

Selected Publications from 2019

The Centre for Genomics Research has contributed to project design, method development/optimisation, data generation or analysis for the following publications:

- Blow, F., Gioti, A., Goodhead, I.B., Kalyva, M., Kampouraki, A., Vontas, J., Darby, A.C. Functional genomics of a symbiotic community: shared traits in the olive fruit fly gut microbiota. *Microbiol. Mol. Rev.* (2019).
- Giannoudis, Athina, Kim Clarke, Rasheed Zakaria, Damir Varešlija, Mosavar Farahani, Lucille Rainbow, Angela Platt-Higgins et al. "A novel panel of differentially-expressed microRNAs in breast cancer brain metastasis may predict patient survival." *Scientific Reports* 9, no. 1 (2019): 1-11.
- Hope, W., Stone, N.R.H., Johnson, A., McEntee, L., Farrington, N., Santoro-Castelazo, A., Liu, X., Lucaci, A., Hughes, M., Oliver, J.D, Glamberardino, C., Mfinanga, S., Harrison, T.S., Perfect, J.R., Bicanic, T. Fluconazole Monotherapy is a Suboptimal Option for Initial Treatment of Cryptococcal Meningitis because of Emergence of Resistance. *American Society for Microbiology* (2019).
- Pascoal, S., Risse, J.E., Zhang, X., Blaxter, M., Cezard, T., Challis, R.J., Gharbi, K., et al. Field cricket genome reveals the footprint of recent, abrupt adaptation in the wild. *Evolution Letters* (2019).
- Larke-Mejia, N.L., Crombie, A., Pratscher, J., McGenity, T.J., Murrell, C. Novel Isoprene-Degrading Proteobacteria from Soil and Leaves Identified by Cultivation and Metagenomics Analysis of Stable Isotope Probing Experiments. *Frontiers in Microbiology* (2019).
- Hicham, H., Puckelwaldt, O., Strube, C., Haeblerlein, S. Reference gene analysis and its use for kinase expression profiling in *Fasciola hepatica*. *Scientific Reports* (2019).
- George, P.B.L., Creer, S., Griffiths, R.I., Emmett, B.A., Robinson, D.A., Jones, D.L. Primer and Database Choice affect Fungal Functional but not Biological Diversity Findings in a National Soil Survey. *Frontiers in Environmental Science* (2019).
- Solano-Gonzalez, S., Darby, A.C., Cossar, D., Caddick, M.X. High-Quality Draft Genome Sequence and Annotation of the Basidiomycete Yeast *Sporisorium graminicola* CBS10092, a Producer of Mannosylerythritol Lipids. *American Society for Microbiology* (2019).
- Van De Wijgert, J., Gill, A.C., Chikandiwa, A., Verwjs, M., Kelly, H., Omar, T., Delany-Moretlwe, S., Segondy, M., Francis, S., Darby, A.C., Mayaud, P. Human papillomavirus infection and cervical dysplasia in HIV-positive women. *AIDS* (2019).

- McIntyre, K.M., Bolton, F.J., Christley, R.M., Cleary, Deja, E., Durie, A.E., Diggle, P.J., Hughes, D.A., de Lusignan, S., Orton, L., Radford, A.D., Elliott, A.J., Smith, G.E., Snape, D.A., Stanistret, D., Vivancos, R., Winstanley, C., O'Brien, S. A Fully Integrated Real-Time Detection, Diagnosis and Control of Community Diarrheal Disease Clusters and Outbreaks (the INTEGRATE Project): Protocol for an Enhanced Surveillance System. *JMIR Publications* (2019).
- Lilley, T.M., Prokkola, J.M., Blomberg, A.S., Paterson, S., Johnson, J.S., Turner, G.G., Bartonicka, T., Bachorec, E., Reeder, D.M., Field, K.A. Resistance is futile: RNA-sequencing reveals differing responses to bat fungal pathogen in Nearctic *Myotis lucifugus* and Palearctic *Myotis myotis*. *Oecologia* (2019).
- Van De Wijgert, J., Gill, A., Darby, A.C., Kelly, H., Chikandiwa, A., Delaney-Moretlwe, S., Verwijs, M., Francis, S., Mayaud, P. Associations of the Vaginal Microbiota with HPV Infection and Cervical Dysplasia in South African Women Living with HIV. *Sex Transm Infect* (2019).
- Jones, H.J., Krober, E., Stephenson, J., Mausz, M.A., Jameson, E., Millard, A., Purdy, K.J., Chen, Y. A new family of uncultivated bacteria involved in methanogenesis from the ubiquitous osmolyte glycine betaine in coastal saltmarsh sediments. *Microbiome* (2019).
- Culbert, N.J., Gilles, J.R.L., Bouyer, J. Investigating the impact of chilling temperature on male *Aedes aegypti* and *Aedes albopictus* survival. *PLOS ONE* (2019).
- Saba, R., Kitajima, K., Rainbow, L., Engert, S., Uemura, M., Ishida, H., Kokkinopoulos, I., Shintani, Y., Miyagawa, S., Kanai, Y., Kanai-Azuma, M., Koopman, P., Meno, C., Kenny, J., Lickert, H., Saga, Y., Suzuki, K., Sawa, Y., Yashiro, K. Endocardium differentiation through *Sox17* expression in endocardium precursor cells regulates heart development in mice. *Scientific Reports* (2019).
- Esemu, S.N., Dong, X., Kfusi, A.J., Hartley, C.S., Ndip, R.N., Ndip, L.M., Darby, A.C., Post, R.J., Makepeace, B.L. Aquatic Hemiptera in Southwest Cameroon: Biodiversity of Potential Reservoirs of *Mycobacterium ulcerans* and Multiple *Wolbachia* Sequence Types Revealed by Metagenomics. *Preprints* (2019).
- Hardwick, K.M., Ojwang, A.M.E., Stomeo, F., Maina, S., Bichang, G., Calatayud, P-A., Filee, J., Djikeng, A., Miller, C., Cepko, L., Darby, A.C., Le Ru, B., Schaack, S. Draft Genome of *Busseola fusca*, the Maize Stalk Borer, a Major Crop Pest in Sub-Saharan Africa. *Genome Biol. Evol.* (2019).
- Griffiths, S.M., Antwis, R.E., Lenzi, L., Lucaci, A., Behringer, D.C., Butler IV, M.J., Preziosi, R.F. Host genetics and geography influence microbiome composition in the sponge *Ircinia campana*. *Journal of Animal Ecology* (2019).
- Verwijs, M.C., Agaba, S.K., Darby, A.C., van de Wijgert, J.H.H.M. Impact of oral metronidazole treatment on the vaginal microbiota and correlates of treatment failure. *American Journal of Obstetrics & Gynecology* (2019).

- Frau, A., Kenny, J.G., Lenzi, L., Campbell, B.J., Ijaz, U.Z., Duckworth, C.A., Burkitt, M.D., Hall, N., Anson, J., Darby, A.C., Probert, C.S.J. DNA extraction and amplicon production strategies deeply influence the outcome of gut mycobiome studies. *Scientific Reports* (2019).
- Kelita, K., Noyes, H., Nambala, P., Senga, E., Musaya, J., Kumwenda, B., Bucheton, B., et al. Association of APOL1 renal disease risk alleles with *Trypanosoma brucei rhodesiense* infection outcomes in the northern part of Malawi. *PLOS Neglected Tropical Diseases* (2019).
- Floyd, J.S., Bloch, K.M., Brody, J.A., Maroteau, C., Siddiqui, M.K., Gregory, R., Carr, D.F., Molokhia, M., Liu, X., Bis, J.C., Ahmed, A., Liu, X. Hallberg, P. Pharmacogenics of statin-related myopathy: Meta-analysis of rare variants from whole-exome sequencing. *PLOS ONE* (2019).
- Kabore, J.W., Camara, O., Ilboudo, H., Capewell, P., Clucas, C., Cooper, A., Kabore, J., Camara, M., Jamonneau, V., Hertz-Fowler, C., Belem, A.M.G., Matovu, E., Macleod, A., Sidibe, I., Noyes, H., Bucheton, B. Macrophage migrating inhibitory factor expression is associated with *Trypanosoma brucei gambiense* infection and is controlled by trans-acting expression quantitative trait loci in the Guinean population. *Science Direct* (2019).
- Hall, R., Flanagan, L., Bottery, M., Springthorpe, V., Thorpe, S., Darby, A.C., Wood, J., Thomas, G. The Sodalix system and flux balance analysis as a tool for investigating insect-microbe interactions and the evolution of symbioses. *Access Microbiology* (2019).
- Wanelik, K.M., Begon, M., Arriero, E., Bradley, J.E., Friberg, I.M., Jackson, J.A., Taylor, C.H., Paterson, S. Decomposing variation in immune response in a wild rodent population. *BioRxiv* (2019).
- Knowles, S.C.L., Eccles, R.M., Baltrunaite, L. Species identity dominates over environment in shaping the microbiota of small mammals. *Wiley Online Library* (2019).
- Ofon, E., Noyes, H., Ebo'o Eyanga, V., Njiokou, F., Koffi, M., Fogue, P., Hertz-Fowler, C., MacLeod, A., Matovu, E., Simo, G. Association between *IL1* gene polymorphism and human African trypanosomiasis in populations of sleeping sickness foci of southern Cameroon. *PLOS Neglected Tropical Diseases* (2019).
- Harris, C., Paxton, E., Donachie, A-M., Vaikkinen, H., Lenzi, L., Hertz-Fowler, C., Cobbold, C. Application of long read sequencing to determine expressed antigen diversity in *Trypanosoma brucei* infections. *PLOS Neglected Tropical Diseases* (2019).
- George, P.B.L., Lallias, D., Creer, S., Seaton, F.M., Kenny, J.G., Eccles, R.M., Griffiths, R.I., et al. Divergent national-scale trends of microbial and animal biodiversity revealed across diverse temperate soil ecosystems. *Nature Communications* 10, no. 1 (2019).
- Knowles, S.C.S., Eccles, R.M., Baltrunaite, L. Species identity dominates over environment in shaping the microbiota of small mammals. *Ecology Letters* (2019).

- Siozios, S., Pilgrim, J., Darby, A.C., Baylis, M., Hurst, G.D.D. The draft genome of strain cCpun from biting midges confirms insect *Cardinium* are not a monophyletic group and reveals a novel gene family expansion in a symbiont. *PeerJ* 7 (2019).
- Wilson, I.W., Weedall, G.D., Lorenzi, H., Howcroft, T., Hon, C-C., Deloger, M., Guillén, N., Paterson, S., Clark, C.G., Hall, N. Genetic diversity and gene family expansions in members of the genus *Entamoeba*. *Genome Biology and Evolution* (2019).
- O'Brien, S., Kummerli, R., Paterson, S., Winstanely, C., Brockhurst, M.A. Transposable temperate phages promote the evolution of divergent social strategies in *Pseudomonas aeruginosa* populations. *bioRxiv* (2019).
- Husnik, F., Hypsa, V., Darby, A.C. Insect-symbiont gene expression in the midgut bacteriocytes of a blood-sucking parasite. *bioRxiv* (2019).
- Chaisiri, K., A. Gill, C., Stekolnikov, A.A., Hinjoy, S., McGarry, J.W., Darby, A.C., Morand, S., Makepeace, B. Ecological and microbiological diversity of chigger mites, including vectors of scrub typhus, on small mammals across stratified habitats in Thailand. *bioRxiv* (2019).
- Foulkes, A.C., Watson, D.S., Carr, D.F., Kenny, J.G., Slidel, T., Parslew, R., Pirmohamed, M., et al. A Framework for Multi-Omic Prediction of Treatment Response to Biologic Therapy for Psoriasis. *Journal of Investigative Dermatology* (2019)
- Copple, I.M., den Hollander, W., Callegaro, G., Mutter, F.E., Maggs, J.L., Schofield, A.L., Rainbow, L., Fang, Y., et al. Characterisation of the NRF2 transcriptional network and its response to chemical insult in primary human hepatocytes: implications for prediction of drug-induced liver injury. *Archives of Toxicology* (2019).

The Centre for Genomics Research has generated data and/or analysis for the following publications:

- Parker, M.T., Knop, K., Sherwood, A.V., Schurch, N.J., Mackinnon, K., Gould, P.D., Hall, A.J.W., Garton, G.J., Simpson, G.G. Nanopore direct RNA sequencing maps the complexity of *Arabidopsis* mRNA processing and m⁶A modification. *eLIFE* (2019).
- Richards, P., Leeming, G., Fothergill, J., Bernardeau, M., Wigley, P. Topical Application of Adult Caecal Contents to Eggs Transplants Spore-Forming Microbiota but Not Other Members of the Microbiota to Chicks. *Applied & Environmental Microbiology* (2019).
- van Sluis, M., Gailin, M.O., McCarter, J.G.W., Hangan, H., Grob, A., McStay, B. Human NORs, comprising rDNA arrays and functionally conserved distal elements, are located within dynamic chromosomal regions. *CSHLP* (2019).

- Sven, L., Callbeck, C.M., Eland, L.E., Wipat, A., Enning, D., Head, I.M., Hubert, C.R.J. Comparison of sulfide oxidizing *Sulfurimonas* strains reveals a new mode of thiosulfate formation in subsurface environments. *Environmental Microbiology* (2019).
- Ferrari, R.C., Bittencourt, P.P., Rodrigues, M.A., Moreno-Villena, J.J., Alves, F.R.R., Gastaldi, V.D., Boxall, S.F., Dever, L.V., Demarco, D., Andrade, S.C.S., Edwards, E.J., Hartwell, J., Freschi, L. C₄ and crassulacean acid metabolism within a single leaf: deciphering key components behind a rare photosynthetic adaptation. *New Phytologist* (2019).
- Ndhlovu, V., Kiran, A., Sloan, D., Mandala, W., Kontogianni, K., Kamdolozi, M., Caws, M., Davies, G. Genetic diversity of *Mycobacterium tuberculosis* clinical isolates in Blantyre, Malawi. *Science Direct* (2019).
- Mugenzi, L.M.J., Menze, B.D., Tchouskui, M., Wondji, M.J., Irving, H., Tchoupo, M., Hearn, J., Weedall, G.D., Riverson, J.M., Wondji, C.S. Cis-regulatory CYP6P9b P450 variants associated with loss of insecticide-treated bed net efficacy against *Anopheles funestus*. *Nature Communications* (2019).
- Abdulwahed Faha, A., Low, R., Hall, N., Jardim, R., Davila, A., Gerhold, R., Shinto, J., et al. Multilocus analysis resolves the European Finch epidemic strain of *Trichomonas gallinae* and suggests introgression from divergent trichomonads. *Genome Biology Evolution* (2019).
- Carballo, J., Santos, B.A.C.M., Zappacosta, D., Garbus, I., Selva, J.P., Gallo, C.A., Diaz, A., Albertini, E., Caccamo, M., Echenique, V. A high-quality genome of *Eragrostis curvula* grass provides insights into Poaceae evolution and supports new strategies to enhance forage quality. *Scientific Reports* (2019).
- Rick, E-M., Fungi in asthma-investigation of the lung mycobiome and characterisation of allergens. Thesis submitted for the degree of Doctor of Philosophy at the University of Leicester (2019).
- Randall, D.W., Kieswich, J., Swann, J., McCafferty, K., Thiemermann, C., Curtis, M., Hoyes, L., Yaqoob, M.M. Batch effect exerts a bigger influence on the rat urinary metabolome and gut microbiota than uraemia: a cautionary tale. *Microbiome* (2019).
- Jere, K.C., Bar-Zeev, N., Chande, A., Bennett, A., Pollock, L., Sanchez-Lopez, P.F., Nakagomi, O., Tate, J.E., Parashar, U.D., Heyderman, R.S., French, N., Iturriza-Gomara, M., Cuncliffe, N.A. Vaccine Effectiveness against DS-1-Like Rotavirus Strains in Infants with Acute Gastroenteritis, Malawi, 2013-2015. *Emerging Infectious Diseases* (2019).
- Ritchie, N.D., Evans, T.J. Dual RNA-seq in *Streptococcus pneumoniae* Infection Reveals Compartmentalized Neutrophil Responses in Lung and Pleural Space. *American Society of Microbiology* (2019).



- Elliott, D.R., Thomas, A.D., Strong, C.L., Bullard, J., Surface Stability in Drylands is Influenced by Dispersal Strategy of Soil Bacteria. *Journal of Geophysical Research: Biogeosciences* (2019).
- Lilley, T.M., Prokkola, J.M., Blomberg, A.S., Paterson, S., Johnson, J.S., Turner, G.G., Bartonicka, T., Bachorec, E., Reeder, D.M., Field, K.A. Resistance is futile: RNA-sequencing reveals differing responses to bat fungal pathogen in Nearctic *Myotis lucifugus* and Palearctic *Myotis myotis*. *Oecologia* (2019).
- Jenner, R.A., von Reumont, B.M., Campbell, L.I., Undheim, E.A.B. Parallel Evolution of Complex Centipede Venoms Revealed by Comparative Proteotranscriptomic Analyses. *Society for Molecular Biology & Evolution* (2019).
- Troitsky, T. The Effects of Host Genotype and Maternal Transmission on the Gut Microbiome of Wild Wood Mice (*Apodemus sylvaticus*) - Viewed Through the Lens of Ecological Theories *University of Helsinki* (2019).
- Afroz, H., Meharg, A.A., Meharg, C. Microbial transformation of arsenic in Bengal floodplain. In *Environmental Arsenic in a Changing World: Proceedings of the 7th International Congress & Exhibition on Arsenic in the Environment* (2019).
- Cheng, C.W., Jongwutiwes, S., Putapornip, C., Jackson, A.P. Clinical expression and antigenic profiles of a Plasmodium vivax vaccine candidate: merozoite surface protein 7 (PvMSP-7). *Malaria Journal* (2019).
- Culbert, N.J., Balestrino, F., Dor, A., Herranz, G.S., Yamada, H., Wallner, T., Bouyer, J. Author Correction: A rapid quality control test to foster the development of genetic control in mosquitoes. *Scientific Reports* (2019).
- Weiser, R., Green, A.E., Bull, M.J., Cunningham-Oakes, E., Jolley, K.A., Maiden, M.C.J., Hall, A. J., et al. Not all Pseudomonas aeruginosa are equal: strains from industrial sources possess uniquely large multireplicon genomes. *Microbial Genomics* (2019).
- Alghoribi, M.F., Doumith, M., Upton M, Al Johani, S.M., Alzayer, M., Woodford, N., Ellington, M.J., Balkhy, H.H. Complete Genome Sequence of a Colistin-Resistant Uropathogenic Escherichia coli Sequence Type 131 fimH22 Strain Harboring mcr-1 on an IncHI2 Plasmid, Isolated in Riyadh, Saudi Arabia. *American Society of Microbiology* (2019).
- Dawon, E.M., Dunne, K.A., Richardson, E.J., Praszker, J., Alfawaz, D., Woelfel, S., De Paoli, A., Hassan, M., Henderson, I.R., Ferrero, R.L., Rossiter, A.E. Complete genome sequence of Helicobacter pylori B128 7.13 and a single-step method for the generation of unmarked mutations. *Wiley* (2019).
- Abdulwahed Fahad, A., Low, R., Hall, N., Jardim, R., Davila, A., Gerhold, R., John, S., et al. Multilocus Analysis Resolved the European Finch Epidemic Strain of Trichomonas

gallinae and Suggests Introgression from Divergent Trichomonads. *Genome Biology & Evolution* (2019).

- Sharon, I., Bunk, B., Bayes, H.K., Sproer, C., Connolly, J.P.R., Six, A., Evans, T.J., Roe, A.J., Overmann, J., Walker, D. Genomic and transcriptomic characterization of *Pseudomonas aeruginosa* small colony variants derived from a chronic infection model. *Microbial Genomics* (2019).
- Rayner, J.G., Pascoal, S., Bailey, N.W., Release from intralocus sexual conflict? Evolved loss of a male sexual trait demasculinises female gene expression. *Proceedings of the Royal Society B: Biological Sciences* (2019).
- McDermott, B.T., Peffers, M.J., McDonagh, B., Tew, S.R. Translational regulation contributes to the secretory response of chondrocytic cells following exposure to interleukin-1B. *Journal of Biological Chemistry* (2019).
- Pitt, S.J., Hawthorne, J.A., Garcia-Maya, D., Alexandrovich, A., Symonds, R.C., Gunn, A. Identification and characterisation of anti-*Pseudomonas aeruginosa* proteins in mucus of the brown garden snail, *Cornu aspersum*. *British Journal of Biomedical Science* (2019).
- Weedall, G.D., Mugenzi, L.M.J., Menze, B.D., Tchouakui, M., Ibrahim, S.S., et al. A cytochrome P450 allele confers pyrethroid resistance on a major African malaria vector, reducing insecticide-treated bednet efficacy. *Science Translational Medicine* (2019).
- Arana, A., Jere, K.C., Chaguza, C., Montes, M., Alorta, M., Iturriza-Gomara, M., Cilla, G. Molecular epidemiology of G12 rotavirus strains during eight consecutive epidemic seasons in the Basque Country (North of Spain), 2010-2018. *Science Direct* (2019).
- Plancq, J., Couto, J.M., Ijaz, U.Z., Leavitt, P.R., Toney, J.L. Next-Generation Sequencing to Identify Lacustrine Haptophytes in the Canadian Prairies: Significance for Temperature Proxy Applications. *Journal of Geophysical Research: Biogeosciences* (2019).
- Tam T.T. Tran, Simone Corsini, Lee Kellingray, Claire Hegarty, Gwenaelle Le Gall, ARjan Narbad, Michael Muller, Noemi Tejera, Paul W. O'Toole, Anne-Marie Minihane, David Vauzour. APOE genotype influences the gut microbiome structure and function in humans and mice: relevance for Alzheimer's disease pathophysiology. *The FASEB Journal* (2019).
- Daubon, Thomas, Céline Léon, Kim Clarke, Laetitia Andrique, Laura Salabert, Elodie Darbo, Raphael Pineau et al. Deciphering the complex role of thrombospondin-1 in glioblastoma development. *Nature Communications* 10, no. 1 (2019): 1146.
- Cazares, A., Moore, M.P., Grimes, M., Emond-Rheault, J-G., Wright, L.L., Pongchaikul, P., Santanirand, P., Levesque, R.C., Fothergill, J.L., Winstanley, C. A megaplasmid family responsible for dissemination of multidrug resistance in *Pseudomonas*. *bioRxiv* (2019).

- Awad, M., Burkitt, M.D., Duckworth, C.A., Hold, G.L., Campbell, B.J., Pritchard, D.M., Probert, C.S. Long-term iron deficiency and iron supplementation exacerbate acute DSS-induced colitis and are associated with significant dysbiosis. *bioRxiv* (2019).
- Chevallereau, S., Meaden, S., Fradet, O., Landsberger, M., Maestri, A., Biswas, A., Gandon, S., van Houte, S., Westra, E. Exploitation of the cooperative behaviours of anti-CRISPR phages. *bioRxiv* (2019).
- Daubon, T., Leon, C., Clarke, K., Andrique, L., Salabert, L., Darbo., E., Pineau, R., et al. Deciphering the complex role of thrombospondin-1 in glioblastoma development. *Nature Communications* (2019).
- Randall, Kate, Fiona Brennan, Nicholas Clipson, Rachel Creamer, Bryan Griffiths, Sean Storey, and Evelyn Doyle. Soil bacterial community structure and functional responses across a long-term mineral phosphorus (Pi) fertilisation gradient differ in grazed and cut grasslands. *Applied Soil Ecology* (2019).
- Melo-Gonzalez, Felipe, Hana Kammoun, Elza Evren, Emma E. Dutton, Markella Papadopoulou, Barry M. Bradford, Ceylan Tanes et al. Antigen-presenting ILC3 regulate T cell-dependent IgA responses to colonic mucosal bacteria. *Journal of Experimental Medicine* (2019): jem-20180871.
- Alsaady, I., Tedford, E., Alsaad, M., Bristow, G., Kohli, S., Murray, M., Reeves, M., et al. Downregulation of the Central Noradrenergic System by *Toxoplasma gondii* Infection *Infection and Immunity* (2019).
- Chudzicka-Ormaniec, P., Macios, M., Koper, M., Weedall, G.D., Caddick, M.X., Weglenski, P., Dzikowska, A. The role of the GATA transcription factor AreB in regulation of nitrogen and carbon metabolism in *Aspergillus nidulans*. *FEMS Microbiology Letters* (2019).
- Yurchenko, A.A., Recknagel, H., Elmer, K.E. Chromosome-level assembly of the common lizard (*Zootoca vivipara*) genome *BioRxiv* (2019).
- Forbes, S., Morgan, N., Humphreys, G.J., Amézquita, A., Mistry, H., McBain, A.J. McBain. Loss of Function in *Escherichia coli* Exposed to Environmentally Relevant Concentrations of Benzalkonium Chloride *American Society for Microbiology* (2019).
- Wilding, C.S., Weedall, G.D. Morphotypes of the common beadlet anemone *Actinia equina* (L.) are genetically distinct *Journal of Experimental Marine Biology and Ecology* (2019).
- Petra, D., Hempel, B-F., Gocmen, B., Karis, M., Whiteley, G., Wagstaff, S.C., Heiss, P., Casewell, N.R., Nalbantsoy, A., Sussmuth, R.D. Intact protein mass spectrometry reveals intraspecies variations in venom composition of a local population of *Vipera kaznakovi* in Northeastern Turkey. *Journal of Proteomics* (2019).



- Brown, M.R., Baptista, J.C., Lunn, M., Swan, D.L., Smith, S.J., Davenport, R.J., Allen, B.D., Sloan, W.T., Curtis, T.P. Coupled virus - bacteria interactions and ecosystem function in an engineered microbial system *Science Direct* (2019).
- Canals, R., Hammarlof, D.L., Kroger, C., Owen, S.V., Fong, W.Y., Lacharme-Lora, L., et al. Adding function to the genome of African *Salmonella* Typhimurium ST313 strain D23580 *PLOS Biology* (2019).
- Porter, L.F., Saptarshi, N., Fang, Y., Rathi, S., den Hollander, A.I., de Jong, E. K., et al. Whole-genome methylation profiling of the retinal pigment epithelium of individuals with age-related macular degeneration reveals differential methylation of the *SKI*, *GTF2H4*, and *TNXB* genes *Clinical Epigenetics* (2019).
- Andreassi, C., Luisier, R., Crerar, H., Blokziji-Franke, S., Luscombe, M., Cuda, G., Gaspari, M., Riccio, A. 3'UTR cleavage of transcripts localized in axons of sympathetic neurons *bioRxiv* (2019).
- Cox, F., Newsham, K.K., Robinson, C.H. Endemic and cosmopolitan fungal taxa exhibit differential abundances in total and active communities of Antarctic soils *Wiley Online Library* (2019).
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- Oejo, M., Oporto, B., Hurtado, A. 16S rRNA amplicon sequencing characterization of caecal microbiome composition of broilers and free-range slow-growing chickens throughout their productive lifespan. *Scientific Reports* 9, no. 1 (2019).