# Sheng-Kai Hsu

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## Positions & Education

| Year | Position / Degree |
| --- | --- |
| 2022–present | Postdoc, Institute for Genomic Diversity, Cornell University |
| 2017–2021 | Ph.D., Vienna Graduate School of Population Genetics, Univ. of Veterinary Medicine Vienna *Advisor: Christian Schlötterer* |
| 2014–2015 | M.Sc., Department of Agronomy, National Taiwan University *Advisor: Chih-Wei Tung* |
| 2010–2014 | B.Sc., Department of Agronomy, National Taiwan University |

## Publications

* **Two different adaptive speciation mechanisms operate during adaptation to a novel hot environment** (2021), [DOI](https://doi.org/10.1101/2021.11.08.467720)
* **Reduced Parallel Gene Expression Evolution With Increasing Genetic Divergence—A Hallmark of Polygenic Adaptation** (2025), [DOI](https://doi.org/10.1111/mec.17803)
* **Rapid sex-specific adaptation to high temperature in Drosophila** (2020), [DOI](https://doi.org/10.7554/eLife.53237)
* **Pleiotropy increases parallel selection signatures during adaptation from standing genetic variation** (2025), [DOI](https://doi.org/10.7554/eLife.102321.3)
* **Pleiotropy increases parallel selection signatures during adaptation from standing genetic variation** (2025), [DOI](https://doi.org/10.7554/eLife.102321.2)
* **Pleiotropy increases parallel selection signatures during adaptation from standing genetic variation** (2025), [DOI](https://doi.org/10.7554/eLife.102321)
* **Pleiotropy increases parallel selection signatures during adaptation from standing genetic variation** (2024), [DOI](https://doi.org/10.7554/eLife.102321.1)
* **Pleiotropy increases parallel selection signatures during adaptation from standing genetic variation** (2024), [DOI](https://doi.org/10.1101/2024.08.06.606803)
* **Parallel gene expression evolution in natural and laboratory evolved populations** (2021), [DOI](https://doi.org/10.1111/mec.15649)
* **Neuronal function and dopamine signaling evolve at high temperature in Drosophila** (2019), [DOI](https://doi.org/10.1101/585422)
* **Grass Rhizome Proteomics Reveals Convergent Freezing-Tolerance Strategies** (2025), [DOI](https://doi.org/10.1101/2025.05.15.654294)
* **Extensive modulation of a conservedcis-regulatory code across 589 grass species** (2025), [DOI](https://doi.org/10.1101/2025.04.23.650228)
* **Extensive genome evolution distinguishes maize within a stable tribe of grasses** (2025), [DOI](https://doi.org/10.1101/2025.01.22.633974)
* **Effects of larval crowding on the transcriptome of Drosophila simulans** (2023), [DOI](https://doi.org/10.1111/eva.13592)
* **Contrasting rhizosphere nitrogen dynamics in Andropogoneae grasses** (2025), [DOI](https://doi.org/10.1111/tpj.70319)
* **Contrasting Rhizosphere Nitrogen Dynamics in Andropogoneae Grasses: Implications for Sustainable Agriculture** (2024), [DOI](https://doi.org/10.1101/2024.06.03.597142)
* **A 24 h Age Difference Causes Twice as Much Gene Expression Divergence as 100 Generations of Adaptation to a Novel Environment** (2019), [DOI](https://doi.org/10.3390/genes10020089)

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