What are Intellectual Assets?

Intellectual Assets are pieces of knowledge with value such as know how, relationships and stock tips.
• **Intellectual property (IP) rights** are the ways in which a government gives power to a person – the IP holder – to control how certain bits of knowledge will be used.

• IP rights include patents, copyrights and trade-marks
Why care about Intellectual Property Rights?
An appropriate understanding of IP rights can help the university attain its mission

- Education and research
- Knowledge generation, dissemination, and transfer/translation
- Return to society for social investment in the university
Respond to Pressures

• Obtaining funding
  – Respond to the desire of private funders to acquire IP rights over research they support
  – Respond to granting agencies that call for commercialization (e.g. Genome Canada) or that limit who can hold IP rights (e.g. Natural Science and Engineering Research Council)
IP and Dissemination

• Positive effects of some IP rights
  – Provides a single holder of rights so that downstream development can take place
  – Maintains the university’s ability to participate in future innovation
  – Provides the framework for open access and humanitarian uses

• Negative effects of some IP rights
  – Costly to the university and to downstream users
  – Provides an incentive to deviate from university mission by concentrating on revenue rather than dissemination
  – IP often not necessary to develop downstream applications
  – IP may block downstream innovation
• Positive effects of some IP rights
  – Provides a mechanism to transfer knowledge to partners
  – Provides an incentive to retain researchers
  – Provides a tangible way to demonstrate social return

• Negative effects of some IP rights
  – Increases the burden on downstream companies, making it more expensive to do development
  – Undermines transparency and public mission of the university by fostering secrecy rather than openness
  – Establishes perverse incentives for universities and technology transfer offices
Facts about Technology Transfer at McGill

• Must disclose invention to the Office of Technology Transfer only if intend to commercialize

• First stage
  • initial due diligence by the Office of Technology Transfer
  • obligatory disclosure to MSBi / iNovia (right of 1st refusal, 90-day obligation)
  • decision whether or not the Office of Technology Transfer will pursue commercialization

• Next stages, if invention retained by the Office of Technology Transfer for commercialization
  • Full assignment of IP rights to McGill
  • File for protection, as determined by the Office of Technology Transfer
  • Promote the technology and seek licensees
  • Seek further financing from public and private sources
  • Create spin-off company, if warranted
  • Negotiate license agreement
Some Indicators of Technology Transfer Performance

<table>
<thead>
<tr>
<th>McGill Quick Facts</th>
<th>2007</th>
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</thead>
<tbody>
<tr>
<td>Research Funding</td>
<td>$376M</td>
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<tr>
<td>Principal Investigators</td>
<td>1,600</td>
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<tr>
<td>Reports of Invention</td>
<td>114</td>
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<tr>
<td>Patents Filed</td>
<td>118</td>
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<tr>
<td>Issued Patents</td>
<td>30</td>
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<tr>
<td>Licenses &amp; Options</td>
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<tr>
<td>Active Licenses (revenue)</td>
<td>156 ($1.5M)</td>
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<tr>
<td>Spin-offs created in 2007</td>
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<tr>
<td>Active Spin-offs</td>
<td>38</td>
</tr>
<tr>
<td>Research Contracts signed (value)</td>
<td>171 ($14.1M)</td>
</tr>
</tbody>
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The Range

- 2 spectra:
  - What intellectual assets you deal with
  - Why you deal with those assets

- Policies range from conservative to ‘pushing the boundaries’
Measuring Success
The Problem with Innovation Metrics

- Policy demands to encourage innovation AND access to the products of innovation.

- Depends on proper tools to measure the social benefits arising from research.
Linear View of Innovation
Innovation is Complex

- Innovation is circular and iterative
- Diffused in space and time
- Innovation depends on networks of public and private sector actors
We Measure What is Tangible

- % disclosures protected
- # patents filed
- % of disclosures licensed
- # licenses / M$ in research grant income (excluding infrastructure grants)
- Royalties and other license income
- # of viable spin-offs
- # of Material Transfer Agreements, Collaborative R&D grants, sponsored research contracts [any research activity requiring a Research Agreement]
What We Don’t Measure

• Is what we measure a good indication of what we care about?
• Other measures require investments in data gathering
  – Graduate students trained and where they go
  – Collaborations (measured through joint publications)
Key Questions for Discussion Period

1) What are the most important intellectual assets?

2) What role should IP rights play in promoting and advancing these assets?

3) Who should own IP rights? Who should have responsibility for protecting and managing IP rights?