# Good Practice presented by the General Directorate of Universities and Research, "Transferencia de Conocimiento Universidad-Empresa 2015-2017", aid granted to Fundación General de la Universidad de Salamanca

The Regional Ministry of Education, working through the General Directorate of Universities and Research, implemented the Plan de Transferencia de Conocimiento Universidad–Empresa 2015-2017. (University-Business Knowledge Transfer Plan), known as Plan TCUE. The purpose of the plan is to refocus and invigorate university-business community cooperation, and to further reinforce the connection between between higher education and the business sector, particularly in the specialization niches identified in Castilla y León.

The actions and measures comprising the TCUE Plan are divided in four large sections: Innovative University, University-Business Projects, Entrepreneurial University and Innovative Ecosystem. A series of measures will be implemented within the four sections, many aimed at improving knowledge transfer management in universities themselves, by creating specialized and professionalized units. A further aim is to encourage university participation in international projects, and in R+D+i projects. Another objective is to provide new impetus for the creation of technology based enterprises, and for the participation of university researchers in research-development-innovation clusters and innovative entrepreneurial groups.

All these of these actions are carried out by Red TCUE, the university-business knowledge transfer network (Network TCUE), which is comprised of the Regional Ministry of Education along with all universities of Castilla and Leon. The universities work through the Knowledge Transfer Offices, the bodies currently responsible for university-business community relations.

Public universities have assigned these functions to their general foundations.

One of those foundations is the Fundación General de la Universidad de Salamanca, which received aid for this 2015-2017 operation totaling  $883.776 \in$ , with the ERDF providing 441.888  $\in$  of the amount.

The impact achieved by the operation is evident, since the number of enterprises cooperating with research bodies was 278, and in 2017, the Spanish Office of Patents and Trademarks received applications for 6 patents.

This project is considered a good practice, because it meets the following criteria:

1. The action was duly disseminated and communicated to beneficiaries, potential beneficiaries and to the general public, through different types of media

The General Directorate of Universities and Research published information on its website regarding the aid.

http://www.educa.jcyl.es/universidad/es/fondos-europeos/fondo-europeo-desarrollo-regional-feder/subvencion-fundaciones-universidades-publicas-integrantes-r



The Universidad de Salamanca foundation disseminated information on its website, and also held events to announce the funding received for the project.

For example, a total of 13 public acts and events were held, attended by 439 people.



Other communication media used: Bulletins were sent by the Fundación de la Universidad de Salamanca to the Salamanca, Béjar and Ávila campuses.

Medium <a href="http://fundacion.usal.es/">http://fundacion.usal.es/</a>









Videos, posters and signage were made to disseminate the project.









#### 2. The action incorporates innovative elements

The action serves to stimulate innovation as an engine of regional development and contributes to a change in the Castilla y León production model by fostering the development of new ties and synergies among enterprise, R+D centers, and higher education, in this case, the Universidad de Salamanca.

### 3. Adequacy of results obtained to objectives established

One of the objectives of the Castilla y León government (Junta), is to strengthen the focus on smart specialization, by concentrating efforts toward scientific, technological and economic specializations. Smart specialization is the focus from which the European Union supports and incentivizes research, development and innovation actions.

The university-business relationship a vital component for achievement of the objective, and for the future of Castilla y León. In our autonomous community, approximately 60% of researchers are concentrated in the higher education sector, while 62% of R+D spending is done by the private sector. Collaboration between universities and business is urgently needed to make the most of the strengths of the two sectors.

To this end, in July 2015, a call for university-business collaboration projects was issued denominated, "Lanzadera Universitaria de proyectos con empresas", which is to serve as a launching pad for university-business projects, and to provide support to the projects submitted to the "UNIVERSITY-BUSINESS CHALLENGE". This was a way of providing

another opportunity for joint R+D+i and/or consultancy projects with important knowledge generators in Castilla y León and its entrepreneurial fabric. All Universidad de Salamanca researchers or research groups that had presented solutions to the demands by businesses, associations or entrepreneurs in other calls were invited to take part.

The collaboration among different departments and areas of the universities, the Universidad de Salamanca among them, facilitates this task.

### 4. Contribution to the resolution of a problem or weakness detected in the territorial scope of execution.

In response to society's demand for knowledge transfer, the intention was to establish a publication/communication policy that promotes dissemination of research findings, while respecting -not penalizing- intellectual property; a policy that incentivizes both the formalization of research project contracts with companies, and applications for patents. And, given the regulation of own-technology based Spin-Offs, one that favors the creation of this type of companies and the channels for potential participation of the university in these.

In response to these weaknesses, the DOCTOR TCUE program was launched, with the primary aim of promoting culture, innovative thinking, technological development and knowledge transfer at the Universidad de Salamanca. The program supports doctoral dissertations on subjects involving social, entrepreneurial and industrial matters. It facilitates professional bridge-building between the academic and business communities, and strengthens and invigorates University-Business ties.

A maximum of 35 awards were established for doctoral students meeting the following criteria: their dissertations soon-to-be-finished on subjects directly related to solving technological or knowledge problems or needs, and a recommendation from their faculty or dissertation advisor.

### 5. High degree of coverage of the target population

The model itself, designed and implemented by the Fundación General de la Universidad de Salamanca for the action, involves various activities and the use of different communication media and means, and assures total coverage the university community, the initial target population. We note the success of programs underway, such as the Concurso Desafío Universidad empresa (University-Business Challenge) and the Concurso Vivero Universitario de Promotores Empresariales (a university entrepreneurial seedbed) in reaching and engaging the target population, as well as that of Universidad de Salamanca´s web links to the Knowledge Transfer Office and another link on technological supply/demand. <a href="http://campus.usal.es/otri">http://campus.usal.es/otri</a>

Seminars and information sessions were held with the business community to communicate the knowledge transfer measures and actions by the University now underway, and those planned, as a means of encouraging business community participation.

## 6. Consideration of the horizontal criteria of equal opportunity, non-discrimination, social responsibility and environmental sustainability

Universidad de Salamanca is a member of the gender equality for excellence network, through the University's Equality Unit, which has a comprehensive gender-equality strategy.

The Universidad de Salamanca Foundation fully implemented the gender-equality strategy in this project, and particularly encouraged the participation of women in the actions taken. The working team is comprised of 6 men and 7 women. Both women and men are involved in all project activities (prototypes, proof of concept, projects/proposals launch pad, consortia, entrepreneurs, seminars, workshops, etc.).

In compliance with national law and practices, the Universidad de Salamanca foundation has taken steps to combat gender discrimination, with special attention to the prevention of harassment and sexual harassment in the workplace, and the assurance of access to

employment, professional training and promotions. The information and communication actions linked to the operation employ non-sexist language and images.

Regarding environmental policies: The Universidad de Salamanca is committed to the application of these, and to ensuring that none of its actions have negative environmental impacts. Thus, the use of innovative technologies that enhance environmental protection was fostered and encouraged in each of the project actions. Resource efficiency, waste reduction, conservation and the mitigation of air, water and soil contamination were taken into consideration, all in efforts toward a transition to industries based on the efficient use of resources, ecological growth, innovation and environmental impact management.

### 7. Synergies with other public policies or instruments

The University-Business Knowledge Transfer Plan, and the actions taken by the Foundation of the Universidad de Salamanca on its behalf, aim to foster multidisciplinary collaboration among knowledge generators and knowledge transfer agents by improving relationships across the regional R+D+i system, and establishing mechanisms for collaboration between academic research and business. All are reflected in Castilla y León's Smart Specialization Strategy, and in its Science Technology and Innovation Strategy 2013-2020.

These objectives are aligned with those set by the EU in its framework program HORIZON 2020, for the funding of R+D+i projects.

The collaboration with business has borne fruit, leading to the establishment of a total of ten consortia, nine international and one national, which are now collaborating on research into subjects such as renal and cardiovascular diseases, plant physiology and hormonal signaling, mechanical engineering, business organizational research and marketing.