

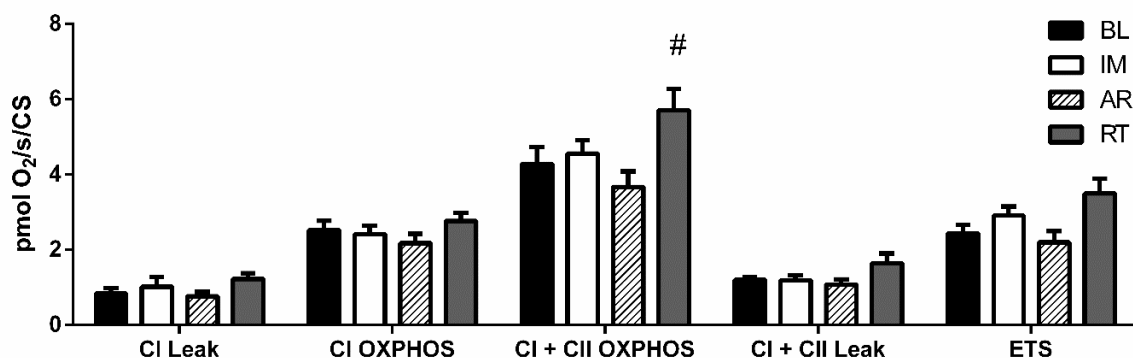
## High-Resolution Fluorespirometry and oxidative stress

Chantal A. Pileggi, Christopher P. Hedges, Randall F. D'Souza, Brenan R. Durainayagam, James F. Markworth, Anthony J.R. Hickey, Cameron J. Mitchell and David Cameron-Smith

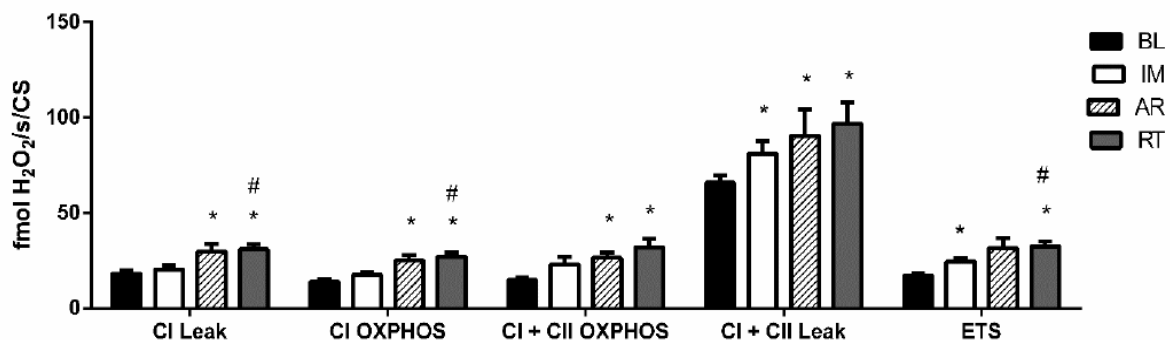
Free Radic Biol Med 124:447-453 (2018).



### Effect of post-ambulatory recovery and supervised resistance training on mitochondrial respiration for permeabilized human muscle fibres before and after limb immobilization.



An increase in the H<sub>2</sub>O<sub>2</sub> production was reported after suffering the immobilization of a limb and recovering the physical activity. This suggests a signalling role of ROS in human muscle remodelling.



Fibres. BL: Baseline, IM: 2-weeks immobilization, AR: 2-weeks post ambulatory recovery, RT: 2-weeks of supervised resistance training. N=16 patients. Fibres were obtained from the *Vasus lateralis* and permeabilized with saponin before running the high-resolution Fluorespirometry assessment.

[http://wiki.oroboros.at/index.php/Pileggi\\_2018\\_Free\\_Radic\\_Biol\\_Med](http://wiki.oroboros.at/index.php/Pileggi_2018_Free_Radic_Biol_Med)

Reference: Pileggi CA, Hedges CP, D'Souza RF, Durainayagam BR, Markworth JF, Hickey AJR, Mitchell CJ, Cameron-Smith D (2018) Exercise recovery increases skeletal muscle H<sub>2</sub>O<sub>2</sub> emission and mitochondrial respiratory capacity following two-weeks of limb immobilization. Free Radic Biol Med 124:447-453.