Erik Nordquist

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Education

Ph.D. Chemistry, University of Massachusetts Amherst

2018 B.S. Chemistry and Math-Physics, The College of Idaho

Fellowships

2020 – 2022 | Chemistry-Biology Interface (CBI) Fellowship

Funded Traineeship through NIH and UMass

Publications

1. **Nordquist, E.** *et al.* Physics-Based Modeling Provides Predictive Understanding of Selectively Promiscuous Substrate Binding by Hsp70 Chaperones. *PLOS Computational Biology* (2021).

2020 2. Gong, X. *et al.* Accelerating the Generalized Born with Molecular Volume and Solvent Accessible Surface Area Implicit Solvent Model Using Graphics Processing Units. *Journal of Computational Chemistry* (2020).

Teaching

2019 – 2021 | **Undergraduates Mentored:** Samantha Schultz, Callie Jillson

Presentations

2022 | Biophysical Society Annual Meeting

"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 winner; "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"

Professional Development

2021 Intro. to Evidence-based Undergraduate STEM Teaching

8-week CITRL-run course, incl. topics: active learning, formative assessments, backward design, etc.

The Inclusive STEM Teaching Project online course

4-week CIRTL-run, evidence-based course on inclusive STEM teaching.

2019 OpenACC GPU Hackathon at MIT

Parallelizing implementation of implicit solvent model GBMV2/SA

Service

| 2021 | Journal Referee Biophysical Journal, reviewed 1 article |
|-------------|---|
| 2021 | Search Committee for Grad Program Director, UMass Amherst Chem. Dept. |
| 2021 – | Journal for Emerging Investigators, 10 articles reviewed to-date |
| 2020 | CBI Alumni Networking Event, Organization Committee |
| 2019 – 2021 | Annual Chem Dept ResearchFest, Organization Committee |