



Forum in Focus

SPRING 2012

President's Letter

Spring is in the air and with it comes the Annual Forum Spring Gala!! Though this is one of the busiest times of the year for many hard-working Forum members and Board Trustees, it is also one of the most exciting!

Final preparations for this year's Gala (**Diwali – "A Festival of Lights"**) are now in full swing! Gala Chair and Co-Chair, **Cathryn LeVrier and Raven Labatt**, along with Gala Assistant, **Courtney Duphorne**, and countless volunteers are working long hours behind the scenes to ensure that May 5th will be an evening to remember!

In January, Neiman Marcus joined forces with Forum Board Special Event Co-Chairs, **Amanda Bezner and Leslie Miller**, to heighten Gala anticipation. Fabulous evening gowns were showcased by beautiful runway models wearing Stephanie Anne jewelry with a "lash bar" by Wink, and catered food and beverages, as well. Many designer items were flown in especially for Forum members to consider for the Indian-themed Gala.

One of my favorite Forum events is the Science Education Awards. Board Trustees, **Kathleen LeFlore and Ashley Hixon**, in concert with the V.H. McNutt Foundation, spent hours perusing local high school applications to determine this year's winner. It is always such fun to meet the recipients at the Spring Lecture Luncheon and to share their excitement upon receiving their cash prizes. Even those applicants who were not chosen as award recipients this year



Suzanne Dabbous

did each receive a cash prize thanks to the generosity of the L.D. Ormsby Foundation.

Thank you to Board Trustees, **Julie Zacher and Christy Meador**, for overseeing a seamless Spring Lecture Luncheon on March 28th at the Argyle. Dr. Jean L. Patterson, a Forum favorite and Chair of the Department of Virology and Immunology at the Institute, brought us up to date on "The Age of Bio-defense."

I am proud to say that this year, with the help of dedicated Forum members and two very hard working Trustees, **Sonya Medina Williams and Dr. Ann Cross**, we have been able to offer more Student Tours of the Texas Biomedical Institute than ever before.

Saving the best for last – MEMBERSHIP DRIVE! I say the best because it is truly the hard-working **members** of this organization who make me proud to say I am President. We may be known as a "working *Board*" but I have learned that this is also a "working *Organization*." We need everyone to renew each year and Membership Chair, **Wendy Garcia**, has worked tirelessly this year to streamline the membership process. Please consider renewing your membership "ONLINE AND ON TIME"!

This is my last letter as President. Soon, I will turn over the gavels (one for our old namesake, Southwest Foundation Forum, and one for our new name, Texas Biomedical Forum) to my good friend and capable leader **Julie Zacher**. I think a few of you may know her?

A handwritten signature in cursive script that reads "Suzanne".

Suzanne Dabbous, MD

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

Outstanding Lecture Luncheon

We hope you were able to join us for our Spring Lecture Luncheon, held on March 28th at the Argyle! It was a great success with the announcement of our Science Education Award winners, followed by a very informative and interesting lecture.



Our featured speaker, Dr. Jean Patterson, Chair of the Department of Virology and Immunology at Texas Biomedical Research Institute, spoke on "The Age of Biodefense". Her talk highlighted how far we have come over the course of time with

the discoveries and advancements in vaccinations and their ability to almost eradicate many diseases that were once a threat to society, such as the German measles or Rubella. However today we face new challenges with new diseases, such as the various influenza strains, and other lethal pathogens or select agents, for which there are no known cures or treatment.



A special advantage for her team is their department's state-of-the-art facilities which include the nation's only privately owned bio-safety level four (BSL-4) maximum containment laboratory. This facility – which has proven especially beneficial in support of the nation's biodefense efforts – allows Institute scientists to safely study these lethal pathogens. Her department has worked on countermeasures against these select agents while putting a great amount of time and resources into developing vaccines and therapies against naturally occurring pathogens that can cause sporadic but lethal outbreaks.

Her laboratory recently developed a high-throughput antiviral screen specifically for viruses that can only be studied in BSL-4 laboratories. Through other research efforts, Dr. Patterson and her team continue to work with the Department of Defense on projects involved with government's attempt to block the proliferation of biological weapons, including anthrax, tularensis, and other select agents.

While everyone would probably agree that we are so fortunate to have such an important and accomplished research facility like Texas Biomed in our city, it's a special treat to hear one of our Scientists speak about how they are doing things every day to keep us all healthy and safe from things we may not even know exist!

Science Education Awards

The Texas Biomedical Forum, in cooperation with the V.H. McNutt Memorial Foundation, offers a yearly opportunity for teachers to apply for science education grants. The goal is to assist in the purchase of teaching materials for creative, hands-on projects the teachers would like to implement in their schools. Both public and private school teachers within Bexar County and its contiguous counties are eligible. The awards are given to the six teachers

who submit the most innovative proposals showing a strong commitment to furthering

the development of meaningful science education programs.

The winners are determined by a panel of judges consisting of a representative from the V.H. McNutt Memorial Foundation, scientists from the Texas Biomedical Research Institute and members of the Texas Biomedical Forum board. As always, we wish to thank Valerie Guenther of the V.H. McNutt Memorial Foundation, for her time and input. We also appreciate the invaluable insight of the TBRI scientists, Dr. Heather Coan, Dr. Robert Davey, and Dr. Lorena Havill. Each generously donated their time to judge this year's numerous applications.

(Continued on Page 3)

Science Education Awards

(Continued from Page 2)

We would also like to thank the many teachers who submitted exciting science projects for consideration, but who were not ultimately selected to be in the top six this year. Due to a generous donation by the L.D. Ormsby Foundation, we were able to offer a participatory stipend of \$200 for each school's science program. In addition, the first ten teachers who submitted a proposal received a \$50 personal stipend for taking the time to apply.

This year, the sum of \$20,000 was awarded jointly by the TBF and the V. H. McNutt Memorial Foundation at the Spring Lecture Luncheon and Awards Ceremony. The deserving winners for 2012 are as follows:

1st Place –

Ronnie Kerchhof — \$7,000
Samuel Clemens High School

“Can microalgae be produced as a cost effective alternative biofuel?”

2nd Place –

Marvin Rudd — \$5,000
Byron P. Steele II High School
“Fish farm & hydroponic garden”

3rd Place –

Robin Howard — \$3,500
STEM RAM Academy at
Robert E. Lee High School

“Can purified recombinant proteins from Borrelia burgdorferi be tested and developed into an effective therapy for the treatment of Lyme disease?”

4th Place –

Jason Nydegger — \$2,500
Keystone School

“Student investigations into digital logic and varying electromagnetics”

5th Place –

Helen Whisenhunt — \$1,500
Samuel Clemens High School
“Physics First”

Honorable Mention –

Aja Gardner — \$500
John Jay Science & Engineering Academy
“Mini Medical School”

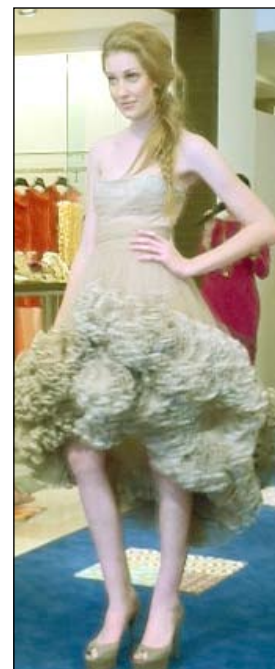
Spring Special Event with Neiman Marcus



On, Wednesday, February 1st, the Texas Biomedical Forum and Neiman Marcus paired up for a fabulous evening in tribute to this year's Gala theme, **Diwali**, organized by Special Event Chairs Amanda Bezner and Leslie Miller. Guests enjoyed cocktails, light bites, and an evening gown runway show that left us with a few ideas on what to wear to this year's Gala! 100%



of proceeds from the event were donated to the Texas Biomedical Research Institute.



TBI Student Tours

Thank you to the generous volunteers who contributed their time this Spring for the TBI Student Tours. These individuals



include: Wendy Garcia, Mary Potts, Sheila Mayfield, Erika Silva, Jennifer McLIney, Leslie Miller, Julie Zacher, Estee Kellogg, Ashley Hixon, Kathleen LeFlore, Karen Lee Zachry, and Whitney Ramirez.

We would like to kindly remind all members that volunteers are needed for the 2012 fall tour dates, these dates include:

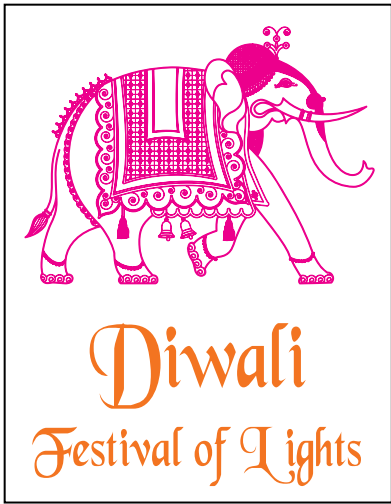
Tue. Sept. 11, 9:30am-11:30am

Tue. Sept. 25, 9:30am-11:30am

Tue. Sept. 18, 9:30am-11:30am

Tue. Oct. 2, 9:30am-11:30am

If you are interested in volunteering for the fall, please contact Ann Cross, DVM, and/or Sonya Medina Williams.



Please Join the Texas Biomedical Forum for Diwali: A Festival of Lights on Saturday, the Fifth of May Two Thousand Twelve at the Argyle. This is the Forum's primary fundraiser for Texas Biomedical Research Institute and will be the 42nd annual Gala! The Gala committee

has many exciting plans in store for this auspicious evening. The night will be influenced by beautiful Indian décor to celebrate the festival of lights with a feeling of fun, happiness and illumination!

Your traditional Indian celebration of goodness and joy will begin as you receive the festive invitation for Diwali: A Festival of Lights. Thanks to the hard work of our talented invitations committee, guided by Tracy Williams and Heather Fulton, the stage will be set for wonderful things to come. Upon entering the Argyle you will be swept up in the Celebration of Diwali with the brilliant colors of hot pink, orange, green and red displayed in the textiles, lights, and the traditional Rangoli designs. Our decorations chairs, Melissa Morgan and Elizabeth Hale, have created a vivid Indian aura that will cover the Argyle grounds. Our table sales chairs, Sonya Medina Williams and Amanda Bezner, have worked up to the deadline to ensure our event is sold out. Amy White and Lisa Miller are coordinating the logistics so your table will be perfectly placed and prepared for you and your guests. In addition you can look forward to the party favors which Jennifer McLiney has secured through the generosity of Julian Gold.

The menu committee has worked closely with the Argyle chef to create a delectable dining experience for our guests. We were fortunate enough to enjoy a tasting of the menu items recently and the Indian flavors were incredible. Lisa Spielhagen and Catherine Matthews have

simply outdone themselves in the planning of both the menu and cocktail selection. You will enjoy the cocktail hour entertainment that Michele Stevens and Mary Beth Mosbacker have arranged with an interactive Indian offering for both our female and male guests. After your savory meal and dessert, get ready for the fun of Diwali After Dark! Shetler Wade Jewelers has generously offered a magnificent surprise for one lucky winner with an amazing item they have hand selected to capture Diwali. Keys are available now at Shetler Wade Jewelers and will also be available for purchase the evening of the Gala for \$25.

After dinner, get ready for the unveiling of the tent and Diwali After Dark which will include drinks, dancing, hookah and more, organized by the after-party committee led by Emilie Petty and Amelita Mauze. Get ready to dance to the musical stylings of Lucy Wrubel as she spins the Gala over the top! The highlight of the evening will be the announcement of the raffle winners. This year's spectacular packages were compiled through the hard work of our raffle chairs, Melissa Barnett, Mary Potts, and their committee. They have exceeded all expectations in putting together amazing packages as you will read in the descriptions. Leanne Kelly and Erika Silva will be marketing these tickets to our attendees throughout the evening so be sure to purchase your raffle tickets for a chance to win some great prizes.

Gala 2012 would not be possible without the dedication of a fantastic group of women who have generously volunteered their time and talents over the last year. Thank you to everyone who has supported the gala with donations to Forum Grants, raffle packages, and the purchase of tables. It is going to be a night to celebrate each of you as well as the efforts of the Forum and the Texas Biomedical Research Institute as we work together to make our world a better and healthier place for today and tomorrow.

(Continued on Page 5)

Festival of Lights

(Continued from Page 4)

PACKAGE 1 . . .

ESHA

DO YOU LOVE DRESSES, SHOES, BLOUSES, JEWELRY, LINGERIE, HANDBAGS, BELTS, MAKE-UP AND SKINCARE? SHOP TILL YOU DROP AT JULIAN GOLD, SAN ANTONIO'S FINEST BOUTIQUE, WITH A \$1,500 – YES, \$1,500! – GIFT CARD. DRESS IN THE NEWEST FASHIONS, SPARKLE IN THE MOST GORGEOUS JEWELRY, AND UPDATE YOUR LIPS AND CHEEKS WITH THE COLORS OF THE SEASON!

GENEROUSLY DONATED BY:

JULIAN GOLD.

VALUE: \$1,500

PACKAGE 3 . . .

MANJUA

ENJOY A MAGNIFICENT EVENING AMONG FRIENDS AS YOU PLAY HOST TO A PRIVATE DINNER PARTY FOR TEN AT THE ARGYLE COMPLETE WITH A CASE OF WINE. INVITE YOUR GUESTS WITH CUSTOM ANNOUNCEMENTS FROM YOU'RE INVITED FINE STATIONERY. YOUR TABLE WILL LOOK ELEGANT WITH A BEAUTIFUL ARRANGEMENT FROM ALAMO PLANTS AND PETALS. AS HOSTESS, YOU WILL BE PAMPERED IN PREPARATION FOR YOUR BIG NIGHT WITH STUNNING HAIR DONE BY RAUL AT RIC MARMOLEJO SALON. YOU'LL BE ACCESSORIZED PERFECTLY WITH TURQUOISE CHANDELIER EARRINGS AND A TURQUOISE PENDANT CHAIN NECKLACE FROM BEJEWEL AND AN EXOTIC HANDBAG FROM BARFIELD. YOUR CO-HOST WILL SHINE IN A CUSTOM TAILORED SHIRT BY J. HILBURN.

GENEROUSLY DONATED BY:

*THE ARGYLE, YOU'RE INVITED FINE STATIONERY,
ALAMO PLANTS & PETALS, RAUL SALDANA,
BEJEWEL BY CARROLL DORSEY WALKER,
LISA KOPECKY OF BARFIELD,
AND SHANNON GUNN OF J. HILBURN.*

VALUE: \$2,100

PACKAGE 2 . . .

MALA

ANY WOMAN WILL LOOK STUNNING DURING DIWALI WITH THIS GEM DANGLING FROM HER NECK, COMPLIMENTS OF LEE MICHAELS. TURN HEADS WITH A 1.25 KARAT ROUND DIAMOND PENDANT SET IN WHITE GOLD AND ELEGANTLY HANGING ON AN 18 INCH WHITE GOLD CHAIN. A PERFECT COMPLEMENT TO ANY SETTING, FASHION, OR NECKLINE.

GENEROUSLY DONATED BY:

LEE MICHAELS.

VALUE: \$6,500

PACKAGE 4 . . .

AKASH

FORGET YOUR CARES AND TROUBLES DURING THIS TWO-NIGHT STAY ON LAKE TRAVIS. YOU'LL DRIVE YOUR GET-AWAY JAGUAR, COMPLIMENTS OF BARRETT JAGUAR TO ENJOY YOUR STAY WHICH INCLUDES BREAKFAST FOR TWO AT THE LAKEWAY RESORT AND SPA. BE THE ENVY OF EVERYONE ON THE LAKE AS YOU SET SAIL FOR A FOUR HOUR CAPTAIN CHARTER ON A BENETEAU OCEANIS 34. DURING YOUR LAKE SAIL, YOU'LL ENJOY SNACKS, A LIGHT LUNCH, AND CHILLED BEVERAGES AS YOU BASK IN THE BEAUTY OF THIS ICONIC TEXAS DESTINATION. ALSO WHILE IN LAKEWAY, YOU'LL ENJOY AN INCREDIBLY UNIQUE DINING EXPERIENCE AT HUDSON'S ON THE BEND RESTAURANT AND TAKE HOME A RESTAURANT COOKBOOK WITH YOU TO REMEMBER AND RECREATE THE EXPERIENCE. TRAVEL IN STYLE WITH A TORY BURCH BAG FOR HER AND A DUFFLE BAG FROM TEXAS SADDLERY FOR HIM.

GENEROUSLY DONATED BY: LAKEWAY

*RESORT & SPA, BARRETT JAGUAR,
TEXAS SAILING, HUDSON'S ON THE BEND,
SAKS FIFTH AVENUE, TEXAS SADDLERY.*

VALUE: \$2,750

(Continued on Page 6)

Festival of Lights

(Continued from Page 5)

PACKAGE 6 . . .

RAJNI

THIS IS A PACKAGE FIT FOR A QUEEN! SHARE MANY GOOD TIMES WITH YOUR GIRLFRIENDS. GET STARTED WITH AN ELAINE TURNER SHOPPING PARTY FOR 10 AT THEIR NEW SAN ANTONIO LOCATION. AFTERWARDS, DON YOUR NEW ELAINE TURNER KELLY BAG AND TREAT YOUR FRIENDS TO A LUNCHEON AT PALOMA BLANCA. AFTER A DAY WITH THE GIRLS YOU CAN PLAN A COCKTAIL PARTY COMPLIMENTS OF CINCO VODKA, WHERE YOU'LL LOOK STUNNING WITH A MAKE-OVER AT ESTEE LAUDER NORDSTROM'S, CLAD IN A STYLISH DRESS FROM HERFF CHRISTIANSON'S LATEST LINE AND ACCESSORIZED BY A SPECIAL HAZEL SMITH PIECE. AND IF THAT'S NOT ENOUGH, YOU CAN RECAP THE FUN YOU'VE HAD WITH YOUR SPECIAL SOMEONE AT BIGA WHERE YOU'LL EXPERIENCE THE 5 COURSE CHEF'S TASTING FOR TWO!

*GENEROUSLY DONATED BY: ELAINE TURNER,
PALOMA BLANCA, CINCO VODKA,
ESTEE LAUDER, HERFF CHRISTIANSON,
HAZEL SMITH AND BIGA ON THE BANKS.*

VALUE: \$3,850

SURPRISE

SHETLER WADE JEWELERS HAS CHOSEN A DIWALI SURPRISE THAT WILL NOT ONLY TURN HEADS ON THE LUCKY WINNER BUT GIVE THE WINNER A SENSE OF BEING A TRUE PRINCESS! BELIEVE US . . . YOU DON'T WANT TO MISS THE CHANCE TO WIN THIS VERY SPECIAL BAUBLE!

*GENEROUSLY DONATED BY:
SHETLER WADE JEWELERS*

VALUE: \$6,000

PACKAGE 5 . . .

ISHA

WHAT MAN WOULDN'T LOVE A PACKAGE THAT IS ALL ABOUT HIM . . . AND HIS BUDDIES! HE WILL BEGIN HIS EVENING BY DRESSING A DOS CAROLINAS CUSTOM SHIRT IN PREPARATION AND MEETING HIS FRIENDS FOR DINNER AT MYRON'S STEAKHOUSE. AFTERWARDS, THE GROUP WILL HEAD TO THE SPURS GAME WHERE THEY'LL SIT IN 4 LOWER-LEVEL SEATS AND, TO COMMEMORATE A GREAT GUYS' NIGHT OUT, A PRICELESS AUTOGRAPHED BALL WILL BE HIS TO TAKE HOME! AS THE WINNER OF THIS FABULOUS PACKAGE, YOU WILL ALSO RECEIVE BEER FOR A YEAR, COMPLIMENTS OF SILVER EAGLE DISTRIBUTORS, AND MULTIPLE AMAZING DINING OPTIONS FROM PERRY'S STEAKHOUSE INCLUDING: 4 COMPLIMENTARY SUNDAY DINNERS, 6 COMPLIMENTARY PORK CHOP FRIDAY LUNCHES AND APPETIZERS AND WINE FOR 4. ENJOY TWO NEW GOLF BAGS WITH COLLAPSIBLE COOLER AND TOURNAMENT PACK AND A GIFT CARD FROM STONE WERKS. WAIT . . . THAT'S NOT ALL! AS THE FINAL TOUCH, DRESS YOURSELF UP WITH A LORA PIANA SUPER 120'S CUSTOM TUXEDO FROM JS SATEL CUSTOM CLOTHING AND SIP ON SOME FABULOUS SCOTCH DONATED BY GABRIEL'S LIQUOR.

GENEROUSLY DONATED BY:

*DOS CAROLINAS, TIENI FURST OF SPURS SPORTS & ENTERTAINMENT,
MYRON'S PRIME STEAK HOUSE,
SILVER EAGLE DISTRIBUTORS/BUD LIGHT, PERRY'S STEAKHOUSE,
SILVER EAGLE DISTRIBUTORS/MICHELOB ULTRA,
STONE WERKS BIG ROCK GRILLE,
JS SATEL CUSTOM CLOTHING AND GABRIEL'S LIQUOR*

VALUE: \$3,600

PACKAGE 7 . . .

DIVYA

CELEBRATE DIWALI THE FESTIVAL OF LIGHTS AND SPARKLE WITH NEIMAN MARCUS SAN ANTONIO. THE LUCKY WINNER OF THIS FASHIONABLE PRIZE WILL WIN A NEW PAIR OF CHRISTIAN LOUBOUTIN HEELS, A FABULOUS LOUIS VUITTON POCLETTE SOBE CLUTCH, AND A BEAUTIFUL NECKLACE AND PENDANT BY THE STEPHANIE ANNE JEWELRY COLLECTION. TO COMPLETE THIS FABULOUS EXPERIENCE, THE LUCKY WINNER WILL ENJOY LUNCH WITH THEIR BEST FRIEND IN NEIMAN'S AWARD-WINNING MARIPOSA RESTAURANT.

GENEROUSLY DONATED BY:

*NEIMAN MARCUS SAN ANTONIO
EXPIRATION AUGUST 1, 2012*

VALUE: \$3,000

ALL PACKAGE VALUES ARE APPROXIMATE.

Gala Sponsors

Devi

Charles Butt

Kali

Emory A. Hamilton

Lakshmi

Argo Group	Lisa and David Miller
DPT Laboratories, Ltd.	Mission Pharmacal Company
Ernst & Young	Mr. and Mrs. Lew Moorman
Tim and Karen Hixon	Silver Eagle Distributors
Julian Gold	Texas Biomedical Research Institute
Raba Kistner	Valero
Law offices of S. Jason Westmoreland, P.C.	

Saraswati

Balmer/Casey/Conn/Finney/Schnoebelen	Frost Bank
Mr. and Mrs. Robert Bezner	Gunn Automotive
Cris and Brandon Bregman	Heaner/McLiney/Stuart/White/Wood
Broderick/Case/Nelson/Wallis	Jefferson Bank
Browning/Mayfield/Rabinowitz/Serna/Smith	John and Susan Kerr
Clement/Garcia/Locke/Nastala/Tibbetts	Luther King Capital Management
Cox/Lutz/Miller	Marin/Morgan/Osman/Shepperd
Cox Smith	Dr. and Mrs. Jake Martinez
Drs. Matthew and Ann Cross	Mastrapasqua Asset Management/ Claude K. Koontz
Dabbous/Napier	Mazurek Alford & Holliday PC
Davis/Mariano/Mosbacher/Potts/Voss	Mr. and Mrs. Jeff Moorman
Mr. and Mrs. Donald Duffin	Nu Star
Duphorne/Labatt/Le Vrier	

Saraswati

Planned Parenthood
Community Leadership Council

Robert Tucker Hayes Foundation

Victoria and Carlos Roca

Erika and Zeke Silva

South Texas Money Management Ltd.

Southwest Research Institute

St. Mary's University School of Law

Wortham Insurance & Risk Management

Frank and Jenevieve Zoch

Forum Grants

\$2,500 and over

Marshall B. Miller, Jr. and Claudia Huntington

Zachry Corporation

\$1000-\$1499

Caritas Charitable Trust c/o Anna Armstrong

Kenneth and Barbara Trevett

Lori and Mark Wright

Julie and Peter Zacher

\$500-\$999

Mr. and Mrs. Buck Benson

Lynnette and Trey Embrey

Ashley and Timo Hixon

Raven and Fred Labatt

Laura Moorman

\$250-\$499

The Bill Arlitt Family

Suzanne and Ash Dabbous

Gretchen and David Herrmann

Robin and Mark Howard

Cathryn LeVrier

Jean W. MacCluer

Joyce and Jess Mayfield

Sheila and Carter Mayfield

Jo Lynne Meador

Erika and Zeke Silva

Special Thanks

Julian Gold
Shetler Wade Jewelers
Richard Flowers
You're Invited Fine Stationary
Marmalejo
Lisa Kopecky
Lakeway Resort & Spa
Charter Company
Saks Fifth Avenue
Tifini Furst
Perry's Steakhouse
Eileen Turner
Cinco Vodka
Herff Christianson

Lee Michaels
Neiman Marcus
The Argyle
Alamo Plants & Petals
Carol Dorsey Walker
Shannon Gunn
Barrett Jaguar
Hudson's on the Bend
South Texas Saddlery
Silver Eagle Distributors
Dos Carolinas
Paloma Blanca
Estee Lauder
Hazel Smyth

Biga on the Banks

Gala Committee

Gala Chairs

Cathryn LeVrier
Raven Labatt
Courtney Duphorne

Forum President

Suzanne Dabbous, MD

Advisors

Julie Zacher
Josie Flesher
Christy Meador

Committee Chairs

Amanda Bezner	Lisa Miller
Lynnette Embrey	Melissa Morgan
Heather Fulton	Mary Beth Mosbacker
Elizabeth Hale	Courtney Percy
Gretchen Herrmann	Emilie Petty
Leanne Kelly	Mary Potts
Melissa Marino	Erika Silva
Catherine Matthews	Lisa Spielhagen
Amelita Mauze	Michele Stevens
Jennifer McLiney	Sonya Medina Williams
Leslie Miller	Tracy Williams
	Amy White

Texas Biomed Updates

Setbacks and Advances in Global Malaria Fight

Emergence of resistance to the drug artemisinin in western Thailand has created a critical point in global efforts to control and eliminate malaria worldwide, according to a new study published in the *Lancet*, a British medical journal, by researchers at the Texas Biomedical Research Institute and their collaborators in Thailand.

A second study, published concurrently in the journal *Science* by the same research groups, identifies a major region of the malaria parasite genome associated with artemisinin resistance, raising hope that there will soon be effective molecular markers for monitoring the spread of resistance. Both the *Lancet* and *Science* studies were funded by the National Institutes of Health and the Wellcome Trust.

Malaria killed 655,000 people – over one per minute -- in 2010. While these numbers are high, malaria deaths have declined by 30 percent over the past decade, largely because of effective control using treatment with combination therapies containing artemisinin, a plant-derived antimalarial drug developed in China.

Patients infected with malaria parasites who respond poorly to treatment have been observed in Cambodia and stimulated a coordinated World Health Organization effort to eliminate the disease in this region. That effort was based on the premise that drug-resistant malaria was confined to Cambodia. Now that effort needs to be reassessed, the *Lancet* study concludes.

From 2001 until 2010, the Texas Biomed team and their collaborators in Thailand studied 3,202 patients in clinics located in Northwestern Thailand, 500 miles from the Cambodian focus. They observed a dramatic decline in the drug potency over that period. Further, by measuring drug potency in



From left to right: Dr. Ian Cheeseman, Dr. Tim Anderson, and Dr. Standwell Nkhoma.

patients infected with genetically identical malaria parasites, they were able to show that the decline in potency results from the spread of resistance genes.

“Spread of drug resistant malaria parasites within Southeast Asia and overspill into sub-Saharan Africa, where most malaria deaths occur, would be a public health disaster resulting in millions of deaths,” said Texas Biomed’s Standwell Nkhoma, Ph.D., a lead author of the *Lancet* report. Resistance to other antimalarial drugs, such as chloroquine and fansidar, has previously spread from Southeast Asia to Africa, providing a chilling precedent for such a scenario.

“The problem we have is that treatment with artemisinin-based drugs will promote spread of

(Continued on Page 11)

Biomed Updates

(Continued from Page 10)

resistance, but there are no viable alternative treatment options in Southeast Asia,” said Nkhoma.



“Our group wanted to understand what genetic changes have occurred in these parasites,” said Texas Biomed’s Ian Cheeseman,

the first author of the companion report in *Science* “This study narrows the search to a region of the parasite genome containing around 10 genes. We haven’t yet found the precise changes involved, but we are getting close.”

The researchers first compared genetic variants in the genomes of parasites from Laos, which are sensitive to the drug, with parasites from Cambodia, that show high levels of resistance and those from Thailand, where both resistant and sensitive parasites occur.

“We found 33 genome regions that were very different in parasites from these three countries” said Anderson “When we examined these regions in more detail in a large collection of parasites from Thailand, we found that one small section of malaria parasite genome

on chromosome 13 is strongly associated with parasite resistance”.

Identification of a molecular marker for resistance will be critical for monitoring the spread of resistance, for determining how resistance occurs, and for understanding the mechanism of action of the drug. The *Science* study narrows the search for such a marker, and provides an important advance in the race to avert a public health crisis.

Both reports resulted from an international effort led by Texas Biomed’s Tim Anderson, Ph.D., and François Nosten, M.D., at the Shoklo Malaria Research Unit in Thailand, with collaborators at Notre Dame University and in Laos and Cambodia. The other Texas Biomed authors on the reports are Shalini Nair and Salma Al-Saai.

Vaccine Development Center

Texas Biomed has joined the San Antonio Vaccine Development Center, a collaboration of four San Antonio institutions, created in 2011 to coordinate vaccine development activities across the city. The center is co-directed by Bernard Arulanandam, Ph.D., M.B.A., of the University of Texas at San Antonio and by Jean L. Patterson, Ph.D., chair of the Department of Virology and Immunology at Texas Biomed. Other partners are the Southwest Research Institute and the UT Health Science Center San Antonio.

In addition to outstanding human assets and institutions in academia, health care, military,

industry, governments and not-for-profit entities involved in infectious disease, the infrastructure for R & D, education and health care in San Antonio is unique. Programs span a wide range from basic R & D to applied and translational research with initiatives in prevention and treatment of acute and chronic infections. Bio-defense activities include the military and its needs for dealing with infectious agents encountered by their personnel as well as potential bio-weapon threats.

The global nature of epidemics emphasizes the essential importance of international collaborations and the San Antonio Vaccine Development Center coordinates these efforts for the region.

CANCER DRUGS POTENTIAL FOR DEADLY EBOLA

Two off-the-shelf cancer drugs blocked the deadly Ebola virus from reproducing in the test tube – an early, promising advance in a disease and potential biological weapon with no approved treatments or vaccine, scientists report.

Testing of the drugs took place in the biosafety level-4 lab at Texas Biomedical Research Institute, in collaboration with government scientists and researchers in Houston and Atlanta.

The two leukemia drugs, nilotinib and imatinib, don't attack the virus directly, but instead target the patient's own infected cells, preventing the virus inside from reproducing and escaping.

"That's a concept that's been attractive for antiviral therapy, because if you can target a cellular protein that's required for the virus, it makes it a little harder for the virus to mutate to develop resistance," said Dr. Gary Nabel, director of the Vaccine Research Center at the National Institute of Allergy and Infectious Diseases, which led the study published in *Science Translational Medicine*. And while the drugs didn't completely clear the virus, researchers say what they've learned from outbreaks of the disease in Africa show that those with low levels of the virus in their bodies often survive.

The hope would be that a short-term course of treatment with the drug might eliminate enough of the virus that the patient's own immune system could eliminate the rest.

"Often in this disease if you can just shave a little bit of the viral load off of the infection, if you can just

"If you can target a cellular protein that's required for the virus, it makes it a little harder for the virus to mutate to develop resistance."

lower it tenfold even, that's what's going to give people a chance to survive it," Nabel said. "That's really what we're aiming to do."

Nabel cautioned the work is early but promising, and that the next step is to test it in animals. Because Ebola outbreaks in nature are so infrequent and unpredictable, it makes human testing almost impossible, researchers say.

Government rules will allow approval of vaccines and treatments in such cases if they demonstrate effectiveness in two animal models. Ebola hemorrhagic fever, described by the World Health Organization as often fatal and one of the most virulent viral diseases on the planet, was named for a river in the Democratic Republic of the Congo, near the location it was first identified in 1976.

It causes illness in both people and nonhuman primates, and appears

sporadically in a handful of African nations.

"It's very random," said Ricardo Carrion, a virologist at Texas Bio-



med and co-author of the study. "We're still trying to identify the reservoir. We don't even know what maintains it in nature."

From the *San Antonio Express-News*

Moving On

In 2011, four long-time Texas Biomed staffers retired. Geneticist David Rainwater, Ph.D., and Facilities Director Lee Bricker retired. In addition, Administrative Assistant Cindy Calderon, who coordinated the activities of the Institutional Animal Care and Use Committee, retired after 23 years. Librarian Danny Jones retired after nine active years of bringing the library into the digital age.

Campus news

Sarah Williams-Blangero, Ph.D., chair of the Department of Genetics, was designated a Health Care Hero by the San Antonio Business Journal. The annual award honors leaders in the city's health care and biomedical fields. Williams-Blangero was recognized for her work in the field of infectious disease genetics.



Campus Visits

Throughout 2011, the Institute hosted visits by officials of the Canadian government, representatives of several members of the San Antonio congressional delegation, and a number of prominent scientists.

In April, Mona Ayoub, Vice Consul and Trade Commissioner for Life Science at the Canadian consulate in Houston, visited and toured the campus. Her goal was to gain a better understanding of Texas Biomed's research program and discuss possible international collaborations.

Other visits included those by staff members from the offices of Rep. Lamar Smith, Rep. Francisco Canseco, Sen. Kay Bailey Hutchison, and Sen. John Cornyn. Institute president Kenneth P. Trevett presented an overview of Texas Biomed and the visitors toured the biosafety level 4 laboratory, AT&T Genetics Computing Center, and animal areas.

Lee Hood, M.D., Ph.D., the father of molecular medicine and founder and director of the Institute for Systems Biology in Seattle, visited Texas Biomed and met with department chairs and other scientists to discuss their work and possible collaborations.

MEMBERSHIP DRIVE

Since 1971, women throughout San Antonio and the surrounding areas have been working together to educate fellow community members about the positive, life-changing research that is being conducted at the city's biomedical research jewel, the Texas Biomedical Research Institute. When you join or renew your membership to the Texas Biomedical Forum, you are a part of a very important circle of individuals whose fundraising and friend raising efforts are furthering the mission of Texas Biomed, an internationally renowned, independent biomedical research institution that is a pacesetter in the race to find new preventions, treatments and cures for life's most serious diseases.

We are currently in the membership renewal season for The Forum and look forward to your continued participation. Or if you are considering joining for the first time, we welcome you to The Forum and all that membership provides including:

- Exclusive Invitations to attend Two Lecture Luncheons at the Argyle
- A Membership Tour of the Texas Biomedical Research Institute Campus
- Invitation to the Yearly Gala
- Receipt of the Forum Newsletter (3 editions per year)
- Inclusion in the Membership Directory

To renew your membership or join for the first time, simply log on to the Forum website at <http://txbiomed.org/forum> and join or renew online. We offer three levels of membership each of which is 100% tax deductible:

- | | |
|----------------------------------|----------|
| 1. Base membership | \$35.00 |
| 2. Patron-level sponsorship: | \$50.00 |
| 3. Benefactor-level sponsorship: | \$100.00 |

We look forward to your continued membership in The Forum and for those who are new, welcome! We thank you for your interest in and support of the Forum and look forward to seeing you soon!



TEXAS BIOMEDICAL FORUM 2011-2012 BOARD OFFICERS

Suzanne Dabbous, M.D.
President

Julie Zacher
First Vice-President

Cathryn LeVrier
Second Vice-President, Gala Chair

Raven Labatt
Third Vice-President, Gala Co-Chair

Wendy Garcia
Fourth Vice-President, Membership

Leanne Kelly
Treasurer

Courtney Percy
Assistant Treasurer

Amy White
Recording Secretary

Josie Flesher
Corresponding Secretary

Karen Lee Zachry
Immediate Past President



TEXAS BIOMEDICAL FORUM 2011-2012 BOARD OF TRUSTEES

Jennifer McLiney
Aide-de-Camp

Julie LaBarba Miggins
Archivist

Melinda Hart
Database Coordinator

Mary Potts
Directory

Lisa Miller
Directory

Courtney Duphorne
Gala Assistant

Victoria Roca
Historian

Christy Meador
Luncheon Assistant

Shannon Turner
Newsletter

Sheila Mayfield
Newsletter

Anne Seay
Parliamentarian

Gretchen Herrmann
Photographer

Whitney Ramirez
Photographer

Chaney Stuart
Public Relations

Kathleen LeFlore
Science Education Awards

Ashley Solcher Hixon
Science Education Awards

Debbie Duperier
Texas Biomedical Research
Institute (TBRI) Tour

Melissa Morgan
Texas Biomedical Research
Institute (TBRI) Tour

Amanda Bezner
Special Event

Leslie Miller
Special Event

Ann Allen Cross
TBRI Student Tours

Sonya Medina Williams
TBRI Student Tours

Erika Silva
Volunteers

Melissa Marino
Website Liaison

Honorary Trustees

Ruth Bates
Mary Henrich
Harriett Romo
Barbara Trevett

Advisors

Barbara Dreeben
Estee Kellogg
Rhonda Low
Laura Moorman

TEXAS BIOMEDICAL FORUM

P.O. Box 6648

San Antonio, Texas 78209

Non-Profit Org.
U.S. Postage
PAID
San Antonio, Texas
Permit No. 2193