Flinders Bioknowledge

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Mike completed his doctoral work at Monash University in 1987. A succession of post-doctoral fellowships followed at La Trobe University. His Flinders University lectureship began in 1993, initially teaching in animal behaviour.

He coordinates an active programme of research with people at the Evolutionary Biology Unit within the South Australian Museum where the DNA-based component of the phylogenetic projects is hosted.

Through collaborative research projects, he has developed and maintains ties with researchers from Simon Fraser University (Canada), Lausanne University (Switzerland), University of Pretoria (South Africa), University of the Witwatersrand (South Africa) and the CSIRO Division of Entomology (Canberra).

Mike’s research group conducts projects focussed on several inter-related topics involving social insects. The insect subjects of choice are native bees and thrips. Research involves the use of molecular data and field ecology techniques. They have facilities and equipment to operate in both field and laboratory environments.

Current Research Projects

- intrinsic and extrinsic factors underlying social evolution in bees
- social behaviour, sex allocation and molecular phylogenetics of thrips
- assessing reproductive skew theories using allodapine bees
- social evolution and phylogenetics of African and Australian allodapine bees behaviour and ecology of carpenter bees

Over the last couple of years Mike’s research has had increased focus on allodapine species from Madagascar, and more recently expanding into Kenya. The initial work here was aimed at obtaining data on additional taxa for phylogenetic comparative approaches to the evolution of sociality and sex allocation. However, phylogenetic components to this work have thrown up some interesting puzzles and these are forming the basis for new projects in the future.