# Innovation & New Ventures at Northwestern

Northwestern

## Today's Goals

- 1. Who are we & what do we do at Northwestern?
- 2. What does the invention disclosure process look like?
- 3. What should research administrators know about INVO?
- 4. How can you learn more about what we do at INVO? N



## INVO | Our Mission

To catalyze the translation of Northwestern innovations to benefit the public

- Become a source of impactful innovations and products that improve lives
- Become a magnet for entrepreneurial talent



### **INVO Staff**

#### INVENTION MANAGEMENT TEAM



Alicia Löffler, PhD **Executive Director** 



Andrea Minoque, MPA Finance & Administration



John Haugen, JD Assoc. General Counsel



Michael Moore, PhD Life Sciences



Arjan Quist, PhD Physical Sciences, Engineering



Dimitra Georganopoulou, PhD Life Sciences. Medical Devices



Copyright



Life Sciences,



Nicole Janovick, JD, PhD Gwendolyn Humphreys, PhD Life Sciences. Research Tools



Wenting Luo, PhD Life Sciences



Iwona Maciagiewicz, PhD Life Sciences



Sarah Kamper, PhD Chemistry, Materials Science



Anne-Isabelle Henry, PhD Chemistry, Materials Science



Isabella Ortiz, JD Engineering, Computer Science

#### **NEW VENTURES TEAM**



Lisa Dhar, PhD New Business Ventures for Engineering



Sonia Kim, PhD Marketing & Educational Programs

### INVO | Our Activities

#### Technology Transfer

IP Support (Consultation, Filing, Office Actions, etc.) Technology Evaluations Marketing Efforts

# Innovation & Entrepreneurship Programming

Workshops
Seminars
Mentoring
Internships
Coordination with Classes,
etc.

#### **Space**

The Garage
Faculty Hub
University Memberships
(mHub, 1871 & MATTER)

#### **Funds**

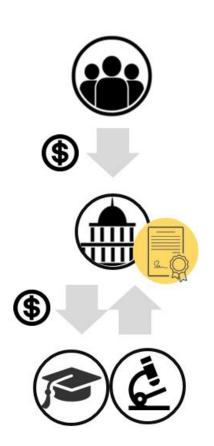
N.XT Fund (\$10M) NuSeeds Fund (\$4M)

### Technology Transfer

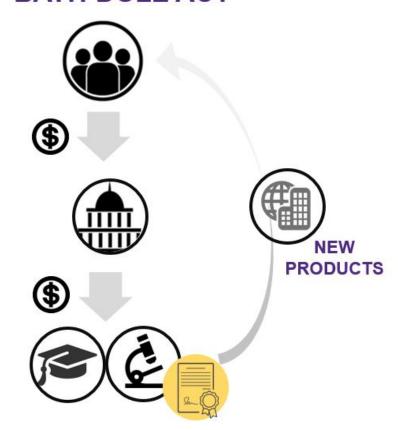
Technology transfer activities focus on moving technology from the University to the public domain

BAYH-DOLE ACT of 1980

# Change in IP Ownership



#### **BAYH-DOLE ACT**



# INVO | FY18 Stats

INVENTIONS DISCLOSED

**210** 460 PATENT APPLICATIONS

**171** AGREEMENTS EXECUTED

MILLION IN LICENSING REVENUES, DOLLARS

**170** PATENTS ISSUED

**STARTUPS** 

## INVO | Areas of Innovation





Northwestern
WEINBERG COLLEGE
OF ARTS & SCIENCES

Northwestern MEDILL

life sciences

physical sciences

therapeutics

engineering

manufacturing

research tools

advanced materials

nanotechnology

biotechnology

computer science

medical devices

chemistry

electronics

### The Invention Disclosure

An **INVENTION DISCLOSURE** is Northwestern's record of an invention, the inventors involved, sponsorships, & other public disclosures and publications.

Inventors should plan to submit their invention disclosure <u>3-4 weeks</u> prior to a public disclosure

- Posters/abstracts/proceedings
- Journal articles, book chapters
- Conference presentations
- Some departmental seminars & thesis defenses
- Some grant proposals

DISCLOSING AN INVENTION TO INVO

<u>DOES NOT</u> PROTECT AN INVENTION.

A PATENT APPLICATION MUST BE SUBMITTED TO THE USPTO

### Reasons to Disclose to INVO

#### 1. PROTECT COMMERCIAL POTENTIAL

INVO can provide feedback on how to proceed in the commercialization process.

#### 2. PROTECT INTELLECTUAL PROPERTY

If IP protection is appropriate, INVO can maximize IP protection if invention is disclosed in advance of public disclosure.

### 3. FULFILL NU'S RESPONSIBILITY TO REPORT TO RESEARCH SPONSORS

INVO must report all inventions to respective public and private research sponsors.

#### 4. IMPROVE MARKETING WITH INDUSTRY PARTNERS

INVO can help provide industry with insight into available technologies and the research that is taking place at the university.

### Important Take-Homes



Complete the disclosure as thoroughly as possible.



Be available to meet with IM to discuss your technology.



Respond to IM as quickly as possible as they may have time-sensitive questions.



Send relevant updates to IM, such as future public disclosures or technology development.

# Commercializing Technologies

- 1. Explore Additional Sponsored Research Opportunities INVO coordinates with other offices to review IP stipulations. Ideally, several weeks are needed to review these agreements.
- N 2. License Technology to Existing Company INVO helps identify and negotiate license agreements. If there's interest, IMs contact faculty to discuss.
- N 3. Create University Startup INVO has Startup Guide online.

### Northwestern Licensees (Past & Present)





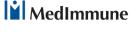


















Imtech









Thermo Fisher

SCIENTIFIC















mc10°

















novo nordisk







# Our Startup Playground

**Diagnostic Fingerprinting** Big Data **Gas Storage Software Encryption Nanomaterials** Tangible Haptics Machine Learning **Electricity Storage Personalized Medicine** 3D Imaging **Software Optimization** Robotics **High Performance Alloys Microfluidics** Geolocation **Medical Devices** Point of Care Diagnostics Thin Film Transistors **Artificial Intelligence Advanced Materials Surgical Devices Wearables Nanoparticles Therapeutics Biomedical 3D Printing** 3D Vision **Sound Engineering Biotechnology** Plastic Recycling **Cancer Diagnostics Nanofabrication** 

### Northwestern Startups





























































































### Recent Issues for Discussion

#### Pre-Award

Commercialization Plan or IP Provisions – Reach out to INVO/Invention Manager early

#### Disclosures – Key items

- Employee ID to identify personnel @ NU our system is linked to myHR
- Funding accuracy
  - Corrections result in costly fees to NU each one can be hundreds of \$
  - When possible, include grant Project Award Summary as an attachment to disclosure

#### Agency Requests

- If you are ever asked from an agency about reporting, please reach out to INVO early
- iEdison Reporting INVO takes care of this; Please reach out to INVO/Invention Manager if asked by agency
- Foundation/Private funding compliance INVO takes care of this; Please reach out to INVO if asked by agency

### Ways to Learn More about INVO

WEBSITE: Visit <u>www.invo.northwestern.edu</u>. For global I&E, visit

https://www.northwestern.edu/innovation/index.html

INVO NEWSLETTER: Sign up on our home page

SOCIAL MEDIA: Follow us on Twitter (@INVOatNU)

STUDENT OPPORTUNITIES: INVO Practicum Interns and N.XT Associates

### **THANK YOU**

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