

## Laboratories of Analytical Biology Publications from 2019

### Publications listed in alphabetical order

Akıner, MM, Öztürk, M, Başer, AB, Günay, F, Hacıoğlu, S, Brinkmann, A, Emanet, N, Alten, B, Özkul, A, Nitsche, A, **Linton, Y-M**, Ergünay, K. 2019. Arboviral screening of invasive *Aedes* species in northeastern Turkey: West Nile virus circulation and detection of insect-only viruses. PLoS Negl Trop Dis. 2019 May 6;13(5):e0007334.

**Ames, CL**, Klompen, AML, Badhiwala, K. et al. 2020. Cassiosomes are stinging-cell structures in the mucus of the upside-down jellyfish *Cassiopea xamachana*. Commun Biol 3, 67 doi:10.1038/s42003-020-0777-8

Andersen, JC, Oboyski, P, Davies, N, Charlat, S, Ewing, C, **Meyer, C**, Krehenwinkel, H, Lim, JY, Noriyuki, S, Ramage, T, Gillespie, RG, Roderick, GK 2019. Categorization of species as native or nonnative using DNA sequence signatures without a complete reference library. Ecological Applications. 29(5) e01914.

Angeli, NF, Coles W, McKinley S, and **DG Mulcahy**. 2019. Introduction of an exotic constricting snake (*Boa constrictor*) and its establishment on St. Croix, U.S. Virgin Islands. Herpetological Conservation and Biology 14(1):288–296.

Ballantine, DL, **BL Brooks, GP Johnson**. 2019. Some rarely reported deep-water macroalgal species from Bonaire, Caribbean Sea, including *Verdigellas discoidea* sp. nov. (Palmophyllaceae, Chlorophyta) based on submersible collections. Botanica Marina 62(60): 587-593.

Barberá P, A Quintanar, **PM Peterson**, RJ Soreng, **K Romaschenko** & C Aedo. 2019. New combinations, new names, typifications, and a new section, Hispanica in *Koeleria* (Poeae, Poaceae). Phytoneuron 2019-46: 1–13. <http://www.phytoneuron.net/2019Phytoneuron/46PhytoN-KoeleriaNames.pdf>

Barberá P, RJ Soreng, **PM Peterson, K Romaschenko**, A Quintanar & C Aedo. 2019. Molecular phylogenetic analysis resolves *Trisetum* Pers. (Poaceae: Pooideae: Koeleriinae) polyphyletic: Evidence for a new genus, *Sibirotrisetum* and resurrection of *Acrosperion*. Journal of Systematics and Evolution doi:10.1111/jse.12523

**Bell RC**, McLaughlin PJ, Jongsma GFM, Blackburn DC, Stuart BL. 2019. Morphological and genetic variation of *Leptopelis brevirostris* encompasses the little-known treefrogs *Leptopelis crystallinoron* from Gabon and *Leptopelis brevipes* from Bioko Island, Equatorial Guinea. African Journal of Herpetology 68(2): 91-117.

Bennett, KL, Kaddumukasa, M, Shija, F, Djouaka R, Misinzo, G, Lutwama J, **Linton, Y-M** & C Walton. 2018. Comparative phylogeography of *Aedes* mosquitoes and the role of past climatic change for evolution within Africa. Ecology & Evolution doi:10.1002/ece3.3668

Bernaba M, E Power, J Campion, **D Gotzek**, JO Schmidt, SA Klotz. 2019. Unconscious Woman in Shock and Covered with Ants Pulled from an Abandoned Automobile. American Journal of Medicine. 132(10): 1239–1241.

Borges, R, J Fonseca, C Gomes, **WE Johnson**, SJ O'Brien, G Zhang, MTP Gilbert, ED Jarvis and A Antunes. 2019. Avian binocularity and adaptation to nocturnal environments: genomic insights from a highly-derived visual phenotype. *Genome Biology and Evolution*: doi:10.1093/gbe/evz111

Borowiec, ML, C Rabeling, **SG Brady**, BL Fisher, **TR Schultz**, and PS. Ward. 2019. Compositional heterogeneity and outgroup choice influence the internal phylogeny of the ants. *Molecular Phylogenetics and Evolution* 134: 111-121. doi: 10.1016/j.ympev.2019.01.024

**Bossert, S, Murray, EA, Almeida, EAE, Brady, SG, Blaimer, BB & Danforth, BN.** 2019. Combining transcriptomics and ultraconserved elements to illuminate the phylogeny of Apidae. *Molecular Phylogenetics and Evolution*, 130: 121–131. doi:10.1016/j.ympev.2018.10.012

**Brandl, SJ, Morais RA, Casey JM, Parravicini V, Tornabene L, Goatley CHR, Côté IM, Baldwin CC, Schiettekatte NMD & Bellwood DR.** 2019. Response to Comment on “Demographic dynamics of the smallest marine vertebrates fuel coral reef ecosystem functioning”. *Science* 366.

**Brandl, SJ, Rasher DB, Côté IM, Casey JM, Darling ES, Lefcheck JS & Duffy JE.** 2019. Coral reef ecosystem functioning: eight core processes and the role of biodiversity. *Frontiers in Ecology and the Environment*

**Brandl, SJ, Tornabene L, Goatley CHR, Casey JM, Morais RA, Côté IM, Baldwin CC, Parravicini V, Schiettekatte NMD & Bellwood DR.** 2019. Demographic dynamics of the smallest marine vertebrates fuel coral reef ecosystem functioning. *Science* 364: 1189-1192.

Cardinal-McTeague WM, **Wurdack KJ**, Sigel EM, & Gillespie LJ. 2019. Seed size evolution and biogeography of *Plukenetia* (Euphorbiaceae), a pantropical genus with traditionally cultivated oilseed species. *BMC Evolutionary Biology*, 19: 29. doi:10.1186/s12862- 018-1308-9

Carrillo-Baltodano AM, **Boyle MJ, Rice ME & NP Meyer.** 2019 Developmental architecture of the nervous system in *Themiste lageniformis* (Sipuncula): new evidence from confocal laser scanning microscopy and gene expression. *Journal of Morphology*, 280, 11: 1605-1737. doi:10.1002/jmor.21054

**Casey, JM, Meyer CP, Morat F, Brandl SJ, Planes S and Parravicini V.** 2019. Reconstructing hyperdiverse food webs: gut content metabarcoding as a tool to disentangle trophic interactions on coral reefs. *Methods in Ecology and Evolution* 10: 1157-1170. doi:10.1111/2041-210X.13206

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Chen Y-C, Nazarizadeh M, Lei F, Yang XJ, Yao C-t, Dong F, Dong L, Zou F, **Drovetski SV, Liu Y, Huang C-C, Hung C-M.** 2019. The niches of nuthatches affect their lineage evolution differently across latitude. *Molecular Ecology* 28(4): 803-817. doi: 10.1111/mec.14980

Chialvo P, **D Gotzek, D Shoemaker, KG Ross.** 2018. Genetic analyses reveal cryptic diversity in the native North American fire ants (Hymenoptera: Formicidae: *Solenopsis*). *Systematic Entomology*. 43(1): 109–122.

Colavite J, **Windsor A**, Santana W. 2019. Three new species and a new genus of majoid crabs from the eastern Pacific (Decapoda, Brachyura). ZooKeys: 1-24. doi:10.3897/zookeys.825.32271

**Collin, R**, DE Venera-Pontón, **AC Driskell, KS Macdonald III, MJ Boyle**. 2019. Planktotrophic brachiopod larvae from the Pacific and Caribbean of Panama. Diversity 11(1) 2. doi:10.3390/d11010002

**Collin, R**, DE Venera-Pontón, **AC Driskell, KS Macdonald III, MJ Boyle**. 2019. Unexpected molecular and morphological diversity of hemichordate larvae from the Neotropics. Invertebrate Biology 138(4) e12273. doi:10.1111/ivb.12273

**Collin, R**, DE Venera-Pontón, **AC Driskell, KS Macdonald III, KYK Chan, M Boyle**. 2019. Documenting neotropical diversity of phoronids with DNA barcoding of planktonic larvae. Invertebrate Biology 138(2) e12242. doi:10.1111/ivb.12242

**Dal Forno M**, Kaminsky L, Rosentreter R, McMullin T, Aptroot A, Lücking R. 2019. A first phylogenetic assessment of *Dictyonema* s.lat. in southeastern North America reveals three new basidiolichens, described in honor of James D. Lawrey. Plant & Fungal Systematics 64 (2): 383–392. doi: 10.2478/pfs-2019-0025

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Deidun, A, A Sciberras, J Formosa, B Zava, G Insacco, M Corsini-Foka, **KA Crandall**. 2018. Invasion by non-indigenous freshwater decapods of Malta and Sicily, central Mediterranean Sea. Journal of Crustacean Biology 38(6):748-753.

Delrieu-Trottin, E, **Williams, JT, Pitassy, D, Driskell, A**, Hubert, N, Vivani, J, Cribb, TH, Espiau, B, Galzin, R, Kulbicki, M, Lison de Loma, T, **Meyer, C**, Mourier, J, Mou-Tham, G, Parravicini, V, Plantard, P, Sasal, P, Siu, G, Tolou, N, Veulle, M, **Weigt, L**, Planes, S. 2019. A DNA barcode reference library of French Polynesian shore fishes. Scientific Data. 6(1): 114. doi:10.1038/s41597-019-0123-5

**de Santana, CD**, Crampton, WGR, **Dillman, CB** et al. 2019. Unexpected species diversity in electric eels with a description of the strongest living bioelectricity generator. Nature Communications 10, 4000 doi: 10.1038/s41467-019-11690-z

Dinçer, E, Hacıoğlu, S, Kar, S, Emanet, N, Brinkmann, A, Nitsche, A, Özkul, A, **Linton, Y-M**, & Ergünay, K. 2019. Survey and Characterization of Jingmen Tick Virus Variants. Viruses 2019, 11(11), 1071; doi:10.3390/v11111071

**Drovetski SV**, O'Mahoney MJV, Matterson KO, **Schmidt BK, Graves GR**. 2019. Distinct microbiotas of anatomical gut regions display idiosyncratic seasonal variation in an avian folivore. Animal Microbiome 1(1): 2. doi:10.1186/s42523-019-0002-6

Edelman, NB, **Frandsen, PB**, Miyagi, M, Clavijo, BJ, Davey, J, **Dikow, RB**, Accinelli, GG, Van Belleghem, S, Patterson, NJ, Neafsey, DE, Challis, RJ, Kumar, S, Moreira, G, Salazar, C, Chouteau, M, Counterman, B, Papa, R, Blaxter, M, Reed, RD, Dasmahapatra, K, Kronforst, M, Joron, M, Jiggins, CD, **McMillan, WO**, Di-Palma, F, Blumberg, AJ, Wakeley, J, Jaffe, D, Mallet, J. 2019. Genomic architecture and introgression shape a butterfly radiation. *Science* 366 (6465), 594-599.

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Ewers-Saucedo C, Owen CL, Pérez-Losada M, Høeg JT, Glenner H, Chan BKK, **Crandall KA**. 2019. Towards a barnacle tree of life: integrating diverse phylogenetic efforts into a comprehensive hypothesis of thecostracan evolution. *PeerJ* 7:e7387 doi:10.7717/peerj.7387

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Grismer, LL, PL Wood Jr., JL Grismer, N Thy, S Pimmachak, N Sivongxay, S Seateun, BL Stuart, CB Siler, **DG Mulcahy**, and RM Brown. 2019. Geographic structure of genetic variation in the Parachute Gecko *Ptychozoon lionotum* Annandale, 1905 across Indochina and Sundaland with descriptions of three new species. *Zootaxa* 4638(2):151–198. doi: 10.1111/zootaxa.4638.2.1

**Harasewych, MG.** 2019. *Tropidofusus ypotethys*: a new genus and species of Columbariidae (Mollusca: Gastropoda: Turbinelloidea). *Molluscan Research*, 39: 148-158. doi:10.1080/13235818.2018.1284265.

**Harasewych MG, Sei M, Wirshing HH, Gonzalez VL, & Uribe JE.** 2019. The complete mitochondrial genome of *Neptuneopsis gilchristi* GB Sowerby III, 1898 (Neogastropoda: Volutidae: Calliotectinae). *The Nautilus* 133 (3-4):67–73.

Herranz M, Leander BS, Pardos F & **MJ Boyle.** 2019. Neuroanatomy of mud Dragons: a comprehensive view of the nervous system in *Echinoderes* (Kinorhyncha) by confocal laser scanning microscopy. *BMC Evolutionary Biology*, 19: 86. doi:10.1186/s12862-019-1405-4

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**Hiller A & B Werding** 2019. A new species of *Petrolisthes* (Crustacea, Anomura, Porcellanidae) inhabiting vermetid formations (Mollusca, Gastropoda, Vermetidae) in the southern Caribbean Sea. *Zookeys* 876: 143-151. doi:10.3897/zookeys.876.37244

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**Hughes, LC**, Cardoso, YP, Sommer, J, Cifuentes, R, Cuello, M, Somoza, GM, González-Castro, M, Malabarba, LR, Cussac, V, Habit, EM, **Betancur-R, R**, and **Ortí, G.** 2020. Biogeography, habitat transitions and hybridization in a radiation of South American silverside fishes revealed by mitochondrial and genomic RAD data. *Molecular Ecology*, 29(4): 738-751. doi:10.1111/mec.15350

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