

第3回産学官連携サミット パネルディスカッション

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The Future of University Technology Transfer:
Where Do We Go From Here?

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1. That was then . . .
 - a. Licensing Office received invention disclosure from faculty members
 - b. A patent application may have been filed, but probably not
 - c. Non-confidential description was mailed to list of companies
 - d. Sat back and hoped the phone rang

2. . . . This is now
 - a. Move from passive to active portfolio management
 - b. Focus on creation of value
 - c. New business development paradigm

3. What We Look Like
 - a. Strong Scientific Background
 - i. Typically PhD with experience at the bench
 - b. Industrial Experience
 - i. Either New Venture or Existing Corporation
 - ii. Often New Business Development
 - c. Entrepreneurial Spirit
 - i. Not looking for lifetime employment
 - ii. Supra-Apprenticeship

4. Why? What happened?

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- a. In a word - EXPECTATIONS
 - i. Bayh-Dole: improving the impact of research
 - ii. Enhance the profile of the university
 - iii. Faculty recruitment and retention
 - iv. Economic development for community
 - v. Additional source of revenues

5. The AUTM Survey Says . . .
 - a. Over 4,000 new license agreements executed with nearly 23,000 currently active.
 - b. Nearly 360 new commercial products brought to market with more than 1,500 new products introduced since 1998
 - c. 494 new companies formed based on a license from an academic institution with over 3,800 such ventures created since 1980.
 - d. Approximately \$30 billion of economic activity each year attributed to the commercialization of new technologies from academic institutions.

6. Life Saving Therapies
 - a. Cisplatin and carboplatin cancer therapeutics: Michigan State University
 - b. Haemophilus B conjugate vaccine: University of Rochester
 - c. Antiretroviral drugs for the treatment of HIV/AIDS:
 - i. Abacavir: University of Minnesota
 - ii. Lamivudine: Emory University
 - iii. Enfuvirtide: Duke University
 - iv. Stavudine: Yale University

7. d4T - Stavudine
 - a. d4T first synthesized in 1960s by Jerome Horwitz at the Detroit Cancer Center, but had limited anticancer activity
 - b. In mid-1980s, Tai-Shun Lin and Bill Prusoff found it very active against HIV
 - c. Licensed to Bristol-Myers Squibb in 1988

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- d. First drug tested under the FDA's parallel track policy and approved in 1994 as Zerit
- e. By 2000, Zerit was the most widely prescribed component of the AIDS combination therapy with over 90,000 prescriptions written

8. Continuing to Grow

- a. March 10 - SOPHERION THERAPEUTICS Raises \$26 Million in Series A Funding
- b. May 1 - RIB-X PHARMACEUTICALS Completes \$63.5 Million Series B Financing
- c. September 9 - VION Secures \$11.3 Million Private Placement
- d. September 12 - ALEXION Pharmaceuticals Raises Approximately \$44 Million in Sale of Common Stock
- e. September 18 - CURAGEN/454 LIFE SCIENCES Secures \$20 Million
- f. TOTAL: \$164.8 Million

9. Where are we going?

- a. Managing an increasingly complex world
- b. Acting as the bridge between the for-profit and not-for-profit worlds
- c. Maintaining the integrity of the university
- d. Faculty conflicts of commitment
- e. Teaching/Research/Service
 versus
- f. Outside activities