EXCELLENCE IN GENETICS & IMMUNOLOGY
SEMINAR SERIES

Fabio ROSSI, MD, PhD

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Title: "The role of Mesenchymal Progenitors in regeneration and degeneration"

Monday, January 18, 2016

MARTIN Amphitheater | Room 504 | 12:00 PM

McIntyre Medical Sciences Building

"Following acute sterile damage healthy skeletal muscle regenerates efficiently, leading to a complete restoration of function. However, chronic damage leads to inefficient repair. This is in large part due to the involvement of mesenchymal cells capable of generating matrix producing myofibroblasts and white adipocytes, which are key players in the establishment of the chronic inflammation, fibrosis and fat infiltration (Joe et al, Nat Cell Bio 2010). We have explored the mechanisms underlying the shift from robust regeneration to a degenerative environment and gathered evidence of extensive regulatory crosstalk between activated mesenchymal fibro/adipogenic progenitors (FAPs) and infiltrating innate immune cells (Lemos et al, Nat Med 2015). Such interactions play a key role in clearing expanded FAPs from the tissue, leading to the timely termination of the transient deposition of extracellular matrix (ECM) associated with regeneration. In chronic damage such as that observed in muscular dystrophies however, FAP clearance is defective and their permanence in the tissue eventually leads to fibrofatty infiltration, indicating that the control mechanisms at play during acute damage are disrupted. I will present a synopsis of the mechanisms regulating fibro/adipogenic progenitors underlying these processes."

This seminar is mandatory for Biochemistry Graduate students

LOCATION: **McIntyre Medical Sciences Building, Room #504, 12:00 PM**

HOSTED BY: DRS JÖRG FRITZ & SILVIA VIDAL