SEMINARIOS DE INVESTIGACIÓN

(Marcar la opción que proceda)
☒ SEMINARIO DE INVESTIGACIÓN con financiación obtenida en la Convocatoria de Ayudas UAM de Movilidad para estos seminarios.
☐ SEMINARIO DE INVESTIGACIÓN con financiación asignada al Máster Oficial en la partida presupuestaria del ejercicio en curso.
☐ OTROS SEMINARIOS

NOTA: Este Anexo ha de remitirse a posgrado.oficial@uam.es
La no cumplimentación exhaustiva de alguno de estos datos supondrá la devolución al remitente.

ANEXO B : Información para la difusión del seminario¹

Título: Extracellular vesicles as bioeffectors of metabolic and vascular dysfunctions associated with obesity-related diseases

Ponente: Ramaroson Andriantsitohaina

Fecha/Hora: 28 de febrero de 2019, 16:00
Facultad/Escuela: Facultad de Medicina
Aula/Modulo: Biblioteca del Departamento de Farmacología

Contenido del seminario

Ámbito:
Programa de Doctorado en: Farmacología y Fisiología
Línea/Tema de investigación: Aterosclerosis, Cardiometabolismo y Enfermedad Renal

Breve resumen (max. 150 palabras):
Metabolic syndrome (MetS) defines a cluster of interrelated risk factors for cardiovascular diseases and diabetes mellitus, including hyperglycemia, elevated triglyceride levels, low high-density lipoprotein cholesterol levels, high blood pressure, and obesity. In this context, extracellular vesicles (EVs) may represent novel effectors that might help to elucidate disease-specific pathways in metabolic diseases. Indeed, EVs (a terminology that encompasses large vesicles including microvesicles (MVs) and small vesicles such as exosomes (Exos) are emerging as a novel mean of cell-to-cell communication in physiology and pathology because they represent a new way to convey fundamental information between cells. These microstructures contain proteins, lipids, and genetic information able to modify the phenotype and function of the target cells. We have reported that MVs from MetS induce endothelial dysfunction via the interaction with Fas/Fas ligand, resulting in a temporal endoplasmic reticulum-mitochondria cross talk and increased reactive oxygen species formation via neutral sphingomyelinase activation. Moreover, MVs from MetS patients overexpress Rap1 and may participate in early atherosclerosis remodelling. Finally, MVs in obesity are functional conveyors of macrophage migration inhibitory factor (MIF), which transduces metabolic responses. All of these effects underscore the importance of EVs in mediating metabolic and vascular dysfunctions associated with obesity-related diseases and as potential therapeutic targets.

¹ La información sobre el seminario no debe superar una página
Dr. Ramaroson Andriantsitohaina is currently Director of Research “1ère Classe” INSEMER and Director of Oxidative Stress and Disease Metabolic INSERM UMR 1063 Angers (France) since 2012. Since 2005, Dr. Andriantsitohaina leads a research team involved in the research of red wine polyphenols and the isolation, characterization and bioactions of extracellular vesicles (EVs) including microvesicles (MVs) and exosomes (EXOs) from different cohort (sepsis, Crohn, OSA, preeclampsia, MetS). Concerning MPs, he is internationally recognized having demonstrated the effects of MVs from different cohorts (sepsis, Crohn, OSA, preeclampsia), including MetS patients, on vascular cells. Indeed, MVs participate in vascular dysfunction in cardiovascular pathologies associated with the coexistence of several cardio-metabolic risk factors (as reviewed by Dr. Andriantsitohaina and colleagues in Circ Res. 2017, Pharmacol Therap 2016, Antioxid Redox Signal 2018). Dr. Andriantsitohaina has published 216 papers and 16-book chapters; his h-index is 51 and he has 4 patents.