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**Solid-state nanopore analysis of the PDZ2 protein domain** KEVIN FREEDMAN, Drexel University, RAZA HAQ, MAIKE JURGENS, Uppsala University, RAFAEL MULERO, ANMIV PRABHU, Drexel University, PER JEMTH, Uppsala University, JOSHUA EDEL, Imperial College London, MINJUN KIM, Drexel University — The PDZ2 protein domain plays a significant role in biology; specifically as a ubiquitous binding domain for a variety of proteins found in organisms from bacteria to humans. PDZ2 and a single-point mutant were characterized using nanopores to help elucidate the structure-function relationship of this protein and provide a framework for more complex studies involving protein folding/binding. The translocation properties and unfolding of this domain was interrogated by the ionic-current blockade method using a single digit nanometer solid-state pore. By conducting these experiments under a wide variety of fluidic conditions, significantly different ionic current blockades were recorded and provided a method for sensing the folding/unfolding characteristics of the PDZ2 protein domain and its single-point mutant.

Prefer Oral Session  
 Prefer Poster Session

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