Support & Reinforce:
The Management & Exploitation of IP in Universities, Research & Development Institutions and Polytechnics
Introduction

- University of the Western Cape

South Africa’s national Intellectual Property Rights Act

- National IP Management Office

Obligations on Higher Education Institutions

- Institutional Offices for Technology Transfer
- Obligations of recipients of public funds

Conducive Environment
Vision:
“A place of quality, a place to grow, from hope to action through knowledge”

Mission:
“…a national University, alert to its African and international context…”
committed to being a place of…:

- Quality & growth through knowledge
- Excellence in teaching, learning & research
- Nurturing the cultural diversity of SA
- Critical & creative response to the needs of a society in transition
- Drawing on its proud historic experience
- Contributing to building an equitable & dynamic society
To continue to be a relevant & engaged institution…UWC must…

❑ strive for EXCELLENCE in:
  Knowledge Generation…
    ➢ Study
    ➢ Research…

❑ matched with EXCELLENCE in:
  Knowledge Dissemination…
    ➢ Teaching… (graduates with industry-relevant competencies)
    ➢ Publications/presentations… (high impact, peer-reviewed)
    ➢ Technology transfer… (products / services / processes)
South Africa’s IPR-PFRD Act...

Intellectual Property Rights for Publicly Financed Research & Development (IPR-PFRD) Act

“IPR Act”

Act 51 of 2008

Published – 2008, In effect – Aug 2010

Objective:

Intellectual Property (IP) emanating from publicly funded research & development (R&D) must be identified, protected, utilised and commercialised for the benefit of the Republic of South Africa.
“Intellectual Property”

…any creation of the mind that is capable of being protected by law from use by any other person, whether in terms of South African law or foreign intellectual property law, and includes any rights in such creation…

**NB:** excludes copyrighted works… publications… ordinarily associated with conventional academic work.

“Publicly financed R&D”

…R&D undertaken using any funds allocated by a **funding agency**, or by a **private entity or organisation** at below **full cost**.

**NB:** excludes funds allocated for scholarships and bursaries

“Funding agency”

…the State or an organ of state or a state agency that funds R&D.

(Source: UCT RCIPS – IP Information Session Oct 2010)
“Private entity or organisation”
…a private sector company, a public entity, an international research organisation, an educational institution or an international funding or donor organisation.

“Commercialisation”
…the process by which any IP emanating from publicly financed R&D is or may be adapted/used for any purpose that may provide any benefit to society or commercial use on reasonable terms.

“Full cost”
…the full cost of undertaking R&D as determined in accordance with international financial reporting standards, and includes all applicable direct and indirect cost as may be prescribed.

(Source: UCT RCIPS – IP Information Session Oct 2010)
Overview of South Africa’s IPR Act...

- **IP management obligation**: placed on Higher Education institutions (HEIs)
- **Statutory protection obligation** (where applicable): re: IP from publicly-financed R&D
- **IP commercialisation requirement**: re: IP from publicly-financed R&D
- **State intervention allowable**: where commercialisation of IP from publicly-financed R&D is not done adequately or not at all
- **IP rights recognised**: for HEIs and researchers (staff and students) – ownership and beneficiation rights
- **Sole & co-ownership of IP options**: and pre-conditions thereto defined
- **National IP Management Office (NIPMO)**: establishment

(Source: Hobololo. V, Technology Transfer in the Higher Education sector: the IPR Act, 2012 Presentation)
According to the IPR-Act:

- Non-exclusive, royalty-free, non-transferable, worldwide licence for use for health, security, strategic & emergency needs
- Non-commercialisation
- Walk-in rights: Failure to disclose – assignment of IP to NIPMO

"The intellectual property under this transaction was created with support from the South African Government; ([under the contract number where applicable] awarded by [identify the Funding Agency or relevant government department, where applicable]) and is subject to the requirements of the South African Intellectual Property Rights from Publicly Financed Research and Development Act, 2008 and its regulations ("Act 51 of 2008"). The South African Government has certain rights to the intellectual property in terms of sections 11(1)(e), 11(2) and 14 of "Act 51 of 2008"."
International comparisons...

- **USA**: Bayh-Dole Act (1980)
- **Japan**: Technology Licensing Organisations (1998-2004)
- **Germany**: Law on University Employees’ Inventions (2002)
- **Taiwan**: Science & Technology Basic Law (1999)
- **UK**: IP Ownership Decentralisation Efforts (1980’s)
- **Korea**: Technology Transfer Promotion Act (2000)
- **Brazil**: Innovation Law (2005)
- **Switzerland**: Technology Transfer Law (1991/9)
- **Phillipines**: Technology Transfer Act 2010
- **RSA**: IPR-PFRD Act (2010)

(Source: Hobololo. V, Technology Transfer in the Higher Education sector: the IPR Act, 2012 Presentation)
“NIPMO”… agency under Dept. of Science & Technology (DST)
- Minister appoint Head of NIPMO
- Advisory Board (5-9 members)
- Independent dispute resolution re: IPR Act

**Enabling/Supporting Role**
- Capacity building
- Guidelines
- IP Transactions
- IP Rebate Fund
- IP Incentive Fund
- OTT Support Fund

**Regulatory/Enforcement Role**
- Reporting
  - Disclosures
  - Commercialisation
- Offshore IP Transactions
- Government Rights
- Full-costing
IPR Act obligations on all Higher Education Institutions (HEIs)...

- **Develop** an IP Policy in line with the IPR Act – NIPMO approved
- **establish** & maintain an Office for Technology Transfer (OTT), or
- **designate OTT responsibilities** to existing persons/structure, or
- **establish joint OTT function** amongst HEIs e.g. regional OTT
Establish mechanisms for...

- **IP Management**: identification, protection, development, management of IP, IP transactions, IP commercialisation and capacity-building;

- **IP Disclosure**: effective and practical measures and procedures for IP disclosure and ensure appropriate protection before public disclosure (e.g. publications);

- **Timely Disclosure**: before public disclosure - within 90 days (or longer period as may be prescribed) from time of identification of possible IP;

- **IP Assessment**: establish if IP warrants statutory protection, apply for and use best efforts to obtain statutory protection as appropriate in recipient's name;

- **IP Referral to NIPMO**: within 30 days (or longer period as may be prescribed) where recipient elects not to obtain statutory protection or retain ownership of IP

- **IP Revenue Management**: from IP transactions, includes managing the benefit-sharing arrangements with IP creators/enablers at the institution.
Conducive Environment…

- National policy/frameworks alignment
- Southern African Research & Innovation Management Association
- Innovation & entrepreneurial culture
- Innovation support elements: incubation, hubs, clusters, IP Firms…
- Funding landscape
NSI Challenges:
• Existence of innovation “Chasm”
• Fragmentation of instruments
• Narrow definition of Innovation

The “Knowledge Economy”:
• Knowledge = basic form of capital
• Economic growth driven by innovation

Technological Innovation Agency (TIA)

IPR-FPRD Act in Effect

TIA Established

IPR-FPRD & TIA Acts promulgated

DST 10 Year Innovation Plan

OECD Review

Creation of DST

R&D Strategy

Technology Foresight Studies

Foundation for Technological Innovation (FTI)

S&T White Paper

National policy/frameworks alignment…
Southern African Research & Innovation Management Association (SARIMA)

- Stakeholder organisation - established 2002
- Key stakeholders - Research and Innovation (R&I) managers in the public/private sectors.

Overall objectives:
- develop the discipline of R&I management (incl. professional dev.)
- develop and promote best practices in R&I management
- Foster & co-ordinate R&I management activities locally/internationally
- create a climate conducive to R&I at institute/organisation & national level
- Identify and establish mutually beneficial links with similar associations
International experience (advanced economies): level of investment in R&D and innovation linked to economic growth and development.

Emerging economies, e.g. China, India, Brazil’s innovation driven policies and investments (10-15 yrs back) - reaping the benefits now

SA National Industrial Policy Framework and Industrial Policy Action Plan (IPAP) envisions a competitive, faster growing economy – diversified, large-scale employment creation

IPAP highlights specific industries and interventions that need scientific, R&D innovation inputs.
Ivory Tower

No, no... **WE** study and write about the world. **YOU** go and save it...

Really? I thought if was Publish or PARIS
NEW paradigm @ HEIs...

Publish, publish publish...

Innovate... or perish

BUT...Protect first !!!
Innovation Support Elements...
Overview... SAFunding Landscape

Govt. Venture Capital Funds
- IDC
- TIA

Govt. Grants
- Support Programme for Industrial Innovation

Private Sector Venture Capital Funds
- Invenfin
- Business Partners
- 4Di
- Hasso Plattner Ventures

Angel Investors
- ANGEL HUB

Corporate South Africa
- AngloAmerican
- Vodacom
- PRimedia
- Sasol

(Source: IDC Presentation – EDP Workshop WC)
Environment for successful innovation...

Source: Fadl Hendricks Presentation (adapted)