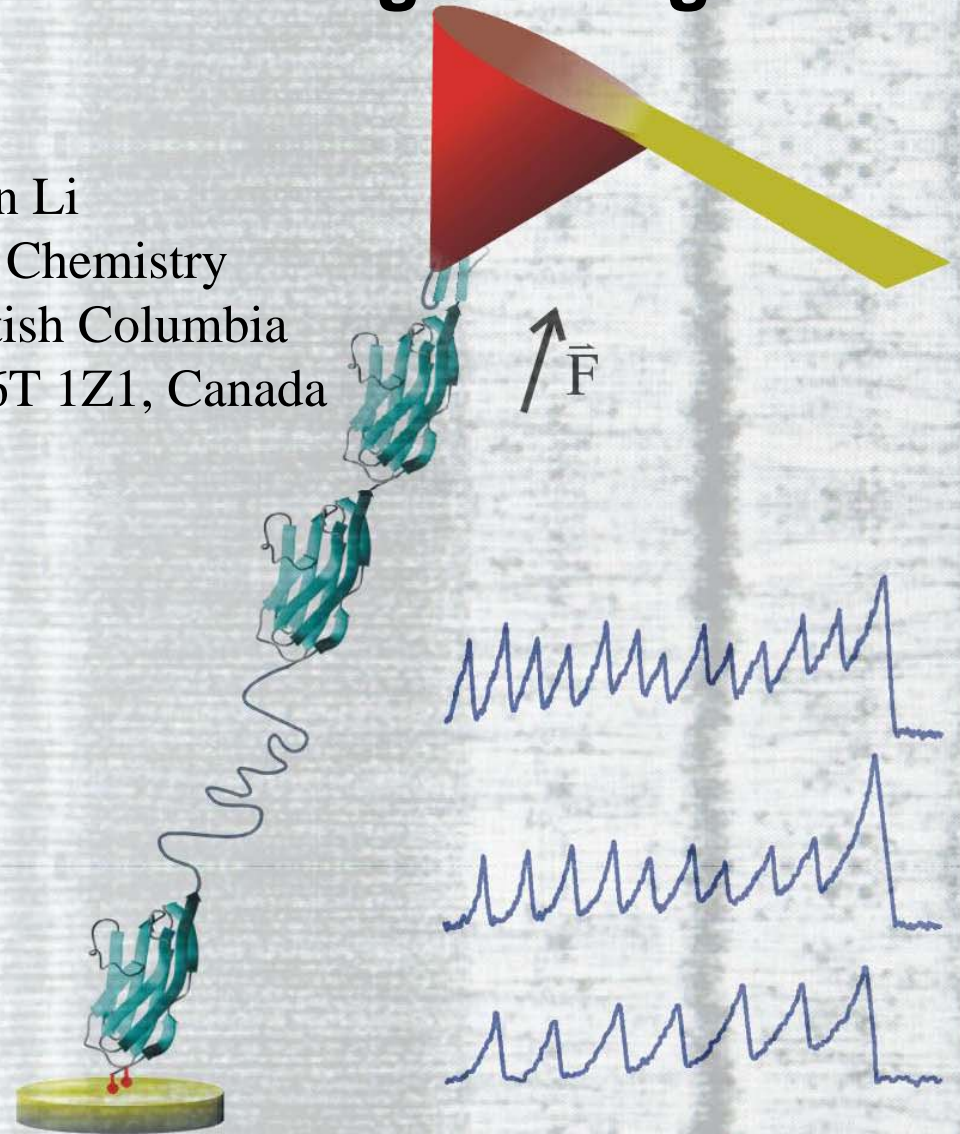


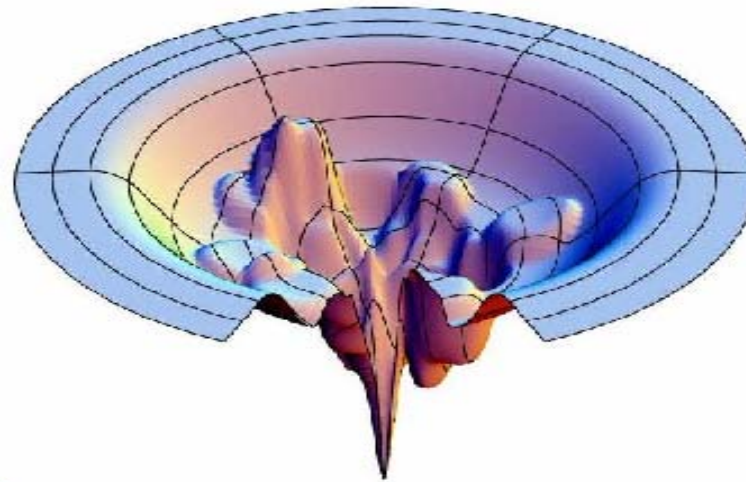
Single Protein Mechanics and Engineering

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Protein folding and unfolding

- Using single molecule atomic force microscopy, we are attempting to understand the folding and unfolding dynamics for proteins that are subject to mechanical stretching forces inside the cell.





- **Engineering proteins with tailored mechanical properties**

-We are interested the structure-mechanical properties relationship for proteins at different length scales.

-Through protein engineering, we endeavor to design proteins with tailored nanomechanical properties that can be used as building blocks for nanomechanical devices by serving as nano-springs and force-sensors.