University of Alberta Research Funding Fair
November 22, 2018

Presented by TEC Edmonton
TEC Edmonton is a business accelerator for emerging technology companies and a joint venture between:

UNIVERSITY OF ALBERTA

EDMONTON ECONOMIC DEVELOPMENT
We Serve:

- Innovation Community
- Researchers
- Early-Stage Technology Companies

Entrepreneurs
Our Promise:

To Our Clients: Our extensive expertise and network will help you advance your business or technology.

To Our People: We provide diverse experience and you will make a difference to innovators.

To Our Innovation Service Partners: We use your strengths to create better client outcomes.

To Our Funders: Together with you, we deliver the best outcomes for the best value.
What we do.

Our 60 people deliver services in 4 areas:

- Business Development
- Entrepreneur Development
- Technology Management
- Funding & Financing
TEC Edmonton Technology Management Group

- Responsible for intellectual property and commercialization activities and agreements for the University of Alberta
- Collaborate extensively with other UofA offices, especially RSO
- 12 individuals with diverse scientific backgrounds
- Part of the VPR portfolio
Agreements that involve IP Rights

- Research contracts & grants
- Data sharing / data transfer agreements
- Material transfer / clinical sample transfer agreements
Agreements that involve IP Rights

- Confidential disclosure / nondisclosure agreements
- Licenses
IP concerns in funding agreements

- Grants - tri-council vs. private foundations
- Industry contracts
- Service Agreements - use with extreme caution!
- Associated agreements - materials & information
Why should society protect IP?

“By striking the right balance between the interests of innovators and the wider public interest, the IP system aims to foster an environment in which creativity and innovation can flourish.”

The World Intellectual Property Office
Source: wipo.int/about-ip
Why should a university protect IP?

Universities do not have $ or expertise to fully develop and bring products to market.

Companies & investors will not invest unless IP protection is in place to ensure return on investment.

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<tr>
<th>Stage</th>
<th>Duration</th>
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<tr>
<td>Basic Science Research</td>
<td>1 to 3 years (avg. 18 months)</td>
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<td>Target and lead development</td>
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<tr>
<td>Pre-Clinical Testing</td>
<td>2 to 10 years (avg. 5 years)</td>
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<td>Clinical Trials</td>
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<td>Gov’t Approval</td>
<td>2 months to 7 years (avg. 24 months)</td>
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Alberta policy & patent statistics

- Inventor-owned subject to contract obligations

- ~85-90% of inventors choose to give ownership of IP to the U of A and commercialize through TEC Edmonton

- TEC: Over 1200 inventions assessed, more than 650 patents granted

- 2015: U of A made top 100 global academic institutions for issued US patents (87th) according to National Academy of Inventors
Intellectual Property = creations of the mind that have value

- Inventions
- Literary and Artistic Works
- Designs
- Symbols, Names and Images Used in Commerce
Types of IP protection

Patents:
Protect the idea behind a novel, inventive product or process
Types of IP protection

Copyright:
Protects the expression of the idea but not the idea itself
Types of IP protection

**Trademarks:**
Name or Symbol

e.g. Gatorade
University of Florida
Types of IP protection

Trade Secrets:
Confidential information

e.g. ingredients of Coca Cola
Types of IP protection

Plant Breeders’ Rights (Canada):
Exclusive control of variety (“patent for plants”)

20-25 years
Definition of “patent”

- Right to exclude others from making or selling your invention for 20 years from filing date

- A negative right!

- Doesn’t guarantee freedom to practice - do others hold rights to components of your invention or dominating rights in the field?

- Jurisdictional
Patent criteria

- Novelty
- Non-obviousness
- Usefulness
- Written description & enablement
Patent criteria

Patentable subject matter - “everything under the sun invented by man”?

Patent law evolves based on court decisions:

- Myriad Genetics
- Higher Life Forms
- Software / Artificial Intelligence
Patent Cooperation Treaty Application Procedure

- Local filing application
- PCT filing
- International search report
- Demand for International Preliminary Examination
- Preliminary Examination And Patentability Report
- National Phase
Patent process

- Cost of an issued US patent ~$50,000
- Countries that require translation cost ~2x
- No guarantee a patent will be granted
Timing is everything!

Talk to TEC... before publishing or presenting any idea that may have commercial potential

Even a poster, abstract, or thesis can affect patent rights

Watch out for advance online publication

It is never too early to ask questions!
A62B33/00
Devices for allowing seemingly-dead persons to escape or draw attention; Breathing apparatus for accidentally buried persons
Example patent

1. a portable alarm system for coffins, comprising: a hollow shaft having an upper end and a lower end;
   a wireless transmitter for transmitting a signal disposed at the upper end of the hollow shaft;
   a lamp box disposed at the lower end of the hollow shaft;
   a lamp disposed in the lamp box, the lamp being extendable therefrom;
   a plurality of wires connected to the lamp and extending through the hollow shaft;
   a reel mechanism positioned in the hollow shaft and connected to the plurality of wires, whereby the plurality of wires may alternately be rolled up and extended through the hollow shaft and the lamp may alternately be extended from and retracted into the lamp box;
   a motor for operating the reel mechanism; and
   a wireless receiver configured for receiving the signal transmitted by the wireless transmitter.
Copyright ©

- Exclusive legal right to produce, reproduce, publish or perform an original literary, artistic, dramatic or musical work...including the written code behind software

- The creator is usually the copyright owner.

- Employers may have copyright in works created by employees unless there is an agreement in place stating otherwise.

- U of A copyright regulations vest © in authors in most cases
Copyright ©

An original work is automatically protected by copyright the moment you create it.

Lasts until 50 years after author’s death.

Registration with the Canadian Intellectual Property Office gives a certificate that can be used as legal evidence of ownership.
Trademark ™ ®

Letters, words, logos, product and service names, slogans, distinguishing guise, etc. that identify your product or business

Can be protected without registration using ™

Can be registered for additional protection ®
Trademark ™ ®

- Registration is valid for 15 years and can be renewed perpetually
- Must be policed and enforced to be valid!
- Genericized trademarks
Spinoff companies

Based significantly on U of A technology

Founded by U of A staff &/or students

TEC provides mentoring, business planning, market research, regulatory, corporate structure.....and more
Talk to TEC Edmonton’s TM group for:

- Patent, Trademark, & Copyright Evaluation
- IP Strategy
- Licensing & Commercialization
Learn more

Canadian Intellectual Property Office: www.cipo.gc.ca

Case studies: www.cipo.ic.gc.ca/casestudies

US PTO: www.uspto.gov
Thank you.