **Whataburger**<sup>®</sup>.

The Gala chairs would also like to thank Social Media Chair **Brooke Meabon**, Public Relations Chair **Audra Kerr**, Logistics Chair **Heather de Rojas**, and the committee members at large for all of their efforts without whom they would not have succeeded. Additional thanks to our event designer and producer **Caplan Miller Events** of Austin, and **The Argyle** and its wonderful staff for ensuring everything went smoothly. And to our advisors, **Terry Gouger**, **Melissa Morgan** and **Marybeth Mosbacker**, whose advice throughout the process has been invaluable.

Until next year ....!



Special Thank you ...

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*Kelly Wade Jewelers* 

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Forum in Focus - Spring 2018

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## Jala Committee



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### Save the Date for next year's Gala, Saturday, May 4th, 2019!

### **TEXAS BIOMED UPDATES**

#### TEXAS BIOMED AND THE CHILDREN'S HOSPITAL OF SAN ANTONIO TEAM UP TO TACKLE KAWASAKI DISEASE



Photo: Dr. Mark Gorelik, Kawasaki Researcher

Texas Biomedical Research Institute and The Children's Hospital of San Antonio have joined forces to cure a mysterious condition called Kawasaki disease. The illness which affects young children is named after the Japanese doctor who first described it

more than 50 years ago. However, researchers still do not know what causes the rashes, fever, and artery damage. Some type of infectious agent is suspected.

Dr. Mark Gorelik, a pediatric rheumatologist with The Children's Hospital of San Antonio and Baylor College of Medicine, is focusing his research on the role of a specific protein in creating the coronary artery aneurysms in Kawasaki disease patients. He treats patients with Kawasaki disease in an outpatient clinic at the downtown hospital.

When he needed a place for his mouse-animal model and experiments, he approached Scientist Jean Patterson, Ph.D., of Texas Biomedical Research Institute. She agreed to be his mentor and help him secure funding for the project.

"Most virologists, maybe bacteriologists, have always sort of had a passing interest in Kawasaki disease just because nobody knows what causes it," Dr. Patterson said. "It seems like by now we should have been able to figure it out. There's some mystery here that keeps it really tantalizing and frustrating."

Drs. Gorelik and Patterson secured funding from the Voelcker Fund Young Investigators Award, the William and Ella Owens Medical Research Foundation and the Vasculitis Foundation.

Gorelik started with just a few mice. Now, there are about 120 animals housed in a Biosafety Level 2 facility at Texas Biomed. He's using new technology to manipulate a gene and look at its impact on one particular protein that may be involved in damage to blood vessels.

"It's amazing the kind of technology that exists nowadays that you can actually sort of turn on something to clip out a very precise set of DNA and then the protein goes away," Dr. Gorelik commented. With the animals, labs, technology and personnel in place, Dr. Patterson said Texas Biomed is a good fit for a collaboration with The Children's Hospital of San Antonio, crediting the veterinarians and veterinary care along with Dr. Gorelik's mouse model.

"Research institutes like the Texas Biomedical Research Institute bring all of the necessary factors together that allow researchers to spark combustion in science," Dr. Gorelik stressed.

#### PROMISING TREATMENT FOR EBOLA VIRUS TO BE TESTED AT TEXAS BIOMED

During the West African Ebola outbreak that began in 2013, an experimental biopharmaceutical drug called  $ZMapp^{TM}$  was a glimmer of hope in the midst of a health crisis. Now, scientists at Texas Biomedical Research Institute in San Antonio have been awarded a \$2 million dollar contract by the makers of ZMapp, Mapp Biopharmaceutical, Inc., to further test this promising new therapeutic.

Ebola is a filovirus that causes severe hemorrhagic fever and is fatal in about half of cases. ZMapp was evaluated in a clinical trial in humans during that 2013-2016 Ebola virus outbreak. Although the outbreak ended before the trial could be completed, the study gave a 91 percent probability that ZMapp was superior to standard of care in preventing mortality.

These ZMapp studies are being funded by a Project BioShield contract issued by the Biomedical Advanced Research and Development Authority (BARDA) within the Office of the Assistant Secretary for Preparedness and Response in the U.S. Department of Health and Human Services. If approved for use, ZMapp could become part of the Strategic National Stockpile (SNS), a repository of vaccines, therapies, antidotes, antitoxins and various other medical countermeasures for use in a public health emergency.



Ebola virus is one of the deadliest pathogens studied in the Biosafety Level 4 Laboratory at Texas Biomed. Scientists put in a competitive bid to use non-human primates to help determine

Photo: Technicians work in Texas Biomed's Biosafety Level 4 Lab

the effectiveness of this experimental Ebola treatment.

Well-regulated, controlled studies involving animals are critical to licensure of the new therapy by the Food and Drug Administration (FDA). Texas Biomed is the only private biomedical research institute in the world with both a National Primate Research Center and a Level 4 Biosafety Lab.

"Mapp Bio has developed a highly effective therapy for the treatment of ebolavirus disease," Said Ricardo Carrion, Jr., Ph.D., Associate Scientist and Associate Director of the BSL-4 laboratory. "We look forward to teaming with Mapp Bio to perform pivotal studies that will transition ZMapp towards FDA licensure."

Preparations for ZMapp testing are currently under way at Texas Biomed. The study will be in full swing by late 2018.

The Centers for Disease Control and Prevention (CDC) classified Ebola as a Category A Bioterrorism Disease. That means the virus can be easily transmitted from person to person, results in a high mortality rate, could cause public panic and social disruption, and requires preparation for a response.

#### MARMOSETS AS THE CANARY IN THE HIGHLY COAL MINE: А SENSITIVE PRIMATE MODEL OF THE EFFECTS OF PLACENTAL ZIKA VIRUS INFECTION ON FETAL HEALTH

New research shows

small. New World mon-

keys called marmosets

may be an important an-

imal model for emerging

viruses with the potential

for harmful effects on

fetuses. Establishing animal models for emerg-

ing diseases, like Zika, is necessary for the de-

velopment of vaccines,



Photo: Marmoset monkeys

therapies and diagnostics. Results of a study published in the journal Scientific Reports (Nature.com) showed pregnant marmosets inoculated with the Zika virus at a specific point during the first half of their pregnancy spontaneously aborted the fetuses at almost exactly the same time – about two weeks after the infection. In addition, histology on the fetuses showed neurological abnormalities.

"There is strong interest in the scientific community in developing animal models to understand Zika virus with the goal of developing vaccines and therapies," said lead author Suzette Tardif, Ph.D., a Scientist at Texas Biomedical Research Institute and Associate Director of Research at the Southwest National Primate Research Center. "We believe marmosets may be an especially relevant model for effects on infection in pregnancy."

While a number of different animals are being studied as possible models for investigations of the Zika virus, including macaques and baboons, this is one of several studies that showed marmosets may be especially sensitive to the infection.

"It's early days, but the results are encouraging," Tardif added.

Collaborators in the study included virologists, microbiologists, primatologists and OB/GYNs from Texas Biomed, the University of California at San Francisco, Baylor College of Medicine in Houston, and University of Illinois at Chicago.

After the initial outbreak of Zika in Brazil that caused a large number of babies to be born with severe brain abnormalities, scientists who capture marmosets in the wild found they had antibodies to Zika, indicating the monkeys do get infected with the mosquito-borne illness. A study published by Texas Biomed and UCSF scientists in 2017 found male marmosets mimic human disease when infected with the Zika virus, with the infection found to linger in saliva and semen.

"We have a theory that the placenta may be a reservoir for the Zika virus which would explain why there's so much of it because we find a huge number of infected cells there," said Jean Patterson, Ph.D., Texas Biomed Scientist in the Department of Virology & Immunology and senior author of the study.

With her research partners, Patterson is proposing further studies on the impact of West Nile and cytomegalovirus (CMV) infections in pregnant marmosets. The idea is that these animals could serve as an effective model for pinpointing whether emerging viruses cause fetal development problems during pregnancy.

The Southwest National Primate Research Center at Texas Biomed houses a colony of 300 marmosets.

#### **OBESITY AND HIGH SUGAR DIET IN** PREGNANT MOTHERS CAN PRE-DISPOSE **BABIES TO HEALTH ISSUES**

In a new research study published by The Journal of Physiology, an animal model from the Southwest National Primate Research Center at Texas Biomedical Research Institute in San Antonio showed expectant mothers who were obese and consumed a high fat, high sugar diet while expecting predispose their children to obesity and related health conditions later in life.

"If a woman is considering pregnancy, she should try to get fit," said Peter Nathanielsz, Ph.D., a Texas Biomed researcher who was part of the collaborative research project. "Of women of reproductive age in the United States, 50 percent are overweight and 30 percent are actually obese."

The study involved baboons at the SNPRC. Looking at what is called developmental programming,



Photo: Baboons at the Southwest National Primate Research Center

scientists wanted to shed light on the mechanisms underlying the link between obese pregnant mothers and obesity in their child. Children of obese mothers live shorter lives than the children of normal weight mothers.

The baboon model showed even the fetuses of obese animals consuming a high-fat, high-sugar diet during pregnancy had a "fatty" liver.

"It wasn't until we saw the microscope slides for the staining of liver sections showing very high amounts of lipid in fetuses of obese mothers that we realize the dramatic impact of maternal obesity at such an early developmental time point," Nathanielsz stated. "Histological analyses of these livers showing the condition steatosis, underlined the detrimental impact of maternal obesity on the developing fetus."

The research was a collaboration between Texas Biomed, UT Health San Antonio, Wake Forest Baptist Medical Center, the Indiana School of Medicine, and the University of Wyoming at Laramie.

#### TEXAS BIOMED ACKNOWLEDGED BIOMEDICAL RESEARCH AWARENESS DAY (BRAD) 2018



Photo: Rhesus macaque monkey

Biomedical Research Awareness Day, Thursday, April 19, 2018, was set aside to raise awareness of the critical role animals and their caregivers play in the advancement of treatments and cures for humans. More than 2,000 animals on the Texas Biomed campus are a

crucial part of the quest to understand the mechanisms of disease. They aid our scientists in the search for new diagnostics, drug therapies and vaccines.

Texas Biomed has produced a new video titled "Animals in Biomedical Research: A Vital Scientific Resource" which is online now.

### FORUM HEARTFELT THANKS

# We want to extend a sincere and warm thank you to the following...

- Dr. Larry Schlesinger, Texas Biomed President/Chief Executive Officer, for speaking at our Spring Lecture Luncheon
- Texas Biomed, for hosting a luncheon to honor our Past Forum Leadership
- The Argyle for offering us the opportunity to utilize the Argyle chairs for a fundraising event
- Laura Whalen, Marketing Manager at Saks Fifth Avenue, for organizing our in-store luncheon special event
- To those individuals and corporations that donated to the Forum and Texas Biomed throughout the year
- 2018 Gala Leadership, Denise Mosser and Nicole McLane and their entire committee, for an amazing and successful Gala
- Corbett Christie, Vice President Advancement and Public Relations; Lisa Cruz, Assistant Vice President Corporate Communications; Jill DeYoung, Advancement and Community Relations Manager; and Wendy Rigby, Media and Communications Specialist, and all at Texas Biomed, for their never-ending and continuing support of the Forum
- To the incredible staff of The Argyle for their continued support of all our Forum meetings and events





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# FORUM TIDBITS

### Did you know...

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Texas Biomedical Forum

Texas Biomedical Forum has about 300 members.

There are 3 membership levels for women over 21 years of age who would like to join: Contributor -\$50.00; Supporter-\$100.00; and Benefactor \$250.00.

Forum members act as ambassadors to educate the San Antonio community about the vital research conducted at Texas Biomed.

Members of the Board of Trustees have approximately 14 board events per year, 8 of which are board meetings.

Nominations/Applications for the Board of Trustees are due in March of each year.



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