

DSV SEMINARS

Inaugural lecture
International Master
in Neuroscience
2022-2023

Friday **03 October**
at 16.00
Room L
Building C1

The neural extracellular matrix in health and disease

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Accumulating evidence supports the importance of interactions between pre- and postsynaptic neuronal elements with astroglial processes and extracellular matrix (ECM) for the formation and plasticity of synapses, and thus validate the concept of a tetrapartite synapse.

The neural ECM is formed and remodeled in a manner dependent on neuronal activity, activation of neuromodulatory systems, released proteases, microglial phagocytosis and integrin-based ECM recycling.

These signaling mechanisms contribute to diverse forms of learning and memory and are involved in the pathophysiology of epilepsy, schizophrenia, mental retardation and dementia.