



# **Technology and Industry Alliances**

**Alan B. Bennett**

Associate Vice Chancellor for Research

April 20, 2005

# The University of California is a major source of innovation

Research budget ~ \$2.5B

Inventions ~ 4.5 per \$10M → 1100 or 3/day



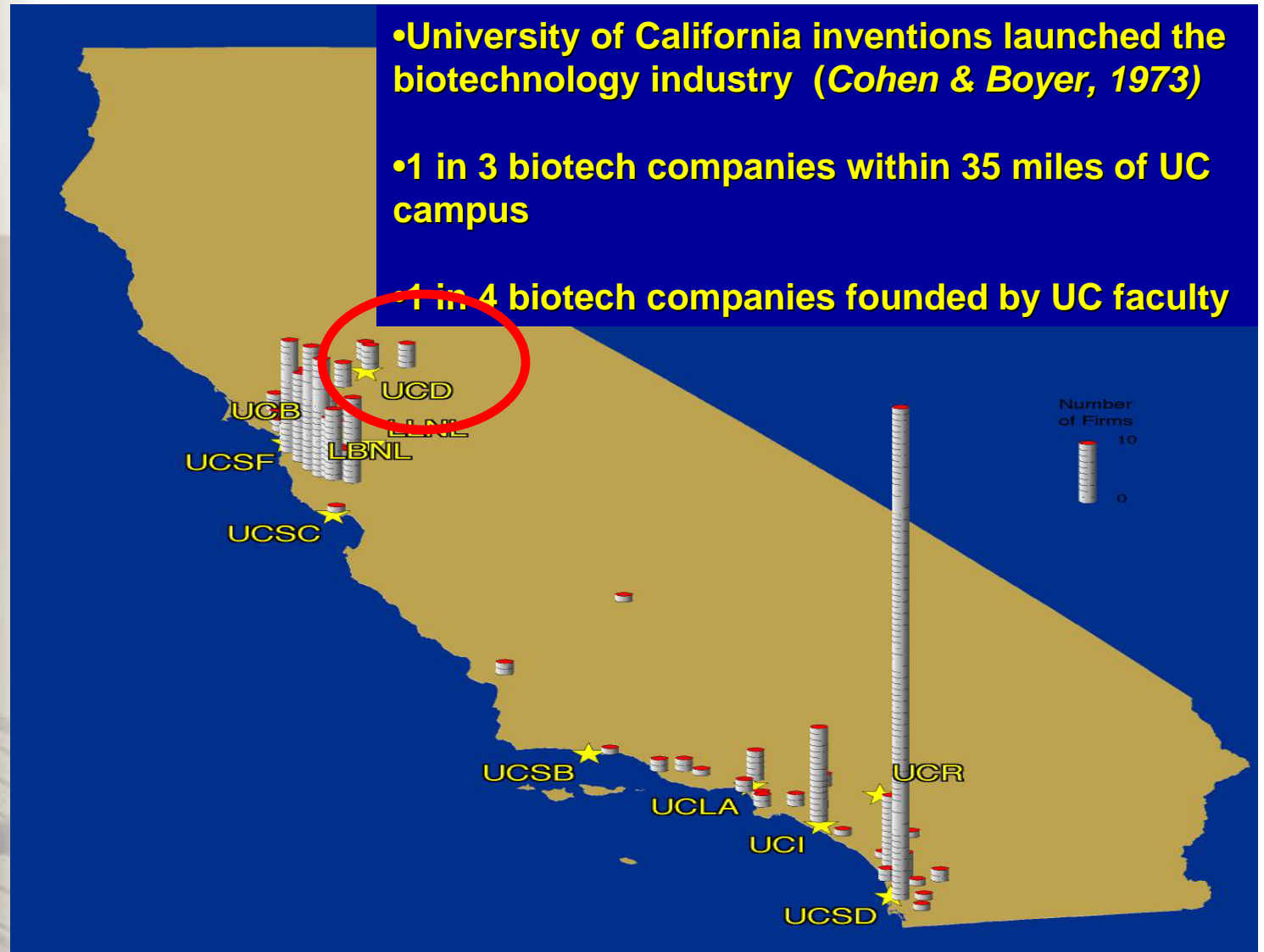
# The University of California is a major source of innovation

## Patents Issued (USPTO) - 2003

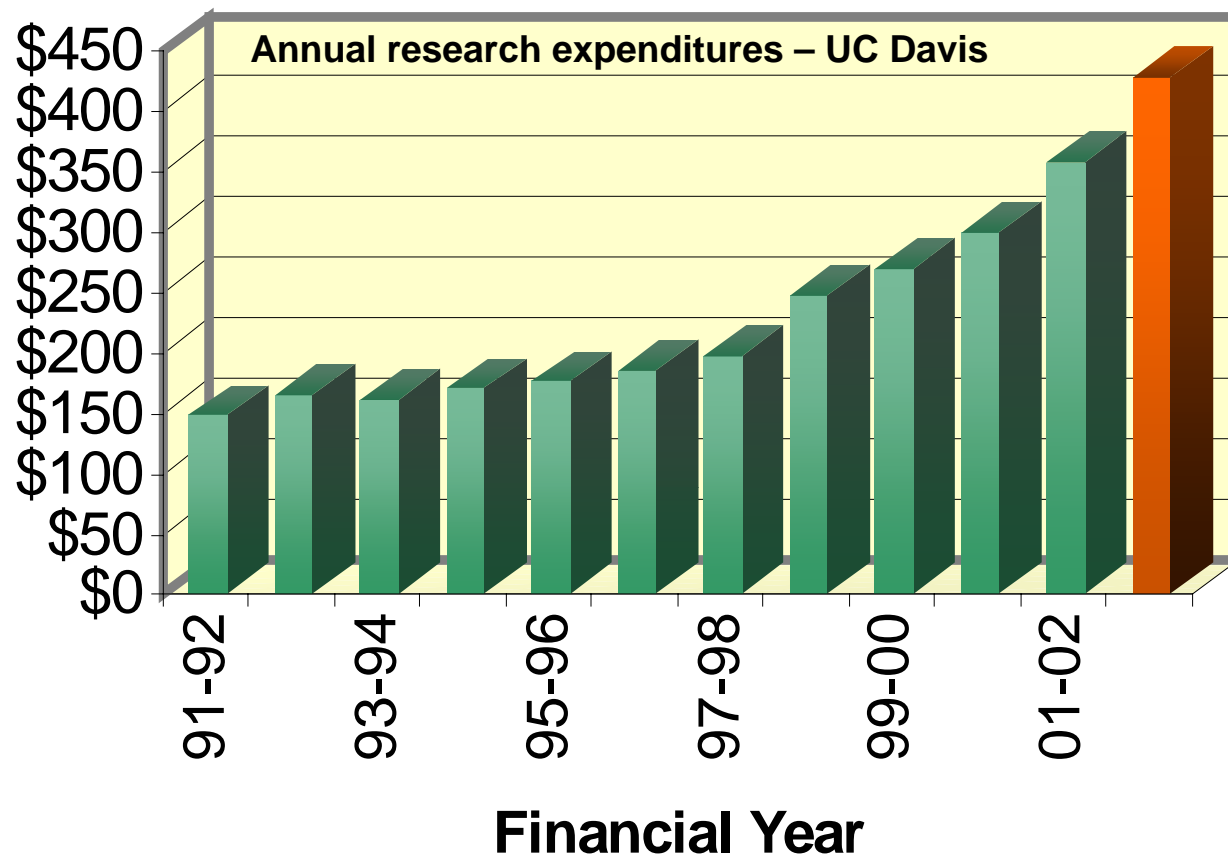
- **1. IBM 3,439**
- **5. Hewlett-Packard/Compaq 1,763**
- **9. Sony 1,354**
- **22. Honda 686**
- **34 Microsoft Corp. 499**
- **36. Regents of University of California 464**
- **39. Nortel Networks 436**
- **50. US Navy 366**

# The University of California is a major source of innovation and of business opportunities through licensing and spinouts

- University of California inventions launched the biotechnology industry (*Cohen & Boyer, 1973*)
- 1 in 3 biotech companies within 35 miles of UC campus
- 1 in 4 biotech companies founded by UC faculty



## 500 new faculty in last six years



# UC Davis by the numbers

## *Ranking:*

- **16<sup>th</sup> among public universities** (National Research Council)
- **11<sup>th</sup> among public universities** (U.S. News & World Report)
- **3<sup>rd</sup> in non-federally financed research expenditures** (National Science Foundation, 2001)
- **15<sup>th</sup> in research expenditure** (NSF, 2001)

*Research Funding:*      **\$426 million** (2002-03)

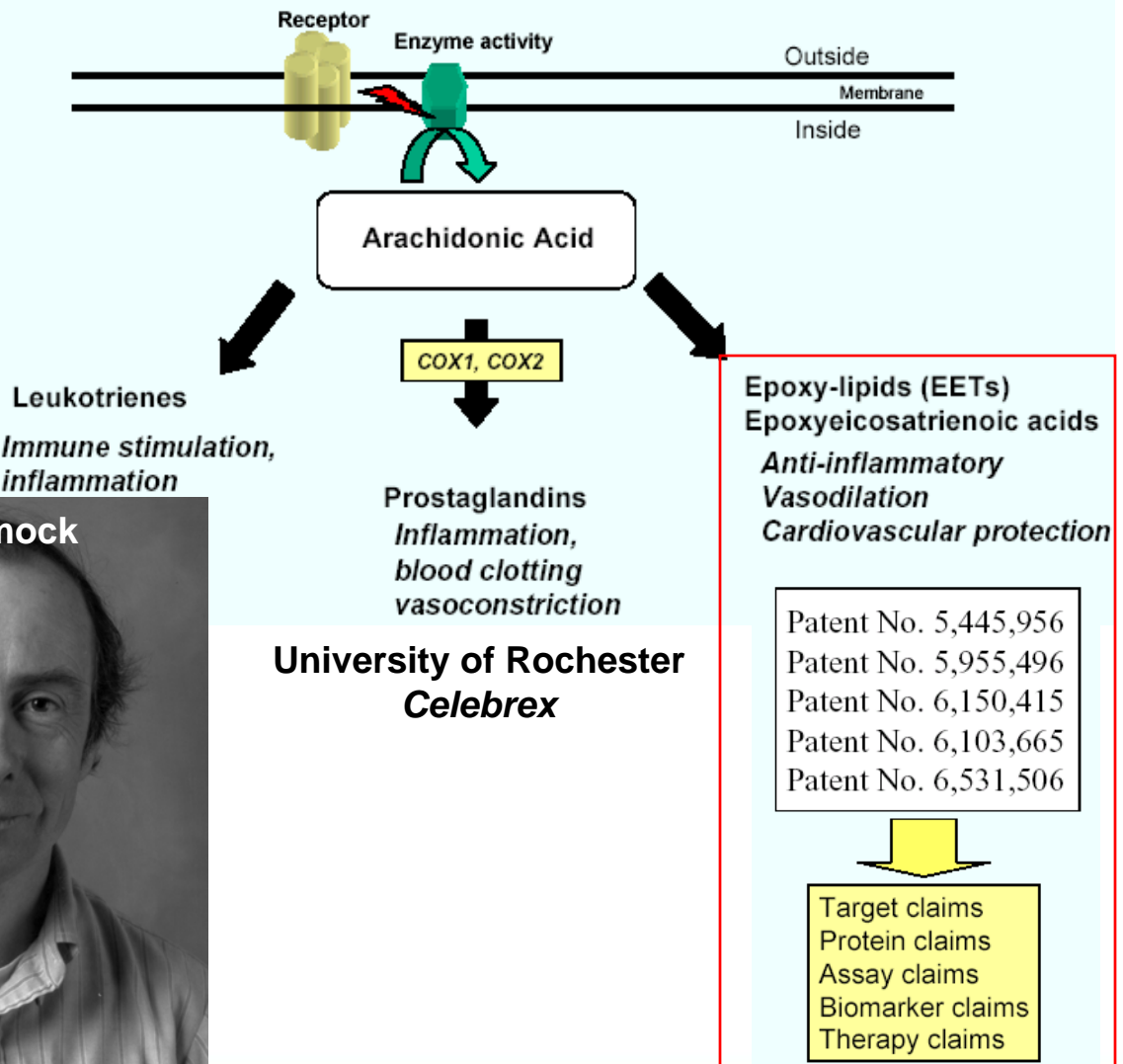
*Private Support:*      **\$116 million** (2002-03)





# Novel anti-inflammation therapeutics

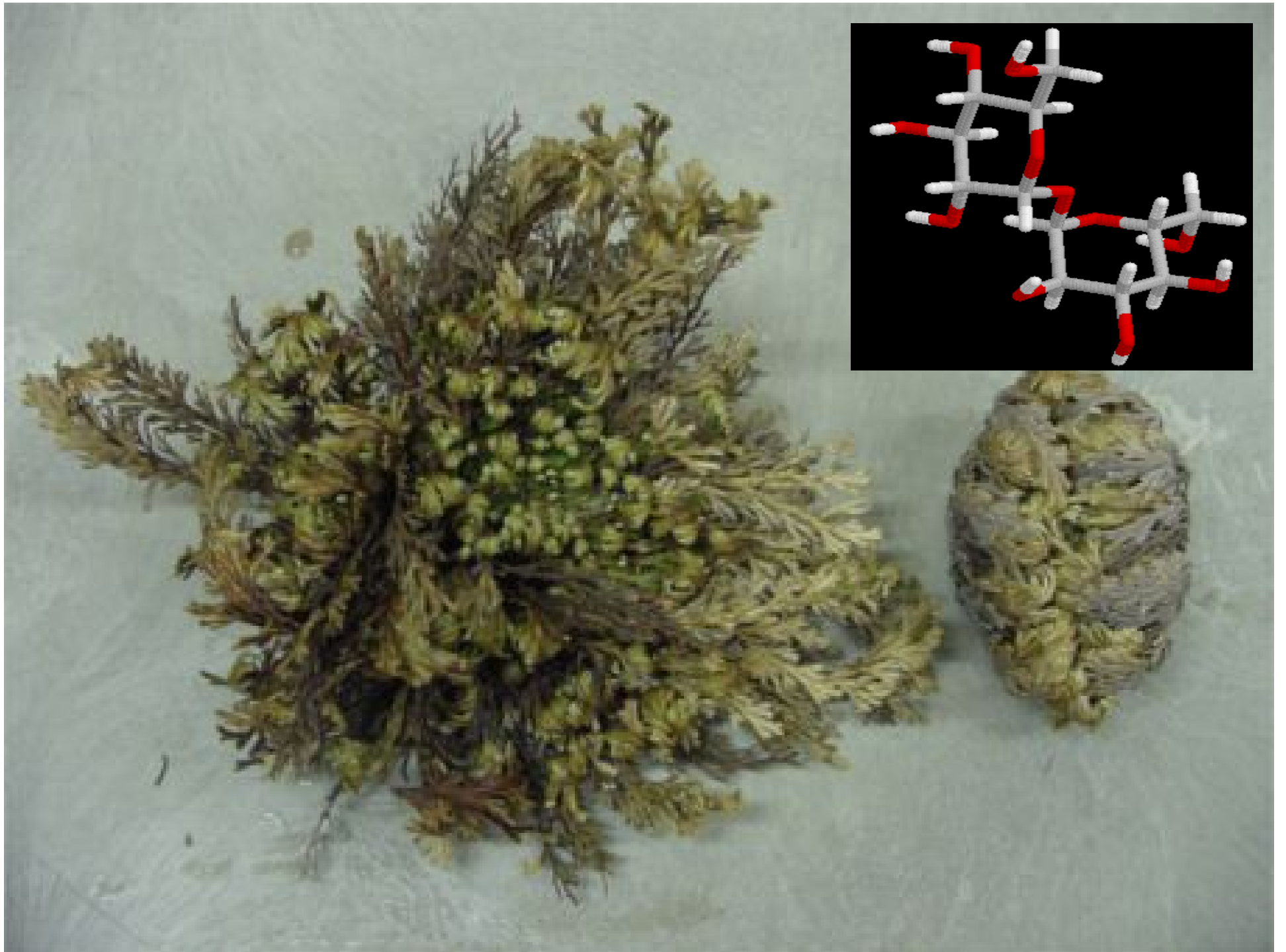
## Eicosinoid (Oxylipid) Signaling



Bruce Hammock



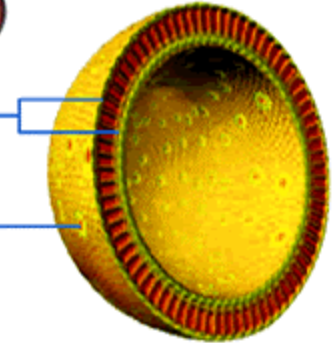
University of Rochester  
**Celebrex**



**AmBisome**  
(amphotericin B) liposome for injection



phospholipid layer



amphotericin B molecule

## Just add water

Thanks to a sugar found in yeast, it may be possible to provide 'freeze-dried' blood cells to treat injured soldiers. The technique could also find applications in the cell-biology lab. Geoff Brumfiel reports.





# Campus commitment

## The UC Davis Vision

### Engagement

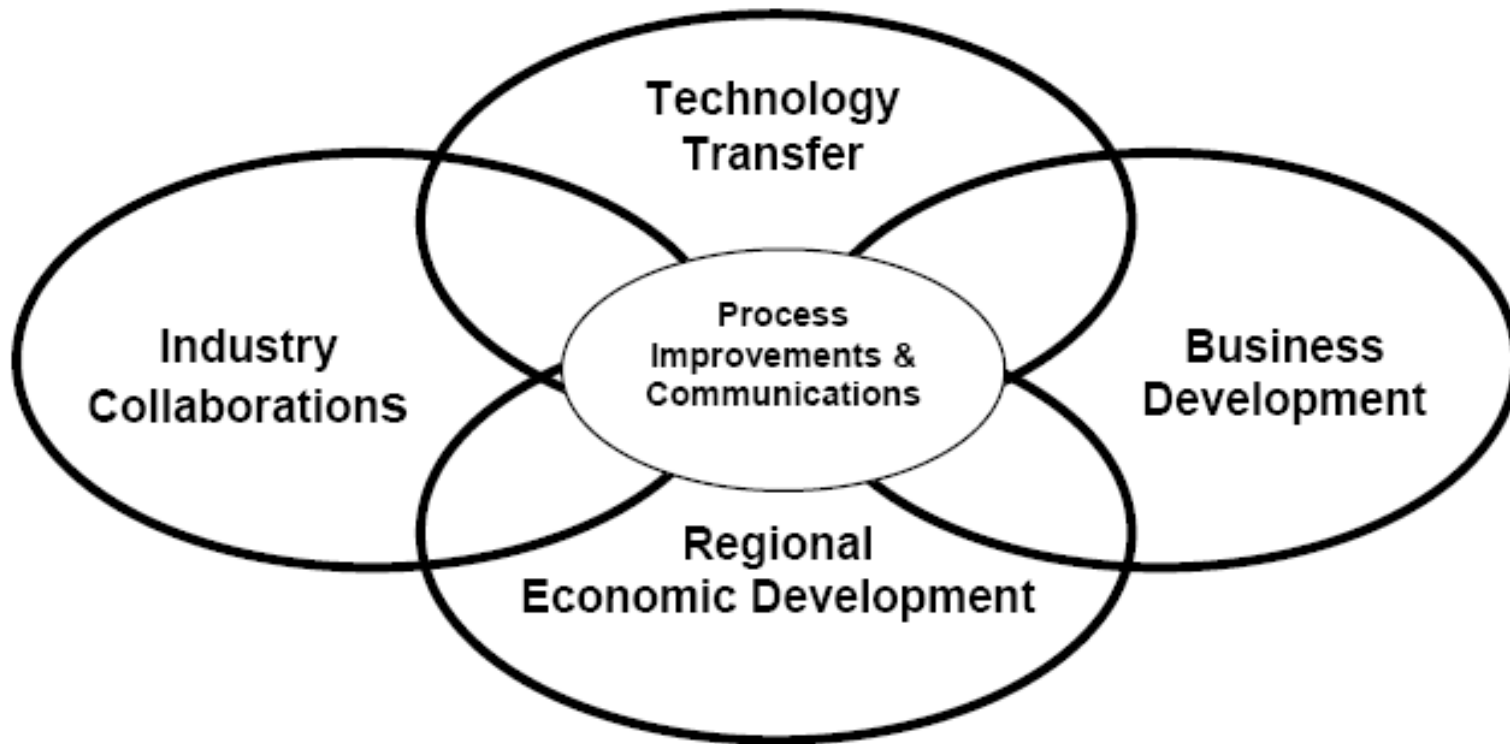
Effectively engage the university in the lives of the broader communities it serves.

### Strategy:

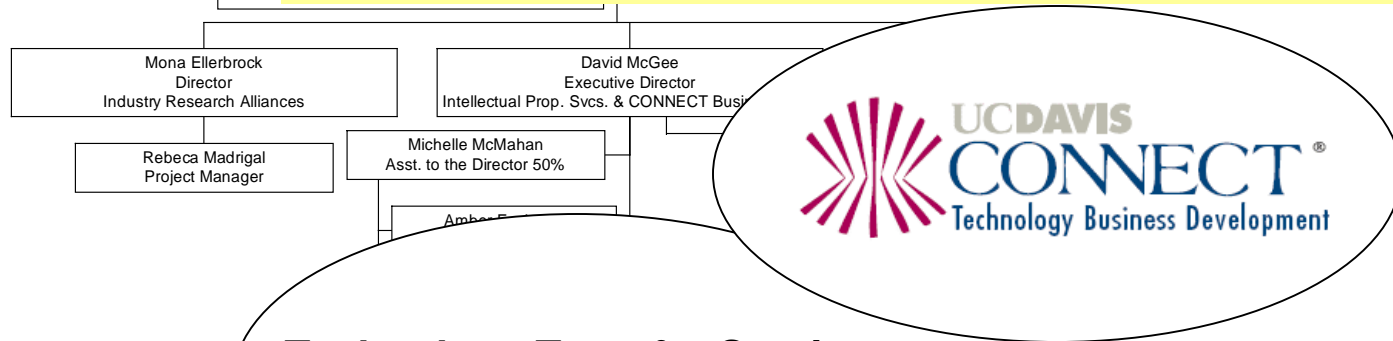
- Expansion of quality, variety and number of industry interactions and partnerships
- Enhancement of level and quality of technology transfer activities
- Successful development of the research park

# TECHNOLOGY AND INDUSTRY ALLIANCES

July 2004



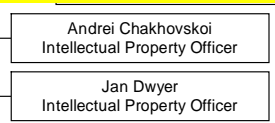
**Education program to campus researchers/entrepreneurs  
Assess commercial opportunities for new technologies  
Support new business development with a regional focus**



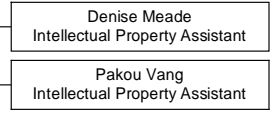
**Technology Transfer Services**


**Improve operation efficiency and business practices  
Enhance presence/reputation of UCD technology transfer  
Transfer invention management from UCOP to campus**

**Industry Research Alliances**



**Expand # and quality of research collaborations  
Access UCD resources to support industry alliances  
Strategy for development of research park/innovation center**



- 
- **Arête Therapeutics**
  - **Vitalea Science**
  - **SialoGen Therapeutics**
  - **Glycometrix**
  - **Immunotox**
  - **Advanced Luminescence**
  - **Leptogen**
  - **OncoNex**
  - **Applied GeneX**
  - **UCDHS Foundation for early detection of birth defects**
  - **Incident Reporting Software**
  - **Analytical Lab for Food Quality**
  - **Boegeskov Energy (Little Bang)**
  - **Biofuels for Transportation (Little Bang)**
  - **Protolluminatomy (Little Bang)**
  - **Whirled of Fruit (Little Bang)**



**Thank You.....**

**Alan B Bennett**

**abbennett@ucdavis.edu**