

# Summary of Successful Linkage - Projects Proposals for Funding to Commence in 2010 by State and Organisation

## Victoria

### La Trobe University

**LP100100339** Dr Benjamin P Kear, Dr Michael S Lee, Prof Patricia A Vickers-Rich, Dr Stephen McLoughlin, Mr Scott A Hocknull, Dr Thomas H Rich

**Approved Project Title** **Mesozoic Austral Biodiversity: Research and Regional Museum Applications**

2010 \$190,000.00

2011 \$190,000.00

2012 \$220,000.00

Primary FoR 0403 GEOLOGY

#### Partner Organisations

Australian Age of Dinosaurs Museum, Australian Opal Centre, Museum Victoria, Outback Gondwana Foundation, Queensland Museum, South Australian Museum

**Administering Organisation** La Trobe University

#### Project Summary

The impact of environmental alteration on Australia's biodiversity has poorly understood long-term effects. This project examines the controversial biogeography and evolution of Australia's biodiversity during the Age of Dinosaurs (mid-Cretaceous ~100 MYA) and their adaptational responses to climatic change. Fossils readily capture the public imagination and thus help promote complex scientific concepts in the global media. This project raises awareness about sustainable use of non-renewable fossil resources through public education and ecotourism fieldwork programs; these will help generate local interest and thus protection of sensitive fossil localities by highlighting them as lucrative tourism assets for regional communities.

**LP100100513** Dr Roman Makarevich

**Approved Project Title** **Plasma layers, waves and fountains: Probing the ionosphere with over-the-horizon radars**

2010 \$68,558.00

Primary FoR 0201 ASTRONOMICAL AND SPACE SCIENCES

#### Partner Organisations

IPS Radio and Space Services

**Administering Organisation** La Trobe University

#### Project Summary

The ionised layers of the Earth's upper atmosphere – the ionosphere - bend radio waves emitted by HF radio communication and radar surveillance systems allowing detection of targets beyond the horizon. This research will provide direct scientific support to this infrastructure including the \$1.8B Australian coastal surveillance radars used to locate and track ships and planes in our region and radio communication links used by military personnel and civilians living or travelling in Australia's remote territories. This project will also provide training in areas highly relevant to our partners in government and defense, potentially improve efficiency of scientific and military radars, and thus contribute to improving national security.