

Date of the CVA	05/02/2020
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Section A. PERSONAL DATA

Name and Surname	Luis Barneo Serra		
DNI/NIE/Passport		Age	70
Researcher's identification number	Researcher ID	M-2712-2017	
	Scopus Author ID	6602813846	
	ORCID	0000-0001-9410-4262	

A.1. Current professional situation

Institution	Universidad de Oviedo		
Dpt. / Centre			
Address			
Phone	Email	lbarneo@uniovi.es	
Professional category	Catedrático Vinculado de Cirugía	Start date	2016
UNESCO spec. code	321300 - Surgery		
Keywords	Therapeutics; Laboratoy animals		

A.2. Academic education (Degrees, institutions, dates)

Bachelor/Master/PhD	University	Year
Oviedo	Universidad de Oviedo	1986
Licenciado en Medicina y Cirugía	Universitat de Barcelona	1973

A.3. General quality indicators of scientific production

Islet transplantation and experimental diabetes have a broad background in experimental surgery that I developed in the Dpt. of Surgery, Univ. of Minnesota, with Dr. D.E.R. Sutherland in 1984 and 1987, with specific training in experimental pancreatic and islet transplantation. My PhD Thesis was about islet transplantation in rats (1986). In the 80-90s of the last century, my research was about different methods of islet isolation, normalization of metabolic alterations after islet transplantation, experimental immunosuppression... And in the last years it has been focused on innovative measures and approaches to ameliorate the survival of transplanted islets. I successfully administered 8 grants as PI that I have obtained from Spanish Health Research Fund, collaborated as CO-PI with other researchers in 5 grants, and produce more than 20 articles about islet transplantation.

- Comparison of Various Techniques for Rat Islet Isolation. **Transplantation proceedings**. 1990; 22(2):777-8
- Effect of Streptozotocin-induced diabetes and islet transplantation in proximal skeletal muscle: A histochemical and morphometric analysis. **The Journal of laboratory and clinical medicine**. 1994; 123(6):921-9.
- Effects of islet transplantation on advanced glycosylation end products in diabetic rats. **Transplantation proceedings**. 1995; 27(6):3345-6
- Plasma-fibroblast gel as scaffold for islet transplantation **Tissue engineering**. Part A. 2009; 15(3):569-77.

Pancreatic cancer

I am the leader of "Grupo G038A-Oncología Quirúrgica Hepatobiliopancreática" of Instituto de Investigación Sanitaria del Principado de Asturias (IIPA) and Pancreatic Surgery in the Asturias Central University Hospital (HUCA). Currently, my researches focus on pancreatic cancer, gene expression in order to find markers and targets, stroma of cancer and animal models of human cancer. I have obtained 6 grants from Spanish Health Research Fund in this thematic area, collaborated with other researchers, and produced several peer-reviewed publications. These investigations bear fruit with the obtention

of an invention patent of a new marker of pancreatic cancer (PCT/ES2012/070616/ US Patent: 2015/0362496 A1).

-Overexpression of COL11A1 by Cancer-Associated Fibroblasts: Clinical Relevance of a Stromal Marker in Pancreatic Cancer. **PLoS one**. 2013; 8(10):e78327.

-Validation of COL11A1/procollagen 11A1 expression in TGF- β 1-activated immortalised human mesenchymal cells and in stromal cells of human colon adenocarcinoma. **BMC cancer**. 2014; 14:867.

- Overexpression of proCOL11A1 as a stromal marker of breast cancer. **Histology and histopathology**. 2015; 30(1):87-93.

-COL11A1/(pro)collagen 11A1 expression is a remarkable biomarker of human invasive carcinoma-associated stromal cells and carcinoma progression. **Tumour biology**. 2015; 36(4):2213-22.

-Reduced risk of pancreatic cancer associated with asthma and nasal allergies. **Gut**.2017; 66(2):314-322

Complete List of Published Work in MyBibliography: https://www.ncbi.nlm.nih.gov/sites/myncbi/1VC_952LEVqkg/bibliography/52997899/public/?sort=date&direction=ascending

Section B. SUMMARY OF THE CURRICULUM

Luis Barneo Serra, PhD, MD, Professor of General Surgery at the University of Oviedo, Spain and Hospital Universitario Central de Asturias, Oviedo, Spain. He got his MD at University of Barcelona in 1972, Specialist in General Surgery at University of Oviedo in 1980 and his PhD in Medicine at University of Oviedo in 1986. He has Master's Degree in "Surgical Research Laboratories" by the University of Minnesota, in 1987, University Expert in Colorectal Surgery by Public University of Pamplona in 2001, and Master in Medical Direction and Clinical Management y Gestión Clínica by UNED in 2012.

Barneo developed his foreign training in the Dpt. of Surgery, Univ. of Minnesota, in experimental and clinical transplantation, in 1984 and 1987; in the Service de Transplantation Renale, H. Saint-Luc, Univ. of Louvain in 1988; in the Dpt. of Surgery Johns Hopkins Hospital, Baltimore, Maryland, in 2000; and in the Dpt. of Surgery, UCLA, Los Angeles, the Dumont-UCLA Transplant Center, in 2001.

Currently, Dr. Barneo's researches focus on pancreatic cancer, the stroma of cancer, animal models of human cancer, and experimental islet transplantation.

Section C. MOST RELEVANT MERITS (ordered by typology)

C.1. Publications

- 1 **Scientific paper**. 2018. Determinants of morbidity and mortality following emergency abdominal surgery in children in low-income and middle-income countries *BMJ Glob Health*. 1, pp.1-12.
- 2 **Scientific paper**. Gomez-Rubio P; et al. 2017. Reduced risk of pancreatic cancer associated with asthma and nasal allergies *GUT*. 66-2, pp.314-322.
- 3 **Scientific paper**. 2016. Mortality of emergency abdominal surgery in high-, middle- and low-income countries *Br J Surg*. John Wiley&Sons Ltd. 103-8, pp.971-988.
- 4 **Scientific paper**. VÁZQUEZ-VILLA F; et al. 2015. COL11A1/(pro)collagen 11A1 expression is a remarkable biomarker of human invasive carcinoma-associated stromal cells and carcinoma progression *Tumor Biol*. SPRINGER. DOI 10.1007/s13277-0. ISSN 1423-0380.

- 5 **Scientific paper.** FUENTES-MARTÍNEZ N; et al. 2015. Overexpression of proCOL11A1 as a stromal marker of breast cancer *Histol Histopathol.* JIMÉNEZ-GODOY SA. 30, pp.87-93.
- 6 **Scientific paper.** Luis Joaquín García-Flórez; et al. 2015. Predictive markers of response to neoadjuvant therapy in rectal cancer *Journal of Surgical Research.* ELSEVIER. 194, pp.120-126. ISSN 0022-4804.
- 7 **Scientific paper.** Luis J García-Flórez; et al. 2015. Response to chemoradiotherapy and lymph node involvement in locally advanced rectal cancer *World J Gastrointest Surg.* Baishideng Publishing Group Inc. 7, pp.196-202. ISSN 1948-9366.
- 8 **Scientific paper.** GALVÁN JA; et al. 2014. Validation of COL11A1/procollagen 11A1 expression in TGF-beta1-activated immortalised human mesenchymal cells and in stromal cells of human colon adenocarcinoma. *BMC Cancer*; 14: 867, doi: 10.1186/1471-2407-14-867, 2014 *BMC Cancer.* SPRINGER. 14, pp.doi: 10.1186/1471-2407-14-867. ISSN 1471-2407.
- 9 **Scientific paper.** GARCÍA-PRAVIA C; et al. 2013. Overexpression of COL11A1 by Cancer-Associated Fibroblasts: Clinical Relevance of a Stromal Marker in Pancreatic Cancer *PLOS ONE.* Public Library of Science. 8, pp.e78327. ISSN 1932-6203.

C.2. Participation in R&D and Innovation projects

- 1 FC-15-GRUPIN14-121, NANOONCOLOGIA CONSEJERIA DE ECONOMIA Y EMPLEO. jaime ferrer rodríguez. From 31/12/2014.
- 2 UNOV-11-CONG-19, XVII CONGRESO DE LA SEIQ UNIVERSIDAD DE OVIEDO. LUIS BARNEO SERRA. From 05/08/2011.
- 3 FC-11-PC10-23, UTILIDAD DIAGNOSTICA DEL PROCOLAGENO 11A1 EN CANCER HUMANO CONSEJERIA DE EDUCACION Y CIENCIA. JUAN RAMON DE LOS TOYOS GONZALEZ. From 01/03/2011.
- 4 MICINN-10-IPT-010000-2010-31, Desarrollo y validación de métodos y productos de diagnóstico y de tratamiento personalizado contra el carcinoma ductal de páncreas (ONCOPAN) MINISTERIO DE ECONOMIA Y COMPETITIVIDAD. JUAN RAMON DE LOS. From 01/11/2010.
- 5 FISS-09-PS09/01911, COLÁGENOS, PROTEOGLICANO DSPG3 Y GLICOSAMINOGLICANOS EN EL ADENOCARCINOMA DUCTAL INFILTRANTE DE PÁNCREAS (PDAC) MINISTERIO DE SANIDAD Y CONSUMO. Barneo L. From 01/01/2010.
- 6 PEST 08-12, PLAN ESTRATÉGICO DE TERAPIA CELULAR CON CÉLULAS MADRES AUTÓLOGAS PARA TRATAMIENTO DE LA DIABETES, PARAPLEJIA, TRAUMA, INSUFICIENCIA CARDÍACA CRÓNICA Y SEUDOARTROSIS FICYT. Manuel Martínez Esteban. From 01/01/2009.
- 7 FC-08-PEST08-12, Tratamiento de la diabetes experimental mediante cotrasplante de islotes pancreáticos y células madre de médula ósea autóloga CONSEJERIA DE CULTURA Y DEPORTE. JESÚS OTERO. From 01/10/2008.
- 8 Fundación Mutua Madrileña2005-2007, ENSAYO CLÍNICO DE UTILIZACIÓN DE ISLOTES DE CADÁVERES HUMANOS PARA RECEPTORES DIABÉTICOS DE TRASPLANTE RENAL FUNDACIÓN MUTUA MADRILEÑA. Jesús Otero Hernández. From 01/01/2007.
- 9 UNOV-06-PUBLIC-1, Libro: identification of specific genes by microarrays UNIVERSIDAD DE OVIEDO. LUIS BARNEO SERRA. From 25/04/2006.
- 10 MEC-04-PROFIT-PROTEOMIKA, PROTEOMIKA - Identificación de marcadores moleculares y dianas terapéuticas en cáncer de vejiga empleando herramientas de proteómica MINISTERIO DE EDUCACIÓN Y CIENCIA. LUIS BARNEO SERRA. From 02/11/2004.
- 11 FISS-04-PI031439, Análisis del fracaso primario y del rechazo usando chips de ADN en injertos de islotes humanos y porcinos en ratones huscid F.I.S.S.-FONDO INV.SANITARIA. MM Esteban. From 01/01/2004.
- 12 FIT-010000-2004-74, IDENTIFICACIONDE MARCADORES MOLECULARES Y DIANAS TERAPEUTICAS EN CANCER DE PANCREAS, EMPLEANDO HERRAMIENTAS DE PROTEOMICA MINISTERIO DE EDUCACIÓN Y CIENCIA. Barneo L. From 01/01/2003.
- 13 C03/03, TECNICAS EXPERIMENTALES EN TRASPLANTE DE ORGANOS SOLIDOS C03/03. Barneo L. From 01/01/2003.

- 14 FUO-EM-030-02, "Establecimiento de nuevas dianas terapéuticas en tumores de páncreas" Universidad de Oviedo/Proteómica SL. Luis Barneo Serra. From 01/07/2002.
- 15 MCT-01-SAF-3636, Efecto mediador del proto-oncogen C-MYC en el cáncer de páncreas: relación entre la hormona insulina y/o citocina TGF β y factores angiogénicos. MINISTERIO DE CIENCIA Y TECNOLOGÍA. ALVARO J. OBAYA GONZALEZ. From 01/01/2001.
- 16 00/0361, ESTUDIO DE LA NO FUNCION PRIMARIA EN XENOTRASPLANTES DE ISLOTES DE LANGERHANS DE CERDO A RATON Instituto de Salud Carlos III. MM Esteban. From 01/01/2000.
- 17 FISS-95-0901, Acomodación e inmunotolerancia en xenotrasplantes: estudios experimentales en animales F.I.S.S.-FONDO INV.SANITARIA. LUIS BARNEO SERRA. From 01/01/1995.
- 18 DF-94-220-3, Inhibición de la glicosilación no enzimática de las proteínas tisulares de la diabetes UNIVERSIDAD DE OVIEDO. LUIS BARNEO SERRA. From 29/07/1994.
- 19 PB93-1079, ESTUDIO COMPARATIVO DE LAS LESIONES MUSCULARES Y NERVIOSAS EN LA DIABETES EXPERIMENTAL. EFECTO DEL TRASPLANTE DE ISLOTES DE LANGERHANS MINISTERIO DE EDUCACIÓN Y CIENCIA-DGICYT. MM Esteban. From 01/01/1994.
- 20 FISS-92-0555, Efectos del trasplante de islotes de Langerhans en la formación de proteínas glicosiladas F.I.S.S.-FONDO INV.SANITARIA. LUIS BARNEO SERRA. From 01/01/1992.
- 21 CC-89-SAL-1123, Inducción de inmunotolerancia a islotes trasplantados a ratas diabéticas Comisión Interministerial de Ciencia y Tecnología. LUIS BARNEO SERRA. From 01/01/1990.
- 22 FISS-89-0378, Aislamiento de islotes de páncreas humano. Modulación de la inmunogenicidad F.I.S.S.-FONDO INV.SANITARIA. LUIS BARNEO SERRA. From 17/02/1989.

C.3. Participation in R&D and Innovation contracts

C.4. Patents

LUIS BARNEO SERRA; MARIA DEL CARMEN GARCIA PRAVIA; JUAN RAMON DE LOS TOYOS GONZALEZ; MARCOS GARCIA OCAÑA; JOSE FERNANDO VAZQUEZ VILLA; NELSON FUENTES MARTINEZ; JOKIN DEL AMO IRIBARREN; LAUREANO SIMÓN BUELA. 201131374. MÉTODOS Y PRODUCTOS PARA EL DIAGNÓSTICO IN VITRO, PRONÓSTICO IN VITRO Y Spain. 29/01/2014. Oncomatrix S.L.. Oncomatrix S.L.