

Dr. Hugo B. HARRISON



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Molecular & Fish Ecologist

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Tertiary education

- March 18th 2014** **PhD, Marine Biology 'Cum Laude'**
Medal for Excellence for a Doctoral Research Thesis
James Cook University, Australia & l'Ecole Pratique des Hautes Etudes, France
- Jul – Dec 2007** **Graduate Certificate of Science, Marine Biology**
Dean's Award for Research Higher Degree Excellence (JCU)
James Cook University, Australia
- 2002 – 2006** **Bachelors of Science with Honours, Genetics**
University of Edinburgh, United Kingdom

Relevant work experience

- Since Jan 2013** **Postdoctoral Research Fellow (F/T)** – James Cook University
Australian Research Council - Centre of Excellence for Coral Reef Studies
- 2008 – 2012** **Consultant – Reef monitoring (casual)** – James Cook University
- 2008 – 2010** **Tutor – Genetics (casual)** – James Cook University
- March 2010** **Tutor – Field Ecology** – Reef EcoTours & Tevene'I Marine
- August 2007** **Science Communicator** – Edinburgh International Science Festival
- Jul – Oct 2006** **Research Technician (F/T)** – Centre de Biologie et d'Ecologie Tropicale et Méditerranéenne EPHE-CNRS

Academic publishing

Simpson SD[†], **Harrison HB[†]**, Claereboudt MR and Planes S (*in press*). Long-distance dispersal via ocean currents connects Omani clownfish populations throughout entire species range. *PLOS ONE* – due Sept 2014

Harrison HB, Feldheim KA, Jones GP, Mansour H, Perumal S, Williamson DH and Berumen ML (2014). Validation of microsatellite multiplexes for parentage analysis in a coral reef fish (*Lutjanus carponotatus*). *Conservation Genetic Resources*, **4**, 1-4. [DOI: 10.1007/s12686-014-0226-4](https://doi.org/10.1007/s12686-014-0226-4)

Harrison HB, Feldheim KA, Jones GP, Ma K, Mansour H, Perumal S, Williamson DH and Berumen ML (2014). Assessing the accuracy of microsatellite datasets for parentage analysis and species discrimination in two hybridising species of coral

reef fish (*Plectropomus spp.*, Serranidae). *Ecology and Evolution*, **4**, 2046-2057.
[DOI: 10.1002/ece3.1002](https://doi.org/10.1002/ece3.1002)

Harrison HB, Saenz-Agudelo P, Planes S, Jones GP and Berumen ML (2013). On minimising assignment errors and the trade-off between false positives and negatives in parentage analysis. *Molecular Ecology*, **22**, 5738-5742. [DOI: 10.1111/mec.12527](https://doi.org/10.1111/mec.12527)

Harrison HB[†], Saenz-Agudelo P[†], Planes S, Jones GP and Berumen ML (2013). Relative accuracy of three common methods of parentage analysis in natural populations. *Molecular Ecology*, **22**, 1158-1170. [DOI: 10.1111/mec.12138](https://doi.org/10.1111/mec.12138)

Harrison HB, Williamson DH, Evans RD, Almany GR, Thorrold SR, Russ GR, Feldheim KA, van Herwerden L, Planes S, Srinivasan M, Berumen ML and Jones GP (2012). Larval export from marine reserves and the recruitment benefit for fish and fisheries. *Current Biology*, **22**, 1023-1028. [DOI: 10.1016/j.cub.2012.04.008](https://doi.org/10.1016/j.cub.2012.04.008)
[Science Editor's Pick](#) [Evaluated by the Faculty of 1000](#) [Press release](#)

[†] *These authors contributed equally*

[Google Scholar page](#) 122 citations

Journal referee for: *Molecular Ecology, Coral Reefs, Conservation Letters, PLOS ONE*

Scientific and public presentations

- Harrison HB. *Keep Calm and Just Keep Swimming*. 3MT Competition, **Australian Research Council Centre of Excellence for Coral Reef Studies**, Townsville, Australia 2014
- Harrison HB, Saenz-Agudelo P, Williamson DH, Pressey R, Jones GP. *Identifying patterns of network connectivity in marine metapopulations*. **Society for Conservation Biology Oceania**, Suva, Fiji 2014
- Harrison HB. *Should I stay or should I go? Larval connectivity in the Great Barrier Reef Marine Park*. **Australian Research Council Centre of Excellence for Coral Reef Studies Annual Symposium** – Future Reefs, Canberra, Australia 2014
- Harrison HB. *Assessing the role of marine protected areas in fisheries management*. **Australian Research Council Centre of Excellence for Coral Reef Studies Annual Symposium** – Coral Reefs in the 21st Century, Townsville, Australia 2013
- Harrison HB, Williamson DH, Evans RD, Almany GR, Thorrold SR, Russ GR, Feldheim KA, van Herwerden L, Planes S, Srinivasan M, Berumen ML & Jones GP. *Larval export from marine reserves and the recruitment benefit for fish and fisheries*. Virginia Chadwick Award reception, **Australian Research Council Centre of Excellence for Coral Reef Studies**, Townsville, Australia 2013
- Harrison HB, Williamson DH, Almany GR, Russ GR, Planes S, Jones GP. *Larval dispersal, reproductive success & recruitment dynamics in an island archipelago*. **International Coral Reef Symposium**, Cairns, Australia 2012
- Harrison HB, Williamson DH, Almany GR, Russ GR, Planes S, Jones GP. *How marine reserves redefined recruitment dynamics in an island archipelago*. **Doctoriales EPHE, Université de Perpignan**, France 2012
- Harrison HB, Williamson DH, Almany GR, Russ GR, Planes S, Jones GP. *How marine reserves redefined recruitment dynamics in an island archipelago*. **Round Table Talks, University of Bristol**, Bristol, United Kingdom 2012

Harrison HB, Williamson DH, Evans RD, Almany GR, Feldheim KA, van Herwerden L, Russ GR, Jones GP. *Beyond the boundaries: Marine reserves provide recruitment subsidies to local fisheries*. **Australian Coral Reef Society**, Coff's Harbour, Australia 2010

Harrison HB, Williamson DH, Evans RD, Almany GR, Russ GR, Jones GP. *Beyond the boundaries: Marine reserves provide recruitment subsidies to local fisheries*. **International Larval Biology Symposium**, Wellington, New Zealand 2010

Harrison HB, Evans RD, Williamson DH, van Herwerden L, Jones, GP. *From Metapopulation dynamics to local recruitment patterns in marine protected areas*. **Indo-Pacific Fish Conference**, Freemantle, Australia 2009

Research funding

2013 Pratchett MS, Messmer V, Harrison HB, Saenz-Agudelo P, Berumen ML (2013-2015) Initiation and spread of outbreaks of crown-of-thorns starfish on the Great Barrier Reef. Caring for Country Reef Rescue Research Fund - AU\$400,000

Grants and awards

2014 3MT competition ECR winner, departmental heats

2013 Paddy Palin Science grant (unsuccessful)

2012 Medal for Excellence for a Doctoral Research Thesis
Virginia Chadwick Publication Award (AU\$1,000)
JCU Graduate Research School Doctoral completion award (AU\$3,000)

2011 JCU Graduate Research School travel grant (AU\$3,000)
Summer Institute in Statistical Genetics travel scholarship (US\$1,600)

2010 Australian Coral Reef Society presentation award
Australian Coral Reef Society travel grant (AU\$600)

2009 JCU Postgraduate Research Scholarship (4 years)

2007 Dean's Award for Research Higher Degree Excellence

2006 British Association Travel Fund Grant (GBP£600)

Community outreach

2013 **ReefLive – World Ocean Day**
Tourism and Events Queensland (supported by UNESCO)
Global live video stream from marine scientists and expert divers to explore the Great Barrier Reef for World Ocean Day (June 7th, 2013)

2012 **Panasonic Presents: Access 360° World Heritage**
National Geographic Channel (supported by UNSECO)
Documentary on the Great Barrier Reef World Heritage Site
Aired globally May 25th, 2013
ABC National Radio News Broadcast
Discussing the benefits of no-take marine reserves for fish and fisheries

Scholarly memberships

Society for Conservation Biology
Royal Zoological Society of New South Wales
Australian Coral Reef Society

Guest Lectures

Coral reef ecology (KAUST, ML Berumen) – The role of marine protected areas in fisheries management

Marine Conservation (JCU – MB3200, GP Jones) – Larval connectivity and the design of marine reserves

Marine reserves as fisheries management tools (JCU – MB5310 , GR Russ) – Larval dispersal & connectivity in coral reef fishes: Implications for the design of marine reserves

Referees

Professor Geoffrey P. Jones

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Professor Garry R. Russ

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Dr Serge Planes

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Dr Stephen D. Simpson

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