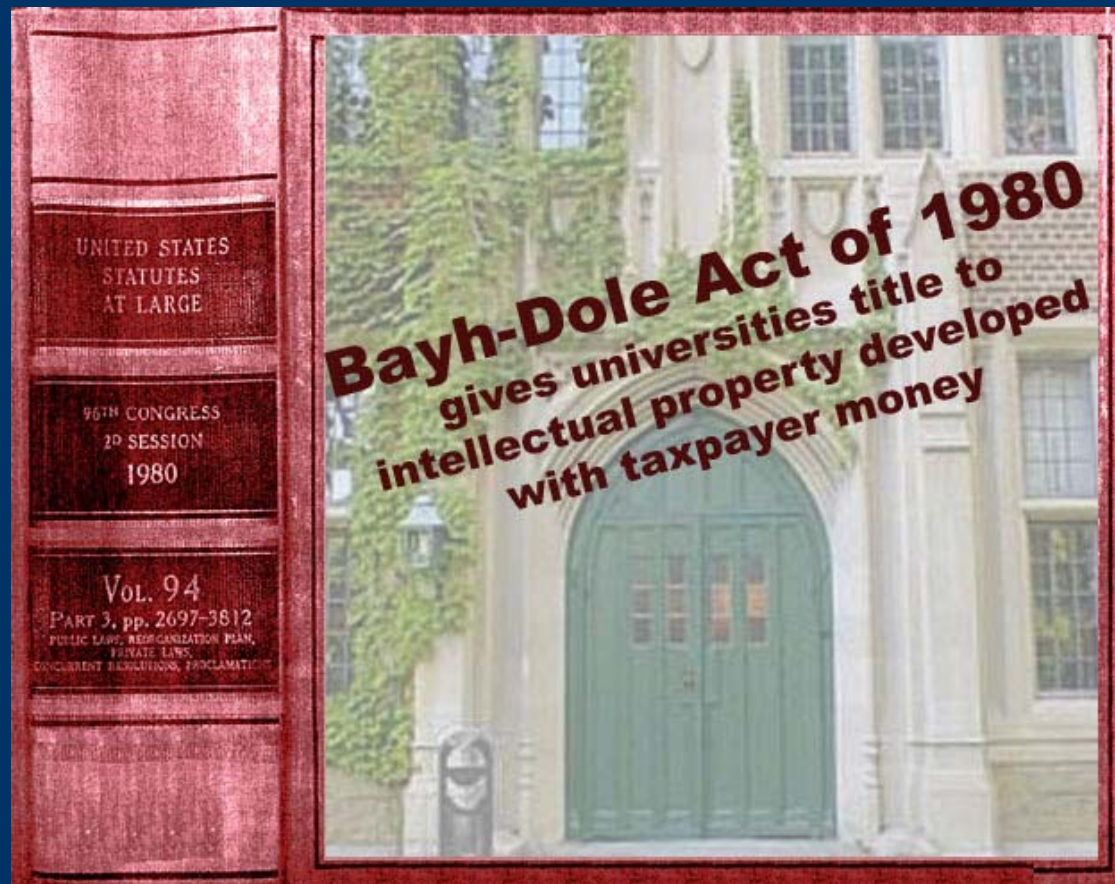


CORRUPTED SCIENCE

Historical Background



Toward Academic Capitalism

The decade of the 1980s was a watershed for the university sector. Academia became highly commercialized, especially notable in the life sciences. This effect has been in great part brought on by legislation, a Supreme Court decision, patent policy decisions, declining federal science budgets, and executive orders.

These policies and legal decisions have turned research universities into private enterprise zones and made “academic capitalism” a new mission for American higher education.

The following timeline presents the policies that have transformed the ethos of the modern research university and turned many scientists into academic-entrepreneurs.

Time line I: University-Industry-Government Ties

- 1980: *Diamond v Chakrabarty*; Supreme Court approves patenting of life forms; leads to patents on genes, plants and animals.
- Bayh-Dole Act of 1980: (PL 96-517). Also called the Patent and Trademark Law Amendments Act of 1980. Inventions made by academic scientists on federally-funded research were no longer the property of government; institutions can transfer rights to inventors and commercial partners.
- Federal tax code was revised to encourage investment in university research, allowing Research and Development Limited Partnerships (RDLPs).

Stevenson-Wydler Technology Innovation Act of 1980

Public Law 96-480

- The Secretary of Commerce shall provide assistance for the establishment of Cooperative Research Centers where individuals from industry and universities participate in cooperative technological innovation activities.
- Sec. 12: Each Federal agency may permit the director of any of its Government-operated Federal laboratories...to enter into cooperative research and development agreement with industrial organizations.
- Promote technological innovation by encouraging cooperation among industry, government and universities. Cooperative Research & Development Agreements (CRADAs) between government & industry are created.



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Office of Productivity, Technology & Innovation

The Office of Productivity, Technology & Innovation (OPTI) was created in the Department of Commerce in 1981 by the Reagan administration. OPTI advocated the use of Research and Development Limited Partnerships (RDLPs) at universities as a means of developing alternative sources of research capital and accelerating the transfer and private appropriation (patents) of federally developed and funded technology.

Time line II: University-Industry-Government Ties

1981: Economic Recovery Act: tax credits for private investment in university research

1983: Executive Order # 12591: extends Bayh-Dole Act from small business to any business.

1986: Federal Technology Transfer Act: (PL 99-502) gives to companies licensing rights to federally-funded research discoveries.

1997: FDA Modernization Act of 1997 (PL 105-324) allows FDA to add official industry representatives to advisory committees.

2000: University R&D funding by industry rises to 8% of overall contributions; up from 3.5% in 1970s. Universities awarded 3200 patents. (Only 96 granted in 1965.)

Cooperative Research and Development Agreement (CRADA)

Under the CRADA initiative, federal agencies can form R&D agreements with for-profit companies to commercialize inventions arising from federal laboratories.

CRADAs grew out of the Stevenson-Wydler Technology Innovation Act of 1980, the Federal Technology Transfer Act of 1986 (FTTA, 15U.S.C. 3710) and Executive Order 12591, April 10, 1987. These acts were amended by the National Technology Transfer and Advancement Act of 1995.