

CoE Advisory Board

The ET CoE's Advisory Board met on 11 May to hear the latest updates on the acceleration of standards for exoskeletons and to provide advise on the overall CoE strategic path. The CoE's Research to Standards projects, the 2021 RFP for Return to Work exoskeletons, and the three year roadmap were briefed. The Board was updated on this years Training & Education events and the latest ASTM Board of Directors meetings.

Upcoming Events

- Exoskeleton and PPE Interface Challenges
- Applications for Exoskeletons
- Workshop on Establishing Quantitative Metrics to Certify Exoskeleton Safety
- How Standardization Helps Commercialization of Exo Technology
- Insurance and Risk Assessment for Exoskeletons

Committee F48 Ballots

F48 currently has four work items under ballot. They are:

- 1** Test Method for Exoskeleton Use: Confined Space: Horizontal Movement **WK74246**
- 2** Guide for Quantitative Measures for Establishing Exoskeleton Functional Ergonomic Parameters and Test Metrics **WK74625**
- 3** Guide for Establishing a Reporting Structure for Exoskeleton Analysis **WK74626**
- 4** Practice for Mobility When Using an Exoskeleton **WK73341**

ASTM F48 members are encouraged to read and vote on these ballots.

ASTM International ET CoE Webinar on Research to Standards for Mobility, Cognitive Fit, and Transitions

On 27 May, Vanderbilt University, The University of Michigan, Texas Tech University, and The University of Massachusetts Lowell presented how their teams are accelerating exoskeleton standards through innovative research projects. The teams discussed how they are approaching the development of test methods for exoskeletons and the latest updates from their projects. [More.](#)

ASTM International and HFES Announce Cooperative Agreement for Exoskeletons

Representatives of ASTM International and The Human Factors and Ergonomics Society (HFES) recently signed a letter of cooperation supporting exoskeleton standards development.

The letter of cooperation is intended to encourage technical excellence in exoskeletons and their enabling technologies through the application of standards. Additional goals include efforts to enhance technical knowledge and facilitate HFES' input in the development of standards to reflect human-centric solutions. [More.](#)



Exoskeletons in the News

Exoskeleton Improves Mobility in Advanced MS Patients

Researchers at New Jersey's Kessler Institute for Rehabilitation say patients with advanced multiple sclerosis showed significant improvements in mobility after four weeks of training with a robotic skeleton. The study involved 10 patients between age 18 and 75 who were tested on functional mobility, walking endurance, cognitive processing speed, and resting-state functional brain connectivity.

[Full Story: Medical News Today](#)

Man Walks for the First Time in 25 Years Using Robotic Legs

A pair of robotic legs helped six-foot-two Chablis Dandridge see the world from a different angle as he took his first steps since he became paralyzed 25 years ago. The 39-pound exoskeleton is controlled through a smartphone app and does all of the leg work for wearers, who need between 30 to 40 hours of training to master the device.

[Full Story: Asheville Citizen-Times \(N.C.\)](#)