



3.6 Surgery, Transplant and Health Technologies Area



Bone Pathophysiology and Biomaterials Group

Publications: **7** Impact Factor: **12.529** QI: **2**

Research Activity

Publications

- Cordero-Ampuero J, García-Rey Eo, García-Cimbrello E. Proximal femoral bone regeneration after an uncemented hydroxyapatite-coated long-stem in revision hip surgery. *Open Orthop J.* 2018; 12: 125-33. Article. Not Indexed
- Fernández-Fernández R, Martínez-Miranda JM, Gil-Garay E. Comparison of an uncemented tapered stem design in cobalt-chrome vs titanium at 15-year follow-up. *J Arthroplasty.* 2018; 33(4): 1139-43. Article. IF: 3.524; Q1
- Gómez-Álvarez J, González-Escobar S, Gil-Garay E. Clinical assessment of patients with isolated hip fractures associated with an upper limb fracture. *Rev Esp Cir Ortop Traumatol.* 2018; 62(3): 222-7-. Article. Not Indexed
- Martín-Saavedra F, Escudero-Duch C, Prieto M, Sánchez-Casanova S, López D, Arruebo M, Voellmy R, Santamaría J, Vilaboa N. Pro-angiogenic near infrared-responsive hydrogels for deliberate transgene expression. *Acta Biomater.* 2018; 78: 123-36. Article. IF: 6.638; D1
- Rey DM, Martín SD, Hernando AS, Gamarra CM, Álvarez-Escola C, Ferrer PL, Vicandi B, Martín-Hervas C. Thyroid nodules: Too many fine needle biopsies? *Curr Med Imaging Rev.* 2018; 14(5): 725-31. Article. IF: 0.533; Q4
- Rubio-Suárez JC, Carbonell-Escobar R, Rodríguez-Merchán EC, Ibarzábal-Gil A, Gil-Garay E. Fractures of the tibial pilon treated by open reduction and internal fixation (locking compression plate-less invasive stabilising system): Complications and sequelae. *Injury.* 2018; 49: S60-4. Article. IF: 1.834; Q2

- Saez-López P, González-Montalvo JI, Ojeda-Thies C, Mora-Fernández J, Muñoz-Pascual A, Cancio J M, Tarazona F J, Pareja T, Gómez-Campelo P, Montero-Fernández N, Alarcón T, Mesa-Lampre P, Larráinzar-Gar R, Duaso E, Gil-Garay E, Díez-Pérez A, Prieto-Alhambra D, Queipo-Matas R, Otero-Puime A. Spanish National Hip Fracture Registry (SNHFR): a description of its objectives, methodology and implementation. *Rev Esp Geriatr Gerontol.* 2018; 53(4): 188-95. Article. Not Indexed

Public projects

- **Aguilar de Armas MR, Ramírez R, Vilaboa Díaz N.** Preparation and application of eardrops for the inhibition of sensorineural hearing loss (NADEAFNESS). CIBER-BBN. 2017-2019.
Management centre: CIBER-BBN
- **Escudero Duch C.** Contrato predoctoral (FI14/00447). ISCIII. 2015-2018.
Management centre: FIBHULP
- **Saldaña Quero L.** Contrato Miguel Servet Tipo II (CP1116/00038). CM. 2017-2019.
Management centre: FIBHULP
- **Saldaña Quero L.** Pre-acondicionamiento inflamatorio de células madre mesenquimales para su aplicación en terapias avanzadas de regeneración ósea mediante ingeniería de tejidos (PI15/00752). ISCIII. 2016-2018.

Management centre: FIBHULP

Sánchez Casanova S. Contrato ayuda investigación (PEJ15/BIO/AI-0250). CM. 2016-2018.

Management centre: FIBHULP

Santamaria J, Vilaboa Díaz N. Bone substitutes based on hydrogels responsive to near infrared light for the generation of therapeutic hyperthermia (NIRHYD). CIBER-BBN. 2018-2020.

Management centre: CIBER-BBN

Vilaboa Díaz NE. Contrato de estabilización I2. CM. 2013-2025.

Management centre: FIBHULP

Vilaboa Díaz NE. Hacia una terapia avanzada de regeneración ósea: intermediarios tisulares activables mediante energía infrarroja para la expresión controlada de factores ontogénicos y antigénicos (PI15/01118). ISCIII. 2016-2018.

Management centre: FIBHULP

Vilaboa Díaz NE. MULTIMAT - Materiales multifuncionales para los retos de la sociedad (S2013/MIT-2862). CM. 2014-2018.

Management centre: FIBHULP

Private projects

San Roman del Barrio J, Vilaboa Díaz N. Caracterización y evaluación de biomateriales de aplicación dental. J Ripoll S.L. 2017-2018.

Management centre: CIBER-BBN

Vilaboa Díaz NE. Detección de activación de HSF parte II. HSF Farmacéutica. 2004-Ongoing.

Management centre: FIBHULP

Vilaboa Díaz NE. Estudio de actividad osteoblástica de dos sustancias: ranelato de estroncio y LA16034. Lacer S.A. 2011-Ongoing.

Management centre: FIBHULP

Vilaboa Díaz NE. Animal model of bone regeneration induced by tissue intermediates responsive to near-infrared light. Roche Farma S.A. 2016-Ongoing.

Management centre: FIBHULP

Vilaboa Díaz NE. Desarrollo de fluidos que potencien o favorezcan la osteointegración de los implantes ante distintas situaciones. Mozo-Grau S.A. 2017-Ongoing.

Management centre: FIBHULP

Clinical trials

Gil Garay E. Artroplastia total de cadera con el vástago femoral alteon™ Tapered Wedge de Exactech®. Type: EPA-SP.

HULP code: PI-2913. Sponsored's protocol code: CRI4-001.

Sponsored by: Exactech International Operation AG. Signed date: 09/02/2018

Patents and trademarks

Fabilli M, Wilson C, Padilla F, Martín Saavedra FM, inventors; The regents of the University of Michigan, assignee. Ultrasound-triggerable agents for tissue engineering; PCT/US2013/044817, US2013/0330389; 2012 June 08.

González Carrasco JL, Benavente Castro R, Cifuentes Cuellar SC, Lieblich Rodríguez M, Olalde Graells B, Atorrasagasti Goyalde G, Argarate Madariaga N, Pacha Olivenza MA, Fernández Calderón MC, Saldaña Quero L, González Martín ML, Pérez Giraldo C, Gallardo Moreno AM, inventors; CSIC, Fundación Tecnalia Research & Innovation, FIBHULP, Universidad de Extremadura, Centro de Investigación Biomédica en Red (CIBER). Moldable, biodegradable, biocompatible and bioresorbable implant material, method for its preparation and uses thereof. P201530683; 2015 May 18.

Martín Saavedra FM, Vilaboa Díaz NE, Cebrián Hernando V, Arruebo Gordo M, Santamaria Ramiro J, Gómez Navascués L, inventors; FIBHULP, CIBER-BBN, Universidad de Zaragoza, assignees. Fibrin hydrogel with plasmonic nanoparticles; P201330894, PCT/ES2014/070484; 2013 June 14.

Vilaboa Díaz NE, Calzado Martín A, Crespo García L, Saldaña Quero L, Moreo Calvo P, Alastrué Vera V, inventors; FIBHULP, CIBER-BBN, assignees. Chamber device for dynamic cell culture on biomaterials; P201330040, PCT/ES2013/070819; 2013 January 16.

Vilaboa Díaz NE, González Carrasco JL, Multigner Domínguez M, Lieblich Rodríguez M, Muñoz Hernández M, Frutos Torres E, Saldaña Quero L, inventors; FIBHULP, CSIC, CIBER-BBN, Universidad Alfonso X El Sabio, assignees. Magnesium/polymer composite biomaterial for biomedical applications; P201030950, PCT/ES2011/070440; 2010 June 21.

Vilaboa Díaz NE, González Carrasco JL, Saldaña Quero L, Frutos Torres E, inventors; FIBHULP, CSIC, CIBER-BBN, assignees. Method to obtain a metallic-coated biomaterial; P201030949, PCT/ES2011/070400; 2010 June 21.

Voellmy R, Vilaboa Díaz NE, inventors; HSF Pharmaceuticals S.A., assignee. Inhibitors of heat shock factor 1 and uses thereof. US 62/495,501; 2016 September 16.

Voellmy R, Vilaboa Díaz NE, inventors; HSF Pharmaceuticals SA. Assignees. Compounds that induce protein unfolding and a mitigated response thereto, and methods of use thereof. US 62/764,569. 2018 August 08

Voellmy R, Vilaboa Díaz NE, inventors; HSF Pharmaceuticals SA. Assignees. Inhibitors of heat shock factors and uses thereof. US62/499,650. 2017 February 17