## Quyen V. Vu

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## **Education**

	Ph.D. student, Institute of Physics, Polish Academy of Sciences
2018-2023	Thesis title: "Influence of the ribosome on protein ejection and folding"
2015-2017	M.S., Vietnam National University-University of Science
2011-2015	B.S., Vietnam National University-University of Science Talented Program of Physics

## **Honors and Awards**

- 1. The second prize "Student Scientific Researching" Conference of Faculty of Physics, VNU-US, April 2015.
- 2. PetroVietnam Scholarship 2015.
- 3. "Creative Youth" Award of Vietnam Association of Science and Technology in Poland for 2021.

## **Publications**

- Nissley, D. A.; <u>Vu, Q. V.</u>; Trovato, F.; Ahmed, N.; Jiang, Y.; Li, M. S.; O'Brien, E.
  P. Electrostatic Interactions Govern Extreme Nascent Protein Ejection Times from Ribosomes and Can Delay Ribosome Recycling. *J. Am. Chem. Soc.* 2020, *142* (13), 6103–6110.
- Vu, Q. V.: Jiang, Y.; Li, M. S.; O'Brien, E. P. The Driving Force for Co-Translational Protein Folding Is Weaker in the Ribosome Vestibule Due to Greater Water Ordering. *Chem. Sci.* 2021, 12 (35), 11851–11857.

- Leininger, S. E.; Rodriguez, J.; <u>Vu, Q. V.</u>; Jiang, Y.; Li, M. S.; Deutsch, C.; O'Brien, E. P. Ribosome Elongation Kinetics of Consecutively Charged Residues Are Coupled to Electrostatic Force. *Biochemistry* 2021, 60 (43), 3223–3235.
- 4. **Vu, Q. V.**; Nissley, D. A.; Jiang, Y.; O'Brien, E. P.; Li, M. S. Is Posttranslational Folding More Efficient Than Refolding from a Denatured State: A Computational Study. *J. Phys. Chem. B* 2023, 127 (21), 4761–4774.
- 5. Halder, R.; Nissley, D. A.; Sitarik, I.; Jiang, Y.; Rao, Y.; **Vu, O. V.**; Li, M. S.; Pritchard, J. R.; O'Brien, E. P. How soluble misfolded proteins bypass chaperones at the molecular level. *Nat. Commun.* 2023 (accepted).
- Dang, L. P.; Nissley, D. A.; Sitarik, I.; <u>Vu, Q. V.</u>; Jiang, Y.; Li, M. S.; O'Brien, E. P. Synonymous Mutations Can Alter Protein Dimerization through Localized Interface Misfolding Involving Self-Entanglements. *bioRxiv* 2021, 2021.10.26.465867. <a href="https://doi.org/10.1101/2021.10.26.465867">https://doi.org/10.1101/2021.10.26.465867</a>.
- Yu, Q. V.; Sitarik, I.; Jiang, Y.; Yadav, D.; Sharma, P.; Fried, S. D.; Li, M. S.; O'Brien, E. P. A Newly Identified Class of Protein Misfolding in All-Atom Folding Simulations Consistent with Limited Proteolysis Mass Spectrometry. *bioRxiv* 2022. <a href="https://doi.org/10.1101/2022.07.19.500586">https://doi.org/10.1101/2022.07.19.500586</a>.