Yi-Hsuan Lin, PhD

yi-hsuan.lin@outlook.com | +1-416-829-6531 | laphysique.github.io

PEER-REVIEWED PUBLICATIONS

- 14. S. Das, **Y.-H. Lin**, R. M. Vernon, J. D. Forman-Kay, and H. S, Chan (2020) Comparative roles of charge, π , and hydrophobic interactions in sequence-dependent phase separation of intrinsically disordered proteins. *Proc. Natl. Acad. Sci. U.S.A.* **117**, 28795–28805
- 13. A. N. Amin*, **Y.-H. Lin***, S. Das, and H. S. Chan (2020) Analytical theory for sequence-specific binary fuzzy complexes of charged intrinsically disordered proteins. *J. Phys. Chem. B* **124**, 6709–6720 (*equal contribution; selected supplementary cover)
- 12. Y.-H. Lin, J. P Brady, H. S. Chan, and K. Ghosh (2020) A unified analytical theory of heteropolymers for sequence-specific phase behaviors of polyelectrolytes and polyampholytes. *J. Chem. Phys.* **152**, 045102
- 11. H. Cinar, R. Oliva, **Y.-H. Lin**, X. Chen, M. Zhang, H. S. Chan, and R. H. A. Winter (2020) Pressure sensitivity of SynGAP/PSD-95 condensates as a model for postsynaptic densities and its biophysical and neurological ramifications. *Chem. Eur. J.* **26**, 11024–11031 (cover feature)
- 10. S. Das, A. N. Amin, Y.-H. Lin, and H. S. Chan (2018) Coarse-grained residue-based models of disordered protein condensates: utility and limitations of simple charge pattern parameters, *Phys. Chem. Chem. Phys.* **20**, 28558–28574
- 9. **Y.-H. Lin**, J. D. Forman-Kay, and H. S. Chan (2018) Theories for sequence-dependent phase behaviors of biomolecular condensates. *Biochemistry* **57**, 2499–2508
- 8. S. Das, A. Eisen, Y.-H. Lin, and H. S. Chan (2018) A lattice model of charge-pattern-dependent polyampholyte phase separation. *J. Phys. Chem. B* 122, 5418–5431
- 7. Y.-H. Lin, J. P. Brady, J. D. Forman-Kay, and H. S. Chan (2017) Charge pattern matching as a "fuzzy" mode of molecular recognition for the functional phase separations of intrinsically disordered proteins. *New J. Phys.* 19, 115003
- J. P. Brady, P. J. Farber, A. Sekhar, Y.-H. Lin, R. Huang, A. Bah, T. J. Nott, H. S. Chan, A. J. Baldwin, J. D. Forman-Kay, and L. E. Kay (2017) Structural and hydrodynamic properties of an intrinsically disordered region of a germ-cell specific protein upon phase separation. *Proc. Natl. Acad. Sci. U.S.A.* 114, E8194–E8203
- 5. **Y.-H. Lin** and H. S. Chan (2017) Phase separation and single-chain compactness of charged disordered proteins are strongly correlated. *Biophys. J.* **112**, 2043–2046
- 4. Y.-H. Lin, J. Song, J. D. Forman-Kay, and H. S. Chan (2017) Random-phase-approximation theory for sequence- dependent, biologically functional liquid-liquid phase separation of intrinsically disordered proteins. *J. Mol. Liq.* 228, 176–193
- 3. Y.-H. Lin, J. D. Forman-Kay, and H. S. Chan (2016) Sequence-specific polyampholyte phase separation in membraneless organelles. *Phys. Rev. Lett.* **117**, 178101
- 2. **Y.-H. Lin** and R. Bundschuh (2015) RNA structure generates natural cooperativity between single-stranded RNA binding proteins targeting 5' and 3'UTRs. *Nucleic Acids Res.* **43**, 1160–1169
- 1. **Y.-H. Lin** and R. Bundschuh (2013) Interplay between single-stranded binding proteins on RNA secondary structure. *Phys. Rev. E* **88**, 052707

WORKING PAPER

• J. Gaither, Y.-H. Lin, and R. Bundschuh (2016) RBPBind: Quantitative prediction of Protein-RNA Interactions. Preprint: arXiv:1611.01245