Berkeley Postdoc Entrepreneur Program (BPEP)

**BPEP Mission:** To foster entrepreneurship in the UC Berkeley postdoctoral and scientific community in order to move innovations from the laboratory to the marketplace.

**Goals**
- Provide an entrepreneurship toolkit for postdocs through on-campus workshops
- Collaborate with business leaders for mentoring
- Assist building (bio-)technology start-up companies
- Connect technology know-how with business skills
OUR PURPOSE

- Jumpstart seed stage cleantech to create a vibrant ecosystem where entrepreneurs thrive
- Launch 500+ cleantech startups in first ten years
- Increase chances of success for each startup that goes through the Greenstart Accelerator
BPEP 2: IP, Legal Issues, Patents

• The Basics – Peter Fiske
• The University Perspective - Lynne Hollyer
  – Associate Director - UC Berkeley Industry Alliances Office
• The discussion
• The beer
Michael Katz
Executive Director
IPIRA
IP, Legal Issues & Patents
The Basics...

Dr. Peter S. Fiske
October 6, 2011
BPEP #2
First: a disclaimer

The opinions expressed in this lecture are solely those of Dr. Fiske and not his employer, the University of California, the State of California, the government of the United States, or other sentient creatures in our solar system. Dr. Fiske is not a lawyer, nor does he claim to be a lawyer, nor is he representing himself as an authority in legal matters in any capacity. Some of the statements contained in this presentation may not be suitable for children, people with compromised immune systems, people with opposable thumbs, pandas and those who work with pandas.
When I first encountered IP issues, here’s what I thought:

• You cannot commercialize any technology without a patent
• Any patent that is close to your invention invalidates your IP claims
• Obtaining a patent will completely protect my IP
• We need to patent as soon as possible to prevent being scooped
Some history from my first year.
Some of my experience

• Dealt with all aspects of IP while running RAPT Industries
  – Filed 13 US and many more international patents
  – Critically evaluated competitive IP
  – Took 2 WONDERFUL classes at Haas
    • Intellectual Asset Management
    • Law and the Business Environment
  – Successfully negotiated a license for RAPT IP
  – Hundreds of hours spent with legal counsel
  – Managed NDAs, employment agreements

Highly likely you will do this too…
Patents are a valuable research tool...

<table>
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<tr>
<th>Search Criteria</th>
<th>Pat No.</th>
<th>Date Filed</th>
<th>Inventors</th>
<th>Assignee</th>
<th>Title</th>
<th>Abstract</th>
<th>Application</th>
<th>Notes</th>
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<td></td>
<td>6043160</td>
<td>1/11/99</td>
<td>Machining Technology, Inc.</td>
<td>Midwest Machine Works, Inc.</td>
<td>Method for machine component cleaning to reduce machine component wear by reducing frictional heat and wear</td>
<td>Reduces wear and heat due to friction by using a plasma flame to clean the component, thereby reducing the likelihood of component failure due to wear and tear.</td>
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<td>6036152</td>
<td>10/28/99</td>
<td>Scourto, John, et al.</td>
<td>The Regents of the University of California</td>
<td>Surface modification using plasma process to improve coating adhesion</td>
<td>Increases the adhesion of coatings on machine components by modifying the surface properties through plasma treatment.</td>
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<td>6031334</td>
<td>6/30/99</td>
<td>Bock, George, et al.</td>
<td>The Boeing Company</td>
<td>Surface modifications using plasma process for improved coating adhesion</td>
<td>Improves the adhesion of coatings on machine components through plasma-based surface modification.</td>
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Patent analysis can provide great competitive insight
Levels of IP Strategy

• Defensive – “stake a claim”
• Cost Center – “reduce IP costs”
• Profit Center – “license what you can”
• Integrated – “company-wide focus”
• Visionary – “trans-company – future-oriented”
Today – here’s what I think:

• There are many paths to commercializing an invention that do not involve a patent
• Patents are not a “fixed asset” – they are a “ticket to play”
• Almost always, there is room to move around someone else’s patent
• Patents are expensive and time-consuming and of finite duration. When and how to protect IP should be carefully considered
The basics

Intellectual Property (IP) is any product or result of a mental process that is given legal protection against unauthorized use. Different types of intellectual property are protected in different ways. Properly protected, intellectual property can give a firm a strategic competitive advantage.
Different forms of IP

**Patent** – a government-granted right to exclude others from making, using, or selling an invention

**Copyright** – a legal right to prevent others from copying the original expression embodied in a creative work or any other work of authorship fixed in a tangible medium.

**Trademark** – a set of words and/or symbols that identify the source of goods and services and embody the “goodwill” of the business

**Trade Secret** – information that gives a business an advantage over others who do not have the information

**Know-how** – detailed information on how to make or do something (can be a trade secret)
Patent v. Trade Secret

• Does disclosing the invention complicate other aspects of IP?
• Is it easy to detect use of the IP in a product?
• Would “codifying” the IP increase value to the firm?
Einstein in the Boardroom

Moving Beyond Intellectual Capital to I-Stuff

Suzanne S. Harrison...Patrick H. Sullivan Sr.
University of California IP Management and Technology Licensing

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IPIRA Consists of Two Offices

Industry Alliances Office (IAO)

Office of Technology Licensing (OTL)
What We Do at IPIRA

- The IAO manages incoming intellectual property and research materials, and industry funding for research project for the 1,575 full and part time faculty at Berkeley.

- The Office of Technology Licensing manages the outgoing technology portfolio, including invention disclosures, patenting and licensing.
What Did IPIRA do Last Year?

- In FY 2011, the IAO completed 297 Research Agreements totaling just over $32.5M, not including the $35M per year that we get from the EBI
- IAO signed 263 Material Transfer agreements for research materials in 2011
- In FY 2011, the OTL signed 28 licenses and 13 options to licenses for Berkeley technologies, about half to start up companies
- In FY 2011 Faculty filed 189 invention disclosures
- Licensing revenue fluxuates between $3M and $5M a year
Some Vocabulary

- **Invention**—at UC we define an invention as something “conceived and reduced to practice.
- **Patent Acknowledgement**—the form all employees sign to acknowledge their understanding of their IP obligations to their employer.
- **Invention Disclosure**—the form submitted to the OTL that describes the invention and informs the office of any obligations to funders.
- **Provisional Patent**—is a U.S. national application for patent filed in the USPTO without a formal patent claim, or any information disclosure (prior art) statement. It lasts for 12 months and cannot be extended.
- **Patent**—intellectual property right granted by the US government to an inventor “to exclude others from making, using, offering for sale, or selling the invention throughout the United States or importing the invention into the United States” for a limited time in exchange for public disclosure of the invention when the patent is granted.
- **License**—gives permission to another to use an invention in exchange for payment.
The Patent Acknowledgement

- All UC employees sign the UC Patent Acknowledgement as a condition of employment.
- When an employee signs the Patent Acknowledgement they acknowledge their obligation to assign all inventions conceived or developed while employed by the University or during the course of using University research facilities or in connection with any use of a gift, grant or contract received by the University.
- The employee also acknowledges their obligation to promptly disclose inventions to the Office of Technology Licensing.
UC IP Management Principles

- If in the performance of your job you create an invention using University resources, the University owns it.
- Sponsors can review publications in advance of publication or presentation to identify a patentable invention they would support but do not have the right to approve them.
- Sponsors of research (the federal, state or local government, non-profits, companies) are granted a right to use research results and a first option to license patentable technologies.
- Sponsors pay the patent costs, the University will not file a patent application without a sponsor to fund it.
- The University manages the patent process with an outside patent firm.
- Our primary goals are to protect academic freedom and make the knowledge obtained through research available for the public good.
Why Do Employers Own IP?

- The facilities and resources that are used to create the invention have been provided and are subsidized by the employer whether a university, for profit company or government. The employee is hired to perform a job and is paid to perform that job.
What Does it Mean to “Disclose”? 

- Under US Patent Law, an inventor has one year after disclosure of an invention to file a patent application.
- In Europe, an inventor must file a patent application before disclosure since once an invention is disclosed the right to file is lost.
- A disclosure of research results to a sponsor is not a “disclosure” since it is confidential.
- A public disclosure is a patent application, presentation, poster, article, web posting or any instance wherein your results are made available non-confidentially.
- Since Europe is around 50% of the market for most products and services, its prudent to file before disclosure.
Confidential Information

- Your confidential information—if during the course of a project you learn or invent something that you will want to publish or use in an invention disclosure, that’s your confidential information. If you are planning to file a patent application you need to be especially careful not to have your confidential information disclosed to a third party. If the information is disclosed, you lose your right to file for a patent.

- A collaborator or sponsor may provide you with confidential information or trade secrets and you are bound to keep that information confidential and may not include it in a publication.

- Your results using a third party’s confidential information are yours and you can discuss your results but not the specific information from the company.