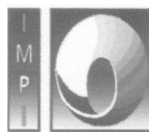


WIPO/INV/MTY/02/3

ORIGINAL:English

DATE:April2002



MEXICAN INSTITUTE OF
INDUSTRIAL PROPERTY



WORLD INTELLECTUAL
PROPERTY ORGANIZATION



INSTITUTE OF TECHNOLOGY AND
SUPERIOR STUDIES OF MONTERREY

**INTERNATIONAL WORKSHOP ON
MANAGEMENT AND COMMERCIALIZATION OF INVENTIONS
AND TECHNOLOGY**

organized by
the World Intellectual Property Organization (WIPO)
in cooperation with
the Mexican Institute of Industrial Property (IMPI)
and
the Institute of Technology and Superior Studies of Monterrey (ITESM)

Monterrey (Mexico), April 17 to 19, 2002

UNIVERSITY AND RESEARCH AND DEVELOPMENT (R&D) ORGANIZATION
STRATEGIES IN SUPPORT OF INTELLECTUAL PROPERTY CREATION
AND COMMERCIALIZATION

*Document prepared by Dr. George Newkome, Vice President for Research and
Dean, Graduate School, Oelschlagel Professor of Science and Technology,
University of Akron, Akron, Ohio, United States of America*

OVERVIEW OF UNIVERSITY RESEARCH

- Historical Aspects: The European Model
- Morrill Act: US Congress and Land Grant Universities
- Traditional Aspects: Academic Purity and the Role of Professors in this Classical Environment
- Academics: Science/Engineering vs. Arts/Humanities
- The Changing Times: The US Federal Government

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FEDERAL LEGISLATION – THE 1980s

- Stevenson-Wydler Technology Innovation Act (1980)
 - Federal laboratories need to transfer technology
- Bayh-Dole University & Small Business Patent Act (1980)
 - Government grantees & contractors retain title of federally funded inventions
- Small Business Innovation Development Act (1982)
 - SBIR programs
- National Cooperative Research Act (1984)

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FEDERAL LEGISLATION – THE 1980s

- Federal Technology Transfer Act (1986)
 - Cooperative Research & Development Agreements (CRADAs)
- Omnibus Trade and Competitiveness Act (1988)
 - Advanced/Manufacturing Technology Programs (ATP & MTP)
- National Competitiveness Technology Transfer Act (1989)
- Defense Conversion, Reinvestment, and Transition Assistance Act (1992)
 - Technology Reinvestment Program (TRP)

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“BAYH-DOLE”

The rationale was that there was “an unfulfilled of untapped possibilities in universities and other public research institutions ”

-
- Factor Fiction?
 - Generality?
 - Working Hypothesis?
 - Theory?

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UNIVERSITY & IN TRANSITION

- ☛ Role of the Administration
- ☛ Role of the Faculty
- ☛ Increasing Importance of IP Management
 - New Environment
 - New Roles
 - New Problems

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UNIVERSITY ROLES, CAPACITIES, AND STRATEGIES

- ☛ Teaching: 45
- ☛ Research: 45
- ☛ Public Service: 10

- ☛ Teaching: 40-30
- ☛ Research: 60-70
- ☛ Entrepreneurial Activities: ???

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STAKEHOLDERS

☛ Traditionally Concepts

- Faculty – (Publish or Perish)
- Students – (graduation, job ...)
- (Administration)

☛ Modern Variance

- Faculty – (enhance take-home \$\$\$s, ...)
- Students/Colleagues – (ownership, ...)
- Administration – (new revenue source, ...)
- Community/Economic Development – (Hometown companies, increased tax revenues, ...)

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THE UNIVERSITY 'S COMMUNITY/ENVIRONMENT

☛ Location, Location, Location

- Thought Process: Liberal vs. Conservative
- Urban vs. Rural
- Medical vs. Nonmedical
- Agricultural vs. Industrial

Location is critical to development

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CASESTUDY#1:UNIVERSITYOF SOUTHFLORIDA(1986)

- ☛ MedicalSchool,TampaBayHealthCare
- ☛ MetropolitanArea:4.5MillionPeople
- ☛ YoungUniversity(1956)
- ☛ 25,000Students
- ☛ \$20,000,000(Meager)ResearchPortfolio
- ☛ PoorSelfImage

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USF(2001)

- ☛ 37,000Students
- ☛ \$170,000,000+ResearchPortfolio
- ☛ CoordinatedCommunityHealthCare
- ☛ 30+StartupCompanies
- ☛ ResearchParkandBuildings

Location....

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NEEDED COMPONENTS TO GROW

- ☛ Technology Transfer Group
- ☛ Research Foundation
- ☛ Appropriate Policies
- ☛ Entrepreneurial Administration
- ☛ Trainable Faculty

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UNIVERSITY OF AKRON (2001)

- ☛ Large Industrial Complex
 - 2000+ Polymer/Material Companies
- ☛ Urban Community (3.9 million)
- ☛ Science & Engineering University (1870)
- ☛ Large Library Holdings
- ☛ Superb Polymer Facility (2nd in the US)
- ☛ Long History of University – Industry Relationships

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APPLICATION OF THE KEY COMPONENTS

- Policies
 - Research Policies
 - Faculty Equity
- Research Foundation
 - University's Equity Position
- Enhanced Partnerships
 - Library Consortium
 - Instrumentation Facility
 - Graduate Student Work Force Development
- Entrepreneurial Environment
- IP Management Center

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LAGNIAPPE

- Research Park
- Incubators
- Innovation Centers
- Venture Capital Funds
- Angel Network
- Working University/Industry For-Profit(s)

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ALTERNATIVES TO THE UNIVERSITY

- Traditional Out-Licensing
- Third Party Commercialization Services
 - Research Corporation Technologies
- Start-ups and Spin-outs
- Equity-based Performance Compensation
 - UTEK Model

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