

## **Doctoral Education in the Entrepreneurial University**

Eloïse Germain

Traditionally, doctoral education was designed for a career in academia; but there is a bottleneck in the academic labour market in many countries, making it increasingly difficult for recent doctoral graduates to engage in an academic career. The current employment situations of doctorate holders call for more relevance of doctoral education and doctoral-level skills to be able to integrate both the academic and the non-academic labour markets.

The openness and the interactions of the entrepreneurial university with its environment, in particular its region, makes it a relevant model to enhance the employability of doctorate holders, in particular outside academia. Beyond theoretical contributions to the model of the entrepreneurial university, the dissertation suggests practical recommendations to universities, to doctorate holders, to non-academic employers, and to other regional actors.

## **The Organisational Adaptation of Universities to Smart Specialisation: The Emergence of Strategic Network Interface Units**

Liliana Fonseca

Universities are increasingly expected to engage in regional innovation policy. This has reinforced the need for organisational adaptation of university structures to respond to these new challenges. Recently, a variation in the typical knowledge transfer structures has emerged: strategic network interface units. These units are multidisciplinary and cluster-like formal networks led by universities in collaboration with businesses, government authorities and other organisations.

This paper compares the organisational adaptation of two universities – the University of Aveiro and the Autonomous University of Barcelona – as they assume increased responsibilities in regional innovation dynamics. Through interview-based analysis, findings suggest these interface units were created to support the alignment of the universities with smart specialisation strategies and EU priority areas for accessing funding. However, while the original aims of these units are very similar, their institutional and operational configuration has led to different cooperative arrangements. Transversal communication based on trust and capacity-building was an important supporting factor in the innovation impact of these units.

## **Living Labs: Challenging and changing the smart city organisational field?**

Huong Thu Nguyen

Smart cities may be considered as place-specific organisational fields where many actors interact to collectively address public problems. However, smart city initiatives regularly frame citizens as the weakest link, passive consumers rather than active creative agents. This article argues power imbalances between citizens and other smart cities' participants structurally mutes citizens' voices, ultimately compromising smart cities' aims. Living laboratories became a popular smart city intervention: from this perspective, their success depends on addressing this power imbalance to allow citizens to influence smart city organisational fields. This paper explores this role of living labs, theoretically and empirically, with a multiple case study of urban living labs in Spain. It highlights that involving citizens effectively requires lead actors applying their power to give citizens the opportunity to establish themselves as legitimate actors. This suggests that incorporating citizens into smart city models is more challenging than simplistic Quadruple Helix discourses propose.

## **What is the Role of University-industry Research Collaborations and Graduate Production for the Impact of Universities on Regional Industrial Development?**

Gerwin Evers

As research and educational institutions, universities are in a key position to help other actors thrive in an economy in which knowledge has become the main source of competitive advantage. Through the development of their so-called 'third mission', universities can have an impact by supplying both public and private actors in their surroundings with knowledge and requisite human capital. While the internationalisation of academic research and university education has transformed universities into players in global networks, universities still have an undeniable, strong regional character. The literature considers graduate human capital and research collaboration to be highly important channels for realising such university–industry knowledge transfer at the regional level. Gerwin's thesis set out to expand the understanding of how these two university–industry knowledge transfer channels contribute to regional industrial development by answering the following question:

- What is the role of university–industry research collaborations and graduate production for the impact of universities on regional industrial development?

The insights are based on analyses of Danish micro-level data, Community Innovation Survey data, interview data, and other data using a variety of empirical techniques. The results highlight the importance of the specific characteristics of regional contexts in relation to the impact of universities on regional industrial development. While universities can play a role in the economic revival of their regions, the extent to which this happens depends on the extent to which the university is related to the industrial specialisation that is prevalent in the region of its location.