

Tom Hill

University of Kansas

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Education

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| 2016 | Grade 1 Ph.D. Institut für Populationsgenetik, Vetmeduni Vienna, Austria. |
| 2012 | First Class BSc with Honours in Biological Sciences, University of Reading, United Kingdom. |
| 2009 | 4 UK GCEs: Advanced level – Biology, Mathematics, History.
1 GCE: Subsidiary level – Physics. |

Employment

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| 2016 - present | Postdoctoral Research fellow for Dr. Robert Unckless - University of Kansas, USA. |
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Publications

Kofler, R., **Hill, T.**, Nolte, V., Betancourt, A., and Schlötterer, C., The Recent Invasion of Natural *Drosophila simulans* Populations by the P-Element. *Proceedings of the National Academy of Sciences* 112, no. 21 (2015): 6659–63.

Hill, T., Schlötterer, C. and Betancourt, A.J., Hybrid dysgenesis in *Drosophila simulans* due to a rapid global invasion of the P-element, *PLoS Genetics* 12.3 (2016): e1005920.

Hill, T. and Unckless, R.L. The landscape of adaptation of baculoviruses via positive selection and gene turnover, *Journal of Virology* 91, no. 22 (2017) 1-22.

Hill, T. and Unckless R.L. The dynamic evolution of *Drosophila innubila* Nudivirus. *Infection, Genetics and Evolution* 57 (2018) 151-7.

Hill, T. and Betancourt, AJ. Extensive exchange of transposable elements across the *Drosophila pseudoobscura* group. *Mobile DNA* 9:20 (2018) 1-14.

Hill, T., Koseva, B. and Unckless R.L. The genome of *Drosophila innubila* reveals lineage-specific patterns of selection in immune genes. *Molecular Biology and Evolution*. *Molecular Biology and Evolution* (2019) msz059.

Chapman, J., **Hill, T.** and Unckless, R.L. Balancing selection in *Drosophila* antimicrobial peptides. (*in review*).

Hill, T. Transposable element dynamics as consistent across the *Drosophila* phylogeny, despite drastically differing content. (*in review*).

Grants & Awards

2018 – K-INBRE Postdoctoral Research Award

2017 – Kansas University Research Excellence Initiative Award

2016 Austrian Academy of Sciences, Max Kade Foundation research fellowship

2016 Austria Federal Minister of Science, Research and Economy, award for excellence

2015 VetMedUni Vienna, Funds for research activities abroad for academic staff (declined)

2012 University of Reading Award for academic excellence, University of Reading UK

Presentations

Annual Drosophila Research Conference 2019, Dallas USA - The genome of *Drosophila innubila* reveals lineage-specific patterns of selection in immune genes (talk).

Population Genetics Group 2019, United Kingdom – Antiviral genes are not fast evolving in *D. innubila* (talk).

Molecular Evolution of the Cell 2018, Utah USA – Antiviral genes are not fast evolving in *D. innubila* (talk).

Population Genetics Group 2018, United Kingdom – Evolution of baculoviruses via recurrent evolution of key genes (talk).

SMBE 2017, Austin USA – Evolution of baculoviruses via recurrent evolution of key genes (talk).

University of Rochester 2016, USA – The Rapid Invasion of P-element in *Drosophila simulans* (invited talk).

SMBE 2015, Austria – Hybrid dysgenesis in *Drosophila simulans*, caused by a rapid global invasion of the P-element (poster).

Population Genetics Group 2015, United Kingdom – Hybrid dysgenesis in *Drosophila simulans*, caused by a rapid global invasion of the P-element (talk).

Laboratory of Genome Dynamics, Medical University Vienna, 2015 – Hybrid dysgenesis in *Drosophila simulans*, caused by a rapid global invasion of the P-element (invited talk).

Evolution 2014, North Carolina USA - The Rapid spread of hybrid dysgenesis in *Drosophila simulans* (poster).

Ecology & Evolutionary Biology Symposium of Turkey 2014, Turkey – The Rapid spread of hybrid dysgenesis in *Drosophila simulans* (poster prize awardee – best student poster).

Teaching

Teaching assistant for Introduction to bioinformatics – Institut für Populationsgenetik, University of Veterinary Medicine Vienna (2014 and 2015)

Teaching assistant for NGS workshop - Institut für Populationsgenetik, University of Veterinary Medicine Vienna (2014)

Teaching assistant for Software Carpentry Workshop – University of Kansas, Lawrence KS USA (2018)

Service

Organizing committee of ‘Mind the Gap’ conference (2013)

Organizing committee, NGS workshop (2014)

Supervised FFG summer student intern (2014)

University of Veterinary Medicine Vienna ‘Open Day’, public outreach program (2014 and 2015)

Reviewer: *Genome Biology and Evolution*, *BMC Genomics*, *G3*, *PeerJ*, *Scientific Reports*, *Journal of General Virology*, *Ecology and Evolution*, *Research Square*, *Biology Letters*.

Skills/Training

Proficient in both R and Python, including several bioinformatic packages such as Biopython, Pysam, NumPy, Pandas and SKLearn.

Training in DNA and RNA isolation, PCR, qPCR, and next-generation sequencing library preparation. Also trained in *Drosophila* husbandry and experimental design.