

Abstract Submitted
for the MAR07 Meeting of
The American Physical Society

A simple model system to study forces when virus interacts with cell membrane JANET WONG, LIANG HONG, SUNG CHUL BAE, STEVE GRANICK, University of Illinois at Urbana-Champaign — Virus needs to attach itself to the cell membrane in order to force the cell to replicate its DNA and multiply. To better understand the fundamental adhesion mechanism between the virus and the cell membrane, we work on a much simplified system, charged hard spheres that interact with phospholipid liposomes. The interactions between the liposome and charged nanoparticles were examined using colloidal probe microscopy. The local and global mechanical properties of these “attacked” liposomes were measured using atomic force microscopy and a homebuilt surface forces apparatus.

Janet Wong
University of Illinois at Urbana-Champaign

Date submitted: 14 Nov 2006

Electronic form version 1.4