

Neuromuscular Complications of Critical Illness: Current Concepts and Future Directions

October 30-31, 2026,

October 30, 2026

12:30–13:00 *Registration and Welcome*

13:00–15:00 | Muscle Wasting in the ICU: From Epidemiology to Clinical Diagnosis

13:00–13:30 *Epidemiology, Etiology, and Risk Factors (Kirby Mayer)*

13:30–14:00 *Mechanisms and Pathophysiology (Oliver Friedrich)*

14:00–14:30 *Ion Channelopathies in the Pathogenesis of Critical Illness Myopathy (Mark M. Rich)*

14:30–15:00 *Clinical Recognition of ICU-Acquired Weakness: Clinical Assessment and Bedside Examination (Damien Bachasson)*

15:00–15:30 *Coffee Break*

15:30–17:30 | Neurophysiological Assessment of ICU-Acquired Weakness

15:30–16:00 *Nerve Conduction Studies, Including Simplified Screening Protocols (Nicola Latronico)*

16:00–16:30 *Electrical Phrenic Nerve Stimulation and Direct Muscle Stimulation (Jean-Pascal Lefaucheur)*

16:30–17:00 *Needle Electromyography (Mamede de Carvalho)*

17:00–17:30 *Muscle Excitability Testing (Werner Z'Graggen)*

19:00–22:00 *Networking Dinner*

October 31, 2026

08:30–10:30 | Imaging and Histopathology

08:30–09:00 Muscle Imaging: Ultrasonography and Elastography (*Kirby Mayer*)

09:00–09:30 Muscle Tissue Oxygenation and Microcirculation: Near-Infrared Spectroscopy (NIRS) (*Asher A. Mendelson*)

09:30–10:00 Assessment of Diaphragm Function: Ultrasound Imaging and Magnetic Cervical Stimulation (*Martin Dres*)

10:00–10:30 Myosin Expression Analysis (*Lars Larsson*)

10:30–11:00 Coffee Break

11:00–12:00 | Panel Discussion

Diagnosis in the ICU: Are We Missing the Window?

This multidisciplinary panel will discuss the roles of clinical examination, neurophysiology, imaging, and emerging biomarkers, as well as the practical barriers to early recognition and opportunities to improve diagnostic pathways.

12:00–13:00 Lunch Break

13:00–14:30 | Treatment and Prevention

13:00–13:30 Early Mobilization and Rehabilitation Beginning in the ICU (*Carol Hodgson*)

13:30–14:00 Novel Therapeutic Targets (*Steffen Weber-Carstens*)

14:00–14:30 Ongoing Clinical Trials (Speaker TBC)

14:30–15:00 Coffee Break

15:00–16:00 | Panel Discussion

Preventing ICU-Acquired Weakness: What Should Change in Clinical Practice?

A multidisciplinary debate featuring intensivists, neurologists, clinical neurophysiologists, physiotherapists, rehabilitation physicians, and critical care nurses.

16:00–16:30 Concluding Remarks and Farewell
