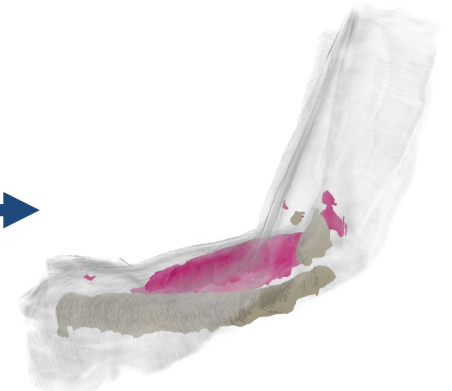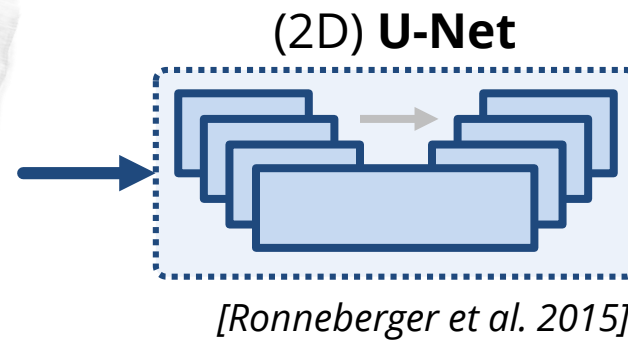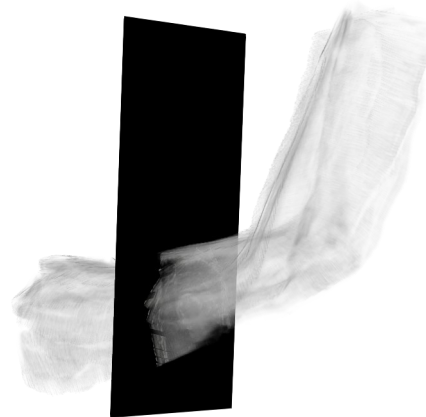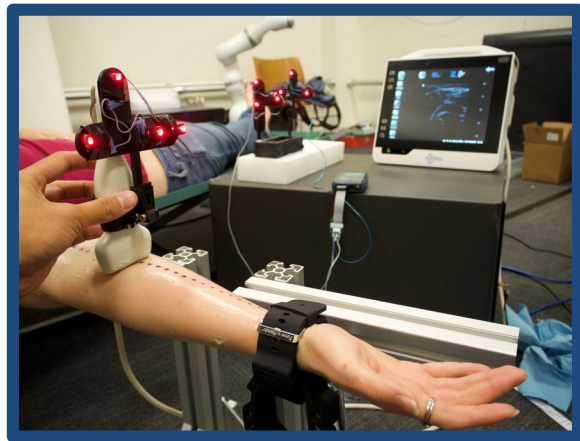# OpenArm 2.0: Automated Segmentation of 3D Tissue Structures for Multi-Subject Study of Muscle Deformation Dynamics

Yonatan Nozik*, Laura A. Hallock*, Daniel Ho, Sai Mandava, Chris Mitchell, Thomas Hui Li, and Ruzena Bajcsy
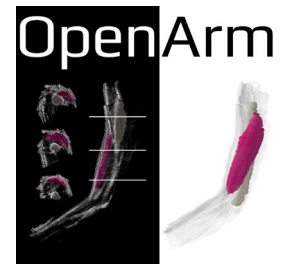
ultrasound + motion capture　　**localized ultrasound data**　　**output segmentation**

(2D) **U-Net**

[Ronneberger et al. 2015]

CONTRIBUTION: **Multi-subject** deformation data under **factorial angle and force conditions** applicable to **assistive device control**, diagnosis / rehabilitation of musculoskeletal **pathology**, **animation**, and general **biomechanical modeling**

ULTIMATE OBJECTIVE: Noninvasively measure **individual muscle forces** in vivo

OpenArm

Download all code and data at
`simtk.org/projects/openarm`