

PhD seminar

“Molecular Mechanisms to maintain an operative (and accessible)
respiratory surface in health and disease”

CURRICUL VITAE

Jesus Perez-Gil



1 Short CV

J. Perez-Gil received his B. Sc. Degree in Biology and his Ph. D. in Biochemistry at Complutense University in Madrid. He then carried out postdoctoral research in physical chemistry of lipid and lipid-protein systems at the laboratory of Prof. Kevin M. W. Keough, at the Memorial University of Newfoundland, in St. Johns, Canada, and at the Max-Planck-Institut für biophysikalische Chemie, in Göttingen, Germany, under the supervision of Prof. Derek Marsh. He then returned to Complutense University, where he has spent most of his professional career, now as Professor and Chair of the Biochemistry and Molecular Biology Dept., at the Biology Faculty of UCM.

Dr. Perez-Gil received in 2006 the Bruker Prize from the Spanish Society of Biophysics, for his contribution to the development and spreading of Biophysics in Spain, and is an active member of the Biophysical Society.

The main research interest of Dr. Perez-Gil is focused on the elucidation of the organization and molecular mechanisms of the lipid-protein complexes of pulmonary surfactant, and the way lipids and proteins mutually modulate their physical properties in different lipid-protein systems.

2 Bibliometric data

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(Scopus) 419 pubblicazioni, 7734 citazioni, h-index 48

3 Selection of the 10 most relevant publications and/or patents

Parra, E., Pérez-Gil, J. Composition, structure and mechanical properties define performance of pulmonary surfactant membranes and films *Chemistry and Physics of Lipids* 2015, 185, pp. 153-175

Hidalgo, A., Cruz, A., Pérez-Gil, J. Barrier or carrier? Pulmonary surfactant and drug delivery *European Journal of Pharmaceutics and Biopharmaceutics* 2015, 95, pp. 117-127

Hidalgo, A., Cruz, A., Pérez-Gil, J. Pulmonary surfactant and nanocarriers: Toxicity versus combined nanomedical applications *Biochimica et Biophysica Acta - Biomembranes* 2017, 1859(9), pp. 1740-1748

Guagliardo, R., Pérez-Gil, J., De Smedt, S., Raemdonck, K. Pulmonary surfactant and drug delivery: Focusing on the role of surfactant proteins *Journal of Controlled Release* 2018, 291, pp. 116-126

Garcia-Mouton, C., Hidalgo, A., Cruz, A., Pérez-Gil, J. The Lord of the Lungs: The essential role of pulmonary surfactant upon inhalation of nanoparticles *European Journal of Pharmaceutics and Biopharmaceutics* 2019, 144, pp. 230-243

Cañadas, O., Olmeda, B., Alonso, A., Pérez-Gil, J. Lipid–protein and protein–protein interactions in the pulmonary surfactant system and their role in lung homeostasis

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De Backer, L., Cerrada, A., Pérez-Gil, J., De Smedt, S.C., Raemdonck, K. Bio-inspired materials in drug delivery: Exploring the role of pulmonary surfactant in siRNA inhalation therapy *Journal of Controlled Release* 2015, 220, pp. 642-650

Hidalgo, A., Salomone, F., Fresno, N., (...), Cruz, A., Perez-Gil, J. Efficient Interfacially Driven Vehiculization of Corticosteroids by Pulmonary Surfactant *Langmuir* 2017, 33(32), pp. 7929-7939

Autilio, C., Echaide, M., De Luca, D., Pérez-Gil, J. Controlled hypothermia may improve surfactant function in asphyxiated neonates with or without meconium aspiration syndrome *PLoS ONE* 2018, 13(2),e0192295

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Arroyo, R., Khan, M.A., Echaide, M., Pérez-Gil, J., Palaniyar, N. SP-D attenuates LPS-induced formation of human neutrophil extracellular traps (NETs), protecting pulmonary surfactant inactivation by NETs *Communications Biology* 2019, 2(1),470