NEWS ITEM 06/2019

**TAmiRNA GmbH is part of the EU-funded Innovative Training Network FIDELIO**

Vienna, Austria (September 2019)
Diabetes mellitus is a widespread metabolic disease, with negative/adverse effects on many organ systems. Diabetes also significantly affects bone health. An increased risk of bone fractures and impaired fracture healing has been observed in patients, but the mechanisms are not fully understood. In order to investigate the links between diabetes and the bone system, the EU project "FIDELIO" will run for four years starting October 2019. This European Training Network, coordinated by scientists from the Faculty of Medicine of the Technical University of Dresden, is funded by the EU Marie Skłodowska-Curie Actions program with a total of 3.8 million €.

FIDELIO aims to train the next generation of scientists in order to tackle the challenges of diabetic bone disease from various angles and with the newest technologies available. The research programme will address different aspects of diabetic bone disease from the viewpoints of epidemiology, genetics, miRNAs, microbiome, bone biology, bone biomechanics and microstructure, preclinical and clinical research.

**Early Stage Researcher project (ESR13) at TAmiRNA**
miR-203a has been recently identified as a key regulator of bone formation and potential biomarker candidate for type-2 diabetic bone disease. In order to complete our understanding of the biological functions of this miRNA, you will characterize expression levels of miR-203a in different compartments of bone tissue from type-2 diabetic and nondiabetic animals obtained in collaboration with the Technical University Dresden (TUD), and apply RNAs sequencing technology in primary (like) human bone cells (osteoprogenitors and osteoclast progenitors) under ectopic up- and down-regulation of miR-203a to identify novel mRNA targets.
For more information click [here](#) or get in touch

**TAmiRNA** specializes in technologies for profiling levels of blood-circulating microRNAs and developing multi-parametric classification algorithms (“signatures”). TAmiRNA uses these technologies to develop minimal-invasive diagnostic tests for drug development, early diagnosis and prognosis of disease, and as companion diagnostic tests to support treatment decisions.