

The TechComm Initiative
(An approach to further research and investment in Texas)
November 2010

I - SUMMARY

While the State of Texas has been a leader in business growth, especially during the current economic slowdown, the state lags behind a number of other states in terms of research and innovation (including patents). Similarly, Texas has not had sufficient venture capital funding to take the innovations that are being developed to market. In an attempt to address some of the barriers in the state's commercialization market, Texas has implemented two incentive programs, the Texas Emerging Technology Fund and the CAPCO Program that are designed to help attract research to the state and to offer venture capital to start-up businesses looking to bridge the so called "valley of death" between research and development and production. The TechComm Initiative created by the Center for Innovation at Arlington offers an avenue for Texas businesses and entrepreneurs to gain access to existing federal research and federal research facilities. TechComm offers Texans ready access to federal laboratories (e.g. US Department of Agriculture) and a full service conduit to existing federal government research patents and/or innovation; the potential licensing of this innovation; and access to venture capital and other business growth mechanisms.

II – TEXAS and INNOVATION

The State of Texas has been a model for business growth and expansion. This fact has shone most brightly during the economic downturn of 2008 – 2010. Texas has been a leader in job growth during this time and arguably has the best business climate in the United States. One reason for Texas' "business first" reputation is the State's conscious desire to create and expand new technology and innovation and the research behind such endeavors. The State of Texas continues to be a leader in hi-tech innovation and in partnering businesses with research institutions to expand the State's technological wherewithal.

There are a number of efforts available to further research and innovation as well as invest in these new ideas and bring them to market which in turn moves the Texas economy forward. The most aggressive step being taken by the Texas research community is the idea of adding to the current list of Tier One universities in the state. Texas has three Tier One institutions (University of Texas at Austin, Texas A&M University and Rice University). Adding one or even two more universities to this list would have a significant cost but could ultimately boost innovation and investment in Texas.

II A: Patents

Over the years Texas has emerged as a leader in innovation. This can be clearly seen by looking at the number of patents issued to residents of the various states. The United States Patent Office reports that through 2009, Texas ranks as the fourth highest state in terms of total number of patents issued to residents since 1963. Texas continues to make strides in innovation with the state receiving the second

highest total of patents in 2009. While Texas trails California in total patents issued, it is by far the leader in the south central region.

Number of Patents Granted as Distributed by Year of Patent Grant.
Granted: 01/01/1963 - 12/31/2009

State Rank		2009			All Years		
		total patents	US	All	total patents	US	All
	Total, U.S. And Foreign Origin	167,349		100.00%	4,548,072		100.00%
	-- Subtotal- U.S. Origin	82,382	100.00%	49.23%	2,620,632	100.00%	57.62%
	-- Subtotal- Foreign Origin	84,967		50.77%	1,927,440		42.38%
1	CALIFORNIA	20,646	25.06%	12.34%	453,051	17.29%	9.96%
2	NEW YORK	5,237	6.36%	3.13%	223,278	8.52%	4.91%
3	NEW JERSEY	2,839	3.45%	1.70%	156,813	5.98%	3.45%
4	TEXAS	5,934	7.20%	3.55%	153,760	5.87%	3.38%
5	ILLINOIS	2,898	3.52%	1.73%	151,421	5.78%	3.33%
6	PENNSYLVANIA	2,656	3.22%	1.59%	140,884	5.38%	3.10%
7	MICHIGAN	2,983	3.62%	1.78%	132,712	5.06%	2.92%
8	OHIO	2,341	2.84%	1.40%	129,408	4.94%	2.85%
9	MASSACHUSETTS	3,696	4.49%	2.21%	111,133	4.24%	2.44%
10	FLORIDA	2,197	2.67%	1.31%	70,421	2.69%	1.55%
11	MINNESOTA	2,625	3.19%	1.57%	69,921	2.67%	1.54%
12	CONNECTICUT	1,416	1.72%	0.85%	69,855	2.67%	1.54%
13	WISCONSIN	1,467	1.78%	0.88%	54,191	2.07%	1.19%
14	WASHINGTON	4,310	5.23%	2.58%	52,427	2.00%	1.15%
18	COLORADO	1,716	2.08%	1.03%	43,065	1.64%	0.95%
22	MISSOURI	708	0.86%	0.42%	31,594	1.21%	0.69%
24	OKLAHOMA	403	0.49%	0.24%	28,460	1.09%	0.63%
29	LOUISIANA	257	0.31%	0.15%	16,874	0.64%	0.37%
34	KANSAS	435	0.53%	0.26%	13,677	0.52%	0.30%
37	NEW MEXICO	303	0.37%	0.18%	8,951	0.34%	0.20%
42	ARKANSAS	96	0.12%	0.06%	4,814	0.18%	0.11%

Source: U.S. Patent and Trademark Office

II B: Tier One Universities

One potential reason behind Texas' lower number of patents versus population is its lack of Tier One Universities. While Texas can boast three very well established and well regarded "Tier One" universities which are all members of the Association of American Universities (AAU is the leading association of research universities), other large states have similar or more institutions included in the AAU list of members. California alone can count nine top level research universities, New York has seven and Massachusetts lists three.

With the three Tier One Universities in Texas (UT-Austin, Texas A&M, Rice) leading the way, increasing the number of top public research institutions in the state or even increasing the level of research at those public universities and at smaller private programs would only add to Texas' research prowess and increase the number of innovations and patents awarded.

Examples of the impact of top level universities in Texas¹:

- In 2006 and 2007, Austin, home of UT-Austin, had more venture capital investment than Dallas/Ft. Worth, Houston, and San Antonio combined.
- 15% of Rice University's undergraduates are from Harris County, yet 33% of alumni live in Harris County.

According to David Daniel, president – University of Texas at Dallas, Texas had a net brain drain of almost 6,000 students to doctoral granting research universities in other states in 2006 alone. Tier One universities bring together critical mass of talent and bring a large proportion of research and development funds as well as venture capital investment. "Limited investment in Texas' flagship universities, and lack of more Tier One universities, among other factors, is costing Texas every day in terms of human capital as well as real investment capital²."

There are positive signs for Texas in terms of top level research institutions. Many of the long standing Tier One level public research universities in other states are smaller than UT-Austin and Texas A&M or are private universities. Additionally, the Carnegie Foundation's Carnegie Commission on Higher Education classifies colleges and universities supporting programs of research and policy analysis. The Carnegie Foundation's list offers the above mentioned three Texas Tier One universities as well as an additional thirteen institutions of higher education within Texas as research universities. Thus, of the 283 universities listed as research institutions by the Carnegie Foundation, 16 are from Texas³.

Texas Public and Private Research Universities

University of Texas at Austin	AAU Tier One Research University / Carnegie designated Very High Research
Texas A&M University	AAU Tier One Research University / Carnegie designated Very High Research
Rice University	AAU Tier One Research University / Carnegie designated Very High Research
Baylor University	Carnegie designated High Research University
Texas Tech University	Carnegie designated High Research University
University of Houston	Carnegie designated High Research University
University of North Texas	Carnegie designated High Research University
University of Texas at Dallas	Carnegie designated High Research University
University of Texas at Arlington	Carnegie designated High Research University
University of Texas at El Paso	Carnegie designated High Research University
Sam Houston State University	Carnegie designated Doctoral/Research University
Southern Methodist University	Carnegie designated Doctoral/Research University
Texas A&M Kingsville	Carnegie designated Doctoral/Research University
Texas A&M Commerce	Carnegie designated Doctoral/Research University
Texas Christian University	Carnegie designated Doctoral/Research University
Texas Women's University	Carnegie designated Doctoral/Research University

¹ Presentation by David E. Daniel May 2008

² "Thoughts on Creating More Tier One Universities in Texas" by David E. Daniel May 28, 2008.

³ The Carnegie Classification of Institutions of Higher Education <http://classifications.carnegiefoundation.org/> (viewed 11/12/10)

A number of public research institutions in Texas have accepted a challenge to increase funding as well as the amount of research conducted through its campus and explore becoming a top tier research university. This list includes: Texas Tech; University of Houston; University of North Texas; UT-Arlington; UT-Dallas; UT-El Paso; UT- San Antonio.

II C: Investment and Venture Capital

In Texas the demand from young businesses for growth capital exceeds supply. One reason is in the aftermath of the 'dot-com' boom and bust, venture capital funds became much more risk-averse than they were a decade prior. The result was that there existed an enormous need for capital among startup companies in Texas that otherwise had few funding options⁴. Additionally, the current recession appears to have decreased the availability of venture capital.

VC Investment in TX-based Companies (2005 - 3Q 2010)

Investments by Year	No. of Companies	Sum of Equity Invested (USD Mil)
2010 (through 3Q)	96	\$733.29
2009	99	\$685.16
2008	130	\$1,271.59
2007	148	\$1,411.79
2006	150	\$1,375.38
2005	150	\$1,168.43
TOTAL	430	\$6,645.63

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According to the PriceWaterhouseCoopers - MoneyTree Historical Trend Data (currently available for venture capital investments in the U.S. from Q1 1995 to Q3 2010)⁵ Texas has lagged behind other areas in the United States for venture capital invested as well as in the number of deals made. In fact, over time, the percentage of venture capital reportedly invested in Texas has gone down.

AMOUNT INVESTED (\$ millions)

REGION	2000 Total	2005 Total	2009 Total	2010 Total* (for 1st 3 Qtrs)	TOTAL* 2005 to 3Q 2010
New England	\$ 11,420.7	\$2,831.1	\$2,202.7	\$2,069.6*	\$17,204.9*
% of US	11.41%	12.53%	12.07%	12.18%	12.11%
Northwest	\$3,639.8	\$978.9	\$725.9	\$678.4*	\$6,256.0*
% of US	3.64%	4.33%	3.98%	3.99%	4.40%
Silicon Valley	\$32,107.7	\$8,055.8	\$7,289.1	\$6,407.2*	\$53,138.2*
% of US	32.09%	35.64%	39.94%	37.72%	37.41%
Texas	\$5,828.1	\$1,168.4	\$685.2	\$ 733.3*	\$6,645.6*
% of US	5.83%	5.17%	3.75%	4.32%	4.68%
Grand Total (US)	\$100,053.7	\$22,601.9	\$18,250.4	\$16,986.6*	\$142,061.7*

⁴ Window on State Government – Texas Certified Capital Company Program overview.

⁵ PricewaterhouseCoopers and the National Venture Capital Association based upon data from Thomson Reuters, "The MoneyTree Report" is a quarterly study of venture capital investment activity in the United States. <https://www.pwcmoneytree.com/MTPublic/ns/nav.jsp?page=notice&iden=B> (viewed 11/4/10)

NUMBER of VENTURE CAPITAL DEALS

REGION	2000 Total	2005 Total	2009 Total	2010 Total* (for 1st 3 Qtrs)	TOTAL* 2005 to 3Q 2010
New England	887	430	362	260*	1,078*
% of US	11.12%	13.46%	12.41%	11.81%	11.62%
Northwest	336	158	133	104*	443*
% of US	4.21%	4.95%	4.56%	4.72%	4.77%
Silicon Valley	2,168	990	908	635*	2,634*
% of US	27.17%	31.00%	31.14%	28.84%	28.39%
Texas	474	174	118	96*	430*
% of US	5.94%	5.45%	4.05%	4.36%	4.63%
Grand Total (US)	7,979	3,194	2,916	2,202*	9,279*

Source: PricewaterhouseCoopers/National Venture Capital Association MoneyTree™ Report, Data: Thomson Reuters

*Data marked, source courtesy of National Venture Capital Association from Thomson Reuters

As of the third quarter of 2010, there have been 96 venture capital deals in Texas totaling \$733 million. As can be seen in the data below, the investments have been diverse with the large proportion taking place in the energy, medical and software industries. A large amount of the venture capital investment in Texas is coming from within the state itself showing Texas is investing in Texas.

VC Investment in TX-based Companies - by VC firm location from 1/1/2010 - 09/30/2010

-- Industry Breakdown --		
Company Industry	No. of Companies	Sum of Equity Invested (USD Mil)
Industrial/Energy	11	\$209.18
Software	23	\$142.09
Medical Devices and Equipment	12	\$89.52
Biotechnology	4	\$70.79
Healthcare Services	6	\$41.61
Networking and Equipment	5	\$29.62
Consumer Products and Services	5	\$26.21
Electronics/Instrumentation	4	\$25.54
Financial Services	3	\$25.00
Semiconductors	5	\$24.71
IT Services	5	\$18.00
Telecommunications	3	\$12.73
Media and Entertainment	4	\$10.96
Computers and Peripherals	3	\$3.83
Business Products and Services	3	\$3.50
TOTAL	96	\$733.29

Where is the VC Money Coming From?		
Firm Location (State)	No. of Companies	Sum of Equity Invested (USD Mil)
California	20	\$207.86
Unknown	43	\$186.74
Texas	46	\$120.52
Non-US	7	\$83.40
New York	11	\$45.50
Massachusetts	8	\$26.61
Illinois	5	\$10.84
Pennsylvania	4	\$10.06
Washington	1	\$6.00
Maryland	3	\$5.99
Michigan	1	\$4.92
Ontario,(CA)	2	\$4.90
Tennessee	1	\$4.00
New Jersey	2	\$3.83
Louisiana	4	\$3.60
Colorado	2	\$2.27
Missouri	1	\$1.81
Connecticut	2	\$1.16
Ohio	1	\$1.15
Minnesota	1	\$1.09
North Carolina	1	\$0.68
Alabama	1	\$0.39
TOTAL	96	\$733.29

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II D: Economic Development Incentives

Currently the State of Texas has made two economic development incentives available specifically to assist research and commercialization projects and/or invest in fledgling start-up operations that may bring new products to market as well as potentially expand the Texas economy. These two incentive programs, CAPCO and the Texas Emerging Tech Fund, have proven successful in creating jobs and expanding research partnerships in the state.

CAPCO:

Created through legislation in 2005, a CAPCO is a private government-sponsored venture capital company formed to increase the availability of growth capital for small businesses located in Texas and to stimulate job creation in Texas. The CAPCO program has developed into a series of annual \$50 million premium tax credits (totaling \$400 million) to insurance companies who invested in an approved CAPCO investment fund⁶. The CAPCO program provides alternative sources of venture capital to Texas entrepreneurs.

⁶ For Program I, ten (10) CAPCO investment funds were approved. For Program II, nine (9) CAPCO investment funds were approved. Source: Texas Treasury Safekeeping Trust Company

As of August 31, 2010, 81 businesses have received over \$188 million in investments from CAPCO's. This investment has reportedly created almost 2,000 new jobs and retained over 4,400 jobs in Texas.

Certified Capital Company Program I and II Combined Statistics

	Total Since Inception
Investments by CAPCOs in Texas Businesses Program I	\$126,378,845
Investments by CAPCOs in Texas Businesses Program II	\$62,311,598
Total Invested in Qualified Texas Businesses	\$188,690,443

Number of Jobs Created	1,892
Number of Jobs Retained	4,440

Source: the Texas Treasury Safekeeping Trust (latest information available up to 12/2009 as reported 11/12/10)

The Texas Emerging Technology Fund (ETF):

Established in 2005, the ETF was designed to expand innovation and research within the State of Texas as well as increase higher education applied technology capabilities and to potentially expand the job base associated with high tech and research industries. ETF gives priority to organizations with primary operations in Texas. Collaboration with a Texas institution of higher learning is a requirement for applicants. Through 2010, 155 businesses and/or organizations have been assisted through the ETF and \$318,512,917 has been invested or granted for high tech and research opportunities.

Texas Emerging Technology Fund Investments and Grants

Period	Commercialization Investments		Research Superiority Grants		Research Matching Grants	
	Number of Contracts*	Investment	Number of Grants	Grant Value	Number of Grants	Grant Value
2006	11	\$12,850,000	7	\$26,717,500	5	\$13,934,068
2007	20	\$23,954,349	3	\$12,025,000	5	\$11,025,000
2008	24	\$23,235,000	4	\$15,500,000	2	\$9,700,000
2009	41	\$54,534,000	2	\$10,500,000	1	\$50,000,000
2010**	28	\$43,138,000	2	\$11,400,000		
TOTAL	124	\$157,711,349	18	\$76,142,500	13	\$84,659,068

SOURCE: Texas Emerging Technology Fund, Office of the Governor (ETF Project Dashboard (Viewed 11/12/10)
http://members.texasone.us/site/PageServer?pagename=tetf_homepage – Link to "Dashboard"

III – MOVING FORWARD

The above mentioned limitations and existing initiatives are in no way to suggest that there are no other options for Texas to continue moving forward. By far the easiest, most available, and greatest untapped resources are the facilities owned and operated by the United States government.

III A: Federal Partnerships

The US government has been more aggressive of late in capitalizing on the research and innovations, which in many cases are awarded patents, developed in federal labs. Licensing and commercializing federal research is a means of bringing to market new developments as well as a mechanism for federal scientists to capitalize on their work. With no real means of commercialization, federal departments need partners to bring ideas to market. Similarly, smaller businesses that may not have the resources for the research and development of new products can team with a federal lab on the commercialization of a new technology. While these partnership opportunities exist with a number of agencies, the US Department of Agriculture offers a very good example of how partnering can be successful.

In late 2007, the US Department of Agriculture's Agricultural Research Service (ARS) initiated an Agricultural Technology Innovation Partnership (ATIP) program to facilitate adoption of research outcomes by private-sector companies for commercial production of goods and services. The key to this initiative was to utilize a series of strategically chosen technology based economic development entities. The idea is to utilize these intermediaries to increase opportunities for businesses to gain access to the 2,100 ARS scientists. These intermediaries assist small businesses whose research needs can be matched to ARS scientists.

The ATIP program is managed by the ARS Office of Technology Transfer, which helps move ARS research discoveries from the laboratory to the marketplace. The overarching goal of the ATIP program is to increase adoption of these research discoveries by private sector firms through licensing of ARS technologies and establishment of cooperative research and development agreements. The biggest benefit for the nine ATIP groups is the coordinated co-sponsored events showcasing ARS research capabilities, licensing opportunities, and mission related issues related to associated industries. The nine ATIP members can have sub-members but the ARS only manages the original nine.

The ARS encourages the ATIP group to support marketing of ARS opportunities, identify funding sources to help businesses successfully bring a new technology to commercialization, and assist in matching USDA technologies with business needs. The ARS also offers early notification to new available patents and technologies for licensing as well as allows ATIP members and affiliates access to facilities and equipment through formal agreements.

Through these agreements, ARS research is being translated directly into products to benefit consumers. For example, a widely used example as to the possibilities ATIP presents is an agreement with the Maryland Technology Development Corporation (TEDCO) which enabled CrispTek, a Columbia, Md.-based company, to begin commercializing a gluten-free, rice-flour-based batter developed by ARS that reduces the oil uptake of fried foods. CrispTek was developed to commercialize this technology, which they licensed from ARS in the spring of 2008.

ARS is a leader in the federal government in transferring and marketing its new technologies developed from in-house research, and has formed numerous partnership cooperative agreements⁷.

The Department of Defense has a similar program to ATIP. This program is slightly different, however, in that the Defense Department may research and develop a new technology or program that it cannot manufacture but wants to use. It will license the patented innovation with the intent of being the sole customer.

Most federal departments make information publicly available. However, as a mechanism to identify private-sector industries that would be suitable for federal cooperative research and development agreements a small number of regional partners have been sought to work as intermediaries. In Texas, TechComm will work to transfer technologies from federal labs to the marketplace⁸.

III B: TechComm

In September of 2010, the Center for Innovation at Arlington (a business accelerator operated jointly by the Arlington Chamber of Commerce and the University of Texas at Arlington) developed a new organization called Technology, Commercialization and Manufacturing (TechComm). The Center for Innovation has served as a catalyst for technology led economic development since its formation in 2002. The Center was established to serve as a catalyst for technology led economic development. Supporting a strategic approach to the formation of collaborative partnerships, it facilitates and enables the integration of industry, academic, and government research with venture capital and talent & know how. TechComm, while more regionally focused, fits perfectly into the Center's mission and offers Texas based business entities and research houses an opportunity for innovative expansion.

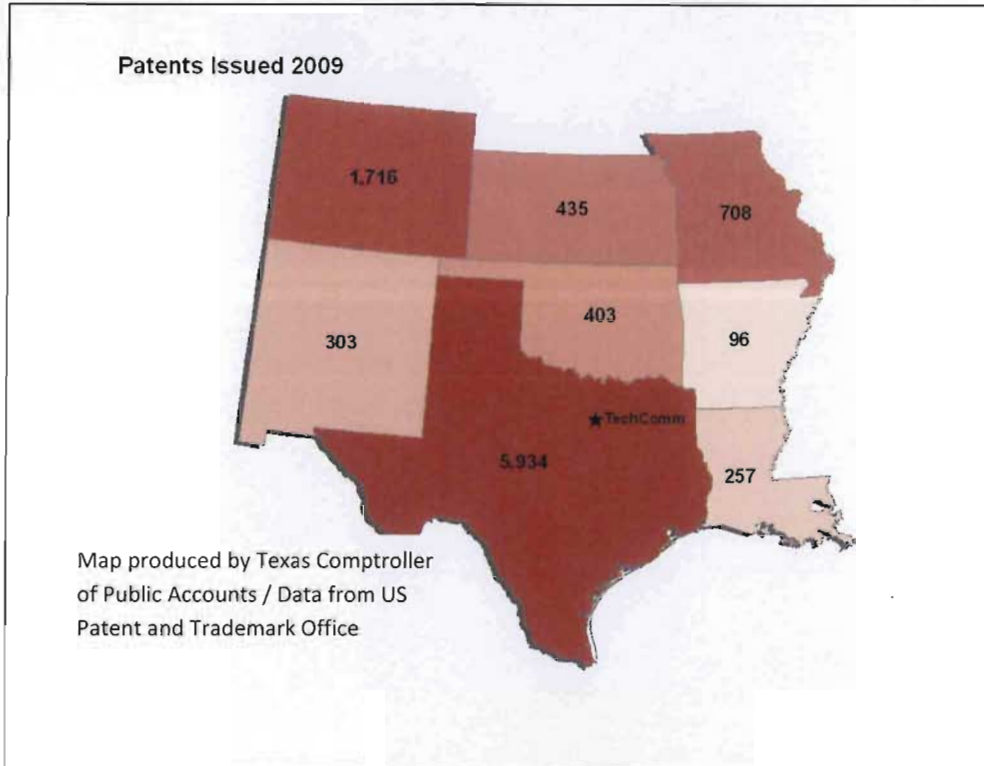
TechComm's scope is to develop partnerships within an eight state area between universities, venture capital firms, manufacturers and economic development organizations. These partnerships will work with federal agencies and federal research institutions to further develop and potentially bring to market innovations and patented concepts and materials.

The eight state area designated by TechComm (Texas, Arkansas, Colorado, Louisiana, Kansas, Missouri, New Mexico, and Oklahoma) has been granted 6.62% of all patents granted since 1963. In 2009, the TechComm area was granted 5.89% of patents granted. Of eight states in the area, Texas residents represent the largest portion of patent recipients with 5,934 patents granted in 2009 versus 3,918 patents granted to the other seven states in the area during the same year. A regional program like TechComm and the partnerships anticipated will allow greater opportunity to increase the percentage of patents awarded from the south central United States and the investment that comes from such innovation.

⁷ USDA <http://www.ars.usda.gov/is/pr/2010/100923.htm?pf=1> (viewed 11/10/10)

⁸ Window on State Government, Texas Comptroller of Public Accounts, "Combs to Chair New TechComm Steering Committee." <http://www.window.state.tx.us/news2010/100923-techcomm.htm> (viewed 11/15/10)

The TechComm Region (number of patents awarded per state 2009)



In terms of venture capital, the information below illustrates the impact the TechComm region has in the area of investment and the business deals created by venture capital investment. The data also shows the potential available to investors in the south-central region when compared to other key innovation markets.

Venture Capital Deals and Investment Q4 2009 to Q3 2010

STATE	Q4 2009		Q1 2010		Q2 2010		Q3 2010	
	Deals	Amount	Deals	Amount	Deals	Amount	Deals	Amount
CA	355	\$2,673.1	304	\$2,234.1	385	\$3,902.3	282	\$2,219.5
MA	98	\$678.1	88	\$764.8	91	\$675.1	88	\$484.9
NY	46	\$243.2	57	\$271.2	70	\$325.6	66	\$257.0
WA	27	\$158.5	25	\$176.5	40	\$194.4	29	\$171.2
TechComm Area	74	\$402.7	52	\$268.1	85	\$319.7	71	\$478.8
TOTAL U.S.	856	\$5,372.8	755	\$4,926.4	962	\$6,942.8	780	\$4,820.1

Source: PricewaterhouseCoopers/National Venture Capital Association MoneyTree™ Report, Data: Thomson Reuters

In the few months since inception, TechComm has already teamed up with federal agencies and collaborative programs to bring parties together are already being planned. By teaming with the Department of Defense, TechComm will assist in matching the defense related research and innovation with a business which has the needed capabilities. It can assist the business to find the funding and

support resources to help bring the end product to market (even if the only market might simply be the innovator as with the Department of Defense).

TechComm is also the newest member of the ATIP program. The ATIP program is a formal partnership with well-established economic development entities to facilitate commercialization of USDA research patents, thus creating innovation-based economic development. This non-exclusive group of nine regionally focused local, state and regional economic development organizations is designed to create and enhance opportunities for partnerships between businesses and ARS. ATIP was created to further enhance the likelihood that research outcomes would be adopted by the private sector for commercialization.

TechComm is poised to take advantage of the research conducted by all 300 federal labs located throughout the country. Over \$100 billion annually spent by these labs on research and innovation. TechComm is in a position to build a network among federal agencies and labs creating opportunities for licensing of patented technologies and invite proposals for research and development agreements. Also TechComm will establish a network of partners, including universities, economic development entities, and venture capital funds, to foster licensing and development of federal technologies.

IV - CONCLUSION

Texas values innovation. Texas values economic expansion. Texas values businesses. However, despite Texas' "business first" environment, venture capital investment in Texas has lagged the two coasts. In response, the State of Texas has adopted a number of programs designed to increase research and development (and the patents that come along with such activity) as well as increase opportunities for business development and expansion. At the state level these initiatives include economic development initiatives such as the CAPCO and Texas Emerging Tech Fund programs. Working at the university level, a number of Texas' well regarded institutions of higher learning have committed to expanding their research funding levels and also looking at becoming a Tier One research institution to go along with the three Tier One universities currently in existence.

At a local and regional level, efforts need to be made to take advantage of the federal government's efforts to bring to market patents and innovations developed by federal agencies' research facilities. TechComm was created to be the regional leader in the efforts to commercialize federal research. TechComm has the potential to be the driver in developing partnerships and creating opportunities for research institutions, business entities and venture capital funding to generate further economic expansion within the State of Texas.

Agenda - 2011 WBT Innovation Marketplace

Agenda at a Glance

Monday, March 21st

- Strategic Patent Management for Entrepreneurs Workshop (SPME)
- Seed Investing as a Team Sport (SITS)
- Licensing Executive Society Seminar (LES) - To be Announced
- Early Registration
- Reception

Tuesday, March 22nd

- Multi-track Sessions
- Technology Presentations at the Arlington Convention Center
- Meet the Presenters Reception

Wednesday, March 23rd

- Technology Presentations at the Arlington Convention Center
- Multi-track Sessions
- Reception
- Awards Dinner

Monday, March 21, 2011

8:00 am - 5:00 am

Seed Investing as a Team Sport (SITS)

Sheraton Arlington Hotel

1:00 pm - 5:30 pm

Strategic Patent Management for Entrepreneurs (SPME)

Sheraton Arlington Hotel

4:00 am - 8:00 am

WBT2011 Registration Open

Sheraton Arlington Hotel

5:00 am - 7:00 am

Reception
Sheraton Hotel Arlington - Champions Foyer

Tuesday, March 22, 2010

7:00 am - 8:00 am
Registration Open
Sheraton Arlington Hotel
7:30 am - 8:50 am
Continental Breakfast
Sheraton Arlington Hotel
8:00 am - 8:45 am
Welcome and Plenary Session
Sheraton Arlington Hotel

Join us as we kick off the 2011 WBT Innovation Marketplace with an opening plenary session hosted by Lockheed Martin

9:00 am - 9:45 am
Multi-track Sessions
Arlington Convention Center

Track 1: Innovation Capital - More Than Just Money

An inside view from the experts on seed and early-stage funding innovation programs including representatives from private equity firms, public funds and tech-based economic development organizations. The topics might include How to fund a startup, what gets funded and what doesn't get funded, leveraging public investment to attract private investment and the "how to" in commercializing technologies developed at Federal laboratories.

Moderator(s):

- Mr. Richard A. Bendis, President and CEO, Innovation America

Panelist(s):

- James C Epolito, Managing Director, HMA Capital Partners
- Mr. Richard Fox, Partner, Astralis Group LLC
- Kef Kasdin, General Partner, Battelle Ventures and Innovation Valley Partners
- Steven Mercil, President and Chief Executive Officer, RAIN Source Capital
- Jim Jaffe, President and Chief Executive Officer, National Association of Seed and Venture Funds
- Mr. Richard Miller, Vice President, Marketing and Editor, NetNews, National Association of Seed and Venture Funds

Track 2: Investing in Early-Stage Life Science Companies

This session will explore the funding challenges that face start-up lifescience companies. Beyond federal grants, and often too early for venture firms or corporate partners, we will discuss the barriers as well as the pathways that have proven successful for pharmaceutical, biotechnology, and medical device companies. Our stellar panel includes a university technology transfer officer, angel investor, venture capitalist, and corporate partner, as we plan to share real-world

case studies that document failed attempts, but more importantly offer blueprints of funding success for early-stage lifescience companies.

Moderator(s):

- Mr. Yonnie D. Butler MBA, Assistant Director, Duke University Fuqua School of Business

Panelist(s):

- James Eadie MD, MBA, Senior Associate, Santé Ventures
- Yael Weiss MD, PhD, Director, Licensing and External Research, Western United States, Merck Research Laboratories
- Catherine Innes, Director of Tech Transfer Office, University of North Carolina at Chapel Hill
- Andrea Alms, Founder and Partner, BrookDell Partners

Track 3: NIST

The National Institute of Standards and Technology, NIST, offers an array of programs and services that address these challenges and more faced by start-ups and innovators. As the lead agency within the Department of Commerce for technology innovation, NIST programs and services can help firms become successful participants in the global marketplace. This panel will provide a snapshot into some of these programs, and examples of how they can be used to accelerate the growth of advanced technologies and businesses.

Moderator(s):

- Michael Schen, Senior Scientific Advisor to the Director, NIST/Technology Innovation Program

10:00 am - 10:45 am

Multi-track Sessions

Arlington Convention Center

Track 1: Industry Outlooks and Presentations

Moderator(s):

- Karen L. Kaehler, Technology Strategy Manager, University of Minnesota

Panelist(s):

- Amar Kapadia, Director, Strategic Business Development, McKesson Provider Technologies
- John D. Reid Ph.D., Director, Global Alliance Management, SPBD-NS, AstraZeneca Pharmaceuticals LP
- Michael Thompson Ph.D., Global Lead, Agrigenomics, Illumina, Inc.

Track 2: Cleantech - Sustainable Innovation

Moderator(s):

- Mr. Matt Blanton, Managing Partner, STARTech Early Ventures

Panelist(s):

- Brad Barton, Principal, NGP Energy Technology Partners
- Victor Liu, Vice President, Hunt Energy Enterprises, LLC
- Kevin R. Rogers, Executive Vice President of Real Estate, Realty Appreciation, LTD

Track 3: USDA

Moderator(s):

- Dr. Richard Brenner, Assistant Administrator, US Dept of Agriculture -ARS

11:00 am - 11:45 am

Multi-track Sessions
Arlington Convention Center

Track 1: Industry Outlooks and Presentations

Panelist(s):

- Rodney Bowen-Wright, Director, Microsoft Corporation
- Glenn J Doell, Technology Transfer Director, Greene, Tweed & Co
- Keith Gutierrez, Worldwide Strategic Marketing, Semiconductor Group, Texas Instruments
- Dr. Chris Steinbeck, Senior Research Engineer, The Dow Chemical Company

Track 2: Hot Investment Markets and Sizzling Sectors

WBT continues the tradition with the Hot Investment Markets and Sizzling Sectors series. Get in the game and join Bill Reichert, Garage Technology Ventures, in this discussion with technology enterprise front runners now bringing potential game-changing technologies into the global market.

Panelist(s):

- Annette Finsterbusch, Investment Manager, Applied Ventures, LLC
- Mr. William Reichert, Managing Director, Garage Technology Ventures

12:00 pm - 1:30 pm

WBT Marketplace Opening Luncheon

Arlington Convention Center

Keynote Presentation: Marc, Heesen, President - National Venture Capital Association



The National Venture Capital Association (NVCA), comprised of more than 400 member firms, is the premier trade association that represents the U.S. venture capital industry.

- Mark G. Heesen, President, National Venture Capital Association

1:30 pm - 3:00 pm

Technology Presentations

Arlington Convention Center

3:15 pm - 4:45 pm

Technology Presentations

Arlington Convention Center

5:30 pm - 7:30 pm

Meet the Presenters Reception

Arlington Convention Center

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Wednesday, March 23, 2011

7:00 am - 5:00 pm

Registration Open

Arlington Convention Center

7:00 am - 8:00 am

WBT Marketplace Breakfast

Arlington Convention Center

8:30 am - 10:00 am

Technology Presentations

Arlington Convention Center

10:15 am - 11:45 am

Technology Presentations

Arlington Convention Center

12:00 pm - 1:45 pm

WBT Marketplace Luncheon

Arlington Convention Center

2:00 pm - 2:45 pm

d Multi-track Sessions

Arlington Convention Center

Track 1: Round Table Discussion: How Organizations Can Take Advantage of Open Innovation Trends

Moderator(s):

- Bernard Slede, Entrepreneur, Intrapreneur and Venture Capitalist, Managing Director

Panelist(s):

- Darren Cox, Contractor, University of Minnesota, and Founder, CEO and Chief Evangelist, UCaSTT
- Patricia Ansems - Bancroft, Research Scientist - Ventures & Business Development, The Dow Chemical Company
- Mr. Arundeeep S. Pradhan, Director, Technology & Research Collaborations, Oregon Health & Science University
- Charles L. Dennis II, Vice President, CROM Business Development, Medtronic, Inc.
- John D. Reid Ph.D., Director, Global Alliance Management, SPBD-NS, AstraZeneca Pharmaceuticals LP

Track 2: Alternative Funding Sources - Leveraging non traditional credit options to grow your business

In todays tight credit markets understanding venture lending, factoring, and EXIM financing could be critical in the success of your business.

Moderator(s):

- Paul Huleatt, Managing Director, Development Capital Networks, LLC

Panelist(s):

- David Whiting, Senior Vice President, D/FW Regional Manager, Comerica Bank
 - Veronica Wallace, Business Development Officer, The Commercial Finance Group
- Track 3: Investment In Cleantech - Unmet Needs and Emerging Priorities

Moderator(s):

- Doug Cameron, Alberti Advisors

Panelist(s):

- Duke Leahey M.A., Founding Partner, Nidus Investment Partners

3:00 pm - 3:45 pm

Multi-track Sessions

Arlington Convention Center

Track 1: Strategies for Partnering with Angel Investors

This session will expand an entrepreneur's understanding of seed investing, offer strategies for finding and engaging angels in your region, and provide do's and don'ts when working with angel investors. The panel will include 3 active angel investors who invest in funds and also as individuals.

Panelists to be announced, check back soon.

Moderator(s):

- Jim Troxel, DCN Founder, Development Capital Networks, LLC

Track2: Alternative Funding Sources Part 2

Panelist(s):

- Jouko Ahvenainen, Chairman, Grow VC International
- Matt Crowe, Founder, AHHHA
- Bernard Slede, Entrepreneur, Intrapreneur and Venture Capitalist, Managing Director

5:30 pm - 7:00 pm

Reception

Arlington Convention Center

7:00 pm - 9:00 pm

Awards Dinner

Arlington Convention Center

KeyNote Presentation: Francis Béland, VP, Prize Development - X PRIZE Foundation

The X PRIZE Foundation is an educational nonprofit organization whose mission is to create radical breakthroughs for the benefit of humanity thereby inspiring the formation of new industries, jobs and the revitalization of markets that are currently stuck. Today, it is widely recognized as the leader in fostering innovation through competition.

- Francis Béland, VP, Prize Development, X PRIZE Foundation