



The Royal Society
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RSWA Monthly Talks

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How do insects smell and taste?



Dr Wei Xu



School of Veterinary & Life Sciences, Murdoch University

Monday 18th April 2016

7.00 pm Kings Park Administration Building, Fraser Ave

Insects live in a world of chemistry. They rely upon smell (the olfactory system) to detect mates, food and oviposition sites. They also rely upon taste (the gustatory system) to evaluate which foods to feed on and which foods to avoid.

In this presentation, I will talk about my research projects on insect olfactory and taste systems at the molecular level. I will also dissect how these insects have fine-tuned their chemical sensory systems to sense their environment and regulate their behaviours. Understanding the molecular basis of these mechanisms will provide a vital tool for assessing crucial natural interactions of hosts and insects, as well as allowing us to develop new strategies for insect control through disruption of chemosensory mechanisms.

More information: www.rswa.org.au Queries to rswa.events@gmail.com



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Biography

Wei Xu, Ph.D.



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Wei Xu received his PhD in the Department of Entomology at the University of California, Davis (UC Davis) in June, 2010. His research project was “Olfactory (Smell) proteins in moths and mosquitoes”.

Following his doctoral studies, he came to Australia on an OCE (Office of the Chief Executive) Postdoctoral Fellowship and joined CSIRO Ecosystem Sciences (CES). His study focus was the molecular mechanisms of insect chemosensory systems and their functions in insect-host interaction and co-evolution.

He joined Murdoch University as a lecturer in Entomology in School of Veterinary and Life Sciences in 2015. Most recently, Dr Xu was awarded a Discovery Early Career Research Award (DECRA) by the Australian Research Council (ARC). His research interests focus is on chemical ecology, functional genomics and molecular biology of agricultural and medical insect species.