

# Intellectual Property in an Academic Research Context

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# COGR

- Association of 178 research universities and affiliated medical centers and research institutions
- Involved in all major financial and administrative aspects of federally funded research
- Provides advice and information to members on a wide variety of research related issues

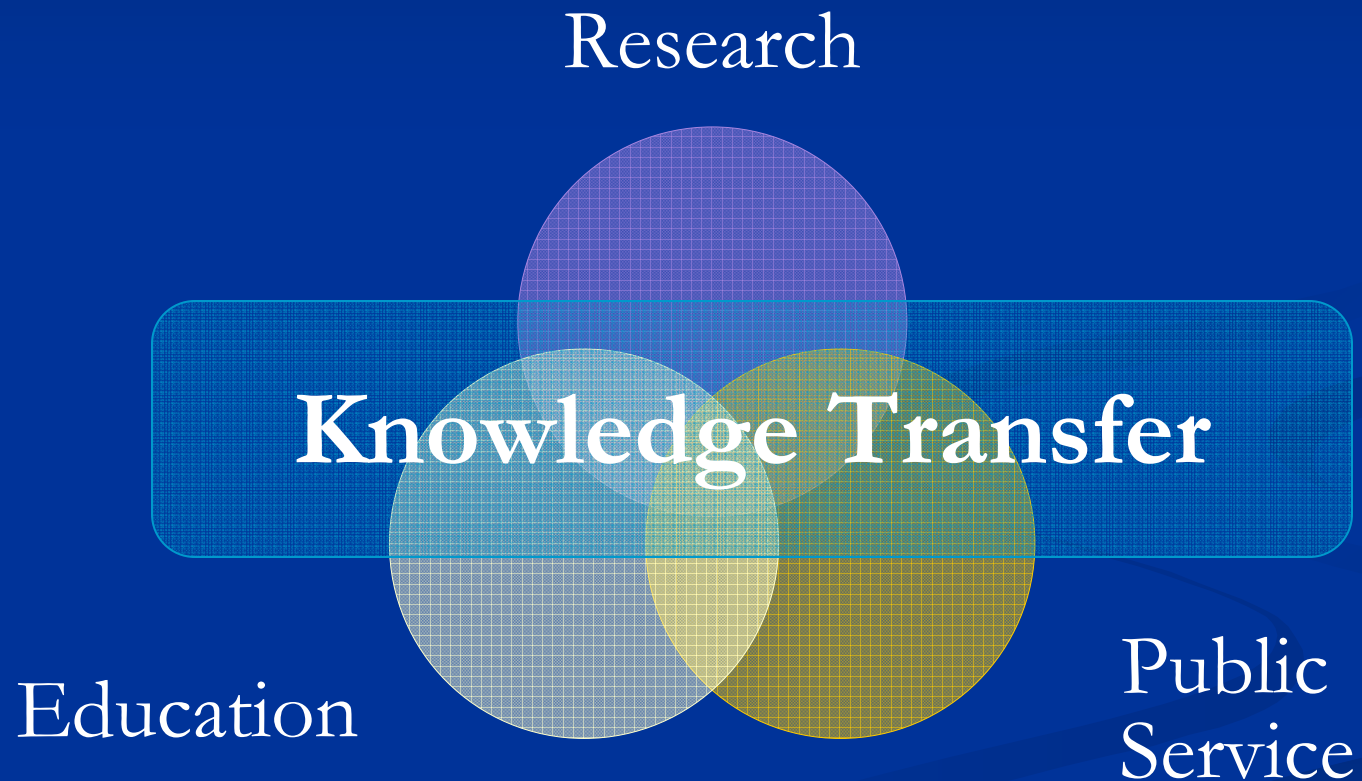
# The University of California System



- 10 campuses
- ~8,800 faculty  
(50 Noble laureates)
- ~214,000 students
- \$4.37 B in extramural  
grant and contract  
revenues

(FY07)

# Everything in Context of the University's Mission



# Academic Knowledge Transfer

- Publication/presentation
- Education of students
- Research collaboration
- Personnel exchange
- Sharing research materials
- Sponsored research
- Trained students/postdocs entering the workforce
- Faculty consulting
- Cooperative extension
- Licensing technology to commercial partners (aka, TT)

# Appropriate Management of IP Is Critical to Research Enterprise

- To be able to continue a line of research and education
- To ensure results can be published in peer-reviewed journals
- To ensure availability for research by others, including by other research institutions
- To encourage/enable university-industry collaborations
- To meet obligations to ALL sponsors
- To ensure results are used for public good
- To preserve incentive for industry investment in bringing products to market

# Research in Academia

# Multiple Stakeholders

## Internal

- Researchers/inventors
- Office of Research
- Students/postdocs
- Sponsored Programs Office
- Technology Transfer Office
- Office of General Counsel
- Risk Management
- Management at various levels
- Business & Finance/Accounting
- Development Office

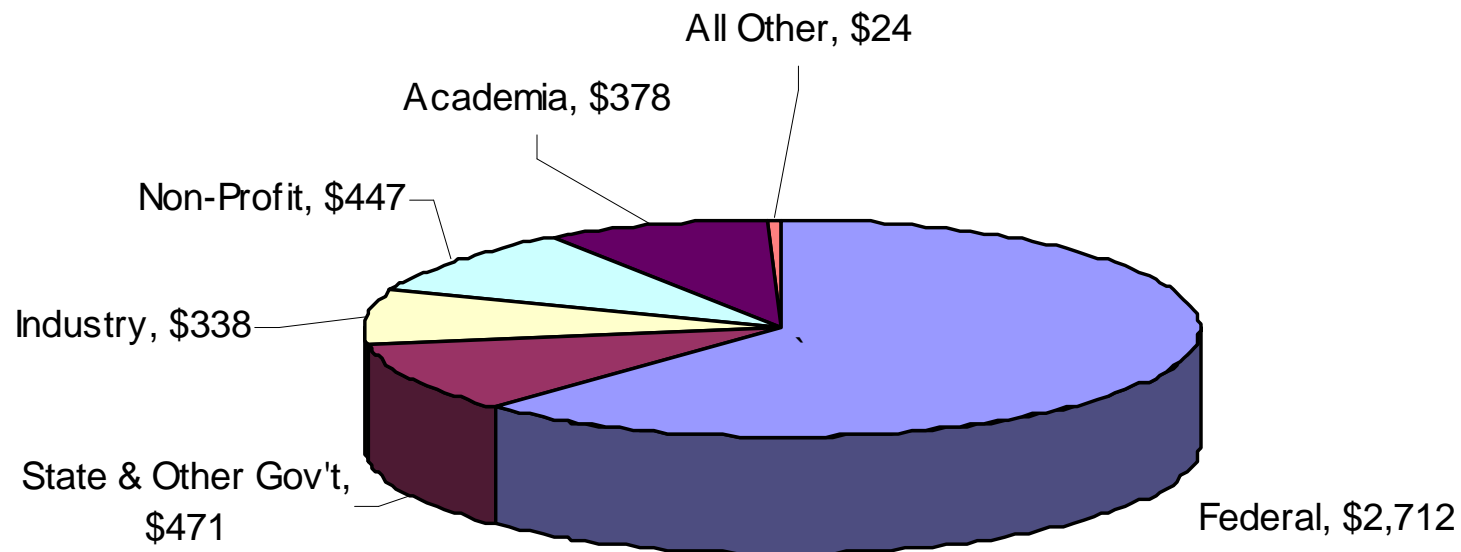
## External

- Government sponsors
- Industry sponsors
- Non-profit sponsors
- State and Federal governments
- Potential licensees
- Industry organizations
- Academic community
- General public
- Media
- Special interest groups
- Economic development agencies

# Research Funding Sources

UC Awards in FY07 (\$M)

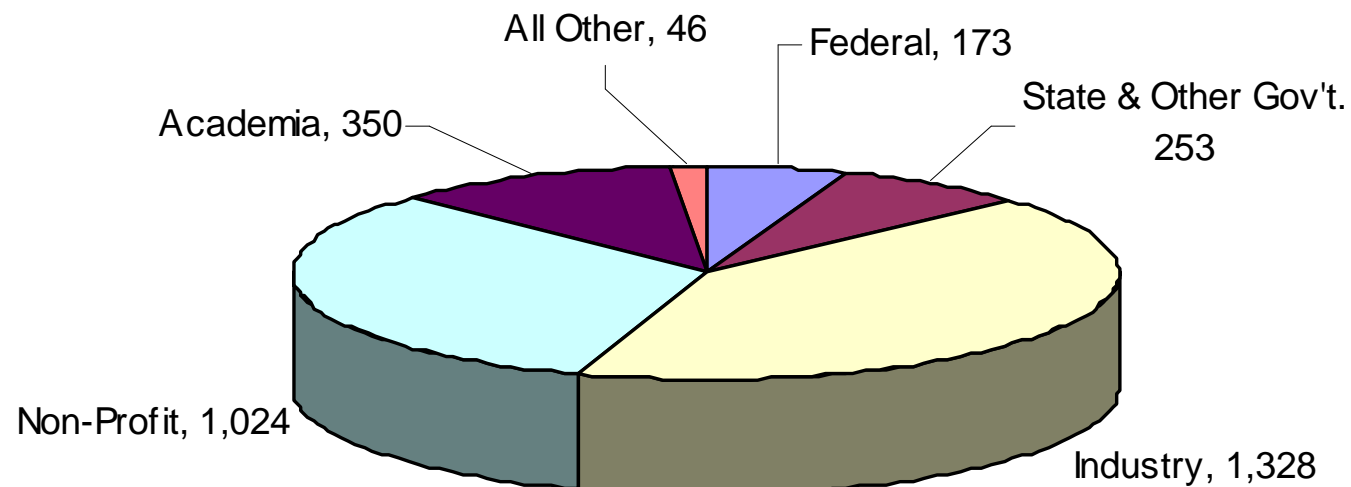
Total = \$4.37 B



# Wide Variety of Partners

UC Sponsors in FY07

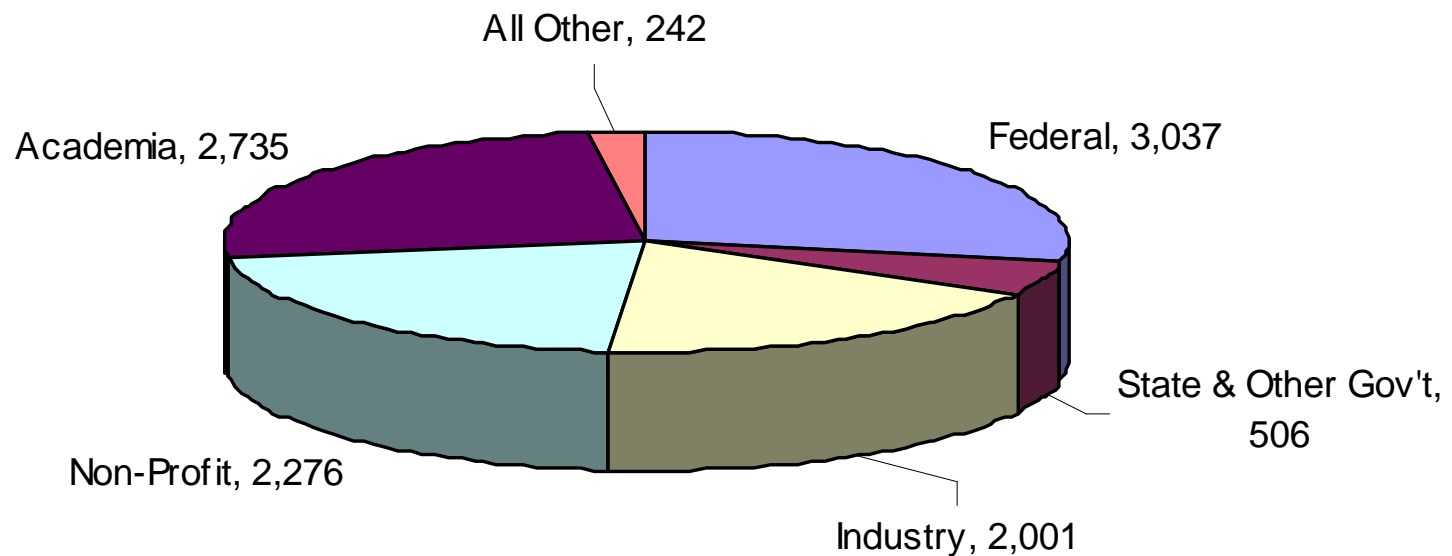
Total = 3,160



# # of Agreements Negotiated

**New Awards to UC in FY07**

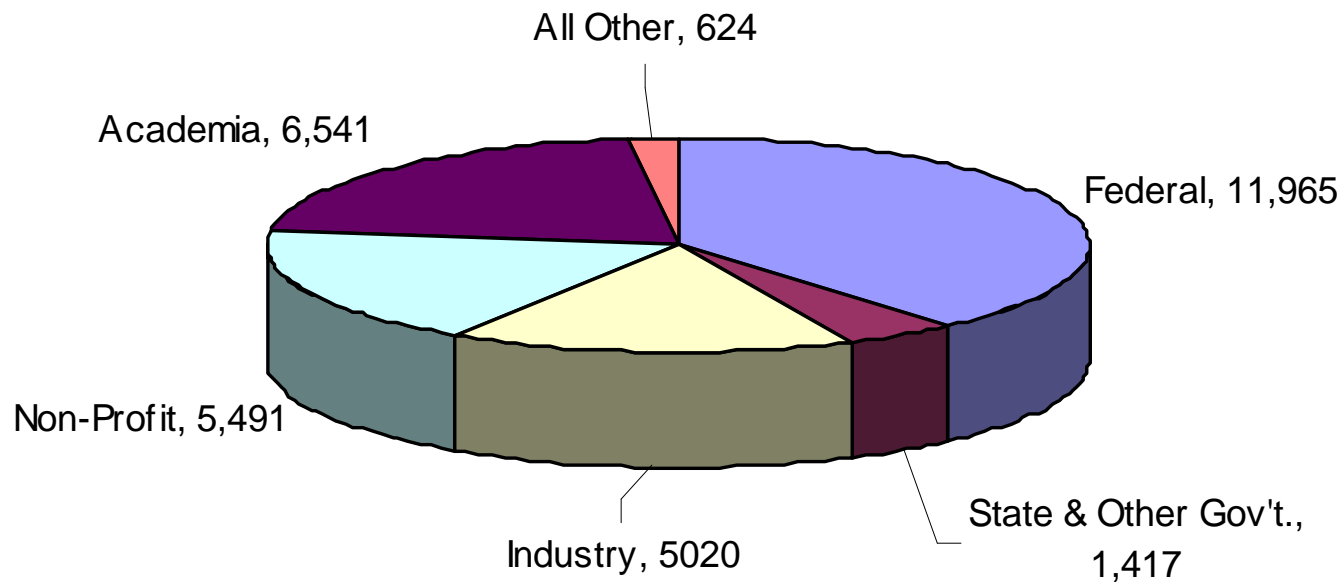
**Total = 10,797**



# Ongoing Administrative Effort

Active Awards at UC in FY07

Total = 31,058

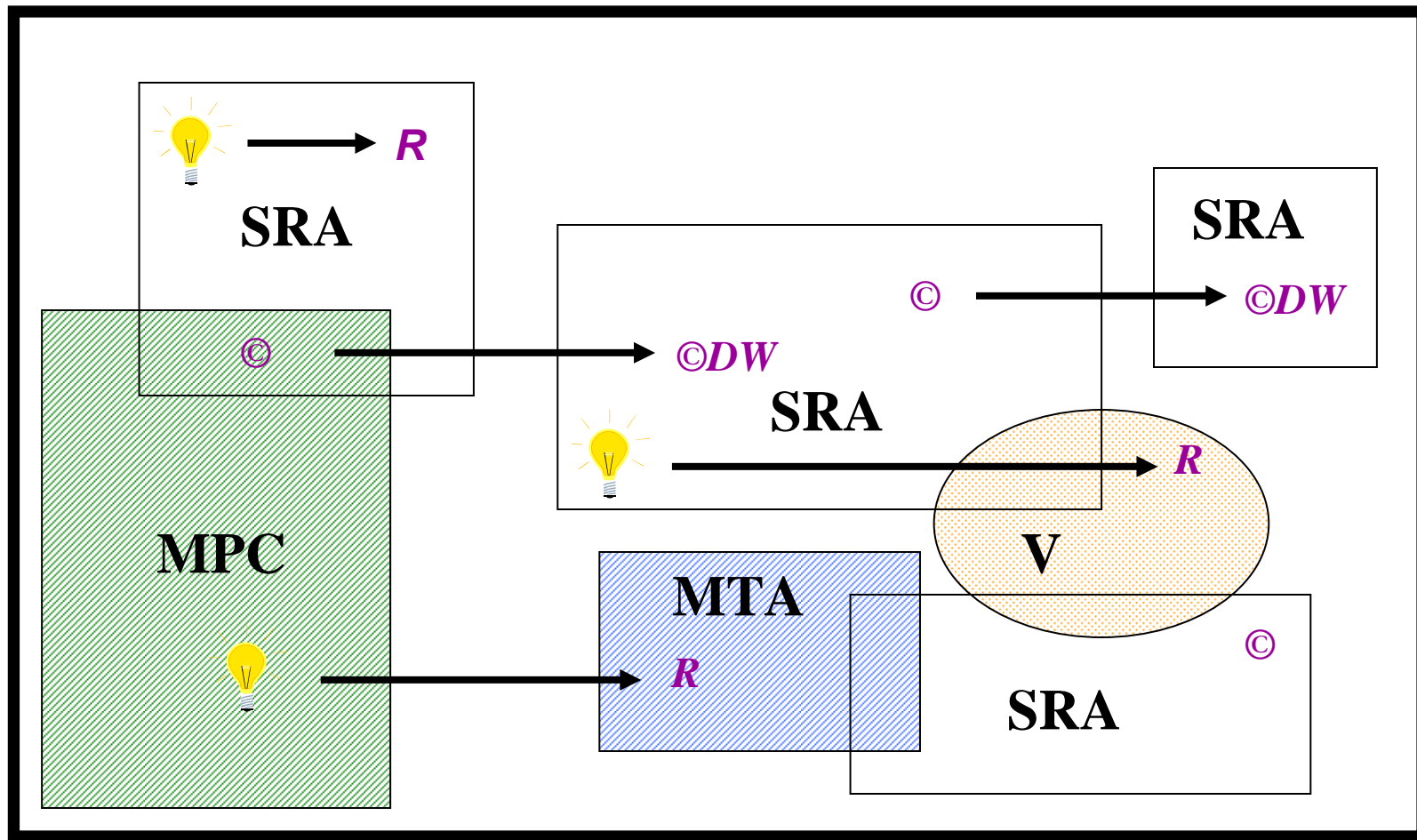


# The “Web” of Research Support

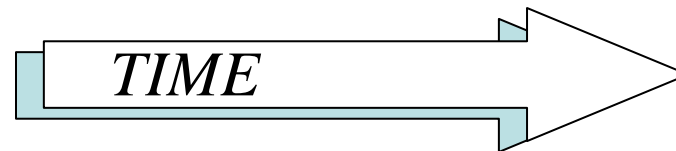
- Many sources of support, many (sometimes conflicting) requirements
- Dominated by federal funds so administrative approaches *must* accommodate federal funding
- Must maintain sufficient flexibility
  - to meet all obligations
    - E.g., research material from one source, \$\$ from another, and a visiting scientist
  - to find creative solutions to address emerging issues
    - E.g., research tools, developing countries, access to indigenous resources

# UNIVERSITY INVESTIGATOR'S RESEARCH PROGRAM INTELLECTUAL PROPERTY PORTFOLIO

SCIENTIFIC SCOPE



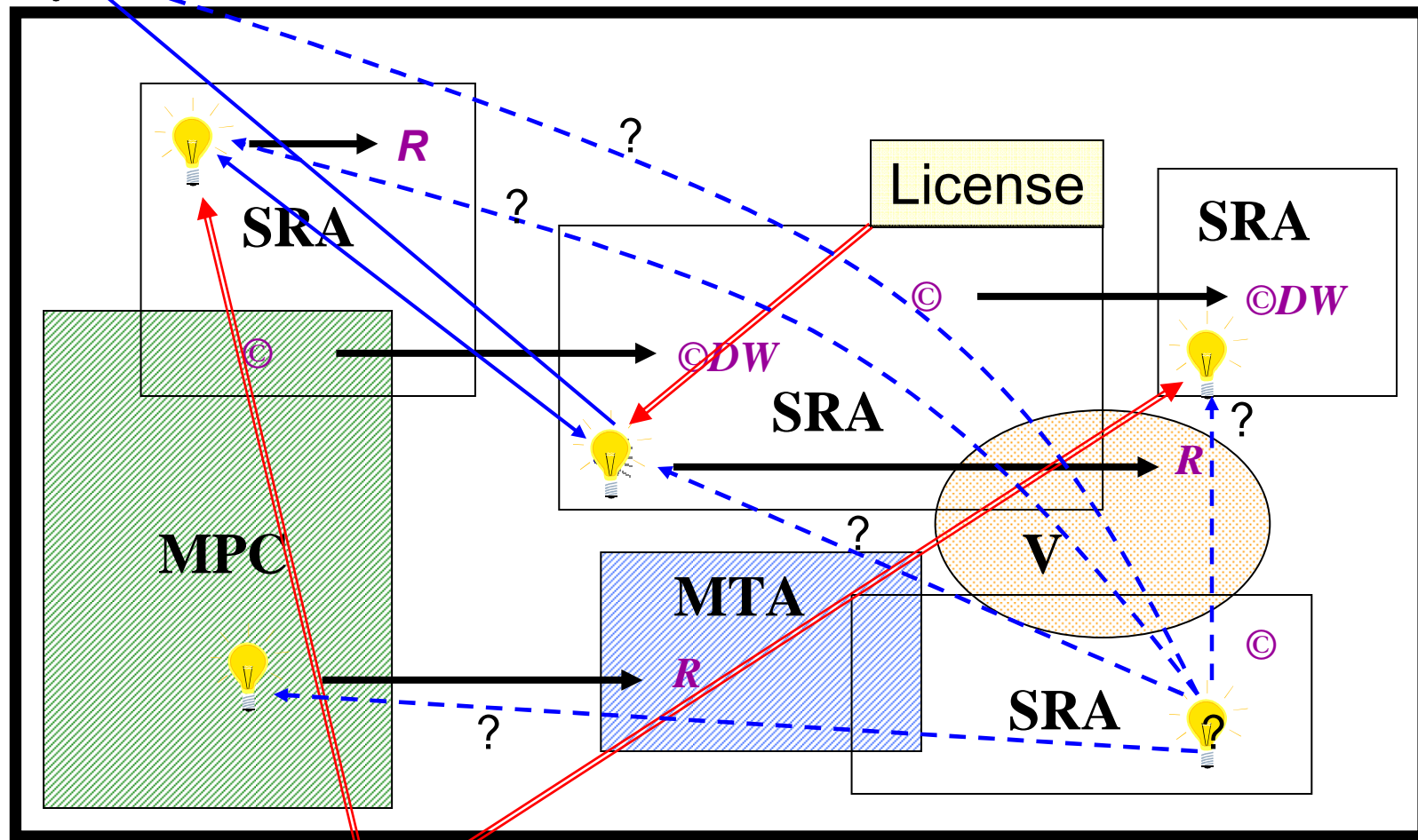
- 💡 CONCEPTION
- R** REDUCTION TO PRACTICE
- © COPYRIGHTABLE WORK
- ©DW** DERIVATIVE WORK
- SRA** SPONSORED RESEARCH/AGREEMENT
- MTA** MATERIAL TRANSFER AGREEMENT
- MPC** MULTI-PARTY COLLABORATION
- V** VISITOR



**THIS IS NOT  
EASY STUFF!**

# UNIVERSITY INVESTIGATOR'S RESEARCH PROGRAM

*With Background IP Commitments*



- Primary License
- Background IP License
- Potential Background IP Commitment

**THIS IS NOT  
MANAGEABLE!**

# Common Interests

## ■ University-Government

- Advancement of (usually basic) science
- Education of students/training of workforce
- Public benefit
- Benefit to economy

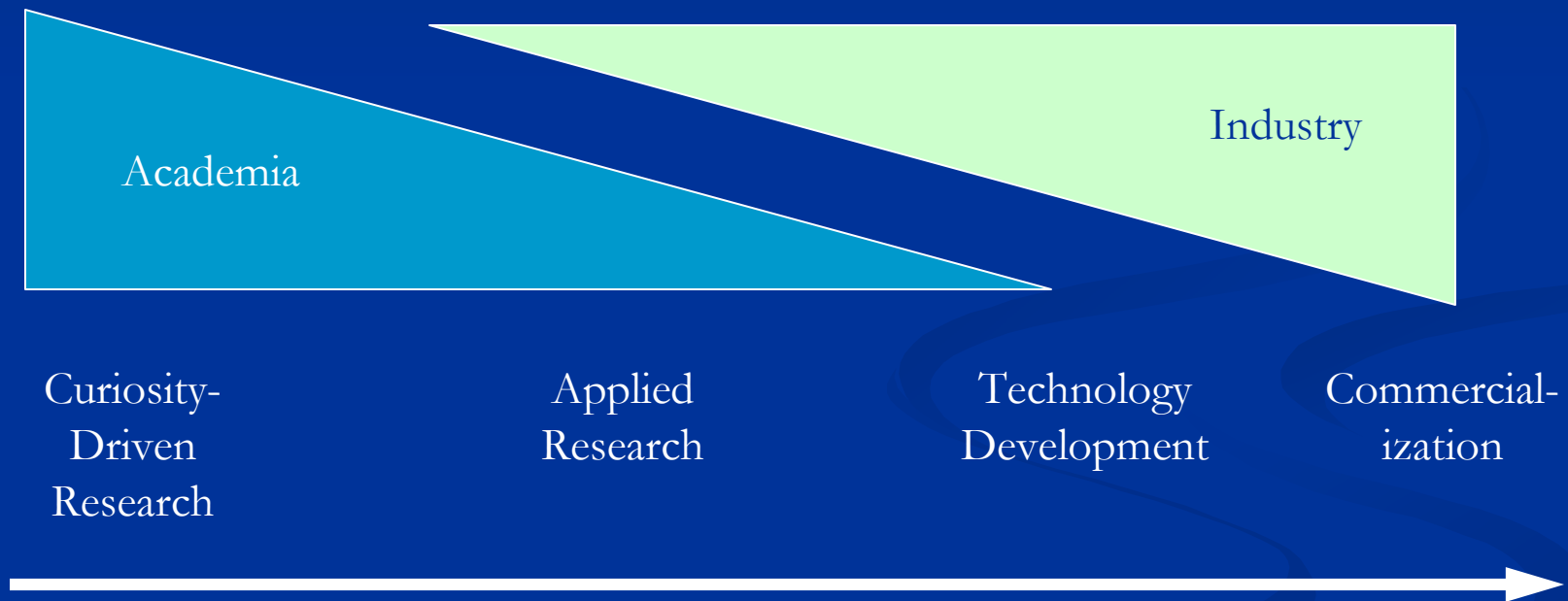
## ■ University-Nonprofit

- Advancement of science (often interest-specific)
- Public benefit (often interest-specific)
- Training of scientists/workforce

## ■ University-Industry

- Advancement of (often applied) science
- Training of workforce

# University-Industry Relationship



From Basic Research to Products on Shelves

# Inherent & Entirely Appropriate Cultural Differences

- Industry culture:
  - Profit-oriented; needs secrecy; focus on select products/markets
  - *Companies manage IP for profit and competitive advantage*
- University culture:
  - Non-profit; emphasis on advancing science and public benefit; open dissemination of ideas is critical; curiosity-driven exploration over broad spectrum of disciplines
  - *Universities manage IP in the public interest*

# Relationships with Industry

- Universities work with complex variety:
  - Many different sectors and fields; different models, frameworks; *Hundreds* of unique companies
- **Yet the vast majority of these relationships work very well!**
- As long as both parties understand that universities cannot be “job shops” for industry

# External Pressures

- **Universities are doing too much for/with industry**  
(e.g., Jennifer Washburn's "University, Inc.")
  - Compromising academic integrity and objectivity
  - Moving away from curiosity-driven research
- **Universities aren't doing enough for industry**  
(e.g., some companies, economic development groups)
  - Insufficient return on industry investment of research dollars
  - Need to do more to support economic development

# In Broader Context

- Must keep concerns in perspective with the larger innovation ecosystem
- Since 1980, Bayh-Dole is not the only change
  - Chakrabarty and emergence of biotech
  - Emergence of knowledge economy
  - ...and growing industry appetite for IP
  - Globalization of economy

# Maintaining Our Integrity

- Universities take concerns very seriously, consider them carefully, and try to address without compromising fundamental academic principles
- Tough issues almost always stem from academic concerns and are NOT about the money!

# UC's Principles for Research Results

- Must remain true to mission and fundamental academic principles
- E.g., UC's articulated Principles regarding treatment of future research results:
  - Open Dissemination of Research Results
  - Commitment to Students
  - Accessibility for Research Purposes
  - Public Benefit
  - Informed Participation
  - Legal Integrity
  - Fair Consideration
  - Objective Decision Making

Questions?