Erik Nordquist

enordquist@umass.edu | eriknordquist.com | erik-nordquist

Education

–	**PhD Chemistry,** University of Massachusetts Amherst
2018	**BS Chemistry, BS Physics,** The College of Idaho. Gipson Honors Fellow. Summa Cum Laude.

Fellowships

2022	**UMass CNS Teaching Fellowship,** funding to teach 2 sections of self-designed FYS (info)
2020 – 2022	**Chemistry-Biology Interface,** fully-funded NIH/UMass traineeship (info)

Publications

5. **Nordquist E**, Jia Z, Chen J. Inner pore hydration free energy controls the activation of the big potassium channels. (in preparation)
4. **Nordquist E**, Schultz S, Chen J. Using metadynamics to explore the free energy of dewetting in biologically-relevant nanopores. JPC B (submitted).
3. **Nordquist E**, Clerico E, Chen J, Gierasch L. Computationally-aided modeling of Hsp70-client interactions: past, present, and future. JPC B (submitted).
2. **Nordquist E**, English C, Clerico E, Sherman W, Gierasch L, Chen J. Physics-Based Modeling Provides Predictive Understanding of Selectively Promiscuous Substrate Binding by Hsp70 Chaperones. PLOS Comp Bio (2021). (doi)
1. Gong X, Chiricotto M, Liu X, **Nordquist E,** Feig M, Brooks C, Chen J. Accelerating the GBMV/SA Implicit Solvent Model Using GPUs. J Comput Chem (2020). (doi)

Presentations

2022	**Biophysical Society Annual Meeting Poster,** ”Free Energy of Hydrophobic Dewetting in Gating of BK Channels”
2020	**Northeastern Structural Symposium Research Talk,** ”Physical Origins of Selective Promiscuity to Hsp70s Revealed Through Physics-Based Modeling” **UMass ResearchFest Poster,** W.E. McEwen Poster Prize; ”Physical Origins of Selective Promiscuity to Hsp70s Revealed Through Physics-Based Modeling”
2019	**Molecular Biophysics in the Northeast Poster Session,** ”Understanding the Origins of DnaK’s Selective Promiscuity with Physics-based Modeling”

Service and Outreach

Organization Committees	**Annual Research symposium** for UMass Chem (2019-2022) **CBI Networking Symposium** and Research symposium (2020)
Search Committee	**Grad Program Manager** for UMass Chem.
Reviewer	**Journal Reviewer,** 1 article reviewed (Biophys. J.)
Scientific Outreach	**Reviewer for J. Emerging Investigators,** 14 articles for middle-/high-school students (info) **Girls summer science camp,** Eureka! at Umass Amherst

Teaching and Mentoring

Courses	First-year seminar (self-designed, 2 sections)
Mentoring	**Undergraduates:** Samantha Schultz (2020-2021); Callie Jillson (2019-2020)

Professional Development

2021	**Evidence-based Undergraduate STEM Teaching** online course (info)
	Inclusive STEM Teaching online course (info)