Office of Technology Commercialization
Annual Report for FY 2016

Executive Summary

This report provides an overview of Texas State University's commercialization activities for the fiscal year ending August 31, 2016. The annual report will highlight the Office of Technology Commercialization's roles and accomplishments in two distinct areas: Research Contracts Activity and Intellectual Property Management and Commercialization Activity.

The Office of Technology Commercialization (OTC) and the Office of Industry Engagement and Innovation (OIEI) were created in September 2015. Together these entities, which were once combined into one department, support industrial relationships for Texas State University and report to the Chief Research Officer.

The objectives for the OTC include:

- Promote and manage Texas State's intellectual property (IP) portfolio
- Provide support for and review of all faculty IP disclosures
- Facilitate and support the IP Committee
- Negotiate and review all research-related contractual agreements; including nondisclosures, sponsored research agreements, university-industry partnerships, etc.
- Provide coordination with OIEI

The objectives for OIEI include:

- Engage industry with Texas State University to represent all university technologies and help industry identify most relevant touch points
- Engage faculty with industry, be a "matchmaker" between industry needs and faculty capabilities
- Develop and drive a strategy to promote interdisciplinary innovation both on campus between researchers and with industry partners.
- Explore opportunities for non-technical disciplines to form collaborations with industry.
- Provide coordination with OTC

"The mission of the OTC is to identify Intellectual Property resulting from research at Texas State University, protect it, and to facilitate the commercialization to business and industry; and, when feasible, to assist in the formation of start-up businesses that utilize the university's technology in order to provide benefits to the university and the regional economy"

OTC provides the link between university research laboratories, where innovative new technologies are being developed, and industry partners, who will bring these technologies to fruition as a product. The OTC protects new innovations developed by Texas State University researchers through patents and seeks to transfer the IP to industry by royalty-bearing license agreements for commercial products that result in economic development and public benefit.

The processes for all research contracts, invention disclosures, and filing patents are well established and are readily available on the OTC website. The fiscal year 2016 successes include Research Contracts Activity and Intellectual Property Management and Commercialization Activity. The following sections detail the cutting-edge technology and the future research and discovery at the university through the support of the OTC.

2016 Successes

Research Contracts Activity

- University-Industry Partnership Agreements combined resources and talents of the university with industrial partners to establish long-term research, development, and commercialization partnerships
- OTC reviewed and negotiated the terms and conditions for research related agreements such as Nondisclosures, Sponsor Research Agreements, University Industry Partnerships, and Service or Testing Agreements
- OTC worked closely with the Office of Sponsored Programs and the Texas State University System legal office to ensure the terms of research contracts supported the university's mission
- OTC worked closely with the Office of Research Compliance to ensure compliance with Federal and State laws and University policies

During fiscal year 2016, Texas State collaborations with private industry increased. The results of industry activities include:

- 37 Sponsored Research Agreements
- 13 University Industry Partnerships
- 5 Service or Testing Agreements
- 21 Nondisclosure Agreements

Intellectual Property (IP) Management and Commercialization

Technology Transfer Activity

- Assisted university researchers in submitting invention disclosure forms that, upon recommendation of the IP Committee, could be filed quickly as provisional patents to initiate early IP protection
- Facilitated meetings with faculty and TreMonti Consulting, LLC to provide basic information about the process of commercialization
- Coordinated patent applications with inventors, outside entities, and the IP
- Negotiated with outside counsel to file patent applications and resolve litigations between faculty and industrial partners
- Presented available technologies to industry, as appropriate

Invention Reporting

Texas State University is a Rising Star on the entrepreneurial and commercialization horizon in Central Texas. During fiscal year 2016, 9 inventions were disclosed by faculty and researchers (Table 1). The results of commercialization activities (over past 7 years) total:

- 80 Invention Disclosures received
- 34 Provisional Patents filed
- 22 Full Patent Applications filed

Year-end Statistics With Comparison to Prior Years (Table 1)

Metric	FY10	FY11	FY12	FY13	FY14	FY15	FY16
Invention Disclosures	7	12	12	13	16	11	9
Provisional Applications Filed	2	7	5	5	7	5	3
Patents Applications Filed	1	1	3	2	7	5	3

Licensing and Related Activity

A license agreement gives the licensee the ability to use Texas State's IP rights for a technology in order to develop that technology for commercialization. University license agreements typically include the following elements:

- License Fee
- Patent Cost Reimbursement
- Development Period
- Royalties

During the fiscal year 2016, the university did not enter into new licensing agreements. However, Texas State entered into seven licensing agreements since FY 2011.

Support of Research Initiative

The OTC/Formosa Plastics Professorship (Formosa Professorship) was established to recognize a tenured faculty member's scholarly contributions at Texas State toward multidisciplinary scientific and technological solutions of industrial and environmental problems. Candidates may be from a variety of backgrounds including Biology, Chemistry and Biochemistry, Economics, Engineering Technology, Finance, Geography, Physics, the Materials Science, Engineering and Commercialization Program, and the School of Engineering as well as certain university centers, programs, and schools at Texas State.

The Formosa Plastics Corporation Faculty Fellowship provides an annual research stipend of $12,000 that can be used to cover teaching expenditures (after approval of the department chair), research expenditures, or to supplement salary.

Economic and Entrepreneurial Outreach

Entrepreneurship Working Group

The level of student and faculty activity, classified as entrepreneurial in nature, has increased significantly at Texas State. All indications are that this activity will continue and increase in the coming years. In addition, financial support for entrepreneurial (innovation) activity is increasing from state, federal, and private sources.

With this in mind, Texas State established an Entrepreneurial Working Group (EWG) to address the following areas:

- Compilation of programs currently underway focused on either commercialization and/or entrepreneurship
- Compilation of initiatives and/or programs being actively considered
- Identification of new opportunities, especially as related to obtaining outside funding
- Compilation and review of existing policies impacting new initiatives (e.g., crowdfunding)
- Recommendations for processes and strategies to support an innovation environment

Membership of the working group consists of one member from each college including the Graduate College and additional members including Directors, Entrepreneur in Residence, etc.

3 Day Startup

The Center for Entrepreneurial Action in the McCoy College of Business Administration hosted a 3-Day Startup program starting in the fall of 2013. This program is open to all Texas State University students at no charge and is intended to complement their studies. 3-Day Startup teaches entrepreneurial skills to the students in an intense hands-on environment. This proven program provides the tools needed to start successful companies. Participants of this program gain experience in cross-disciplinary collaboration, brainstorming and ideation, group productivity, and hoc leadership, and decision-making under time constrains that stimulate

creativity and innovation. In the spring of 2015, 3-Day Startup program had 65 attendees, of which 56 were undergraduate and nine were graduate students.

Development of Unique Incubator Facility

Texas State's 58-acre Science, Technology and Advanced Research (STAR) Park was established in 2011. The first building was financed through a three-way partnership with the City of San Marcos, Texas State University, and a $1.85M award from the U.S. Economic Development Administration. STAR One, dedicated in November 2012, has been expanded twice from its initial 14,000 square feet to a 36,000 square foot incubation facility. STAR One is designed to serves as an incubator and accelerator for high growth technology focused companies interested in collaborations with Texas State University. Unique in the region, STAR One offers specialized space for companies developing new products in the fields of material science, semiconductors, clean energy production, nanomaterials, medical diagnostics and life sciences.

OTC and STAR Park work closely in the following areas through different aspects of commercialization activities:

- Encouraging technology commercialization from public investment in research
- Stimulating the formation of new technology or innovation focused businesses in the state
- Stimulating economic development and competitiveness in San Marcos, Hays and Caldwell counties, and the state of Texas, through collaborations with regional and state entities
- Establishing Texas State and the State of Texas as recognized center for technology commercialization and innovation

Due to the OTC and STAR Park overlapping activities relative to commercialization, the Directors and the Chief Research Officer meet weekly to discuss the delineation of responsibilities and to coordinate the commercialization efforts.

Student Entrepreneurship Initiative

STAR SEEK [Student Entrepreneurship and Enterprise Knowledge] was initiated to Provide an opportunity for students to participate in an immersive 12-month multi-disciplinary team based entrepreneurial experience and to create new scalable ventures commercializing proprietary products, processes or services.