

Erik Nordquist

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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)