

Process

There are two streams of Honours projects. The **Discovery Stream** develops the skills needed for original research in Zoology. Previous projects are listed under the **Research Groups**. The **Links Stream** focuses on skills to conduct applied research in an Industry context. These projects involve a co-supervisor from an industry or government agency, such as Parks Victoria. Previous projects are listed in the **Links Stream** section.

You should review the research groups in the Department and decide on an area of research that interests you. Take time to discuss available projects with potential supervisors; it's important to choose an area of research you really like! You should aim for 2 or 3 options. If the Department cannot place you with your first choice of project, it is better to have a second option.

Once you are ready to apply, download and read the following three documents from the website:

www.zoology.unimelb.edu.au/honours.htm

- checklist for making an application
- Department of Zoology application coversheet
- Faculty of Science application form for admission to Honours

OR.....

Obtain these documents in an information booklet available from the Head of Department's Office.

Negotiations with Honours supervisors can be for either semester but supervisors fill most places for both semesters in the main negotiating period **in second semester**. So get in fast!!!

Most offers are made early December and attempts will be made to notify applicants before Christmas. However, negotiations for projects can continue and additional offers will be made until the courses start.

Students who have not been notified should contact the coordinators for more information.

Links Stream

The program comprises a project linked to, co-supervised by, or designed to be of practical value to industry, a government agency or other user of biological information. It focuses on the development of skills such as writing clear and concise reports, and good oral communication for industry or government agencies. You will also learn how biological training is utilised by industry or government agencies and how to develop links with such bodies. **For further information** on the Links Stream in Zoology, please contact the Links coordinator, Dr Rob Day (r.day@unimelb.edu.au).

Previous projects:

- Abundance, behaviour and aversive conditioning of Common Wombats at Wilsons Promontory National Park
- New methods for conditioning and spawning the greenlip abalone (*Haliotis laevigata*) in an aquaculture facility

Research Groups

Conservation and Wildlife Biology

Dr Graeme Coulson
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Dr Kath Handasyde/Dr Jenny Martin
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Dr Terry Fletcher
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Dr Michael Kearney
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Previous/potential projects:

- Contraceptive strategies for marsupial populations
- Faecal pellet output and decomposition rates of wild sambar in the Yarra Ranges
- Reproductive ecology of the long nose potoroo
- Climate-animal interactions: ecophysiology, modelling species distributions, impacts of climate change

Marine Biology

Prof Mick Keough
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Prof David Macmillan
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Dr Rob Day
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Dr Steve Swearer
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Dr Nicole Barbee
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Dr Jeremy Hindell (PIRVic)
Jeremy.Hindell@dpi.vic.gov.au
Dr Robin Wilson
rwilson@museum.vic.gov.au

Previous/potential projects:

- Behavioural analysis of crustaceans
- Systematics, taxonomy and settlement ecology on hard substrates of Serpulidae fauna
- Predation on early post settlement sessile invertebrates in Port Phillip Bay, Australia
- Olfactory and locomotory capabilities of temperate reef fish larvae

Animal Behaviour

Prof Mark Elgar
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Dr Raoul Mulder
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Dr Matt Symonds
symondsm@unimelb.edu.au
Dr Jane Melville
jmelv@museum.vic.gov.au
Dr Devi Stuart-Fox (in Jan 2007)

Previous/potential projects:

- Social control of the status signalling in the Black Swan
- Cryptic speciation in the savannahs of northern Australia: phylogeography of agamid lizards
- Sexual selection: sperm competition and cryptic female choice
- Role of pheromones in animal social and mating behaviour

Reproduction & Development Physiology

*Prof Marilyn Renfree
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Dr Shuliang Cui
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Prof Roger Short
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Previous/potential projects:

- Reproductive tract disorders in female relaxin gene knockout mice
- Genes in the sexual differentiation pathway
- Derivation of hepatocytes from mouse embryonic stem cells
- Maturation of gametes in vitro in the marsupial *Sminthopsis macroura*
- Genomics and bioinformatics of the lactation system
- Control of male development in marsupials
- Regulation of uterine artery blood flow in pregnancy
- Identification and expression of oocyte-specific factors in the dunnart
- The regulation of germ cells in marsupial reproduction
- Do conjoined bovine twin fetuses exchange stem cells?

KanGo GROUP

[ARC Centre for Kangaroo Genomics; * on previous page for Melbourne University staff involved]

Previous/potential projects:

- Spermatogenesis genes on the X chromosome
- Evolution of genomic imprinting
- Microarrays of marsupial EST libraries
- Genomic biology of the placenta

For further information on **KanGo**, please contact m.renfree@unimelb.edu.au

CESAR GROUP

[Centre for Environmental Stress and Adaptation Research]

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Dr Martina Bernard
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Dr Melissa Carew
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Previous/potential projects:

- Developing DNA markers for identifying aquatic invertebrates for monitoring pollution
- Control of mite and insect pests in vineyards and in the grains industry
- Biology of rainforest invertebrates and their potential to counter climate change
- Maintenance of evolutionary potential in asexual species
- Developing invertebrate indicators of sustainability in agricultural ecosystems
- Understanding the population structure of invasive fish, moths and leafminers

For further information on **CESAR**, please contact ary@unimelb.edu.au



Department of Zoology

Discover Honours

2007

**For further information see
our webpage at:**

www.zoology.unimelb.edu.au

or contact us on 8344 6254