

## REFERENCES & CITED WORK

"How do we understand natural selection?"

PhD defense spooktacular given at University of Illinois at Chicago, October 2021 🎉

- Allen, A. and Hiscock, S. (2008). Evolution and phylogeny of self-incompatibility systems in angiosperms. In *Self-Incompatibility in Flowering Plants*, pages 73–101. Springer.
- Ballard, R. D. (1988). Exploring Our Living Planet. National Geographic Society, Washington, D.C.
- Braillard, P.-A. and Malaterre, C. (2015). Explanation in biology: An introduction. In *Explanation in Biology*, pages 1–28. Springer.
- Burnet, J. (1908). Early Greek Philosophy.
- Charlesworth, D. (2006). Evolution of plant breeding systems. Current Biology, 16(17):R726-R735.
- Chase, M. W., Christenhusz, M., Fay, M., Byng, J., Judd, W. S., Soltis, D., Mabberley, D., Sennikov, A., Soltis, P. S., and Stevens, P. F. (2016). An update of the Angiosperm Phylogeny Group classification for the orders and families of flowering plants: APG IV. *Botanical Journal of the Linnean Society*, 181(1):1–20.
- Coley, J. D. and Tanner, K. (2015). Relations between intuitive biological thinking and biological misconceptions in biology majors and nonmajors. *CBE—Life Sciences Education*, 14(1):ar8.
- Darwin, C. (1859). On the Origin of Species: A Fascimile of the First Edition. Harvard University Press.
- Delaney, L. E. and Brown, J. S. (2021a). University students' descriptions and explanations of adaptation. I. A framework for systematic analysis. *Manuscript in Prep*.
- Delaney, L. E. and Brown, J. S. (2021b). University students' descriptions and explanations of adaptation. II. A framework for pedagogical explanation. *Manuscript in Prep.*
- Delaney, L. E. and Igić, B. (2021). Breeding systems in the orchids. Manuscript in Prep.
- Delaney, L. E. and Igić, B. (2022). The phylogenetic distribution and frequency of self-incompatibility in Fabaceae. *International Journal of Plant Sciences*.
- Franklin-Tong, V. E. and Franklin, F. (2003). The different mechanisms of gametophytic self–incompatibility. *Philosophical Transactions of the Royal Society of London. Series B: Biological Sciences*, 358(1434):1025–1032.
- Goldberg, E. E., Kohn, J. R., Lande, R., Robertson, K. A., Smith, S. A., and Igić, B. (2010). Species selection maintains self-incompatibility. *Science*, 330(6003):493–495.
- Heath, C. and Heath, D. (2007). Made to Stick: Why Some Ideas Survive and Others Die. Random House.
- Igić, B. and Busch, J. W. (2013). Is self-fertilization an evolutionary dead end? New Phytologist, 198(2):386-397.

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- Igić, B. and Kohn, J. R. (2001). Evolutionary relationships among self-incompatibility RNases. *Proceedings of the National Academy of Sciences*, 98(23):13167–13171.
- Jacob, F. (1977). Evolution and tinkering. Science, 196(4295):1161-1166.
- Kampourakis, K. (2020). Students' "teleological misconceptions" in evolution education: Why the underlying design stance, not teleology per se, is the problem. *Evolution: Education and Outreach*, 13(1):1–12.
- Kampourakis, K. and Zogza, V. (2008). Students' intuitive explanations of the causes of homologies and adaptations. Science & Education, 17(1):27–47.
- Khaldun, I. (1377). The Muqaddimah.
- Liang, M., Cao, Z., Zhu, A., Liu, Y., Tao, M., Yang, H., Xu, Q., Wang, S., Liu, J., Li, Y., et al. (2020). Evolution of self-compatibility by a mutant S m-RNase in citrus. *Nature Plants*, 6(2):131–142.
- Lucretius (1997). On the Nature of Things. Oxford University Press, New York, NY.
- Momsen, J. L., Long, T. M., Wyse, S. A., and Ebert-May, D. (2010). Just the facts? introductory undergraduate biology courses focus on low-level cognitive skills. *CBE-Life Sciences Education*, 9(4):435–440.
- Monod, J. (1971). Chance and Necessity: An Essay on the Natural Philosophy of Modern Biology. Alfred A. Knopf, New York, NY.
- Poincaré, H. (1905). Science and Hypothesis. New Science Press, New York, NY.
- Potochnik, A. (2013). Biological explanation. In The Philosophy of Biology, pages 49-65. Springer.
- Potochnik, A. (2020). What constitutes an explanation in biology? In *Philosophy of Science for Biologists*, pages 21–35. Cambridge University Press, Cambridge, UK.
- Ramanauskas, K. and Igić, B. (2017). The evolutionary history of plant T2/S-type ribonucleases. *PeerJ*, 5:e3790.
- Salmon, W. C. (2006). Four Decades of Scientific Explanation. University of Pittsburgh Press.
- Shah, M. S. (2017). Pre-darwinian muslim scholars' views on evolution.
- Silva, N. and Goring, D. (2001). Mechanisms of self-incompatibility in flowering plants. *Cellular and Molecular Life Sciences CMLS*, 58(14):1988–2007.
- Smith, S. A. and Brown, J. W. (2018). Constructing a broadly inclusive seed plant phylogeny. *American Journal of Botany*, 105(3):302–314.
- Steinbachs, J. and Holsinger, K. (2002). S-RNase mediated gametophytic self-incompatibility is ancestral in Eudicots. *Molecular Biology and Evolution*, 19(6):825–829.
- Trommler, F., Gresch, H., and Hammann, M. (2018). Students' reasons for preferring teleological explanations. International Journal of Science Education, 40(2):159–187.
- Zirkle, C. (1941). Natural selection before the "Origin of Species". *Proceedings of the American Philosophical Society*, pages 71–123.

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