

**15TH APRIL AT 11.30 A.M.
ROOM A 204 | POVO 1**

**CIBIO
EXTERNAL
seminar**

IMMUNE RESPONSE IN THE SKELETAL MUSCLES IS PIVOTAL TO COUNTERACT ALS

GIOVANNI NARDO

**NEUROMUSCULAR DISEASES
UNIT LABORATORY OF
NEUROBIOLOGY AND
PRECLINICAL THERAPEUTICS
ALS CENTER
DEPARTMENT OF
NEUROSCIENCE
ISTITUTO DI RICERCHE
FARMACOLOGICHE MARIO
NEGRI - IRCCS**



“ Growing evidence suggests a prominent role of the immune system in ALS pathoprogession, the most common and fatal adult-onset neuromuscular disorder. We provided direct evidence underlying the pivotal role of the innate immune system in driving skeletal muscle regeneration, spotlighting that boosting a peripheral immune response is required to mitigate the pathological process in ALS. Intriguingly, our data showed a novel immune-unrelated role of MCP1 in promoting motor axon regeneration and modulating neuroinflammation in the nervous system of SOD1G93A mice, with the overall effect of reducing neurodegeneration. Altogether, these observations highlight the immune response as a critical determinant for disease variability and provide a reasonable explanation for the failure of systemic immunomodulatory treatments suggesting new potential strategies to hamper ALS progression. ”



**DEPARTMENT OF CELLULAR, COMPUTATIONAL
AND INTEGRATIVE BIOLOGY - CIBIO
VIA SOMMARIVE, 9
38123 - POVO (TN)
COMUNICAZIONE.CIBIO@UNITN.IT**



**UNIVERSITÀ
DI TRENTO**

**Department of
Cellular, Computational and Integrative Biology - CIBIO**