

MicroTransponder is developing a wireless neurostimulation device to treat patients suffering from nerve damage due to diabetes. The State's investment went primarily toward design and production of a prototype for testing and steps toward securing Food and Drug Administration (FDA) approval and larger-scale trial studies.

Actual Outcome:

The company produced a prototype that proved effective in early testing. The final device design is being manufactured at Southwest Research Institute in preparation for biocompatibility testing. In June 2012, the company completed a proof of concept study designed to provide feasibility information on the clinical use of vagus nerve stimulation (VNS) paired with tones for the treatment of severe tinnitus. In August 2012, the FDA approved a second proof of concept study. The company has had several research papers published in industry publications and has nine Texas employees.

MicroZAP, Inc.

TETF Award Amount: \$1,500,000

Award Date: April 30, 2010

Region: West Texas

Higher Education Collaboration: Texas Tech University

Intended Outcome:

MicroZAP is developing technology that sterilizes food and kills bacteria, including MRSA (Methicillin-resistant Staphylococcus aureus). The State's investment went primarily toward designing and building a commercial prototype that would enable the company to conduct a trial with an industry partner, and to conduct research into its product with Texas Tech University.

Actual Outcome:

The company conducted commercial trials of the MicroZAP machine pursuant to the Technology Testing and Contingent Purchase Agreement with Southwest Regional Wound Care Center. The trial was successfully completed. Additionally, the company retrofitted the original Texas Tech University prototype with the patent-pending technology, coordinated by MicroZAP and fabricated by Scott Manufacturing, Inc.

Mirna Therapeutics, Inc.

TETF Award Amount: \$5,000,000

Award Date: November 11, 2009

Region: Central Texas

Higher Education Collaboration: The University of Texas MD Anderson Cancer Center

Intended Outcome:

Mirna Therapeutics is developing a cancer treatment that introduces synthetic micro RNA, or miRNA, back into tumors to trigger their deaths. Research shows that the use of this therapy has reduced or eliminated cancerous tumors in mice. The State's investment went primarily toward performing initial studies and manufacturing clinical-grade material for further testing.

Actual Outcome:

The company developed mimics for miRNA, is making progress on a proprietary systemic delivery, and in obtaining new patents on treatments of different types of cancer. Mirna is in preparation for Phase 1 clinical trials, and, within the last year, closed a financing round, entered into a licensing agreement and published preclinical data.

Modria, Inc.

TETF Award Amount: \$500,000

Award Date: December 1, 2008

Region: North Texas

Higher Education Collaboration: The University of Texas at Dallas

Intended Outcome:

Modria is developing supply-chain management software that allows a business to manage all stages of its supply chain efficiently and at a lower cost. The State's investment went primarily toward developing beta software for testing and customer validation, and partnering with an institute of higher education. The company was also to secure letters of intent from customers, raise \$1 million from outside investors and develop a detailed strategy.

Actual Outcome:

The company successfully worked with researchers at The University of Texas at Dallas' Department of Computer Sciences to develop domain specific language (DSL) to edit their plan with human logic and intelligence, demonstrating its stand-alone feasibility. In addition, Modria raised \$225,000 from outside investors and hired product management personnel to enhance and expand its product offerings.

Molecular Imprints, Inc.

TETF Award Amount: \$3,000,000

Award Date: May 30, 2006

Region: Central Texas

Higher Education Collaboration: The University of Texas at Austin

Intended Outcome:

Molecular Imprints develops a technology product line for nanomanufacturing of devices and components with applications such as semiconductors, light-emitting diodes, disk drives, displays, digital cameras and biodevices. Potential markets are semiconductor memory and hard disk drives, with additional opportunities in displays, solar energy and nanopharmaceuticals. The State's investment went primarily toward the creation of a demonstration unit for use in sales, and obtaining customer feedback for future improvements.

Actual Outcome:

The company successfully completed its demonstration unit and closed the company's first sale. The company developed its proprietary technology into new product lines. The demonstration unit continues to be used as customers evaluate the technology and build their production processes around the tools of the new technology. Full production is expected in the 2013-2014 time frames. The company increased their manufacturing facilities for production and development functions. In September 2012, the company announced a multiple unit purchase order to provide advanced lithography equipment for high-volume semiconductor manufacturing. All contractual milestones have been completed.

Molecular Logix, Inc.

TETF Award Amount: \$794,520

Award Date: March 20, 2007

Region: Gulf Coast

Higher Education Collaboration: Baylor College of Medicine Faculty Center

Intended Outcome:

Molecular Logix is developing a cancer treatment using naturally-occurring growth hormones that block the cell receptors necessary for growth of tumor cells. The State's investment went primarily toward matching of a Small Business Innovation Research grant and directed the company to create a lead compound for testing prior to clinical trials. After Food and Drug Administration approval, the company was slated to seek further financing and complete further clinical trials.

Actual Outcome:

The company successfully completed development of its lead drug. The company developed its proprietary technology into new product lines. The technology continues to be evaluated by major customers as Molecular LogiX pursues development collaborations and builds production processes around the new technology.

Monebo, Technologies Inc.

TETF Award Amount: \$500,000

Award Date: October 23, 2006

Region: Central Texas

Higher Education Collaboration: The University of Texas at Austin

Intended Outcome:

Monebo is developing heart-monitoring technology that enables patients to conduct their own electrocardiogram at home and wirelessly transmit the information to their doctor. The State's investment went primarily toward obtaining FDA market clearance, contracting with a qualified manufacturer in Texas, and launching sales.

Actual Outcome:

The company obtained 510(k) clearance from the Food and Drug Administration on its single-lead CardioBelt and was cleared to market its Automatic ECG Analysis and Interpretation Software Library. In 2012, the company partnered with Canadian startup CardioComm (TSX Venture Symbol:EKG) to provide Electrocardiography (ECG) analysis technology for automated heart rhythm and ECG analysis. All milestones have been completed.

Mystic Pharmaceuticals, Inc.

TETF Award Amount: \$1,568,000

Award Date: April 21, 2009

Region: Central Texas

Higher Education Collaboration: The University of Texas Medical Branch at Galveston

Intended Outcome:

Mystic is developing ophthalmic and intranasal delivery platforms for a wide range of drugs and biologics. Ophthalmic applications include macular degeneration (the leading cause of blindness in adults), glaucoma, dry eyes, allergy and infections. Nasal applications include pain management, anti-convulsives, hormones and vaccines for pandemic flu, anthrax, plague and other infectious diseases. The State's investment went primarily toward completing the installation of a system for product manufacturing, initiating the preliminary design of a larger commercial scale production system, completing testing of the ophthalmic delivery platform and preliminary testing of the intranasal delivery platform.

Actual Outcome:

The Company completed the build and installation of the MVP 50K Aseptic blister clinical production system in March 2010 at its Cedar Park, Texas facility. In addition, the Company commenced Phase I design of a MVP 300K Aseptic blister commercial production system in 2009. Also in 2009, the Company completed testing and optimization of the VersiDoser™ Ophthalmic Delivery Platform for clinical trials and initiated testing and optimization of the VersiDoser™ Intranasal Delivery Platform. With the approval of Texas ETF, and in accordance with FDA regulations, preparation and submission of Certified Good Manufacturing Practices (cGMP) was deemed unnecessary for cGMP manufacturing of clinical supplies. Mystic subsequently successfully engaged in a Phase I clinical trial in conjunction with a partner and manufactured the clinical supplies at its Cedar Park facility under cGMP protocols.

Nano Medical Systems, Inc.

TETF Award Amount: \$3,500,000

Award Date: September 30, 2008

Region: Central Texas

Higher Education Collaboration: The University of Texas Health Science Center at Houston, University of Texas at Austin

Intended Outcome:

Nano Medical Systems is developing a personalized therapy device to be implanted under the skin, using nanotechnology on a silicon chip to regulate drug flow. The State's investment went primarily toward forming a university collaboration to determine drug flow data, engineering the nanochannel drug delivery device, meeting with Food and Drug Administration (FDA) representatives for an Investigational Device Exception, and identifying a pharmaceutical partner.

Actual Outcome:

The company worked with researchers at University of Health Science Center Houston and fabricating partner SVTC Technologies in Austin to complete the first molecular flow data using nanochannel chips produced in December 2008. Multiple laboratory and animal tests have been completed at The Methodist Hospital Research Institute in Houston. In late 2008, the company had initial meetings with the FDA, resulting in a drug selection refinement and a need for a pharmaceutical partner. Nano Medical Systems signed a development and supply agreement with a pharmaceutical partner for the development of a hormone-replacement product.

Nano3D Biosciences, Inc.

TETF Award Amount: \$1,000,000

Award Date: May 20, 2010

Region: Gulf Coast

Higher Education Collaboration: Rice University

Intended Outcome:

Nano3D is developing 3D in-vitro cell culturing, which will have significant implications for life science research and development, as well as applications in drug discovery, toxicology and regenerative medicine. The State's investment went primarily toward production plans for the product line and completion of beta testing. The company was also to establish its first commercial sale.

Actual Outcome:

The company completed its first commercial sale and has reached a large customer base of major commercial partners. Nano3D introduced additional cell-culturing products since first commercializing the original "single-well" Bio Assembler kit, and announced a 24-well platform. The company formed a partnership with Funakoshi Japan to distribute its products in Japan, signed another distribution agreement with MIDSCI, and continues to evaluate other potential distribution and licensing partnerships. The company, which raised equity financing and received multiple federal grants, continues to collaborate with the MD Anderson Cancer Center, Rice University and University of Texas Health Science Center at Houston. Nano3D was recently featured in MIT Technology Review.

NanoComposites, Inc.

TETF Award Amount: \$1,500,000

Award Date: September 20, 2006

Region: Gulf Coast

Higher Education Collaboration: Rice University

Intended Outcome:

NanoComposites, Inc. is developing high-performance materials employing nanotechnology. The State's investment went primarily toward completing a Houston-based laboratory, conducting research, determining scaling feasibility and producing prototypes and recruiting. The company also was to partner with an o-ring manufacturer and commence sales.

Actual Outcome:

The company conducted research, determined scaling feasibility and completed prototypes of four different types of elastomer seals. NanoComposites executed two joint development agreements with corporate partners, and started generating revenue. As of August 10, 2012, the company exhausted its financial resources and did not raise sufficient capital for ongoing operation. At the time of this report the company is in discussions with a third party to acquire their assets.

Nanocoolers, Inc.

TETF Award Amount: \$3,000,000

Award Date: March 5, 2007

Region: Central Texas

Higher Education Collaboration: The University of Texas at Austin

Intended Outcome:

Nanocoolers was developing a solid-state cooling system for improved system performance and power efficiency in refrigerators, air conditioners and other thermoelectric devices. The coolers were projected to save energy and eliminate the need for Freon-based chemicals. The State's investment went primarily toward the development of working prototypes and thermal packaging. A reliability test was to be completed by May 2007. Nanocoolers was also slated to begin the sales process and find a manufacturing partner.

Actual Outcome:

The company successfully completed prototype development by May 2007. However, citing technical problems and the need for more money, Nanocoolers informed the Office of the Governor in December 2007 that it had ceased business operations.

Nanospectra Biosciences, Inc.

TETF Award Amount: \$1,250,000

Award Date: June 12, 2006

Region: Gulf Coast

Higher Education Collaboration: Rice University, University of Texas Medical Branch, University of Texas at Austin, University of Texas MD Anderson Cancer Center, Baylor College of Medicine, University of Texas Health Science Center

Intended Outcome:

Nanospectra is developing a cancer treatment that selectively kills solid tumors without significantly damaging healthy tissue. The State's investment went primarily toward the filing of an Investigational Device Exemption with the Food and Drug Administration, as well as the beginning of a pilot clinical study.

Actual Outcome:

The company enrolled and treated eight patients in the pilot clinical study in head and neck cancer. In addition to its clinical activities, Nanospectra Biosciences, Inc. has successfully conducted preclinical animal research with collaborators at the University of Texas MD Anderson Cancer Center in radiation dose-enhancement, and joint research with the University of Texas at Austin for methods of imaging breast cancer. Nanospectra Biosciences, Inc. continues preclinical collaborations with the University of Texas MD Anderson Cancer Center in brain cancer research. The company is focusing on the completion of a prostate clinical study and the beginning of a lung cancer airway obstruction clinical study.

NanoTailor, Inc.

TETF Award Amount: \$250,000

Award Date: March 16, 2010

Region: Central Texas

Higher Education Collaboration: Texas State University

Intended Outcome:

NanoTailor was developing licensed technology from NASA to manufacture single-walled carbon nanotubes, without the use of a metal catalyst, for the aerospace, energy, defense, chemical manufacturing and pharmaceutical industries. The State's investment went primarily toward relocating staff to Texas, filing patents and finalizing design of the company's nanotube production machine.

Actual Outcome:

The company relocated employees and operations to Texas, filed patent applications and began work on the nanotube production machine. However, in December 2011, the Office of the Governor demanded full repayment of the award and ultimately referred the matter to the Texas Office of the Attorney General. NanoTailor filed for Chapter 7 bankruptcy in May 2012. The State filed a Proof of Claim in the bankruptcy.

Net Watch Solutions, Inc.

TETF Award Amount: \$500,000

Award Date: March 25, 2008

Region: North Texas

Higher Education Collaboration: The University of Texas at Dallas

Intended Outcome:

Net Watch was developing a commercial software program to predict the consequences of information technology change, as well as methods for modeling the sources and causes of IT downtime. The State's investment went primarily toward recruiting key staff members, filing patent claims, conducting market surveys and beginning software development.

Actual Outcome:

In 2008, the company terminated agreements with The University of Texas at Dallas, and a lack of funding and revenue halted progress. The company has ceased operations and filed paperwork with the Texas Secretary of State's office to dissolve the corporation.

Net.Orange, Inc.

TETF Award Amount: \$1,900,000

Award Date: July 30, 2009

Region: North Texas

Higher Education Collaboration: The University of Texas Southwestern Medical Center

Intended Outcome:

Net.Orange is developing software for health care providers to easily analyze, monitor and act on patient information for better medical care and treatment. The technology will initially be used to monitor oncology, diabetes and women's health issues. The State's investment went primarily toward accelerating development of the operating system, integrating the product into university acute care devices and expanding staff, board of directors and board of advisors.

Actual Outcome:

The company agreed to develop an oncology version of its system for use at the Mary Crowley Cancer Research Center, and also delivered a version to U.S. Oncology. As of September 2012, the company has increased its Texas-based employees to a total of 57. Net.Orange completed its collaboration with The University of Texas Southwestern Medical Center. In 2012, the company announced a significant distribution partnership of a clinical operating system (COS), a real-time, cloud-based data integration platform along with the industry leading population health management suite of applications. All contractual milestones have been completed.

Neuro Resource Group, Inc.

TETF Award Amount: \$1,500,000

Award Date: July 1, 2010

Region: North Texas

Higher Education Collaboration: The University of Texas at Arlington

Intended Outcome:

Neuro Resource Group, Inc. (NRG), is developing a non-drug, post-operative and chronic pain management therapy, The InterX, that reduces pain and the need for medication while improving range of motion. The State's investment went primarily toward completion of a low-cost single-patient product that complies with Medicare reimbursement, as well as contracting with three potential distributors.

Actual Outcome:

The company successfully completed the low-cost single-patient system, has been selling its product and has added three new distributors in addition to the original. The company has recently mapped out a design for a new low-cost driver and is in the process of securing Food and Drug Administration (FDA) approval for an extension of its clearance for the InterX device, as well as approval of another device.

Neurolink, Inc.

TETF Award Amount: \$3,234,000

Award Date: October 1, 2010

Region: South Texas

Higher Education Collaboration: The University of Texas San Antonio & The University of Texas Health Science Center at San Antonio

Intended Outcome:

Neurolink is developing a seizure detection and prevention system that will be implanted into a patient to detect pre-epileptic conditions and deliver an anticonvulsant drug, preventing the onset of a seizure. The State's investment went primarily toward accelerated prototype development and pre-clinical testing.

Actual Outcome:

Neurolink developed a prototype detection probe and completed initial device testing. The company prepared in-vitro alpha phase testing for deployment of the probe and data collection and selected three pharmacological agents. The company also completed a drug delivery device prototype and delivered a drug in-vitro, drafted protocol for a preclinical study and raised additional capital through an offering of Preferred Stock.

NonInvasix, Inc.

TETF Award Amount: \$250,000

Award Date: April 8, 2009

Region: Gulf Coast

Higher Education Collaboration: The University of Texas Medical Branch at Galveston

Intended Outcome:

NonInvasix is developing a device that relies on sound waves to measure hemoglobin and other blood components without requiring a blood draw. The State's investment went primarily toward developing a disposable patient interface cable, preparing an application for Food and Drug Administration approval, filing patents and producing a prototype for testing.

Actual Outcome:

The company hired a medical engineering development firm to aid in the design of the company's console, patient interface, and a cable for a working clinical prototype. NonInvasix also filed for a provisional patent application and

conducted a review of patents that concluded Noninvasix patents did not pose a freedom to operate risk. The company has also received a \$1.2 million U.S. Army development award and a \$2.2 million U.S. Army development award to develop a laboratory prototype shock monitor and a laboratory prototype brain oxygenation monitor, respectively.

Oncolix, Inc.

TETF Award Amount: \$2,400,000

Award Date: October 1, 2010

Region: Gulf Coast

Higher Education Collaboration: The University of Texas MD Anderson Cancer Center

Intended Outcome:

Oncolix is developing Prolanta, a drug to treat ovarian and other gynecological cancers. Prolanta targets prolactin receptors in gynecological cancer cells and triggers a response that results in the destruction of cancerous cells with fewer side effects than chemotherapy. The State's investment went primarily toward completing preclinical development and commencing a human test trial in ovarian cancer.

Actual Outcome:

The company has performed preclinical development studies, toxicology/safety studies, optimized the manufacturing process and developed its Phase I clinical trial design. Oncolix continues to work with The University of Texas MD Anderson Cancer Center under a sponsored research agreement, and has completed Phase I clinical study protocol and received clearance from the U.S. Food and Drug Administration to commence a Phase I clinical study. All contractual milestones have been completed.

OnTrack Imaging, Inc.

TETF Award Amount: \$1,000,000

Award Date: October 7, 2009

Region: North Texas

Higher Education Collaboration: Texas A&M University

Intended Outcome:

OnTrack Imaging is developing a high-definition ultrasound imaging system that can detect soft-tissue defects that can lead to catastrophic injuries in horses and humans. The State's investment went primarily toward development of the system, along with efforts to secure two letters indicating intent to purchase. The company was also to raise \$300,000 in private capital.

Actual Outcome:

The company completed the OnTrack Imaging, Inc. Ultrasound System (OTIS) coupling device and transducer, which generates a signal that is captured by the camera and chip and is transmitted to the display. The company received two letters from veterinary clinics stating their desire to purchase the camera when it is available. In addition, OnTrack received a letter of support from Dr. Mark Lennox at Texas A&M TIPS and raised an additional \$150,000 in private capital. The company completed all technical milestones.

OptiSense Network LLC.

TETF Award Amount: \$1,500,000

Award Date: March 5, 2007

Region: North Texas

Higher Education Collaboration: The University of North Texas

Intended Outcome:

Optisense is developing “intelligent grid” technology that enables utility companies to monitor feeder circuits more cost-effectively, enhance system operations, optimize power flows, and provide greater grid security and reliability. The State’s investment went primarily toward finalizing testing units, designing procedures for lab testing certification, setting up production equipment and delivering customer units.

Actual Outcome:

The company completed research on current sensor technology, resulting in a patented product being added to Optisense’s existing voltage sensor technology. Another method’s patent application is pending. Lab testing procedures were completed in collaboration with the University of North Texas, and the company has expanded its existing technology. The company also made progress in the development of its patent portfolio, and has hired a VP of Engineering, Sales, and a Chief Optical Engineer. All contractual milestones have been completed.

Ortho Kinematics, Inc.

TETF Award Amount: \$1,500,000

Award Date: May 8, 2009

Region: North Texas

Higher Education Collaboration: The University of Texas at Austin

Intended Outcome:

Ortho Kinematics is developing a spinal diagnostic imaging system to improve diagnosis and surgical management of severe back and neck pain. The State’s investment went primarily toward relocation of operations from California to Texas, finalizing test protocols and establishing collaboration with a Texas university. The company was also to submit an application to the Food and Drug Administration (FDA) for device testing approval.

Actual Outcome:

Product development is complete. The company received FDA 510(k) clearance for the KineGraph VMA™ (Vertebral Motion Analyzer) system and is conducting a beta launch. Nine investors contributed \$605,000 of additional capital in the most recent 12-month period, and the company has expanded its leadership team. All contractual milestones have been completed.

OrthoAccel Technologies, Inc.

TETF Award Amount: \$750,000

Award Date: October 26, 2007

Region: Gulf Coast

Higher Education Collaboration: The University of Texas at Dallas

Intended Outcome:

OrthoAccel Technologies is developing and commercializing orthodontic devices that safely reduce treatment for braces and works as a complement to all existing orthodontic technologies. The State’s investment went primarily toward attracting additional management talent, completing device prototyping and launching the first human trial. The company was also to raise additional financing and conduct a market launch in 2009.

Actual Outcome:

The company’s product has been successfully introduced to the United Kingdom, Australia, France, Italy and many other countries. OrthoAccel holds at least three issued patents and has filed applications for several more. Clinical trials have been collaborated on with The University of Texas at Houston, The University of Texas at San Antonio, and the University of Connecticut. The company received Food and Drug Administration clearance in November 2011 on their AcceleDent™ product, which is now available in the U.S. The first U.S. patient has completed treatment. In April and May 2012, the company raised \$10,000,000 in a Series B financing. All contractual milestones have been completed.

Palmaz Scientific, Inc.

TETF Award Amount: \$3,000,000

Award Date: April 15, 2010

Region: South Texas

Higher Education Collaboration: The University of Texas Health Science Center at San Antonio

Intended Outcome:

Palmaz Scientific is redesigning and improving cardiovascular stents through advancements in nanotechnology and metallurgy. The State's investment went primarily toward preparation of a stent design dossier for regulatory approval, acquisition of specialized equipment and the fabrication and bench testing of prototypes.

Actual Outcome:

The company integrated laser technology to cut stent development cycle time from weeks to days and low-profile stent prototypes have been bench tested. Follow-up animal studies were completed at The University of Texas Health Science Center at San Antonio, validating the effectiveness of the company's patented micro-groove technology. All contractual milestones have been completed.

Patton Surgical Corporation

TETF Award Amount: \$3,000,000

Award Date: September 4, 2009

Region: Central Texas

Higher Education Collaboration: The University of Texas at Austin

Intended Outcome:

Patton developed a medical device to help make abdominal laparoscopic surgeries less invasive. The State's investment went primarily toward completing research and development of the product, hiring additional staff, building inventory for future demand, creating molds for new surgical products, marketing of the product and finalizing plans for the assembly and sterilization processes.

Actual Outcome:

The company performed additional research and development to complete a full product line that launched in 2010. After building up inventory and hiring a sales and marketing team, the company tripled the number of facilities where Patton Surgical's products were used in surgery. A leading medical device company, Stryker, purchased the company's Trocar line in June 2012. The company returned the TETF's investment in July 2012, and the business wound down operations to close formally later that month.

Photodigm, Inc.

TETF Award Amount: \$749,829

Award Date: April 26, 2007

Region: North Texas

Higher Education Collaboration: The University of Texas at Dallas

Intended Outcome:

Photodigm is developing advanced laser technology for more affordable and efficient laser systems to be used in communications, digital imaging, medical devices and defense. The State's investment went primarily toward purchasing manufacturing equipment, recruiting senior sales and marketing personnel and producing prototypes. The company would use these steps to prepare for the introduction of a variety of high-power laser products for delivery.

Actual Outcome:

The company introduced a wide product line of single frequency precision semiconductor lasers for use in scientific instruments, metrology and industrial processing. Customers include defense contractors, government and academic

research laboratories, and industrial equipment manufacturers. The lasers are designed and produced in the company's wafer fabrication facility in Richardson, TX, and are being sold to customers worldwide.

Photon8, Inc.

TETF Award Amount: \$1,000,000

Award Date: November 13, 2009

Region: Tropical Texas

Higher Education Collaboration: The University of Texas at Brownsville

Intended Outcome:

Photon8 is developing technology to genetically enhance algae to boost its performance as a source of biofuel. The State's investment went primarily toward completing laboratory tests, completing its seawater collection and sterilization procedure, and demonstrating the genetic capabilities of the technology.

Actual Outcome:

In order to conduct a bulk seawater treatment process, the company purchased a truck and mounted a 225-gallon tank on it. As of February 2012, the company had successfully processed 14 truckloads. Photon8 has also produced a 8-oz. visual quantity of algae oil and shipped it to customers for analytical testing.

PLx Pharma, Inc.

TETF Award Amount: \$2,000,000

Award Date: March 27, 2007

Region: Gulf Coast

Higher Education Collaboration: The University of Texas Health Science Center at Houston

Intended Outcome:

PLx Pharma is developing gastrointestinal, non-steroidal anti-inflammatory drugs that are safer than those currently on the market, such as aspirin and ibuprofen. The State's investment went primarily toward the development of a commercial formulation and a trial of a safer aspirin to assess its bioequivalence, compared with regular aspirin.

Actual Outcome:

The company successfully completed a pivotal trial for PL2200 Aspirin 325 mg, essential for a New Drug Application, and continues development of a GI safer aspirin product, PL2200 Aspirin 325 mg. A new Drug Application was filed with the US FDA on March 12, 2012, and PLX has been notified that the NDA is accepted for review. PLX has one clinical trial ongoing and is preparing to initiate another clinical trial.

PrincipleSoft, Inc.

TETF Award Amount: \$750,000

Award Date: June 13, 2007

Region: North Texas

Higher Education Collaboration: The University of Texas at Dallas

Intended Outcome:

PrincipleSoft is developing technology that creates a high-speed data connection directly between targeted individuals and information, allowing for the delivery of real-time video to a variety of wireless devices. The State's investment went primarily toward completion of a digital transceiver design and its integration with analog/radio frequency subsystems. The company was also to develop a demonstration unit, a prototype, and file for additional patents.

Actual Outcome:

The company completed the design of both the digital transceiver and analog frequency subsystems, successfully integrating them in a field-programmable gate array board. An omnibus patent was filed with the U.S. Patent and

Trade Office. While testing and some development have not been completed due to a lack of funding, the company is pursuing a new application in the area of microwave backhaul and is in the process of solidifying patents to pursue a revenue model based on licensing.

Pronucleotein Biotechnologies Corporation

TETF Award Amount: \$1,000,000

Award Date: February 18, 2009

Region: South Texas

Higher Education Collaboration: The University of Texas-Pan American

Intended Outcome:

Pronucleotein (PnB) is developing products for rapid onsite food-safety testing, using technology that can detect pathogens such as E. coli and salmonella in food and water. The State's investment went primarily toward research involving Food Safety Net Services and The University of Texas-Pan American. The company also was to develop product prototypes for testing and evaluation.

Actual Outcome:

The company produced its prototype assay in-house and coupled it with PnB firmware in order to detect bacteria in foods. The improved second-generation reader has been completed and testing continues. In December 2011, the company received three testing reports from an external laboratory, and is currently working with a third party to develop an automated washer for use with its prototype reader and conduct advanced testing.

Pulmotect, Inc.

TETF Award Amount: \$1,000,000

Award Date: June 8, 2009

Region: Gulf Coast

Higher Education Collaboration: The University of Texas MD Anderson Cancer Center

Intended Outcome:

Pulmotect is developing products to boost the immune system against a wide range of airborne diseases, including pneumonia, influenza, anthrax and staphylococcus. The State's investment went primarily toward securing a manufacturing partner, preparing for Food and Drug Administration (FDA) review and completing preclinical studies at The University of Texas MD Anderson Cancer Center and recruiting additional management staff.

Actual Outcome:

The company secured contract manufacturing for preclinical studies with Bachem, Inc., and Aveica Biotechnology, Inc., as manufacturers. Pulmotect also completed preclinical safety and dose-response studies at MD Anderson that provided a foundation to conduct further studies, as approved by the FDA.

Qcue, Inc.

TETF Award Amount: \$1,000,000

Award Date: October 20, 2009

Region: Gulf Coast

Higher Education Collaboration: The University of Texas at Austin

Intended Outcome:

Qcue is reinventing the primary ticket marketplace with dynamic pricing and inventory management solutions for live entertainment events. Sports teams, concert promoters and venues use Qcue's patent-pending technology to set the right price at the right time and provide the best value for fans, from initial sale to the date of the event. The State's investment went primarily toward filing patents, hiring business development executives, acquiring new clients, deploying the product and conducting market research.

Actual Outcome:

The company filed patent applications, hired a software developer and a public relations firm to further business development. Customers and partners include leading franchises across Major League Baseball, Major League Soccer, the National Basketball Association, the National Hockey League and NASCAR. All contractual milestones have been completed and the company continues to sign new clients and increase sales.

Quantum Logic Devices, Inc.

TETF Award Amount: \$600,000

Award Date: March 27, 2007

Region: Central Texas

Higher Education Collaboration: The University of Texas at Austin

Intended Outcome:

Quantum Logic is commercializing its patented nanoelectronic platforms, which allow hospitals, clinics, physicians and consumers to perform simple medical tests to immediately identify possible illnesses. The State's investment went primarily toward continuing development of Quantum Logic's technology. The company was also to finalize designs and produce a first generation unit.

Actual Outcome:

The company finalized its designs and has a manufacturing agreement in place, with prototypes completed and delivered to NASA's Johnson Space Center. Quantum Logic Devices collaborated with The University of Texas at Austin for the use of facilities at the Microelectronics Research Center. The company has completed all contractual milestones and continues to seek commercialization partners, capital investors and additional parties for additional development and licensing.

RadioMedix, Inc.

TETF Award Amount: \$2,800,000

Award Date: November 23, 2010

Region: Central Texas

Higher Education Collaboration: The University of Texas MD Anderson Cancer Center

Intended Outcome:

RadioMedix is developing a new radiopharmaceutical platform and automated synthesizer unit to assist in the manufacturing of radiopharmaceuticals for positron emission tomography (PET) scans. This unit, when coupled with a small generator, will produce PET Gallium-68 radiopharmaceuticals, onsite, alleviating the need for separate cyclotron facilities, saving time and money.

Actual Outcome:

The company is working on software upgrades and design improvements of the product based on testing results. The company completed the last stage of pre-clinical studies in tumor-bearing animal models. It also completed design and building of new imaging center that will focus on an application of state-of-art imaging technologies for preclinical characterization of new radiotracers. The company anticipates that its SmartMedix system will be introduced into the research market by mid-2013.

Rebellion Photonics, Inc.

TETF Award Amount: \$1,000,000

Award Date: June 21, 2012

Region: Gulf Coast

Higher Education Collaboration: Rice University

Intended Outcome:

Rebellion Photonics is developing technology to detect chemical leaks within the oil drilling, oil refining and chemical/petrochemical industries. The State's investment went primarily toward product design, further technological development and fabrication process development, selection of suppliers, cost analysis and initiation of device certification.

Actual Outcome:

A prototype was scheduled to be completed in late 2012. A major oil and gas industry leader has agreed to perform a pilot study of the company's oil and gas product. Following this pilot study and certification tests, sales are expected to commence in 2013.

Receptor Logic, Inc.

TETF Award Amount: \$2,000,000

Award Date: June 16, 2008

Region: West Texas

Higher Education Collaboration: Texas Tech University

Intended Outcome:

Receptor Logic is developing technology for the treatment of cancer and chronic diseases in the field of immunology. The State's investment went primarily toward finalizing production designs, completing technical assays, assembling a research and development team and launching a web-based catalog.

Actual Outcome:

The company has demonstrated the therapeutic potential of TCRm antibodies for treatment of oncology conditions and infectious disease. The company is collaborating with academic and industry partners, including Texas Tech University, to move the technology into the clinic, with licensing and evaluation discussions underway with leading companies. The company has completed all contractual milestones.

Resonant Sensors, Inc.

TETF Award Amount: \$600,000

Award Date: May 18, 2007

Region: North Texas

Higher Education Collaboration: The University of Texas at Arlington

Intended Outcome:

Resonant Sensors is developing a new class of sensors for use in the production of biomedical compounds and drugs, allowing researchers to rapidly and accurately evaluate the performance of experimental new drug compounds. The State's investment went primarily toward development of the product and business strategy, as well as development and production of sensor plates. The company also was to establish high-volume production of the sensors, and enter into a partnership for high-throughput system production.

Actual Outcome:

The company completed strategy development goals in early 2007, with a sales and marketing plan that extends through 2013. Joining with university research partners, Resonant Sensors is conducting various projects utilizing a commercial prototype. The company established a means for commercial production of the sensor plates, and a partnership has been established for production. The company, which recently released a new RSI Bioassay system, has completed all contractual milestones.

RFMicron, Inc.

TETF Award Amount: \$925,000

Award Date: May 22, 2008

Region: Central Texas
Higher Education Collaboration: The University of Texas at Austin

Intended Outcome:

RFMicron is developing self-tuning Radio Frequency ID circuits to be used as tags for faster, more accurate tracking of a company's inventory and other assets. The State's investment went primarily toward design, development and testing of hardware and software, continued product development and market strategy, and expansion of patents.

Actual Outcome:

The company completed its design and development of "Chameleon," which adapts to any product and automatically compensates for any interference from the product's packaging. RFMicron's designs have been manufactured and tested. The company filed applications for several patents, and two have been issued. RFMicron successfully graduated from the ATI and has moved into its own facility located in Austin. RFMicron has attracted additional investment, and all milestones have been completed.

Salient Pharmaceuticals, Inc.

TETF Award Amount: \$2,000,000

Award Date: December 14, 2009

Region: Gulf Coast

Higher Education Collaboration: The University of Texas MD Anderson Cancer Center

Intended Outcome:

Salient is developing therapeutic products for the prevention and treatment of gastrointestinal side effects caused by disease, chemotherapy or radiation. The State's investment went primarily toward enrolling new patients in clinical trials, expanding trials to sites outside The University of Texas MD Anderson Cancer Center, designing and securing a provider for drug-to-drug interaction testing, completing stability testing of the product, and recruiting a Scientific Advisory Board.

Actual Outcome:

In 2010, Salient completed the drug-to-drug interaction studies at Austin-based PharmaForm and also completed a drug stability study. Salient also continued to work with Texas-based institutions of higher education. The company completed a Phase II clinical trial with 100 patients during 2012 and has filed additional patent applications.

Savara, Inc.

TETF Award Amount: \$1,900,000

Award Date: June 1, 2010

Region: Central Texas

Higher Education Collaboration: The University of Texas at Austin

Intended Outcome:

Savara is utilizing its advanced nanoparticle-based platform technologies to create a pulmonary focused, pharmaceutical product development company aimed at such fields as oncology and the treatment of asthma and cystic fibrosis. The State's investment went primarily toward formulation development, conducting studies and developing standard operating procedures for the production of a clinical supply. The company was also slated to take steps toward approval of clinical studies and filing of additional IP applications.

Actual Outcome:

In Q4 2012, Savara submitted an Investigational New Drug application (IND) with the FDA and will start Phase IIa trial in the US in Q1 2013. In the IND, Savara included the results of their Phase I trial in both volunteers and patients and the successful outcome of their inhalation toxicology studies. Savara is engaged in collaborations with several large

pharmaceutical companies, and was a member of The University of Texas Austin Technology Incubator. All contractual milestones have been completed.

ScanTech Sciences, Inc.

TETF Award Amount: \$2,000,000

Award Date: July 9, 2009

Region: Rio Grande

Higher Education Collaboration: Texas A&M University

Intended Outcome:

ScanTech Sciences, Inc. (STS), is developing technology that will improve phytosanitary treatment and prolong the useable shelf life of fresh fruits and vegetables. The State's investment went primarily toward research and development of STS' Electron Beam Food Treatment System, as well as ongoing research into the effects of irradiation on produce quality. The company also was to complete design on a facility, relocate headquarters to Texas and apply for approval of the facility from the U.S. Department of Agriculture (USDA).

Actual Outcome:

The company has completed studies and schematics for the facility, has located a potential site, and has partnered with a local business to build and operate the facility in McAllen, Texas. The company has received the amendment to the USDA regulation that will allow the operation of the facility on the Texas side of the Mexican border and has initiated the final licensing for the construction of the plant.

Secure Origins, Inc.

TETF Award Amount: \$2,000,000

Award Date: July 5, 2007

Region: Trans Pecos

Higher Education Collaboration: The University of Texas at El Paso

Intended Outcome:

Secure Origins is developing software to effectively and intelligently monitor company supply chains. The State's investment went primarily toward establishing a monitoring laboratory in El Paso, creating a fully-functional networked operation and establishing a public-private partnership in the El Paso-Juarez region. The company was also to complete development tools for programmers, as well as establish an international distributor.

Actual Outcome:

In August 2011, El Paso Commissioners Court approved the final Secure Border Trade Demonstration Project (SBT) contract with TransCore, Inc., Secure Origins, and OnAsset, Inc. A technical committee composed of state and regional representatives selected the company's cross-border technology solution. The company's SBT contract is in place and ongoing.

Seno Medical Instruments, Inc.

TETF Award Amount: \$2,000,000

Award Date: July 19, 2007

Region: South Texas

Higher Education Collaboration: The University of Texas Health Science Center at San Antonio

Intended Outcome:

Seno Medical Instruments is developing acoustic imaging technology for the detection and diagnosis of various cancers. The State's investment went primarily toward design and development of imaging probe prototypes, final device development, and steps toward conducting Food and Drug Administration (FDA) clinical trials.

Actual Outcome:

The company completed the design and prototype development of a small animal research imaging system, and subsequently licensed the system to a worldwide market leader. Development of a cancer imaging system has progressed, with a prototype system installed at the Cancer Therapy and Research Center at The University of Texas Health Science Center at San Antonio. A clinical trial at The University of Texas Health Science Center at San Antonio is ongoing. The company also completed a product redesign based on study group feedback to better address market needs, and is currently working on components for the final commercial device.

SeprOx Corporation

TETF Award Amount: \$750,000

Award Date: February 17, 2009

Region: Gulf Coast

Higher Education Collaboration: University of Houston

Intended Outcome:

SeprOX was developing a medical oxygen generator that separates pure oxygen from air for patients with breathing problems. The device was to be lighter and less expensive than currently marketed home oxygen generators. The State's investment went primarily toward continued product design and development, creation of a prototype module, finalization of a business plan, and expansion of the management team. The company was also to acquire a letter of interest and secure additional funding.

Actual Outcome:

The company was unable to secure any outside investor funding, a requirement imposed by the State of Texas for the company to qualify to receive its final tranche of funding. With no additional funding, no industrial partner and a licensed material with a fatal flaw that prevented it from being fabricated into a usable membrane, SerOx will discontinue business activities and the company will be closed as of December 31, 2012. The Office of the Governor sent a Demand Notice, in accordance with the agreement, on October 9, 2011, and has referred the matter to the Attorney General's Office.

Smart Imaging Technologies Corporation

TETF Award Amount: \$1,000,000

Award Date: December 31, 2008

Region: Gulf Coast

Higher Education Collaboration: Texas A&M University

Intended Outcome:

Smart Imaging is developing a system to automatically identify water-borne pathogens during analysis tests mandated by the Environmental Protection Agency and the Safe Drinking Water Act. The technology will significantly reduce the amount of time needed to perform critical analysis and increase the number of tests that can be completed in a given day. The State's investment went primarily toward developing and completing a pilot program, continuing business development and establishing a customer base.

Actual Outcome:

The company developed a cloud-based software platform for high-performance biomedical image analysis with a \$20 billion dollar target market. Smart Imaging is working with the Texas A&M University Office of Technology Commercialization, accelerating the adoption of the technology in multiple markets.

SmartField, Inc.

TETF Award Amount: \$1,000,000

Award Date: January 6, 2010

Region: West Texas

Higher Education Collaboration: Texas Tech University

Intended Outcome:

Smartfield is developing and commercializing technology that uses sensors to remotely monitor crop canopy temperatures and stress levels, helping keep track of irrigation needs, product performance, intervention signals and fertility programs. The State's investment went primarily toward continuing product design and development, establishing commercial distributors and institutional collaboration, conducting field trials and data collection, and meeting a minimum sales goal.

Actual Outcome:

The company partnered with global and regional agricultural retailers, crop consultants, and landowners. Sales continue to grow. The company is researching an offshoot technology and exploring additional uses for its current product.

SNR Labs Corporation

TETF Award Amount: \$750,000

Award Date: September 26, 2007

Region: North Texas

Higher Education Collaboration: The University of Texas at Dallas

Intended Outcome:

SNR Labs is developing a convergence manager that would allow wireless devices to transition seamlessly between various services, including conventional cellular, WiFi and WIMAX networks. The State's investment went primarily toward patent filing, technical development, business development, and finance and product integration.

Actual Outcome:

The company expanded business development resources to target other service providers for the SNR Labs' Vergere product line, which provides device-based solutions for traffic management of heterogeneous networks, including 3G and WiFi. SNR Labs has developed its product to address multi-radio bandwidth management and seamless mobility for network operators. Their products are for sale and SNR Labs has earned significant revenue from AT&T. The company has completed all contractual milestones.

SolarBridge Technologies, Inc.

TETF Award Amount: \$1,500,000

Award Date: December 30, 2009

Region: Central Texas

Higher Education Collaboration: The University of Texas at Austin

Intended Outcome:

SolarBridge is developing technology to improve the efficiency and reliability of solar panels. The State's investment went primarily toward completing prototype designs and securing a round of outside financing. The company was then to build a prototype and begin testing while securing regulatory certification.

Actual Outcome:

The company completed its first prototype and has gained regulatory approvals. SolarBridge has also introduced a second generation microinverter, as well as two types of management systems to use along with the microinverters. The company raised a significant amount of funds from several sources, and has completed all contractual milestones.

Solarno, Inc.

TETF Award Amount: \$250,000

Award Date: March 1, 2009

Region: North Texas
Higher Education Collaboration: The University of Texas at Dallas

Intended Outcome:

Solarno is developing nanostructured carbon materials for a number of applications. The first product, SolarnoFlex, is a transparent flexible carbon nanotube sheet that can be used as a collector electrode in thin film solar panels, a charge-injection electrode in lightweight Organic Light Emitting Diodes, and as a charge combination interlayer in tandem solar cells. The product line is expanding to include electrospun carbon nanofibers for electrodes in supercapacitors. The State's investment went primarily toward product production, IP filing, additional funding proposals and securing commercial collaborative arrangements.

Actual Outcome:

The company filed and received additional patents and expanded its product line to engage more customers, and additional funding proposals have been submitted. Funding for a Phase II STTR project for supercapacitors was secured, and NDAs have been signed with potential commercialization partners. All contractual milestones have been completed.

Speer Medical Devices, Inc.

TETF Award Amount: \$2,500,000

Award Date: March 31, 2011

Region: South Texas

Higher Education Collaboration: The University of Texas San Antonio

Intended Outcome:

Speer Medical Devices is developing and testing a portable, lightweight vital sign monitor that utilizes pulse oximetry technology to noninvasively monitor eight vital signs, including total hemoglobin. The Company is designing the monitor for battlefield trauma victims with possible hemorrhaging, which is the leading preventable cause of trauma-related deaths. The State's investment went primarily towards completing design and production of the monitor for clinical trials and execution of development agreements with partnering organizations.

Actual Outcome:

All contractual milestones have been completed. The Company executed received approval from an Investigational Review Board to proceed with a clinical trial. Clinical trials were being planned with a regional hospital. The Company is in the process of winding down business operations and in negotiation with the Office of the Governor to resolve conditions of the award.

StarVision Technologies, Inc.

TETF Award Amount: \$750,000

Award Date: October 30, 2007

Region: Gulf Coast

Higher Education Collaboration: Texas A&M University

Intended Outcome:

StarVision was developing an altitude-determination sensor system to improve satellite performance and reduce costs. The State's investment went primarily toward completing the design and testing of the system prior to flight qualification performance tests. The company was also to build cleanroom facilities, purchase manufacturing equipment and add to its engineering, marketing and sales staffs.

Actual Outcome:

The company completed initial testing and development of its technology, but filed for bankruptcy in October 2010. The State filed a Proof of Claim in the bankruptcy. The Office of the Governor referred this matter to the Texas Office of the Attorney General.

Stellarray, Inc.

TETF Award Amount: \$750,000

Award Date: July 17, 2008

Region: Central Texas

Higher Education Collaboration: Texas A&M University

Intended Outcome:

Stellarray is developing a new type of flat-panel X-ray source for use in the sterilization of mail, food and medical products, as well as medical imaging and various industrial applications. The State's investment went primarily toward co-funding a large federal contract for development of manufacturing tools and processes, as well as testing radiation panels ranging in size from 5 to 20 inches.

Actual Outcome:

The company successfully established its manufacturing processes and tested panel arrays ranging up to 6 x 14 inches in size. Development of 20-inch panels was postponed due to the decision to use multiple panels of the smaller size to cover larger sterilization areas. The Company continues its collaboration with The University of Texas MD Anderson Cancer Center. They recently received a patent and are now producing flat panel x-ray sources for use in a self-contained blood irradiator, and are implementing procedures and performing tests of the irradiator to prepare for FDA clearance. They have received a large NIH grant (\$3Mn) for development of the blood irradiator, two Phase I SBIR contracts, one Phase II SBIR contract and a \$100K commercial contract. The company is currently a subcontractor to the MD Anderson Cancer Center under a long-term NIH grant (\$2.5 Mn) for the development of real-time CT systems using the Stellarray digitally addressable x-ray source.

Sunrise Ridge Algae, Inc.

TETF Award Amount: \$250,000

Award Date: July 24, 2008

Region: Central Texas

Higher Education Collaboration: The University of Texas at Austin

Intended Outcome:

Sunrise Ridge was developing algae biomass technology that uses algae to convert waste water and carbon dioxide into renewable energy and animal feeds. The State's investment went primarily toward establishing a pilot plant operation with the goal of producing 1 kg of algae biomass and 1 kg of extracted algal oils for delivery and testing, securing additional patents, and creating a sponsored research agreement with The University of Texas at Austin.

Actual Outcome:

The company worked with The University of Texas at Austin to research algae culture collection and was able to produce algae biomass for additional research and development. However, Sunrise Ridge Algae subsequently ceased operations. The Office of the Governor demanded repayment of the disbursed award for failure to pursue commercialization efforts. The Office of the Governor referred this matter to the Texas Office of the Attorney General.

Syndiant, Inc.

TETF Award Amount: \$3,500,000

Award Date: February 20, 2009

Region: North Texas

Higher Education Collaboration: The University of Texas at Dallas

Intended Outcome:

Syndiant is developing smart-panel projection display technology that enables production of the world's smallest high-resolution light modulators. The technology enhances the small-format projector market for cell phones, personal computers and accessory products. The State's investment went primarily toward expanding the engineering team, preparing for mass production, filing patents applications and conducting two research projects with The University of Texas at Dallas.

Actual Outcome:

The company expanded their engineering team and hired 19 new employees in Texas. Preparation for mass production was completed as the final design for Lithographic masks and tooling was finished and the ASIC#2 image controller chip went into mass production. The company completed power-reduction analysis of products with the University of Texas at Dallas (UTD) Center for Integrated Circuits, and engaged with the UTD Material Science Department to explore Active Matrix Organic Light Emitting Diode (AMOLED) drive applications. Additionally, Syndiant filed five provisional patents, with one patent granted.

Terapio Corporation

TETF Award Amount: \$1,700,000

Award Date: July 21, 2008

Region: Central Texas

Higher Education Collaboration: The University of Texas at Arlington, University of North Texas Health Science Center and the University of Texas at Austin.

Intended Outcome:

Terapio is developing treatments for radiation poisoning and other toxicities that use the naturally-occurring protein RLIP76 to transport toxins out of cells before major damage occurs. The State's investment went primarily toward testing the stability of the protein, testing for toxicity and completing process development and associated production runs to provide the foundation for commercial manufacturing.

Actual Outcome:

The company reported that stability testing is complete and toxicity tests indicated clinically-relevant dosages were feasible. Terapio successfully conducted each phase of protein production using a commercially-scalable process.

Terrabon, Inc.

TETF Award Amount: \$2,750,000

Award Date: July 12, 2010

Region: Tropical Texas

Higher Education Collaboration: Texas A&M University

Intended Outcome:

Terrabon was developing technology that converts materials such as municipal solid waste, sewage, forest product residues and non-edible energy crops into chemicals and secondary alcohols that can be further refined to produce non-ethanol gasoline, jet fuel or diesel. The State's investment went primarily toward the building and operation of a demonstration facility in Bryan, Texas, to convert municipal waste into hydrocarbons. The company was also to expand its research agreement with Texas A&M University.

Actual Outcome:

The company failed to commercialize the MixAlco Technology, including but not limited to an inability to continue business operations. As of September 7, 2012, Terrabon, Inc. intended to liquidate the company under Chapter 7 of the U.S. Bankruptcy Code.

Texas MicroPower, Inc.

TETF Award Amount: \$750,000

Award Date: February 15, 2008

Region: North Texas

Higher Education Collaboration: The University of Texas at Arlington

Intended Outcome:

Texas Micropower is developing innovative materials, structures and systems for efficient, cost-effective energy harvesting for mobile and embedded systems. The State's investment went primarily toward product development and design, evaluating and optimizing materials, completing prototypes and engaging potential customers.

Actual Outcome:

The company suffered a substantial loss of key engineering personnel, requiring both a major re-strategizing and operative redirection for cash flow conservation. Texas Micropower, Inc., concentrated on manufacturable micro transducer technology development, primarily in collaboration with leading academic research teams at University of Texas at Dallas. The company is expanding the collaboration through sponsoring senior design teams (three to date) and with the National Science Foundation (NSF). The company will continue efforts to collaborate with regional and national academia and energy-harvesting centers to secure more grants, as well as expand the opportunities to commercialize the IP.

Thrombo Vision, Inc.

TETF Award Amount: \$1,500,000

Award Date: July 5, 2007

Region: Gulf Coast

Higher Education Collaboration: Texas A&M University-Commerce

Intended Outcome:

Thrombo Vision was developing a platelet function monitor that would measure the effectiveness of anti-platelet therapies in preventing heart attacks, strokes, stent occlusions and other cardiovascular crises. The State's investment went primarily toward completion of device design improvements, submission of an application for Food and Drug Administration (FDA) approval, and the establishment of manufacturing capabilities for clinical trials and market introduction.

Actual Outcome:

The company completed design and prototype development of a 5th generation monitor in 2007. These devices were used to conduct several clinical trials, including at Methodist Hospital in Houston. An application for FDA approval was filed in August 2008; however, after five rounds of questioning and additional clinical testing, the FDA denied approval. Thrombo Vision filed for bankruptcy in September 2010, and the State filed a Proof of Claim. The Office of the Governor referred this matter to the Texas Office of the Attorney General.

Turbo Trac USA, Inc.

TETF Award Amount: \$2,000,000

Award Date: August 24, 2009

Region: West Texas

Higher Education Collaboration: The University of Texas of the Permian Basin

Intended Outcome:

Turbo Trac is developing energy conservation technology for automotive, industrial and wind energy markets. This technology increases efficiency in industrial motors, while reducing energy consumption for industrial systems. The State's investment went primarily toward development and assembly of the company's first prototype for use in field and laboratory testing

Actual Outcome:

The company's prototype program has been completed and has been tested broadly in both laboratory and field conditions, meeting and exceeding all performance expectations. Product development was completed, commercialization efforts implemented and the product is currently both in production and actively being sold in the target market. The company has completed all contractual milestones and raised additional capital.

TXL Group, Inc.

TETF Award Amount: \$500,000

Award Date: February 4, 2008

Region: Trans Pecos

Higher Education Collaboration: The University of Texas at El Paso

Intended Outcome:

TXL Group is developing thermoelectric solutions for capturing heat energy from waste heat. The State's investment went primarily toward establishing a collaborative agreement with an industry partner, filing additional patents, and securing additional equity and grant capital. The company was also to begin pilot tests for lighted raised pavement markers and recovering heat energy in an industrial application. TXL was also responsible for generating sales and a market presence.

Actual Outcome:

The company began selling a development kit for thermoelectric devices, followed by the release of thermoelectric converter circuits for enabling energy capture from environmental sources. These products are sold through distribution. TXL has received one U.S. patent for roadway heat-powered roadway markers, with additional patents pending. TXL has obtained \$700,000 in two NASA contracts for the development of high-efficiency thermoelectric materials, and maintains an ongoing collaboration with the University of Texas El Paso for research support. The Office of the Governor sent a notice of demand for repayment of the award due to a failure of meeting certain technical milestones. There are ongoing discussions to resolve the dispute.

Vapogenix, Inc.

TETF Award Amount: \$2,000,000

Award Date: June 15, 2012

Region: Gulf Coast

Higher Education Collaboration: University of Texas Medical Division Anderson Cancer Center

Intended Outcome:

Vapogenix is developing novel, non-opioid analgesics for pain management related to minor procedures. The company's lead product, VPX-595, is a compound being developed initially for the treatment of acute pain. The State's investment went primarily toward developing a strategy and testing, initiating communication with the Food and Drug Administration (FDA) for IND requirements, and identifying a clinical trial site.

Actual Outcome:

The company completed existing formulation development projects with DPT Laboratories and Southwest Research Institute, both in San Antonio. The company successfully initiated communication with the FDA to clarify IND requirements. Additionally, Vapogenix contracted with a manufacturer of clinical trial material, Velesco Pharmaceutical Services, and contracted with a clinical operations vendor in Texas, TRIBE Clinical Development, Inc.

Varaha Systems, Inc.

TETF Award Amount: \$1,500,000

Award Date: August 14, 2009

Region: North Texas

Higher Education Collaboration: The University of Texas at Arlington

Intended Outcome:

Varaha is developing technology that allows users to extend voice, data and video applications to mobile devices while maintaining security and network accessibility. The State's investment went primarily toward expanding distribution channels, improving market reach, increasing sales staff and completing a university collaboration survey article.

Actual Outcome:

The company's uMobility application is approved for major Smartphone and Blackberry devices, and is sold worldwide through the company's channel partners. Sales staff has been increased, and Varaha has worked closely with UT Arlington to publish a joint survey article through research and survey activities. The company has completed all contractual milestones.

Veros Systems, Inc.

TETF Award Amount: \$1,500,000

Award Date: June 14, 2010

Region: Gulf Coast

Higher Education Collaboration: Texas A&M University

Intended Outcome:

Veros Systems is developing software-based technology that monitors and assesses the condition of electrically-driven industrial machines, detecting potential anomalies or faults and allowing plant managers time to make decisions on repairing or replacing parts before machine failure. The State's investment went primarily toward securing purchase orders for monitoring motors, expanding the management team, and establishing a sales channel. Additionally, the company's latest intended milestones are to receive additional purchase orders, secure a procurement agreement with a Fortune 500 company, manufacture an enhanced version of the Veros Predictive Intelligence Monitor (PIM), and raise additional capital.

Actual Outcome:

The company received purchase orders for monitoring a total of 67 motors, which was more than the contractual minimum required number of 50. The company hired a permanent CEO with over 25 years of marketing and sales experience in the software industry. Veros Systems has also established an independent sales agent relationship with the Idea Venture Partners (Idea VP) Group.

ViroXis Corporation

TETF Award Amount: \$2,500,000

Award Date: October 1, 2010

Region: South Texas

Higher Education Collaboration: The University of Texas at San Antonio & The University of Texas Health Science Center at San Antonio, Cancer Therapy and Research Center of San Antonio

Intended Outcome:

Viroxis is developing a medication for warts caused by the Human Papilloma Virus (HPV), called albuterpenoid, utilizing a botanical extract from sandalwood oil. The State's investment went primarily toward gaining Food and Drug Administration approval to conduct further clinical studies of its lead drug candidate, a topical albuterpenoid formulation.

Actual Outcome:

The company obtained Food and Drug Administration approval for a Phase II study, expected to be initiated in Q4 2012. ViroXis successfully met milestones requirements to receive the second funding tranche from the TETF.

Visualase, Inc.

TETF Award Amount: \$750,000

Award Date: August 9, 2007

Region: Gulf Coast

Higher Education Collaboration: The University of Texas MD Anderson Cancer Center

Intended Outcome:

Visualase is developing technology using an MRI-guided laser interstitial thermal therapy system for treatment of cancerous tumors, particularly small focal metastatic tumors. The State's investment went primarily toward completing design improvements of the first prototype and software, securing regulatory approvals, completing production designs, commencing clinical trials, and commercial sales.

Actual Outcome:

The company received six regulatory approvals for Visualase-related products and began commercial sales in 2009. The company completed a bone tumor study that demonstrated the procedure can be done both safely and easily with little pain to the patient. The company has completed all contractual milestones. Visualase has also completed a Phase I clinical study on low-grade prostate cancer and initiated a Phase II clinical study for MR-image-guided thermal therapy in prostate cancer. The company's device is also being used in a clinical study for the treatment of partial epilepsy and for treatment of metastatic brain tumors. The company has also been featured on the cover of American Society for Laser Medicine.

Vital Arts & Sciences Incorporated

TETF Award Amount: \$1,000,000

Award Date: June 7, 2011

Region: North Texas

Higher Education Collaboration: The University of Texas Southwestern Medical Center and University of North Texas Health Science Center

Intended Outcome:

Vital Art and Science developed myVisionTrack™, a smartphone app that monitors vision loss caused by age-related Macular Degeneration and Diabetic Retinopathy. The app implements a shape discrimination test that a patient can take at home to quickly and accurately monitor their own disease progression in between doctor visits. This replaces the current unreliable and hard-to-use paper tests to ensure patients get timely treatments and minimize permanent vision loss. The State's investment went primarily toward product development, applications for FDA approval, validation clinical trials and international patent filings.

Actual Outcome:

The company successfully completed a 4-month, 160-patient clinical trial, funded by a major pharmaceutical corporation. The results were presented in May at the Association for Research in Vision and Ophthalmology Conference. The company was awarded a \$988,000 Phase II SBIR Grant from National Eye Institute to develop a next-generation product that has attracted interest from several drug companies. The company's 510(k) application is currently under review by the FDA.

VUV Analytics, Inc.

TETF Award Amount: \$1,000,000

Award Date: June 15, 2012

Region: Central Texas

Higher Education Collaboration: University of Texas at Austin

Intended Outcome:

VUV Analytics is developing and commercializing a Vacuum Ultraviolet Circular Dichroism instrument for structural determination of chiral molecules for use in discovery, development and production of biotherapeutics. The State's investment went primarily toward filing patents, funding early-stage university collaboration, complete initial technology control and analysis software, and build a prototype solution.

Actual Outcome:

The company filed three patents and patent applications for its technology, and funded one-third early-stage university collaboration for technology validation at the University of Texas at Austin. The company also completed VUV-VIS Absorption Spectroscopy initial control and analysis software and built a prototype gas sample cell for use in VUV-VIS/VUV-CD instruments. In addition, VUV Analytics successfully appointed an individual with relevant industry experience as an advisor.

Xtreme Power, Inc.

TETF Award Amount: \$2,000,000

Award Date: March 27, 2007

Region: Central Texas

Higher Education Collaboration: The University of Texas at Austin, Texas State University

Intended Outcome:

Xtreme Power is developing a large-scale energy load-leveling system capable of efficiently and cost-effectively storing and delivering large quantities of electric power. The State's investment went primarily toward designing and developing a prototype. The company was also to raise additional capital and reach an agreement with a Fortune 100 company to test one of its systems.

Actual Outcome:

The company designed, built and installed a large-scale product design of their 100kw system. A pilot agreement with a Fortune 100 Company was completed and the company's products are available for purchase from the Grainger and Home Depot websites. Additionally, Xtreme Power sponsored the McCombs School of Business Cleantech Fellows program at the University of Texas at Austin. All contractual milestones have been completed.

Xitronix Corporation

TETF Award Amount: \$500,000

Award Date: January 17, 2008

Region: Central Texas

Higher Education Collaboration: The University of Texas at Austin

Intended Outcome:

Xitronix develops powerful measurement systems that are used to measure nanoscale electronic properties of semiconductors during production. The State's investment went primarily toward completing development, design and an alpha build of the XP700 measurement system, as well as expanding management staff.

Actual Outcome:

The company has completed engineering design and tool development and conducted a trial with consortium partners. In February 2011, the company won an important victory in an intellectual property case against a company that is challenging the company's commercialization of technology for process control of nanostructure electronic properties in semiconductor manufacturing. Headquartered in Austin, Xitronix is now turning its focus to fully bringing its XP700 system to market and plans to expand operations.

ZS Pharma, Inc.

TETF Award Amount: \$2,000,000

Award Date: August 13, 2010

Region: North Texas

Higher Education Collaboration: University of North Texas Health Science Center

Intended Outcome:

ZS Pharma is developing a therapy for the treatment of complications associated with liver and kidney failure, using zirconium silicate crystals to specifically target excess toxins that have built up in the body. The State's investment went primarily toward establishing Food and Drug Administration (FDA) pre-clinical protocols, completing toxicology studies, submitting applications for necessary FDA approvals and conducting pilot trials with humans. The company is also to raise additional capital to complete the needed FDA safety and efficacy trails required to commercialize its product line.

Actual Outcome:

The company established FDA preclinical protocols, completed the toxicology studies, submitted an IND package to the FDA, and received an IND assigned number. In 2011, the company continued to work with the FDA, seeking agreement on the design of human efficacy and safety clinical trials. The company successfully completed a Phase 2 clinical study on the safety and efficacy of zirconium silicate and is planning to initiate a Phase 3 study by the end of 2012.

Research Award Matching

Alliance for Higher Education (Atomically Precise Manufacturing Corporation)

TETF Award Amount: \$4,700,000

Award Date: March 7, 2008

Industry: Nanotechnology

Industry Collaboration & Funding Source: Defense Advanced Research Projects Agency, The University of Texas at Dallas, the University of North Texas, Molecular Imprints, and Zyvex Labs

The award developed the basic tools and techniques necessary to enable accelerated commercialization and market adoption of nanotechnology-enabled devices and systems, including biosensors, pharmacological processing, deep-tissue medical imaging and low-powered sensors for defense and environmental monitoring.

Carbon Nanotechnologies, Inc.

TETF Award Amount: \$975,000

Award Date: September 1, 2006

Industry: Nanotechnology

Industry Collaboration & Funding Source: National Institute of Standards and Technology and Advanced Technology Program

The award was used to further research in the micro-fuel cells that power portable and wireless electronic devices, and to supply single-wall nanotubes in broad enough numbers to support nanoelectronic component development and commercialization efforts. Carbon Nanotechnologies Inc. merged with Unidyn Inc., a California-based subsidiary of Arrowhead Research Corporation, and Arrowhead subsequently sold Unidyn. The contract between Carbon Nanotechnologies and the TETF ended September 14, 2010.

Center for Commercialization of Electric Technologies (CCET)

TETF Award Amount: \$500,000

Award Date: October 9, 2007

Industry: Electric

Industry Collaboration & Funding Source: CCET member electric companies—Oncor Electric Delivery, CenterPoint Energy, and AEP Texas, ERCOT, Electric Power Research Institute and U.S. Department of Energy

The award was used for the Informational Technology for the 21st Century Smart Grid project. The contract between CCET and the TETF ended October 9, 2012.

Global Contours Ltd.

TETF Award Amount: \$950,000

Award Date: April 5, 2007

Industry: Defense

Industry Collaboration & Funding Source: U.S. Army Small Business Innovation and Research and the National Science Foundation

The award was used to develop electromagnetic interference (EMI) and electromagnetic pulse (EMP)–shielding dome technologies for construction of electronic data centers and other special purpose buildings with the Monolithic Dome Institute in Italy, TX, using a modified concrete formula. The contract between Global Contours and the TETF ended April 5, 2012.

Lynntech, Inc.

TETF Award Amount: \$600,000

Award Date: April 19, 2007

Industry: Energy

Industry Collaboration & Funding Source: U.S. Air Force Small Business Innovation and Research

The award was used to design, fabricate and demonstrate a hydrogen fuel-cell powered, multi-use vehicle for the U.S. Air Force. The contract between Lynntech and the TETF ended March 19, 2012.

National Trauma Institute (NTI)

TETF Award Amount: \$3,800,000

Award Date: January 28, 2008

Industry: Biotechnology & Life Science

Industry Collaboration & Funding Source: Industry Collaborator: Athena GTX; Government Collaborator: U.S. Army Institute of Surgical Research

The award was used for the development of a small, rugged, wireless portable vital sign monitor and computer system that attaches to a standard blood pressure cuff at point of injury, through patient transport and into advanced care. FDA approved, the device can monitor and stream data on up to 20 individuals, providing critical information on injured soldiers during transport. Developed for the battlefield, the device is also gaining commercial traction in hospitals and for emergency response.

Sematech Corporation

TETF Award Amount: \$5,000,000

Award Date: May 22, 2006

Industry: Computer & Information Technologies

Industry Collaboration & Funding Source: Defense Advanced Research Projects Agency, University of Texas at Austin, University of Texas at Dallas, Molecular Imprints, Inc., Hewlett Packard, and Texas Instruments

The award was used to develop the Advanced Processing and Prototyping Center, dedicated to prototyping new nanoscale manufacturing processes and accelerating the commercialization of new nanoelectronic products. Sematech and the Advanced Technology Development Facility (ATDF) purchased six semiconductor processing and metrology equipment units in support of the Texas Workforce Commission grant establishing the Nano Scholars program. 163 interns completed the program. According to the Nanoelectronics Project Activities and Performance Measures Report provided to the Texas Workforce Commission - February 2008 "At least 2 students were directly

hired by Sematech at the completion of their internship; a third student was offered a position. Most returned to their studies but felt confident in their prospects for employment on graduation.”

Texas A&M University System (National Center for Therapeutics Manufacturing)

TETF Award Amount: \$50,000,000

Award Date: January 27, 2009

Industry: Life Sciences

Industry Collaboration & Funding Source: The University of Texas MD Anderson Cancer Center and the Defense Advanced Research Projects Agency

The award provided funding for the establishment of the National Center for Therapeutics Manufacturing, which will become an international destination for research and development of medications to combat diseases such as cancer, diabetes and influenza, and serve as a model for future national facilities that will protect the nation from bioterror threats and attacks.

Texas Agriculture Experiment Station (Algae Biofuels)

TETF Award Amount: \$4,025,000

Award Date: November 29, 2007

Industry: Energy

Industry Collaboration & Funding Source: General Atomics, U.S. Air Force, Defense Advanced Research Projects Agency, and National Alliance for Advanced Biofuels and Bio-Products

The award was used for a demonstration project for the cost-effective production of algae-derived transportation fuels, and to provide a pathway to commercialization of this technology in Texas. Harvesting and wet-extraction methods were evaluated at the pilot and demonstration scale.

Texas Railroad Commission (FutureGen)

TETF Award Amount: \$3,259,095

Award Date: August 31, 2006

Industry: Energy

Industry Collaboration & Funding Source: U.S. Department of Energy

The award was used to completing a proposal to establish the nation’s first near-zero emission coal-fired power plant in Texas. Texas was one of two finalists; however, the project was awarded to Illinois.

The University of Texas System (SWAN)

TETF Award Amount: \$1,750,000

Award Date: January 9, 2007

Industry: Nanotechnology

Industry Collaboration & Funding Source: Defense Advanced Research Projects Agency, National Science Foundation, National Institute of Standards and Technology, Nanoelectronics Research Initiative, TI, IBM, Intel, Micron, Global Foundries

The award was used to match Semiconductor Research Corporation and Nanoelectronics Research Corporation projects to investigate the limitations in scalability of CMOS transistors, and help establish the Southwest Academy of Nanotechnology (SWAN), a multi-campus nanoelectronics research center. The contract between the University of Texas system and the TETF ended January 9, 2012.

The University of Texas at Dallas (FUSION)

TETF Award Amount: \$5,000,000

Award Date: October 6, 2008
Industry: Semiconductor
Industry Collaboration & Funding Source: COSAR

With additional funding from the Consortium of Semiconductor Advanced Research of South Korea, the TETF award was used to fund and conduct collaborative research projects with Texas Future Semiconductor Commercialization (FUSION) partners, including Samsung, UTHSC – Southwestern, and UT Austin.

The University of Texas Health Science Center at San Antonio (CFAIR)

TETF Award Amount: \$4,099,973

Award Date: February 22, 2007

Industry: Life Science

Industry Collaboration & Funding Source: Defense Advanced Research Projects Agency, NIH, UT, American Heart Association, San Antonio Area Foundation and VA

The award was used to establish a Comprehensive Facility for Animal Imaging Research, using imaging to evaluate new drugs and medical devices prior to and during human trials. Particular focus was given to protective and modified equipment to enhance efficacy and safety on the battlefield. The contract between CFAIR and the Texas Emerging Technology Fund ended January 31, 2012.

Acquisition of Research Superiority

TEXAS A&M UNIVERSITY SYSTEM

Texas Institute for Preclinical Studies (TIPS)

TETF Award Amount: \$6,300,000

Award Date: July 20, 2007

Award Recipient: Texas A&M University

The award was used to recruit three researchers to TIPS to develop advancements in biotechnology, helping new discoveries, particularly medical devices and therapies, move more quickly from concept to the marketplace to treat and prevent diseases.

Texas BioEnergy Alliance

TETF Award Amount: \$3,412,500

Award Date: July 26, 2007

Award Recipient: Texas A&M University

The award enabled Texas A&M University to recruit two top researchers to accelerate the research and development of preferred feedstock for converting biomass, production of biofuels, and related bioproducts. The institution also established the Texas BioEnergy Alliance, a partnership between the Texas Agricultural Experiment Station and Texas Engineering Experiment Station to accelerate the commercialization of the next generation of biofuels.

Institute for Regenerative Medicine (IRM)

TETF Award Amount: \$5,250,000

Award Date: September 19, 2008

Award Recipient: Texas A&M Health Science Center

The IRM was established in August 2008 as a joint venture between the Texas A&M Health Science Center College of Medicine, Scott & White, and the Temple Bioscience District to bridge the gap between basic science and clinical translation in regenerative medicine and experimental cell therapeutics. To date, the IRM has attracted three top researchers and their teams. Using a National Institute of Health grant, the IRM currently distributes standardized preparations of adult stem cells (MSCs) for preclinical experiments to more than 250 laboratories.

TEXAS STATE UNIVERSITY SYSTEM**Center for Multifunctional Materials**

TETF Award Amount: \$4,200,000

Award Date: February 9, 2009

Award Recipient: Texas State University

The award secured three top researchers to expand the Advanced Functional Materials Laboratory and create the Center for Multifunctional Materials. It enabled the Center to expand its user base, which includes Taiwan Semiconductor Manufacturing Corporation, Texas Instruments, and SEMATECH, to include MicroPower Global, which relocated to San Marcos.

TEXAS TECH UNIVERSITY SYSTEM**International Center for Excellence (ICE) in Agriculture Genomics and Biotechnology**

TETF Award Amount: \$2,045,950

Award Date: May 1, 2006

Award Recipient: Texas Tech University

The award provided the necessary financing to acquire a director for the International Center for Excellence in Agriculture Genomics and Biotechnology at Texas Tech University. The Center reported 236 research disclosures, 71 patent applications, 18 patents granted and 37 technologies licensed, including an exclusive license to Bayer Cropscience. Monsanto Co., a multinational agricultural biotechnology corporation, opened a cotton research mega-site in Lubbock to better partner with the center. The contract between Texas Tech University and the TETF ended August 31, 2010.

Nanotechnology Center

TEFT Award Amount: \$2,100,000

Award Date: February 12, 2008

Award Recipient: Texas Tech University

The award was used to attract two internationally renowned researchers to study nanophotonics, the science of the creation and manipulation of advanced materials at the nanoscale that can produce and sense light.

National Institute for Renewable Energy

TEFT Award Amount: \$8,400,000

Industry: Energy

Award Date: August 20, 2010

Award Recipient: Texas Tech University

The award funded the creation of the National Institute for Renewable Energy (NIRE), an independent public-private collaboration that works to solve key challenges facing the wind power industry, and the creation of the National Wind Research Center in Lubbock through the recruitment of four top researchers.

UNIVERSITY OF HOUSTON SYSTEM

Texas International Center for Cell Signaling and Nuclear Receptors

TETF Award Amount: \$5,500,000

Award Date: February 5, 2009

Award Recipient: University of Houston

The award was used to create the Texas International Center for Cell Signaling and Nuclear Receptors (TICNR) by recruiting two internationally renowned researchers and their 10-person team from the Karolinska Institute, in partnership with Houston's Methodist Hospital Research Institute. Their research examines the role of nuclear receptors in the prevention and treatment of disease.

Superconductivity Applied Research Hub

TETF Award Amount: \$3,500,000

Award Date: November 17, 2009

Award Recipient: University of Houston

The Superconductivity Applied Research Hub is researching superconductive wires with a focus on solar and wind power applications, wire manufacturing techniques, and conductivity, through the recruitment of four top researchers. The award also facilitated the relocation of a Superpower, Inc. facility to the University of Houston Energy Research Park for superconductor wire manufacturing.

UNIVERSITY OF NORTH TEXAS SYSTEM

Center for Commercialization of Fluorescence Technology

TETF Award Amount: \$2,388,750

Award Date: March 13, 2007

Award Recipient: UNT Health Science Center at Fort Worth

The award helped recruit three top international researchers to merge modern fluorescence with nanotechnology to develop new biomedical tools and laboratory technology for medical diagnostics, biotechnology, genomics, and proteomics. The contract between the University of North Texas Health Science Center at Fort Worth and the TETF ended January 31, 2011.

THE UNIVERSITY OF TEXAS SYSTEM

Neuroscience Imaging Center

TETF Award Amount: \$3,675,000

Award Date: December 10, 2007

Award Recipient: The University of Texas at Austin

The center is studying brain circuitry and neural activity using brain imaging equipment and reconstruction modeling. The award allowed the University of Texas at Austin to recruit three top researchers to drive developments in software and imaging technologies that enable topological renderings and 3D imagery of brain processes. This allows researchers to study how the brain processes information, and how those processes change under various drug interactions and neurological states.

Texas Analog Center of Excellence (TxACE)

TETF Award Amount: \$4,725,000

Award Date: September 1, 2009
Award Recipient: The University of Texas at Dallas

The University of Texas at Dallas has created the largest analog research center based in an academic institution in the world. The award helped recruit four researchers to examine how to lower the cost of millimeter wave and sub-millimeter wave analog electronics systems.

Integrated 3D Systems Technology

TETF Award Amount: \$3,150,000
Award Date: July 21, 2010
Award Recipient: The University of Texas at El Paso

The award enabled the University of Texas at El Paso to recruit three top researchers in advanced 3D manufacturing and materials technologies. The overall focus of the research is to improve the physical properties of materials, components, and systems while also improving safety and reliability and reducing costs.

Center for Inland Desalination Systems

TETF Award Amount: \$2,100,000
Award Date: October 20, 2008
Award Recipient: The University of Texas at El Paso

The Center, through the research of two TETF funded researchers, is studying desalination-related issues to maximize the benefits of desalination while minimizing negative environmental impacts.

Institute for Cyber Security Research

TETF Award Amount: \$3,694,950
Award Date: April 5, 2007
Award Recipient: The University of Texas at San Antonio

The University of Texas San Antonio (UTSA) Institute for Cyber Security (ICS), with one recruited top researcher, has received more than \$3.8 million in follow-on funding from the National Science Foundation, Silicon Informatics, and others during the term of the contract. ICS entered into one new non-disclosure agreement and filed two invention disclosures. The contract between UTSA and the TETF ended April 5, 2012.

Texas Allergy, Indoor Environment and Energy Institute (TxAIRE)

TETF Award Amount: \$3,937,500
Award Date: July 14, 2007
Award Recipient: The University of Texas at Tyler

The University of Texas at Tyler recruited two nationally recognized experts from industry and created TxAIRE as an Indoor Environmental Quality technology development center. The award enabled the development of a new product commercialization center servicing the HVAC industry cluster. To date, more than eighty Texas-based companies have worked collaboratively with TxAIRE. The contract between the University of Texas at Tyler and the TETF ended August 31, 2011.

Center for Translational Injury Research (CeTIR)

TETF Award Amount: \$4,000,000
Award Date: October 6, 2008
Award Recipient: University of Texas Health Science Center at Houston

The award enabled the University of Texas Health Science Center at Houston to recruit three leading scientists and surgeons in trauma care and next-generation medical technologies to improve the level of critical care that patients receive in an emergency.

Alliance for NanoHealth

TETF Award Amount: \$2,625,000

Award Date: August 23, 2006

Award Recipient: The University of Texas Health Science Center at Houston

The award provided support to hire Dr. Mauro Ferrari to head the Alliance for NanoHealth, which was created as an interdisciplinary, multi-institutional organization aimed at bridging gaps between medicine, biology, engineering, public policy, and nanotechnology.

Texas Therapeutics Institute

TETF Award Amount: \$6,300,000

Award Date: July 12, 2010

Award Recipient: The University of Texas Health Science Center at Houston

The award went to the recruitment of six researchers and the formation of a research pipeline between the University of Texas Health Science Center at Houston, University of Texas MD Anderson Cancer Center, and University of Texas at Austin. The institute coordinates and oversees collaborative drug development at these three institutions.

Children's Regenerative Medicine

TETF Award Amount: \$3,150,000

Award Date: July 28, 2011

Award Recipient: The University of Texas Health Science Center at Houston

This award helped recruit two researchers and enabled the expansion of the University of Texas Health Science Center at Houston's program devoted to discovering curative therapies for childhood conditions that use the body's regenerative powers to repair malformed organs and mitigate injury from illness or trauma. The center is researching the treatment of cerebral palsy, which was funded by TIRR Foundation, Mission Connect, and the Let's Cure Cerebral Palsy Foundation.

Southwest Academy for Nanotechnology (SWAN)

TETF Award Amount: \$10,500,000

Award Date: March 15, 2007

Award Recipient: The University of Texas System

The award helped the University of Texas at Austin Microelectronics Research Center (MRC) establish SWAN, in collaboration with the Semiconductor Research Corporation Nanoelectronics Research Initiative. The award enabled the MRC to attract globally-recognized researchers and their teams to the University of Texas at Austin, the University of Texas at Dallas, and the University of Texas at Arlington. The universities of Texas at Dallas and Arlington are members of SWAN, and collaboratively work to develop breakthrough nanoelectronics research.