Seminar/Talk

Tales from spring brakes

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Host:

The heart is a mechanical machine that has little room for failure. Differently to pumps manufactured by men, the heart is built upon soft tissue. What are the mechanical properties of cardiac tissue and its constituent proteins sustaining the remarkable activity of the heart? How is the elasticity of the myocardium tuned to accommodate the expansion of the ventricles during diastole? How do mutations in proteins with a mechanical role trigger the development of life-threatening cardiomyopathies? Since the mechanical properties of proteins are not accessible to standard bulk biochemical techniques, our lab takes a multidisciplinary approach to try to answer all these questions. We specialize in single molecule methods using atomic force microscopy (AFM), which are able to measure the effects of mechanical forces on proteins. We focus on titin and cardiac myosin binding protein C, two key proteins that enable and modulate contractility of the sarcomere by establishing elastic tethers.

Tuesday, April 11, 2017 11:00am - 12:00pm
Mondi Seminar Room 3, Central Building

This invitation is valid as a ticket for the ISTA Shuttle from and to Heiligenstadt Station. Please find a schedule of the ISTA Shuttle on our webpage: https://ista.ac.at/en/campus/how-to-get-here/ The ISTA Shuttle bus is marked ISTA Shuttle (#142) and has the Institute Logo printed on the side.