

Bone Pathophysiology and Biomaterials Group



 Publications: **11**

 Impact Factor: **47.723**

 QI: **8**

Research Activity

DOCTORAL THESES

Romanillos Arroyo JO. ¿Mejora la PTH (Teriparada) los resultados en fracturas peritrocantéreas inestables osteoporóticas?[dissertation]. Madrid: UAM: 2017(07/09/2017).

Directors: Gil Garay E; Herruzo Cabrera R.

PUBLICATIONS

- Cruz-Pardos A, García-Rey E, García-Cimbreló E. Total hip arthroplasty with use of the cementless Zweymüller Alloclassic System A concise follow-up, at a minimum of 25 years, of a previous report. *J Bone Joint Surg Am.* 2017; 99(22): 1927-31. Article. IF: 4.583; D1
- Fernández-Calderón MC, Cifuentes SC, Pacha-Olivenza MA, Gallardo-Moreno AM, Saldaña L, González-Carrasco JL, Blanco MT, Vilaboa N, González-Martín ML, Pérez-Giraldo C. Antibacterial effect of novel biodegradable and bioresorbable PLDA/Mg composites. *Biomed Mater.* 2017; 12(1): 15025. Article. IF: 2.897; Q2
- García-Cimbreló E. CORR Insights (R): femoral morphology in the dysplastic hip: three-dimensional characterizations with CT. *Clin Orthop Relat R.* 2017; 475(4):1055-7. Editorial Material. IF: 4.091; D1
- García-Rey E, Cruz-Pardos A, García-Cimbreló E. The evolution of an uncemented acetabular component in alumina-on-alumina total hip arthroplasty has improved clinical outcome: a prospective, comparative five- to 15-year follow-up study. *Bone Joint J.* 2017; 99B(6): 749-58. Article. IF: 3.581; D1
- Martín-Saavedra F, Crespo L, Escudero-Duch C, Saldaña L, Gómez-Barrena E, Vilaboa N. Substrate microarchitecture shapes the paracrine crosstalk of stem cells with endothelial cells and

osteoblasts. *SCI Rep-Uk.* 2017; 7: 15182. Article. IF: 4.122; Q1

- Martín-Saavedra F, Ruíz-Hernández E, Escudero-Duch C, Prieto M, Arruebo M, Sadeghi N, Deckers R, Storm G, Hennink WE, Santamaría J, Vilaboa N. Lipogels responsive to near-infrared light for the triggered release of therapeutic agents. *Acta Biomater.* 2017; 61: 54-65. Article. IF: 6.383; D1
- Palao-Suay R, Martín-Saavedra FM, Aguilar MR, Escudero-Duch C, Martín-Saldaña S, Parra-Ruiz FJ, Rohner NA, Thomas SN, Vilaboa N, Roman JS. Photothermal and photodynamic activity of polymeric nanoparticles based on alpha-tocopheryl succinate-RAFT block copolymers conjugated to IR-780. *Acta Biomater.* 2017; 57: 70-84. Article. IF: 6.383; D1
- Ruíz Ibán MA, Tejedor A, Gil Garay E, Revenga C, Hermosa JC, Montfort J, Peña M J, López Millán J M, Montero Matamala A, Capa Grasa A, Navarro MJ, Gobbo M, Loza E. GEDOS-SECOT consensus on the care process of patients with knee osteoarthritis and arthroplasty. *Rev Esp Cir Ortop Traumatol.* 2017; 61(5): 296-312. Article. Not Indexed
- Saldaña L, Vallés G, Bensiamar F, Mancebo FJ, García-Rey E, Vilaboa N. Paracrine interactions between mesenchymal stem cells and macrophages are regulated by 1,25-dihydroxyvitamin D3. *SCI Rep-Uk.* 2017; 7: 14618. Article. IF: 4.122; Q1
- Vilaboa N, Boré A, Martín-Saavedra F, Bayford M, Winfield N, Firth-Clark S, Kirton SB, Voellmy R. New inhibitor targeting human transcription factor HSF1: effects on the heat shock response and tumor cell survival. *Nucleic Acids Res.* 2017; 45(10): 5797-817. Article. IF: 11.561; D1
- Voellmy R, Bloom DC, Vilaboa N, Feller J. Development of recombinant HSV-Based Vaccine Vectors. *Methods Mol Biol.* 2017; 1581: 55-78-. Article. Not Indexed

PUBLIC PROJECTS

Escudero Duch C. Contrato predoctoral de formación en investigación, Instituto de Salud Carlos III (FI14/00447). ISCIII. 2015-2018.

Surgery, Transplant and Health Technologies Area

Management centre: FIBHULP

Saldaña Quero L. Contrato Miguel Servet tipo II (CPII16/00038). CAM, ISCIII. 2017-2019.

Management centre: FIBHULP

Saldaña Quero L. Preacondicionamiento inflamatorio de celulas madre mesenquimales para su aplicacion en terapias avanzadas de regeneracion osea mediante ingenieria de tejidos (PI15/00752). ISCIII. 2016-2018.

Management centre: FIBHULP

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

Management centre: FIBHULP

Vallés Pérez G. Contrato de graduado superior en formación para programa operativo de empleo juvenil (PEJ-2014-A-23662). MINECO. 2015-2017.

Management centre: FIBHULP

Vilaboa Díaz NE. Biofunctionalization of titanium implant surfaces: protein conformation, osseointegration and antimicrobial activity (BIOSURFACES2016). CIBER-BBN. 2016-2017.

Management centre: CIBER-BBN

Vilaboa Díaz NE. Control espaciotemporal de la expresion de transgenes mediante irradiación con luz en el infrarrojo cercano (SAF2013-50364-EXP). MINECO. 2014-2017.

Management centre: FIBHULP

Vilaboa Díaz NE. Dynamic molecular bio-interfaces for controlled environments towards vascular morphogenesis (DYNAMIC-VASC-2). CIBER-BBN. 2016-2017.

Management centre: CIBER-BBN

Vilaboa Díaz NE. Hacia una terapia avanzada de regeneracion osea: intermediarios tisulares activables mediante energia infrarroja para la expresion controlada de factores osteogenicos y angiogenicos (PI15/01118). ISCIII. 2016-2018.

Management centre: FIBHULP

Vilaboa Díaz NE. Innovative biomedical tools for the early diagnosis and treatment of osteoporosis and osteoarthritis (OSTEOMIR). CIBER-BBN. 2016-2017.

Management centre: CIBER-BBN

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

Management centre: FIBHULP

Vilaboa Díaz NE. Contrato de Estabilización Miguel Servet (I2). CAM, ISCIII. 2013-2025.

Management centre: FIBHULP

Vilaboa Díaz NE. NIR-responsive scaffolds for deliberate regulation of transgene expression in bone tissue engineering

(HOT-SCAFF extended). CIBER-BBN. 2016-2017.

Management centre: CIBER-BBN

Vilaboa Díaz NE. Preparation and application of eardrops for the inhibition of sensorineuronal hearing loss (NADEAF-NESS). CIBER-BBN. 2017-Ongoing.

Management centre: CIBER-BBN

Vilaboa Díaz NE. Red de investigación para el desarrollo de implantes de titanio funcionalizados (MAT2014-52905-REDT). MINECO. 2014-2017.

Management centre: Universidad Politécnica de Valencia

PRIVATE PROJECTS

Vilaboa Díaz NE. Animal model of bone regeneration induced by tissue intermediates responsive to near-infrared light (AMBIT). Roche Farma S.A. 2016-2017.

Management centre: FIBHULP

Vilaboa Díaz NE. Caracterización y Evaluación de biomateriales de aplicación dental. J Ripoll S.L. 2017-Ongoing.

Management centre: CIBER-BBN

Vilaboa Díaz NE. Detección de activación de HSF parte II- parte XI. HSF Pharmaceuticals. 2004-2018.

Management centre: FIBHULP

Vilaboa Díaz NE. Preparation and application of eardrops for the inhibition of sensorineuronal hearing loss (NADEAF-NESS). Alodia Farmaceutica S.L. 2017-Ongoing.

Management centre: CIBER-BBN

CLINICAL TRIALS

Gil Garay E. Estudio prospectivo, multicéntrico, no aleatorizado. Estudio de resultados clínicos del sistema acetabular R3 en pacientes con enfermedades degenerativas de cadera. Type: EPA-SP.

HULP code: ANEXO-I 2929.

Sponsored's protocol code: R3H01/01/05/200.

Sponsored by: Smith Nephew.

Signed date: 18/12/2017

PATENTS AND TRADEMARKS

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.

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.

Fabiilli 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.

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.

Martín Saavedra FM, Vilaboa Díaz NE, Cebrián Hernando V, Arruebo Gordo M, Santamaría 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.

González Carrasco JL, Benavente Castro R, Cifuentes Cue-

llar SC, Lieblich Rodríguez M, Olalde Graells B, Atorrastagasti 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.

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.

