summer schools which were open to a wider public and created visibility for the research group. 15 working papers of the project were published on the project website as well as in the working paper series of the participating institutions. All were presented at international conferences and subsequently turned into publications in international peer reviewed journals. All working papers contain a one page publicly accessible summary to facilitate communication to a wider audience, including the general printed media.

FACTS AND FIGURES	
Project Name	Education Economics Network
Project Acronym	EdEN
Project ID	691676
Project contact	Magyar Tudomanyos Akademia Kozgazdasag- Es Regionalis Tudomanyi Kutatokozpont (Hungary)
Coordinator	Dr. Daniel Horn, horn.daniel@krtk.mta.hu
All Participants in Project	1. Katholieke Universiteit Leuven (Belgium) 2. Universiteit Maastricht (Netherlands) 3. Politecnico Di Milano (Italy)
Start Day – End Day	01/01/2016 – 31/12/2018
Instrument Funding	Twinning
Call for Proposal	H2020-TWINN-2015
Project Website	www.edenproject.eu
EC Financial Contribution / Overall budget	€ 681 437,50 / € 681 437,50
Project Keywords	Economics of education, equity, efficiency, quantitative methods
Area	Economics

SEED

STRENGTHENING THE SFAX UNIVERSITY EXPERTISE FOR DIAGNOSIS AND MANAGEMENT OF EPILEPTIC ENCEPHALOPATHIES

Developmental Epileptic Encephalopathies (DEE) represent a group of severe epileptic diseases with early onset that lead to progressive cerebral dysfunction. The genetic causes are prominent. New molecular technologies have made it easier to diagnose and initiate treatment earlier leading to better patient outcomes. The SEED project will help the Sfax University (SU) in Tunisia to establish a collaboration (Twinning) with two internationally leading European institutions in DEE diagnosis, Aix-Marseille University in France and University of Antwerp in Belgium, to build research excellence and innovation in DEE clinical and genetic diagnostics. The aim is for SU to build long lasting research networks, to close knowledge gaps and to integrate into international programmes via training and staff exchanges.

This project has considerable value for Tunisians, for the communities, for the beneficiary parties, and for stakeholders.

Stakeholders include medical professionals, researchers and their scientific communities, epidemiologists, medical educators, clinical trialists, insurance payers, regulatory agencies and policy makers, patient families, non-governmental organizations (NGOs), advocacy groups, and medical reporters.

Expected impacts are:

- To improve the skills and technical capacities of Tunisian doctors, researchers, and health professional on the diagnosis of DEE.
- To increase the research excellence of the coordinating institutions in the field of DEE.
- To enhance the reputation, attractiveness and networking channels of the coordinating institutions.

SU will become a designated "specialized epilepsy centre" as determined by the International League Against Epilepsy (ILAE).

Prof. Dr. Chahnez Charfi Triki, coordinator of the twinning project SEED. Project Collection.

What are some of the positive aspects highlighted?

Some of the positive aspects of SEED are:

- *Improving clinical diagnostics.*
- *Improving EEG techniques and interpretation.*
- *Enhancing the quality of DEE phenotyping.*
- *Increasing technical and molecular capacity.*
- *Improving interpretation of the results of NGS.*
- *Enhancing high throughput data management.*
- *Increasing knowledge transfer and ensure the sustainability of the project.*

SEED project members. Project Collection

This will enable it to receive fellowships and researchers from the Middle East and North Africa (MENA) region for training.

SEED project funding will provide access to scientific excellence at international levels for next generation sequencing domain, based on the expertise of SEED team on the EE NGS.

The combination of the specialised knowledge of the institutions involved, the training and technological factors will all contribute to introduce successful structural change at SU successfully.

What can we expect next with the project?

The project aims at stepping up and stimulating the scientific excellence and innovation capacity of SU thanks to the collaboration with Aix Marseille University (AMU) and Anvers University (UA), as well as the scientific quality of the involved EU partners through the implementation of training and capacity building activities.

The structural change will:

- Increase the number of publications with high impact factors (from 0 to 4).
- Increase the number of new generation sequencing experts. This will allow SU to develop its gene panel and to deploy the skills acquired in other genetic diseases (e.g. neuromuscular diseases, leukodystrophy), and subsequently to improve their level of technological maturity (from 4 to 9)
- Train additional skills that will enhance

How do you think the project will impact the economy of the region/country?

SEED seeks to reduce the costs of Developmental Epileptic Encephalopathies (DEE) diagnosis in three components:

Cost of time lost to patient/family: This is the time between electro-clinical diagnosis for DEE syndromes and the genetic diagnosis before the use of Next Generation Sequencing (NGS) was very long (15 years in one of Sfax University (SU) patient who died before the diagnosis was complete). With the availability of DEE panel testing, the genetic diagnosis can be obtained within months after birth.

Extra cost: Early clinical and genetic diagnostic of DEE helps to evaluate the recurrence risk; guiding medication management and avoiding aggravation with inappropriate drugs which would result in extra costs.

Monetary cost: Overall the cost of the etiological evaluation for epilepsy was significantly higher compared to cost of DEE panel testing. Indeed, the cost of current epilepsy gene panels ranges from 1 500 to 6 000 dollars compared to 19 000 dollars spent on diagnostic tests other than NGS.