



TEXAS BIOMEDICAL
RESEARCH INSTITUTE

EVOLVING

2 0 1 7 A N N U A L R E P O R T



EVOLVING

BOARD OF Trustees



Dr. James (Jamo) Rubin
Chairman

EXECUTIVE COMMITTEE

- Dr. James (Jamo) Rubin, *Chairman*
Chief Executive Officer, TAVHealth
- Dr. C. Collins (Andy) Anderson III, *Vice Chairman*
Managing Partner, Windgate Partners, LLC
- Mr. James B. (Jamie) Smith, *Secretary*
Vice Chairman – Texas, Dykema Cox Smith

- Mr. John R. (J.R.) Hurd
Chair, Hurd Enterprises, Ltd.
- Mrs. Abigail G. Kampmann
Chief Executive Officer, Principle Auto
- Mr. John C. Kerr
Principal, Moorman Kerr Interests
- Mrs. Marsha M. Shields
President, McCombs Enterprises

TRUSTEES

- Mr. Rex Amini
Managing Director, Sage Energy Co.
- Mr. Edward H. Austin, Jr.
Principal, Austin Family Investments
- Mr. Richard N. Azar II
General Partner, Sezar Energy, L.P.
- Mr. Craig Boyan
President & Chief Operating Officer, H-E-B
- Mr. Robert M. (Bobby) Cavender
President, Cavender Auto Group
- Ms. Phyllis Slick Cowell
President, Slick Enterprises
- Mrs. Barbara B. Dreeben
- Mr. Walter Embrey
Chief Executive Officer, Embrey Partners, Ltd.
- Mr. John W. Feik
Chief Executive Officer, Feik Enterprises, LLC
- Mrs. Emory Alexander Hamilton
Partner, Groves Alexander
- Mrs. Ashley Hixon
Hixon Family Office
- Mr. Richard Kardys
(Retired) Wealth Advisor Senior Officer,
Frost Bank
- Mr. William R. (Bill) Klesse
- Mrs. Carolyn H. Labatt
Chief Executive Officer, Computer Solutions
- Mr. Mark Pitman Mays
Principal, Rocking M Capital
- Mr. Joe C. McKinney
Vice Chairman, Broadway National Bank
- Mr. Lewis J. (Lew) Moorman IV
Entrepreneur
- Dr. Dacia Napier
Radiologist
- Mr. Richard T. (Dick) Schlosberg III
(Retired) Publisher and CEO, Los Angeles Times
- Mr. Charles (Chuck) Urschel Slick
Partner, Slick Enterprises
- Mr. John B. Zachry
Chairman and CEO, Zachry Group

SPECIAL TRUSTEES

- Mr. Adam L. Hamilton
President & CEO, Southwest Research Institute
- Dr. Andrea Giuffrida
Vice President for Research and Professor,
UTHealth San Antonio

EX-OFFICIO TRUSTEE

- Mr. Trey Dawson
President, Founder's Council
- Mr. John A. Oberman
President / Through March 31, 2018
The Argyle
- Mr. Al Philip
President / As of April 1, 2018
The Argyle

- Ms. Courtney Percy
President, Texas Biomedical Forum

HONORARY TRUSTEE

- Dr. John P. Howe, III
Retired President/CEO, Project HOPE

TRUSTEES EMERITUS

- Dr. Ronald K. Calgaard
Chairman, Ray Ellison Grandchildren Trust,
The Abbey
- Mr. Tom C. Frost
Chairman Emeritus, Frost Bank
- Mr. James W. Gorman, Jr.
Investor/Rancher
- Mr. William E. Greehey
Chairman, NuStar Energy, L.P.
- Mr. George C. (Tim) Hixon
Investor/Rancher
- Mr. Milton B. Lee
(Retired) CEO, CPS Energy
- Mr. B.J. McCombs
Chairman, McCombs Enterprises
- Mr. William G. (Bill) Moll
(Retired) CEO, KLRN
(Retired) Chairman & CEO, Clear Channel
Television
- Mr. Edward E. Whitacre, Jr.
Chairman Emeritus, AT&T



TABLE OF Contents

- 4 President's letter
- 6 Teaming up against TB
- 10 Women in science
- 16 Women supporting science
- 18 Scientists of the future
- 19 Financials
- 20 Grants and contracts
- 22 Champions of discovery
- 23 Circles of giving
- 27 The Forum
- 29 The Founder's Council
- 32 The Argyle

From the President

WE ARE EVOLVING. WE ARE MOVING FORWARD. WE ARE TEXAS BIOMED.

The world is evolving, and so is Texas Biomedical Research Institute. We've embraced a bold vision that will establish our Institute as an inspiring, one-of-a-kind research and resource organization — thus changing the course of human health. We are indeed reimagining science in the 21st century.

By 2050, infectious diseases will be the leading cause of death around the globe. There is an urgent need for new pipeline strategies for diagnostics, therapies and vaccines and consequently the end-markets are significantly growing in this sector. The world must be prepared for possible pandemics. Recent headlines involving Ebola, Zika and Influenza prove the world is “smaller” than it has ever been. Deadly diseases are literally just a plane flight away. And, those pathogens are evolving, too. Dangerous “superbugs” resistant to current treatments claim thousands of lives every year.

Texas Biomed is home to scientific explorers aiming to understand the basic biology of human disease, and we are uniquely positioned to become an international leader in infectious disease research.

Texas Biomed's grants and contracts support work in HIV, malaria, TB, hepatitis, Ebola, Pertussis, and co-morbidities such as diabetes, cardiovascular disease and obesity among others. The Institute is developing a multidisciplinary approach to science with integrative research platforms in aging, inflammation, data sciences and more. This approach enables researchers to better understand interactions between microbes and humans, create and test new diagnostics, therapies and vaccines and understand the health of human, animal and microbial populations. These studies serve the ultimate purpose of diagnosing, preventing and curing diseases affecting you, your loved ones and the world.

Collaborative science enables us to build teams of scientists aimed at addressing our most pressing health issue of this century — the eradication of infection. By investing in a future that includes more scientists working in a collaborative laboratory, we can tackle infectious diseases with the urgency they deserve. Interdisciplinary research can yield faster and more impactful scientific breakthroughs.



Collaborative science enables us to build teams of scientists aimed at addressing our most pressing health issue of this century — the eradication of infection.

The evolution of Texas Biomed requires revolutionary ideas in science, technology and infrastructure, as well as revolutionary support from donors, the community and visionaries with the common goal of wiping out infection and improving human health. This support empowers our team to unravel the mysteries of infectious diseases and improve human health.

Just as our society continues to explore the evolving roles of our diverse population, so the makeup of Texas Biomed is changing. In this issue, you will read about our newest team of scientists, learn about the women impacting science at Texas Biomed and discover how we are fostering a new generation of researchers.

Our vision and our passion is science that enhances lives through discovery. I believe the time is now to dream big...act bold...evolve.

Larry Schlesinger, M.D.
President and CEO



Joanne Turner, PhD, Larry Schlesinger, MD and Jordi B. Torrelles, PhD

PROFILE

Teaming up against TB

Team science is a concept Texas Biomedical Research Institute **President Larry Schlesinger, MD**, believes is the secret sauce of scientific discovery, which lies in bringing together researchers with complementary expertise to attack a big problem. At The Ohio State University, Schlesinger assembled and nurtured a team of tuberculosis (TB) researchers working to develop better diagnostics, vaccines, and treatments for TB, a disease that latently infects more than two billion people worldwide, of which 10 million develop a full-blown infection each year. To combat this scourge, Schlesinger is expanding his team science approach at Texas Biomed and has brought three labs, totaling about 15 researchers at various stages of training, who are advancing TB science.

One of the labs is Schlesinger's own, which focuses on host immunity and how the TB bacterium invades and evades immune control. **Joanne Turner, PhD**, an immunologist by training and Texas Biomed's new Vice President for Research, and **Jordi B. Torrelles, PhD**, a trained clinical microbiologist and biochemist, lead the other two TB labs that have moved from The Ohio State University to Texas Biomed.

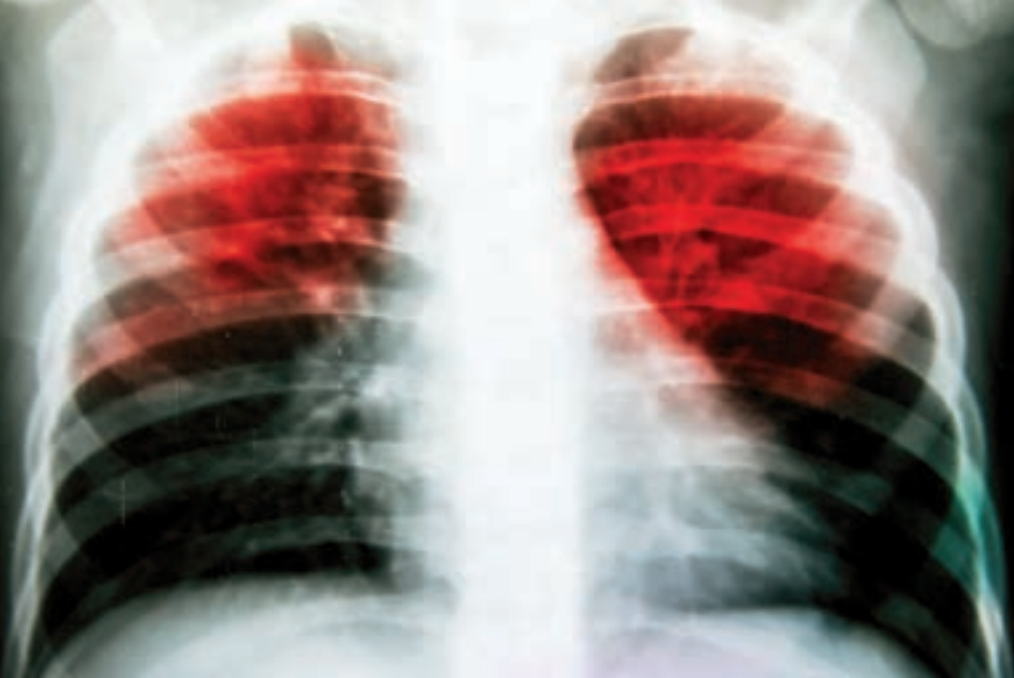
Turner's lab focuses on aging and the immune system, specifically on understanding why older individuals are more susceptible to TB infection. A native of England, Turner completed her PhD at the London School of Hygiene and Tropical Medicine. She stumbled into TB research "purely accidentally," she says, "because it was a good problem to solve" for a young immunologist looking for a challenge.

Her PhD work focused on TB in humans, but she realized that to really understand the mechanisms of disease, she needed access to a simpler system with fewer unknown variables. For her postdoctoral fellowship at Colorado State University, she developed studies using mouse models of TB. With mice, she could look directly at lung tissue to understand what was happening at the infection site, she explains. Now, she leverages the strengths of mouse models to investigate TB but always with an eye towards improving human health.

"I can see something interesting in humans, and mechanistically test it in a mouse," Turner explains. "Or, I can see something in a mouse and then go back and make sure it's relevant in humans. It's a really nice kind of cycle. It's much more powerful."

At Colorado State University, Turner met Torrelles, a Barcelona native who had just completed his clinical microbiology training and was performing a three-month internship specializing in mycobacterial pathogenesis. He enjoyed it so much that he ended up staying in Colorado to complete his PhD in biochemistry. Torrelles studied *Mycobacterium tuberculosis*, the bug that causes TB.

Around the time Torrelles was finishing his PhD, Schlesinger recruited Turner as a faculty member to the Center for Microbial Interface Biology at The Ohio State University, a research center that he built from the ground up. Torrelles also moved to Ohio State to do a postdoctoral fellowship in Schlesinger's lab. There, Torrelles augmented his detailed understanding of the TB pathogen with a thorough understanding of host immunology.



Pulmonary Tuberculosis (TB): Chest x-ray shows alveolar infiltration in both lungs due to Mycobacterium tuberculosis infection.

“I knew everything about the bacterial side, but I didn’t know too much about the host side,” Torrelles said. “So I learned everything about the host side — trying to understand how the human lung mucosa affects mycobacteria in a way that allows them to infect the host cell and establish infection in the human body.”

With the combined expertise in biochemistry, microbiology, immunology, animal models, and clinical knowledge of TB in human patients, the team is able to perform and publish groundbreaking research that would be very difficult to do as a sole investigator.

“It’s good to work in a team like that — you get instant updates from your colleagues about some new finding that normally would take years to get in the literature,” says Turner. “It is really, really helpful to bounce ideas off people.”

After more than a decade working together at The Ohio State University, Schlesinger, Turner and Torrelles moved to Texas Biomed last year. With unique research facilities that include the Southwest National Primate Research Center (SNPRC), the biosafety level 3 laboratory, plus access to TB patients from border populations and the local TB hospital, Texas Biomed was the perfect place to accelerate the translation of their TB research to the clinic.

There’s a much higher rate of TB in South Texas, especially near the Mexican border, than there is in Ohio. That’s one of the reasons the team wanted to move to San Antonio, explains Turner.

The team is now testing a novel TB vaccine in guinea pigs. If it is successful, they will move to testing it in nonhuman primates at the SNPRC.

They are also working to advance new anti-TB therapeutic approaches and develop inexpensive diagnostics for TB to facilitate early detection in low resource settings with collaborators throughout the world. TB is a disease associated with poverty. Places that need diagnostics and treatment the most are least able to afford them.

Torrelles recently discovered that the lung mucosa (surface of the lung) contains enzymes that modify the TB microbe before it infects the lung cells. Much of the *in vitro* work on the TB microbe doesn’t take into account the modifications caused by the enzymes in the lung mucosa, so it doesn’t accurately represent the infection process, he says.

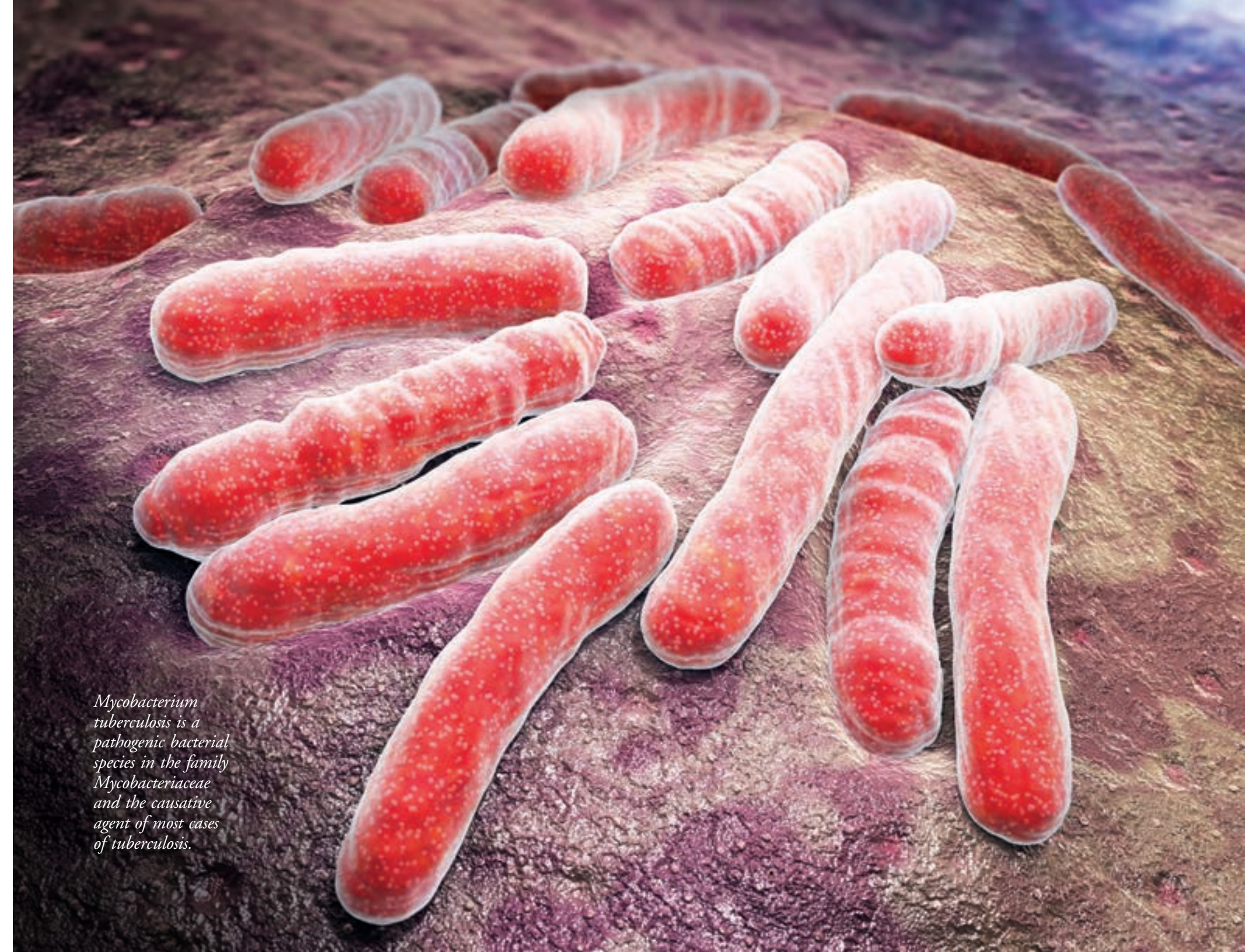
“Now we can try to figure out which compounds are hiding in the lung mucosa that determine if bacteria will successfully infect the host, or if the host will successfully control the infection,” Torrelles explains.

Intriguingly, the molecules present in the lung mucosa of elderly people are different, which might explain why the elderly are more susceptible to infection — a hypothesis the TB team is currently investigating.

Turner’s lab has a large NIH program project grant focused on the immunology of aging, but she is increasingly busy with her administrative role as VP for Research. In this role, she ensures that the investigators at the Institute have the resources and support to do their best work.

“I love helping other people do good science,” she says.

Schlesinger’s talent for bringing together teams and having them capitalize on each others’ strengths continues to bear fruit not just in the lab but at the highest levels of leadership. He and Turner work in tandem as administrators, with Schlesinger focusing on raising the visibility of Texas Biomed and strategically growing the Institute, while Turner manages the inward-facing work of ensuring the science in the Institute is advancing smoothly. Given their years of experience working together as a well-oiled research machine, it’s exciting to see what they’ll be able to accomplish at the helm of Texas Biomed.



Mycobacterium tuberculosis is a pathogenic bacterial species in the family Mycobacteriaceae and the causative agent of most cases of tuberculosis.



*Shannan Hall-Ursone,
DVM*

Melanie Carless, PhD

Kathy Brasky, VDM

Karin Haack, PhD

*Olga Gonzalez, DVM,
ACVP Diplomate*

*Ruth Ruprecht,
MD, PhD*

EVOLVING SCIENCE, EVOLVING CAREERS

Women in science at Texas Biomed

Ruth Ruprecht, MD, PhD, Director of the Texas Biomed AIDS Research Program, came of age in Switzerland when women still did not have the right to vote. She was not about to let her gender hold her back, though. The first woman in her family to seek higher education, she was the only woman in her University of Zurich chemistry class. Although she had read papers in high school that sparked her interest in molecular biology, the university did not have a program in that emerging discipline. So she studied chemistry instead.

Then she got a serendipitous opportunity to come to the United States. Through an exchange program, she landed a summer research internship at a pharmaceutical company in New Jersey. Serendipity helped again — to be accepted into the PhD program in Human Genetics at Columbia University, New York. Under the mentorship of a leading molecular biologist, she studied the mechanisms of reverse transcriptase, an enzyme that catalyzes the formation of DNA from an RNA template. Following her mentor's advice, Ruprecht then entered the 2-year PhD-to-MD Program in Miami. During her residency at UCLA, she treated the first AIDS patients, before the new illness had a name and before its cause was known.

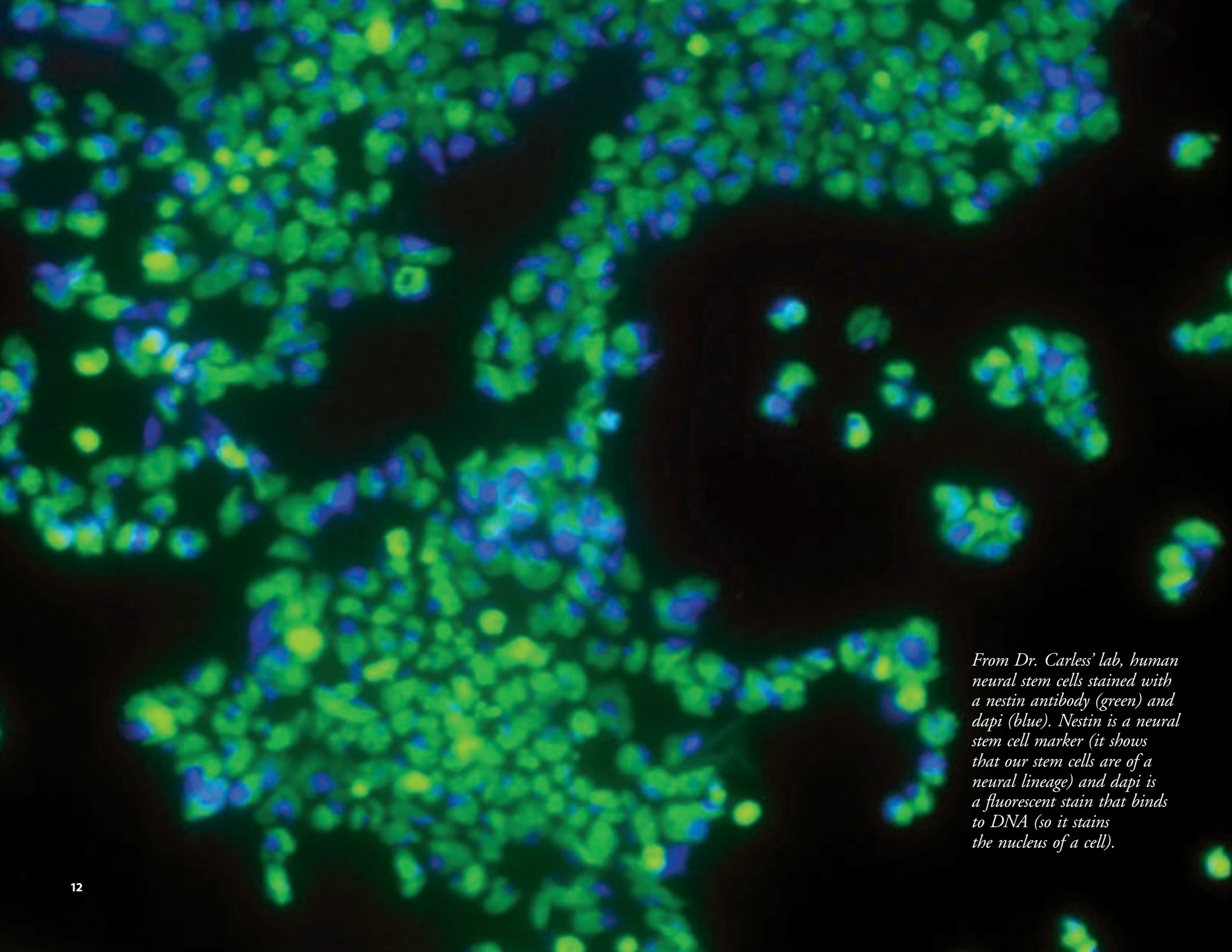
Researchers discovered AIDS was caused by HIV, a retrovirus that relies on reverse transcriptase, the enzyme Ruprecht had studied for her PhD. She quickly realized it was essential to test inhibitors of this enzyme in cultured cells and in animal models. Her lab first showed that AZT protected animals against retroviral infection — even when given as post-exposure prophylaxis.

AZT eventually became the first FDA-approved AIDS drug. Ruprecht also developed the concept of giving AZT during pregnancy to prevent maternal virus transmission. This was the first of many discoveries she made in her 29-year career at the Dana-Farber Cancer Institute/Harvard Medical School. She moved to Texas Biomed in 2013 to focus on translational HIV research using nonhuman primate models.

The challenges and opportunities for women in science have evolved over time; the women who started their careers more than 40 years ago navigated a very different landscape in science than the women who started 5 years ago. Even so, the women in science at Texas Biomed have in common tales of persistence, resourcefulness, and serendipity. Scientific research rarely goes in a straight line and neither do careers. Success for these women was the result of hard work and putting themselves in the path of opportunity. They balanced overcoming obstacles on the way to a scientific goal with being flexible enough to see when a different path could be more interesting in the long run.

Karin Haack, PhD, a staff scientist, studies the genetics of complex diseases like cardiovascular disease, obesity, and diabetes in American Indians and Mexican Americans, among other underserved and understudied groups.

Originally from Germany, Haack completed her PhD training in gene therapy at the German Cancer Center in Heidelberg. When she and her husband moved to San Antonio in 2004, Haack knew she didn't want the responsibilities that come with leading a lab, but she wanted to continue to



From Dr. Carless' lab, human neural stem cells stained with a nestin antibody (green) and dapi (blue). Nestin is a neural stem cell marker (it shows that our stem cells are of a neural lineage) and dapi is a fluorescent stain that binds to DNA (so it stains the nucleus of a cell).

contribute to science in meaningful ways. In a stroke of luck, she found a staff scientist position in Dr. Shelley Cole's lab. Although she is not trained in population genetics or bioinformatics, her technical know-how allowed her to switch fields relatively easily from cancer therapeutics to the genetics of complex diseases. Now, Haack implements new genetic and genomic techniques, manages the lab, and trains new technicians and students. "I got really lucky," she says. "I love what I do here."

Melanie Carless, PhD, Associate Scientist, has a similar story of finding her niche by changing fields along the way. At Texas Biomed, Carless is studying epigenetic mechanisms with the goal of identifying modifiable biological risk factors, and subsequently developing novel therapies for the treatment of neurological and cardiometabolic diseases.

Originally from Australia, Carless went to college thinking she would study business but quickly realized it was not for her, and switched to studying biology. She stayed on at Griffiths University Gold Coast in Australia to receive her PhD while researching genetic changes in non-melanoma skin cancers. She then spent two years as a postdoctoral fellow at the Moffitt Cancer Center in Florida. At that point, her research stalled and she was feeling disheartened when a friend at Texas Biomed suggested she move here.

Although Carless didn't have training in neuroscience, her training in genomics allowed her to join a project that was just launching, identifying genes associated with changes in brain structure and cognition. "I came over and started working on that, and the rest is history," she says. She's now been here for 11 years, and has advanced in her career from postdoctoral fellow to associate scientist.

Her path has not always been smooth, but that's what science is all about. "To be honest, science is very much about failure as much as it is about success," Carless says. "You can learn a lot about a process when an experiment doesn't work the way you expect it to. I think it's important to understand that when you choose a career in science, if you truly want to drive the field forward in new and exciting ways, you can't expect smooth sailing. Science is challenging. It takes dedication and hard work to make new discoveries and advance our scientific knowledge. Perseverance is key."

A PASSION FOR LAB ANIMALS

The veterinarians who care for the animals and help design and carry out studies are driving the field forward, too. Like the scientists at Texas Biomed, they are

These women are representative of the dozens of women who are pursuing careers in science at Texas Biomed.

driven by the desire to impact human and animal health, today and in the future.

"I really like the work," **Kathy Brasky, VMD**, says. "I like being part of the research team, and I like being an advocate for the animals. My job is

to make sure all of their needs are taken care of."

Brasky and **Shannan Hall-Ursone, DVM**, are two of the team of six veterinarians who oversee the research animals' medical care at the Southwest National Primate Research Center, which is home to approximately 2,500 nonhuman primates including baboons, macaques, and marmosets. In addition to delivering routine veterinary care, Hall-Ursone and Brasky assist Texas Biomed scientists in designing research studies and perform the necessary procedures.

Brasky, originally from Philadelphia, had been interested in biology from a young age and was unsure whether to go to medical or veterinary school. But a career day at a hospital gave her the opportunity to meet a burn patient. "I just felt so bad for the person...and so I decided that human medicine was not going to be for me," she explains.

Before vet school, Brasky worked in a lab conducting animal research, leading her to specialize in laboratory animal medicine. After residency, she joined Texas Biomed, where she's worked for 28 years and counting.

Another Philadelphia native, Hall-Ursone has been interested in working with animals since she was a child, and that set her on the fast track to vet school. During her pathology training, she worked with a research monkey for the first time.

"I was kind of hooked on lab animals from then on," she says. She joined Texas Biomed in 2015.

Hall-Ursone enjoys the variety that her work offers: she practices clinical and preventive medicine, performs surgeries, and works with a variety of research animal species from mice to monkeys. In the long run, animal studies make the lives of people and other animals better in the future, and "that's what keeps me going," Hall-Ursone says.

Olga Gonzalez, DVM, ACVP Diplomate, is a veterinary pathologist. Unlike Brasky and Hall-Ursone, Gonzalez spends most of her time looking through a microscope. She collects and analyzes tissues from animals. She also assists in diagnosing any natural disease that may spread in the nonhuman primates.

“Necropsies are super important,” she says. “We do a full workup and look at all the tissues and generate a report.” Those animal data are crucial to scientists’ research conclusions.

Gonzalez grew up on the island of Puerto Rico, and as an undergraduate, had the opportunity to do research with a parasitologist, which ignited her interest in working with laboratory species. After vet school at the University of Wisconsin Madison and a pathology residency, she returned to Puerto Rico in 2009, starting her own veterinary pathology service — the only one on the island at the time. She also worked as the veterinary pathologist at the Caribbean Primate Research Center in San Juan, Puerto Rico. Last year, excited about the prospect of working with nonhuman primates and assisting with studies on infectious diseases such as TB and Ebola, she joined Texas Biomed.

The scientists and veterinarians, for their part, often began their careers with a natural curiosity about how the world works, later supplanted with a desire to make a real impact on peoples’ lives.

For example, Ruprecht’s scientific training was a natural fit for a bright and curious mind. Her medical training after her PhD led her to apply her skills to clinical problems. “In retrospect, I’m grateful to my professor for having persuaded me [to go to medical school] because it really shaped what I am interested in. I’m not interested in just writing papers for the sake of writing papers. I’m interested in dealing with questions that have an impact on public health,” she says.

Even so, the scientists know it can take years of basic research before new findings lead to clinical applications. “You want to contribute to discovering something that will be used to develop preventative measures or a new treatment. But you have to really think long-term,” Haack says.

CHANGE AND CHALLENGES

The fact that Ruprecht was not allowed to vote in Switzerland remains a salient memory for her. While studying at the university, she taught chemistry at an engineering school in Zurich. At one point, she was teaching water purification processes, and Zurich was planning a major water purification project in the city. Although Ruprecht had the expertise and was teaching the men, only they would be allowed to vote on the project. “The paradox was that the woman who knew how this worked and taught the men the processes did not have the right to say yes or no for the project,” she says.

Younger women scientists are less likely to report overt discrimination like Ruprecht experienced. Several of them, however, mentioned how challenging it is to balance their career with family responsibilities.

“There’s not a lot of support for families in this society, such as paid maternity leave and affordable childcare,” says Carless.

It’s hard to have a demanding career while also being expected to be the primary caregiver. It can be especially challenging for immigrants like herself who don’t have extended family nearby to lean on, she adds. Mother of three young children, she juggles schedules as best she can, but admits “I just don’t get very much sleep.”

Gonzalez, mother of two, agrees. She says the challenges of balancing work and family life are harder than anything she’s ever done — even harder than the rigorous training she went through to become a veterinarian. Hall-Ursone also balances the demands of raising a family and excelling at her job.

Although challenges remain, it’s clear women today have more opportunities in scientific research than ever before. One of the ways to honor the pioneering women who paved the way is to encourage aspiring women and girls to pursue a scientific career.

ADVICE FOR YOUNG FEMALE SCIENTISTS

Each of these scientists and veterinarians encourage young women to gain research experience early through internships or similar programs. Haack’s early research experiences at the university and in a small biotech startup helped her make up her mind she wanted a career in research, she says.

Brasky’s advice for young women interested in research careers is to “just go for it.” She’s been impressed with the veterinary students she has mentored at Texas Biomed through summer internship programs.

“I’m really surprised to see the young ladies these days. They are real go-getters. I support them wholeheartedly,” Brasky adds.

It’s worth taking inspiration from pioneers like Ruprecht, who created a life for herself that many women of her generation could not even imagine.

“I always envisioned traveling the world and having an adventuresome life. And I ended up getting what I made for myself,” she says. “I always knew where my compass was pointing — molecular biology. I’ll make huge compromises just to follow that compass.”



Shannan Hall-Ursone, DVM, shows baboon colony technician Heather Gleason an x-ray image of one of the animals.



Jody Lutz, Tena Gorman, Ruth Eilene Sullivan, Courtney Percy

LEADERSHIP THROUGH THE YEARS

Women Supporting Science

A nugget of an idea has evolved into a shiny jewel in the San Antonio community. Founded in the early 1970s by three women, the Texas Biomedical Forum now boasts 320 members.

One of those visionary women, **Ruth Eilene Sullivan**, says jokingly “we wanted to promote what goes on at the place way down there with the baboons.” She adds in a more serious tone, “you have to believe in the cause. And you have to have a little spirit and spunk.”

The all-female organization raises hundreds of thousands of dollars each year to support research at Texas Biomed and educate the public. Their funds support school tours and grants for high school science teachers as well as Texas Biomed scientists. Generations of women, from their 20s to their 80s, act as ambassadors for science.

The group’s second president, **Tena Gorman**, remembers that it was fairly easy to talk people they knew into joining the organization.

“We had a lot of very energetic friends, and the idea caught on because of the interest in research and medicine,” Gorman recalls.

The Forum’s showcase event, a Gala put on each year on the first Saturday in May, has evolved into one of the most anticipated San Antonio social events of the spring. Over the years, the women of the Forum have thrown lavish parties at The Argyle with themes ranging from Under the Sea to Alice in Wonderland.

Since 1970, the Forum has raised more than \$4.5 million. About \$3 million in funding has been dedicated to pilot research projects. Those are early studies

Texas Biomed scientists conduct to win larger funding for their work. That \$3 million has translated into \$70 million in funding for projects — a 23 to 1 return on investment.

Immediate past President of the Forum, **Courtney Percy**, discovered the group when she was fresh out of college. She was looking for a philanthropic group to support with her time and talent. Her father suggested she check out the Forum.

“I am certainly no scientist, but I find the research fascinating and interesting,” Percy says. “If my way of contributing is through creating awareness and raising funds, then I wanted that to be my purpose.”

Percy points out the Forum is changing with the times, evolving in its use of social media, leaving behind scrapbooking for Facebooking. However, she says, the longevity of the group points to its members’ lingering passion and purpose.

Current Forum President **Jody Lutz** calls the organization “a blessing.”

“I’ve learned so much, not only on the science side, but from a leadership and event planning perspective as well,” Lutz says. “Plus, I’ve gotten to develop some of the most important friendships of my adult life through the Forum.”

Forum members have spent more than 45 years promoting biomedical science. The leaders of the group today say they owe a debt to the founders.

“Courtney and I have been very fortunate to follow in the footsteps of some truly remarkable women,” Lutz adds.

ENCOURAGING GROWTH

Scientists of the future

At any given moment, several dozen up-and-coming scientists are working at Texas Biomed. These talented postdoctoral scholars and postgraduate students are vital to the future of our institute and science in general.

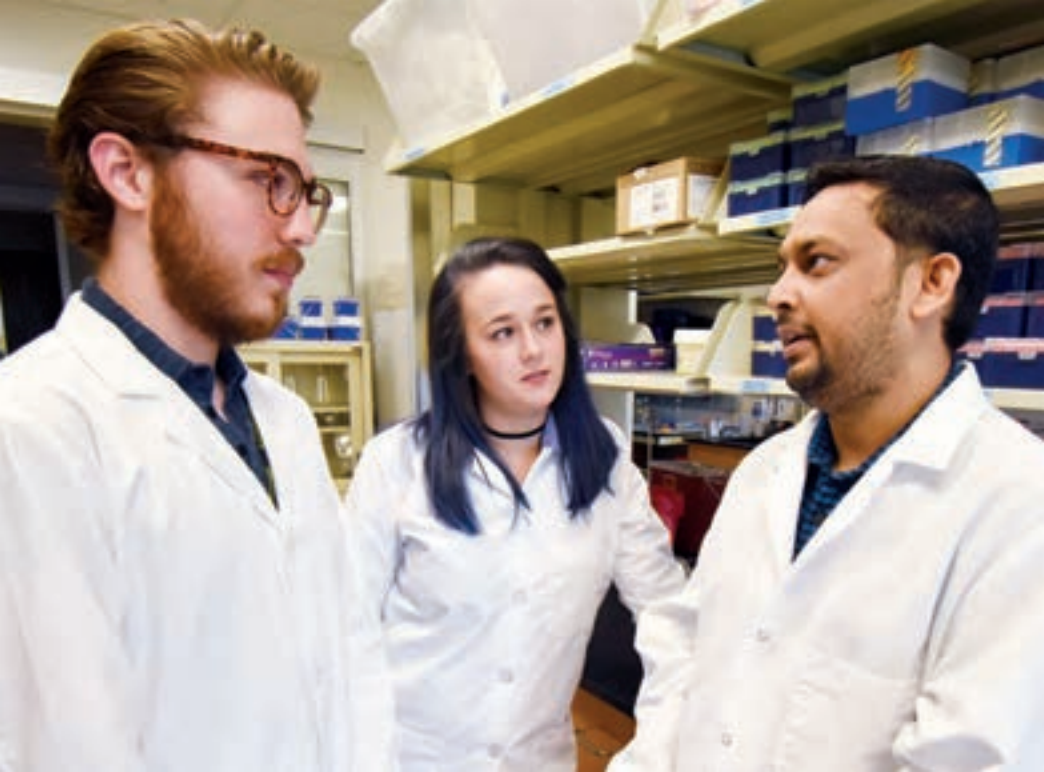
Now, Texas Biomed is launching a new program to cater to postgrad and postdoc needs. It's called the Texas Biomed Association for Postgraduate and Postdoctoral Trainees or TBAPPT.

The faculty facilitator is Associate Scientist Melanie Carless, PhD, who says she has "always had an interest in supporting the pursuit of science in younger people." What she's been trying to do on an individual basis has now become part of the cultural fabric at Texas Biomed.

Postdoctoral scientist Chrissy Leopold Wager, PhD, attended the first meeting. "I am very excited to be part of the inaugural TBAPPT where we can help shape what this association will become," she said. "I am most excited for opportunities to improve my grant writing and leadership skills which will be crucial as my scientific career advances."

TBAPPT will be run independently by the postdocs and postgrads. The group has elected four people to leadership positions. They will run the meetings and related activities. For some, this will be a way of connecting with other young scientists in other labs on our campus. For others, this could be the start of a collaborative research experiment.

The monthly activities will focus on three main areas: career development, community outreach and networking skills.



Tucker Piergallini, a PhD student, Amanda Marek, a PhD student, and Gourav Roy Choudhury, PhD, a postdoctoral student are taking part in TBAPPT.

To advance their careers, members will attend grant-writing workshops, talk to journal editors, and listen to speakers from industry, just to name a few of the plans.

In reaching out to the community, TBAPPT members will volunteer their time and even raise money for a cause on which they agree, speak at local schools, and judge science competitions.

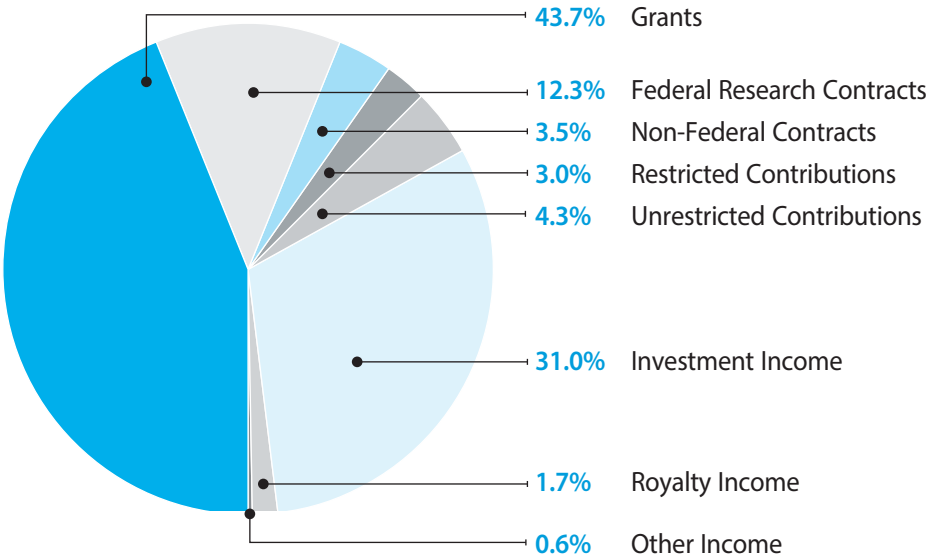
This new venue for sharing ideas will also include teambuilding activities, social events and perhaps even mentoring with postdocs advising postgrads about the challenges facing them.

At Texas Biomed, we embrace a set of values we call TIDES: Teamwork, Integrity, Diversity, Excellence and Safety. VP for Research Joanne Turner, PhD, says "this new organization is designed to bolster the input and integration of young scientists into our future and reflects our commitment to fostering an environment of continuous improvement that promotes excellence in science."

Financials

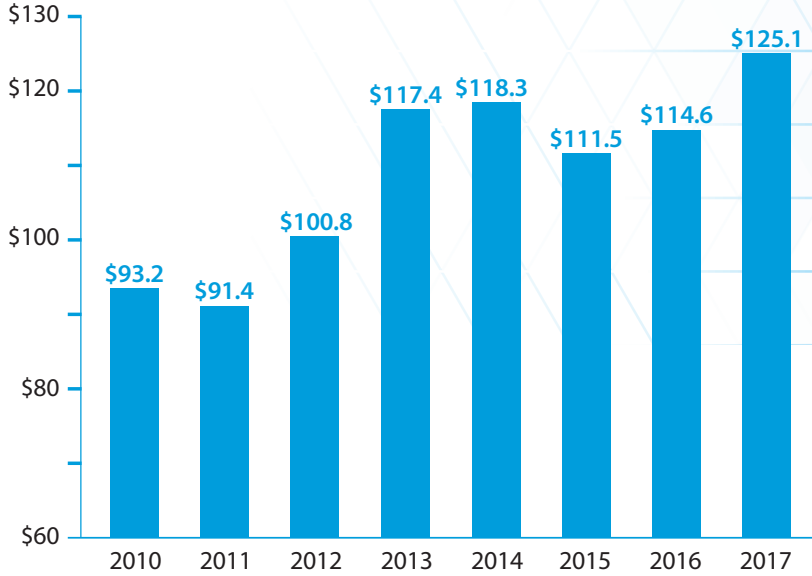
2017 REVENUE

Based on 2017 Audited Report



2017 VALUE OF ENDOWMENT

In Millions of Dollars



Grants And Contracts

AWARDED IN 2017

FEDERAL RESEARCH GRANTS

SPONSOR AND TITLE	PRINCIPAL INVESTIGATOR	LENGTH	NEW AWARD TOTAL
NATIONAL INSTITUTES OF HEALTH (NIH) <i>Mapping Drug Resistance Genes in Plasmodium falciparum</i>	Dr. Timothy Anderson	5 years	\$4,615,235
NIH/UTSCH <i>A Neonatal Monkey Model for Tuberculosis Vaccination</i>	Dr. Marie-Claire Gauduin	5 years	\$3,491,584
NIH <i>Genetic analysis of cercarial release in schistosomes</i>	Dr. Timothy Anderson	5 years	\$2,545,442
NIH/UNC <i>Leveraging Ancestry to Map Kidney Loci</i>	Dr. Shelley Cole	5 years	\$1,245,399
NIH/JANSSEN <i>Advanced Development of a Multivalent Filovirus (Ebola/ Marburg) Hemorrhagic Fever Vaccine (SOW 27)</i>	Dr. Ricardo Carrion	1 year	\$1,160,067
NIH/GSU <i>Small molecule inhibitors of Ebola virus polymerase function</i>	Dr. Robert Davey	5 years	\$1,038,016
NIH <i>Defining the Normal Range of Postprandial Metabolic Risk: Multi-omic and multi-tissue Analysis after a Mixed Meal</i>	Dr. Raul Bastarrachea	2 years	\$544,803
NIH <i>Establishing a miRNA biomarker signature for brain structural variation in a non-human primate model</i>	Dr. Melanie Carless	2 years	\$521,848
FDA/U OF OK <i>Purchase of 20 Baboons</i>	Dr. Karen Rice	1 year	\$170,995
NIH <i>Research to Improve and Standardize Marmoset Nutrition and Dietary Health (Equipment Supplement)</i>	Dr. Suzette Tardif	1 year	\$158,030
NIH/UVA <i>Targeting Ebola virus for small molecule drug discovery</i>	Dr. Robert Davey	2 years	\$66,516
NIH/STELLENBOSCH <i>Altered immune-endocrine axis in type 2 diabetes and tuberculosis risk</i>	Dr. Larry Schlesinger	1 year	\$2,427

Total from Federal Research: \$15,560,362

PHILANTHROPIC AND PRIVATE RESEARCH GRANTS

SPONSOR AND TITLE	PRINCIPAL INVESTIGATOR	LENGTH	NEW AWARD TOTAL
GATES <i>Drug resistance markers for surveillance in schistosomiasis control programs</i>	Dr. Timothy Anderson	1 year	\$286,656
GATES <i>Alveolar macrophage immunobiology and functional genomics: Unlocking human to human variation in host response to M. tuberculosis</i>	Dr. Larry Schlesinger	2 years	\$263,922
COWLES <i>Genomic analysis of hybridization in Schistosoma haematobium from Nigeria</i>	Dr. Timothy Anderson	2 years	\$122,386
OWENS <i>Microencapsulated Stem Cells for the Treatment of Diabetes</i>	Dr. Marcel Daadi	2 years	\$95,000
OWENS <i>Innovations in the Baboon Model of Liver Cancer</i>	Dr. Christopher Chen	2 years	\$89,864
MARMION <i>Metabolomics-Obesity and Aging</i>	Dr. Michael Olivier	1 year	\$89,000
DOUGLAS <i>Douglass Grad Student Fellowship</i>	Dr. Tiziano Barberi	2 years	\$71,600
TEXAS BIOMEDICAL FORUM (TBF) <i>In vivo engraftment potential of hPSC-derived muscle progenitors maintained in long-term cultures</i>	Dr. Bianca Borchin	1 year	\$70,637
COWLES <i>Role of LncRNAs in establishing and reactivation of HIV latency</i>	Dr. Smita Kulkarni	1 year	\$61,193
TBF <i>Influence of the human lung mucosa in Mycobacterium tuberculosis pathogenesis</i>	Dr. Jordi Torrelles	1 year	\$60,000
TBF <i>In vivo efficacy of small molecule anti-TB compounds</i>	Dr. Abul Azad	1 year	\$60,000
TBF <i>Predicting Time Since Mycobacterium Tuberculosis Infection</i>	Dr. Joanne Turner	1 year	\$60,000

SPONSOR AND TITLE	PRINCIPAL INVESTIGATOR	LENGTH	NEW AWARD TOTAL
TBF <i>Development of Novel Arenavirus Inhibitors into Drug Like Substances</i>	Dr. Manu Anantz padma	1 year	\$50,000
TBF <i>Novel Antiviral Based on Crosslinking Marburgvirus nucleoprotein</i>	Dr. Andrew Hayhurst	1 year	\$50,000
TBF <i>Cellular Long Non-coding RNAs in HIV replication</i>	Dr. Smita Kulkarni	1 year	\$49,954
TBF <i>Identification of microRNA Biomarkers Associated with Extent of Atherosclerosis in Hispanic Obese Adolescents</i>	Dr. Genesio Karere	1 year	\$49,928
TBF <i>Liver and serum metabolomics biomarkers for atherosclerosis</i>	Dr. Biswapriya Misra	1 year	\$49,654
TBF <i>Assessing the Impact of Consumption of a Sugar-sweetened Drink on Physical Activity, body fat, and Metabolism in the Baboon</i>	Dr. Anthony Comuzzie	1 year	\$46,307
OWENS <i>The Role of Follistatin Like-1 Protein in Coronary Aneurisms of Kawasaki Disease</i>	Dr. Jean Patterson	2 years	\$40,338
TBF <i>Regulation of VPS34 complex in macropinocytosis</i>	Dr. Olena Shtanko	1 year	\$40,000
TBF <i>Effect of HIV infection on M. tuberculosis granuloma formation and evolution</i>	Dr. Eusondia Arnett	1 year	\$40,000
TBF <i>Baboon Pluripotent Stem Cell Derived Retina Progenitor Cells for Treatment of Retina Degeneration</i>	Dr. Alberto Muniz	1 year	\$40,000
TBF <i>Mitochondrial Dysfunction & Aging Adaptive Immunity in M tb Infection</i>	Dr. Colwyn Headly	1 year	\$36,100

SPONSOR AND TITLE	PRINCIPAL INVESTIGATOR	LENGTH	NEW AWARD TOTAL
KUMAMOTO UNIVERSITY <i>Development of antiretroviral agents that penetrate the central nervous system and exert potent activity against various HIV-1</i>	Dr. Ruth Ruprecht	1 year	\$35,765
SAAFDN <i>Developing Stem Cell Therapy for Treating Diabetes</i>	Dr. Marcel Daadi	2 years	\$35,000
ETHNOMED <i>Effects of exposure to BMAA on neurofibrillary tangles and amyloid deposits in the brain</i>	Dr. Suzette Tardif	1 year	\$33,324
OWENS <i>Exploring a Possible Novel Approach for the Treatment of T-Cell Acute Lymphoblastic Leukemia</i>	Dr. Tiziano Barberi	2 years	\$30,000
MCNUTT <i>V.H. McNutt Memorial Foundation Gang Cages Donation</i>	Institutional donation	1 year	\$25,000
VASCFDN/BCM <i>Follistatin-like 1 protein blockade in Kawasaki Disease</i>	Dr. Jean Patterson	1 year	\$25,000
SAAFDN <i>Exploring a Possible Novel Approach for the Treatment of T-cell Acute Lymphoblastic Leukemia</i>	Dr. Tiziano Barberi	2 years	\$20,000
VARIOUS <i>Dr. Katy A. Freed Fund for Research in Cystinosis and Rare Genetic Disorders</i>	Dr. Timothy Anderson	1 year	\$1,510

Total from Philanthropic and Private Research: \$2,028,139

COMMERCIAL RESEARCH GRANTS

Total from Commercial Research: \$1,040,362

TOTAL OF NEW GRANTS AND CONTRACTS: \$18,628,863

TEXAS BIOMED CONTRIBUTIONS

Champions of Discovery

"Science gives us a tool of unparalleled effectiveness by which we can improve the physical side of our lives, and since science recognizes no boundaries, the lives of people all over the world."

Those are the words of Texas Biomed founder Tom Slick in 1952. Now, 66 years later, his philosophy is being lived out by the scientists who are enhancing lives through their research and discoveries.

None of this would be possible for a nonprofit, independent institution without the support of generous donors. Every year, philanthropists with their eyes on the future invest in the men and

women who are working diligently to battle diseases and develop new vaccines, diagnostics and therapeutics.

The need for new insights grows more urgent every year. Emerging health issues don't stay in one place. A problem halfway around the world today could be at our doorstep tomorrow.

You can be part of something big. A contribution to Texas Biomed is a way to fund the people, equipment, and ideas with the power to change the world.

A monetary donation to Texas Biomedical Research Institute is a way to honor past visions, enable present dreams and fortify humankind's vitality in the future.



It is an honor to acknowledge the exceptional support of the following donors, whose significant financial contributions enable our scientists to tackle life-changing research:

Mr. and Mrs. Rex Mitchell Amini
Dr. and Mrs. C. Collins Anderson
AT&T
Mr. and Mrs. Richard N. Azar II
Mr. and Mrs. Sam P. Bell, Jr.
Bill and Melinda Gates Foundation
Brown Foundation, Inc.
Mr. Charles C. Butt
Ms. Phyllis Slick Cowell
Dickson-Allen Foundation
Mr. and Mrs. James L. Donnell, Jr.
Mrs. James L. Donnell
Douglass Foundation
Elizabeth Huth Coates Charitable Foundation
Fletcher Jones Foundation
Founder's Council
Frost
Mr. and Mrs. Tom C. Frost, Jr.
G. Harold and Leila Y. Mathers Charitable Foundation

Gorman Foundation
Mr. and Mrs. James W. Gorman, Jr.
Mr. and Mrs. William E. Greehey
The Greehey Family Foundation
Mrs. Helen Kleberg Groves
Mr. and Mrs. Jack E. Guenther, Jr.
Mr. and Mrs. Jack Guenther
Mr. and Mrs. Curtis C. Gunn, Jr.
Mr. and Mrs. Frederic Hamilton
H-E-B
Mr. and Mrs. Ronald J. Herrmann
Mr. and Mrs. George C. Hixon
Tim and Karen Hixon Foundation
Mr. and Mrs. William A. Johnson
John and Florence Newman Foundation
Mr. and Mrs. George A. Kampmann, Jr.
Betty Stieren Kelso Foundation
Mr. Robert E. Kelso
Mr. and Mrs. John C. Kerr
Klesse Foundation

Mr. and Mrs. William R. Klesse
Mr. and Mrs. Cappy Lawton
Mr. and Mrs. Steven Q. Lee
Ms. Mary Sue Marmion
Max & Minnie Tomerlin Voelker Fund
Mays Family Foundation
Mr. Mark Mays
Mr. and Mrs. L. Lowry Mays
Mr. and Mrs. B.J. "Red" McCombs
McCombs Foundation
McCrea Foundation
Mr. and Mrs. Lewis J. Moorman IV
Mrs. Lewis J. Moorman III
Ms. Judith N. Morton
Mr. and Mrs. Curtis T. Vaughan III
Dr. Peter W. Nathanielsz
Mr. and Mrs. John E. Newman, Jr.
Mr. William Owens
Perry & Ruby Stevens Charitable Foundation
Phoenix Charitable Foundation

Robert J. Jr. and Helen C. Kleberg Foundation
Mr. and Mrs. Barry Coates Roberts
Roger L. and Laura D. Zeller Charitable Foundation
Ruth Chapman Cowles & Andrew G. Cowles Memorial Fund
RWM Foundation
San Antonio Area Foundation
Mr. and Dr. Richard T. Schlosberg III
The Honorable and Mrs. John Shields
Stumberg Foundation
Mrs. Louis Stumberg, Sr.
Texas Biomedical Forum
V.H. McNutt Memorial Foundation
Mr. and Mrs. Curtis T. Vaughan III
Virginia C. Joslin Trust
Mr. and Mrs. Edward C. Welsh
William and Ella Owens Medical Research Foundation
Mr. and Mrs. James P. Zachry

Circles of Giving

CHAIRMAN'S CIRCLE

Mr. and Mrs. Rex Mitchell Amini
Dr. and Mrs. C. Collins Anderson
Mr. and Mrs. Robert A. Anderson
Mrs. Robert R. Archer
Mr. and Mrs. John C. Asel
AT&T
Mr. and Mrs. Edward H. Austin, Jr.
Mr. and Mrs. Richard N. Azar II
Mr. and Mrs. Sam P. Bell, Jr.
Betty Stieren Kelso Foundation
Bill and Melinda Gates Foundation
Brown Foundation, Inc.
Mr. Charles C. Butt
Mr. and Mrs. Charles E. Cheever, Jr.
Ms. Phyllis Slick Cowell
Mr. and Mrs. Trey Dawson
Dickson-Allen Foundation
Mrs. James L. Donnell
Mr. and Mrs. James L. Donnell, Jr.
Douglass Foundation
Elizabeth Huth Coates Charitable Foundation
Mr. Donald G. Elliott
Mr. H. Rugeley Ferguson (*In Memoriam*)
Fletcher Jones Foundation
Founder's Council
Frost
Mr. and Mrs. Tom C. Frost, Jr.
G. Harold and Leila Y. Mathers Charitable Foundation
Mr. and Mrs. Joseph W. Gorder
Mr. and Mrs. James W. Gorman, Jr.
Gorman Foundation
Mr. and Mrs. William E. Greehey
The Greehey Family Foundation
Mrs. Helen Kleberg Groves
Mr. and Mrs. Jack Guenther
Mr. and Mrs. Jack E. Guenther, Jr.
Mr. and Mrs. Curtis C. Gunn, Jr.
Mr. and Mrs. Frederic Hamilton
Mr. and Mrs. Ronald J. Herrmann
H-E-B
Mr. and Mrs. John L. Hendry III

The Henry J. Kaiser Family Foundation
Mr. and Mrs. George C. Hixon
Hixon Properties, Inc.
Joe & Jessie Crump Foundation for Medical Research
John and Florence Newman Foundation
Mr. and Mrs. William A. Johnson
Mr. Walter Juliff
Mr. and Mrs. George A. Kampmann, Jr.
Mr. Robert E. Kelso
Mr. and Mrs. John C. Kerr
Klesse Foundation
Mr. and Mrs. William R. Klesse
Mr. and Mrs. Cappy Lawton
Mr. and Mrs. Steven Q. Lee
Mr. Rodney Ray Lewis
Ms. Kimberly Spicer Lewis
Ms. Mary Sue Marmion
Mauze Construction
Mr. and Mrs. David Mauze
Max & Minnie Tomerlin Voelker Fund
Mays Family Foundation
Mr. and Mrs. L. Lowry Mays
Mr. and Mrs. Mark P. Mays
Mr. and Mrs. B.J. "Red" McCombs
McCombs Foundation
McCrea Foundation
Mr. and Mrs. Lewis J. Moorman IV
Mrs. Lewis J. Moorman III
Ms. Judith N. Morton
Ms. Patricia P. Muir
Mr. Lanham Napier and Dr. Dacia Napier
Dr. Peter W. Nathanielsz
Mr. and Mrs. John E. Newman, Jr.
Nordan Trust
Mr. Charles G. Northrup
Mr. and Mrs. Thomas I. O'Connor III
Mr. and Mrs. Alex H. Oliver
Mr. William Owens
Mr. and Mrs. George Parker, Jr.
Mr. and Mrs. Allan G. Paterson
Perry & Ruby Stevens Charitable Foundation
Phoenix Charitable Foundation
Robert J. Jr. and Helen C. Kleberg Foundation

Mr. and Mrs. Barry Coates Roberts
Roger L. and Laura D. Zeller Charitable Foundation
Rugeley Ferguson Foundation
Ruth Chapman Cowles & Andrew G. Cowles Memorial Fund
The Ruth and Edward Austin Foundation
RWM Foundation
San Antonio Area Foundation
Mr. and Dr. Richard T. Schlosberg III
Mr. and Mrs. Thomas R. Semmes
The Honorable and Mrs. John Shields
Mr. and Mrs. Jack J. Spector
Anonymous
Anonymous
Texas Biomedical Forum
Tim and Karen Hixon Foundation
Mr. and Mrs. Jon Turner
V.H. McNutt Memorial Foundation
Mr. and Mrs. Curtis T. Vaughan III
Virginia C. Joslin Trust
Wave Healthcare, LLC
Mr. and Mrs. C. Clark Welder
Mr. and Mrs. Edward C. Welsh
William and Ella Owens Medical Research Foundation
Mr. and Mrs. James P. Zachry

PRESIDENT'S CIRCLE

2011 Eric Hill Gift Trust
Alamo Group
Mr. and Mrs. Brian and Emmy Ballantyne
Mr. and Mrs. Craig Boyan
Dr. Robert R. Clemons
Mr. and Mrs. Justin Cole
Mr. and Mrs. Peter B. Dahlberg
Mr. and Mrs. Alan W. Dreeben
The Edouard Foundation, Inc
Mr. and Mrs. John W. Feik
Mr. and Mrs. Ron Finch
Mr. William Ford
Mr. and Mrs. Thomas Albert Gates, Jr.
Mr. and Mrs. Stephen Goebel
Mrs. Marie Halff
Harris K. & Lois G. Oppenheimer Foundation
Continued on page 24

*For more information about giving opportunities, please contact Texas Biomed Vice President for Institutional Advancement Corbett Christie at (210) 258-9870 or cchristie@TxBiomed.org, or visit our website at www.TxBiomed.org and click on **Support Us**.*

Continued from page 23

Mr. and Mrs. Joe N. Haynes
Mr. and Mrs. H. Wayne Hightower (*In Memoriam*)
Mr. and Mrs. Roger C. Hill, Jr.
Mr. and Mrs. Timo Hixon
Mr. Thomas Francis Hogan III
Jack and Valerie Guenther Foundation
Joseph & Madelon Harrison Family Advised Fund
Mr. and Mrs. Richard Kardys
Mr. and Mrs. Richard F. Lord
Lorene March Partnership
Mr. Michael Lynd, Jr.
Mr. and Mrs. Clark R. Mandigo II
Mr. and Mrs. Robert S. McClane
Mr. and Mrs. John K. Meyer
Mr. and Mrs. Matthew Z. Mosser
Ms. Lynn Tidwell Neff
Mrs. Claire Oppenheimer O'Malley
Project Control of Texas, Inc.
Ms. Roxana McCallister Richardson
Dr. and Mrs. James M. O. Rubin
Mr. and Mrs. S. Van Stewart
Dr. and Mrs. Norton A. Stuart III
Dr. Joanne Turner and Dr. Jordi Torrelles
Uhl, Fitzsimons, Kewett & Burton, PLLC
USAA Foundation, Inc.
Ms. Ann Brennand Watson
Mr. and Mrs. Warren S. Wilkinson, Jr.
Mr. and Mrs. John B. Zachry

BENEFACTOR'S CIRCLE

Mr. and Mrs. Aaron Asel
Mr. and Mrs. Geary Atherton
Bank of America
Bank of San Antonio
Mr. and Mrs. James Hunter Barrow
Mr. and Mrs. Brian Beem
Mrs. Walter F. Brown
Brown and Ortiz, P.C.
Mr. and Mrs. John Brozovich
Mr. and Mrs. J. Byron Burton III
Mr. and Mrs. Guy Wade Caldwell
Mr. and Mrs. Richard W. Calvert
Mr. and Mrs. Claiborne Ayres Carrington
Mr. Chris Cheever
Ms. Jean Cheever

Daniel J. Sullivan Family Charitable Foundation
Mr. and Mrs. James R. W. Daniell
Mr. and Mrs. Christopher H. Dewar
Mr. Thomas H. Edson
Mr. and Mrs. Jeff Edwards
Mr. and Mrs. James D. Ellis
Mr. and Mrs. John W. Feik
Ferguson Enterprises, Inc.
Mr. Robert H. Finney and Dr. Nancy A. Finney
Mr. and Mrs. W. W. Flannery, Jr.
Mrs. Charles E. Foster
Mr. and Mrs. Aubra L. Franklin
Mr. and Mrs. James L. Glover
Dr. and Mrs. William W. Gordon
Mr. and Mrs. James B. Griffin
Mr. and Mrs. Robert Gurwitz
Mr. and Mrs. Harry Half
Mr. and Mrs. Michael Harper
Mr. and Mrs. James L. Hayne
Mr. and Mrs. Ronald J. Herrmann
Mr. and Mrs. Reagan Houston IV
Mr. and Mrs. Mark S. Howard
Mr. and Mrs. John R. Hurd, Jr.
Institute for Women's Health
Jackson Walker, LLP
Lt. General and Mrs. Frank F. Ledford, Jr.
Mr. and Mrs. Porter Loring III
Mr. and Mrs. Mike MacNaughton
Ms. Ann Marmion
Mr. James R. Marmion III
Matera Paper Company
Mr. (*In Memoriam*) and Mrs. John McLaughlin
McNelis + Associates, PLLC
Mr. and Mrs. Sean McNelis
Minnie Stevens Piper Foundation
Mr. and Mrs. Stuart D. Moiles
Mr. and Mrs. William G. Moll
Mr. and Mrs. Sergio Montemayor
Mr. and Mrs. Edward D. Moore
Mrs. Jeffrey M. Morehouse
Nelson Puett Foundation
Mr. and Mrs. John A. Oberman
Pape-Dawson Engineers, Inc.
Dr. and Mrs. Daniel C. Peavy
Mr. and Mrs. Gardner Peavy
Mr. and Mrs. Christopher Petty

Mr. and Mrs. Scott Petty, Jr.
Mr. and Mrs. Andrew B. Price
Mr. and Mrs. Nelson H. Puett
R. L. Worth Family, L.P.
Mr. and Mrs. John Richardson
RSM US LLP
Dr. and Mrs. Frank C. Sammis III
Mr. and Mrs. William Scanlan, Jr.
Dr. and Mrs. Antonio Serna IV
Mrs. Daniel J. Sullivan IV
Mr. and Mrs. Charles Urschel Slick
Mr. and Mrs. James B. Smith, Jr.
Mr. and Mrs. Bruce A. Smith
SpawGlass
The Tobin Endowment
Mr. Dale W. Tremblay and Dr. Sandra Tremblay
The University of Texas Health Science Center
Mr. and Mrs. Jason Westmoreland
Mr. and Mrs. Jack Williams III
Mr. and Mrs. Keith Zars

GOLDEN CIRCLE

The Honorable and Mrs. Clyde H. Alexander
Mr. and Mrs. Brett Alvheim
Mr. and Mrs. Michael Richard Amini
Ms. Ann Griffith Ash
Dr. and Mrs. Wilbur S. Avant, Jr.
Mrs. Elizabeth Badouh
Mr. and Mrs. Jeff P. Bailey
Mr. and Mrs. Joseph Stewart Bakke
Mr. and Mrs. Stephen P. Ballantyne
Mr. and Mrs. A. L. Ballard
Mrs. Sam Barshop
Mr. Bruce B. Barshop
Mr. and Mrs. Lee M. Bass
Mr. and Mrs. Jim Baxter
BB&T
Mr. and Mrs. J. Scott Beckendorf
Mr. and Mrs. Will Alston Beinhorn
Mr. and Mrs. Jonathon Beitz
Mr. and Mrs. Michael D. Beldon
Mrs. Marion Dewar Bell
Mr. and Mrs. Matthew M. Bell
Mr. and Mrs. Michael L. Benedum
Mr. and Mrs. Barry G. Benton
Mr. Jeffrey H. Berler

Mr. and Mrs. Mark J. Berridge
Mrs. Lawrence A. Bertetti
Eugenia and Lawrence A. Bertetti Foundation
Mr. and Mrs. Albert M. Biedenbarn III
Ms. Margery L. Block
Mr. and Mrs. Cooper N. Boddy
Mr. and Mrs. Robert L. Bowers
Mr. and Mrs. McLean Bowman
Miss Marrs McLean Bowman
Mr. Paul Bracher
Dr. and Mrs. Warren B. Branch
Dr. Sara McCamish and Dr. Edward Briggs
Mr. and Mrs. James C. Browning
Mr. and Mrs. Harry H. Brusenhan
Mr. and Mrs. J. Bruce Bugg, Jr.
Mrs. George V. Burkholder
Mr. and Mrs. Stephen W. Butt
Mrs. Walter J. Buzzini III
Mr. and Mrs. A. H. Cadwallader IV
Dean Charles E. Cantu
Dr. and Mrs. Carlos Cardenas
Dr. Melanie Carless and Dr. Mark Kos
Mrs. Cassandra C. Carr
Mr. and Mrs. William Carrington
Mr. and Mrs. James M. Caruth
Mr. and Mrs. Robert M. Cavender
Mrs. James M. Cavender III
Mr. and Mrs. Pedro Cerisola
Mr. and Mrs. Corbett Christie
Mrs. Malcolm H. Cohen
Mrs. William L. Coiner
Mrs. Richard T. Coiner III
Mr. and Mrs. Norborne P. Cole, Jr.
Commercial Storage Specialists
Mr. Todd Compton
Mrs. George J. Condos
Dr. Sara Trampota Conquest and Mr. Andrew Conquest
Mrs. John Crichton
Mr. and Mrs. Michael Cruz
Mr. Keith A. Davis
Mr. Taylor Dawson
Mr. and Mrs. Jeffrey de Rojas
Mrs. Leroy G. Denman, Jr.
Mr. and Mrs. Michael Dewar
Mr. and Mrs. Robert L. Dewar
Mrs. Elizabeth N. Dewar

Mr. and Mrs. Taylor Dorris
Mr. and Mrs. Donald Y. Duffin
DuWest Realty
Mr. and Mrs. Michael Ellis
Dr. and Mrs. John A. Evans
Mr. and Mrs. Richard W. Evans, Jr.
Mr. and Mrs. John W. Feik, Jr.
Mr. and Mrs. Eric Fisher
Mr. and Mrs. Hugh Fitzsimons, Jr.
Mr. Charles A. Forster
Mr. and Mrs. Casey Fry
Mr. and Mrs. Mark Garcia
Mr. and Mrs. David Gard
Mr. and Mrs. George A. Geis
Mr. Lukin T. Gilliland, Jr.
Mr. and Mrs. Christopher Goldsbury, Jr.
Dr. and Mrs. Joseph W. Goldzieher
Mr. and Mrs. James B. Gouger
Mr. and Mrs. John Paul Gould
Dr. and Mrs. Joseph Grant
Greater Houston Community Foundation
Mr. and Mrs. Phillip D. Green
Mr. and Mrs. Claiborne B. Gregory, Jr.
Mr. and Mrs. Brandon E. Grossman
Dr. and Mrs. Kennon Guglielmo
Mr. and Mrs. Thomas L. Guido
Mr. and Mrs. Cosmo M. Guido
Mr. and Mrs. Ricardo Guzman
Mr. and Mrs. Mark Hanrahan
Ms. Mary Austin Hart
Mr. and Mrs. Warren B. Hart II
Mr. and Mrs. Albert F. Hausser
Mrs. Frances J. Hearn
Mr. and Mrs. Jeffrey E. Heinke
Mr. and Mrs. Roger Hemminghaus
Mr. and Mrs. Stuart Carl Hendry
Mr. and Mrs. David S. Herrmann
Mr. Jonathan Hess
Mr. and Mrs. Russell Hoermann
Dr. Peter W. Hollimon and Dr. Mary H. Arno
Mr. and Mrs. Charles R. Hollimon
Mr. and Mrs. Ladd J. Howell
Mr. and Mrs. Dan Allen Hughes, Jr.
Mr. Christian Hummel
Mr. and Mrs. Andrew Hunt
Ms. Sara Smith Hurd

Mr. and Mrs. John R. Hurd
Mr. and Mrs. Kenneth M. Jastrow II
Jefferson State Bank
Mr. and Mrs. Jeremy Jessop
Jody and Sheila Grant Fund of Communities Foundation
Mr. and Mrs. Tony C. Johnson
Mr. and Mrs. Ansley E. Johnston
Mr. and Mrs. J. Bradley Jones
Mrs. Joe Warren Jones
JP Morgan Chase
Mrs. George A. Kampmann
Mr. and Mrs. Patrick J. Kennedy
Mr. and Mrs. Evan Ketabchi
Mr. and Mrs. Creston A. King III
Mr. and Mrs. Robert A. Kiobassa
Kittie Nelson Ferguson Foundation
Mr. and Mrs. Richard M. Kleberg III
Dr. and Mrs. Gary Koehl
Mr. Shaj and Dr. Avina Kolareth
Mr. and Mrs. John C. Korbell
Ms. Rosemary Kowalski
Mr. and Mrs. Gregory W. Kowalski
Mr. and Mrs. Michael L. Kreager
Mr. and Mrs. William Jeffrey Kuhn
Mr. and Mrs. Joseph B. Labatt
Mr. and Mrs. Pete LaBonte
Ms. Amy Stinson and Mr. Trevor Lawton
Mr. and Mrs. Milton B. Lee
Mr. and Mrs. Byron L. LeFlore, Jr.
Mr. and Mrs. Ralph Lehr, Jr.
Mr. and Mrs. Thomas Robert Leslie IV
Mrs. John R. Less
Mr. and Mrs. Steve C. Lewis
Mr. and Mrs. Cinco Light
Ms. Joyce Lindler
Ms. Judith Lindquist
Mr. and Mrs. Taylor Little
Dr. and Mrs. David G. Lloyd
Mr. and Mrs. David G. Lloyd, Jr.
Mr. and Mrs. Cullen Rogers Looney
Luther King Capital Management
Mr. and Mrs. Howard H. Lutz
Mr. Samuel E. Maclin
Mr. and Mrs. Glenn MacTaggart
Mr. and Mrs. Gregory Mann
Continued on page 26

Continued from page 25

Ms. Margo Spitz Marbut
Mr. and Mrs. Madison C. Marceau
Mr. and Mrs. Chris Marco
Mrs. Janey Marmion
The Marshall T. Steves, Sr. Foundation
Mr. and Mrs. Charles G. Martens
Mr. Paul Martin
Mr. and Mrs. Madison Mauze
Mr. and Mrs. Jess Mayfield
MBA Consulting
Mr. and Mrs. Walter W. McAllister III
Mr. David and Mrs. Jeannie Hegeler McArthur
Mr. and Mrs. Norris Robert McClane
Mr. and Mrs. Don B. McDonald, Jr.
Ms. K. Heather McFarlin
Mr. and Mrs. Elkin McGaughy
Dr. Henry C. McGill (*In Memoriam*)
Mrs. Anne O. McNeel
Mr. and Mrs. Paul E. McSween, Jr.
Mrs. Jo Lynne Meador
Dr. and Mrs. Gilbert R. Meadows
Mr. and Mrs. Richard Menchaca
Mr. and Mrs. Mort Mertz
Mr. Fred W. Middleton
Mr. and Mrs. Balous T. Miller
Mr. and Mrs. Joe Miller
The Milly Ann & John Stewart Charitable Fund
Mr. and Mrs. Michael L. Molak
Mr. and Mrs. Thomas Slick Moorman
Mr. and Mrs. John Moorman
Mr. and Mrs. Randall Morris
Mr. S. Mark Murray
Mr. and Mrs. Hamlet Tatum Newsom, Jr.
Mr. and Mrs. David F. Nicolson III
Dr. and Mrs. Aris Nikas
Mr. Robert Ochoa
Mr. and Mrs. Keith O'Connell
Mr. and Mrs. Lawrence O'Connor
Mr. and Mrs. Kirk Oden
Mr. and Mrs. Steven M. Ogle
Mrs. Frederic J. Oppenheimer
Mr. and Mrs. William B. Osborn III
Mr. and Mrs. John Carroll Park
Mrs. William A. Parker
Dr. and Mrs. Mahendra Patel

Mr. and Mrs. Henry B. Paup
Mrs. Tom E. Pawel
Mr. and Mrs. John A. Peveto, Jr.
Mr. and Mrs. Philip J. Pfeiffer
Mr. and Mrs. Alistair F. Philip
Mr. and Mrs. Karl W. Poorbaugh
Mr. and Mrs. William H. Quirk IV
Rachael & Ben Vaughan Foundation
Mr. and Mrs. James L. Ramsey
Mr. (*In Memoriam*) and Mrs. Coleman Renick
Mr. and Mrs. Lane Riggs
Dr. and Mrs. Mark C. Rittenhouse
Ms. Regina Rocha
Mr. and Mrs. Paul A. Rohlf, Jr.
Mr. and Mrs. Robert A. Rosenthal
Mrs. Ruth Bowman Russell
Mr. and Mrs. David Schlagel
Dr. and Mrs. Larry S. Schlesinger
Mr. and Mrs. J. Thomas Schmidt
Mrs. Robert L. Schupbach
Mr. David Schwab
Mr. and Mrs. Harry F. Schwethelm, Jr.
Mrs. H. Kyle Seale
Mr. and Mrs. Donnie Seay
Mr. and Mrs. Peter C. Selig
Mr. and Mrs. Robert Eric Shaw
Mr. and Mrs. Chip Shirley
Mrs. Clara Shovlin
Mrs. E.R. Sidwell
Silver Eagle Distributors, L.P.
Mr. and Mrs. Pete Sitterle
Mr. Tom B. Slick, Jr.
Mr. Charles Slick, Jr.
Smith Protective Services
Dr. and Mrs. Lon S. Smith
Mr. and Mrs. J. Dudley Snyder
South Texas Money Management, LTD.
Southwest Research Institute
Mr. and Mrs. Dennis W. Stacy
Mr. and Mrs. Sam Bell Steves III
Mrs. Marshall T. Steves, Sr.
Mr. and Mrs. Drew Stewart
Mr. and Mrs. Julian C. Stewart
Mr. (*In Memoriam*) and Mrs. Thomas D. Stribling
Mr. and Mrs. L. Herbert Stumberg, Jr.
Ms. Shelley M. Summers
Mr. and Mrs. Timothy L. Swan

Mr. and Mrs. Stephen Lee Swanson
Mr. Patrick H. Swearingen, Jr.
Dr. and Mrs. Casey Taber
Mr. Charles W. Tate
Dr. and Mrs. Alvin Thaggard III
Mr. and Mrs. John C. Thomas
Mr. Ron Thompson
Dr. and Mrs. Brad S. Tolin
Trade Craft
Mr. and Mrs. Richard C. Traylor
Mr. Kenneth P. Trevett
Dr. Joanne Turner and Dr. Jordi Torrelles
Dr. and Mrs. George J. Vassar
Mr. and Mrs. Ben F. Vaughan IV
Mr. and Mrs. Michael N. Venson
Mr. and Mrs. Jack Vexler
Mr. and Mrs. W. Lawrence Walker, Jr.
Mr. and Mrs. Neill Bailey Walsdorf
Mr. Neill Walsdorf, Jr.
Mr. and Mrs. Mark E. Watson, Jr.
Mr. and Mrs. Mark E. Watson III
Mr. and Mrs. Rad Weaver
Mr. and Mrs. Don E. Weber
Mr. and Mrs. Dan G. Webster III
Mr. Alex P. Weekes
Mr. and Mrs. Heath Wenrich
Ms. Kittie West
Mr. Adam Wetherell
Mr. and Mrs. Edward E. Whitacre, Jr.
Mr. and Mrs. John H. White, Jr.
Mr. and Mrs. Roger Winter
Mr. and Mrs. George J. Wommack
Mr. and Mrs. Robert L. Worth, Jr.
Mr. and Mrs. Robert Clinton Worth
R.L. Worth Family, L.P.
Wortham Insurance & Risk Management
Mr. and Mrs. John G. Wright
Mrs. Leon C. Wulfe, Jr.
Mr. Mike Yantis
Yantis Company
Mr. and Mrs. Peter Zacher
Mr. and Mrs. H. Bartell Zachry, Jr.
Mr. and Mrs. Joshua Zeller
Mr. and Mrs. Thad W. Ziegler
Mrs. Marion C. Zoch

TEXAS BIOMEDICAL Forum



*With 43 past presidents
paving the way, the
future of The Forum
looks beyond promising.*

The Texas Biomedical Forum, proudly established in 1970-71, supports Texas Biomed through community relations, volunteer services, and fundraising. The original founders Dottie Block, Ruth Eilene Sullivan and Tena Gorman had a vision that is respectfully carried on today. Made up of women ages 21 years and older, The Forum membership continues to serve its mission and three areas of focus each year.

Community Relations remains a significant effort. This includes our fall and spring lecture luncheons, annual roundtable discussions, special events, student tours for area high school science programs, annual science education awards for area high school teachers, and our newsletters that are distributed three times a year. Community Relations opportunities provide the Forum the chance to share important information regarding Texas Biomed to a wide audience of potential supporters and volunteers. Thanks to our Board of Trustees, Advisors, Honorary Advisors, and general membership we are able to volunteer in a number of ways to support the work of Texas Biomed. One of the most significant ways in which we are able to support Texas Biomed is through fundraising. Membership dues help fund our general needs such as operating expenses, administrative costs, and most importantly, our Science Education Awards Program. Our most significant fundraising effort is our annual gala. The Forum Gala raises money for pilot study grants that are used by Texas Biomed research scientists to fund investigational studies needed to lead to larger scale grants funded by national and government agencies.

Each year The Forum continues to grow and enhance its efforts to support Texas Biomed and 2017-2018 was another significant year. In October 2017 we welcomed a number of Texas Biomed Scientists as part of a unique dinner and discussion featuring conversations with scientists from across the Institute, discussing the latest research into diseases from aging and liver cancer to Malaria and Zika. In November 2017 we hosted our Fall Lecture Luncheon featuring guest speaker Dr. Marcel Daadi, Ph.D. speaking on “Tackling Parkinson’s and other Neurological Disorders with Neural Stem Cells.” Our Spring Lecture Luncheon was held in March 2018 and offered guests the opportunity to welcome Larry S. Schlesinger, MD President and CEO, Texas Biomedical Research Institute, and hear him discuss “How Team Science Will Cure Infection.” We continue to be grateful for our partnership with Texas Biomed on these luncheons as well as the attendance and support of all those who join.

Our 24th Annual Science Education Awards received great participation and interest from area teachers and science programs. This year, five award recipients shared \$20,000 in award 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



From left to right, Daniela Serna, Amelita Mauze, Molly Drought, Corbett Christie, Ashley Weaver

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 Guenther of the V.H. McNutt Memorial Foundation and the Forum.

This year's special events began with the Gala Kickoff party at The Argyle in September 2017. That was followed by a Past Presidents' Luncheon at The Argyle in November, graciously hosted by Texas Biomed to honor and recognize our Past Presidents and our founders; Mrs. Ruth Eilene Sullivan, and Mrs. Tena Gorman and the late Mrs. Dottie Block. In the spring 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. Additionally, Saks Fifth Avenue hosted a Spring Jewelry Show and Luncheon for our membership. 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.

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. Over the last 18 years, the Forum has awarded more than \$3 million dollars to fund pilot studies at Texas Biomed. That grant money has resulted in nearly \$70 million dollars of additional funds for scientists to support their work.

Thanks to our past leadership, the Forum continues to be a distinctive organization. With 43 past presidents paving the way, the future of The Forum looks beyond promising, and I am grateful to all those who have invested in this great organization of women. 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
2017 Forum President

The Forum awarded \$400,000 in grants to scientists at Texas Biomedical Research Institute to assist in developing preliminary data that will enable these scientists to secure future funding for novel projects. The following projects were funded in 2017.

SCIENTISTS
Effect of HIV infection on <i>M. tuberculosis</i> granuloma formation and evolution Eusondia Arnett, Ph.D.
<i>In vivo</i> efficacy of small molecule anti-TB compounds Abul Azad, Ph.D.
Baboon pluripotent stem cell derived retina progenitor cells for treatment of retina degeneration Alberto Muniz, Ph.D.
Regulation of VPS34 complex in macropinocytosis Olena Shtanko, Ph.D.
Influence of the human lung mucosa in <i>Mycobacterium tuberculosis</i> pathogenesis Jordi Torrelles, Ph.D.
Predicting time since <i>Mtb</i> infection Joanne Turner, Ph.D.
POST-DOCTORAL SCIENTIST
<i>In vivo</i> engraftment of hPSC-derived muscle progenitors maintained in long-term cultures Bianca Borchin, Ph.D.
GRADUATE STUDENTS (SUPPORTED BY THE DOUGLASS FOUNDATION)
Signaling factors that induce ocular lens and olfactory cell types from stem cells Becky Bricker
Mitochondrial dysfunction & aging adaptive immunity in <i>Mtb</i> infection Colwyn Headley

THE FOUNDER'S Council



The Founder's Council exists to educate its members about the life-changing research conducted every day at Texas Biomed.

The Founder's Council is a dynamic group of professionals and young leaders between the ages of 25 and 46 founded in 1988 to honor the memory of Tom Slick and to promote Texas Biomed.

The mission of the Founder's Council is to cultivate interest in Texas Biomed among young leaders in the San Antonio area who show potential for lifelong support of Texas Biomed. The Founder's Council has approximately 360 diverse members from all walks of life whose annual contributions help fund small equipment grants for Texas Biomed scientists.

Texas Biomed had an exciting 2017 as it welcomed its new President/CEO, Dr. Larry Schlesinger. The Founder's Council was honored to have Dr. Schlesinger attend and speak at several of the Founder's Council's annual functions. The Founder's Council looks forward to working with Dr. Schlesinger and continuing to grow the partnership that exists between the Founder's Council and Texas Biomed.

The Founder's Council delivered three fantastic Lecture Luncheons throughout the year at which Texas Biomed scientists shared their cutting edge research with our membership and many new member prospects. In March, members enjoyed the premiere event, Dining and Discourse, where scientists from across all areas of research joined a table of guests in an intimate setting at The Argyle over dinner allowing for conversations about their area of expertise. Many thanks to our event sponsors that underwrite one hundred percent of our event costs. This allows Founder's Council to send more money towards small equipment grants. We concluded the 2017 year at The Argyle with a holiday party and were honored to present Texas Biomed scientists with small equipment grant awards totaling nearly \$75,000.

The Founder's Council exists to educate its members about the life-changing research that is conducted every day at Texas Biomed so that the members can then educate their communities and colleagues about Texas Biomed. It is our sincere hope that once educated, these community leaders will provide financial support to Texas Biomed so that it may continue for generations. This year played a vital role in helping Texas Biomed make a global impact, and we are proud to carry on this great tradition.

Sincerely yours,

Chris Petty
2017 President, Founder's Council

2017 Founder's Council

EXPLORERS

Mr. and Mrs. Brett Alvheim
Mr. and Mrs. John Asel
Mr. and Mrs. Aaron Asel
Mr. and Mrs. Jeff P. Bailey
Mr. and Mrs. Matthew M. Bell
Mr. and Mrs. Ryan Berg
Drs. Sara and Edward Briggs
Mr. and Mrs. Justin Cole
Mr. and Mrs. Trey Dawson
Mr. and Mrs. Jeffrey de Rojas
Mr. and Mrs. John W. Feik, Jr.
Mr. Robert H. Finney and Dr. Nancy A. Finney
Mr. and Mrs. David Gard
Mr. and Mrs. Brandon E. Grossman
Mr. and Mrs. Ricardo Guzman
Mr. Jonathan Hess
Mr. and Mrs. Charles R. Hollimon
Mr. and Mrs. Jeremy Jessop
Mr. and Mrs. Tony C. Johnson
Mr. and Mrs. Creston A. King III
Mr. Trevor Lawton and Ms. Amy Stinson
Mr. and Mrs. Taylor Little
Mr. and Mrs. Charles G. Martens
Mr. and Mrs. David Mauze
Mr. and Mrs. Madison Mauze
Mr. David and Mrs. Jeannie Hegeler McArthur
Mr. and Mrs. Joe Miller
Mr. and Mrs. Gardner Peavy
Mr. and Mrs. Christopher Petty
Mr. and Mrs. Andrew B. Price
Ms. Regina Rocha
Dr. and Mrs. Antonio Serna IV
Mr. Charles Slick, Jr.
Dr. and Mrs. George J. Vassar
Mr. and Mrs. Rad Weaver
Mr. and Mrs. George J. Wommack
Mr. and Mrs. Joshua Zeller

ADVENTURERS

Mr. and Mrs. Edward Badouh III
Mr. and Mrs. Brian and Emmy Ballantyne
Mr. and Mrs. Kenneth Dorbandt
Mr. and Mrs. Marty Dusek
Mr. and Mrs. Andrew T. Friedman
Mr. and Mrs. Casey Fry
Mr. and Mrs. Lane Golden
Mr. Carlo Gutierrez
Mr. and Mrs. William Kothmann
Mr. and Mrs. Daniel Lasater
Mr. Andrew J. Lewis IV
Mr. and Ms. Will Newburn
Mr. Krishna Reddy
Mr. and Mrs. Paul A. Rohlf's, Jr.
Mr. and Mrs. Robert Shaw
Mr. and Mrs. Paxton Jordan Smith
Mr. and Mrs. Mellick Sykes, Jr.
Mr. and Mrs. Robert Turnbull
Mr. and Mrs. R. Bruce Walker
Dr. Alexis Wiesenthal

MEMBERS

Ms. Selena Aleman
Mr. Chase Anderson
Mr. Suhail Arastu
Mr. and Mrs. Scott Archer
Ms. Katherine Atkinson
Mr. and Mrs. Tom Bagby
Mr. John W. Ballantyne
Mr. and Mrs. Edward Bartolomei
Mr. and Mrs. Brad Beldon
Dr. Emily Boice
Mr. Kyle Braaten
Mr. and Mrs. Ben Bratteli
Mr. and Mrs. Keith Brittain
Mr. and Mrs. William A. Brooks
Mr. Jeffrey Brouillard
Mr. and Mrs. John Brozovich
Mr. and Mrs. Randy Cadwallader
Mr. Andrew Cardwell

Mr. Brandon Carpenter
Mr. and Mrs. Claiborne Ayres Carrington
Mr. and Mrs. Bradley Carson
Mr. Paul B. Carter
Mr. and Mrs. James Chandler
Mr. and Mrs. Brandon Clementson
Mr. and Mrs. Hunter Conger
Mr. and Mrs. Cody Courtney
Mr. Andrew R. Craig
Drs. Matthew and Ann Cross
Ms. Nancy Hanks Dewar
Mr. and Mrs. Albert Dickson
Mr. and Mrs. Miguel E. Dilley
Mr. Kevin Doran
Mr. and Mrs. Kenneth Dorbandt
Mr. and Mrs. Taylor Dorris
Mr. and Mrs. Robert A. Dullnig
Mr. Will Fawcett
Mr. Ramiro Fernandez and Ms. Ashley Ross
Mrs. Burkley Fitzsimons
Mr. and Mrs. Chase Gorman
Mr. and Mrs. Adam Harden
Mr. and Mrs. Hunter Hawkins
Mr. and Mrs. Clay Hefty
Mr. and Mrs. Jeffrey F. Hetrick
Ms. Carlie L. Hill
Mr. and Mrs. Roger C. Hill III
Mr. and Mrs. David Hornberger
Mr. and Mrs. Robert Jones
Mr. and Mrs. Clifton Karam
Mr. and Mrs. Tim Kelley
Mr. Faisal David Khan
Mr. and Mrs. Daniel Koehl
Mr. and Mrs. Matthew Koehler
Mr. and Mrs. Clint Lawson
Mr. and Mrs. Colby Lewis
Mr. and Mrs. Alcide M. Longoria
Mr. and Mrs. Chance Mazurek
Mr. and Mrs. Alexander S. McAllister
Mr. David and Mrs. Jeannie Hegeler McArthur
Mr. William L. McCamish

Mr. and Mrs. R.W. McDonald
Mr. and Mrs. Brad McMurray
Mr. Benjamin Montanez
Ms. Mary Christian Moorman
Ms. Catriona L. Morrison
Mr. and Mrs. Mark W. Muecke
Mr. and Mrs. Keith O'Connell
Mr. and Mrs. Brian O'Gorman
Mr. and Mrs. H. Mills Palm, Jr.
Mr. and Mrs. Donald R. Philbin, Jr.
Mr. Benjamin Pilgrim
Mr. and Mrs. Jack Marshall Porterfield
Mr. and Mrs. J.B. Richter
Judge Carla Martinez Riedl
Mr. and Mrs. Patrick Rouse
Mr. and Mrs. Conner Ryan
Mr. and Mrs. Forrest Seger
Mr. and Mrs. Robert Webb Sellers, Jr.
Ms. Abigail Shaver
Mr. Ty Hunter Sheehan
Mr. and Mrs. Alan Spalten
Mr. and Mrs. Sam Bell Steves III
Mr. and Ms. Blake Stouffer
Mr. and Mrs. Matthew Strange
Ms. Delaney Tholen
Mr. and Mrs. Frederick Thomson IV
Mrs. Paula Waggoner-Aguilar
Mr. and Mrs. Robert Watson, Jr.
Mr. and Mrs. William Daniel Westmoreland
Mr. Adam Wetherell
Dr. Alison Wiesenthal
Mr. and Mrs. Brandon Williams
Mr. and Mrs. Steven Frederick Willson
Mr. Ben Wilson
Mr. and Mrs. Elgin Wong
Mr. and Mrs. John H. Wright IV
Mr. and Mrs. Will F. Ziegler

CORPORATIONS/SPONSORS

Asel & Associates, PLLC
Mr. Aaron Asel
Mr. John Asel
BB&T
Ms. Stephanie Dick
Mr. Ben Presentin
BDO
Ms. Candace Lynch
Ms. Penny Pepperling
Broadway Bank
Ms. Tammy Ashby
Mr. Travis Edlund
Brown & Ortiz, PC
Mr. James B. Griffin
Cappy's Inc. & La Fonda, Inc.
Mr. Trevor Lawton
Ms. Regina Rocha
Cavender Toyota
Ms. Kate Cavender
Commercial Storage Specialists
Mr. Johnny Moorman
Ms. Natalie Harrison
DuWest
Mr. Evan Ketabchi
Frost
Mrs. Mallory Abl
Mrs. Mary Stephanie Locke
Guido Brothers Construction
Ms. Lauren Guido Tew
Hixon Properties Inc.
Mr. Clint Wynn
Mr. Hunter Kingman
IBC Bank
Mr. Bernardo De La Garza
Mrs. Jennifer Martinez MuenChow
Independence Title Company
Ms. Rebecca Bagby
Ms. Lara Thompson
Institute for Women's Health
Dr. Michael Koroscik
Ms. Westyn Gibbons
Jackson Walker, LLP
Mrs. Lauren Ciminello
Ms. Alexine Friedman

Joeris
Mr. Gary Joeris
Mr. Jeff Bryant
J.P. Morgan & Company
Ms. Michele Camp
Mauze Construction
Mr. David Mauze
McNelis & Associates, PLLC
Mr. Richard McSwain
Mr. Sean B. McNelis
Nelson Puett Foundation
Mrs. Callie Nelson Price
Pape-Dawson Engineers, Inc.
Mr. Trey Dawson
Mr. Taylor Dawson
Mr. and Mrs. Christopher Petty
Project Control of Texas, Inc.
Mr. Andrew Hunt
Mr. John Dubring
R.L. Worth & Associates
Mr. Robert L. Worth, Jr.
Mr. Robert Clinton Worth
RSM US LLP
Ms. Josie Behrend
Ms. Vicky Martin
RVK Architects
Mr. Heath Wenrich
Mr. Jason Puchot
Silver Eagle Distributors, L.P.
Ms. Katie Reynolds
Mr. Mark De Hoyos
SpawGlass
Ms. Melodye Tomsu
Mr. Jonathan Bradley
The Bank of San Antonio
Mr. Jordan Booth
Ms. Kacy Smith
The Tobin Endowment
Mr. J. Bruce Bugg, Jr.
TransPecos Banks
Mr. George Musselman
Mr. Matthew McLaughlin
Yantis Company
Mr. Mike Yantis
Mr. Todd Compton
Zachry Group
Mr. David Schwab
Mr. Rode Moore

THE Argyle

The Argyle serves as a bond between Texas Biomedical Research Institute and those who give the time and money to support it. Each member of The Argyle supports the future of scientific discovery with annual contributions to advance the many studies conducted by scientists at Texas Biomed. The club continues to stand as a symbol, both of its rich past and of progress toward a better tomorrow for humankind.

The past year has been a great one for The Argyle in terms of facility improvements, member engagement, communication and of course, culinary offerings. The Argyle was awarded the prestigious Distinguished Clubs award by BoardRoom Magazine. The Distinguished Clubs award program was developed to recognize and share with the private club industry what it is that Distinguished Clubs do differently with the goal to improve the “Member Experience” at every private club, thereby helping to preserve the institution of private clubs for future generations.

Member engagement is always a priority in the club industry. Overall club usage for The Argyle is on the rise. The Argyle consistently offers world class culinary cuisine and continues to hold spectacular events, including community education events such as the Fireside Chat Tom Talk Series and newly instituted Argyle lecture series with varying topics presented by different community leaders. Last year’s “Fireside Chats” included Dr. Larry Schlesinger on Genetics, Immunity and Infectious Disease and Dr. Joanne Turner on Immunology of *Mycobacterium tuberculosis* Infection and Aging. These chats allow members and their guests to meet with Texas Biomed scientists in a social setting to enjoy a conversational exchange of ideas, including the opportunity for questions and answers regarding the scientists’ research. It is a true bridge builder between scientists and supporters.

The Argyle is on a positive path and will continue to add value to membership while improving operations with a vision to be the most exclusive and reputable club in San Antonio and beyond.





Officers of the Institution and Senior Administrators

President and Chief Executive Officer
Larry Schlesinger, MD

Vice President for Finance and Administration, Chief Financial Officer
Keith A. Davis

Vice President, Research
Joanne Turner, PhD

Vice President, Advancement and Public Relations
Corbett Christie

Vice President for Information Technology and Chief Technology Officer
John M. Heaner

Senior Scientific Leadership Team

Interim Chair, Department of Genetics
Timothy Anderson, PhD

Interim Chair, Department of Virology & Immunology
Luis Giavedoni, PhD

Director, Southwest National Primate Research Center
Robert Lanford, PhD

Acknowledgments

Copyright © 2018
Texas Biomedical Research Institute
P.O. Box 760549
San Antonio, Texas 78245

The 2017 Annual Report is a publication of the Texas Biomedical Research Institute.

**Board of Trustees and Senior Administrators listed for 2018*

CREDITS

Lisa Cruz,
Assistant Vice President for Communications, Editor

Jeffrey Heinke Design,
Design

Wendy Rigby,
Media and Communications Specialist, Writer and Assistant Editor

Vivianne Callier,
Contract writer for Teaming up against TB and Women in science

PHOTOGRAPHY

Josh Hushkin, pp 7, 8, 12, 18
Jeffrey Heinke, pp 32-33
File photos, all other pages



TEXAS BIOMEDICAL
RESEARCH INSTITUTE

Texas Biomedical Research Institute

P.O. Box 760549

San Antonio, Texas 78245

www.txbiomed.org

210.258.9400