Computing Research Association (CRA) Workshop on University Software Licensing, Patents, and Industrial Interaction
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The Issue

• Close interactions between University and Industry can be mutually beneficial
  – Impact: universities can provide research useful to industry
  – Industry provides access to practical problems
  – the so-called “disappearance of the industrial research laboratory”

• Industry is becoming an increasingly important source of funding for university research

• Does existing university policies encourage or discourage this interaction?

• The special issues of software, and where they fit within existing policies of copyrights vs. patents
Is This a Good Idea?

“The bottom line of the university is not and should not be measured in dollars or in devices, but in ideas and initiatives. It is the job of the academy to take the long view; a view that the country badly needs to keep in mind. There can be serious conflicts of interest when universities serve industry: Who pays? Who gets the credit? Whose interests conflict?”

Workshop Purpose

• Bring together faculty, administrators, licensing and legal professionals, and industrial researchers

• Focus on:
  – Software developed by computer science researchers
  – Issues with Visiting Industrial Fellows and Faculty on Sabbatical

• Identify what these parties want and should expect from industrial-university interactions

• Draft a set of principles and guidelines for software licensing agreements

• Identify next steps
Workshop Agenda

• 0830-1000 Where Are We Today?
• 1000-1030 Break
• 1030-1200 Where Do We Want to Be?
• 1200-1300 Working Lunch
• 1300-1430 How Do We Get There (Breakouts)?
• 1430-1500 Break
• 1500-1630 How Do We Get There (Group)?
• 1630-1700 Warp-up and Discussion of Next Steps
Questions to be Considered

• What do university faculty and industrial researchers want to achieve in terms of their interactions?
• What are the kinds of university-industrial interactions?
• How should consortia-based research be handled?
• How should mixed federal/industrially-funded research be handled?
• What kinds of intellectual property should be protected?
• What are the roadblocks to interaction, given current policies and agreements?
Some Observations from Berkeley

- Patent Stats for UCB

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<th>FY90</th>
<th>FY94</th>
<th>FY95</th>
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<tr>
<td>Inventions reported</td>
<td>15</td>
<td>68</td>
<td>48</td>
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<tr>
<td>US Patents Issued</td>
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<tr>
<td>US Applications Filed</td>
<td>3</td>
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<td>Foreign Applications Filed</td>
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<td>26</td>
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<tr>
<td>Options in Effect</td>
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<td>7</td>
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<td>Licenses Issued</td>
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<td>8</td>
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<tr>
<td>Licenses in Effect</td>
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<td>25</td>
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<td>Gross Income ($000)</td>
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1995 UC System: 645 licenses in effect, yielding $49 million vs. $10.4 million in 1990. Much of this is biotech related.

Wisconsin: 1 patent disclosure in 100 yields $100,000 over the life of the patent
Some Observations from Berkeley

• The Berkeley BSD UNIX Experience
  – Great fame for the University
  – Expensive legal action between AT&T, Unix Labs, Berkeley

• Widely disseminated software
  – UCB CAD Software: Spice, Magic, etc.
  – Tcl/Tk
  – Ingres, Postgres versus Inktomi

• EECS: $6 million per year in industrial supported research
  (includes approximately $2 million in state matching funds)

• Most successful patent in electronics technology within
  UC: switched capacitor filters, $2 million since 1980
One Industrial View of Licensing

• HP Master Research Agreement
  - Royalty-free license for inventions generated in the research
  - Up to $10K assistance for university’s patent filing costs
  - First option on an exclusive license with credit for payment of patent costs
  - Unrestricted use of software wholly generated in the research
  - Royalty-free use for internal evaluation purposes
  - Provision for HP visiting scientists to work on campus without further compensation to the university
Some Possible Principles

• The university’s responsibility is to discover and disseminate knowledge

• Academic freedom is a higher priority than possible financial rewards

• Public benefit takes precedence over profit making

• All rights to intellectual property resulting from university affiliation should remain with the inventor/creator
  - Different if “substantial” university resources are used?
  - Creation of work part of job for hire?
  - Status of investigators versus students?
  - Copyrights handled differently from patents?

• Provide incentives for faculty and staff to be as creative as possible
  - Equitable sharing of licensing income
  - Balancing the needs for secrecy vs. dissemination of new discoveries
  - Faculty led start-up companies
Some Possible Principles

• Exclusive licenses should be the exception, not the norm, to insure rapid dissemination and the greatest possible public benefit

• Universities are not well positioned to commercialize inventions
  – Licensing versus developing/manufacturing/directly selling
  – Establish licensing offices on campus
  – Establish arms-length research foundations

• Acknowledge the value of industrial sponsorship through preferential licensing (free evaluation licenses, first access for commercial licenses, credit for research support against fees)

• Acknowledge the contributions of the University and its facilities

• Use licensing income to fund further scientific investigation and research

• Inventors/authors who derive substantial income may see fit to make a gift to the University in recognition of its contributions
Breakout Groups

• Washington
  » Rick Adrion, UMass
  - Susan Alberts, Duke
  - Ashok Chandra, IBM
  - Lee Hollar, Utah
  - Patrick Jones, UWashington
  - Jim Larus, UWisconsin
  - A. Agnes Livingstone, UBC
  - Kurt Maly, ODU

• Adams
  » Peter Freeman, Georgia Tech
  - Allen Eisdorfer, Lucent
  - Jordan Konisky, Rice
  - Zahir Parpia, Toronto
  - Todd Proebsting, UArizona
  - Sargur Srihari, SUNY Buffalo
  - Ribert Tendler, Mitsubishi
  - Catherine Whenumouth, UC

• Jefferson
  - Jean-Lou Chameau, GeorgiaTech
  - Jim Foley, Mitsubishi
  » Ed Lazowska, UWashington
  - Martha Palmer, UPenn
  - Michael C. Rudzinski, NCSA
  - Richard Walters, UC Davis
  - Kathleen Williams, Duke
  - Anneliese von Mayrhauser, CSU

• Hamilton
  » C. W. Gear, NEC
  - Randy Katz, UC Berkeley
  - Paul Martin, Harvard
  - Danny Powell, Rice
  - Larry Snyder, UWashington
  - Sharon Tipsword, UUC
  - Roger Webb, GeorgiaTech
  - Terry Young, Texas A&M