Wurmlab

Community: Journal table of contents highlights

published between 1st and last day of **NOVEMBER**** (in print *and* early access). **Finish it by December 7th**. Please add everything as nested bullet-points.

CTRL-K for links

CTRL-SHIFT-V paste w/o format

Look at the table of content duties here (github)

- Am Nat
- Bioinformatics
 - Combining probabilistic alignments with read pair information improves accuracy of split-alignments. Shrestha et al
- Cell
- Current Biology
 - A vast 4,000-year-old spatial pattern of termite mounds
 - o Sex Chromosome Effects on Male–Female Differences in Mammals
- eLife
 - The Aquilegia genome provides insight into adaptive radiation and reveals an extraordinarily polymorphic chromosome with a unique history
 - Can Hamilton's rule be violated?
 - o Reconstructing the functions of endosymbiotic Mollicutes in fungus-growing ants
- Evolution
- GBE
 - <u>Doublesex evolution is correlated with social complexity in ants</u>. Jia... Huang. https://doi.org/10.1093/gbe/evy250. A doublesex domain is absent in the species with complex social organisation (ie not Ponerinae).
- Genome Biol
- Genome Res
- Insectes Sociaux
- Journal of Evolutionary Biology
- MBE
- Mol Ecol
 - o Gene regulatory divergence between locally adapted ecotypes in their native habitats
 - Genomic evidence for asymmetric introgression by sexual selection in the common wall lizard
 - Lineage-specific duplication and adaptive evolution of bitter taste receptor genes in bats
 - The evolution of abdominal microbiomes in fungus-growing ants. https://doi.org/10.1111/mec.14931
- Myrmecological News
- Nature
 - <u>First law of leadership: be human first, scientist second</u>. Review from interviews with scientists. Lists tasks to implement, such as "put recurring one-on-one meetings with the members of your group on your calendar"
 - Improved reference genome of Aedes aegypti informs arbovirus vector control. Matthews et al. https://doi.org/10.1038/s41586-018-0692-z
- Nature Comms

- Nature Genetics
- Nature Methods
- Plos Biol
- Plos Comp Biol
- Plos Genet
 - Slower environmental change hinders adaptation from standing genetic variation
 - An investigation of Y chromosome incorporations in 400 species of Drosophila and related genera
 - <u>Evolution at two time frames: Polymorphisms from an ancient singular divergence event fuel</u>
 <u>contemporary parallel evolution</u>
 - o Genetic architecture and selective sweeps after polygenic adaptation to distant trait optima

PNAS

- o Ant-plant interactions evolved through increasing interdependence
- Biparental Inheritance of Mitochondrial DNA in Humans. The authors document three independent cases of mitochondria inherited from both the parental and maternal line in humans. This may have deep implications for the assumption that mitochondria are always inherited via the maternal line. DOI:10.1073/pnas.1810946115

Proc B

- An experimental test of the mutation-selection balance model for the maintenance of genetic variance in fitness components. The authors propose a test to detect traits or populations which genetic diversity cannot be explained by mutation-selection balance alone, thus pointing at other evolutionary forces maintaining diversity (e.g. balancing selection). DOI: 10.1098/rspb.2018.1864
- Reciprocal mimicry: kin selection can drive defended prey to resemble their Batesian mimics.
 The authors explore the interplay between batesian mimicry evolution and kin selection using modelling approaches. DOI: 10.1098/rspb.2018.1149
- Science
 - Social network plasticity decreases disease transmission in a eusocial insect

• TREE

- <u>Environmentally mediated social dilemmas.</u> The authors discuss how integrating explicit spatial information into social evolution models can better inform our understanding of how altrustic behaviours emerge and are maintained over time. DOI: 10.1016/j.tree.2018.10.004
- Trends in Genetics

[1]. Other papers/tools that you feel someone should have seen:

- o BioRxiv:
- BMC: <u>Unexpected patterns of segregation distortion at a selfish supergene in the fire ant</u>
 <u>Solenopsis invicta</u>
- Journal of Chemical Ecology: <u>Desiccation Resistance and Micro-Climate Adaptation:</u>
 <u>Cuticular Hydrocarbon Signatures of Different Argentine Ant Supercolonies Across California</u>
- J Exp Zool B Mol Dev Evol: <u>Interruption points in the wing gene regulatory network</u> underlying wing polyphenism evolved independently in male and female morphs in <u>Cardiocondyla ants</u>
- Nature Ecology and Evolution
- Scientific Reports:
- Animal Behaviour:
- Genetics

- o Heredity
- o Aging
- o Mol Cell Biol
- o J Gerontol
- o Methods in Ecology and Evolution
- o Current Opinion in Insect Science
- o Molecular Phylogenetics & Phylogenetic
- o PeerJ
- o DGE