

# Intellectual Property

Office of Intellectual Property and Technology Commercialization  
Vice-Presidency for Research and Technology  
University of Puerto Rico

September 2005





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# UPR Institutional Policy Regarding Intellectual Property

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## Copyrights

©

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# UPR Institutional Policy Regarding Intellectual Property



1993 – The Institutional Policy Regarding Intellectual Property was established and approved by the Council of Higher Education through Certification Number 93-140 (92-93).

- It establishes that the academic personnel and the students will be the owners of the work created in their academic activities, except when otherwise agreed.
- The ownership of the work does not exempt him/her of the responsibility to acknowledge the University.
- It will be the sole responsibility of the professors and the students to register and protect their work.



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# UPR Institutional Policy on Patents, Inventions and Commercialization

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# Patents

U.S. Patent No.



# UPR Patent Policy

The University of Puerto Rico protects the intellectual property of its researchers:

- 1991 - The Council for Higher Education approved the Institutional Policy on Patents and Inventions by Certification Number 18 (91-92).
- 2003 - The certification was revised and a new Institutional Policy on Patents, Invention and its Commercialization was approved by the Board of Trustees by Certification Number 132 (2002-2003)



# UPR Institutional Policy on Patents, Inventions and Commercialization

The University of Puerto Rico:

- Recognizes that the research work can result in patentable inventions.
- Provides mechanisms to protect the intellectual product of the researchers and employees of the UPR System.
- Establishes the patenting process.
- Will assist with the process of product commercialization.



# UPR Institutional Policy on Patents, Inventions and Commercialization

This Policy:

- Provides definitions of specialized terms.
- Expands its scope to include independent contractors, and visiting students and professors besides the regular employees, students and faculty.
- Requires to notify the university authorities about the research that is being conducted.
- Introduces the concept of commercialization.
- Establishes the importance of the Laboratory Notebooks.



# UPR Institutional Policy on Patents, Inventions and Commercialization



- Establishes the mechanisms and processes for ample disclosure of the discoveries and inventions.
- States that the President will establish the distribution of the net income (royalties, licenses, etc.)\*.
- Establishes that an entity designated by the President will manage and implement the process system-wide\*\*.
- Provides for each unit to designate a representative that will be the liaison with this entity.

\*The President has established distribution through Circular No. R-0304-17

\*\* The President has designated the Vice-Presidency for Research and Technology



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# UPR Institutional Policy on Patents, Inventions and Commercialization

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- Recognizes potential conflict of interests and provides mechanisms for its handling and solution.
- Establishes the composition of the Technology Advisory Committee according to the new structure of eleven units at the UPR System.
- Allows to provide services to people outside of the University.
- Each university employee should have a copy of the Policy.

# UPR Institutional Policy on Patents, Inventions and Commercialization

Ownership of the Invention (Section V of the Policy):

## A. Inventions developed in the course of employment or studies

The University **owns** those inventions that are developed:

1. In the work environment of the employee, in the normal activities inherent in teaching and academic research, in the course of studies or employment; or
2. While using University funds, facilities, or other University resources

Any employee interested in developing an invention that might be attached to the above-mentioned dispositions should present a declaration of intent before starting to develop the project and should submit the same to the appropriate campus authorities.



# UPR Institutional Policy on Patents, Inventions and Commercialization



Ownership of the Invention (Section V of the Policy):

**B. Inventions developed in the course of independent work:**

1. in the free time
2. outside of the field of employment, and
3. without the use of University funds, facilities, or other University resources

will be the individual property of the employee and will not be subject to this policy unless the owner assigns the property to the University of Puerto Rico through an agreement between the parties.



# UPR Institutional Policy on Patents, Inventions and Commercialization



## Ownership of the Invention (Section V of the Policy):

**C. Inventions resulting from work sponsored by a Third Party** (including government or private grants, sponsorships of specific inventions, consulting agreements, or others) will be considered property of the University above, unless terms of the contract, grant or other agreement with the sponsor modify these provisions.

Any person interested in beginning a project sponsored by a third party shall submit a proposal contract to the campus authorities so they can determine if the proposed agreement is consistent with the mission of the University, the particular campus, and this Policy.



# Distribution of Net Income

According to the Institutional Policy, the President has established the distribution of net income with Circular Letter Number **R-0304-17** of October 6, 2003 sent to the Chancellors entitled:

***TO ESTABLISH THE DISTRIBUTION OF THE NET INCOME THAT RESULTS FROM THE COMMERCIALIZATION OF THE PATENTS OF THE UNIVERSITY OF PUERTO RICO***

# Distribution of Net Income

Accordingly, the distribution of the net income will be:

- ◆ Inventor(s) <sup>1</sup> 33.33%
- ◆ Department(s)/Campus(es) <sup>2</sup> 56.67%
- ◆ Special Fund <sup>3</sup> 10%
- ◆ The remainder, if any, will be for other institutional purposes

- 1 If there is more than one inventor they decide, by means of a notarized document, how to distribute the net income.
- 2 If there is more than one campus, it will be distributed in proportion to their participation.
- 3 To administer this Policy, finance operational costs associated with the functions established in the same, including the promotion, presentation and commercialization of other inventions.



# Applicable federal laws



The University of Puerto Rico, or any entity that receives federal money for research, has to comply with the following laws that relates to the patent laws:

- CREATE Act of 2004
- Bayh-Dole Act

Also with all the regulations of the federal agencies that sponsors the research



# **CREATE ACT OF 2004 (Public Law 108-453)**



## **Cooperative Research and Technology Enhancement (CREATE) Act of 2004**

- Amends the patent laws to promote cooperative research involving universities, the public sector, and private enterprises.
- Provides that sharing of confidential information under a joint research agreement that was in effect on or before the date the claimed invention was made will not be the basis of an obviousness determination under patent law.
- The Act applies to patents granted on or after Dec. 10, 2004.



# CREATE ACT OF 2004 (Public Law 108-453)



Subject matter developed by another person shall not be considered prior art provided:

- the claimed invention was made by or on behalf of parties to a joint research agreement that was in effect on or before the date the claimed invention was made;
- the claimed invention was made as a result of activities undertaken within the scope of the joint research agreement; and
- the application for patent for the claimed invention discloses or is amended to disclose the names of the parties to the joint research agreement.



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# CREATE ACT OF 2004 (Public Law 108-453)

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A joint research agreement is:

- A written contract, grant, or cooperative agreement entered into by two or more persons or entities for the performance of experimental, developmental, or research work in the field of the claimed invention.
- Should include the names of the parties to the Agreement, the effective date, and a concise statement of the field to which the joint research applies.
- It is very important that everyone on the team understands the Agreement and the field of research.



# CREATE ACT OF 2004 (Public Law 108-453)



To be in compliance with the CREATE ACT:

- Written Agreement Prior to Initiation of Research
- Must Require Confidentiality
- Broadly Specify Field of Research

Subsequent disclosures are not prior art under the patent laws.



# BAYH-DOLE ACT



The Bayh-Dole Act, and its subsequent amendments created incentives for the government, universities, and industry to work together in the commercialization of new technologies for the public benefit.

It gives the opportunity to develop new industries.



# BAYH-DOLE ACT



- ◆ Establishes a uniform policy for the disposition and licensing of rights to patentable inventions discovered in the course of federally-funded research.
- ◆ This Act gives grantee/contractor organizations first rights to title of a subject invention stemming from federally-funded research.



# BAYH-DOLE ACT



- ◆ The federal funding agency has to be notified of the invention **within 60 days** and receives a nonexclusive, nontransferable, irrevocable, paid-up license to practice the invention.



# BAYH-DOLE ACT

- ◆ The federal agency support is acknowledged in any related patent application, and commercialization is actively pursued.
- ◆ In their marketing of an invention, universities must give preference to small business firms and, to the extent possible, products are to be manufactured in the U.S.
- ◆ University must share with the inventor(s) any revenue received from licensing the invention.



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# UPR Institutional Policy on Patents, Inventions and Commercialization

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## Laboratory Notebook



# Laboratory Notebook

- ◆ It is the most important tool for the scientist.
- ◆ It contains the official copy of the investigator's physical and mental activities of his experiment.
- ◆ Preserves the experimental data and the observations.
- ◆ Notes must be clear, accurate and complete so that other scientists can use them at anytime, repeat the work and obtain the same results. It contains unmistakable declarations of “the truth”.
- ◆ It can be used to write reports, technical documents, patent information and correspondence.



# Laboratory Notebook: Principal Functions



- ◆ Provides necessary information to:
  - decide if a patent application will be filed
  - to prepare the patent and,
  - as part of the evidence of the original inventor to demonstrate when was the invention conceived and when was it demonstrated.
- ◆ Use bound laboratory notebooks to which pages cannot be added or removed.



# Laboratory Notebook: Recommendations

- ◆ No pages or space on pages should be skipped. If blank spaces are left on a page or pages are skipped, then a line should be drawn through them to demonstrate that the blank spaces are intentional.
- ◆ Entries should be made consecutively.
- ◆ Record all experimental data in the notebooks. Record each entry indelibly in ink. Never make deletions; instead, make corrections by drawing a line through the entry. Date and initial the changes.



# Laboratory Notebook: Recommendations

- ◆ Use a narrative style to describe the hypothesis, experimental design, material, methods, and conclusions. Tell the story of your research clearly.
- ◆ Record what was done; why it was done; who suggested it; who did it; when it was done; what were the results (both positive and negative). This is specially important to decide who is an inventor and who can be named as a co-inventor. This is very important when working with students or post-doc.
- ◆ What conclusions were drawn.



# Laboratory Notebook: Recommendations

- ◆ All details of an experiment should be listed, signed, dated, and witnessed. This includes data and final results of experiments, protocols and design of experiments, calculations on which the results are based, manufacturer and model of equipment used, and a key to any abbreviations used.
- ◆ Record dates when an idea was formed and when work on the idea was started and completed.
- ◆ Describe inventions completely in a separate entry in the notebook. Have the entry signed and dated by a corroborator. In addition, enlist a third person who is knowledgeable but is not an inventor to read, sign, and date the entry describing the invention.



# Laboratory Notebook: Recommendations (cont.)



- ◆ Do not rely solely upon computer generated and stored data. If you keep your records and notes on your computer, print them out regularly (once a week is a good schedule). Bind the printouts permanently together to form a notebook. Sign and date each entry just as in the traditional bound notebooks.
- ◆ Ideally, records should be retained in a fireproof safe. Records of inventions need to be kept a long time (in some cases for 30 years).



# When to protect your Intellectual Property



- ◆ As soon as the invention is complete and the inventor can give a description that can be followed by any other person and obtain the same results.
- ◆ Within a year of any public disclosure.

The slide features a decorative design with a vertical green bar on the left side, a horizontal blue line at the top, and another horizontal blue line below the title with a green rectangular block at its right end.

# Patents at the UPR

**Process to submit a  
patent at the  
University of Puerto  
Rico**



# Process to submit a patent at the University of Puerto Rico



- ◆ The inventor has to be sure that his/her invention can be described from the beginning to the end and that any person that has knowledge in that area can repeat the process and obtain the same results.
- ◆ The inventor should research the USPTO Depository Library or contact directly the USPTO to see if there is any patent related, directly or indirectly, to his invention and what would be the difference with his/her invention.
- ◆ The inventor should research any publications, by him/her or any other colleague, related to his/her research/invention.



# Process to submit a patent at the University of Puerto Rico



- ◆ This process could help improve his/her work and/or demonstrate what is different and unique of his/her product.
- ◆ The inventor prepares the document “UPR Invention Disclosure” and submits it to the Office of Intellectual Property at the Vice Presidency for Research and Technology for its evaluation.
- ◆ In case that there is a third party, a copy of the written document regarding the relationship in the research should be included.
- ◆ The information is evaluated and discussed with the inventor.



# Process to submit a patent at the University of Puerto Rico



- ◆ The patent lawyer revises the information for his legal advise.
- ◆ A decision is made as to whether the UPR will process the patent application or if the inventor receives a release so that he/her can process it on his/her own.
- ◆ If the UPR decides to process the patent application, a meeting is held with all the interested parties to discuss the invention and decide if it is ready for submission as a provisional or a regular patent application.



# Process to submit a patent at the University of Puerto Rico



- ◆ The application is prepared and the necessary documents are signed. These include the Assignment Document and the Royalty Sharing Agreement in case there is more than one inventor.
- ◆ After a final revision by the inventor(s), all required documents are submitted to the U.S. Patent and Trademark Office (USPTO).

# Claims to be included in the Patent Application

## CLAIMS

- ◆ They are extremely important since they define the invention.
- ◆ Have to be sustained by the information in the laboratory notebook .
- ◆ They “legally” explain the invention.
- ◆ They contain the validity of the invention and determine if the patent is allowed.
- ◆ If there is an infringement, legal courts will use them as basis in their decision.
- ◆ Their language has to be very specific.



# Documents to be submitted to the UPR Office of Intellectual Property



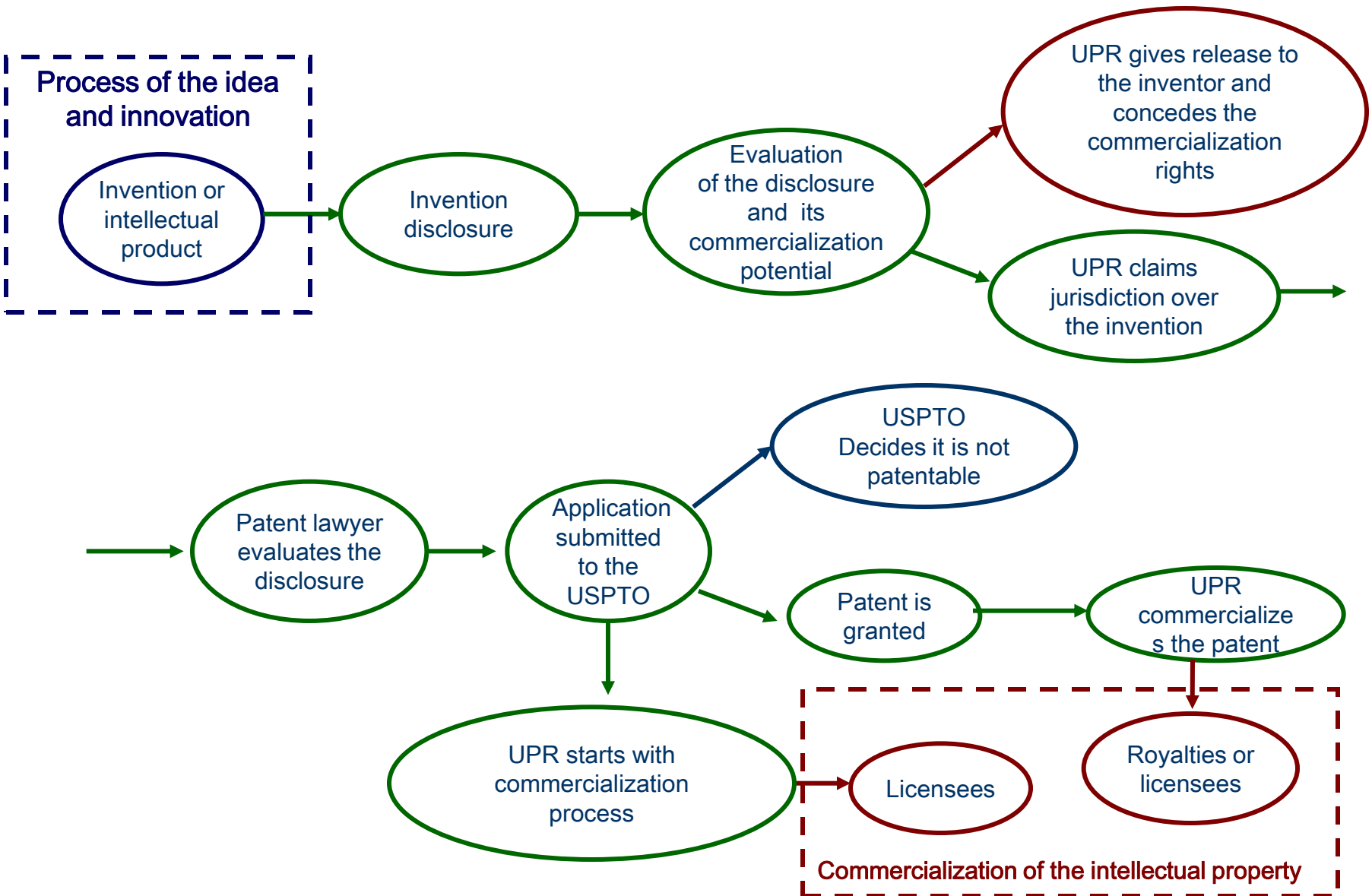
What to submit:

- ◆ UPR Invention Disclosure
- ◆ If a third party is involved, copy of the signed Agreement
- ◆ Copy of the funding agreement or the proposal
- ◆ Copy of the Disclosure of Invention to the funding agency

When ready to present the application to the USPTO:

- ◆ Assignment document
- ◆ Royalty Sharing Agreement
- ◆ Conflict of Interest documents

# Patenting and Commercialization Process





**UPR Portfolio**



**UPR Portfolio**  
**as of**  
**September 2005**

# UPR Portfolio

The UPR has 27 issued patents by the Patent and Trademark Office (USPTO):

- UPR at Mayagüez 18\*
- UPR at Río Piedras 5
- Medical Sciences Campus 4\*
- UPR at Humacao 3

\*3 of the patents are shared



# UPR Portfolio



Some of the patents are co-owned by other entities:

## UPR at Mayagüez

University of Georgia Research Foundation, Inc. (2)

## UPR at Río Piedras

Universidad Central del Caribe (2)

## UPR at Humacao

Case Western Research University (2)

# Patents in Process

There are 15 patent applications submitted as of August 2005:

◆ UPR at Mayagüez	6**
◆ UPR at Río Piedras	4*
◆ UPR at Humacao	4*
◆ UPR MSC	3

\* Río Piedras and Humacao are co-owners of one of them

\*\* One is in conjunction with The University of Georgia Research Foundation, Inc.



**Office of Intellectual Property**



**The Office of Intellectual  
Property of the  
University of Puerto  
Rico**



# Office of Intellectual Property



Reports to the Vice President for Research and  
Technology of the University of Puerto Rico

## Primary Functions:

- ◆ Disseminate intellectual property related information to faculty, students and other UPR personnel.
- ◆ Identify and evaluate UPR patent prospects.
- ◆ Help protect intellectual property developed by the faculty, students, and staff of the UPR.
- ◆ Process patent applications.
- ◆ Coordinate with Patent Law Firms the legal services.
- ◆ Offer consulting services to the community, private sector, and other entities.



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# Office of Intellectual Property

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## Major Activities:

- ◆ Seminars and workshops to faculty, students, and staff.
- ◆ Seminars and conferences to the Puerto Rican community.
- ◆ Manage the UPR Portfolio.
- ◆ Identify marketing and patent licensing opportunities.
- ◆ Participate in commercialization strategies.



# USPTO Depository Libraries



- ◆ University of Puerto Rico at Mayagüez  
(787) 832-4040 ext. 2307 - Prof. Ronaldo Martínez, Director  
[ronaldo@rumlib.uprm.edu](mailto:ronaldo@rumlib.uprm.edu)
- ◆ University of Puerto Rico at Bayamón  
(787) 786-2885 ext. 2495 - Prof. Mildred Pérez, Director  
[milperez@uprb.edu](mailto:milperez@uprb.edu)



# Electronic addresses



United States Patents and Trademark Office  
(USPTO)

<http://www.uspto.gov>

United States Congress Library

<http://www.copyright.gov>

Puerto Rico's Department of State

<http://www.estado.gobierno.pr>



# Office of Intellectual Property



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