

<u>Topics:</u> Clinical aspects of critical illness myopathy, mechanical ventilation-induced diaphragm dysfunction, Animal models of critical care myopathy, Mitochondrial mechanisms of critical care myopathy, Proteolytic and Autophagy pathways in critical care myopathy

International Speakers: Jesse Hall (University of Chicago, USA), Mervyn Singer (University College London, UK), Gerald Supinsky (University of Kentucky, USA), Lars Larsson (University of Uppsula, Sweden), Marco Sandri (University of Padova, Italy), Irina Conboy (University of California Berkeley, USA), Margret Herridge and Hane Batt (University of Toronto, Canada), Danielle Slitter (NIH, USA).

<u>Registration:</u> Free. Please contact Dr. Sabah Hussain (<u>sabah.hussain@muhc.mcgill.ca</u>).

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Thursday October 4, 2012

8:00 am Opening Remarks: **Dr. Peter Goldberg** (Director, Department of Critical Care Medicine, McGill University Health Centre)

8:20-10:00 am Clinical Aspects of Critical Illness Myopathy

- Clinical aspects of skeletal muscle dysfunction in the critically ill.
 - **Dr. Jesse Hall** (University of Chicago, USA)
- Long-term neuromuscular outcomes in survivors of critical illness.
 Dr. Margaret Herridge and Dr. Jane Batt (University of Toronto, CAN)

Coffee break

10:30-11:50 am Cellular Aspects of Critical Illness Myopathy I

- The muscle stem cell niche and muscle dysfunction in critical care myopathy.
 - **Dr. Irina Conboy** (UC Berkeley, USA)
- *Mechanistic insights from animal models of critical care myopathy.*
 - **Dr. Sabah Hussain** (McGill University, CAN)

12-1:20 pm Lunch

1:30-2:50 pm Cellular Aspects of Critical Illness Myopathy II

- Experimental and clinical studies in critical illness myopathy: Underlying mechanisms and specific intervention strategies.
 - **Dr. Lars Larsson** (Uppsula, Sweden)
- Is old age a potentiating factor in critical illness myopathy?
 - **Dr. Russell Hepple** (McGill University, CAN)

Coffee break

3:30-5:40 pm Mechanical Ventilation

- $\bullet \quad \textit{Prolonged mechanical ventilation and diaphragm contractile dysfunction}.$
 - **Dr. Ghislaine Gayan-Ramirez** (University of Leuven, BEL)
- Metabolic oversupply as a cause of diaphragm dysfunction with mechanical ventilation.
 - **Dr. Basil Petrof** (McGill University, CAN)
- Respiratory muscle mechanical dysfunction in the critically ill.
 - **Dr. Gerald Supinski** (University of Kentucky, USA)

5:40-6:30 pm Panel Discussion (beverages?)

Friday October 5, 2012

8:00-10:40 am Mitochondrial Pathways

- Mitochondrial dysfunction in the critically ill.
 - **Dr. Mervyn Singer** (University College, London, UK)
- Mitochondrial dynamics and muscle integrity.
 - **Dr. Heidi McBride** (McGill University, CAN)
- Role of Pink1/Parkin pathway in muscle integrity, and the modulatory role of inflammation.
 - Dr. Danielle Sliter (NIH, USA)
- Sepsis-induced mitochondrial dysfunction: role of Parkin.
 - Dr. Yan Burelle (University of Montreal, CAN)

Coffee break

11:15-12:15 pm Proteolysis I

 Regulation of muscle protein degradation by the autophagy-lysosomeal pathway.

Dr. Marco Sandri (University of Padova, Italy)

12:20-2:00 pm Lunch

2-3:30 pm Proteolysis II

- Cachexia and proteolysis in the critically ill.
 - **Dr. Thomas Jagoe** (McGill University)
- *Involvement of the mTOR complex in protein degradation.*
 - **Dr. Arnold Kristof** (McGill University)
- Novel players in the proteasomal pathway.
 - **Dr. Simon Wing** (McGill University)