Invertebrate Systematics - Past and Future

Over the last seven years the journal has gone through a number of significant changes, most important of which have been: a change of name to its current title Invertebrate Systematics, a change in geographic coverage to give the journal a truly global focus, and a shift in its scientific scope from a principally taxonomic journal to one that combines revisionary systematics, molecular and morphological phylogenetics and biology within a more contemporary evolutionary framework. Over this time, the sources of published papers have shifted from being predominantly Australasian to, in 2005-2007, coming from North America, Australasia and the rest of the world in almost equal proportions, while in the last two years, 2007-2008, the number of papers from Australasia has decreased further, and the proportion from other regions increased. The number of submissions has also been increasing and this has been matched by a significant increase in the number of papers downloaded from the journal's website. At the same time, the journal's impact factor has increased from 0.58 in 2002 to 1.66 in 2007.

A further development by the journal since 2002 has been the production of special issues. These issues have included Short-Range Endemism in the Australian Biota (Vol. 16(4), 2002), Lepidopteran Systematics and Biology: A Tribute to Ebbe S. Nielsen (Vol. 17(1), 2003), and Subterranean Connections: Biology and Evolution in Troglobiont and Groundwater Ecosystems (Vol. 22(2), 2008).

During the last seven years, the journal has been headed by a Managing Editor, Dr Camilla Myers, who was employed by CSIRO Publishing in this capacity, with an international Editorial Advisory Committee providing editorial guidance. Camilla has been a superb editor and has provided excellent professional guidance and direction. She has been instrumental in developing a close network of authors and willing referees, and has steered the journal through a series of positive changes that have resulted in its current high standing. In this process,

Camilla has been ably assisted by a highly skilled editorial and production team, who have worked to reduce publication times to no more than three months in most cases and to generate high-quality, error-free proofs incorporating first-class graphic work.

What of the future? During 2008, CSIRO Publishing moved to a more international editorial model with each of its journals being overseen by an Editor-in-Chief supported by a group of Editors or Associate Editors to handle submitted manuscripts. As part of this process, Camilla has been appointed to the new position of Journals Publisher for the animal biology and ecology journals, including Invertebrate Systematics. I have been appointed as the first Editor-in-Chief of Invertebrate Systematics along with a formidable and highly experienced group of Editors, who are listed below with their specific expertise and interests. I have to admit to being somewhat daunted by this position, but I am also looking forward to the challenge. With this new group of Editors I hope will also come a number of new initiatives to be introduced over the next couple of years. Some ideas are already being implemented and include the active recruitment of specialist opinion pieces on topical and controversial subjects, new targeted special issues, and a further increase in the quality of published papers. This, of course depends on you as authors submitting such manuscripts and we look forward to receiving them. Among the first changes to the journal is the introduction of a colour image on the front cover as you will have noticed in this the first issue of 2009.

Finally, I have great pleasure in introducing you, as the readers of *Invertebrate Systematics*, to the new Editorial Board, and I look forward to meeting with you if and when the opportunity arises.

Professor Andy Austin Editor-in-Chief, *Invertebrate Systematics*

Editorial Board

Andy Austin is Editor-in-Chief of *Invertebrate Systematics*. He has studied at several universities in Australia and overseas, and is a founding member of the Australian Centre for Evolutionary Biology and Biodiversity at The University of Adelaide, South Australia where he has been on staff since 1985. His major research interests focus on the taxonomy, biology and molecular phylogenetics of parasitic wasps, the evolution of host–parasitoid interactions, and the diversity and phylogeography of groundwater arthropods.



Invertebrate Systematics Editorial

Robert Anderson is a research scientist at the Canadian Museum of Nature, Ottawa. His research interests include the systematics and evolution of Curculionoidea, particularly the family Curculionidae (weevils) and especially of the New World, but also generally of weevils worldwide. At present he is a co-Principal Investigator on an NSF-sponsored study examining the distribution, diversity and systematics of leaf litter arthropods of Meso-America.

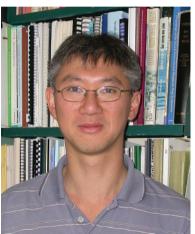
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Shane Ahyong is a Research Scientist at the National Institute of Water and Atmospheric Research, Wellington, New Zealand (NIWA), where he is manager of the Biodiversity and Biosecurity Group. In 1999 he joined the Australian Museum as a Research Fellow, before moving to NIWA in 2006. He is a world authority on the phylogeny and systematics of stomatopod and decapod Crustacea. His ongoing research focuses on crustacean systematics, phylogenetic methods and biological invasions.

Lyn Cook is a faculty member in the School of Biological Sciences at The University of Queensland. She is interested in the integration of molecular phylogenies and biological data to address questions about the evolution of both plants and insects. Her research centres around the molecular systematics, biogeography and evolution of plants and insects, and their interactions. Her doctoral studies were undertaken at The Australian National University in the Evolution, Ecology and Systematics program, where she specialized in the molecular systematics and evolution of scale insects.

Greg Edgecombe has recently taken up an appointment as a senior researcher in the Department of Palaeontology at The Natural History Museum, London, after spending 14 years as a Research Scientist at the Australian Museum. His research interests include integrating anatomical, molecular and palaeontological evidence for examining deep relationships in the Arthropoda; the systematics of centipedes (Chilopoda), utilising sequence data and comparative morphology; and taxonomic projects on Scutigeromorpha, Lithobiomorpha and Scolopendromorpha, especially their southern-hemisphere diversity.









Gonzalo Giribet is Professor of Organismic and Evolutionary Biology and Curator of Invertebrates at the Museum of Comparative Zoology, Harvard University. He undertook postdoctoral research at the American Museum of Natural History in New York. He is interested in the origins and maintenance of animal diversity and his research focuses on various aspects of invertebrate systematics, biogeography and population genetics, as well as theoretical aspects of phylogenetics. Research in his laboratory uses both morphological and molecular characters to study phylogenetic, biogeographic and phylogeographic patterns. His groups of interest include arthropods, molluscs, sipunculans, nemerteans, onychophorans and tardigrades, among others.

Rudolf Meier is Associate Professor at the National University of Singapore (NUS). He was on the academic staff of Copenhagen University before joining the NUS. He conducts research in three areas. First, he contributes to the assembly of the Tree-of-Life for Diptera based on morphological and DNA sequence data. Second, he studies the use of DNA sequences for taxonomic and identification purposes, testing the efficacy of DNA barcoding and DNA taxonomy based on broad surveys of COI sequence variability in Metazoa and Sepsidae (Diptera). In particular, he is interested in whether widespread species have large intraspecific, genetic variability and/or contain cryptic species-level diversity. Third, he is studying the evolution of Sepsidae with its remarkable mating behaviour and sexual dimorphisms.

Heather Proctor has been working on the biology of mites (Acari) since her undergraduate days at the University of Alberta in the 1980s. After several years at Griffith University in Queensland, she returned to the University of Alberta, where she is now an Associate Chair of Research. Her greatest research efforts have been directed towards a phylogenetically informed understanding of the predatory ecology, mating behaviour, and anti-predator mechanisms of water mites (Parasitengona: Hydrachnidia), and of the diversity and host-relationships of feather mites (Astigmata: Analgoidea and Pterolichoidea). In 1999, she and Dave Walter wrote *Mites: Ecology, Evolution and Behaviour* as a basis for their use as models for testing theory and as fascinating animals in their own right.

Greg Rouse is a Professor of Marine Biology at Scripps Institution of Oceanography in California, where he also serves as curator of the Benthic Invertebrate Collection. Prior to joining Scripps in 2006, he worked at the South Australian Museum and The University of Adelaide, The University of Sydney and the Smithsonian Institution. His research interests lie in the phylogeny and diversity of marine animals, particularly annelids and echinoderms, but also the overall metazoan tree of life. In recent years he has become involved in deep-sea research. So far this has involved studies on whale-fall fauna such as *Osedax*, the extraordinary bone-devouring worm, and other newly discovered annelids from hydrothermal vents and cold seeps of the eastern and western Pacific.



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Nikolaj Scharff has been a postdoctoral fellow at the Smithsonian Institution, Washington D.C., after which he took up a position as Curator of Arachnida at the Zoological Museum, University of Copenhagen, where he is now an Associate Professor. His research interests include: the phylogeny, taxonomy and comparative morphology of spiders, particularly the superfamily Orbicularia; the historical biogeography of the spider fauna of the southern hemisphere with an emphasis on the Afromontane spiders; estimations of species richness among spiders in tropical ecosystems; and the functional morphology of spider genitalia.



Jonathan Waters is an Associate Professor in Zoology at the University of Otago in New Zealand. His research program focuses on the molecular systematics, phylogeography and evolution of southern hemisphere marine and freshwater biota. His current projects are centred on the use of freshwater vicariant events to calibrate molecular clocks, and the importance of macroalgae as facilitators for long distance rafting of marine invertebrates. In 2006 Jon was awarded an Early Career Award for Distinction in Research from the University of Otago.

