

HWANG Wei Song, Entomology PhD

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A. PROFESSIONAL PREPARATION

University of California Riverside, Entomology, PhD	2012		
National University of Singapore	Life Sciences	Bachelor of Science (Honours)	2007

B. PROFESSIONAL EXPERIENCE

- Lecturer/Museum Officer, Lee Kong Chian Natural History Museum, NUS, Feb 2014 – current
- Curator of entomology and terrestrial arthropods, Zoological Reference Collection, LKCNHM, Dec 2015 - current
- Joint Appointee to University Scholar's Programme, NUS, Aug 2013 – current
- Instructor, Department of Biological Sciences, NUS, Jan 2013 – Feb 2014

C. RESEARCH INTERESTS

Systematics (phylogenetics, taxonomy and systematic theory); Understanding drivers of diversification in insect systems; Molecular and morphological evolution in Heteroptera (Reduviidae); Evolutionary interactions between insect vectors and their parasites

D. RECENT PUBLICATIONS

(<https://scholar.google.com.sg/citations?user=X5VxgvsAAAAJ&hl=en> for full list)

1. Emberts Z, **W.S. Hwang** and Wiens JJ, 2021, Weapon performance drives weapon evolution, *Proceedings of the Royal Society B*, 288:20202898. <https://doi.org/10.1098/rspb.2020.2898>
2. Emberts Z, St. Mary CM, Howard CC, Forthman M, Bateman PW, Somjee U, **Hwang WS**, Li D, Kimball RT, Miller CW, 2020, The evolution of autotomy in leaf-footed bugs, *Evolution*, 74(5), 897-910. doi:10.1111/evo.13
3. Smith S., **W.S. Hwang**, C. Weirauch (2019) Synonymy of *Mangabea* and *Stenorhamphus*, with the description of two new species (Hemiptera: Reduviidae: Emesinae: Collartidini), *Raffles Bulletin of Zoology*, 67, 135-149.
4. Thomson S.A., Pyle R.L., Ahyong S.T. et al. (2018) Taxonomy based on science is necessary for global conservation, *PLoS BIOLOGY*, 16(3): e2005075
5. **W.S. Hwang**, Weirauch C. (2017) Uncovering hidden diversity: phylogeny and taxonomy of Physoderinae (Reduviidae, Heteroptera) with emphasis on Physoderes Westwood in the Oriental and Australasian regions, *European Journal of Taxonomy*, 341:1-118
6. Z. Emberts, C.W. Miller, D. Li, **W.S. Hwang**, C.M. St. Mary (2017) Multiple male morphs in the leaf-footed bug *Mictis longicornis* (Hemiptera: Coreidae), *Entomological Science*, 20(1): 396-401.
7. J. Zhang, E.R.L. Gordon, M. Forthman, **W.S. Hwang**, K. Walden, D.R. Swanson, K.P. Johnson, R. Meier, C. Weirauch (2016) Evolution of the assassin's arms: insights from a phylogeny of combined transcriptomic and ribosomal DNA data (Heteroptera: Reduvidae), *Scientific Reports*, 6, 22177. doi:10.1038/srep22177
8. C. Weirauch, K. Russell and **W.S. Hwang** (2015) *Reduvius frommeri*, a new species of Reduviidae from the Western United States (Hemiptera: Reduviidae), with a synopsis of the Nearctic species of *Reduvius* Fabricius, *Zootaxa*, 3972(2): 267-279.

9. L.R. Davranoglou, **W.S. Hwang** and C. Weirauch (2015) Neotropical Physoderinae revisited, with description of a new, sexually dimorphic species of *Leptophysoderes* Weirauch (Hemiptera: Reduviidae), *Zootaxa*, 3963 (1): 089-099.
10. C. Weirauch, J.M. Bérenger, L. Berniker, D. Forero, M. Forthman, S. Frankenberg, A. Freedman, E. Gordon, R. Hoey-Chamberlain, **W.S. Hwang**, S.A. Marshall, A. Michael, S.M. Paiero, O. Uda, C. Watson, M. Yeo, G. Zhang, J. Zhang (2014) An Illustrated Identification Key to Assassin Bug Subfamilies and Tribes (Hemiptera: Reduviidae), *Canadian Journal of Arthropod Identification* No. 26: December 10, 2014.

E. FIELD EXPERIENCE

2003-2019: Argentina, Australia, Brunei, Costa Rica, Madagascar, Malaysia, Philippines, Singapore, South Africa, USA (California, Arizona, New Mexico)

F. AWARDS/FELLOWSHIPS

Fellowships/research grants

- ❖ Mandai Research Fund: Of pollinators, decomposers and blood-suckers: the Mandai Insect Survey Project, (2019 – 2021): SGD\$240,000
- ❖ GBIF Biodiversity Fund for Asia project 'Digitizing butterflies of Singapore and Peninsular Malaysia (2019 – 2020): EURO €14,728
- ❖ Academic Research Fund (AcRF) Tier I: Natural History in the 21st Century: Integration of Field, Specimen and DNA Data (2015-17): SGD\$178,776.
- ❖ UCR Dissertation Year Program Award (2011-2012): USD\$14,400
- ❖ Collection Study Grant at American Museum of Natural History (Apr, 2010): USD\$800
- ❖ California Desert Research Fund, Survey of kissing bugs (Reduviidae: Triatominae) in Southern California (2008-2009): USD\$2,883
- ❖ UCR Dean's Distinguished Fellowship Award (2007-2009)

Teaching award

- ❖ University Scholars Programme Teaching Excellence Award 2018, 2019

G. SYNERGISTIC ACTIVITIES

Teaching.

- Module Co-ordinator & Primary lecturer: ULS2202 Evolution, Semester 1 AY12/13 – present; LSM1302/GEK1303 Genes & Society 2013 – 2015.
- Guest Lecturer: LSM4254 Taxonomy & Systematics, Semester 1 AY14/15; LSM3265 Entomology Semester 1 AY14/15 - present; LSM4263 Field Studies in Biodiversity, Semester 4 AY12/13, AY20/21
- Co-lecturer: LSM1303 Animal Behaviour, Semester 2 AY12/13.

Collection management. Sorting, databasing, imaging and identifying insect specimens from ZRC (Singapore) 2008 - present, Madagascar (California Academy of Sciences), Thailand, USA, 2007 – 2012, UCR Lygaeoidea collection 2008, preparing UCR Entomology Teaching Collection 2009 & 2010.

Museum collection visits: AMNH (2010), USNM (2010), BMNH (2011), MNHN (2011), CAS (2011).

Conferences. Participated and presented talks in the following meetings: Biodiversity Digitization: Celebrating a decade of progress (2021), GBIF Asia Virtual Summit (2020), International Heteropterists' Society Meeting (2010, 2018), Southeast Asian Gateway to Evolution Meeting (2017), International Congress of Entomology (2016), NParks Biodiversity Research Symposium (2013), Entomological Society of America Annual Meeting (2008-2011), Society for Vector Ecology 43rd Annual Conference, invited talk (2011), Meeting of the Willi Hennig Society (2011, 2012), , Heteroptera Synthesis Meeting (2009).