**General Zoology ‘Project Module’ 2021. Literature Seminar Papers**

**Pathogen-Host interactions: week 1**

Esparza-Mora, M.A., Davis, H.E., Meconcelli, S., Plarre, R., McMahon, D.P. (2020) Inhibition of a secreted immune molecule interferes with termite social immunity. *Frontiers in Ecology and Evolution*. <https://doi.org/10.3389/fevo.2020.00075>

Penick, C. A., et al. (2018) External immunity in ant societies: Sociality and colony size do not predict investment in antimicrobials. *Royal Society Open Science*, <https://doi.org/10.1098/rsos.171332>

**Population Genetics/Genomics: week 2**

Castañeda-Zárate, M., Johnson, S.D., van der Niet, T. (2021) Food reward chemistry explains a novel pollinator shift and vestigialization of long floral spurs in an orchid. *Current Biology* 31, 238-246.e7. doi: 10.1016/j.cub.2020.10.024

Baeckens, S., Whiting, M.J. (2021) Investment in chemical signalling glands facilitates the evolution of sociality in lizards. *Proceedings of the Royal Society B* 288, 20202438. doi: 10.1098/rspb.2020.2438

**Biodiversity and Pollination: week 3**

Millard, J., Outhwaite, C.L., Kinnersley, R., Freeman, R., Gregory, R.D., Adedoja, O., Gavini, S., Kioko, E., Kuhlmann, M., Ollerton, J., Ren, Z.-X., Newbold, T. (2021) Global effects of land-use intensity on local pollinator biodiversity. *Nature Communications* 12, 2902. doi:10.1038/s41467-021-23228-3

Baldock, K.C.R., Goddard, M.A., Hicks, D.M., Kunin, W.E., Mitschunas, N., Morse, H., Osgathorpe, L.M., Potts, S.G., Robertson, K.M., Scott, A.V., Staniczenko, P.P.A., Stone, G.N., Vaughan, I.P., Memmott, J. (2019) A systems approach reveals urban pollinator hotspots and conservation opportunities. *Nature Ecology & Evolution* 3, 363–373. doi:10.1038/s41559-018-0769-y

Castle, D., Grass, I., Westphal, C. (2019) Fruit quantity and quality of strawberries benefit from enhanced pollinator abundance at hedgerows in agricultural landscapes. *Agriculture, Ecosystems & Environment* 275, 14-22. doi:10.1016/j.agee.2019.01.003

**Population Genetics/Sexual Selection: week 4**

Dougherty, L.R., Shuker, D.M. (2015) The effect of experimental design on the measurement of mate choice: a meta-analysis. *Behavioral Ecology* 26, 311-319. doi:10.1093/beheco/aru125

Johnston, S.E., Gratten, J., Berenos, C., Pilkington, J.G., Clutton-Brock, T.H., Pemberton, J.M., Slate, J. (2013) Life history trade-offs at a single locus maintain sexually selected genetic variation. *Nature* 502, 93-95. doi:10.1038/nature12489

**Social Evolution: week 5**

Ostwald, M.M., Fox, T.P., Harrison, J.F., Fewell, J.H. (2021) Social consequences of energetically costly nest construction in a facultatively social bee. *Proceedings of the Royal Society B* 288, 20210033. doi:10.1098/rspb.2021.0033

Pennell, T.M., Field, J. (2020) Split sex ratios and genetic relatedness in a primitively eusocial sweat bee. *Behavioral Ecology & Sociobiology* 75, 5. doi:10.1007/s00265-020-02944-8

Rubenstein, D. R. (2011) Spatiotemporal environmental variation, risk aversion, and the evolution of cooperative breeding as a bet-hedging strategy. *Proceedings of the National Academy of Sciences* 108, 10816. doi:10.1073/pnas.1100303108