**PROJECT CO-FUNDED BY THE EUROPEAN REGIONAL DEVELOPMENT FUNDS (ERDF)**

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**Reference**: SAF2016-80286-R

**Title**: ‘Role of the Parathormone receptor (pth1r) and the primary cilium in bone mechanotransduction and recruitment of osteoclast precursors by osteocytes’ (Papel del receptor de Parathormona (pth1r) y el cilio primario en la mecanotransducción ósea y en el reclutamiento de precursores osteoclasticos por parte de osteocitos)

**Financing Entity:** Spanish Ministry of Economy, Industry and Competitivity (Ministerio de Industria, Economía y Competitividad); European Regional Development Fund (ERDF) and Spanish State Research Agency (Agencia Estatal de Investigación).

**Total amount**: 72. 600 €

**Start date**: 30/12/2016

**End date**: 29/12/2019

**Summary:**

To describe the role of the Parathormone receptor (PTH1R) and the primary cilium as the molecular tools that allow the osteocyte and the osteoblast to act as mechanosensors in the bone, as well as to trigger extracellular responses that regulate the activity of osteoclast precursors.

The results obtained in this project would entail an improvement in the knowledge of bone regulation processes in physio-pathological situations and would help in the important challenge of a progressive aging society. It would also be beneficial in the development of therapies and diagnostic/prognostic methods of bone pathologies associated with age, such as the osteoporosis.