

University of the Philippines Los Baños
Office of the Vice-Chancellor for Research and Extension



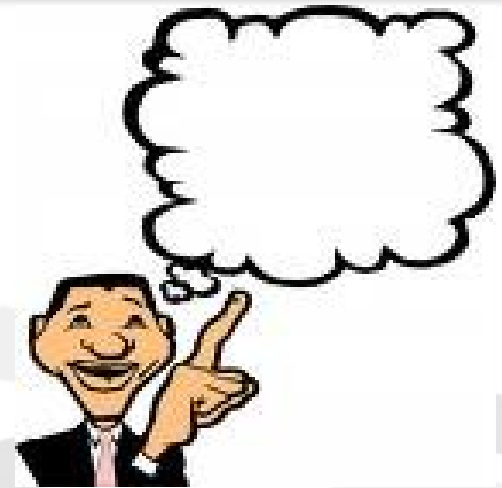
Intellectual Property in Research and Development

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Intellectual Property ... Definition

Intellectual Property (IP) – refers to any creation of human mind or intellect. It is divided into two main groups: **copyright** and **industrial property rights**



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Intellectual Property ... Main Groups

- **Copyright** - the exclusive and legally secured right to the matter and form of literary, scholarly, scientific and artistic works resulting from intellectual creation.
- **Industrial property rights** cover patents, utility models, industrial designs, trademarks, service marks and geographic indications, layout designs of integrated circuits and undisclosed information or trade secret.



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Intellectual Property ... Seven Forms

1. Copyright and Related Rights

Copyright refers to the rights of creators or authors over their literary, scientific and artistic works.

- books and other writings
- periodicals and newspapers
- lectures
- art works
- computer programs
- etc.



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Intellectual Property ... Seven Forms

2. Trademarks, Service Marks and Geographic Indications

Trademark or service mark is any visible sign or graphical symbol that distinguishes the goods or services offered or provided by a business from those produced or provided by others in the market. The mark may be a word mark or device (drawing) mark or a combination of both



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Intellectual Property ... Seven Forms

A **geographic indication** (GI) refers to a sign, mark, figure or symbol used to identify goods as originating from a particular place. Geographic Indications also denote quality, reputation or other characteristics that are attributable to the geographic origin of the goods.



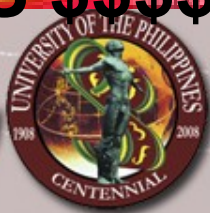
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Intellectual Property ... Seven Forms

Trademarks



How much????
US \$\$\$\$\$



Geographic Indication

Champagne,
France



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Intellectual Property ... Seven Forms

3. Industrial Design A new composition of lines or colors or any three-dimensional form, whether or not associated with lines or colors; provided that such composition or form gives a special appearance and can serve as pattern for an industrial product or handicraft.



4. Utility Models – machines, implements or tools, products or their composition, or an improvement that offer a technical solution to a problem in any field of human activity.



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Intellectual Property ... Seven Forms

5. **Lay-out Design or Topography of Integrated Circuits** – an electronic device with both active and passive components contained in a single package to perform a complete electronic function. (e.g. motherboard of a computer)
6. **Protection of Undisclosed Information** – refers to trade secrets, know-how, process information, product manufacturing specifications and business and marketing systems. (e.g. recipe of Max's Fried Chicken, Coca Cola)



Intellectual Property ... Seven Forms

7. Patents

A *patent* is a grant issued by the government for an invention. The invention may be a product or a process that offers a new technical solution to a problem or a new way of doing something. To be patentable the invention:

- must be new
- must involve an inventive step
- must be industrially applicable



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Intellectual Property ... Seven Forms

Criteria for Patentability

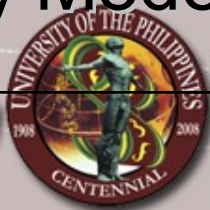
- **New** – an invention shall not be considered new if it forms part of a prior art; a prior art consists of everything which has been made available to the public anywhere in the world, before the filing date or priority date of the application claiming the invention.
- **Inventive step** – an invention involves an inventive step if, having regard to the prior art, it is not obvious to a person skilled in the art at the time of filing or priority date of the application claiming the invention.
- **Industrially applicable** – an invention that can be produced and used in any industry.



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Intellectual Property ... Lifetime

Intellectual Property	Lifetime
Copyright	Author's lifetime and 50 years after his death
Trademark	10 years and may be renewed for periods of 10 years
Utility Model	7 years from filing date



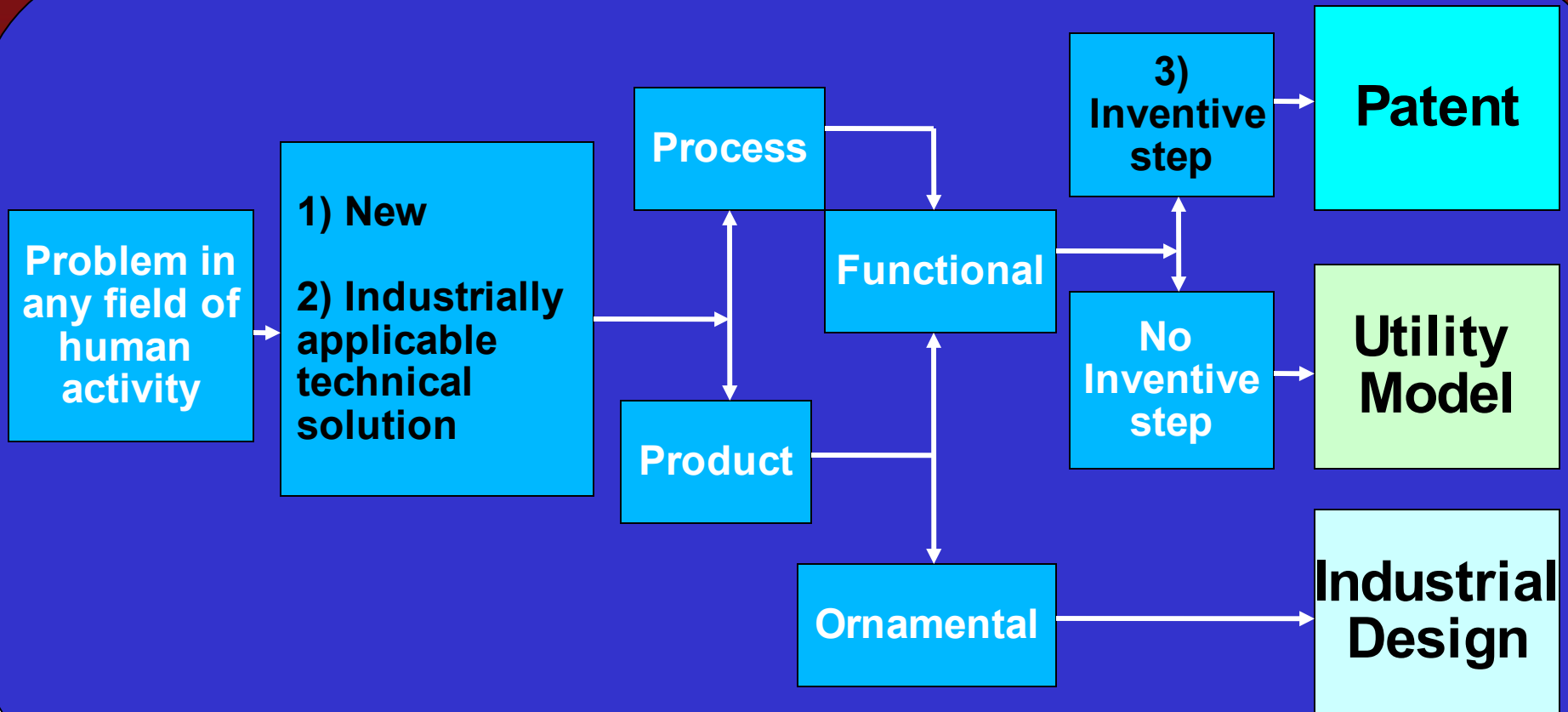
Intellectual Property ... Lifetime

Intellectual Property	Lifetime
Industrial Design	5 years from filing date and may be extended for 2 consecutive period of 5 years
Lay-out Design of Integrated Circuit	10 years from filing date



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Intellectual Property ... Patent vs. UM



Intellectual Property ... Commercialization

WHY PATENT WHEN YOU CANNOT COMMERCIALIZE?

Consider the following costs (minimum), PhP:

Patent application – 1,800

Substantive examination – 1,800

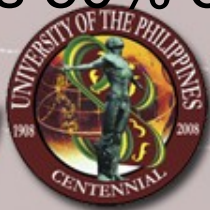
Issuance of letter patent – 500

Annual fees starting from the 5th year – 1,350

6th – 20th year – 158,900

TOTAL – 164,350

(excluding penalties for surcharges for late payments which is 50% of the required fees and 1% legal research fund)



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Salient Provisions of the Governing Principles and Policies on IPR of the UP System ... Coverage based on UPS IPR Guidelines approved by the BOR on May 30, 2003

Note: IPR Policies of the UPS currently being revised

Coverage (Article 1)

Personnel - faculty, researchers, students, research staff and visiting professors

Rights covered – all types of intellectual property rights enumerated in the IP Code



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Salient Provisions of the Governing Principles and Policies on IPR of the UP System ... Copyright

Copyright (Article 4)

General Rule – “Copyright of all works shall remain with the creator except otherwise provided in these rules”

Ownership

The University shall have exclusive ownership over institutional works. Creators shall disclose their existence and assign copyright over the work to the University.



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Salient Provisions of the Governing Principles and Policies on IPR of the UP System ... Copyright

Institutional Works

- supported by specific allocation of University funds
- created at the direction and control of the University through its officials for a specific purpose
- authorship cannot be attributed to one or a discrete number of authors despite application of rules
- authorship cannot be attributed to one or a discrete number of authors because it is a result of multiple or sequential contributions over time by multiple authors



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Salient Provisions of the Governing Principles and Policies on IPR of the UP System ... Copyright

Waiver of copyright ownership by the University in favor of the creator

The following conditions must be met:

1. Enhance the transfer of technology or improve access or works by the public in general
2. Waiver does not violate any existing contractual obligation to third parties
3. Participation of the University is acknowledged by the creator in all publications of the work, whether local or international



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Salient Provisions of the Governing Principles and Policies on IPR of the UP System ... Copyright

Collaborative Works Among Institutions

“Absent any contractual stipulation to the contrary, if the work is the result of collaborative efforts between the University, an outside entity and the creator/s, the copyright shall be jointly owned by the university, the creator/s and the outside entity.” (Article 4, no. 5)



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Salient Provisions of the Governing Principles and Policies on IPR of the UP System ... Patent

Ownership

University Ownership of Patent – “The University shall own all patents to commissioned invention.”
(Article 5, no. 3)



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Salient Provisions of the Governing Principles and Policies on IPR of the UP System ... Patent

Commissioned Invention

- supported by a specific allocation of the University funds
- produced at the direction and control of the University in pursuit of a specific project or purpose regardless of the source of funding
- inventorship could not be attributed to one or a discrete number of inventors
- stipulated by contract as commissioned invention



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Salient Provisions of the Governing Principles and Policies on IPR of the UP System ... Patent

Required Assignment of Patent to the University – regardless of the source of funding, patents to the following inventions shall be assigned to the University:

- those conceived or first reduced to practice by employees, faculty or students in the university in the course of the performance of their duties;
- those created through substantial use of University resources such as libraries, research facilities, buildings, utilities, etc. including services of its employees working within the scope of their employment



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Salient Provisions of the Governing Principles and Policies on IPR of the UP System ... Patent

Waiver by University of Rights to Patent

- the University elects not to file a patent application and the inventor is prepared to do so
- the waiver would facilitate the transfer of technology or its access to the general public
- the equity of the situation clearly indicates that such release should be given

No waiver shall be given unless there is a written commitment that no further development of the invention shall be made involving the financial support or resources of the University.



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Salient Provisions of the Governing Principles and Policies on IPR of the UP System ... Other IPs

Other Intellectual Property Rights (Article 6)

1. Trademarks and service marks - the University shall own trade or service marks relating to goods or services distributed by the University.
2. Proprietary Information – information arising from work within the University; includes processes which may fall under the concept of “trade secrets”



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Salient Provisions of the Governing Principles and Policies on IPR of the UP System ...

Common Provisions

Royalty (Article 7)

In the absence of contractual stipulations to the contrary, royalties from copyrights, patent and other IP shall be shared as follows:

1/3 – Inventor

1/3 – Constituent University

1/3 – UP System

Proposed Revision

40% - Inventor

60% - University



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Salient Provisions of the Technology Transfer Act of 2009 (RA 10055)

An Act Providing the Framework and Support System for the Ownership, Management, Use and Commercialization of Intellectual Property Generated from Research and Development Funded by Government and for Other Purposes

Article II – Intellectual Property Ownership

The ownership of IPS and IPRs shall be vested in the RDI

Article IV – Revenue Sharing

Governed by employee-employer contract or other related agreements without prejudice to RA 8439



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Salient Provisions of the Technology Transfer Act of 2009 (RA 10055)

Article VI – Commercialization by the Researcher and Establishment of Spin-off Firms

RDI shall allow its researcher-employee to commercialize or pursue commercialization of the IP provided, that the researcher-employee takes a leave of absence for a period of one year and renewable for another year



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Salient Provisions of the Technology Transfer Act of 2009 (RA 10055)

Article VII – Use by Government, Compulsory Licensing and Assumption of Potential IPRs

The GFA and/or Parent Agency may assume ownership of any potential IPR in cases of national emergency or other circumstances of extreme urgency.

Article IX – Institutional Mechanism

Creation of the TLO or Technology Business Development Office



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Mechanism in the Protection of IPs

1. VIPO – Virtual Intellectual Property Office
2. Disclosure
3. Deed of Assignment
4. Patent Application
5. Other Patent Documents (Specifications)
 - a. Abstract
 - b. Background of the Invention (Literature Review)
 - c. Detailed Description of the Invention
 - d. Claims
 - e. Drawing (if any)
6. Filing



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Commercialization Strategies

Center for Technology Transfer and Entrepreneurship

- Approved by the UP Board of Regents on July 27, 2007 during its 1222nd meeting
- Under the supervision of the Office of the Vice Chancellor for Research and Extension



Office Address: 2nd Flr., ACTETSME Building, STP, College, Laguna

Tel No: 536-4224

Website: ctte.uplb.edu.ph

Email ad: ctte@uplb.edu.ph

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Commercialization Strategies

Center for Technology Transfer and Entrepreneurship

Mandate: “integrates policies, programs and activities towards the protection, promotion and disposition of UPLB’s technologies through licensing, TBIs, etc.”

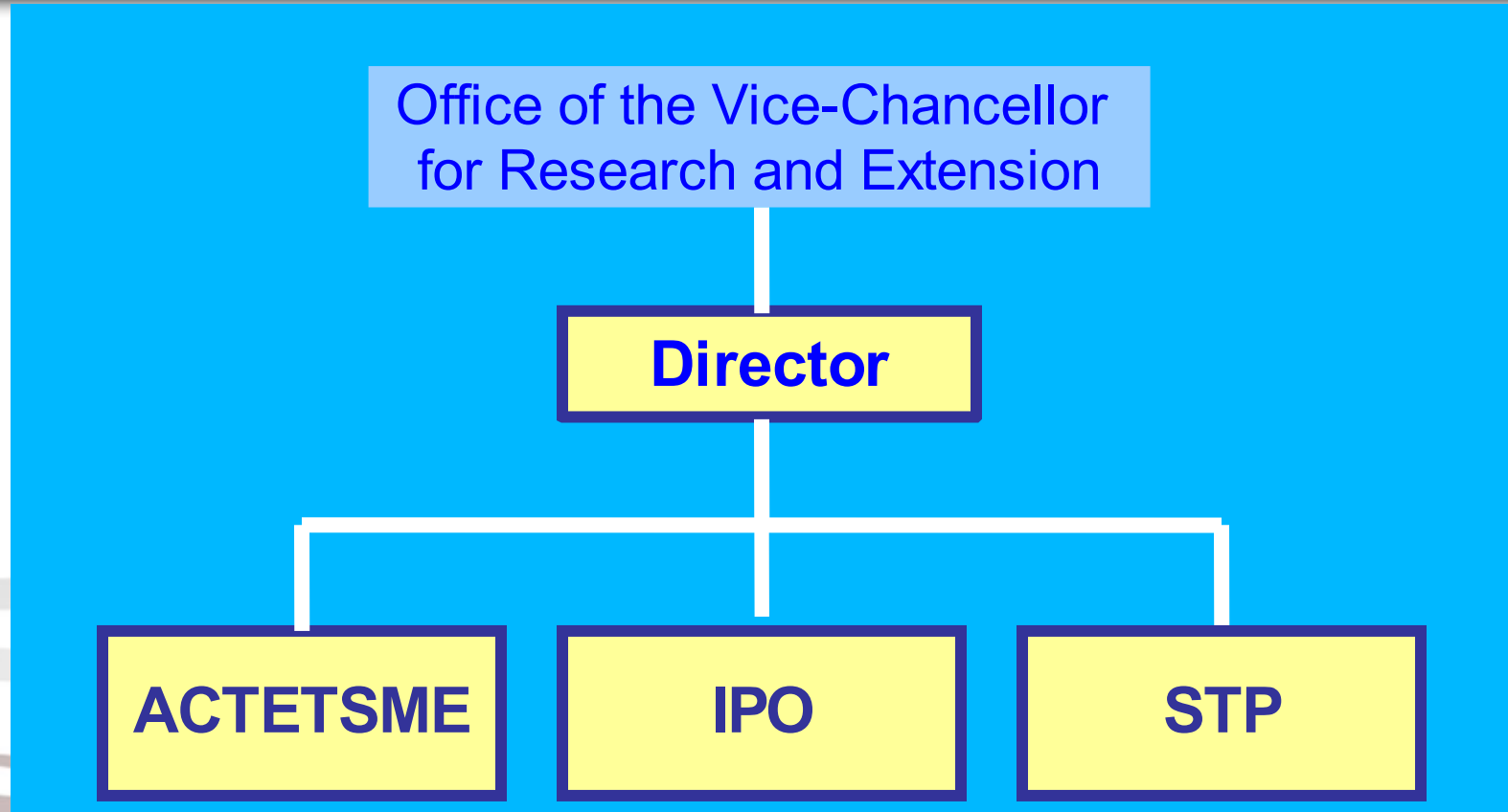
Location: ACTETSME building adjacent to the major research units (IPB, BIOTECH, and NCPC) where most technologies originate



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Center for Technology Transfer and Entrepreneurship

APEC Center for Technology Exchange and Training for Small and Medium Enterprises (ACTETSME) – fosters and promotes technology exchange among SMEs at the regional and national levels

Intellectual Property Office (IPO) – looks after the interests of UPLB researchers, faculty, other staff, and even students, to ensure that their creative works are properly protected, promoted and used.

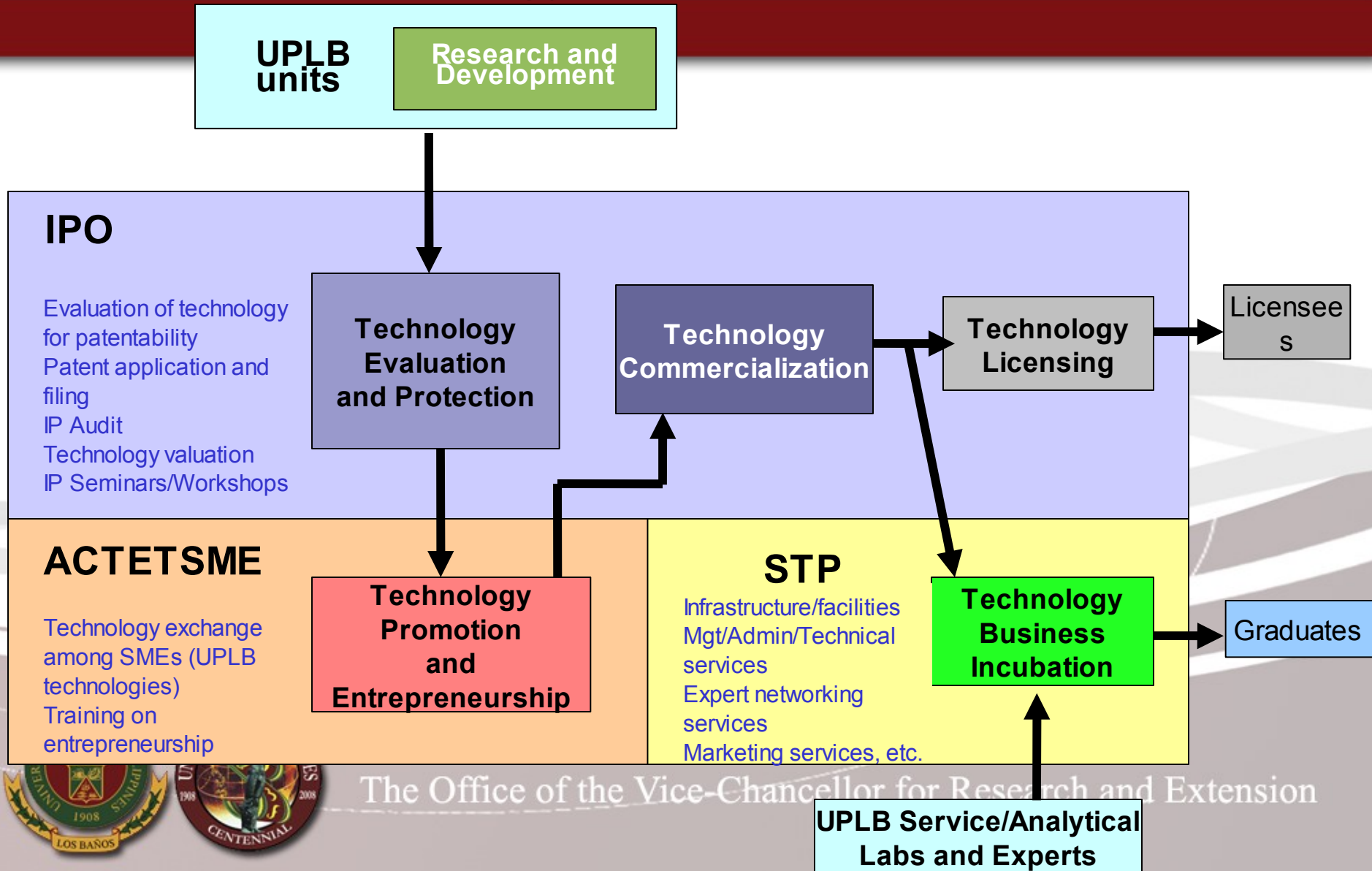
Science and Technology Park (STP) – provides infrastructure/facilities and technical and scientific expertise to TBIs



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Commercialization Strategies

Center for Technology Transfer and Entrepreneurship



Commercialization Strategies ... Technology Business Incubation

An incubator is an integral part (“nursery”) of the STP

TBI accommodates newly created enterprises as tenants and helps them to grow as competitive businesses within **3-5 years**. The mature businesses will then leave the TBI and move to the competitive market environment

PhilHybird (embryo cultured
makapuno seedlings)



O'Mark Enterprises (VCO,
coco oil based products)



BIOSPARK Corp (*Trichoderma*)



Commercialization Strategies ...Technology Licensing

License is granted by the Licensor to the Licensee to mass produce and commercialize the product

License fee (technology access fee, upfront fee) paid by the Licensee

Royalty rate/fee (% of the gross sale) paid by the Licensee on a regular basis



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Commercialization Strategies ...Technology Licensing



- A biofertilizer that replaces 30-50% of the total nitrogen requirement of rice and corn
- Can also be applied to other agricultural crops like vegetables

Developer: Dr. Mercedes U. Garcia



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Commercialization Strategies ...Technology Licensing

Trichoderma Powder



- Both a biocontrol agent of soil-borne fungal pathogens and a biofertilizer
- 30-50% reduction in fertilizer needs of crops
- increases yield, farmers save 2-3 bags of chemical fertilizer per ha.

Patent No. 1-2002-000771

Developer: Dr. Virginia C. Cuevas



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Commercialization Strategies ...Technology Licensing

Virgin Coconut Oil



- Unrefined, unbleached and non-deodorized oil extracted
- Uses locally produced enzymes
- Non-toxic dietary supplement
- Provides medical and health benefits for the prevention and treatment of diseases

Developer: Dr. Teresita M. Espino

Licensee: O'Mark Enterprises

Patent Application No. 1-2004-000261



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Commercialization Strategies ...Technology Licensing

Franchising agreement with
East-West Seed Corporation

Developers: V. N. Villegas,
R.B. Pimentel, P. M. Magdalita,
R.B. Anday



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Republic Act 10055, Tech Transfer Act of 2009

UPLB Research Manual, 2003.

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Strategies, June 5-6, 2006, IP-Phil and WIPO

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MARAMING SALAMAT PO!



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