Nathan A. Bernhardt* and Ulrich H. E. Hansmann*

Dept. of Chemistry & Biochemistry, University of Oklahoma, Norman, OK 73019, USA
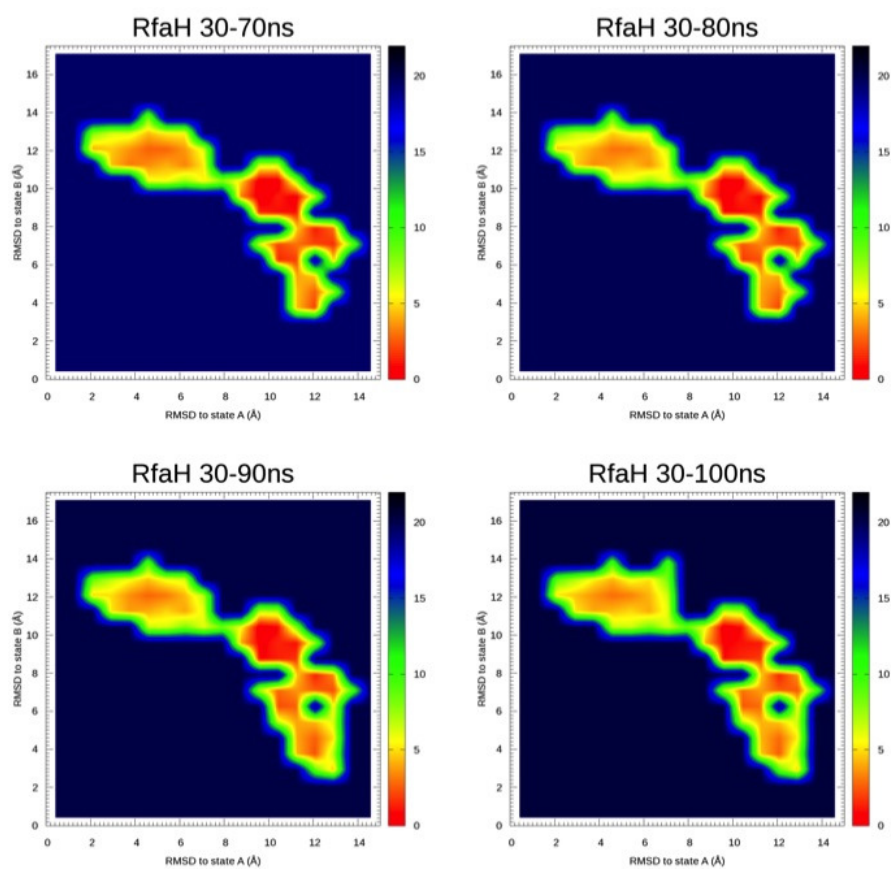
E-mail: nbernhardt@ou.edu; uhansmann@ou.edu

Figure S1: Free energy landscape projected onto the RMSD relative to the ideal bound and unbound state. Each plot uses a different amount of simulation time.

Table S1: **Average exchange rate between a simulation with the lambda value shown and its neighbor with the lambda value beneath.**

$\lambda \ (^{kJ}/_{nm^2})$	Ex-rate (%) Bound Side	Ex-rate (%) Unbound Side
0.4	31	22
0.2	29	19
0.1	29	28
0.075	29	29
0.055	27	24
0.035	28	27
0.028	28	26
0.023	23	26
0.015	24	25
0.010	26	25
0.005	25	25
0.0	0	0
0.0 (hb)	—	—