



## IROS 2020 Workshop

### Application-Driven Soft Robotic Systems: Translational Challenges

Video presentation of:

Professor Conor Walsh  
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Presentation Title  
TBC

Presentation Abstract  
TBC

Biography

Conor Walsh is the Paul A. Maeder Professor of Engineering and Applied Sciences at the John A. Paulson Harvard School of Engineering and Applied Sciences and an Associate Faculty Member at the Wyss Institute for Biologically Inspired Engineering. He is the founder of the Harvard Biodesign Lab, which brings together researchers from the engineering, industrial design, apparel, clinical and business communities to develop new disruptive robotic technologies for augmenting and restoring human performance. This research includes new approaches to the design, manufacture and control of wearable robotic devices and characterizing their performance through biomechanical and physiological studies so as to further the scientific understanding of how humans interact with such machines. Example application areas include, enhancing the mobility of healthy individuals, restoring the mobility of patients with gait deficits, assisting those with upper extremity weakness to perform activities of daily living and preventing injuries of workers performing physically strenuous tasks.

His multidisciplinary research spans engineering, biology and medicine and has led to multiple high impact scientific papers. His group's work is highly translation focused, multiple partnerships with industry, technologies already licensed, and one that has finished a clinical trial and now FDA and CE mark approved. Conor is also dedicated to training the next generation of biomedical engineering innovators through his teaching, as well as outreach efforts through the Soft Robotics Toolkit and Harvard Medical Device Innovation Initiative.

The vast majority of alumni have gone on to paths in academia and high tech R&D positions in industry. He is the winner of multiple awards including the Presidential Early Career Awards for Scientists and Engineers, the MIT Technology Review Innovator Under 35 Award, the Early Academic Career Award in Robotics and Automation from the IEEE RAS, the National Science Foundation Career Award and the MIT 100K Entrepreneurship Competition Grand Prize. Conor received his B.A.I and B.A. degrees in Mechanical and Manufacturing engineering from Trinity College in Dublin, Ireland, in 2003, and M.S. and Ph.D. degrees in Mechanical Engineering from the Massachusetts Institute of Technology in 2006 and 2010.