Notable Stanford Inventions

1970 - OTL Established
1971 - FM Sound Synthesis ($22.9M)
1974 - Recombinant DNA ($255M)
1981 - Phycobiliproteins ($46.3M), Fiber Optic Amplifier ($32M), MINOS ($3.4M)
1982 - Amplification of Genes ($30M)
1984 - Functional Antibodies ($120.6M)
1986 - CHEF Electrophoresis ($2.1M)
1990-1992 - DSL ($28.7M)
1996 - Improved Hypertext Searching (Google™) ($336.5M)

2007 - the next big thing ???
OTL’s Mission

Transfer Stanford technology for society’s use and benefit and to generate royalty income for research and education
Philosophy

- Do what’s “best for the technology”
- Foster good industrial relations
- Be reasonable
- Be flexible
- Be action/results oriented
History

- Started in 1970
- Over 6,500 cumulative disclosures
- Over 2450 active cases
- Executed over 2700 licenses
- Approx. 940 active licenses
The upside...

• OTL has generated ~$1.09B in cumulative gross royalties
• $497M was neither DNA nor Google™
• Over $954.5M stayed at Stanford/inventors
• OTL has given $39.4M to the Research Incentive Fund
Sobering Statistics

• 3/6500 is a BIG WINNER (these three inventions generated 66% of the cumulative income)

• 17 cases generated $5M or more

• 53 cases generated $1M or more in cumulative royalties
OTL’s Success is a numbers game

- Early stage inventions
- Royalties reflect early stage
- We are looking for broad patents
  - revolutionary v. evolutionary products
- 5-10 years patience
Risk and Time

• Evaluation, marketing, patenting
• 4 years on average for US Patent
• Diagnostic products 3-5 years
• Therapeutic products 15-20 years
• 15 years for OTL to break even
Start-ups

• Lots of interest by universities
• 1996
  – One start-up IPO every five days
  – 62 millionaires every 24 hours
• Universities want to share in the upside and help with economic development
• Conflict of interest issues are primary concern
Licenses involving equity

![Bar chart showing the number of companies involved in licenses involving equity from 1998 to 2006. The number of companies is indicated along the y-axis, and the years are shown along the x-axis. The chart shows a peak in 2000 with approximately 20 companies, followed by a steady decrease in subsequent years.]
Equity Cash out* (000)

*2005 does not include $336M in liquidation of Google™ equity
Stanford’s Patent Policy

Patentable inventions made by faculty, staff or students...in the course of their University responsibilities or with more than incidental use of University resources...shall be assigned to the University.
Royalty Sharing

• Gross Royalties
  – Minus 15% administrative fee
  – Minus expenses

• Equals Net Royalties
  – 1/3 to Inventor(s)
  – 1/3 to Department
  – 1/3 to School
Summary

• Technology transfer helps make a Better World
  – Products for making peoples lives better
  – Economic development
  – Start-up activity

• Technology Transfer is a long-term proposition
  – Patience
  – “Just try it” attitude