

CURRICULUM VITAE ***Dr. Christopher Paul Burridge***

1. PERSONAL DETAILS

Work Address: School of Zoology
University of Tasmania
Private Bag 5
Hobart, Tasmania 7001, AUSTRALIA
Phone: (03) 6226 7653
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E-mail: chris.burridge@utas.edu.au

2. EMPLOYMENT HISTORY

i. School of Zoology, University of Tasmania

(September 2008 to present)

Location: Hobart, Tasmania

Position: Lecturer

- Research in Molecular Ecology, Phylogenetics, and Evolutionary Biology
- Supervision of Honours and Postgraduate students conducting molecular research
- Teaching of undergraduate courses in Cell Biology, Conservation Biology, and Behaviour.

ii. CSIRO Marine & Atmospheric Research

(April 2008 to August 2008)

Location: Perth, Western Australia

Position: Research Scientist

- Assessment of metapopulation structure in demersal fish species based on population genetic analysis and oceanographic particle dispersal modelling.
- Comparative phylogeography in echinoderms with contrasting life histories.

iii. Department of Zoology, University of Otago

(April 2005 to March 2008)

Location: Dunedin, New Zealand

Position: Postdoctoral Research Associate

- Using riverine vicariance events (river reversal, river capture) to calibrate molecular clocks and understand rates of molecular change over short and long time scales.
- Biogeography and mechanisms of diversification in freshwater-limited taxa.

iv. School of Life & Environmental Sciences, Deakin University

(June 2002 to March 2005)

Location: Victoria, Australia

Position: Postdoctoral Research Associate

- Molecular phylogenetics and population genetics in temperate fishes, crustaceans, birds and mammals.
- Supervision of PhD (6) and Honours (4) students

vi. Department of Wildlife & Fisheries Sciences, Texas A&M University

(September 1999 to May 2002)

Location: College Station, Texas

Position: Postdoctoral Research Associate

- Population genetics of Red Snapper, *Lutjanus campechanus* (Lutjanidae).
- Conservation genetics of Cape Fear Shiner, *Notropis mekistocholas* (Cyprinidae).

3. PUBLICATIONS

* = papers co-authored by my students)

2012

1. Berry, O., England, P., Marriott, R.J., **Burridge, C.P.** & Newman, S.J. 2012. Understanding age-specific dispersal in fishes through hydrodynamic modelling, genetic simulations and microsatellite DNA analysis. *Molecular Ecology* 21: 2145-2159.
2. **Burridge, C.P.**, McDowall, R.M., Craw, D., Wilson, M.V.H., and Waters, J.M. 2012. Marine dispersal as a pre-requisite for Gondwanan vicariance among elements of the galaxiid fish fauna. *Journal of Biogeography* 39: 306-321.
3. *Higgins, K.L. and **Burridge, C.P.** 2012. Development of eight polymorphic microsatellite loci in the cephalopod *Octopus pallidus*. *Conservation Genetics Resources* 4: 97-99.

2011

4. McDowall, R.M. and **Burridge, C.P.** 2011. Osteology and relationships of the southern freshwater lower euteleostean fishes. *Zoosystematics and Evolution* 87: 7-185.
5. McDowall, R.M. and **Burridge, C.P.** 2011. Erratum: Osteology and relationships of the southern freshwater lower euteleostean fishes. *Zoosystematics and Evolution* 87: 385-385.
6. *Hsu, T.H., Adiputra, Y.T., Burridge, C.P., and Gwo, J.C. 2011. Two spinefoot colour morphs: mottled spinefoot *Siganus fuscescens* and white-spotted spinefoot *Siganus canaliculatus* are synonyms. *Journal of Fish Biology* 79: 1350-1355.
7. *Hsu, T.H., Madrid, A.G.G., Burridge, C.P., Cheng, H.Y., and Gwo, J.C. 2011. Resolution of the *Acanthopagrus* black seabream complex based on mitochondrial and amplified fragment-length polymorphism analyses. *Journal of Fish Biology* 79: 1182-1192.
8. *Shaddick, K., **Burridge, C.P.**, Jerry, D.R., Schwartz, T.S., Truong, K., Gilligan, D.M., and Beheregaray, L.B. 2011. A hybrid zone and bidirectional introgression between two catadromous species: Australian bass *Macquaria novemaculeata* and estuary perch *Macquaria colonorum*. *Journal of Fish Biology* 79: 1214-1235.
9. *Shaddick, K., Gilligan, D. M., **Burridge, C. P.**, Jerry, D. R., Truong, K., and Beheregaray, L. B. 2011. Historic divergence with contemporary connectivity in a catadromous fish, the estuary perch (*Macquaria colonorum*). *Canadian Journal of Fisheries and Aquatic Sciences* 68: 304-318.
10. Worth, J. R. P., Burridge, C. P., While, G., and Wapstra, E. 2011. Development of 13 microsatellite loci in the spotted snow skink *Niveoscincus ocellatus* (Squamata: Scincidae). *Conservation Genetics Resources* 3: 287-290.

2010

11. Waters, J. M., Rowe, D.L., **Burridge, C. P.**, and Wallis, G.P. 2010. Gene trees versus species trees: reassessing life-history evolution in a freshwater fish radiation. *Systematic Biology* 59: 504-517.

2009

12. Peucker, A.J., Dann, P., and **Burridge, C.P.** 2009. Range-wide phylogeography of the Little Penguin (*Eudyptula minor*, Forster 1781): evidence for long distance dispersal. *Auk* 126: 397-408.
13. **Burridge, C.P.**, and England, P.R. 2009. Tri- and tetranucleotide microsatellites in dhufish *Glaucosoma hebraicum* (Perciformes). *Molecular Ecology Resources* 9: 948-951.

2008

14. Burridge, C.P., Craw, D., Jack, D.C., King, T.M., and Waters, J.M. Does fish ecology predict dispersal across a river drainage divide? *Evolution* 62: 1484-1499.
15. Burridge, C.P., Craw, D., Fletcher, D., and Waters, J.M. Geological dates and molecular rates: fish DNA sheds light on time-dependency. *Molecular Biology and Evolution* 25: 624-633.
16. Craw, D., Burridge, C.P., Norris, R., and Waters, J.M. 2008. Genetic ages for Quaternary topographic evolution: A new dating tool. *Geology* 36: 19-32.
17. Craw, D., Burridge, C.P., Upton, P., Rowe, D.L., and Waters, J.M. Evolution of biological dispersal corridors through an active mountain range, New Zealand. *Journal of Biogeography* 35: 1790-1802.
18. *Overeem, R.L., Peucker, A.J., Austin, C.M., Dann, P., and Burridge, C.P. Contrasting genetic structuring between colonies of the World's smallest penguin, *Eudyptula minor* (Aves: Spheniscidae). *Conservation Genetics* 9: 893-905.
19. *Hogan, F.E., Burridge, C.P., Cooke, R., and Norman, J.A. 2008. Optimizing the use of shed feathers for genetic analysis. *Molecular Ecology Resources* 8: 561-567.

2007

20. Burridge, C.P., Craw, D. and Waters, J.M. 2007. An empirical test of freshwater vicariance via river capture. *Molecular Ecology* 16: 1883-1895.
21. Waters, J.M., Rowe, D.L., Apte, S., King, T.M., Wallis, G.P., Anderson, L., Norris, R.J., Craw, D., and Burridge, C.P. 2007. Geological dates and molecular rates: rapid divergence of rivers and their biotas. *Systematic Biology* 56: 271-282.
22. *Burridge, C.P., and Versace, V.L. 2007. Population genetic structuring in *Acanthopagrus butcheri* (Pisces: Sparidae): does low gene flow among estuaries apply to both sexes? *Marine Biotechnology* 9: 33-44.
23. Craw D., Burridge, C.P., Anderson, L. and Waters, J.M. 2007. Late Quaternary river drainage and fish coevolution, Southland, New Zealand. *Geomorphology* 84: 98-110.
24. *Hogan, F., Burridge, C., Cooke, R., and Norman, J. 2007. Isolation and characterization of microsatellite loci to DNA fingerprint the Powerful Owl (*Ninox strenua*). *Molecular Ecology Notes* 7: 1305-1307.
25. *Thai, B.T., Burridge, C.P. and Austin, C.M. 2007. Genetic diversity of common carp (*Cyprinus carpio* L.) in Vietnam using four microsatellite loci. *Aquaculture* 269: 174-186.
26. Craw, D., Burridge, C.P., Norris, R., and Waters, J.M. 2007. Geological and biological evidence for drainage reorientation during uplift of alluvial basins, central Otago, New Zealand. *New Zealand Journal of Geology and Geophysics* 50: 367-376.

2006

27. Burridge, C.P., Meléndez, R. and Dyer, B.S. 2006. Independent origins of the Juan Fernández kelpfish fauna (Perciformes: Chironemidae), and evidence for frequent and unidirectional dispersal of cirrhitoid fishes across the South Pacific. *Systematic Biology* 55: 566-578.
28. Burridge, C.P., Craw, D. and Waters, J.M. 2006. River capture, range expansion, and cladogenesis: the genetic signature of freshwater vicariance. *Evolution* 60: 1038-1049.

2005

29. *Miller, A.D., Burridge, C.P., and Austin, C.M. 2005. Complete mitochondrial DNA sequence of the decapod crustaceans *Pseudocarcinus gigas* (Menippidae), and *Macrobrachium rosenbergii* (Palaemonidae). *Marine Biotechnology* 7: 339-349.
30. *Thai, B.T., Burridge, C.P., Pham, T.A., and Austin, C.M. 2005. Using mitochondrial nucleotide sequences to investigate diversity and genealogical relationships within common carp (*Cyprinus carpio* L.). *Animal Genetics* 36: 23-28.

2004

31. Burridge, C.P., and Smolenski, A.J. 2004. Molecular phylogeny of the Cheilodactylidae and Latridae (Perciformes: Cirrhitidae) with notes on taxonomy and biogeography. *Molecular Phylogenetics and Evolution* 30: 118-127.
32. Burridge, C.P., Hurt, A.C., Farrington, L.W., Coutin, P.C., and Austin, C.M. 2004. Stepping stone gene flow in an estuarine dwelling sparid from southeast Australia. *Journal of Fish Biology* 64: 805-819.
33. *Miller, A.D., Nguyen, T.T.T., Burridge C.P., and Austin C.M. 2004. A novel gene arrangement in the mitochondrial genome of the Australian freshwater crayfish, *Cherax destructor* (Decapoda: Parastacidae). *Gene* 331: 65-72.
34. *Loughnan, S.R., Baranski, M.D., Robinson, N.A., Jones, P.L., and Burridge, C.P. 2004. Microsatellite loci for studies of wild and hatchery Australian Murray cod *Maccullochella peelii peelii* (Percichthyidae). *Molecular Ecology Notes* 4: 382-384.
35. Burridge, C.P. 2004. *Cheilodactylus (Goniistius) francisi*, a new species of morwong (Perciformes: Cirrhitidae) from the southwest Pacific. *Records of the Australian Museum* 56: 231-234.
36. *Munasinghe, D.H.N., Burridge C.P., and Austin, C.M. 2004. The systematics of freshwater crayfish of the genus *Cherax* Erichson (Decapoda: Parastacidae) in eastern Australia re-examined using nucleotide sequences from 12S and 16S rRNA genes. *Invertebrate Systematics* 18: 215-225.
37. *Munasinghe, D.H.N., Burridge, C.P., and Austin, C.M. 2004. Molecular phylogeny and zoogeography of the freshwater crayfish genus *Cherax* Erichson (Parastacidae; Decapoda) in Australia. *Biological Journal of the Linnean Society* 81: 553-563.
38. Gold, J.R., and Burridge, C.P. 2004. Historical population dynamics of red snapper (*Lutjanus campechanus*) in the northern Gulf of Mexico. *Texas Journal of Science* 56: 157-170.
39. *Gold, J.R., Saillant, E., Burridge, C.P., Blanchard, A., and Patton, J.C. 2004. Population structure and effective size in critically endangered Cape Fear shiners *Notropis mekistocholas*. *Southeastern Naturalist* 3 (1): 89-102.
40. Farrington, L.F., Austin, C.M., Burridge, C.P., Gooley, G.J., Ingram, B.A., and Talbot, B. 2004. Allozyme diversity in Australian rainbow trout, *Oncorhynchus mykiss* (Walbaum). *Fisheries Management & Ecology* 11: 97-106.

2003

41. Burridge, C.P., and Smolenski, A.J. 2003. Lack of genetic divergence found with microsatellite DNA markers in the tarakihi *Nemadactylus macropterus*. *New Zealand Journal of Marine and Freshwater Research* 37: 223-230.
42. Burridge, C.P., and Gold, J.R. 2003. Genetic variation in the endangered Cape Fear shiner, *Notropis mekistocholas* (Cyprinidae). *Conservation Genetics* 4: 219-225.

2002

43. Burridge, C.P. 2002. Antitropicality of Pacific fishes: molecular insights. *Environmental Biology of Fishes* 65: 151-164.

2001

44. Gold, J.R., Burridge, C.P. and Turner, T.F. 2001. A modified stepping-stone model of population structure in red drum, *Sciaenops ocellatus* (Sciaenidae) from the northern Gulf of Mexico. *Genetica* 111: 305-317.

2000

45. Burridge, C.P. 2000. Biogeographic history of cirrhitoids (Perciformes: Cirrhitidae) with east-west allopatric distributions across southern Australia, based on molecular data. *Global Ecology and Biogeography* 9: 517-525.
46. Burridge, C.P., and White, R.W.G. 2000. Molecular phylogeny of the antitropical subgenus *Goniistius* (Perciformes: Cheilodactylidae: *Cheilodactylus*): evidence for

multiple transequatorial divergences and non-monophyly. *Biological Journal of the Linnean Society* 70: 435-458.

47. Burridge, C.P. 2000. Molecular phylogeny of the Aplodactylidae (Perciformes: Cirrhitidae), a group of Southern Hemisphere marine fishes. *Journal of Natural History* 34: 2173-2185.
48. Burridge, C.P., and Smolenski, A.J. 2000. Microsatellite loci from the marine fish *Nemadactylus macropterus* (Perciformes: Cheilodactylidae). *Molecular Ecology* 9: 1180-1181.

1999

49. Burridge, C.P. 1999. Molecular phylogeny of *Nemadactylus* and *Acantholatris* (Perciformes: Cirrhitidae: Cheilodactylidae), with implications for taxonomy and biogeography. *Molecular Phylogenetics and Evolution* 13: 93-109.
50. Waters, J.M. and Burridge, C.P. 1999. Extreme intraspecific mitochondrial DNA sequence divergence in *Galaxias maculatus* (Osteichthys: Galaxiidae), one of the World's most widespread freshwater fish. *Molecular Phylogenetics and Evolution* 11: 1-12.
51. Burridge, C.P. 1999. Suggestion of synonymy for *Nemadactylus* and *Acantholatris* (Perciformes: Cirrhitidae). In Seret, B and Sire, J.-Y (eds) *Proceedings of the 5th Indo-Pacific Fish Conference, Noumea 1997*. pp 413-416. Society of French Ichthyologists, Paris.

1998

52. Burridge, C.P. 1998. Evolutionary genetics of the cheilodactylid fish genera *Nemadactylus* and *Acantholatris* (Perciformes: Cheilodactylidae). In Hill, R.S. (ed). *Evolutionary Biology at High Southern Latitudes*. pp 9-16. Australian Institute of Biology, Fortitude Valley, Australia.

4. RESEARCH GRANTS

Total awarded: \$1,507,000

1. **Burridge, C.P.**, Jones, M.E., Brüniche-Olsen, A., Austin, J.J., and Murchison, L. "Effects of DFTD on genetic diversity in the Tasmanian Devil". Eric Guiler Grant (2011): \$30,000
2. **Burridge, C.P.** "Grant-Scientific Visit to Taiwan: Genetic Variation in the Indo-Pacific Fish Genus *Acanthopagrus*". Australian Academy of Science (2010): \$4,200.
3. **Burridge, C.P.**, Austin, J.J., Pridell, D., Carlile, N., Worthy, T.P. "Conservation genetics of the Providence Petrel". Seaworld Research and Rescue Foundation (2011): \$20,000.
4. Jordan, G.J., Baker, S.C., Spies, T.A., **Burridge, C.P.**, Wardlaw, T.J., and Franklin, J.F. "Managing variable retention harvesting to maintain forest biodiversity—effects of forest influence and successional stage on recolonisation". Australian Research Council – Linkage (2010-2012): \$AUS355,000.
5. **Burridge, C.P.**, McQuillan, P., Bell, P., Hawkins, C. "Conservation of Ptunarra Brown Butterfly" Winifred Violet Scott Charitable Trust (2009): \$30,000.
6. **Burridge, C.P.** "Evolution of pufferfishes and their allies". University of Tasmania Internal Research Grants Scheme (2010): \$23,353.
7. **Burridge, C.P.** "8th Indo Pacific Fish Conference". University of Tasmania Internal Research Grants Scheme (2009): \$1,085.
8. **Burridge, C.P.** "Evolutionary Relationships among Galaxiid Fishes". University of Tasmania New Appointees Research Grant Scheme (2009): \$4,842.
9. Waters, J.M., Wallis, G.P., Craw, D., Norris, P., **Burridge, C.P.** 2005-2007. "Geological dates and evolutionary rates: using river vicariance to pinpoint the pace of molecular change". Marsden Fund (New Zealand): \$NZ826,555.
10. **Burridge, C.P.**, Austin, C.M., and Dann, P. "Conservation of the Little Penguin". Australian Research Council – Linkage APAI (2004-2006): \$AUS90,000.

11. **Burridge, C.P.**, Cooke, R., and Norman, J.A. “A molecular investigation of Powerful Owl ecology and conservation”. Deakin University – Central Research Grants Scheme: \$AUS20,000.
12. **Burridge, C.P.** “Conservation genetics of Little Penguin”. Deakin University – Research Priority Area seeding grant (2003): \$AUS4,000.
13. **Burridge, C. P.** “Population genetics of black bream, *Acanthopagrus butcheri*”. Deakin University, School of Ecology & Environment seeding grant (2003): \$AUS2,000.
14. Gold, J.R., and **Burridge, C.P.** “Conservation genetics of Cape Fear shiner, *Notropis mekistocholas*”. U.S. Fish & Wildlife Service (2001-2002): \$US97,000.

5. PUBLICATIONS REFEREED

- | | |
|---|--|
| 1. <i>Evolution</i> | 14. <i>Freshwater Biology</i> |
| 2. <i>Molecular Ecology</i> | 15. <i>Marine and Freshwater Research</i> |
| 3. <i>Systematic Biology</i> | 16. <i>Biological Journal of the Linnean Society</i> |
| 4. <i>Molecular Biology & Evolution</i> | 17. <i>Journal of Biogeography</i> |
| 5. <i>Journal of Animal Ecology</i> | 18. <i>Copeia</i> |
| 6. <i>Molecular Phylogenetics & Evolution</i> | 19. <i>Journal of Fish Biology</i> |
| 7. <i>Human Biology</i> | 20. <i>Australian Journal of Zoology</i> |
| 8. <i>Conservation Genetics</i> | 21. <i>Species Diversity</i> |
| 9. <i>Heredity</i> | 22. <i>New Zealand Journal of Zoology</i> |
| 10. <i>Marine Ecology Progress Series</i> | 23. <i>Fisheries Research</i> |
| 11. <i>Journal of Experimental Marine Biology
& Ecology</i> | 24. <i>Biochemical Genetics</i> |
| 12. <i>BMC Evolutionary Biology</i> | 25. <i>Biologia</i> |
| 13. <i>Marine Biology</i> | 26. <i>Marine Biodiversity Records</i> |
| | 27. <i>Estuaries and Coasts</i> |

6. FUNDING AGENCY REFEREE

Australian Biological Resources Study
 National Science Foundation (USA)
 Marsden Fund (New Zealand)
 Leverhulme (Royal Society of London)

7. PROFESSIONAL ASSOCIATIONS

- Associate Editor *Diversity and Distributions*
- Associate Editor *Journal of Ichthyology*
- Editorial Board, *Frontiers in Biogeography*
- Member, Society of Australian Systematic Biologists
- Member, Australian Society for Fish Biology

8. EDUCATION

i. Graduate Certificate in University Teaching and Learning

University of Tasmania (2009-2011)

ii. Doctor of Philosophy

School of Zoology, University of Tasmania, Hobart, Australia (1996-1999)

"Evolutionary genetics of cirrhitoid fishes (Perciformes: Cirrhitidae)"

- Molecular phylogenetics and biogeography of cirrhitoid fishes
- Population genetics of *Nemadactylus macropterus* based on microsatellites

iii. Bachelor of Science (Honours)

School of Zoology, University of Tasmania, Hobart, Australia (1995)

"Phylogeny of cheilodactylid and latrid fishes"

- Preliminary analysis of cheilodactylid and latrid fish phylogeny using mitochondrial DNA sequence data.

iv. Bachelor of Science

University of Tasmania, Hobart, Australia (1992-1994)

Major: Marine, Antarctic, and Freshwater Biology, half-major in Genetics