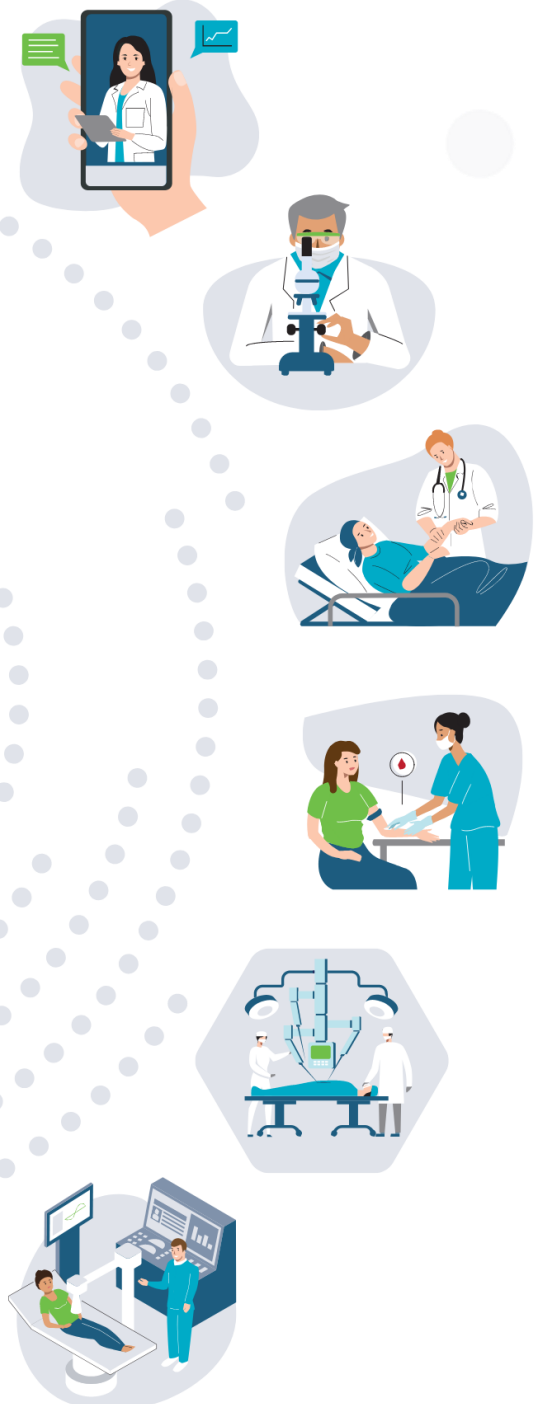


Commercialization, Intellectual Property & Industry Engagement



The **Nova Scotia Health Innovation Hub** is delivering better healthcare, faster – by accelerating clinical trials, test and trying new technology, and launching market-ready solutions.

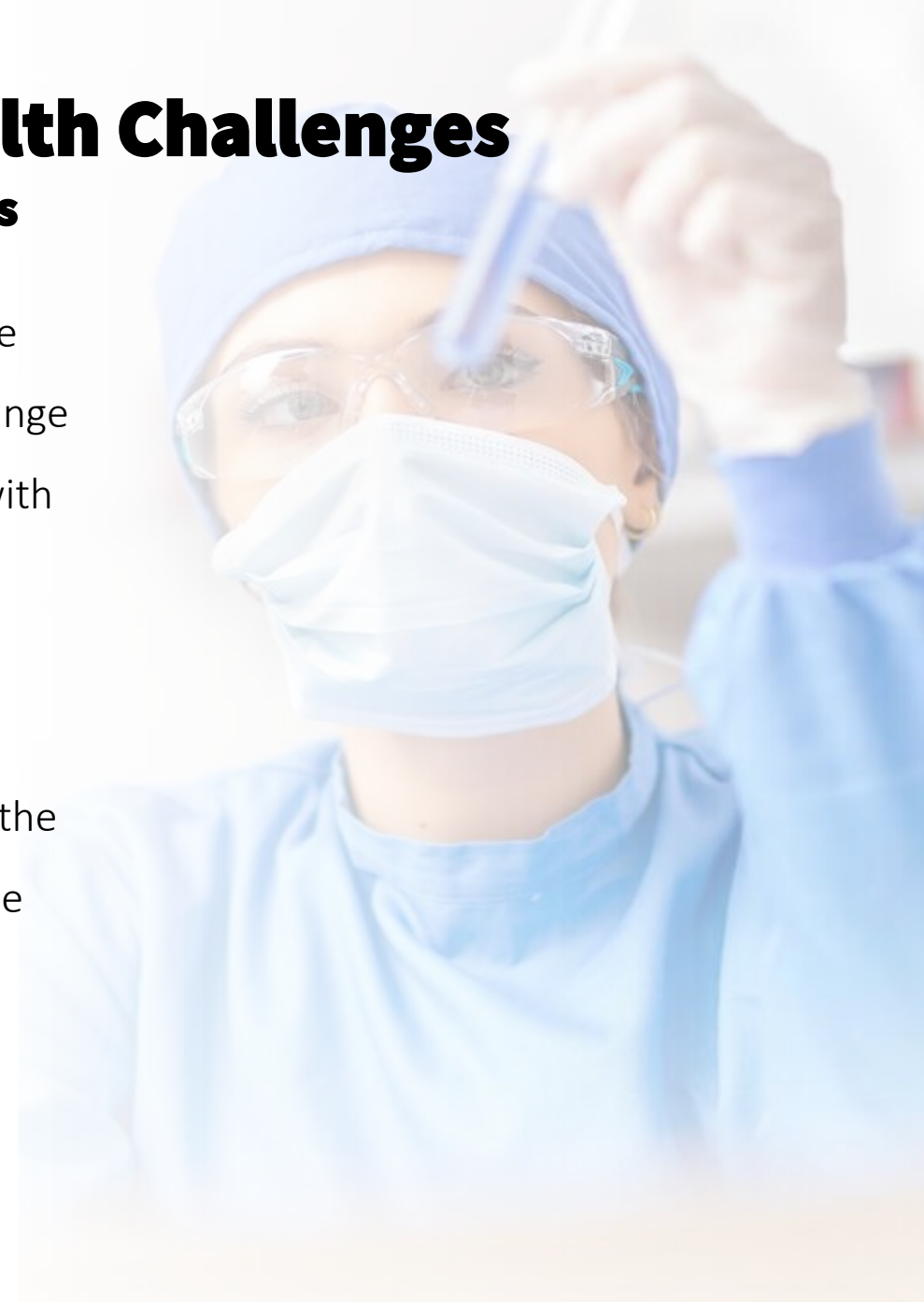
We bring together innovators, researchers and industry partners – through support, space and networks – **in an ideal place to transform care.**

Addressing Nova Scotia's Biggest Health Challenges

Accelerating transformation, leveraging strong partnerships

Formed in 2020, the Nova Scotia Health Innovation Hub is transforming the future of healthcare by challenging norms and readying the system for change through our innovative mindset, infrastructure, and approaches coupled with best practices and scientific evidence.

Aligning ecosystem partners, including industry, clinicians, government, academia, foundations, patients, and families, with the goal of addressing the biggest health challenges facing Nova Scotians and ultimately becoming the global leader in health innovation.



“Nova Scotia Health's Innovation Hub is proud to provide the kind of adaptable, agile, and creative space for researchers, clinical teams, partners, and investors that helps us capitalize on solutions brought forward by the brightest minds.”

Dr. Gail Tomblin Murphy | PhD, RN, FAAN, FCAN, FCAHS
VP Research, Innovation & Discovery, and
Innovation Partnerships



Industry Engagement & Commercialization Expertise



Margaret Palmeter

**Senior Director, Innovation,
Business Development,
Partnership & Commercialization**

- 10 years commercializing academic research and industry-academic partnerships.
- Founding Director of the Emera ideaHUB at Dalhousie University.



Dr. Eric Fisher, PhD

Manager, Business Development

- 14 years in the life sciences commercialization space.
- PhD turned entrepreneur, including founding 2 companies.



Yevhenii Borodin, PhD

Manager, Business Development

- 10 years in business development and policy analysis.
- PhD in public administration with an international startup experience.

Commercialization & Intellectual Property

Experts in the commercialization of solutions developed by Nova Scotia Health inventors to drive economic returns locally and patient outcomes globally

The Innovation Team supports the commercialization of inventions developed within Nova Scotia Health through the engagement of partners, contract negotiation, patents, and by initiating connections with commercialization networks.

We provide the skills, experience and resources to initiate a path to commercialization and foster an entrepreneurial environment at Nova Scotia Health.



Leveraging a portfolio of intellectual property assets through **tech transfer expertise**



Reducing financial barriers for innovators through the **Patent and Legal Fund**



Funding early ideas with tremendous potential to impact patients through the **Innovation Catalyst Fund**

Ideation to Commercialization



Innovation Ecosystem

Nova Scotia is home to a vibrant innovation ecosystem



Progress through Partnerships



varian
A Siemens Healthineers Company

sobeys

NovaResp
Respiratory AI

  | MEDAVIE

IBM

 Microsoft

Medtronic

 thinkresearch

 MIMOSA

Virtual **Hallway** |

 mindsea

 RingRescue



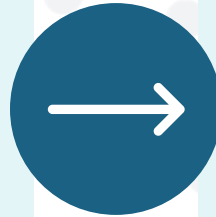
 **accenture**

QEH
HEALTH SCIENCES CENTRE
FOUNDATION

Innovation Catalyst Fund

Accelerating innovative solutions

The objective of the Innovation Catalyst Fund (ICF) is to provide financial support to the earliest of ideas that have the potential to transform into globally applicable solutions that improve the lives of patients. Taking a nimble and responsive approach, this strategic funding opportunity is tailored to meet the unique needs of innovators embedded throughout Nova Scotia Health.



ICF is a program that helps innovators associated with Nova Scotia Health design, develop, adopt and accelerate innovations that will impact patient outcomes or improve care.

Patent Fund

Creating long-term value through sustainable partnerships

The new Patent Fund has been recently established to financially support and protect the intellectual property owned by Nova Scotia Health. The Innovation team has extensive expertise in working with external patent counsel to obtain robust patent protection on commercially relevant intellectual property.

The Innovation team will also lead business development activities to partner this intellectual property with an already established company or create a local spin-off company that will commercialize the intellectual property.



The [Strategic Partnership Office](#) supports an entrepreneurial environment by leveraging partnerships, both internal and external to the organization, to maximize research and innovation and promote the delivery of best-in-class health care for Nova Scotians.

SPO@nshealth.ca

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Early Stage Commercialization Fund (ESCF)



Invest Nova Scotia early stage venture capital organization. The Early Stage Commercialization Fund (ESCF) helps move university, college and university-affiliated hospital research to market.



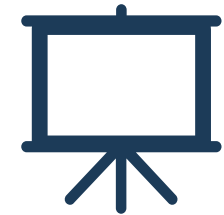
Up to \$50,000 in funding is available per project.



Funds can be used to assess market potential, develop go-to-market strategies, perform strategic planning, create/update business plans, assist with intellectual property protection strategies, finish proof-of-concept development, build prototypes and leverage other funds.



Applications are submitted directly Invest Nova Scotia. The Health Innovation Hub team can support applications and is responsible for administering funds at NS Health.



The Early Stage Commercialization Fund (ESCF) is now closed . The new round will be later this year.

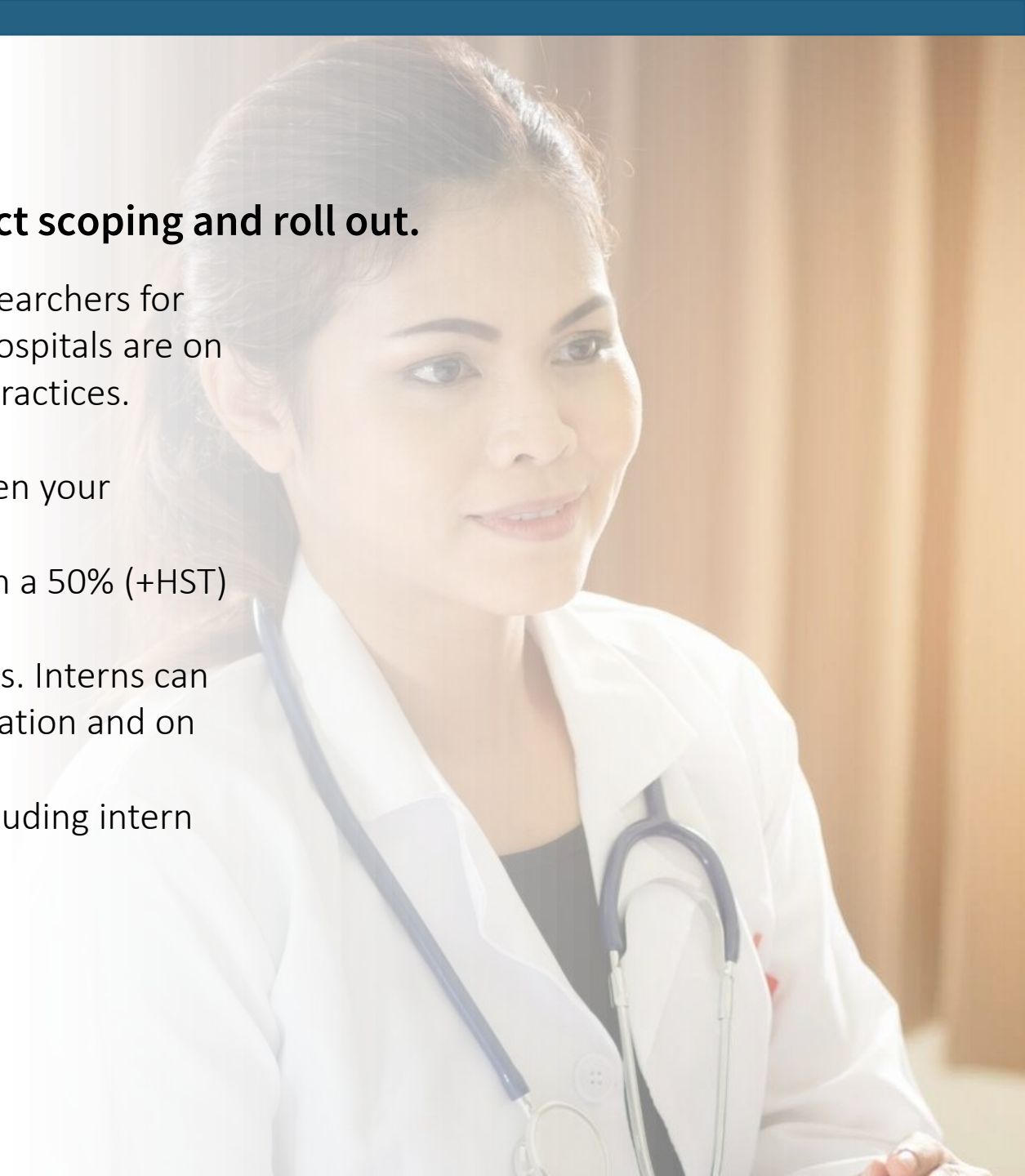


Accelerate

The Health Innovation Hub team can support project scoping and roll out.

Mitacs connects hospitals of all sizes with postsecondary researchers for innovative projects — from AI to HR and more — ensuring hospitals are on the front line of not just the best medicine, but all the best practices.

- Leverage student researchers (interns) as a bridge between your projects and partners at post-secondary Institutions
- Extend your research budget & optimize your project with a 50% (+HST) contribution.
- Projects are supported in 4-month units with no size limits. Interns can work concurrently or consecutively onsite at your organization and on their university campus.
- \$7,500 (+HST) per unit yields \$15,000 for the project (including intern stipend)



Springboard

Funded by ISED, Springboard focuses on enhancing IP capacity for startups. They provide direct support, training, and financial assistance for IP strategies and filings, as well as offering training resources and one-on-one sessions for IP development.

Springboard Atlantic Inc. aims to enhance Intellectual Property (IP) understanding and capacity in the Atlantic region through its partnership.



Intellectual Property

Intellectual Property (IP) refers to creations of the mind, such as inventions; literary and artistic works; designs; and symbols, names and images used in commerce (www.wipo.int).

IP protection provides specific rights that result from intellectual activity in the industrial, scientific, literary and artistic fields.

Several mechanisms exist to protect IP:

- Copyright
- Trademarks
- Trade Secrets
- Industrial Design
- Patents

Intellectual Property at Nova Scotia Health & Dalhousie

The NSHealth IP Policy is designed for research clinicians to own their own Intellectual Property (IP). Staff IP is owned by the institution.

The Collective faculty agreement at Dalhousie states that professors own their own IP at Dalhousie.

IP can be assigned to NSHealth for a commercialization partnership with the NSHealth Innovation Hub and/or to meet the requirements of some funding sources.

Some sources of research funding (both grant and industry) require grants of rights with respect to IP. We will work to assist with those cases.

Copyright ©

Protection for original artistic works (literary works include software, dramatic works, musical works and artistic works).

Right to product or reproduce the work in question or to permit anyone else to do so for life +50 years (in Canada). Rights can be assigned or licensed.

Moral Rights -- an author of a work has

- Integrity right
- Attribution right
- Anonymity right

Can be waived in whole or in part but not assigned.



Trademarks

A Trademark is a combination of letters, words, symbols, and/or designs that distinguished your goods and services from those of others.

Slogans, names of products, distinctive packages or unique product shapes are all examples of features that are eligible for registration as trademarks.

National Protection for a 15 year term (renewable) if registered. Mark must be used within the last 3 years.



Trade Secrets

Any confidential information used in a business that provides a competitive advantage and can be kept secret. This can include technical or business information. It can be a method, technique, process, research & analysis data, formula, device, etc.

Trade Secret Protection

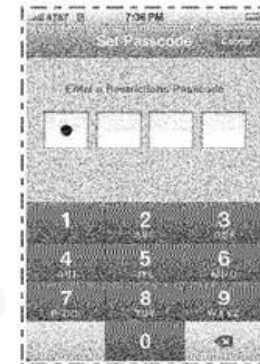
- Trade secrets are protected by confidentiality and license agreements
- Protection can last forever as long as confidentiality is maintained
- If the trade secret is disclosed, protection is lost



Industrial Designs

An Industrial Design registration protects the visual appearance of a product - its shape configuration, pattern, ornamentation or any combination of these features.

- Can include electronic user interface
- 10 year protection only if registered National Protection
- Can be used in conjunction with Trademarks and Patents



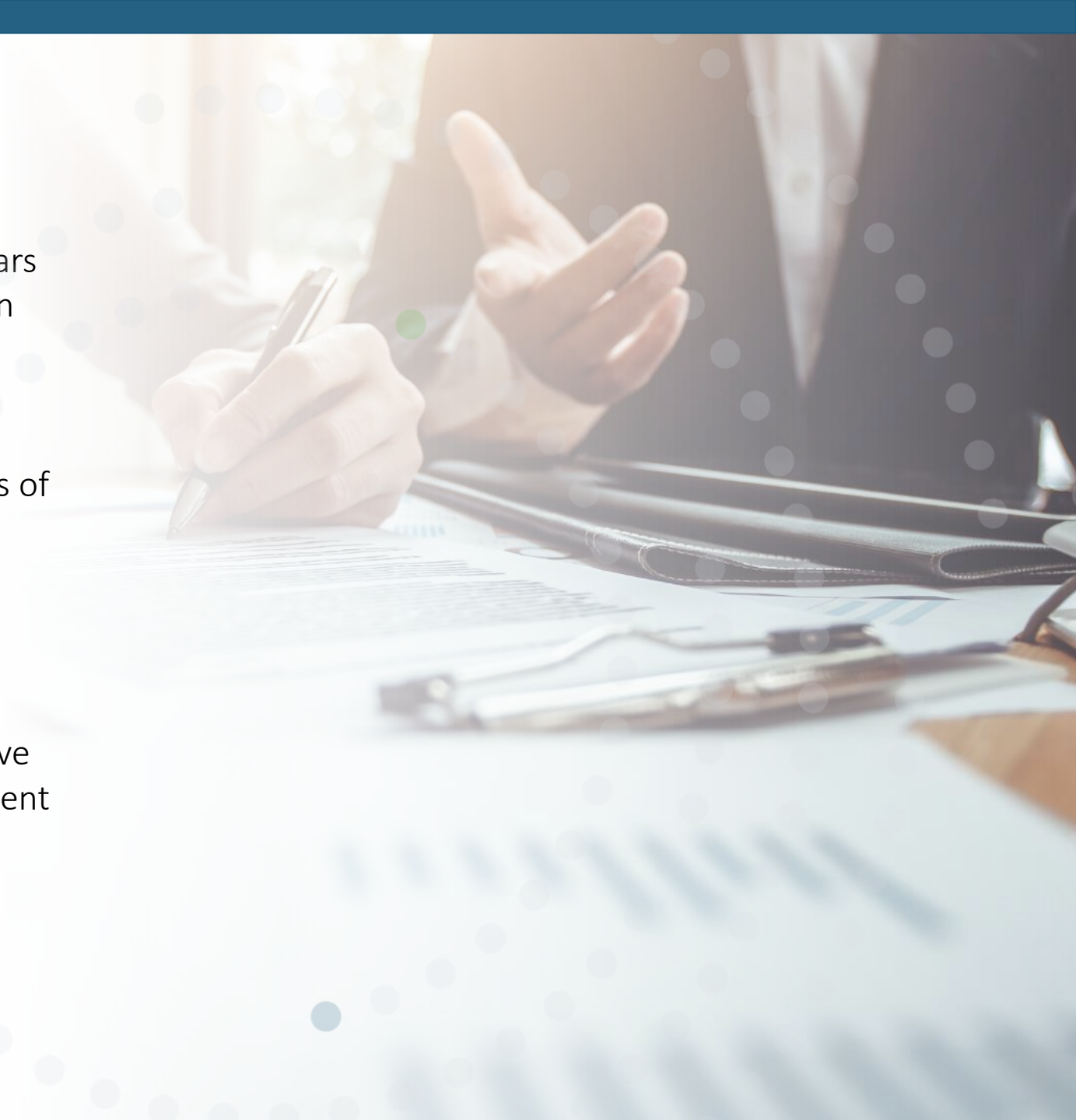
Patents

Government-issued legal right to prevent others from making, using, or selling your invention for up to 20 years in the country or region where your patent is granted in exchange for full public disclosure.

Patents can protect products, processes, machines, chemical compositions, and improvements or new uses of any of these.

**Software is considered a literary work and cannot generally be protected with a patent*

- Prevent others from violating the patentee's exclusive right and/or forced them to pay damages to the patent owner.
- May be assigned, licensed, and given as security.
- National Protection



Patentability

1. Patentable Subject:

- Any new and useful art, process, machine, manufacture or composition of matter, or improvement thereof.

2. Novel:

- The whole of subject matter defined by a claim cannot be disclosed completely in a single prior art reference publicly available anywhere in the world.

3. Non-Obvious:

- Must not be obvious in light of what was done before to someone unimaginative but skilled in the art.

4. Useful:

- Operable: must work for intended purpose and must have promised advantages
- Controllable and reproducible: the desired result must be inevitable
- Utility must be demonstrated or soundly predicted.



Disclosure

Public disclosure includes anything written, conversations, slides, lectures, or seminars which are open to the public.

Any written or oral disclosure, even to a single individual (except employees at your own institution) counts as public disclosure.

A disclosure must be "enabling", that is, it must give someone of "ordinary skill in the art" knowledge of how to duplicate the invention.

12-month grace period of disclosure by inventor: US, CA, some others

Inventorship

Inventorship ≠ Authorship. Inventorship has a strict legal meaning under the laws and regulation of the patent and system of each country.

A patent may be invalidated on the basis that the named inventors failed to name qualified inventors or included someone who was not a true inventor (must be willful in Canada).

Person who contributed an essential element of the invention that resulted in the development of the invention as it is disclosed.

NOT

- Normal assistance or supervision
- Testing or laboratory work
- Persons who follow the inventor's lead in reducing the invention to practice

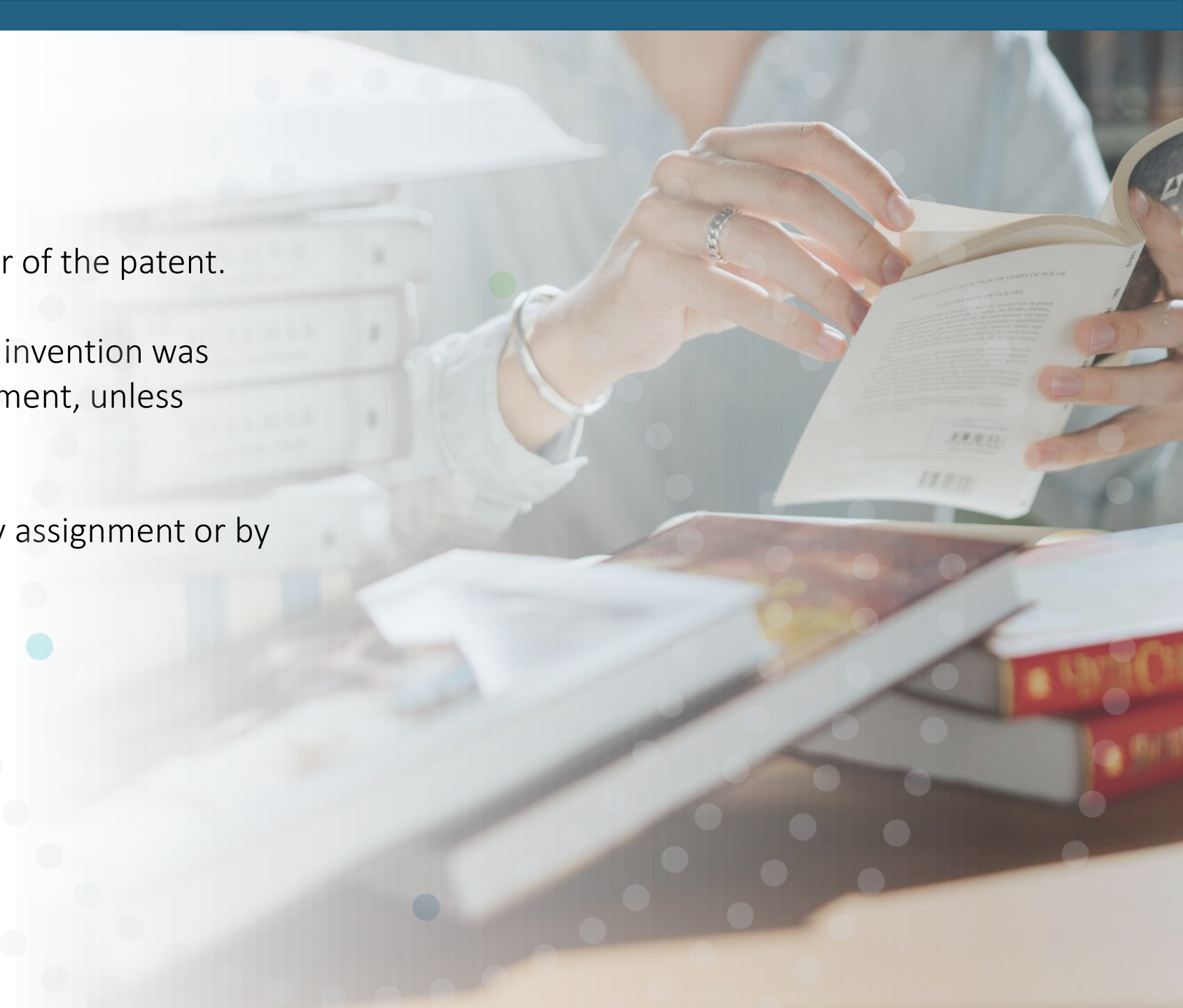
Ownership

Inventor is presumptive first owner of the patent.

Employer is the first owner where invention was made in normal course of employment, unless agreement otherwise.

Patent rights can be transferred by assignment or by license

- Exclusive or non-exclusive
- Partial or full



Stages of Patenting

Invention

The invention is created, keep it confidential, and assess that it meets patentability criteria

Prior Art Search

Keep it confidential – Conduct an IP survey and assess freedom to operate and claim space.

Patent Application

Once the application is ready, an international application is filed with CIPO or WIPO, The application receives a number and a filing date (this date is very important). From this day onwards, the applicant is free to publish the invention without affecting the application.

PCT - Patent Cooperation Treaty

On the anniversary of the patent application (12 months from filing) a full patent must be filed. This application is public.

National Phase

18 months after PCT you must identify which jurisdictions in which you want to pursue patent protection.

Patent Examination

Patent Issued

Patent Maintenance



Resources

Google Patents: <https://patents.google.com/>

CIPO – Canadian Intellectual Property Database: www.cipo.ic.gc.ca/patents

USPTO – United States Patent & Trademark Office: <https://www.uspto.gov/>

WIPO – World Intellectual Property Organization: www.wipo.int/



[Feedback Survey](#)



www.nshealth.ca/research-innovation-discovery

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