



Multiscale Brain Mechanics: From Growth to Injury

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Organizers:

Christian Franck, Brown University

Ellen Kuhl, Stanford University

Reuben Kraft, Penn State University

This symposium aims to bring together the latest advances highlighting the important contribution that multiscale mechanics plays in studying the brain. From birth defects to traumatic brain injuries, the role of mechanical deformations at the cellular scale remain elusive and difficult to quantify and model. Recent studies integrating expertise from solid and fluid mechanics with neurobiology have shown great promise to unravel the complex disease or defect mechanism and resulting sequelae. Topics of interest include, but are not limited to, experimental and modeling research focused on cellular injury or defect mechanisms and models, mechanobiology of the brain-skull interface, techniques to link multiple scales or physics related to brain structure or function, and role of various structures on response (e.g. vasculature).

Abstract Submission: Symposium #361 - Due November 25, 2017

<http://sites.northwestern.edu/usnctam2018/usnctam-2018/abstract-submission/>