



**THE HONG KONG UNIVERSITY OF SCIENCE & TECHNOLOGY**  
**Division of Life Science**

**Macrophages exert essential roles on muscle stem cells during skeletal muscle regeneration**

by

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Abstract

Adult skeletal muscle regenerates after an injury. This is possible thanks to the muscle stem cells, or satellite cells, which activate and recapitulate a myogenic program that eventually leads to the formation of new functional myofibers. There is increasing evidence that non-muscle cells play important roles in skeletal muscle regeneration, among which immune cells, and particularly macrophages. The various roles of these cell types in skeletal muscle regeneration will be presented, as well as the first molecular mechanisms that sustain their regulation. Finally, the role of these interactions will be discussed in the context of degenerative myopathies, which are characterized by a chronic inflammatory state.

**Date :** 13 January 2017 (Friday)  
**Time :** 11:00 am  
**Venue :** Chen Kuan Cheng Lecture Theater (LT-H)  
(Lift No. 27-28)  
**Host :** Prof Zhenguo WU

*All Are Welcome!*