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Committee Meeting: 5/12/2011
Austin, Texas

James D. Dannenbaum, *Chairman*
R. Steven Hicks, *Vice Chairman*
Alex M. Cranberg
Printice L. Gary
Brenda Pejovich

	Committee Meeting	Page
Convene	4:00 p.m. <i>Chairman Dannenbaum</i>	
1. U. T. System: Technology Commercialization Overview	4:00 p.m. Report/Discussion <i>Mr. Aldridge</i> <i>Mr. Allinson</i>	194
2. U. T. System: Report on a Proposed New Investment Fund, tentatively called the U. T. Horizon Fund	4:25 p.m. Report/Discussion <i>Mr. Allinson</i>	211
3. U. T. System: Report on an Intellectual Property Search Engine Portal	4:35 p.m. Report/Discussion <i>Mr. Allinson</i>	222
Adjourn	4:45 p.m.	

1. **U. T. System: Technology Commercialization Overview**

REPORT

Mr. Philip Aldridge, Vice Chancellor for Finance and Business Development, and Mr. Bryan Allinson, Executive Director for Technology Commercialization, will provide a report on the status of technology commercialization at the U. T. System.

The report, as set forth on Pages 195 - 210, reviews the commercialization results from prior years, including a discussion of potential success metrics to be used going forward.

U. T. System Technology Commercialization Overview

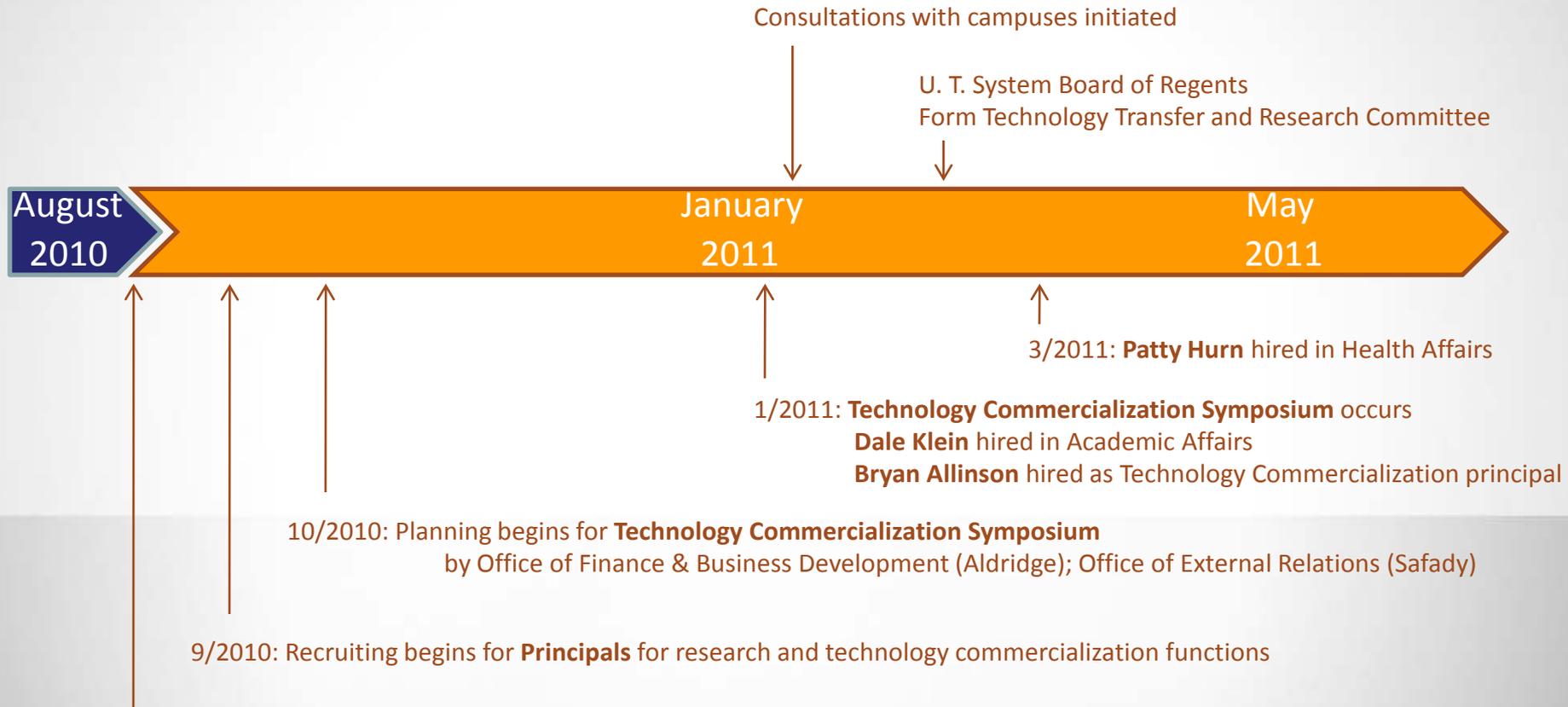
Philip Aldridge, Vice Chancellor for Finance and Business Development
Bryan Allinson, Executive Director for Technology Commercialization

U. T. System Board of Regents' Meeting
Technology Transfer and Research Committee
May 2011

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U. T. System Administration Modifications



August 2010 Reorganization:

- U. T. System Office of Research and Technology Transfer dissolved
- Academic Research function established in the Office of Academic Affairs
- Health Research function established in the Office of Health Affairs
- Technology Commercialization function established in the Office of Finance, Business Affairs Division



U. T. System Administration Role

- Advise (Assist U. T. System Institutions to commercialize)
- Facilitate access to capital
- Facilitate access to entrepreneurial talent
- Provide scalable, shared services
- Communicate, educate and report
- Support thematic partnering (e.g., license bundling)

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Technology Commercialization Symposium (January 18-19, 2011)



- Hosted by U. T. System Office of Finance with 130 attendees from U. T. System Institutions, industry, and other government entities
- Presenters:

Tom Meredith, Co-founder and General Partner, Meritage Capital, L.P.

Joe Cunningham, M.D., Managing Director, Santé Ventures

Cynthia Molina, Molina Regulatory Consulting

Tracy Davies, Partner, Vinson & Elkins, LLP

Zafira Avnur, Ph.D., Roche

Kerry Rupp, Managing Partner, DreamIt Ventures

Andrew Nat, Executive Director, Texas Life Science Center for Innovation and Commercialization

Jerry Cobbs, Chief Commercialization Officer, Cancer Prevention and Research Institute of Texas

George McLendon, Provost, Rice University

Brett Cornwell, Associate Vice Chancellor of Commercialization, The Texas A&M University System

Mark Rohrbaugh, Ph.D., J.D., Director, OTT, NIH

Richard Miller, M.D., Chief Commercialization Officer, U. T. Austin

Charlie Lewis, Vice President of Venture Development, Arizona Technology Enterprises

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Lessons Learned:

Technology Commercialization Symposium

- Lack of resources impedes technology commercialization
 - Help identify early stage capital
 - Help connect with entrepreneurs and Texas' angel community
- Better understanding of “how to work with” U. T. System would improve technology commercialization
 - U. T. System should help foster a greater awareness of U. T. System's capabilities
 - Create a public search engine of capabilities and assets
- Consider bifurcating conflicts of interest review based on human/patient
 - Clinical v. Basic and Non-health
- Interest in multi-institutional license bundling and thematic partnering
- Interest in shared resources

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U. T. System: Top Tier Agenda for 2011

- Intellectual property scorecard (“success metrics”)
 - How do we measure and communicate success?
 - How do we identify areas of improvement?
- Make available resources to help position U. T. System as “*open and ready for business*”
 - U. T. Horizon Fund
 - Availability of entrepreneurial talent
- Intellectual property search and landscaping tools
- Education and intelligence



Technology Commercialization Trends and Performance Metrics

- Performance Trends
- Metrics
- Measuring Success

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U. T. has a strong intellectual property base

In FY 2009, U. T. System was ranked by The Association of University Technology Managers* as:

2nd in Total Research Funding

2nd in Startups created

3rd in Licenses executed

5th in U.S. Patents Issued

2nd in U.S. Patent Applications

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Research	Patent applications	Patents issued	Licenses	License income	Startups
U. C. System	U. C. System	U. C. System	Washington	City of Hope	U. C. System
U. T. System	U. T. System	MIT	U. C. System	Northwestern	U. T. System
MIT	Johns Hopkins	Stanford	U. T. System	Columbia	Utah
Johns Hopkins	MIT	Wisconsin	Mass General	Sloan Kettering	MIT
Wisconsin	Georgia	U. T. System	North Dakota	U.C. System	California Institute of Technology
Washington	California Institute of Technology	California Institute of Technology	Duke	U. T. System (19th)	Kentucky



U. T. System is top two in startups

Institution	Cumulative Startups (through 2009)	New Startups (2009)	New startups In Home State (2009)	New Startup Home State Retention
University of California System	Did Not Report	47	34	72%
University of Texas System	141	25	22	88%
University of Utah	138	19	17	89%
California Institute of Technology	98	18	11	61%
University of Florida	88	10	6	60%
University of Michigan	80	8	5	63%

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* Source: Association of University Technology Managers STATT (Statistical Access for Technology Transfer)



Technology Commercialization Trends

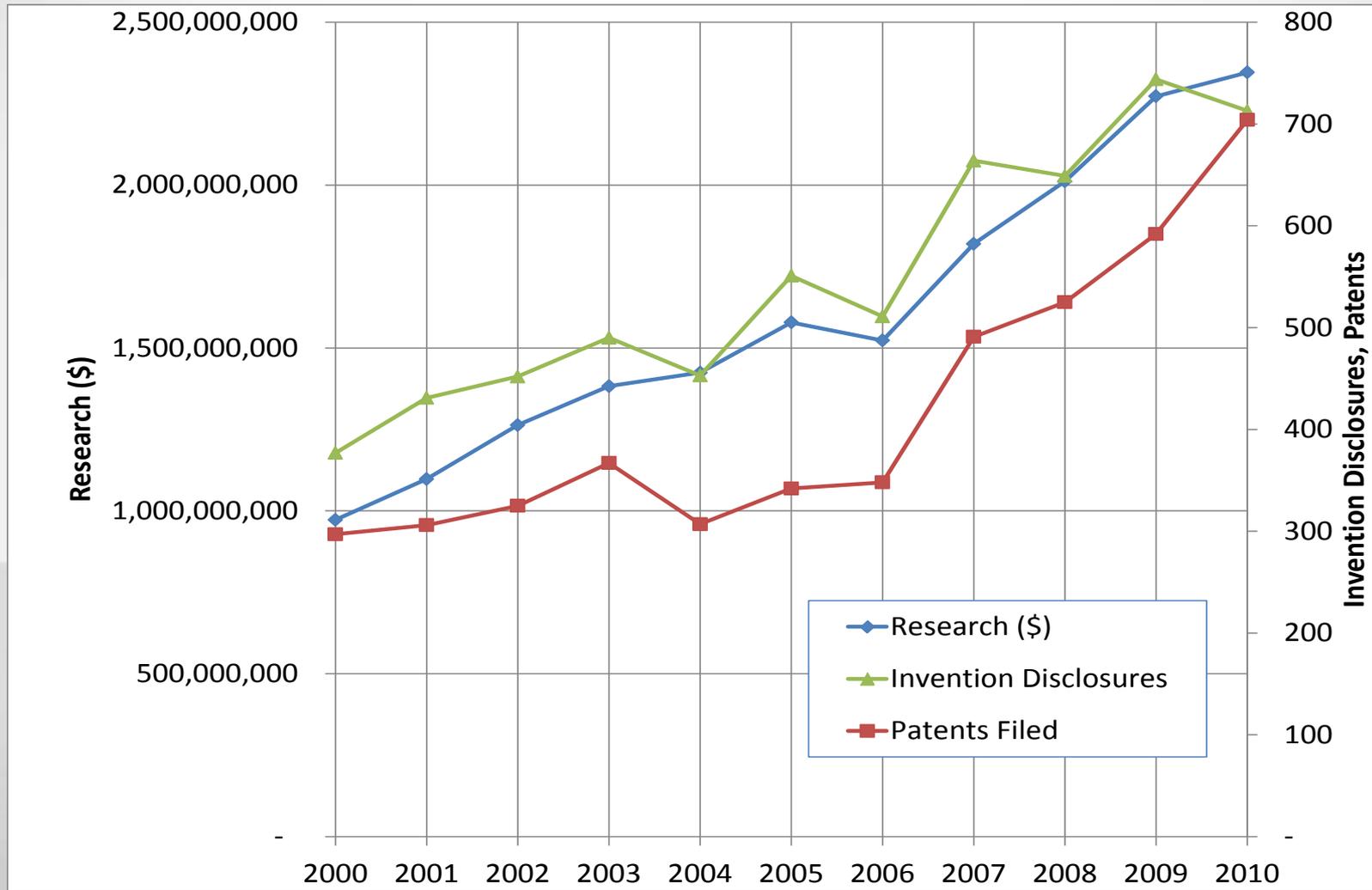
- Research ▶ Disclosures ▶ Patent Filings
- License Agreements ▶ Royalty Revenue
- Start-up Companies

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Research ► Disclosures ► Patent Filings

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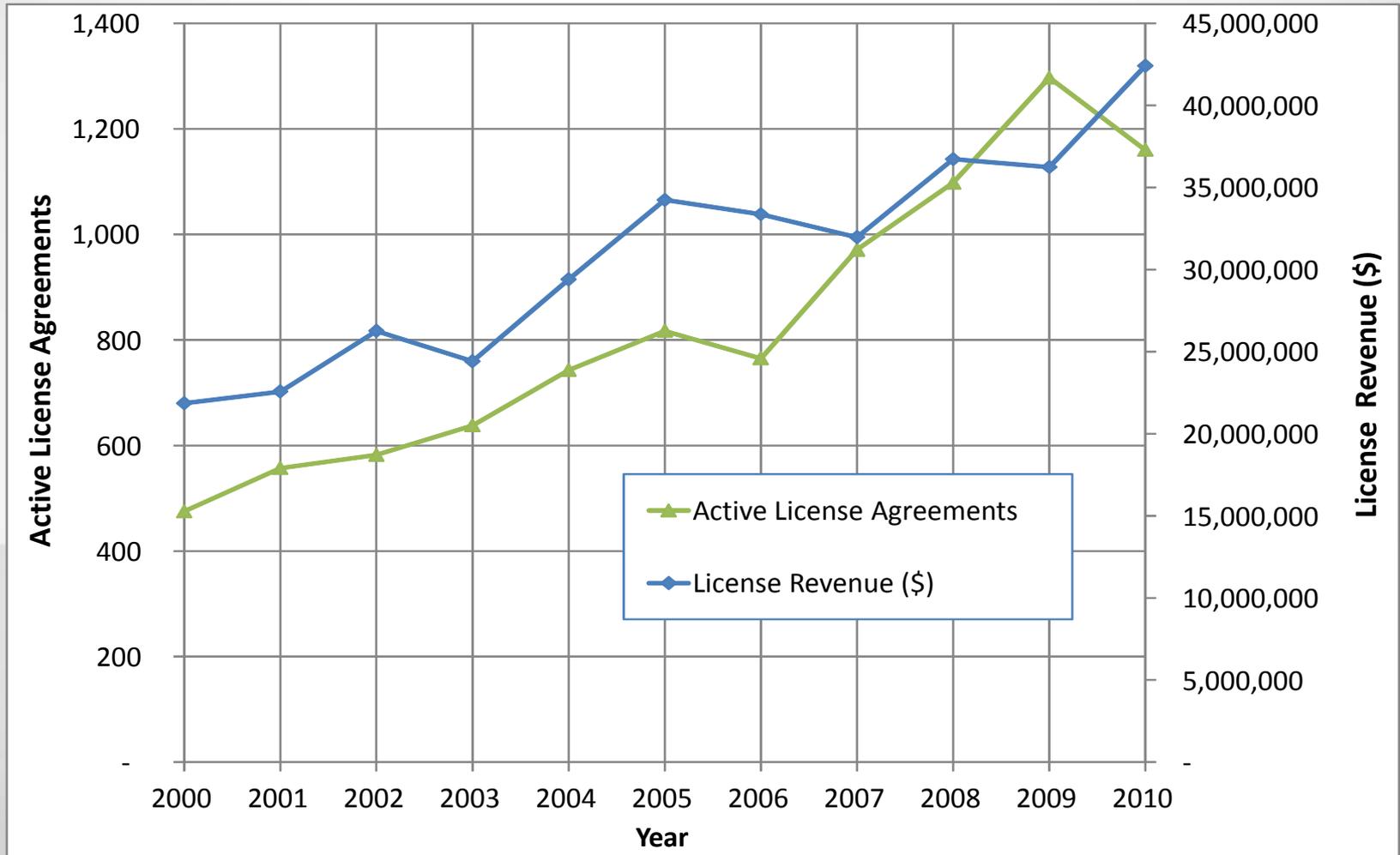


* Source: Association of University Technology Managers STATT (Statistical Access for Technology Interfer)



License Agreements ► License Revenue

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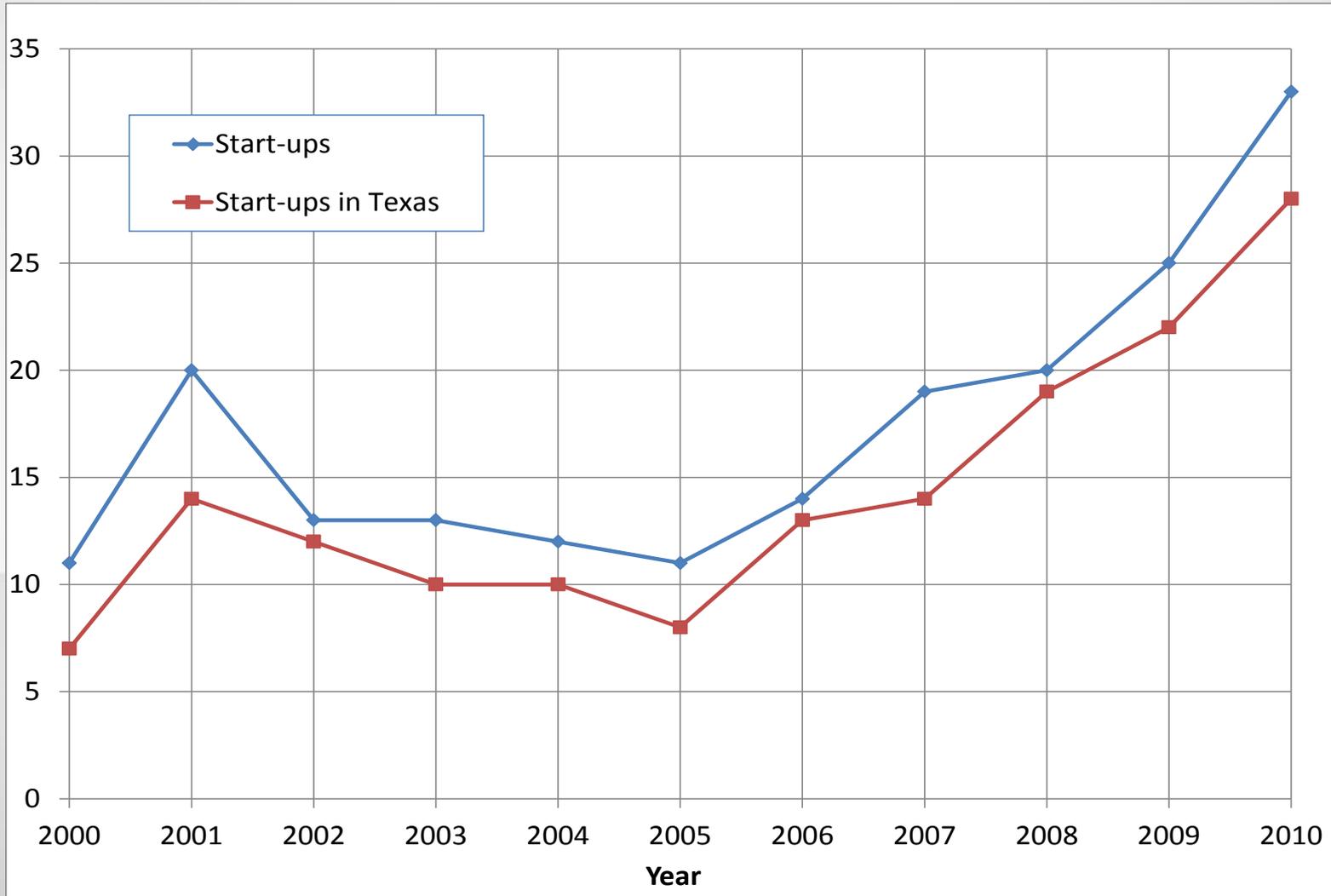


* Source: Association of University Technology Managers STATT (Statistical Access for Technology Interfer)



Start-up Companies

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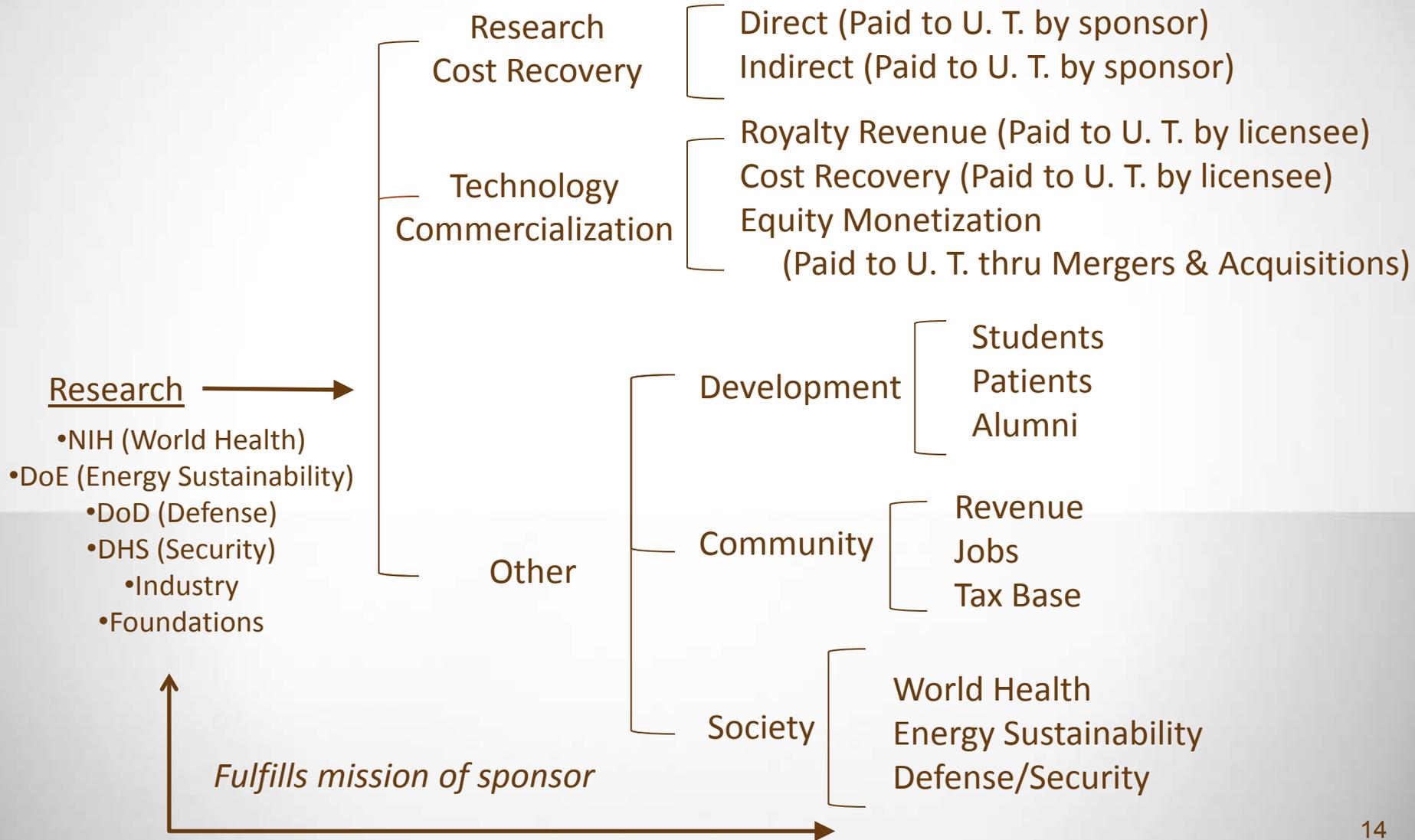


* Source: Association of University Technology Managers STATT (Statistical Access for Technology Interfer)



Understanding “return” from research

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Potential Success Metrics

Scale metrics

- Total Research
- Federal Research
- Industry Research
- Disclosures
- Patents
- Patent Applications
- License Agreements
- Research having U. T. IP or Potential

Performance metrics

- License Income
- Gross Margin (After FTE and legal costs)
- Active Startups
- New Products on the Market
- Patents Licensed

Economic metrics

- Startups
 - Texas
- Licensee Revenue Base
 - Texas
- Jobs
 - Startups
 - Licensees
- Success stories identifying benefit to society
- U. T. alumni employed at Licensees

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U. T. System Results for Fiscal Year 2010

Scale metrics

- \$2.35B Total Research*
- \$1.32B Federal Research*
- \$214M Industry Research*
- 713 New Disclosures *
- 2,405 Total Patents*
- 1,303 U.S. Patents*
- 958 Patent Applications*
- 1,160 License Agreements*
- *Research having U. T. IP or potential*

Performance metrics

- \$42.4M License Income*
- 53% Gross Margin*
- 125 Active Startups*
- 23 New Products on the Market*
- *Patents Licensed*

Economic metrics

- 41 Startups *
 - 29 in Texas*
- *Licensee Revenue Base*
 - *Texas*
- *Jobs*
 - *Startups*
 - *Licensees*
- *Success stories identifying benefit to society*
- *U. T. alumni employed at Licensees*

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* Source: Association of University Technology Managers STATT (Statistical Access for Technology Transfer)

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2. **U. T. System: Report on a Proposed New Investment Fund, tentatively called the U. T. Horizon Fund**

REPORT

Mr. Bryan Allinson, Executive Director for Technology Commercialization, will report on a proposal to design and implement a new investment fund at U. T. System Administration, tentatively called the U. T. Horizon Fund.

The purpose of the U. T. Horizon Fund is to 1) facilitate access to financial capital at critical stages of growth, 2) facilitate access to entrepreneurial talent, and 3) spin firms out of U. T. System institutions.

Mr. Allinson's presentation is set forth on Pages 212 - 221.

U. T. System Technology Commercialization U. T. Horizon Fund

Philip Aldridge, Vice Chancellor for Finance and Business Development
Bryan Allinson, Executive Director for Technology Commercialization

U. T. System Board of Regents' Meeting
Technology Transfer and Research Committee
May 2011



Background: TIF (2007-2010)

- Texas Ignition Fund (TIF)
 - \$2M fund; 45 funded projects
 - Purpose: To mature invention disclosures from earliest phase to patented intellectual property ready for license
 - Launched in October 2007; 100% of capital allocated by July 2010
- Feedback from recipients:
 - Prototypes have been developed further, some licensed to industry
 - \$10.6M additional research funding raised, primarily federal
- Lessons learned/changes to consider:
 - Larger investments to focus on commercialization
 - Greater availability of entrepreneurial talent
 - Identify matching funds
 - Reduce equity dilution
 - Streamlined review process



Overview of U. T. Horizon Fund

- Resource mission:
 - Apply Lessons Learned from 2011 Technology Commercialization Symposium and TIF stakeholders
 - Facilitate access to financial capital at critical stages of growth
 - Facilitate access to entrepreneurial talent
 - Spin firms out of U. T. System institutions
 - Enable U. T. System to facilitate relationships with capital investors and partners
- Phases
 - Phase I: \$10.0 million
 - Phase II: Future consideration - larger size
- Evergreen: Reinvest gains at a future date
- Requirements
 - Match funding: Due diligence validation by third parties at all stages



Proposal review for U. T. Horizon Fund

- Preferences
 - Institutional capabilities; innovative; “big” ideas; scientific pedigree
 - Multi-institutional; thematic partnering/license bundling
- Proposal review
 - Rolling submission review process
 - Investment committee approves investments for Growth Program
 - Subcommittee approves awards for Ignition Program
 - Subcommittee and institutional approval for Entrepreneur-in-Residence matching funds
 - Seek scientific input from faculty on quality of science
 - Consider quality and level of match funding



Licensing Guidelines for U. T. Horizon Fund

- U. T. Horizon Fund will invest in U. T. System institution spin-outs
- U. T. System Office of Finance is recommending “risk-based” licensing terms
 - Equity with anti-dilution provisions
 - Royalties from net sales
 - Nominal upfront fees
 - Multiyear patent fee repayment plan
 - Inclusion of preemptive rights



Phase I of Horizon

Program	1) Entrepreneur-in-Residence	2) Ignition	3) Growth	4) Maturity (Preemptive Rights)
Goal	Plan	Prototype	Develop	Monetize
Stage	Planning	Pre-Company	Early Company	Mid/Late Company
Mean Project Size	\$2.5K/mo FT; \$0.25K/mo PT	\$50K (\$10-90K)	\$750K (\$200-1,000K)	Unlimited
Number	~6-8FT; ~10PT	~20	~10	Unlimited
Match	Institution	Industry	Angel or Venture Capitalist (VC)	VC
Fund Size	\$1.5M	\$1.0M	\$7.5M	Unlimited
Source of Funds	U. T. System Office of Finance	U. T. System Office of Finance	U. T. System Office of Finance	U. T. System Office of Finance <i>(through VC partners)</i>

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1) Entrepreneur-In-Residence Program

- Mission: Provide entrepreneurial talent; encourage innovation and technology development goals
- Full-time program
 - Specific regions; multi-institutional focus
- Part-time program
 - Single or multi-institutional programs; high net worth individual with network and reach
- Structure and compliance
 - One-to-one match from institution(s)
 - Quarterly renewals by U. T. System Office of Finance and institutions

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2) Ignition Program

- Mission: Develop prototypes and market-focused working groups
 - Provide bridge to create prototype and catalyze company formation
 - Continues objectives identified in TIF
- Preferred technologies
 - Institutional capabilities; innovative, “big” ideas; scientific pedigree; thematic partnering/license bundling
- Proposal review
 - Subcommittee by conference call/email vote
- Structure and compliance
 - Grant
 - Industry match (consider nonprofit, Federal or State match)
 - One-time final progress report due to U. T. System Office of Finance

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3) Growth Program

- Mission: Invest in very early stage companies having a prototype
 - Provide bridge to develop prototype further, raise next round of funding
- Requirement
 - License from U. T. System [consider Austin Technology Incubator (ATI) model or incubator companies]
 - Guidelines for recommended license terms
 - Preference for multi-institutional thematic partnering/license bundling
- Proposal review
 - Investment committee decision
 - Scientific advisory
- Structure and compliance
 - Convertible debt or warrant investment
 - Founder, angel, or VC investor match
 - Company financials reported to U. T. System Office of Finance

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4) Maturity Program (Preemptive Rights)

- Mission: Guard against dilution of institutional equity
 - Provide a means for institutions to invest in mid- and late-stage companies who have a license with U. T. System institutions
 - Leverage rights to maintain current equity position (not be diluted) using someone else's investment
 - Receive a portion of capital gains
- Requirement
 - Preemptive rights term in license
- Structure and compliance
 - Through later stage investor partner

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3. U. T. System: Report on an Intellectual Property Search Engine Portal

REPORT

Mr. Bryan Allinson, Executive Director for Technology Commercialization, will report on efforts underway at U. T. System Administration to create an intellectual property search engine portal to improve the accessibility of pertinent U. T. System research and technology commercialization information.

Once completed, the portal will allow external parties to quickly identify relevant publicly available research and technology commercialization information from all U. T. System institutions. The portal will include access to: 1) U. T. System capabilities, 2) patents, and 3) technologies. The goal is to facilitate access to information that can be used to enhance and increase collaborations between the private sector, other government entities, and U. T. System faculty and technology transfer personnel.

Mr. Allinson's presentation is set forth on Pages 223 - 224.

U. T. System Technology Commercialization Intellectual Property Search Engine

Bryan Allinson, Executive Director for Technology Commercialization

U. T. System Board of Regents' Meeting
Technology Transfer and Research Committee
May 2011



Intellectual property search engine

Mission: User-friendly search engine to identify U. T. System intellectual property

Version 1.0 – Completely passive, no additional human management required

Version 2.0 – Explore how to link to campus web page databases

Search engine	Draws from	Results
Capabilities	U. T. Institution web pages U. T. Arlington Profile pages	Links to faculty, programs, and news articles
Technologies	Office of Technology Commercialization generated approved marketing briefs	Syndication of technologies published out of institutional technology transfer offices
Patents	U.S. Patent & Trademark Office	Weekly transmission of patents published on U.S. Patent & Trademark Office database

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