#### Intellectual Property Management and Licensing - Policy Perspectives from Thailand

By

Piengpen Wongnapapan COO, Knowledge Exchange Center, King Mongkut's University of Technology Thonburi 18 June, 2019 Knowledge Exchange Model



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#### Some Points to Note

- We are all part of the complex system
- Impact is actually a team effort
- We NEED external partner to make it happen
- Universities can help by optimizing the channels
- What are the ways to get the knowledge put to use?

## Thailand R&D Spending (2017)

- Total R&D investment =155,143 million THB (\$ 4,848 Million)
- 1% of GDP.
- 20% from the government (30,000 million THB) and 80% from the private sectors.
  - 70 % goes to universities
  - 20% goes to government research institutes
  - 6% goes to state enterprises
  - 4% goes to Non-profit organizations

## What are the ways to get the knowledge put to use?

- Currently, research money flows to universities, but intellectual properties were owned by the national funding agencies or jointly owned by the funding agencies and the universities.
- Universities can have the right to manage the IP, but they need to get a permission from the funding agencies on a case-by-case basis.
- Would the U.S. Bayh-Dole Type law help?

#### What is Bayh-Dole Act?

- The Bayh-Dole Act predominantly deals with ownership of inventions made with Federal funding.
- Providing clarity of intellectual property ownership, and incentivizing the commercial development of intellectual property for economic impact.
  - Specifically, it allows companies, nonprofits, and universities to retain title to federally funded R&D inventions to facilitate their further development.
  - It gave professors and lab teams an enormous incentive to put to commercial use plans and ideas for inventions that they had long ago shelved in their minds and offices.

### Key Provisions of the U.S. Bayh-Dole Act

#### • Ownership:

• The University is entitled to retain ownership of any inventions created as a result of federal funding, unless the funding agency informs the University up front that the agency will retain title to inventions derived from the funded projects because of specifically identified "exceptional circumstances" (usually military).

#### • Obligations of Ownership:

 When a University innovator discloses the creation of an invention derived from federally funded research, the University has two months from that date to disclose that information to the appropriate federal agency. The University also must patent all inventions it elects to own and commercialize.

### Key Provisions of the Bayh-Dole Act

#### • March-In Rights

- The University must attempt to develop and commercialize the invention. If an attempt is not made, the federal government retains the right to take control of the invention.
- The government also may take control of the invention for other reasons, such as a need to alleviate health (catastrophic epidemic) or safety concerns (war), if the EXCLUSIVE Licensee cannot significantly help the government cope with the catastrophic epidemic or war This provision is referred to in the law as the government's "march-in" rights.

### Key Provisions of the Bayh-Dole Act

- Guidance and Permission of Exclusivity:
  - When granting an exclusive license, the University must ensure that the invention will be "manufactured substantially" in the United States.
- Guidance:
  - The University must share a portion of the royalties with the inventor(s).
  - Excess royalty revenue (after Inventor Distribution and out of pocket expense recovery) must support research and education on campus.

### Thailand's initiatives to emulate the U.S. Bayhdole Act

- The Cabinet acknowledged and approved the concept of the law in September 2018.
- The drafted law is now being reviewed the Council of the State of Thailand. The process has been continued for six months now. And there is a long way to go.

## The key questions before the Committee at the Council of the State:

- Many funding agencies are very capable of managing IP, why should we want to shift this duty to the universities?
- Who are the eligible funding recipients?
  - Why should we give government research funding to the private sector?
- Coverage of the law:
  - patentable inventions vs. all kind of intellectual property
  - Invention disclosure vs. innovation intake form
  - Only sciencentific research or including social science

# How can Universities help Optimizing the Knowledge Transfer?

- Universities TTOs often have limitations in terms of budgets and staffs (number of staffs and their capabilities)
- Determining which forms of intellectual property apply and how to secure legal protection for them can be complex.
  - Most institution have a patent-centric IP policy give emphasis on patent and copyright protection.
  - But Innovation is wider in scope than inventions. Most commonly created IP on campus are actually trade secret or know-how.

#### Some Policy Considerations:

- Strengthening TTOs (budget and capabilities)
- Providing sufficient translational research budget. Private sectors especially university spin-outs should be an eligible funding recipient.
- University TTO should be able to help putting research to use whether or not the outputs derive from a scientific research or social science, humanities and arts.