
R&D in Portugal: Why should researchers care about IPR?

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Direitos de Propriedade Intelectual em Portugal: a saída para a Inovação
Intellectual Property Rights in Portugal: the Gateway to Innovation
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University R&D

- Scientific publications are the major output of research activities at the universities.
- The academic career of a researcher crucially depends on his/her number of publications in scientific journals of high reputation.

Scientific publications

- Science Citation Index (SCI):
 - > 3000 journals
 - 85% in science, technology and medicine
- “The core STM publishing market is estimated between USD 7 billion and USD 11 billion, while in 2001 OECD countries allocated USD 638 billion to R&D”

Study on the economic and technical evolution of scientific publication markets in Europe, European Commission, DG-Research, 2006

Scientific publications - Portugal

- Multiplied by 4 in the decade 1990-2000
- Highest average annual rate of growth (14.55%);
European Union average (4.07%)
- In 2000, the number of publications per million
population (333) yet well below the EU average (818)
- In 2002, more than 90% in STM
- In 2000, 42% in international cooperation

PBOOK2003, Observatório da Ciência e do Ensino Superior, Ministério da Ciência e do Ensino Superior, 2003

Academic “rule”

Publish

or

Perish

Intellectual Property Regulations

- A hindrance for the researchers pursuing an academic career?
- A 'complex, expensive and long process' with little positive impact on the researcher's life?
- An impediment to the free dissemination of knowledge produced with public funding?

Patents - Portugal

- In year 2002, 44 patent applications to the EPO (24, in 1998)
- EU-25: 60 698 (2002) and 49 084 (1998)
- EU-15: 60 158 (2002) and 48 671 (1998)
- Patent applications to the EPO per million inhabitants (2002):
Portugal: 4.3 EU-25: 133.6 Sweden: 311.5
Science and Technology in Europe – Statistical Pocketbook, European Commission, 2006

Knowledge-based economy

“The knowledge economy and society stem from the combination of four interdependent elements: the production of knowledge, mainly through scientific research; its transmission through education and training; its dissemination through the information and communication technologies; its use in technological innovation.

Given they are situated at the crossroads of research, education and innovation, universities in many aspects hold the key to the knowledge economy and society.”

The role of universities in the Europe of knowledge, European Commission, Communication COM58 (2003)

University Innovation Pipeline

- Universities around the world have expanded their mission beyond that of basic research and teaching to engage more deeply with the innovation process
- Technology transfer mechanisms have been extensively implemented by many universities in order to convert their research into commercially viable intellectual property, to develop business collaborations and incubators for start-ups

University & Industry

- The relationship between universities and industry has evolved to closer links, mainly aiming for the acceleration of the technology transfer process and, simultaneously, making it much more efficient
- In fields like health or ICT, the large amount of investment required to bring laboratory results to market implies some protection from competitors

Research activities

- Transition from the traditional individually based research to intra and inter-organizational collaborations
- Re-engineering of the research enterprise – interdisciplinary research, translational research, integrated research networks, PPP,...

Intellectual Property

- Facilitator of technology transfer activities
- Key instrument for the open innovation model (e.g., the same IP can be used for different markets)
- Enabler for transparent relationships between research groups, institutions and organizations

Intellectual Property Regulations

- Recognizes individual contributes
- Deters unfair competition
- Promotes technology transfer
- Generates funding
- Avoids conflicts with publishing and other dissemination activities

Academic “rule”

Protect or Publish

or

Perish



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