## **Technology Transfer for Researchers**

**Sponsored Research IP Regimes** 



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### **Outline**

- IP Primer
- Sponsored Research
  - Some suggestions for negotiating positions



## **Intellectual Property – Outline**

- Need a rough understanding of IP regimes to understand where opportunities are
- Different rules for patents and copyrights



## **IP Regimes**

- Copyright
- Patents
- Trade-marks
- Trade secrets
- Others
  - Plant Breeders Rights
  - Industrial Designs



## **Copyrights**

- The 'deal'
  - Protects an Original Expression
  - The author should direct the use



## Copyright - Subject Matter



- Current Challenges are the internet and multi-media
- In academe developing areas are:
  - Alternative delivery methods
  - Software



## **Copyright – Formalities**



- International conventions give some automatic protection – no need for © or a notice
- No need to register but it gives certain presumptions
- Term based on life of author plus years



## Copyright – Ownership



- Issues with teaching material
  - Distance education
  - Web sites
- The problems with temporary staff and contract workers
- Standard licence back



#### **Patents**

- The 'deal':
  - Inventor must make a full disclosure
  - In return they receive a monopoly for a fixed period of time



## Patents – Subject Matter

- Definition of Invention in Patent Act (Canada):
  - any new and useful art, process, machine, manufacture or composition of matter
- Specific exclusions from court decisions:
  - Medical methods of treatment
  - higher forms of life (Oncomouse)
  - Scientific principles
- Other rules in other countries



#### **Patents – Formalities**

- Patents require an application in each country
  - Application in very specialized language
- Examination of application
- Term is 20 years from application
- Many countries require maintenance fees



## Patents – Types of Applications

- Formal application in each country
- Some countries have informal application systems
  - US Provisional
- International Applications PCT
  - Still need to be 'converted' into national applications



#### Patents - Costs

- Filing Fees are about US\$500 per country
- Big costs are agent's fees
- Total worldwide lifetime cost can easily be US\$500,000!



## Patents - Ownership



- Who is an inventor?
- Policies may change this rule
- University challenge:
  - Have you identified all of the inventors? (Grad. Students?)
  - Will they take action if you forgot them?



## Patents – Inventorship

- No definition in Act of 'Inventor'
- US and Canadian case law is different
- In Canada:
  - Conception with 'sound prediction' of success
- Contrast brainpower and horsepower

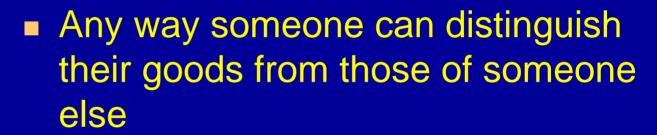


#### **Trade-marks**

- The 'deal':
  - Protects name that goods and services are sold with



## Trade-marks – Subject Matter



- Principally "word marks" and "design marks"
- Also can include "Get-up"; Colours;
  Smells



#### **Trade-marks – Formalities**



- Non-registration
  - If the national law recognizes it protection usually just in the trading area
- Registration
  - Protection is wider
- Special provision for universities



## **Trade-marks – University Situation**

- Usually a bookstore responsibility
- Use of name now being sought in TT context
- When will you allow use of your name by industry?
  - Prospectuses
  - Advisory Boards



#### **Trade secrets**

- The 'deal':
  - Don't tell; contract with others not to tell



#### **Trade secrets – Formalities**



- Non-disclosure agreements
- Confidentiality agreements
- Subject matter:
  - Just about anything
  - Examples
    - ♦ Coca-Cola recipe
    - New computer algorithms



#### **Trade secrets and Universities**



- Can we live up to our obligations?
  - Should the university sign a nondisclosure agreement?
  - What extra steps are you ready to take to safeguard information?



#### **Oddball Protections**



- Why oddball?
  - If you don't specifically need in an area you will never use them



#### Protected IP – What is it worth?



- Just because you have a patent does not mean the world will beat a path to your door!
- Valuation depends on markets
- Probably the most important aspect of TT in a university



## **Sponsored research**



- Industrial partners needed for some types of grants
- Reduce dependence on tri-council funding
- 'Marketability' generally



## **Sponsored Research and IP**

- Historically, tri-council policy was easy:
  - IP is owned and dealt with in accordance with individual university policy
- Assumption in looking at the 'system' is that all sponsorship has similar terms



## **Some Sponsors Rules**



"In the event of any inventions, discoveries or improvements which may be, or have been, covered by patent applications or patents, arising as a result of the work done under the Grant, the Foundation shall be deemed to have an interest in any patent rights covered by such patent applications or patents."



#### **More Rules**



"The university and the researcher agree that company is entitled to exploit any intellectual property resulting from the work and hereby grant to company and its affiliates (as defined by comapny from time to time) a royalty-free, fee-free, worldwide, irrevocable, non-exclusive licence to use such intellectual property"

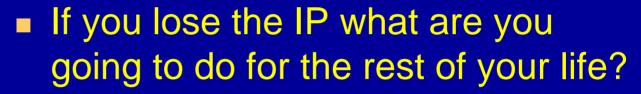


## **Analysis of foregoing rules**

- If either of two previous examples results in a possible commercial project what will happen?
- Will there be anything?
  - Situation One?
  - Situation Two?



## Why do you care?



- Don't think it won't happen!
  - McMaster case of Adenovirus vectors
- Do you want to pay for your own research tools?
- Publication hold-ups



# Our Canadian Funding Challenge

- No one funder ever provides enough for the entire project
- Should the last nickel get to call the shots?
- Alternately: if you do hit on something, will you be able to do anything?



## An example of the challenge



- CFI industrial sponsor 1
- NCE group of industrial members
- OCE another group of members
- ORDCF industrial sponsor 2
- Corporate Grant sponsor 3
- NSERC/CRD sponsors 1, and 3
- If you try and commercialize something, how will you do it?



#### **Indirect Costs**



- Let's step back and ask ourselves a simple question:
  - Should we subsidize any research sponsors?
  - Alternately posed: are you ready to forego an annual raise because we didn't charge a sponsor the true costs of their research?
- cf. US situation:
  - They receive indirect costs on everything and government prevents cross-subsidies



#### How to handle indirect costs



- Don't talk price of line items (cf. buying a car)
- Who says you need to provide all sponsors with detailed budgets?
- Management tactic:
  - Leave a surplus
  - Create a miscellaneous funds account



## In a perfect world

- All money would be properly burdened with all costs
- Reality:
  - Only those who price properly really enjoy financial freedom
  - We are in a race to the bottom undercutting each other



## **Suggestions for Success**



- What IP rights do you really need to give sponsors?
- On indirect costs
  - How can you internally hold the line on whatever you decide?
- Collectively
  - How can universities not undercut each other?





### **Conclusion**

Questions?

