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NOMBRE Y APELLIDOS: Juan Antonio Barcia Albacar

CUERPO: Catedrático de Universidad

UNIVERSIDAD O CENTRO: Universidad Complutense de Madrid

RAMA DE CONOCIMIENTO: Ciencias de la Salud. Medicina Clínica.

ÁREA DE CONOCIMIENTO: Cirugía

SEXENIOS (RD 1086/89): 5

ACTIVIDAD INVESTIGADORA, DE TRANSFERENCIA E INTERCAMBIO DE CONOCIMIENTO:

1: Meyer GM, Hollunder B, Li N, Butenko K, Dembek TA, Hart L, Nombela C, Mosley P, Akram H, Acevedo N, Borrón BM, Chou T, Castaño Montoya JP, Strange B, Barcia JA, Tyagi H, Castle DJ, Smith AH, Choi KS, Kopell BH, Mayberg HS, Sheth SA, Goodman W, Leentjens AFG, Richardson RM, Rossell SL, Bosanac P, Cosgrove GR, Kuhn J, Visser-Vandewalle V, Figeo M, Dougherty DD, Siddiqi SH, Zrinzo L, Joyce E, Baldermann JC, Fox MD, Neudorfer C, Horn A. Deep Brain Stimulation for Obsessive-Compulsive Disorder: Optimal stimulation sites. *Biol Psychiatry*. 2023 Dec 21:S0006-3223(23)01785-7. doi: 10.1016/j.biopsych.2023.12.010. Epub ahead of print. PMID: 38141909.

2: Treu S, Barcia JA, Torres C, Bierbrauer A, Gonzalez-Rosa JJ, Nombela C, Pineda-Pardo JA, Torres D, Kunz L, Hellerstedt R, AVECILLAS-CHASIN JM, Lara M, Navas M, Vallejo AG, García-Albea J, Oliviero A, Seijo F, Horn A, Li N, Axmacher N, Canals S, Reneses B, Strange BA. Deep-brain stimulation of the human nucleus accumbens-medial septum enhances memory formation. *Res Sq [Preprint]*. 2023 Nov 20:rs.3.rs-3476665. doi: 10.21203/rs.3.rs-3476665/v1. PMID: 38045279; PMCID: PMC10690315.

3: Rabinovici Gherman B, Reneses Prieto B, Barcia JA, Ortiz-Villajos López M, Isabel Ramos García M. Safety and Efficacy of Electroconvulsive Therapy in a Patient With Four Deep Brain Stimulation Electrodes. *J ECT*. 2023 Jun 1;39(2):119-120. doi: 10.1097/YCT.0000000000000883. Epub 2022 Sep 20. PMID: 36129473.

4: Barcia JA, Vilorio MA, Yubero R, Sanchez-Sanchez-Rojas L, López A, Strange BA, Cabrera M, Canuet L, Gil P, Nombela C. Directional DBS of the Fornix in Alzheimer's Disease Achieves Long-Term Benefits: A Case Report. *Front Aging Neurosci*. 2022 Apr 1;14:809972. doi: 10.3389/fnagi.2022.809972. PMID: 35431895; PMCID: PMC9011335.

- 5: Rascón-Ramírez FJ, Esteban-García N, Barcia JA, Trondin A, Nombela C, Sánchez-Sánchez-Rojas L. Are We Ready for Cell Therapy to Treat Stroke? *Front Cell Dev Biol.* 2021 Jun 23;9:621645. doi: 10.3389/fcell.2021.621645. PMID: 34249901; PMCID: PMC8260969.
- 6: Li N, Hollunder B, Baldermann JC, Kibleur A, Treu S, Akram H, Al-Fatly B, Strange BA, Barcia JA, Zrinzo L, Joyce EM, Chabardes S, Visser-Vandewalle V, Polosan M, Kuhn J, Kühn AA, Horn A. A Unified Functional Network Target for Deep Brain Stimulation in Obsessive-Compulsive Disorder. *Biol Psychiatry.* 2021 Nov 15;90(10):701-713. doi: 10.1016/j.biopsych.2021.04.006. Epub 2021 Apr 20. PMID: 34134839.
- 7: Treu S, Gonzalez-Rosa JJ, Soto-Leon V, Lozano-Soldevilla D, Oliviero A, Lopez-Sosa F, Reneses-Prieto B, Barcia JA, Strange BA. A ventromedial prefrontal dysrhythmia in obsessive-compulsive disorder is attenuated by nucleus accumbens deep brain stimulation. *Brain Stimul.* 2021 Jul-Aug;14(4):761-770. doi: 10.1016/j.brs.2021.04.028. Epub 2021 May 11. PMID: 33984535.
- 8: Lopez-Sosa F, Reneses B, Sanmartino F, Galarza-Vallejo A, Garcia-Albea J, Cruz-Gomez AJ, Yebra M, Oliviero A, Barcia JA, Strange BA, Gonzalez-Rosa JJ. Nucleus Accumbens Stimulation Modulates Inhibitory Control by Right Prefrontal Cortex Activation in Obsessive-Compulsive Disorder. *Cereb Cortex.* 2021 Mar 31;31(5):2742-2758. doi: 10.1093/cercor/bhaa397. PMID: 33406245.
- 9: Wu H, Hariz M, Visser-Vandewalle V, Zrinzo L, Coenen VA, Sheth SA, Bervoets C, Naesström M, Blomstedt P, Coyne T, Hamani C, Slavin K, Krauss JK, Kahl KG, Taira T, Zhang C, Sun B, Toda H, Schlaepfer T, Chang JW, Régis J, Schuurman R, Schulder M, Doshi P, Mosley P, Poologaindran A, Lázaro-Muñoz G, Pepper J, Schechtmann G, Fytagoridis A, Huys D, Gonçalves-Ferreira A, D'Haese PF, Neimat J, Broggi G, Vilela-Filho O, Voges J, Alkhani A, Nakajima T, Richieri R, Djurfeldt D, Fontaine P, Martinez-Alvarez R, Okamura Y, Chandler J, Watanabe K, Barcia JA, Reneses B, Lozano A, Gabriëls L, De Salles A, Halpern CH, Matthews K, Fins JJ, Nuttin B. Deep brain stimulation for refractory obsessive-compulsive disorder (OCD): emerging or established therapy? *Mol Psychiatry.* 2021 Jan;26(1):60-65. doi: 10.1038/s41380-020-00933-x. Epub 2020 Nov 3. PMID: 33144712; PMCID: PMC7815503.
- 10: Matías-Guiu J, Matías-Guiu JA, Montero-Escribano P, Barcia JA, Canales-Aguirre AA, Mateos-Diaz JC, Gómez-Pinedo U. Particles Containing Cells as a Strategy to Promote Remyelination in Patients With Multiple Sclerosis. *Front Neurol.* 2020 Jul 7;11:638. doi: 10.3389/fneur.2020.00638. PMID: 32733364; PMCID: PMC7358567.
- 11: Li N, Baldermann JC, Kibleur A, Treu S, Akram H, Elias GJB, Boutet A, Lozano AM, Al-Fatly B, Strange B, Barcia JA, Zrinzo L, Joyce E, Chabardes S, Visser-Vandewalle V, Polosan M, Kuhn J, Kühn AA, Horn A. A unified connectomic target for deep brain stimulation in obsessive-compulsive disorder. *Nat Commun.* 2020

Jul 3;11(1):3364. doi: 10.1038/s41467-020-16734-3. PMID: 32620886; PMCID: PMC7335093.

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13: Barcia JA, Reneses B, Nombela C. Precision surgery for obsessive compulsive disorder-which is the proper target? *Ann Transl Med*. 2019 Sep;7(Suppl 6):S184. doi: 10.21037/atm.2019.07.65. PMID: 31656763; PMCID: PMC6789361.

14: Soria B, Martin-Montalvo A, Aguilera Y, Mellado-Damas N, López-Beas J, Herrera-Herrera I, López E, Barcia JA, Alvarez-Dolado M, Hmadcha A, Capilla-González V. Human Mesenchymal Stem Cells Prevent Neurological Complications of Radiotherapy. *Front Cell Neurosci*. 2019 May 16;13:204. doi: 10.3389/fncel.2019.00204. PMID: 31156392; PMCID: PMC6532528.

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21: Sanchez-Rojas L, Gómez-Pinedo U, Benito-Martin MS, León-Espinosa G, Rascón-Ramirez F, Lendinez C, Martínez-Ramos C, Matías-Guiu J, Pradas MM, Barcia JA. Biohybrids of scaffolding hyaluronic acid biomaterials plus adipose stem cells home local neural stem and endothelial cells: Implications for reconstruction of brain lesions after stroke. *J Biomed Mater Res B Appl Biomater.* 2019 Jul;107(5):1598-1606. doi: 10.1002/jbm.b.34252. Epub 2018 Oct 11. PMID: 30307108.

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- 30: Pascual-Gallego M, Alonso-Lera P, Arribi A, Barcia JA, Marco J. *Nocardia farcinica* abscess of the cerebellum in an immunocompetent patient: A case report and review of the literature. *Asian J Neurosurg*. 2016 Oct-Dec;11(4):454. doi: 10.4103/1793-5482.145179. PMID: 27695569; PMCID: PMC4974990.
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ACTIVIDAD DOCENTE:

2011-actual Catedrático de Universidad / Universidad Complutense de Madrid
2006 - 2011 Profesor asociado / Universidad Complutense de Madrid
1999 - 2006 Profesor titular / Universitat de València

ACTIVIDADES DE LIDERAZGO (PARA CU):

2005 - 2006 Director laboratorio de Neuroregeneración / Centro de Investigación Príncipe Felipe. Valencia

2003 - 2006 Director Científico / Fundación de investigación GHUV

EXPERIENCIA PROFESIONAL:

2006 - actual Jefe de Servicio de Neurocirugía Hosp. Clínico San Carlos de Madrid / Universidad Complutense de Madrid

2002 - 2006 Jefe de Sección de Neurocirugía Hosp. Gral / Universitat de València

1993 – 1997 Facultativo Especialista Área / Hospital General Valencia/Univ.Valencia

1007-2002 Facultativo Especialista Área / Hospital General CS/Univ.Valencia

1987 - 1992 Médico Interno Residente / Hospital Clínico Univ. Valencia

OTROS MÉRITOS: