MASTER UNIVERSITARIO EN: NEUROCIENCIA

(Marcar la opción que proceda)

☐ **SEMINARIO DE INVESTIGACIÓN** con financiación obtenida en la Convocatoria de Ayudas UAM de Movilidad para estos seminarios.

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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 seminario[1]

Título: The biology of brain colonization by metastatic cells.
Ponente: Manuel Valiente
Fecha/Hora: 20/12/2019 / 12:30 horas
Facultad/Escuela: Medicina
Aula/Modulo: Seminario IV

Contenido del seminario

Ámbito:

Programa de Doctorado en: Neurociencia
Línea/Tema de investigación: La glia y la neurona y sus trastornos

Breve resumen (max. 150 palabras):

Existing evidences at the cellular. One reason that could underlie this divergent evolution might derive from the unique brain microenvironment. An initial anti-metastatic naïve brain environment that eliminates the vast majority of recently extravasated cancer cells is slowly reprogrammed into a strong pro-tumor niche that finally supports the growth of the limited cells that survived. This switch from an anti-tumor to a pro-tumor brain microenvironment correlates with the emergence of altered molecular patterns affecting specific resident cell types. We identified the activation of STAT3 pathway in reactive astrocytes surrounding brain metastasis. Genetic strategies demonstrated that this reprogrammed component of the microenvironment, is responsible for establishing a potent immunomodulatory program that sustains the growth of brain metastasis. The unprecedented success of a pharmacological strategy targeting this altered molecular pattern in reactive astrocytes from both mice and humans with brain metastasis suggests that current systemic approaches could be significantly improved by incorporating additional drugs targeting the microenvironment.

Ponente: B*reve resumen del CV (max. 200 palabras):*

Manuel Valiente has a degree in Veterinary Medicine. His interest in the Central Nervous System led him to earn a doctorate in Neuroscience (Instituto de Neurociencias, Alicante), in the laboratory of Oscar Marín. Later on, Manuel joined the laboratory of Joan Massagué (Memorial Sloan Kettering Cancer Center) where he started to work on brain metastasis discovering critical mechanisms during the colonization of this organ that have been translated in several publications, patents and generated a clinical trial. Manuel established the Brain Metastasis Group at CNIO, where he leads a team of scientists whose goal is to discover critical aspects of the biology of brain metastasis in order to develop new therapeutic opportunities. His group has pioneered novel strategies to target molecular alterations within the brain metastasis microenvironment that have been proved to be potent anti-metastatic approaches in experimental models and patients. During this period Manuel has received several awards for his scientific contributions, including the EMBO YIP, and attracted competitive grants such as the ERC CoG.

[1] La información sobre el seminario no debe superar una página