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Biology Department Publications: 2015

Alamilla, J., Granados-Fuentes, D., & Aguilar-Roblero, R. (2015). The anterior paraventricular thalamus modulates neuronal excitability in the suprachiasmatic nuclei of the rat. *The European Journal of Neuroscience*, 42(10), 2833–2842.

<https://doi.org/10.1111/ejn.13088>

Allen, G. (2015a). Erika Dyck. Facing eugenics: Reproduction, sterilization, and the politics of choice [book review]. *Isis*, 106(2), 478–479. <https://doi.org/10.1086/682804>

Allen, G. (2015b). Viktor Hamburger, 1900-2001 (NAS Biographical Memoirs (2015)). *National Academy of Sciences Biographical Memoirs*.

Allen, G. E. (2015). How many times can you be wrong and still be right? T. H. Morgan, evolution, chromosomes and the origins of modern genetics. *Science & Education*, 24(1–2), 77–99. <https://doi.org/10.1007/s11191-013-9664-8>

Anderson-Teixeira, K. J., Davies, S. J., Bennett, A. C., Gonzalez-Akre, E. B., Muller-Landau, H. C., Wright, S. J., Abu Salim, K., Almeyda Zambrano, A. M., Alonso, A., Baltzer, J. L., Basset, Y., Bourg, N. A., Broadbent, E. N., Brockelman, W. Y., Bunyavejchewin, S., Burslem, D. F. R. P., Butt, N., Cao, M., Cardenas, D., ... Zimmerman, J. (2015). CTFS-ForestGEO: A worldwide network monitoring forests in an era of global change. *Global Change Biology*, 21(2), 528–549. <https://doi.org/10.1111/gcb.12712>

Arjes, H. A., Lai, B., Emelue, E., Steinbach, A., & Levin, P. A. (2015). Mutations in the bacterial cell division protein FtsZ highlight the role of GTP binding and longitudinal subunit

2 Biology Department Publications: 2015

interactions in assembly and function. *BMC Microbiology*, 15, 209.

<https://doi.org/10.1186/s12866-015-0544-z>

Babbitt, S. E., Sutherland, M. C., San Francisco, B., Mendez, D. L., & Kranz, R. G. (2015).

Mitochondrial cytochrome c biogenesis: No longer an enigma. *Trends in Biochemical Sciences*, 40(8), 446–455. <https://doi.org/10.1016/j.tibs.2015.05.006>

Baker, C. A., Huck, K. R., & Carlson, B. A. (2015). Peripheral sensory coding through oscillatory synchrony in weakly electric fish. *eLife*, 4, e08163.

<https://doi.org/10.7554/eLife.08163>

Barton, K. E., Valkama, E., Vehviläinen, H., Ruohomäki, K., Knight, T. M., & Koricheva, J. (2015). Additive and non-additive effects of birch genotypic diversity on arthropod herbivory in a long-term field experiment. *Oikos*, 124(6), 697–706.

<https://doi.org/10.1111/oik.01663>

Ben-Shahar, Y. (2015). Editorial overview: Neuroscience: How nervous systems generate behavior: Lessons from insects. *Current Opinion in Insect Science*, 12, v–vii.

<https://doi.org/10.1016/j.cois.2015.10.005>

Berla, B. M., Saha, R., Maranas, C. D., & Pakrasi, H. B. (2015). Cyanobacterial alkanes modulate photosynthetic cyclic electron flow to assist growth under cold stress. *Scientific Reports*, 5, 14894. <https://doi.org/10.1038/srep14894>

Bever, J. D., Mangan, S. A., & Alexander, H. M. (2015). Maintenance of plant species diversity by pathogens. *Annual Review of Ecology, Evolution, and Systematics*, 46(1), 305–325.

<https://doi.org/10.1146/annurev-ecolsys-112414-054306>

3 Biology Department Publications: 2015

- Bhuiya, M. W., Lee, S. G., Jez, J. M., & Yu, O. (2015). Structure and mechanism of ferulic acid decarboxylase (FDC1) from *saccharomyces cerevisiae*. *Applied and Environmental Microbiology*, 81(12), 4216–4223. <https://doi.org/10.1128/AEM.00762-15>
- Blake, S., Guézou, A., Deem, S. L., Yackulic, C. B., & Cabrera, F. (2015). The dominance of introduced plant species in the diets of migratory galapagos tortoises increases with elevation on a human-occupied island. *Biotropica*, 47(2), 246–258.
<https://doi.org/10.1111/btp.12195>
- Blankenship, R. E. (2015). Structural and functional dynamics of photosynthetic antenna complexes. *Proceedings of the National Academy of Sciences of the United States of America*, 112(45), 13751–13752. <https://doi.org/10.1073/pnas.1519063112>
- Botero, C. A., Weissing, F. J., Wright, J., & Rubenstein, D. R. (2015). Evolutionary tipping points in the capacity to adapt to environmental change. *Proceedings of the National Academy of Sciences of the United States of America*, 112(1), 184–189.
<https://doi.org/10.1073/pnas.1408589111>
- Bouchard, E. H., Little, L. E., Miller, C. M. L., Rundell, S. M., Vlodaver, E. M., & Maciejewski, K. (2015). Undeclared baggage: Do tourists act as vectors for seed dispersal in fynbos protected areas? *Koedoe*, 57(1), 9. <https://doi.org/10.4102/koedoe.v57i1.1323>
- Brady, S. M., Burow, M., Busch, W., Carlborg, Ö., Denby, K. J., Glazebrook, J., Hamilton, E. S., Harmer, S. L., Haswell, E. S., Maloof, J. N., Springer, N. M., & Kliebenstein, D. J. (2015). Reassess the t test: Interact with all your data via anova. *The Plant Cell*, 27(8), 2088–2094. <https://doi.org/10.1105/tpc.15.00238>

4 Biology Department Publications: 2015

Burkle, L. A., Myers, J. A., & Belote, R. T. (2015). Wildfire disturbance and productivity as drivers of plant species diversity across spatial scales. *Ecosphere*, 6(10), art202.

<https://doi.org/10.1890/ES15-00438.1>

Buske, P. J., Mittal, A., Pappu, R. V., & Levin, P. A. (2015). An intrinsically disordered linker plays a critical role in bacterial cell division. *Seminars in Cell & Developmental Biology*, 37, 3–10. <https://doi.org/10.1016/j.semcdb.2014.09.017>

Cahoon, R. E., Lutke, W. K., Cameron, J. C., Chen, S., Lee, S. G., Rivard, R. S., Rea, P. A., & Jez, J. M. (2015). Adaptive engineering of phytochelatin-based heavy metal tolerance. *The Journal of Biological Chemistry*, 290(28), 17321–17330.

<https://doi.org/10.1074/jbc.M115.652123>

Carlson, B. A. (2015). Animal behavior: Electric eels amp up for an easy meal. *Current Biology*, 25(22), R1070-1072. <https://doi.org/10.1016/j.cub.2015.09.051>

Catano, C. P., & Stout, I. J. (2015). Functional relationships reveal keystone effects of the gopher tortoise on vertebrate diversity in a longleaf pine savanna. *Biodiversity and Conservation*, 24(8), 1957–1974. <https://doi.org/10.1007/s10531-015-0920-x>

Cervantes-Alcayde, M.-A., Olson, M. E., Olsen, K. M., & Eguiarte, L. E. (2015). Apparent similarity, underlying homoplasy: Morphology and molecular phylogeny of the North American clade of *Manihot*. *American Journal of Botany*, 102(4), 520–532.

<https://doi.org/10.3732/ajb.1500063>

Chase, J. M., Powell, K. I., & Knight, T. M. (2015). “Bigger data” on scale-dependent effects of invasive species on biodiversity cannot overcome confounded analyses: A comment on

5 Biology Department Publications: 2015

Stohlgren & Rejmánek (2014). *Biology Letters*, 11(8), 20150103.

<https://doi.org/10.1098/rsbl.2015.0103>

Chen, Y.-S., Lo, S.-F., Sun, P.-K., Lu, C.-A., Ho, T.-H. D., & Yu, S.-M. (2015). A late embryogenesis abundant protein HVA1 regulated by an inducible promoter enhances root growth and abiotic stress tolerance in rice without yield penalty. *Plant Biotechnology Journal*, 13(1), 105–116. <https://doi.org/10.1111/pbi.12241>

Climer, S., Templeton, A. R., & Zhang, W. (2015). Human gephyrin is encompassed within giant functional noncoding yin-yang sequences. *Nature Communications*, 6, 6534. <https://doi.org/10.1038/ncomms7534>

Crandall, R., & Knight, T. M. (2015). Positive frequency dependence undermines the success of restoration using historical disturbance regimes. *Ecology Letters*, 18(9), 883–891. <https://doi.org/10.1111/ele.12473>

Cui, W., Zhang, H., Blankenship, R. E., & Gross, M. L. (2015). Electron-capture dissociation and ion mobility mass spectrometry for characterization of the hemoglobin protein assembly. *Protein Science*, 24(8), 1325–1332. <https://doi.org/10.1002/pro.2712>

Dinsdale, E., Elgin, S. C. R., Grandgenett, N., Morgan, W., Rosenwald, A., Tapprich, W., Triplett, E. W., & Pauley, M. A. (2015). NIBLSE: A network for integrating bioinformatics into life sciences education. *CBE: Life Science Education*, 14(4), le3. <https://doi.org/10.1187/cbe.15-06-0123>

DiSalvo, S., Haselkorn, T. S., Bashir, U., Jimenez, D., Brock, D. A., Queller, D. C., & Strassmann, J. E. (2015). Burkholderia bacteria infectiously induce the proto-farming symbiosis of Dictyostelium amoebae and food bacteria. *Proceedings of the National*

6 Biology Department Publications: 2015

Academy of Sciences of the United States of America, 112(36), E5029-5037.

<https://doi.org/10.1073/pnas.1511878112>

Dixit, R. (2015). Kinesin motors: Teamsters' union. *Nature Plants, 1*, 15126.

<https://doi.org/10.1038/nplants.2015.126>

Dupont, C. L., McCrow, J. P., Valas, R., Moustafa, A., Walworth, N., Goodenough, U., Roth, R., Hogle, S. L., Bai, J., Johnson, Z. I., Mann, E., Palenik, B., Barbeau, K. A., Venter, J. C., & Allen, A. E. (2015). Genomes and gene expression across light and productivity gradients in eastern subtropical Pacific microbial communities. *The ISME Journal, 9*(5), 1076–1092. <https://doi.org/10.1038/ismej.2014.198>

Elgin, S. C. R., & Reuter, G. (2013). Position-effect variegation, heterochromatin formation, and gene silencing in Drosophila. *Cold Spring Harbor Perspectives in Biology, 5*(8), a017780. <https://doi.org/10.1101/cshperspect.a017780>

Enders, T. A., Oh, S., Yang, Z., Montgomery, B. L., & Strader, L. C. (2015). Genome sequencing of Arabidopsis abp1-5 reveals second-site mutations that may affect phenotypes. *The Plant Cell, 27*(7), 1820–1826. <https://doi.org/10.1105/tpc.15.00214>

Enders, T. A., & Strader, L. C. (2015). Auxin activity: Past, present, and future. *American Journal of Botany, 102*(2), 180–196. <https://doi.org/10.3732/ajb.1400285>

Eren, E. C., Dixit, R., & Gautam, N. (2015). Stochastic models for plant microtubule self-organization and structure. *Journal of Mathematical Biology, 71*(6–7), 1353–1385. <https://doi.org/10.1007/s00285-015-0860-9>

7 Biology Department Publications: 2015

Farrer, E. C., Ashton, I. W., Spasojevic, M. J., Fu, S., Gonzalez, D. J. X., & Suding, K. N.

(2015). Indirect effects of global change accumulate to alter plant diversity but not ecosystem function in alpine tundra. *Journal of Ecology*, 103(2), 351–360.

<https://doi.org/10.1111/1365-2745.12363>

Fristoe, T. S., Burger, J. R., Balk, M. A., Khalil, I., Hof, C., & Brown, J. H. (2015). Metabolic heat production and thermal conductance are mass-independent adaptations to thermal environment in birds and mammals. *Proceedings of the National Academy of Sciences of the United States of America*, 112(52), 15934–15939.

<https://doi.org/10.1073/pnas.1521662112>

Gagnon, P. R., Passmore, H. A., Slocum, M., Myers, J. A., Harms, K. E., Platt, W. J., & Paine, C. E. T. (2015). Fuels and fires influence vegetation via above- and belowground pathways in a high-diversity plant community. *Journal of Ecology*, 103(4), 1009–1019.

<https://doi.org/10.1111/1365-2745.12421>

George, T. L., Harrigan, R. J., LaManna, J. A., DeSante, D. F., Saracco, J. F., & Smith, T. B. (2015). Persistent impacts of west nile virus on North American bird populations.

Proceedings of the National Academy of Sciences of the United States of America, 112(46), 14290–14294. <https://doi.org/10.1073/pnas.1507747112>

Goodenough, U. (2015a). Historical perspective on Chlamydomonas as a model for basic research: 1950-1970. *The Plant Journal: For Cell and Molecular Biology*, 82(3), 365–369. <https://doi.org/10.1111/tpj.12794>

Goodenough, U. (2015b). Honoring nature all the way down. *Journal for the Study of Religion, Nature and Culture*, 9(2), 176–180. <https://doi.org/10.1558/jsrnc.v9i2.27266>

8 Biology Department Publications: 2015

- Granados-Fuentes, D., Hermanstyne, T. O., Carrasquillo, Y., Nerbonne, J. M., & Herzog, E. D. (2015). IA channels encoded by Kv1.4 and Kv4.2 regulate circadian period of PER2 expression in the suprachiasmatic nucleus. *Journal of Biological Rhythms*, 30(5), 396–407. <https://doi.org/10.1177/0748730415593377>
- Hamilton, E. S., Jensen, G. S., Maksaev, G., Katims, A., Sherp, A. M., & Haswell, E. S. (2015). Mechanosensitive channel MSL8 regulates osmotic forces during pollen hydration and germination. *Science*, 350(6259), 438–441. <https://doi.org/10.1126/science.aac6014>
- Hamilton, E. S., Schlegel, A. M., & Haswell, E. S. (2015). United in diversity: Mechanosensitive ion channels in plants. *Annual Review of Plant Biology*, 66, 113–137. <https://doi.org/10.1146/annurev-arplant-043014-114700>
- Harmon-Threatt, A. N., & Hendrix, S. D. (2015). Prairie restorations and bees: The potential ability of seed mixes to foster native bee communities. *Basic and Applied Ecology*, 16(1), 64–72. <https://doi.org/10.1016/j.baae.2014.11.001>
- Haselkorn, T. S., & Jaenike, J. (2015). Macroevolutionary persistence of heritable endosymbionts: Acquisition, retention and expression of adaptive phenotypes in Spiroplasma. *Molecular Ecology*, 24(14), 3752–3765. <https://doi.org/10.1111/mec.13261>
- Haswell, E. S., & Verslues, P. E. (2015). The ongoing search for the molecular basis of plant osmosensing. *The Journal of General Physiology*, 145(5), 389–394. <https://doi.org/10.1085/jgp.201411295>
- He, G., Niedzwiedzki, D. M., Orf, G. S., Zhang, H., & Blankenship, R. E. (2015). Dynamics of energy and electron transfer in the FMO-reaction center core complex from the

9 Biology Department Publications: 2015

phototrophic green sulfur bacterium *chlorobaculum tepidum*. *The Journal of Physical Chemistry. B*, 119(26), 8321–8329. <https://doi.org/10.1021/acs.jpcb.5b04170>

Herrmann, J., Nathin, D., Lee, S. G., Sun, T., & Jez, J. M. (2015). Recapitulating the structural evolution of redox regulation in adenosine 5'-phosphosulfate kinase from cyanobacteria to plants. *The Journal of Biological Chemistry*, 290(41), 24705–24714.

<https://doi.org/10.1074/jbc.M115.679514>

Herzog, E. D., Kiss, I. Z., & Mazuski, C. (2015). Measuring synchrony in the mammalian central circadian circuit. *Methods in Enzymology*, 552, 3–22.

<https://doi.org/10.1016/bs.mie.2014.10.042>

Hudson, B. H., & Zaher, H. S. (2015). O6-methylguanosine leads to position-dependent effects on ribosome speed and fidelity. *RNA*, 21(9), 1648–1659.

<https://doi.org/10.1261/rna.052464.115>

Ingram, C. M., Troendle, N. J., Gill, C. A., Braude, S., & Honeycutt, R. L. (2015). Challenging the inbreeding hypothesis in a eusocial mammal: Population genetics of the naked mole-rat, *Heterocephalus glaber*. *Molecular Ecology*, 24(19), 4848–4865.

<https://doi.org/10.1111/mec.13358>

Jack, C. N., Buttery, N., Adu-Oppong, B., Powers, M., Thompson, C. R. L., Queller, D. C., & Strassmann, J. E. (2015). Migration in the social stage of *Dictyostelium discoideum* amoebae impacts competition. *PeerJ*, 3, e1352. <https://doi.org/10.7717/peerj.1352>

Jiang, J., Zhang, H., Lu, X., Lu, Y., Cuneo, M. J., O'Neill, H. M., Urban, V., Lo, C. S., & Blankenship, R. E. (2015). Oligomerization state and pigment binding strength of the

10 Biology Department Publications: 2015

peridinin-chl a-protein. *FEBS Letters*, 589(19 Pt B), 2713–2719.

<https://doi.org/10.1016/j.febslet.2015.07.039>

Kempel, A., Razanajatovo, M., Stein, C., Unsicker, S. B., Auge, H., Weisser, W. W., Fischer,

M., & Prati, D. (2015). Herbivore preference drives plant community composition.

Ecology, 96(11), 2923–2934. <https://doi.org/10.1890/14-2125.1>

Kihara, S., Hartzler, D. A., Orf, G. S., Blankenship, R. E., & Savikhin, S. (2015). The fate of the triplet excitations in the Fenna-Matthews-Olson complex. *The Journal of Physical Chemistry. B*, 119(18), 5765–5772. <https://doi.org/10.1021/jp512222c>

Kocher, S. D., Tsuruda, J. M., Gibson, J. D., Emore, C. M., Arechavaleta-Velasco, M. E., Queller, D. C., Strassmann, J. E., Grozinger, C. M., Gribskov, M. R., San Miguel, P., Westerman, R., & Hunt, G. J. (2015). A search for parent-of-origin effects on honey bee gene expression. *Genes, Genomes, Genetics*, 5(8), 1657–1662.

<https://doi.org/10.1534/g3.115.017814>

Korasick, D. A., Chatterjee, S., Tonelli, M., Dashti, H., Lee, S. G., Westfall, C. S., Fulton, D. B., Andreotti, A. H., Amarasinghe, G. K., Strader, L. C., & Jez, J. M. (2015). Defining a two-pronged structural model for PB1 (Phox/Bem1p) domain interaction in plant auxin responses. *The Journal of Biological Chemistry*, 290(20), 12868–12878.

<https://doi.org/10.1074/jbc.M115.648253>

Korasick, D. A., Jez, J. M., & Strader, L. C. (2015). Refining the nuclear auxin response pathway through structural biology. *Current Opinion in Plant Biology*, 27, 22–28.

<https://doi.org/10.1016/j.pbi.2015.05.007>

11 Biology Department Publications: 2015

- Kunst, M., Tso, M. C. F., Ghosh, D. D., Herzog, E. D., & Nitabach, M. N. (2015). Rhythmic control of activity and sleep by class B1 GPCRs. *Critical Reviews in Biochemistry and Molecular Biology*, 50(1), 18–30. <https://doi.org/10.3109/10409238.2014.985815>
- Land, A. D., Hogan, P., Fritz, S., & Levin, P. A. (2015). Phenotypic variation is almost entirely independent of the host-pathogen relationship in clinical isolates of *S. aureus*. *PLoS One*, 10(6), e0129670. <https://doi.org/10.1371/journal.pone.0129670>
- Lee, J.-H., Heuser, J. E., Roth, R., & Goodenough, U. (2015). Eisosome ultrastructure and evolution in fungi, microalgae, and lichens. *Eukaryotic Cell*, 14(10), 1017–1042. <https://doi.org/10.1128/EC.00106-15>
- Leone, M. J., Beaule, C., Marpegan, L., Simon, T., Herzog, E. D., & Golombek, D. A. (2015). Glial and light-dependent glutamate metabolism in the suprachiasmatic nuclei. *Chronobiology International*, 32(4), 573–578. <https://doi.org/10.3109/07420528.2015.1006328>
- Leung, W., Shaffer, C. D., Reed, L. K., Smith, S. T., Barshop, W., Dirkes, W., Dothager, M., Lee, P., Wong, J., Xiong, D., Yuan, H., Bedard, J. E. J., Machone, J. F., Patterson, S. D., Price, A. L., Turner, B. A., Robic, S., Luippold, E. K., McCartha, S. R., ... Elgin, S. C. R. (2015). Drosophila muller f elements maintain a distinct set of genomic properties over 40 million years of evolution. *Genes, Genomes, Genetics*, 5(5), 719–740. <https://doi.org/10.1534/g3.114.015966>
- Levin, P. A., & Angert, E. R. (2015). Small but mighty: Cell size and bacteria. *Cold Spring Harbor Perspectives in Biology*, 7(7), a019216. <https://doi.org/10.1101/cshperspect.a019216>

12 Biology Department Publications: 2015

Levin, S. R., Brock, D. A., Queller, D. C., & Strassmann, J. E. (2015). Concurrent coevolution of intra-organismal cheaters and resisters. *Journal of Evolutionary Biology*, 28(4), 756–765.
<https://doi.org/10.1111/jeb.12618>

Li, L.-F., Liu, B., Olsen, K. M., & Wendel, J. F. (2015a). A re-evaluation of the homoploid hybrid origin of *Aegilops tauschii*, the donor of the wheat D-subgenome. *The New Phytologist*, 208(1), 4–8. <https://doi.org/10.1111/nph.13294>

Li, L.-F., Liu, B., Olsen, K. M., & Wendel, J. F. (2015b). Multiple rounds of ancient and recent hybridizations have occurred within the *Aegilops-Triticum* complex. *The New Phytologist*, 208(1), 11–12. <https://doi.org/10.1111/nph.13563>

Liao, X., Rong, S., & Queller, D. C. (2015). Relatedness, conflict, and the evolution of eusociality. *PLoS Biology*, 13(3), e1002098.
<https://doi.org/10.1371/journal.pbio.1002098>

Liu, H., Weisz, D. A., & Pakrasi, H. B. (2015). Multiple copies of the PsbQ protein in a cyanobacterial photosystem II assembly intermediate complex. *Photosynthesis Research*, 126(2–3), 375–383. <https://doi.org/10.1007/s11120-015-0123-z>

Liu, Y., Qi, X., Gealy, D. R., Olsen, K. M., Caicedo, A. L., & Jia, Y. (2015). QTL analysis for resistance to blast disease in U.S. weedy rice. *Molecular Plant-Microbe Interactions*, 28(7), 834–844. <https://doi.org/10.1094/MPMI-12-14-0386-R>

Liu, Y., Qi, X., Young, N. D., Olsen, K. M., Caicedo, A. L., & Jia, Y. (2015). Characterization of resistance genes to rice blast fungus *Magnaporthe oryzae* in a “green revolution” rice variety. *Molecular Breeding*, 35(1), 52. <https://doi.org/10.1007/s11032-015-0256-y>

13 Biology Department Publications: 2015

Lu, Y., Zhang, H., Cui, W., Saer, R., Liu, H., Gross, M. L., & Blankenship, R. E. (2015). Top-down mass spectrometry analysis of membrane-bound light-harvesting complex 2 from rhodobacter sphaeroides. *Biochemistry*, 54(49), 7261–7271.

<https://doi.org/10.1021/acs.biochem.5b00959>

Luesse, D. R., Wilson, M. E., & Haswell, E. S. (2015). RNA sequencing analysis of the msl2msl3, crl, and ggps1 mutants indicates that diverse sources of plastid dysfunction do not alter leaf morphology through a common signaling pathway. *Frontiers in Plant Science*, 6, 1148. <https://doi.org/10.3389/fpls.2015.01148>

Maksaev, G., & Haswell, E. S. (2015). Expressing and characterizing mechanosensitive channels in Xenopus oocytes. *Methods in Molecular Biology*, 1309, 151–169.

https://doi.org/10.1007/978-1-4939-2697-8_13

Maksaev, G., Veley, K., & Haswell, E. (2015). A structure-function approach to understanding the dual functions of the plant mechanosensitive ion channel MSL10. *Biophysical Journal*, 108, 562a–563a. <https://doi.org/10.1016/j.bpj.2014.11.3082>

Malik, M. R., Yang, W., Patterson, N., Tang, J., Wellinghoff, R. L., Preuss, M. L., Burkitt, C., Sharma, N., Ji, Y., Jez, J. M., Peoples, O. P., Jaworski, J. G., Cahoon, E. B., & Snell, K. D. (2015). Production of high levels of poly-3-hydroxybutyrate in plastids of *Camelina sativa* seeds. *Plant Biotechnology Journal*, 13(5), 675–688.

<https://doi.org/10.1111/pbi.12290>

Marshall, R. S., & Vierstra, R. D. (2015). Eat or be eaten: The autophagic plight of inactive 26S proteasomes. *Autophagy*, 11(10), 1927–1928.

<https://doi.org/10.1080/15548627.2015.1078961>

14 Biology Department Publications: 2015

Mazuski, C., & Herzog, E. D. (2015). Circadian rhythms: To sync or not to sync. *Current Biology*, 25(8), R337-339. <https://doi.org/10.1016/j.cub.2015.02.032>

McCrea, P. D., Maher, M. T., & Gottardi, C. J. (2015). Nuclear signaling from cadherin adhesion complexes. *Current Topics in Developmental Biology*, 112, 129–196.
<https://doi.org/10.1016/bs.ctdb.2014.11.018>

McKinney, R. M., Vernier, C., & Ben-Shahar, Y. (2015). The neural basis for insect pheromonal communication. *Current Opinion in Insect Science*, 12, 86–92.
<https://doi.org/10.1016/j.cois.2015.09.010>

Medley, K. A., Jenkins, D. G., & Hoffman, E. A. (2015). Human-aided and natural dispersal drive gene flow across the range of an invasive mosquito. *Molecular Ecology*, 24(2), 284–295. <https://doi.org/10.1111/mec.12925>

Michniewicz, M., Frick, E. M., & Strader, L. C. (2015). Gateway-compatible tissue-specific vectors for plant transformation. *BMC Research Notes*, 8, 63.

<https://doi.org/10.1186/s13104-015-1010-6>

Miller, A. J., Novy, A., Glover, J., Kellogg, E. A., Maul, J. E., Raven, P., & Jackson, P. W. (2015). Expanding the role of botanical gardens in the future of food. *Nature Plants*, 1, 15078. <https://doi.org/10.1038/nplants.2015.78>

Myers, J. A., Chase, J. M., Crandall, R. M., & Jiménez, I. (2015). Disturbance alters beta-diversity but not the relative importance of community assembly mechanisms. *Journal of Ecology*, 103(5), 1291–1299. <https://doi.org/10.1111/1365-2745.12436>

15 Biology Department Publications: 2015

Nasir, A. M., Yang, Q., Chalker, D. L., & Forney, J. D. (2015). SUMOylation is developmentally regulated and required for cell pairing during conjugation in *Tetrahymena thermophila*. *Eukaryotic Cell*, 14(2), 170–181.

<https://doi.org/10.1128/EC.00252-14>

Ng, A. H., Berla, B. M., & Pakrasi, H. B. (2015). Fine-tuning of photoautotrophic protein production by combining promoters and neutral sites in the cyanobacterium *synechocystis* sp. Strain PCC 6803. *Applied and Environmental Microbiology*, 81(19), 6857–6863. <https://doi.org/10.1128/AEM.01349-15>

Noh, S., & Henry, C. S. (2015a). Speciation is not necessarily easier in species with sexually monomorphic mating signals. *Journal of Evolutionary Biology*, 28(11), 1925–1939.

<https://doi.org/10.1111/jeb.12707>

Noh, S., & Henry, C. S. (2015b). Within-species mate preferences do not contribute to the maintenance of sexually monomorphic mating signals in green lacewings. *Ethology*, 121(7), 714–724. <https://doi.org/10.1111/eth.12385>

Olsen, O.-A., Perroud, P.-F., Johansen, W., & Demko, V. (2015). DEK1; Missing piece in puzzle of plant development. *Trends in Plant Science*, 20(2), 70–71.

<https://doi.org/10.1016/j.tplants.2015.01.003>

Ort, D. R., Merchant, S. S., Alric, J., Barkan, A., Blankenship, R. E., Bock, R., Croce, R., Hanson, M. R., Hibberd, J. M., Long, S. P., Moore, T. A., Moroney, J., Niyogi, K. K., Parry, M. A. J., Peralta-Yahya, P. P., Prince, R. C., Redding, K. E., Spalding, M. H., van Wijk, K. J., ... Zhu, X. G. (2015). Redesigning photosynthesis to sustainably meet global

16 Biology Department Publications: 2015

food and bioenergy demand. *Proceedings of the National Academy of Sciences of the United States of America*, 112(28), 8529–8536. <https://doi.org/10.1073/pnas.1424031112>

Ostrowski, E. A., Shen, Y., Tian, X., Sucgang, R., Jiang, H., Qu, J., Katoh-Kurasawa, M., Brock, D. A., Dinh, C., Lara-Garduno, F., Lee, S. L., Kovar, C. L., Dinh, H. H., Korchina, V., Jackson, L., Patil, S., Han, Y., Chaboub, L., Shaulsky, G., ... Queller, D. C. (2015). Genomic signatures of cooperation and conflict in the social amoeba. *Current Biology*, 25(12), 1661–1665. <https://doi.org/10.1016/j.cub.2015.04.059>

Pardini, E. A., Vickstrom, K. E., & Knight, T. M. (2015). Early successional microhabitats allow the persistence of endangered plants in coastal sand dunes. *PLoS One*, 10(3), e0119567. <https://doi.org/10.1371/journal.pone.0119567>

Perron, G. G., Inglis, R. F., Pennings, P. S., & Cobey, S. (2015). Fighting microbial drug resistance: A primer on the role of evolutionary biology in public health. *Evolutionary Applications*, 8(3), 211–222. <https://doi.org/10.1111/eva.12254>

PLoS One Staff. (2015). Correction: Allelic richness following population founding events: A stochastic modeling framework incorporating gene flow and genetic drift. *PLoS One*, 10(3), e0119663. <https://doi.org/10.1371/journal.pone.0119663>

Pope, W. H., Bowman, C. A., Russell, D. A., Jacobs-Sera, D., Asai, D. J., Cresawn, S. G., Jacobs, W. R., Hendrix, R. W., Lawrence, J. G., Hatfull, G. F., Science Education Alliance Phage Hunters Advancing Genomics and Evolutionary Science, Phage Hunters Integrating Research and Education, & Mycobacterial Genetics Course. (2015). Whole genome comparison of a large collection of mycobacteriophages reveals a continuum of phage genetic diversity. *eLife*, 4, e06416. <https://doi.org/10.7554/eLife.06416>

17 Biology Department Publications: 2015

Porto, A., Sebastião, H., Pavan, S. E., VandeBerg, J. L., Marroig, G., & Cheverud, J. M. (2015).

Rate of evolutionary change in cranial morphology of the marsupial genus *Monodelphis* is constrained by the availability of additive genetic variation. *Journal of Evolutionary Biology*, 28(4), 973–985. <https://doi.org/10.1111/jeb.12628>

Pourzanjani, A., Herzog, E. D., & Petzold, L. R. (2015). On the inference of functional circadian networks using granger causality. *PLoS One*, 10(9), e0137540.

<https://doi.org/10.1371/journal.pone.0137540>

Qi, X., Liu, Y., Vigueira, C. C., Young, N. D., Caicedo, A. L., Jia, Y., Gealy, D. R., & Olsen, K. M. (2015). More than one way to evolve a weed: Parallel evolution of US weedy rice through independent genetic mechanisms. *Molecular Ecology*, 24(13), 3329–3344.

<https://doi.org/10.1111/mec.13256>

Queller, D. C., Rong, S., & Liao, X. (2015). Some agreement on kin selection and eusociality? *PLoS Biology*, 13(4), e1002133. <https://doi.org/10.1371/journal.pbio.1002133>

Renan, S., Greenbaum, G., Shahar, N., Templeton, A. R., Bouskila, A., & Bar-David, S. (2015). Stochastic modelling of shifts in allele frequencies reveals a strongly polygynous mating system in the re-introduced Asiatic wild ass. *Molecular Ecology*, 24(7), 1433–1446.

<https://doi.org/10.1111/mec.13131>

Schnitzer, S. A., Mangan, S. A., & Hubbell, S. P. (2015). The lianas of barro Colorado island, panama. In *Ecology of lianas* (pp. 76–90).

Schuler, M. S., Chase, J. M., & Knight, T. M. (2015). More individuals drive the species energy-area relationship in an experimental zooplankton community. *Oikos*, 124(8), 1065–1070.

<https://doi.org/10.1111/oik.01931>

18 Biology Department Publications: 2015

Shah, V. B., Henson, W. R., Chadha, T. S., Lakin, G., Liu, H., Blankenship, R. E., & Biswas, P. (2015). Linker-free deposition and adhesion of photosystem I onto nanostructured TiO₂ for biohybrid photoelectrochemical cells. *Langmuir*, 31(5), 1675–1682.

<https://doi.org/10.1021/la503776b>

Sheehan, M. J., Botero, C. A., Hendry, T. A., Sedio, B. E., Jandt, J. M., Weiner, S., Toth, A. L., & Tibbetts, E. A. (2015). Different axes of environmental variation explain the presence vs. Extent of cooperative nest founding associations in *Polistes* paper wasps. *Ecology Letters*, 18(10), 1057–1067. <https://doi.org/10.1111/ele.12488>

Shu, L., Suter, M. J.-F., Laurila, A., & Räsänen, K. (2015). Mechanistic basis of adaptive maternal effects: Egg jelly water balance mediates embryonic adaptation to acidity in *Rana arvalis*. *Oecologia*, 179(3), 617–628. <https://doi.org/10.1007/s00442-015-3332-4>

Søvik, E., Bloch, G., & Ben-Shahar, Y. (2015). Function and evolution of microRNAs in eusocial Hymenoptera. *Frontiers in Genetics*, 6, 193.

<https://doi.org/10.3389/fgene.2015.00193>

Søvik, E., Perry, C. J., LaMora, A., Barron, A. B., & Ben-Shahar, Y. (2015). Negative impact of manganese on honeybee foraging. *Biology Letters*, 11(3), 20140989.

<https://doi.org/10.1098/rsbl.2014.0989>

Suga, N. (2015). Neural processing of auditory signals in the time domain: Delay-tuned coincidence detectors in the mustached bat. *Hearing Research*, 324, 19–36.

<https://doi.org/10.1016/j.heares.2015.02.008>

Szövényi, P., Perroud, P.-F., Symeonidi, A., Stevenson, S., Quatrano, R. S., Rensing, S. A., Cuming, A. C., & McDaniel, S. F. (2015). De novo assembly and comparative analysis of

19 Biology Department Publications: 2015

the *Ceratodon purpureus* transcriptome. *Molecular Ecology Resources*, 15(1), 203–215.

<https://doi.org/10.1111/1755-0998.12284>

Taheri-Araghi, S., Bradde, S., Sauls, J. T., Hill, N. S., Levin, P. A., Paulsson, J., Vergassola, M., & Jun, S. (2015). Cell-size control and homeostasis in bacteria. *Current Biology*, 25(3), 385–391. <https://doi.org/10.1016/j.cub.2014.12.009>

Tello, J. S., Myers, J. A., Macía, M. J., Fuentes, A. F., Cayola, L., Arellano, G., Loza, M. I., Torrez, V., Cornejo, M., Miranda, T. B., & Jørgensen, P. M. (2015). Elevational gradients in β-diversity reflect variation in the strength of local community assembly mechanisms across spatial scales. *PLoS One*, 10(3), e0121458.

<https://doi.org/10.1371/journal.pone.0121458>

Thole, J. M., & Strader, L. C. (2015). Next-generation sequencing as a tool to quickly identify causative EMS-generated mutations. *Plant Signaling & Behavior*, 10(5), e1000167.

<https://doi.org/10.1080/15592324.2014.1000167>

Tso, M. C. F., & Herzog, E. D. (2015). Was Cajal right about sleep? *BMC Biology*, 13, 67.

<https://doi.org/10.1186/s12915-015-0178-5>

Vadia, S., & Levin, P. A. (2015). Growth rate and cell size: A re-examination of the growth law. *Current Opinion in Microbiology*, 24, 96–103. <https://doi.org/10.1016/j.mib.2015.01.011>

Vélez, A., Gall, M. D., & Lucas, J. R. (2015). Seasonal plasticity in auditory processing of the envelope and temporal fine structure of sounds in three songbirds. *Animal Behaviour*, 103, 53–63. <https://doi.org/10.1016/j.anbehav.2015.01.036>

20 Biology Department Publications: 2015

Waring, B. G., Álvarez-Cansino, L., Barry, K. E., Becklund, K. K., Dale, S., Gei, M. G., Keller, A. B., Lopez, O. R., Markestijn, L., Mangan, S., Riggs, C. E., Rodríguez-Ronderos, M. E., Segnitz, R. M., Schnitzer, S. A., & Powers, J. S. (2015). Pervasive and strong effects of plants on soil chemistry: A meta-analysis of individual plant “zinke” effects. *Proceedings. Biological Sciences*, 282(1812), 20151001.

<https://doi.org/10.1098/rspb.2015.1001>

Watt, D., Dixit, R., & Cavalli, V. (2015). JIP3 activates kinesin-1 motility to promote axon elongation. *The Journal of Biological Chemistry*, 290(25), 15512–15525.

<https://doi.org/10.1074/jbc.M115.651885>

Wegener, K. M., Nagarajan, A., & Pakrasi, H. B. (2015). An atypical psbA gene encodes a sentinel D1 protein to form a physiologically relevant inactive photosystem II complex in cyanobacteria. *The Journal of Biological Chemistry*, 290(6), 3764–3774.

<https://doi.org/10.1074/jbc.M114.604124>

Wright, A., Tobin, M., Mangan, S., & Schnitzer, S. A. (2015). Unique competitive effects of lianas and trees in a tropical forest understory. *Oecologia*, 177(2), 561–569.

<https://doi.org/10.1007/s00442-014-3179-0>

You, L., Liu, H., Blankenship, R. E., & Tang, Y. J. (2015). Using photosystem I as a reporter protein for ¹³C analysis in a coculture containing cyanobacterium and a heterotrophic bacterium. *Analytical Biochemistry*, 477, 86–88. <https://doi.org/10.1016/j.ab.2014.12.005>

Yu, J., Liberton, M., Cliften, P. F., Head, R. D., Jacobs, J. M., Smith, R. D., Koppenaal, D. W., Brand, J. J., & Pakrasi, H. B. (2015). Synechococcus elongatus UTEX 2973, a fast

21 Biology Department Publications: 2015

growing cyanobacterial chassis for biosynthesis using light and CO₂. *Scientific Reports*, 5, 8132. <https://doi.org/10.1038/srep08132>

Zanne, A. E., Oberle, B., Dunham, K. M., Milo, A. M., Walton, M. L., & Young, D. F. (2015). A deteriorating state of affairs: How endogenous and exogenous factors determine plant decay rates. *Journal of Ecology*, 103(6), 1421–1431. <https://doi.org/10.1111/1365-2745.12474>

Zhang, Q., Abel, H., Wells, A., Lenzini, P., Gomez, F., Province, M. A., Templeton, A. A., Weinstock, G. M., Salzman, N. H., & Borecki, I. B. (2015). Selection of models for the analysis of risk-factor trees: Leveraging biological knowledge to mine large sets of risk factors with application to microbiome data. *Bioinformatics*, 31(10), 1607–1613.
<https://doi.org/10.1093/bioinformatics/btu855>

Zhu, C., Ganguly, A., Baskin, T. I., McClosky, D. D., Anderson, C. T., Foster, C., Meunier, K. A., Okamoto, R., Berg, H., & Dixit, R. (2015). The fragile Fiber1 kinesin contributes to cortical microtubule-mediated trafficking of cell wall components. *Plant Physiology*, 167(3), 780–792. <https://doi.org/10.1104/pp.114.251462>