



Stanford University

STANFORD RESEARCH POLICY IN SCIENCE AND ENGINEERING

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VICE PROVOST AND DEAN OF RESEARCH
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STANFORD UNIVERSITY



Stanford University

STANFORD UNIVERSITY, CALIFORNIA A PRIVATE UNIVERSITY, FOUNDED 1891

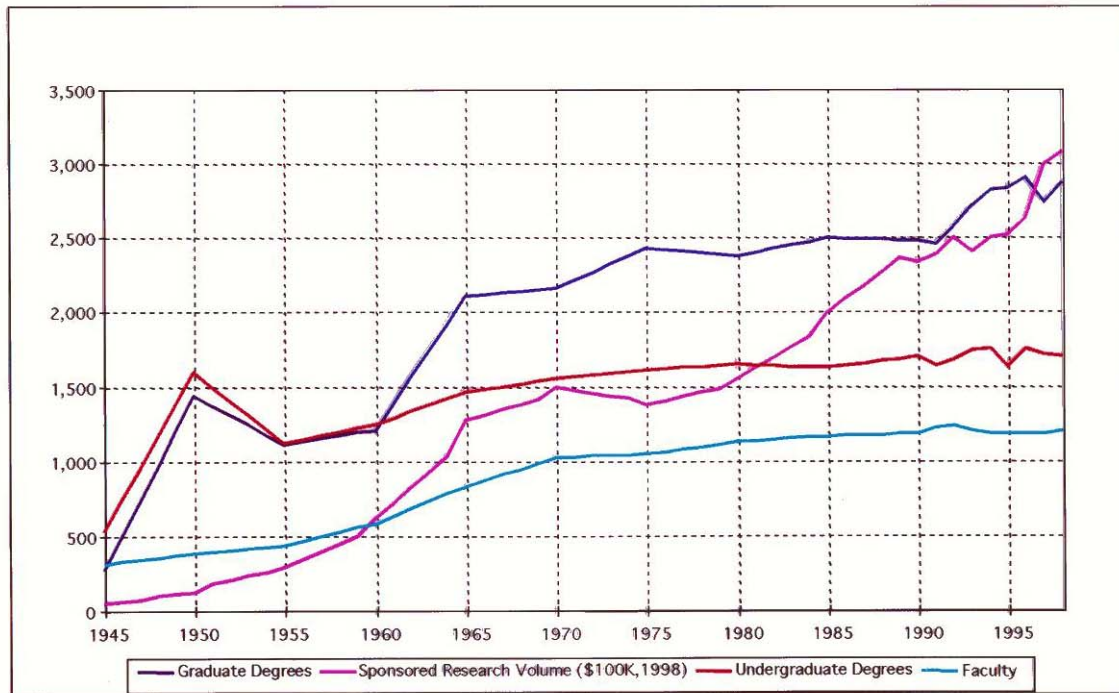
- STANFORD PAST (Background)
- STANFORD PRESENT (Research Policies)
- STANFORD FUTURE (Challenges)

STANFORD RESEARCH POLICY



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STANFORD PAST





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NUMBER OF STANFORD DEPARTMENTS IN TOP RANKINGS NATIONALLY IN US

	TOP 10	TOP 5	TOP 2	FIRST
1966	15	10	2	2
1982	25	15	5	4
1993	32	22	6	5

STANFORD PAST



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STANFORD PRESENT

SEVEN SCHOOLS

Humanities and Sciences

Engineering

Earth Sciences

Medicine

Law

Business

Education

1194 Tenure-Line Faculty
6639 Undergraduate Students
7445 Graduate Students



Stanford University

Eight Independent Laboratories, Centers, Institutes
Including
Laboratory for Advanced Materials

- 30 Faculty
- 150 Ph.D. Students
- \$10M Research Funding
 - Magnetic and Optical Materials
 - Superconductors
 - Polymer Synthesis
 - Complex Oxides
 - Electronic Materials

Also, Stanford Linear Accelerator Center
Hoover Institution

STANFORD PRESENT



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RESEARCH POLICIES

Governance

Board of Trustees

President, Provost

Faculty Senate

Faculty Committee on Research

Dean of Research

Faculty are Principal Investigators
and Advisors of Graduate Students

STANFORD PRESENT



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SPECIFIC RESEARCH POLICIES

OPENNESS IN RESEARCH

CONFLICT OF COMMITMENT

Consulting: One Day a Week
Presence on Campus

CONFLICT OF INTEREST

SCIENTIFIC MISCONDUCT

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INTERACTION WITH INDUSTRY

AFFILIATES PROGRAMS (FACILITATED ACCESS)

INTERDISCIPLINARY RESEARCH CENTERS

GIFTS

SPONSORED RESEARCH

START-UP COMPANIES

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STANFORD AND SILICON VALLEY

Professor Frederick Terman (Late 1930's)
Dean of Engineering, then Provost

Hewlett, Packard, and Terman

Honors Cooperative Program
Part-time MS Study
Stanford Instructional Television Network

Stanford Industrial Park (established 1951)

Start-up Companies such as Varian, Sun Microsystems,
Cisco Systems, Yahoo!

Annual Revenue of such companies is \$100 Billion

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CHARACTERISTICS OF RELATIONS BETWEEN STANFORD AND SILICON VALLEY

Good Ideas and Innovations

Entrepreneurial Spirit

Open and Sharing Community

Venture Capital

Outstanding Graduate Students

e.g. Stanford Graduate Fellows

(The critical importance of such students is often overlooked)

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INTELLECTUAL PROPERTY

PATENTS

Owned by the University if created under Sponsored Projects (Bayh Dole Act) or with more than incidental use of University Resources

COPYRIGHTS

Owned by the creator unless created under Sponsored Projects or with significant use of University Resources

PATENT AND COPYRIGHT AGREEMENTS

INVENTION DISCLOSURES

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OFFICE OF TECHNOLOGY LICENSING REPORTS TO THE DEAN OF RESEARCH

MISSION: "To promote the transfer of Stanford Technology for Society's use while generating income to support Research and Education"

250	Invention Disclosures in 1998
82	US Patents issued 1998 (may be more than one patent for each invention)
725	US Patents currently in Portfolio
300	Inventions now generating income
\$400M	Income since 1970
\$ 61M	Income 1998
\$2.2 M	OTL Staff Budget 1998
1/3	Income to Inventor
1/3	Income to Department
1/3	Income to School (Not Central University)

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STANFORD FUTURE CHALLENGES

Quality Rather than Quantity

New Opportunities - Interdisciplinary Research

Example: Bio X

Molecules to Systems & Organisms

50 Faculty from Science, Engineering,
and Medicine

The Role of Undergraduates in a Research University

Global Collaborations