

Yi Jin LIEW

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EDUCATION

- PhD **Trinity Hall, University of Cambridge, UK (Oct 2008–Dec 2012)**
PI: Dr. Gos Micklem, Department of Genetics
Small RNA studies in *Drosophila melanogaster*, *Stylophora pistillata* and *Symbiodinium* sp.
- BA **Magdalene College, University of Cambridge, UK (Oct 2005–Jun 2008)**
First-Class Honours in Genetics

WORK EXPERIENCE

- 2013 – **Postdoc in Aranda Lab, King Abdullah University of Science and Technology (KAUST), Saudi Arabia**
– 4+ years
- Investigated the role of epigenetics in corals as a mechanism to keep pace with climate change
 - Involved in five marine genome projects
 - Created and maintained an online data portal for reef organisms, <http://reefgenomics.org>
 - Reviewed five papers
 - Provided academic guidance for five PhD students
 - Co-chair of organising committee for RSRC Open Science Conference
 - Designed and taught two mini-courses (programming basics)
- 2009– **Lab demonstrator, University of Cambridge, UK**
2011 – various stints
- Demonstrated general lab skills to first- to third-year undergraduates, and graded lab reports
- 2005 **Relief teacher, The Chinese High School, Singapore**
– 5 months
- Taught Chemistry to students aged 13–15
 - Designed course materials and exams, graded student work

PUBLICATIONS (REVERSE CHRONOLOGY)

Li Y, Liew YJ, Cui G, Czieiselski MJ, Zahran N, et al. DNA methylation regulates transcriptional homeostasis of algal endosymbiosis in the coral model *Aiptasia*. *Nat Commun*, in review. (preprint copy: <https://www.biorxiv.org/content/early/2017/11/02/213066>)

Liew YJ, Zoccola D, Li Y, Tambutté E, Venn AA, et al. Epigenome-associated phenotypic acclimatization to ocean acidification in a reef-building coral. *PNAS*, submitted. (preprint copy: <https://www.biorxiv.org/content/early/2017/09/13/188227>)

Voolstra CR, Li Y, **Liew YJ**, Baumgarten S, Zoccola D, et al. Comparative analysis of the genomes of *Stylophora pistillata* and *Acropora digitifera* provides evidence for extensive differences between species of corals. *Sci Rep*, in review. (preprint copy: <https://www.biorxiv.org/content/early/2017/10/03/197830>)

Chen JE, Cui G, Wang X, **Liew YJ**, Aranda M. Recent expansion of heat-activated retrotransposons in the coral symbiont *Symbiodinium microadriaticum*. *ISME*, published online 20 Oct 2017, doi:10.1038/ismej.2017.179.

Brüwer JD, Agrawal S, **Liew YJ**, Aranda M, Voolstra CR. Association of coral algal symbionts with a diverse viral community responsive to heat shock. *BMC Microbiol.* 2017; **17**(1):174.

Wang X, **Liew YJ**, Li Y, Zoccola D, Tambutte S, et al. Draft genomes of the corallimorpharians *Amplexidiscus fenestrafer* and *Discosoma* sp. *Mol Ecol Resour.* 2017; **00**:1–9.

Voolstra CR, **GIGA Community of Scientists**, Wörheide G, Lopez JV. Advancing Genomics through the Global Invertebrate Genomics Alliance (GIGA). *Invertebr Syst.* 2017; **31**:1–7.

Liew YJ, Li Y, Baumgarten S, Voolstra CR, Aranda M. Condition-specific RNA editing in the coral symbiont *Symbiodinium microadriaticum*. *PLOS Genet.* 2017; **13**(2):e1006619.

Liew YJ, Aranda M, Voolstra CR. Reefgenomics.Org - a repository for marine genomics data. *Database.* 2016; **2016**:baw152.

Aranda M, Li Y, **Liew YJ**, Baumgarten S, Simakov O, et al. Genomes of coral dinoflagellate symbionts highlight evolutionary adaptations conducive to a symbiotic lifestyle. *Sci Rep.* 2016; **6**:39734.

Bhattacharya D, ..., **Liew YJ**, et al. Comparative genomics explains the evolutionary success of reef-forming corals. *eLife.* 2016; **5**:e13288.

Liew YJ, Ryu T, Aranda M, Ravasi T. miRNA Repertoires of Demosponges *Stylissa carteri* and *Xestospongia testudinaria*. *PLOS ONE.* 2016; **11**(2):e0149080.

Ryu T, Seridi L, Moitinho-Silva L, Oates M, **Liew YJ**, et al. Hologenome analysis of two marine sponges with different microbiomes. *BMC Genomics.* 2016; **17**(1):1.

Baumgarten S, Simakov O, Esherick LY, **Liew YJ**, Lehnert EM, et al. The genome of *Aiptasia*, a sea anemone model for coral symbiosis. *PNAS*. 2015; **112(38)**:11893-11898.

Liew YJ, Aranda M. Epigenetic adaptation of corals: A new hope? *Nature Middle East*. 2015; doi:10.1038/nmiddleeast.2015.194

Liew YJ, Aranda M, Carr A, Baumgarten S, Zoccola D, et al. Identification of microRNAs in the coral *Stylophora pistillata*. *PLOS ONE*. 2014; **9(3)**:e91101.

Baumgarten S, Bayer T, Aranda M, **Liew YJ**, Carr A, et al. Integrating microRNA and mRNA expression profiling in *Symbiodinium microadriaticum*, a dinoflagellate symbiont of reef-building corals. *BMC Genomics*. 2013; **14**:704

ORAL PRESENTATIONS AT CONFERENCES

- 2017 RSRC Open Science Conference, Thuwal, KSA
KAUST Research Conference: Environmental Epigenetics, Thuwal, KSA
- 2016 KAUST Research Conference: International Conference on the Marine Environment of the Red Sea, Thuwal, KSA
13th International Coral Reef Symposium, Honolulu, Hawaii, USA
- 2014 3rd Asia-Pacific Coral Reef Symposium, Kenting, Taiwan
- 2012 12th International Coral Reef Symposium, Cairns, Australia

LANGUAGE AND COMPUTING SKILLS

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| Languages | Fluent in English and Mandarin
Proficient in Malay and Cantonese |
| Computing | Extremely familiar with Windows and UNIX environments
Expert in Python, Bash
Competent in Perl, R, Visual Basic, HTML and CSS |