## INTELLECTUAL PROPERTY AND UNIVERSITIES By

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Universities and other institutions of higher learning like the University of the West Indies (UWI), are in the business of creating intellectual property. What is this intellectual property? According to an Oxford university briefing for its researchers, Intellectual Property (IP) is ideas, information and knowledge. In most cases, intellectual property of a university is the outcome of its research.

Since, The St. Augustine Campus of the University of the West Indies is part of one of the leading universities in the developing world and one of the premier research universities in the Caribbean and Latin American region funded by several Caribbean governments, it has long recognized the importance of protecting and making useful to the society its intellectual property and since 1998 approved an Intellectual Property Policy, applicable to all three campuses. This policy describes how UWI's intellectual property is to be protected, how it is to be exploited, and how any benefits arising from this are to be shared (amongst the inventors, the institution and any third party). A copy of this policy can be viewed at

http://www.sta.uwi.edu/resources/documents/IntellectualPropertyRightsPolicy.doc
All matters which relate to the management of this policy are under the purview of the Pro Vice Chancellor Research, Professor Wayne Hunte

The University of the West Indies (UWI) also has in place on each campus a Business Development Office, to pursue collaboration with business and industry and to further develop the outputs of its research i.e. its intellectual property. At the St. Augustine Campus this office is under the directorship of Dr. David Rampersad.

University management of intellectual property is still young and so as time goes by policies must evolve always ensuring that account is taken of the university's obligation to protect and foster the development of its intellectual property in the cause of public economic development.

UWI ensures that its students, researchers and staff can easily access intellectual property information, like patents, for use in their study and research and that they are educated about intellectual property rights issues. In furtherance of this, The University has taken the opportunity to receive technical assistance from the Trinidad and Tobago Intellectual Property Office and the World Intellectual Property Office (WIPO), an agency of the United Nations, which is headquartered in Geneva, Switzerland and which describes itself as "an international organization dedicated to promoting the use and protection of works of the human spirit". The expression "works of the human spirit" is WIPO's way of referring to intellectual property.

Through its Main Library, UWI has made use of WIPO's Patent Information Services for Developing Countries for receiving free copies of patents registered worldwide and other patent related publications from WIPO. More information about this service can be seen at <a href="http://www.wipo.int/innovation/en/wpis/index.htm">http://www.wipo.int/innovation/en/wpis/index.htm</a>.

UWI also recently became part of WIPO's University Initiative. This initiative, coordinated by the Business Development Office of UWI, contributes to enhancing awareness about intellectual property matters among students and university staff. Through this initiative, UWI receives patent information and documentation on CDROM and DVD which can be accessed by UWI's students and researchers through its Main Library. More information about WIPO's University initiative can be viewed at <a href="http://www.wipo.int/uipc/en/">http://www.wipo.int/uipc/en/</a>.

Engineering and science students, in particular, whether they become entrepreneurs, or work in industrial, government or academic environments, should be aware of the freedom they have to use the proprietary, patented or copyrighted products or processes of others in their development and research efforts, and also how to best protect the innovations and creative efforts that result from their own work.

Recently, a postgraduate student in Petroleum Engineering conducting a study of "Desalination by Freezing using Gas Refrigerants or Gas Hydrates" was able to access several patents related to the topic of her research which were invaluable in advancing her research. Many other postgraduate and final year project students in the Faculties of Engineering and Science and Agriculture have been able to use patent documents to further their projects and research.

Some programmes of study at UWI also now incorporate training in Intellectual Property. For example, last year the Industrial Chemistry Course conducted by the Department of Chemistry included two lectures on Intellectual Property for Chemistry. These were conducted jointly by representatives of the local Intellectual Property Office Nicholas Lue Shue and Richard Aching and UWI's Engineering and Physical Sciences Subject Librarian.

Each year on April 26<sup>th</sup>, World Intellectual Property Day is celebrated to foster awareness of the importance of the protection of intellectual property rights. To celebrate this day WIPO hosts an International Essay Competition. In 2002, Nikhil Gyan an Engineering student at The University of the West Indies, St. Augustine Campus was one of the winners of that competition which had 210 entries from entrants from 50 countries! His winning essay can be viewed at <a href="http://www.wipo.int/about-ip/en/world\_ip/2002/pdf/wipo\_international\_essay\_competition.pdf">http://www.wipo.int/about-ip/en/world\_ip/2002/pdf/wipo\_international\_essay\_competition.pdf</a>

The University of the West Indies Main Library in collaboration with the Business Development Office and the Intellectual Property Office of Trinidad and Tobago commemorated World Intellectual Property Day this year with an exhibit mounted at the Main Library on the theme for 2005 which was "Think Imagine Create". This exhibit

which incorporated designs by Ms. Premma Ramsawak of the Main Library included a multimedia presentation on IP.

Some of the nearly 200 books, and other information resources held by UWI's Main Library were also included in the exhibit, as well as brochures and posters from the Trinidad and Tobago Intellectual Property Office. Interestingly, copies of patents registered by citizens of Trinidad and Tobago were also displayed. Some copies of patents registered by Trinidad and Tobago Nationals which were placed on display were:

- "Coconut Dehusking Machine" invented by Chandra Dinanath of the Caribbean Industrial Research Institute (CARIRI) in 1987 and registered as US4708056,
- "Subscriber Pair Identification System" invented by Stephan Gift; Naipaul Ojar; and Linus Rogers of the then Trinidad and Tobago Telephone Company (TELCO) registered as CA1269156 in 1990
- "Dynamic impedance comparator" in 2004 as US2004057583 by Clifton Lawrence.

It should be evident that successful management of Intellectual Property Rights protects the creative output of individuals and institutions from imitators. Thus, an understanding of Intellectual Property Rights is an increasingly important aspect of University and business life. Now, more than ever, IP is recognized as a commodity that can be traded and from which income can be earned.

Today, every industrialized nation of the world including Trinidad and Tobago has adopted an intellectual property protection system that provides exclusive rights to inventors and creators over the use and duplication of their invention or creative work for a limited term, which varies by country, in exchange for the public disclosure of their inventions and creations.

In 1996, old Intellectual Property related laws of Trinidad and Tobago were amended and new laws were enacted. The Intellectual Property Office of Trinidad and Tobago was created on the 1 December, 1997 to advance the cause of Intellectual Property Rights. See <a href="http://www.ipo.gov.tt/home.asp">http://www.ipo.gov.tt/home.asp</a>.

The Copyright Organization of Trinidad and Tobago was incorporated in 1984 in anticipation of the passage of the Copyright Act of Trinidad and Tobago in 1985. This Act has since been revised in 1997. See <a href="http://www.cott.org.tt/">http://www.cott.org.tt/</a>. Thus, Intellectual Property Rights are now protected much more aggressively in Trinidad and Tobago because of increased public awareness, enhanced legislation, increased enforcement and the many activities of COTT and the Intellectual Property Office.

In 2004, the local press reported the story about a Trinidadian-born American, Trevor King, getting a patent (US Patent 6,750,386 of 2004)) for a circle of fifths tenor pan, an instrument designed and developed many years ago by former Pan Am North Stars leader, Anthony Williams.

In 2002, it was also widely reported that two American inventors, George Whitmore, and Harvey J Price secured a US patent for "the process of formation of a Caribbean steelpan using a hydroforming press".

In 1995, Turmeric, Curcuma longa, a medicinal herb long used by practitioners of ayurvedic medicine in India and well known in Trinidad and Tobago was patented by two Indian born researchers from the University of Mississippi Medical Centre as US 5401504. The US patent granted the US university monopoly rights over "a method of promoting healing of a wound by administering tumeric to a patient afflicted with a wound." Based on evidence presented, by the Indian Council of Scientific and Industrial Research, about public knowledge/disclosure of the "tumeric discovery" long before 1995, the patent was revoked in 1998. This public disclosure known as "prior art" was evidenced in ancient Sanskrit texts mentioning the use of tumeric for healing and a 1953 article from the Journal of the Indian Medical Association!

Thus, awareness of intellectual property issues is important not just for universities but particularly for countries and researchers in the developing world. If we do not recognize the value of our intellectual property and take steps to protect it, others (the modern day "ideas pirates") who are more aware will certainly claim these "inventions" and "discoveries" as their own and reap financial and other rewards.

Thus, many universities worldwide realize the commercial value of their research output and engage in the licensing of their inventions and research outputs. Almost all research universities in the United States have technology licensing operations. The number of U.S. patents granted to American universities in a year rose from 524 in 1980 to 32,945 patents in 2000. In 2001, 149 universities in the United States reported collecting \$827 million US from payments derived from licenses on inventions, the top three earners being Columbia University, MIT, and the University of California System. UWI can benefit from this so far untapped source of income.

In conclusion, the University of the West Indies has an Intellectual Property Policy in place which is managed at the highest level by its Pro Vice Chancellor of Research, Prof. Wayne Hunte. It understands the possibilities for income generation by the licensing of inventions to industry and it actively seeks industry collaboration through its Business Development Office. It ensures that information about Intellectual Property is disseminated through its Main Library and is incorporating training in IP in some of its courses of study.