1961 – Graduate Research Center of the Southwest founded by Texas Instruments Founders – Jonsson, Green and McDermott

1967 – Institution’s name changed to Southwest Center for Advanced Studies.

Ground is broken in Richardson for new facility.

1975 – Juniors and Seniors enrolled. Callier Center becomes part of UTD.

1986 – Erik Jonsson School of Engineering and Computer Science founded.

1990 – Freshmen and sophomores enrolled.
UT Dallas confers higher percentage of science, technology and business degrees

17,000 total students – 10,000 undergraduates, 7,000 graduates

The University of Texas at Dallas

- Science & Technology: 44%
- Business Administration: 38%
- All Other Disciplines: 18%

All other Texas public, doctoral-granting institutions

- Science & Technology: 21%
- Business Administration: 38%
- All Other Disciplines: 41%
Total Research Expenditures
($millions)

* through January 2011

FY00: $16.9
FY01: $18.5
FY02: $27.4
FY03: $32.5
FY04: $31.3
FY05: $43.1
FY06: $43.1
FY07: $46.5
FY08: $59.3
FY09: $65.8
FY10: $82.0
FY11*: $32.6

$105M
University Technology Commercialization…Why Bother?

- Important to fulfilling the University’s service mission
- Move technology from lab to market for public good
- Economic development (Community/State/Nation)
- Global Competitiveness
- Fulfills mandates from State and Federal grant programs and Industry Sponsors to disclose and transfer inventions derived from University faculty/researchers
- New inventions & patents can create opportunities in both licensing and research sponsorship.
Office of Technology Commercialization

Mission

- Outreach and education
  - Inventor education and advising
  - Industrial/investor outreach and match-making

- Invention disclosure evaluation
  - Coordinate review of technology for commercial potential

- Intellectual property protection
  - Management of Patents, Copyrights, Trademarks and other IP

- Licensing
  - Seek licensees for certain technologies not suitable for spin-outs

- Venture development (incubation)
  - Comprehensive start-up facilitation
  - Incubator space for about 8 companies – trade equity for rent
How we do Technology Commercialization

- Strong focus on New Venture Development
- Comprehensive, Pro-active, Credible, Start-up Facilitation

Cohesive and Seamless Collaboration between and among:
- Office of Technology Commercialization,
- School of Management
- Office of Vice President for Research,
- IP Committee

Close Alliance with External Resources
- Angel Investors, Entrepreneurs
Why Pro-active, University Start-up Facilitation?

- Commercialization mandates may not be fulfilled otherwise
  - Bayh-Dole Act -1980 (universities given ownership of IP)
  - State mandates
- Technology too early for most investors and large companies (the only option?)
- Service to community—economic development
- Research sponsorship to further develop technology
  - SBIR grants, NIST grants, other grants
  - Investment capital
  - Partnering with larger companies
- More motivation for inventors to commercialize inventions
- Recruitment of entrepreneurial faculty
- Financial reward may bolster future commercialization efforts
Regulations on ownership of IP **

* Standard practice among universities

Who owns what?

IP Creation

IP owned by University

IP owned by Author / inventor

1. Within **scope of employment**
2. With **System time, facilities or financial support**
3. As a **work for hire**
4. From research supported by **Federal or third party sponsorship**

1. Unrelated to **Field of Interest or Job Responsibilities**
2. Invention can be **released to inventor**
3. IP is a **scholarly work**
   - scholarly, educational (i.e. course materials), artistic, musical, literary or architectural work in the author's field of expertise

*
Standard IP Policy

- Sponsors and University require disclosure of inventions
- Benefits of IP accrue to Public, Inventors, University and Sponsors
- 50/50 sharing of royalties between inventors and University
- Inventors may hold equity in a company that does research at University –with approval, full disclosure and compliance with Conflict of Interest Policy
KEY IP ISSUES

• Keep good lab records of inventions (e.g., dated & witnessed in bound notebook)
• Disclose Inventions WELL BEFORE, publication/presentation
• Inventions created from Industry Sponsored Research
  – University owns all IP associated with sponsored research
    • It can be licensed to company but Inventor maintains research rights
  – Use NDA’s, signed by University before disclosing Proprietary Info
  – Sponsor cannot prohibit publication (but require early review)
  – Ownership follows inventorship
Issues in Technology Transfer

• Ownership of IP
  – Industry sponsors often want ownership of IP
    • Industry wants a return on its investment.
  – However, university has a significant investment in research projects as well (i.e. support personnel, facilities, etc.)
  – Policy on ownership is simple – “Ownership follows inventorship”
  – Sponsor receives right of first refusal in licensing IP.
Issues in Technology Transfer

• Publication
  – Industry may want IP to be held as a trade secret.
  • May want to block disclosure of the IP to maximize its value.
  – IP policy generally prohibits restrictions on the right and ability of universities to publish research findings.
  – However, universities may delay publication to allow a sponsor to protect (i.e. patent) IP it believes is valuable.
Issues to Keep in Mind

• Conflict of Interest
  – Researchers with significant financial interests in companies related to their research must report this relationship annually.
  – Researchers must submit COI management plans to avoid any potential COI.
Case Study: MicroTransponder, Inc.

- UTD brain science researchers formed new medical device company, assisted by IIE
  - Wireless, injectable, micro-neuro-stimulation devices
  - Treatment for chronic pain, hearing dysfunction (tinnitus), mental disorders

- IIE mentored MTI—business/strategic planning and investor presentations

- Research agreement and technology license with UTD
  - Exclusive license to new company
  - Approximately $1,000,000 in sponsored research for UTD labs
  - Ongoing mentoring and support from IIE faculty

- UTD received small equity position in company for license

- Total Funding to date: $17M --private equity=$11.2M; Federal grants $5.8M
## Technology Commercialization - Summary

<table>
<thead>
<tr>
<th></th>
<th>FY08</th>
<th>FY09</th>
<th>FY10</th>
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<tbody>
<tr>
<td>Invention disclosures</td>
<td>28</td>
<td>53</td>
<td>64</td>
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<tr>
<td>Patents Filed</td>
<td>26</td>
<td>44</td>
<td>38</td>
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<tr>
<td>Licenses*</td>
<td>1</td>
<td>4</td>
<td>8</td>
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<tr>
<td>License Revenue*</td>
<td>$185,000</td>
<td>$75,000</td>
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<td>Patent Expense Recovery</td>
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<td>$221,000</td>
<td>$34,562</td>
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<tr>
<td>Startups</td>
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<td>5</td>
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<tr>
<td>TX Ignition Fund Grants ($50k)</td>
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<td>3</td>
<td>1</td>
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</tbody>
</table>

* UTD does not track non-exclusive licenses resulting from sponsored research.

- 47 high-tech jobs created by UTD startups as of Sept. 2011
- 3 year Total sponsored research from Startups in excess of $2M
- New Venture Development Center – Grand Opening Sept. 28, 2011
Thank You!