Research and Innovation Staff Exchange (RISE): bridging R&I sectors in Europe and worldwide

The specific objectives of the Marie Skłodowska-Curie action "Research and Innovation Staff Exchange" (RISE) are defined as follows:

- The RISE scheme will promote international and inter-sector collaboration through research and innovation staff exchanges, and sharing of knowledge and ideas from research to market (and vice-versa);

- The scheme fosters a shared culture of research and innovation that welcomes and rewards creativity and entrepreneurship and helps to turn creative ideas into innovative products, services or processes.

In RISE two types of organisations are eligible and distinguished according to the following sector:

1. Academic sector;
2. Non-academic sector.

Participating organisations are considered to belong to the academic sector if they have been assigned to one of the following three categories mentioned below:

- Public or private higher education establishments awarding academic degrees;
- Public or private non-profit research organisations whose primary mission is to pursue research;
- International European Interest Organisations.

All other participating organisations belong by default to the non-academic sector.

A RISE partnership shall be composed of at least three organisations established in three different countries. At least two of them must be established in different MS and/or AC. If all the partners are from MS and/or AC, at least one of the partners must be of a different sector. RISE partnerships can be proposed with an international or European inter-sectorial (MS/AC) dimension, or a combination of both. The European dimension allows only inter-sectorial exchanges whereas the international dimension permits exchanges within the same sector.

Here below four examples of proposals to be funded from RISE 2017 call:

**Sustainable Food Security**
The proposed research will bring together researchers from a number of disciplines to address a global challenge in achieving sustainability and resilience of agri-food supply chains. This project aims to identify place-based policy and solution framework to support local ecological system and sustain agri-food production, meet bioenergy needs and reduce waste. The multidisciplinary group ranging from economics, management, science and engineering have been set up to form a strong platform for research and knowledge exchange to carry out this research.

**Project:** EC-Asia Research Network on Integration of Global and Local Agri-Food Supply Chains (GOLF)
**Coordinator:** The University of Liverpool
**MSCA funding:** EUR 1,003,500; duration 48 months
**Nutraceutical for prevention of osteoporosis**

Osteoporosis constitutes a major public health concern. The economic burden of osteoporotic fractures in EU is expected to increase 25% by 2025 compared to 2010. These estimates may indicate an inefficiency of current drugs for osteoporosis. Therefore, there is a need for innovative agents to reduce the burden of osteoporosis. Colostrum is a promising agent against bone loss since it has natural constituents that are directly involved in bone metabolism. Colostrum confers an advantage over pharmacological drugs since it can avoid side effects. This project aims to bridge two academic with two industrial institutions that through inter-sectorial secondments will exchange knowledge, ideas and expertise towards the creation of an innovative product based on colostrum to prevent osteoporosis.

**Project:** Nutraceutical supplementation based on colostrum for prevention of osteoporosis (COLOSTEO)
**Coordinator:** University of Thessaly - UTH
**MSCA funding:** EUR 828,000; duration 48 months

**Building Resilience through Education**

The Building Resilience through Education (BRTE) project brings together partners from academia, the private sector and the NGO sector to find innovative ways to strengthen the resilience of communities affected by recurring disasters. The BRTE partnership has identified education as a key factor in bringing about this transformative change. BRTE aims to build the capacity of Wolayta Zone (Ethiopia) educational institution in pursuit of the following objectives:

- To build the requisite critical infrastructure to enable resilience education and research;
- To establish an educational platform that will build human capital and transform livelihoods;
- To develop research and innovation capacity that will radically promote social and economic well-being.

**Project:** Building Resilience through Education (BRTE)
**Coordinator:** University College Dublin
**MSCA funding:** EUR 2,097,000; duration 48 months

**Tailor-made Recycled Aggregate Concretes**

Concrete is the main construction material used on earth. The increasing population and urbanization has led to construction of new high-rise buildings and demolishing existing old low-rise ones. This has become not only the cause of natural resources depletion at an alarming rate but also gradually becoming a challenge for environmental preservation. Concrete industry consumes a majority of natural resources and produces a large amount of construction waste. In order to ensure sustainable, cost-effective but still profitable concrete production, extensive research is needed to investigate how concrete industry can produce green concrete by using less nature resources and producing less waste.

**Project:** Tailor-made Recycled Aggregate Concretes (TRAC)
**Coordinator:** University of Plymouth
**MSCA funding:** EUR 450,000; duration 48 months