CURRICULUM VITAE

Part A. PERSONAL INFORMATION

First name	Lin		
Family name	Gao Chen		

A.1. Current position

Position	Associate Professor (Profesora Titular de Universidad)
Initial date	20/07/2021
Institution	Universidad de Sevilla
Department/Center	Departamento de Fisiología Médica y Biofísica/Instituto de Biomedicina de Sevilla
Key words	Hypoxia, O_2 sensing, oxidative stress, neurodegeneration, pulmonary diseases, carotid body, mitochondria, genetic animal models, biochemistry, cell biology, gene expression profiling, proteomics

A.2. Previous positions

Period	Position/Institution/Country
07/1992-07/1994	Lecturer/Research assistant, Tianjin Medical University, China
01/08/1994-08/1996	Graduate student (Master, post-graduate fellowship), University of Hawaii, USA
08/1996-31/07/1999	PhD graduate student (PhD graduate fellowshsip), University of Southern California, USA
01/08/1999-20/10/2000	Research assistant, University of Alabama at Birmingham, USA
30/10/2000-30/11/2001	Postdoctoral fellow (NIH postdoctoral fellowship), University of Alabama at Birmingham, USA
01/01/2002-31/12/2002	Postdoctoral fellow (NSF-USA/NATO fellowship), Universidad de Sevilla
01/08/2002-31/01/2004	Postdoctoral fellow ("Ministerio de Educación, Cultura y Deporte" fellowship), Universidad de Sevilla
10/02/2004-09/02/2010	Research associate (Investigadora del Sistema Nacional de Salud, now "Miguel Servet"), Hospital Virgen del Rocío, FISEVI
10/02/2010-31/12/2015	Researcher (I3SNS), Instituto de Biomedicina de Sevilla, FISEVI
01/01/2016-17/01/2018	Researcher, Instituto de Biomedicina de Sevilla, FIUS
18/01/2018-17/11/2019	Assistant Professor (Profesor Ayudante Doctor), Universidad de Sevilla
18/11/2019-19/07/2021	Assistant Professor (Profesor Contratado Doctor), Universidad de Sevilla

A.3. Education

PhD, Licensed, Graduate	University/Country	Year
Molecular Pharmacology & Toxicology (PhD)	University of Southern California, USA	2000
Nutrition (MS)	University of Hawaii, USA	1996
Biochemistry (BS)	Nankai University, China	1992

Part B. CV SUMMARY

Summary of scientific production:

Total No. of publications: 37 (16 as first author, 9 as corresponding author)
Total No. of publications in 1st decile: 7
Total No. of publications in the remaining 1st quartile: 21
Total No. of citations: 1316
Average citations per article: 34.6
h-Index: 19
"Sexenios": 3

Lin Gao Chen, PhD in Molecular Pharmacology & Toxicology, is an Associate Professor ("Profesor Titular de Universidad") at the Department of Medical Physiology and Biophysics, University of Seville. During the last 3 decades, I have been studying molecular mechanisms of O_2 sensing, neurodegeneration, and pulmonary diseases with special focus on mitochondrial function, reactive oxygen species (ROS) and oxidative stress. I have participated in competitive national and international projects in prestigious research institutes in USA (University of Southern California, University of Alabama at Birmingham) and Spain ("Insitituto de Biomedicina de Sevilla (IBIS), "Universidad de Sevilla").

My PhD graduate study and postdoctoral training in USA were mainly focused on pulmonary research, supported by PhD graduate scholarship and National Institute of Health (NIH) postdoctoral fellowship. We have observed an abnormal antioxidant glutathione transport in cystic fibrosis, and have demonstrated that the transport defect can be corrected with an artificial chloride channel *(Am J Physiol. 1999, Am J Physiol Lung Cell Mol Physiol. 2001a, 2001b*). In 2002, I joined Dr. José López Barneo's group at "Hospital Universitario Virgen del Rocío (HUVR)" and "Universidad de Sevilla" in Seville, Spain, whose group later formed several founding groups of IBIS in Seville. I first worked as a postdoctoral fellow supported by postdoctoral fellowships from National Science Foundation, USA/NATO and "Ministerio de Educación, Cultura y Deporte", then as a researcher of the Spanish national health system (ISCIII, "Investigadora del Sistema Nacional de Salud" now "Contrato Miguel Servet" and I3SNS). Later I worked as a researcher associated with an advanced grant from European Research Council (ERC, PI Dr. López Barneo). In 2018 I was hired by "Universidad de Sevilla" as Assistant Professor first "Profesor Ayudante Doctor" later "Profesor Contratado Doctor", before taking the current position of Associate Professor ("Profesor Titular de Universidad") in 2021. My first major scientific interest is to study the molecular mechanism of acute O_2 sensing by peripheral chemoreceptors, especially the carotid body (CB). We generated conditional knockout mice deficient in a core mitochondrial complex I (MCI) protein. Using these models, we have found that MCI is essential for acute O_2 sensing by the CB (*Cell Metab. 2015*) and the coenzyme QH2/Q ratio and mitochondrial ROS are key players in this process (*Cell Metab. 2018*). Using microarray analysis, we have observed that the CB presents specific metabolic adaptations, which favors its function as a major chemoreceptor (*J Physiol. 2017*). This transcriptomic study led us to the discovery of hypoxia inducible factor 2α (HIF2α), a transcription factor classically implicated in regulation of gene expression during chronic hypoxia, to be also essential during acute O_2 sensing (*Sci Signal, 2020*). My second research interest is to study molecular mechanisms underlying the pathogenesis of neurodegeneration, especially Parkinson's disease (PD). I have been investigating the role of oxidative stress and mitochondrial dysfunction, and aging in PD, using pharmacologically and genetically modified animal models and proteomic and transcriptomic approaches (*FEBS Lett. 2004, J Neurosci. 2006, J Proteomics. 2010, PLoS One. 2013, Nature. 2021*). I have also been studying genetic risk factors for PD and their possible relationships to clinical characteristics using human samples in collaboration with clinical groups (*Eur J Neurol. 2009, Acta Neurol Scand. 2010, Parkinsonism Relat Disord. 2011*). My third research interest is to study molecular mechanisms underlying the pathogenesis of pulmonary diseases, which has always been one of my major research interests since my PhD graduate study in USA. In Seville, I have established collaborations with clinical groups in the Pulmonary Division of HUVR to apply my experiences in mitochondrial and hypoxia-related researches to clinically oriented projects, searching biomarkers of dysfunction in pulmonary circulation and cancer (*Transl Res. 2015, Clin Chem Lab Med. 2016, Ann Med. 2020*). Since 2016, I have become an independent researcher and group leader, which is reflected by the publications (7 as corresponding author), and research grants (PI of national grant Plan Nacional SAF2016-74990-R, regional grant Junta de Andalucía US-1255654, and grants from national scientific societies SEPAR, 2015/018, Neumosur Nº 1/2013). I have also been actively participating in teaching and student training,

supervising two PhD dissertations, 2 Master thesis projects (TFM), and 7 BS research projects "TFG".

Part C. RELEVANT MERITS

C.1. Publications

Peer-reviewed articles:

1. Zhou H, Duncan RF, Robison TW, **Gao L**, Forman HJ. Ca(2+)-dependent p47phox translocation in hydroperoxide modulation of the alveolar macrophage respiratory burst. *Am J Physiol.* 1997, 273:L1042- L1047. DOI: 10.1152/ajplung.1997.273.5.L1042. IF: 3.116 (Q1).

2. Liu RM, **Gao L**, Choi J, Forman HJ. Gamma-glutamylcysteine synthetase: mRNA stabilization and independent subunit transcription by 4-hydroxy-2-nonenal. *Am J Physiol.* 1998, 275:L861-L869. DOI: 10.1152/ajplung.1998.275.5.L861. IF: 3.077 (Q1).

3. Gao L, Kim KJ, Yankaskas JR, Forman HJ. Abnormal glutathione transport in cystic fibrosis airway epithelia. *Am J Physiol.* 1999, 277:L113-L118. DOI: 10.1152/ajplung.1999.277.1.L113. IF: 3.147 (Q1).

4. Gao L, Broughman JR, Iwamoto T, Tomich JM, Venglarik CJ, Forman HJ. Synthetic chloride channel restores glutathione secretion in cystic fibrosis airway epithelia. *Am J Physiol Lung Cell Mol Physiol.* 2001, 281:L24-L30. DOI: 10.1152/ajplung.2001.281.1.L24. IF: 3.658 (Q1).

5. Gao L, Yankaskas JR, Fuller CM, Sorscher EJ, Matalon S, Forman HJ, Venglarik CJ. Chlorzoxazone or 1-EBIO increases Na(+) absorption across cystic fibrosis airway epithelial cells. *Am J Physiol Lung Cell Mol Physiol.* 2001, 281:L1123-L1129. DOI: 10.1152/ajplung.2001.281.5.L1123. IF: 3.658 (Q1).

6. Keeling KM, Lanier J, Du M, Salas-Marco J, **Gao L**, Kaenjak-Angeletti A, Bedwell DM. Leaky termination at premature stop codons antagonizes nonsense-mediated mRNA decay in *S. cerevisiae*. *RNA*. 2004, 10:691-703. DOI: 10.1261/rna.5147804. IF: 5.842 (Q1).

7. **Gao L**, Mejías R, Echevarría M, López-Barneo J. Induction of glucose-6-phosphate dehydrogenase gene expression by chronic hypoxia in PC12 cells. *FEBS Lett.* 2004, 569:256-260. DOI: 10.1016/j.febslet.2004.06.004. IF: 3.843 (Q1).

8. Mejías R, Villadiego j, Pintado CO, Vime PJ, **Gao L**, Toledo-Aral JJ, Echevarría M, López-Barneo. Neuroprotection by transgenic expression of glucosa-6-phosphate dehydrogenase in dopaminergic nigrostriatal neurons of mice. *J Neurosci*. 2006, 26:4500-4508. DOI: 10.1523/JNEUROSCI.0122-06.2006. IF: 7.453 (**D1**).

9. Gao L*, Mir P, Díaz-Corrales FJ, Mejías R, Carrillo F, Vime PJ, Díaz-Martín J, Palomino A, Carballo M, Pintado E, Lucas M, López-Barneo J (***Corresponding author**). Glucose-6-phosphate dehydrogenase activity in Parkinson's disease. *J Neurol.* 2008, 255:1850-1851. DOI: 10.1007/s00415-008-0937-0. IF: 2.536 (Q2).

10. Gao L*, Gómez-Garre P*, Díaz-Corrales FJ, Carrillo F, Carballo M, Palomino A, Díaz-Martín J, Mejías R, Vime PJ, López-Barneo J, Mir P (*Equal contribution). Prevalence and clinical features of *LRRK2* mutations in patients with Parkinson's disease in southern Spain. *Eur J Neurol.* 2009, 16:957-960. DOI: 10.1111/j.1468-1331.2009.02620.x. IF: 2.510 (Q2).

11. Gao L, Díaz-Corrales FJ, Carrillo F, Díaz-Martín J, Caceres-Redondo MT, Carballo M, Palomino A, López-Barneo J, Pablo Mir. Brain-derived neurotrophic factor G196A polymorphism and clinical features in Parkinson's disease. *Acta Neurol Scand.* 2010, 122:41-45. DOI: 10.1111/j.1600-0404.2009.01253.x. IF: 2.153 (Q2).

12. Romero-Ruíz A, Mejías R, Díaz-Martín J, López-Barneo J, **Gao L*** (***Corresponding author**). Mesencephalic and striatal protein profiles in mice over-expressing glucose-6-phosphate dehydrogenase in dopaminergic neurons. *J Proteomics.* 2010, 73:1747-1757. DOI: 10.1016/j.jprot.2010.05.014. IF: 5.074 (Q1).

13. Costa A***, Gao L***, Carrillo F, Cáceres-Redondo MT, Carballo M, Díaz-Martín J, Gómez-Garre P, Sobrino F, Lucas M, López-Barneo J, Mir P, Pintado E (***Equal contribution**). Intermediate alleles at the *FRAXA* and *FRAXE* loci in Parkinson's disease. *Parkinsonism Relat Disord.* 2011, 17:281-284. DOI: 10.1016/j.parkreldis.2010.12.013. IF: 3.795 (Q1).

14. Gao L*, Díaz-Martín J, Dillmann WH, and López-Barneo J* (***Corresponding author**). Heat shock protein 70 kDa over-expression and 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine-induced nigrostriatal degeneration in mice. *Neuroscience*. 2011, 193:323-329. DOI: 10.1016/j.neuroscience.2011.07.028. IF: 3.380 (Q2).

15. Gómez-Garre P, Jesús S, Carrillo F, Cáceres MT, Bernal-Bernal I, Carballo M, **Gao L**, Mir P. PSMC1 gene in Parkinson's disease. *Eur Neurol*. 2012, 68:193-198. DOI: 10.1159/000339003. IF: 1.500 (Q3).
16. Gao L*, Hidalgo-Figueroa M, Escudero LM, Díaz-Martín J, López-Barneo J, Pascual A* (***Corresponding author**). Age-mediated transcriptomic changes in adult mouse substantia nigra. *PLoS One.* 2013, 8:e62456. DOI: 10.1371/journal.pone.0062456. IF: 3.534 (Q1).
17. Gao L*, Ortega-Sáenz P, García-Fernández M, González-Rodríguez P, Caballero-Eraso C, Lopez-Barneo J* (***Corresponding author**). Glucose sensing by carotid body glomus cells: potential implications in disease. *Front Physiol*. 2014, 5:398. DOI: 10.3389/fphys.2014.00398. IF: 3.534 (Q1).
18. Fernández-Agüera MC*****, **Gao L***, González-Rodríguez P*****, Pintado CO, Arias-Mayenco I, García-Flores P, García-Pergañeda A, Pascual A, Ortega-Sáenz P, López-Barneo J (***Equal contribution**). Oxygen sensing by arterial chemoreceptors depends on mitochondrial complex I signaling. *Cell Metab*. 2015, 22:825-837. DOI: 10.1016/j.cmet.2015.09.004. IF: 17.303 (**D1**). **Previews:** Peers C. Acute oxygen sensing-inching ever closer to an elusive mechanism. *Cell Metab*. 2015, 22:753-4. DOI: 10.1016/j.cmet.2015.10.011.
19. Sánchez-López V, Vila-Liante V, Arellano-Orden E, Elías-Hernández T, Ramón-Nuñez LA, Jara-Palomares L, Martínez-Sales V, **Gao L**, Otero-Candelera R. High correlation between 2 flow cytometry platforms in the microparticles analysis using a new calibrated beads strategy. *Transl Res*. 2015, 166:733-739. DOI: 10.1016/j.trsl.2015.08.006. IF: 4.557 (**D1**).
20. López-Barneo J*, Ortega-Sáenz P, González-Rodríguez P, Fernández-Agüera MC, Macías D, Pardal R, **Gao L***. (***Corresponding author**). Oxygen-sensing by arterial chemoreceptors: Mechanisms and medical translation. *Mol Aspects Med*. 2016, 47-48:90-108. DOI: 10.1016/j.mam.2015.12.002. IF: 5.686 (**D1**).
21. López-Barneo J, González-Rodríguez P, **Gao L**, Fernández-Agüera MC, Pardal R, Ortega-Sáenz P. Oxygen sensing by the carotid body: Mechanisms and role in adaptation to hypoxia. *Am J Physiol Cell Physiol*. 2016, 310:C629-642. DOI: 10.1152/ajpcell.00265.2015. IF: 3.602 (Q1).
22. Vila-Liante V, Sánchez-López V, Martínez-Sales V, Ramón-Nuñez LA, Arellano-Orden E, Cano-Ruiz A, Rodríguez-Martorell FJ, **Gao L**, Otero-Candelera R. Impact of sample processing on the measurement of circulating microparticles: storage and centrifugation parameters. *Clin Chem Lab Med.* 2016, 54:1759-1767. DOI: 10.1515/cclm-2016-0036. IF: 3.432 (Q1).
23. Gao L*, González-Rodríguez P, Ortega-Sáenz P, López-Barneo J***** (***Corresponding author**). Redox signaling in acute oxygen sensing. *Redox Biol*. 2017, 12:908-915. DOI: 10.1016/j.redox.2017.04.033. IF: 7.126 (Q1).
24. Gao L*, Bonilla-Henao V, García-Flores P, Arias-Mayenco I, Ortega-Sáenz P, López-Barneo J***** (***Corresponding author**). Gene expression analyses reveal metabolic specifications in acute O2-sensing chemoreceptor cells. *J Physiol*, 2017, 595:6091-6120. DOI: 10.1113/JP274684. IF: 4.54 (Q1). **Journal cover. Perspectives:** Nurse CA. A sensible approach to making sense of oxygen sensing. *J Physiol*, 2017, 595:6087-6088. DOI: 10.1113/JP274880.
25. Arias-Mayenco I, González-Rodríguez P, Torres-Torrelo H, **Gao L**, Fernández-Agüera MC, Bonilla-Henao V, Ortega-Sáenz P, López-Barneo J. Acute O2-Sensing: Role of Coenzyme QH2/Q Ratio and Mitochondrial ROS Compartmentalization. *Cell Metab*, 2018, 28:145-158. DOI: 10.1016/j.cmet.2018.05.009. IF: 22.454 (**D1**).
26. Gao L*, Ortega-Sáenz P, López-Barneo J***** (***Corresponding author**). Acute oxygen sensing - Role of metabolic specifications in peripheral chemoreceptor cells. *Respir Physiol Neurobiol*, 2019, 265:100-111. DOI: 10.1016/j.resp.2018.08.007. IF: 1.591 (Q4).
27. Moreno-Domínguez A*, Ortega-Sáenz P*, **Gao L***, Colinas O, García-Flores P, Bonilla-Henao V, Aragonés J, Hüttemann M, Grossman LI, Weissmann N, Sommer N, López-Barneo J (***Equal contribution**). Acute O2 sensing through HIF2α-dependent expression of atypical cytochrome oxidase subunits in arterial chemoreceptors. *Sci Signal*, 2020, 13:eaay9452. DOI: 10.1126/scisignal.aay9452. IF: 8.192 (Q1). **Journal cover**. **Focus:** Bishop T, Ratcliffe PJ. Genetic basis of oxygen sensing in the carotid body: HIF2α and an isoform switch in cytochrome c oxidase subunit 4. *Sci Signal*. 2020, 13:eaba1302. DOI: 10.1126/scisignal.aba1302
28. Sánchez-López V, **Gao L**, Arellano-Orden E, Ferrer-Galván M, Elías-Hernández T, Jara-Palomares J, Castro MJ, Rodríguez-Martorell FJ, Lobo Beristain JL, Ballaz-Quincoces A, Vila-

Liante V, Otero-Candelera R. Differential biomarker profiles between unprovoked venous thromboembolism and cancer. *Ann Med*. 2020, 52:310-320. DOI: 10.1080/07853890.2020.1779956. FI: 4.709 (Q1).

29. Ortega-Sáenz P, Moreno-Domínguez A, **Gao L**, López-Barneo J. Molecular Mechanisms of Acute Oxygen Sensing by Arterial Chemoreceptor Cells. Role of Hif2α. *Front Physiol*, 2020, 11:614893. DOI: 10.3389/fphys.2020.614893. FI: 4.566 (Q1).

30. Gao L, Arias-Mayenco I, Ortega-Sáenz P, López-Barneo J. Using redox-sensitive fluorescent probes to record real-time reactive oxygen species production in cells from mouse carotid body slices. *STAR Protoc*. 2021, 2:100535. DOI: 10.1016/j.xpro.2021.100535.

31. Torres-Torrelo H, Ortega-Sáenz P, **Gao L**, López-Barneo J. Lactate sensing mechanisms in arterial chemoreceptor cells. *Nat Commun*. 2021, 12:4166. DOI: 10.1038/s41467-021-24444-7. IF: 17.694 (**D1**).

32. González-Rodríguez P, Zampese E, Stout KA, Guzman JN, Ilijic E, Yang B, Tkatch T, Stavarache MA, Wokosin DL, **Gao L**, Kaplitt MG, López-Barneo J, Schumacker PT, Surmeier DJ. Disruption of mitochondrial complex I induces progressive parkinsonism. *Nature*. 2021, 599:650-656. DOI: 10.1038/s41586-021-04059-0. FI: 69.504 (**D1**). **News & views:** Doric Z, Nakamura K. Mice with disrupted mitochondria used to model Parkinson's disease. *Nature*. 2021, 599:558-560. DOI: 10.1038/d41586-021-02955-z. **Comments:** Wright R. Mitochondrial dysfunction and Parkinson's disease. *Nat Neurosci*. 2022, 25:2. DOI: 10.1038/s41593-021-00989-0. Cornejo-Olivas M, Wu L, Noyce A. Disruption of Mitochondrial Complex I Induces Progressive Parkinsonism. *Mov Disord.* 2022, 37:478. DOI: 10.1002/mds.28961. Vos M. Mitochondrial Complex I deficiency: guilty in Parkinson's disease. *Signal Transduct Target Ther*. 2022, 7:136. DOI: 10.1038/s41392-022-00983-3.

33. McElroy GS, Chakrabarty RP, D'Alessandro KB, Hu YS, Vasan K, Tan J, Stoolman JS, Weinberg SE, Steinert EM, Reyfman PA, Singer BD, Ladiges WC, **Gao L**, Lopéz-Barneo J, Ridge K, Budinger GRS, Chandel NS. Reduced expression of mitochondrial complex I subunit Ndufs2 does not impact healthspan in mice. *Sci Rep*. 2022, 12:5196. DOI: 10.1038/s41598-022-09074-3. FI: 4.996 (Q2).

34. Gao L, Ortega-Saenz P, Moreno-Dominguez A, López Barneo J. Mitochondrial redox signaling in O2-sensing chemoreceptor cells. *Antioxid Redox Signal*. 2022, 376:274-289. DOI: 10.1089/ars.2021.0255. FI: 7.468 (Q1).

35. Cabello-Rivera D, Ortega-Sáenz P, **Gao L**, Muñoz-Cabello AM, Bonilla-Henao V, Schumacker PT, López-Barneo J. Oxygen regulation of breathing is abolished in mitochondrial complex III-deficient arterial chemoreceptors. *Proc Natl Acad Sci USA*, 2022, 119: e2202178119. DOI: 10.1073/pnas.2202178119. FI: 12.779 (Q1).

36. Caballero-Eraso C, Colinas O, Sobrino V, González-Montelongo R, Cabeza JM, **Gao L**, Pardal R, López-Barneo J, Ortega-Sáenz P. Rearrangement of cell types in the rat carotid body neurogenic niche induced by chronic intermittent hypoxia. *J Physiol*, 2023 DOI: 10.1113/JP283897. IF: 6.228 (Q1)

Book chapter:

37. Ortega-Sáenz P, Caballero C, **Gao L**, López-Barneo J. Testing Acute Oxygen Sensing in Genetically Modified Mice: Plethysmography and Amperometry. *Methods Mol Biol*. 2018, 1742:139-153. DOI: 10.1007/978-1-4939-7665-2_13.

C.2. Congress

Invited conference:

Gao L. Redox signaling in acute oxygen sensing. Society for Free Radical Research-Europe (SFRR-E) 2019 Annual Meeting: Redox homeostasis: From signaling to damage. June 19-21, 2019, Ferrara, Italy.

Oral presentation:

Gao L, Kim KJ, Yankaskas JR, Forman HJ. Lung epithelial extracellular/intracellular glutathione balance in cystic fibrosis. Twelfth Annual North American Cystic Fibrosis Conference. Pediatric Pulmonology. Supplement 17: 287, 1998. Montreal, Canada. October 15-18, 1998.

Gao L, Kim KJ, Yankaskas JR, Forman HJ. Abnormal glutathione transport in cystic fibrosis airway epithelia. Experimental Biology. The FASEB Journal. 13(5): A1015, 1999. Washington, D.C. USA. April 17-21, 1999.

Poster: > 40 national and international conferences.

Scientific local committee member

Network of European Neuroscience Institutes: Christmas Meeting. Seville, Spain, December 16-18, 2006.

Conference organizer assistant

Keystone symposia: Hypoxia: Molecules, Mechanisms and Disease. January 19-23, 2020, Keystone, Colorado, USA.

C.3. Research projects

As principal investigator:

PROJECT TITLE: “Eje cuerpo carotídeo-médula adrenal y complicaciones cardiovasculares y metabólicas asociadas al síndrome de apnea hipopnea del sueño”
CENTER: Instituto de Biomedicina de Sevilla (IBIS)/Universidad de Sevilla
FINANCIAL ENTITY: Consejería de Economía y Conocimiento, Junta de Andalucía (Proyectos I+D+i FEDER Andalucía 2014-2020, Convocatoria 2018, US-1255654)
LENGTH: 01/02/2020-30/04/2022
AMOUNT: 89700 €
PI: Gracia Patricia Ortega Saenz & Lin Gao Chen

PROJECT TITLE: “Sensibilidad al oxígeno y Neurodegeneración”
FINANCIAL ENTITY: Ministerio de Economía y Competitividad (Retos Investigación: Proyectos I+D+i 2016, SAF2016-74990-R)
LENGTH: 30/12/2016-29/12/2019
AMOUNT: 484000€
PI: José López Barneo & Lin Gao Chen

PROJECT TITLE: “Búsqueda de biomarcadores en pacientes con enfermedad tromboembólica venosa y cáncer mediante análisis proteómico”
FINANCIAL ENTITY: Sociedad Española de Neumología y Cirugía Torácica (SEPAR, 2015/018)
LENGTH: 19/04/2016-18/04/2019
AMOUNT: 16000€
PI: Lin Gao Chen

PROJECT TITLE: “Relación entre la disfunción mitocondrial y la hipertensión pulmonar (HP). Estudio in vitro y en pacientes con diversos fenotipos de HP”
FINANCIAL ENTITY: Asociación de Neumología y Cirugía Torácica de SUR (Neumosur Nº 1/2013)
LENGTH: 2014/05/29-2017/05/29
AMOUNT: 9000€
PI: Lin Gao Chen

PROJECT TITLE: “Modificación genética de enzimas antioxidantes en neuronas nigroestriatales y enfermedad de Parkinson.”
FINANCIAL ENTITY: Instituto de Salud Carlos III, Ministerio de Sanidad y Consumo ((CP03/00047)
LENGTH: 10/02/2004-09/02/2007
AMOUNT: 42000€
PI: Lin Gao Chen

As collaborator (selected from > 30projects):

PROJECT TITLE: “Estimulación del GDNF cerebral como terapia neuroprotectora en la enfermedad de Parkinson”
CENTER: Instituto de Biomedicina de Sevilla (IBIS)/FISEVI
FINANCIAL ENTITY: Consejería de Economía, Conocimiento, Empresas y Universidad, Junta de Andalucía (Convocatoria 2018, PAIDI2020, P18-RT-3100)
LENGTH: 2020-2023
AMOUNT: 140352€
PI: José López Barneo

PROJECT TITLE: “Sensibilidad al oxígeno y Neurodegeneración”

CENTER: Instituto de Biomedicina de Sevilla (IBIS)/Universidad de Sevilla
FINANCIAL ENTITY: Ministerio de Ciencia e Innovación (Plan Estatal 2017-2020 Retos - Proyectos I+D+i 2019, PID2019-106410RB-I00)
LENGTH: 01/06/2020-31/05/2023
AMOUNT: 464640€
PI: José López Barneo & Garcia Patricia Ortega Sáenz

PROJECT TITLE: Molecular mechanism of acute oxygen sensing
CENTER: Instituto de Biomedicina de Sevilla
FINANCIAL ENTITY: European Research Council (Advanced grant, 2014 Call, PRJ201502629)
LENGTH: 2015/11/01-2021/10/31
AMOUNT: 2843750€
PI: José López Barneo

PROJECT TITLE: Translating hypoxia research to a clinical setting: O2 deficiency tolerance, brain dysfunction, infection, and cancer
CENTER: Instituto de Biomedicina de Sevilla (FISEVI)
FINANCIAL ENTITY: Instituto de Salud Carlos III (PIE13/0004)
LENGTH: 01/01/2014-31/12/2016
AMOUNT: 825000€
PI (coordinator): José López Barneo

PROJECT TITLE: “Sensibilidad al oxígeno y neurodegeneración”
CENTER: Universidad de Sevilla
FINANCIAL ENTITY: Fundación Marcelino Botín
LENGTH: 01/01/2012-31/12/2016
AMOUNT: 625000€
PI: José López Barneo

PROJECT TITLE: "CIBER ENFERMEDADES NEURODEGENERATIVAS, Generación de un modelo neuronal dopaminérgico a partir de células madre pluripotentes inducidas de pacientes con enfermedad de Parkinson asociada a mutaciones en el gen LRRK2"
CENTER: CIBERNED
FINANCIAL ENTITY: Fondo de Investigación Sanitaria (FIS), Instituto de Salud Carlos III
LENGTH: 11/01/2010-31/12/2013
AMOUNT: 52500€
PI: Eduardo Tolosa Sarró & José Lopez Barneo

PROJECT TITLE: “Sensibilidad al oxígeno y neurodegeneración”
CENTER: Universidad de Sevilla
FINANCIAL ENTITY: Fundación Marcelino Botín
LENGTH: 01/01/2007-31/12/2011
AMOUNT: 1250000€
PI: José López Barneo

PROJECT TITLE: "Sensibilidad al oxígeno y neurodegeneración”
CENTER: Universidad de Sevilla
FINANCIAL ENTITY: Plan nacional SAF2006/08311 Ministerio de Ciencia e Innovación
LENGTH: 01/10/2006-30/9/2009
AMOUNT: 393250€
PI: José López Barneo

PROJECT TITLE: “CIBER: Enfermedades Neurodegenerativas, Enfermedad de Parkinson, corea de Huntington y otros trastornos del movimiento”
CENTER: Hospital Universitario Virgen del Rocío, Servicio Andaluz de Salud
FINANCIAL ENTITY: Fondo de Investigación Sanitaria (FIS), Instituto de Salud Carlos III
LENGTH: 01/04/2006-31/12/2020
AMOUNT: 1465750.58€

PI: José López Barneo

PROJECT TITLE: "Ayuda de la Convocatoria Nacional: sensibilidad al oxígeno y neurodegeneración"
CENTER: Universidad de Sevilla & Hospital Universitario Virgen del Rocío, Servicio Andaluz de Salud
FINANCIAL ENTITY: Fundación Juan March
LENGTH: 01/01/2001- 31/12/2008
AMOUNT: 901518€
PI: José López Barneo

C.4. Patent
Title: Compuestos para el tratamiento de la sobre-activación simpática
Authors: José López Barneo, Gracia patricia Ortega Sáenz, Olalla Colina Miranda, Lin Gao Chen, Alejandro Moreno Domínguez
Priority country: Spain
Application number: P202030314
Date of reception: 2020-04-17
Reference: ES1650.127
Applicant: Universidad de Sevilla

C.5. External expert for grant evaluation:
- Agencia Nacional de Evaluación y Prospectiva (ANEP): 2017-present
-Consejería de Salud, Junta de Andalucía: 2017-present
-Sociedad Española de Neumología y Cirugía Torácica (SEPAR): 2016-present

C. 6. Reviewer of Peer-Reviewed Articles:
FEBS Letters, Journal of Physiology, European Journal of Neuroscience, Life Sciences, Neurotoxicity Research, Journal of Neurochemistry, Acta Histochemica, Aging, Frontiers in Physiology.

C.7. Membership of Scientific Society:
- The American Physiological Society: 1999-2000
- The Oxygen Society: 1999-2000
- Asociación de Neumología y Cirugía Torácica de SUR (Neumosur): 2013-2021
- European Respiratory Society: 2015-2020
- Sociedad Española de Neumología y Cirugía Torácica (SEPAR): 2013-present

C.8. Supervision of student's research project:
PhD dissertation: 2 (+1 ongoing)
Master thesis (TFM): 2 (+1 ongoing)
BS research project (TFG): 7