



# Editorial

## The Importance of Protection and Transferring of Academic Research Results

Over the three last decades there has been an increasing global effort in order to establish public policies, regulatory frameworks, plans and initiatives to stimulate public-private partnerships in order to enhance the economic and social development arising from the intensive use of knowledge, science and technology.

The knowledge created in public research institutions is an important input to innovation in several industries. With companies' greater perception of the need to diversify their innovation sources, the university-enterprise collaboration has become an important mechanism to generate new business and promote access to technology and new markets all over the world. Thus, university-industry partnerships have been encouraged and strengthened since this kind of cooperation is relevant for the competitiveness of both companies and the nation.

Being aware that their mission goes beyond knowledge production and dissemination, universities have come to play a more pro-active role in the innovation systems, looking for ways of interacting with the productive sector, in order to promote the technological development of companies, without jeopardizing the academic values. The awareness that innovation is also part of the academics' role in the modern university is greater and greater.<sup>1</sup>

The combination of academic excellence and entrepreneurial competence is a characteristic common to the great majority of successful research institutions in several countries. There are a number of examples of research groups that managed to establish better partnerships and so make significant contributions to society while keeping their scientific productivity and academic standards.

One of the main concerns of the 21<sup>st</sup> century university turns to be the formation of professionals with a better understanding of the innovation process and how the scientific knowledge usage can help the companies to promote the country's technological development. Those students will become the

future technological development agents by using the knowledge acquired during their studies and research projects to generate innovation in companies or to start high impact technological enterprises, identifying and trying to respond to the social demands in a creative way. That is why there is an urgent need to pay attention to universities and their policies of protecting and transferring the results of their research projects either to existing companies or to start new ones specifically dedicated to develop the academic inventions.

A 2009 study by the Biotechnology Industry Organization reports the benefits brought by the licensing of patents from American universities in the 1996-2007 period, among which the following economic impacts stand out: US\$187 billions in GDP; US\$457 billions in the gross industrial output and 279 thousand new jobs. Still more impressive than those are the social benefits generated by launching in the market innovations originated from university labs, such as the hepatitis B vaccine, medicines such as Allegra and Taxol, the PSA test, Google and many others.<sup>2,3</sup>

The intellectual property and innovation culture in the Brazilian universities and in several local companies is still embryonic. Increased awareness of the necessity of transferring the university research results to society implies that the academic community should become conscious that a good research result is not enough to be transformed into innovation. Besides that, being the results of a public university research a "public asset", they should be properly protected and managed towards the greatest social benefit. That is why it is fundamental to disseminate the intellectual property culture in the country and to orient those involved in the production of knowledge and technology so that the greatest social benefit can be achieved.

The new university-generated knowledge is frequently risky and demands investments so that it can be turned into technological innovations capable

of improving the society life quality. Such protection of university's creations by means of intellectual property rights is often the only way to achieve such result in many industries; thus, it is relevant to adequately protect university's research results in order to attract investments towards its conversion into products or processes by industries. Universities should pay constant attention to building, expanding and maintaining the community internal awareness of the importance of the protection of its intellectual capital.

The evolution of the Brazilian experience is building up a more convergent governmental, entrepreneurial and academic perception in relation to new potentialities as well as to the difficulties of university-enterprise partnerships under the current policies and regulatory frameworks.

Significant headway has been achieved with the establishment of Technology Transfer Offices in universities and other public technological and scientific institutions as determined by the 10973/2004 Brazilian Innovation Law, the first Brazilian law to deal with the university-enterprise relationship. The main objective of such technological centers is to take care of the protection and negotiation of the intellectual property arising from the university research and to support university's partnerships with companies or other social organizations to generate innovations.

The importance of university-enterprise partnerships towards innovation and of the establishment of high-impact spin out companies is increasing and fundamental to overcome the challenge to settle in Brazil a technological structure capable of meeting the need for internationally competitive economic development, based on environmental and social responsibility principles.

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## References

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