## Consolidated list of research projects

Advice provided by the CACLD, recommendations from the Scoping Study, and outcomes from the Lyme Disease Round Table Meeting have revealed potential research projects that would assist in clarifying the Australian Lyme disease-like syndrome. The consolidated list of these research projects are presented below in no particular order. Further details for the first seven projects are provided in <a href="the Department of Health's response to Prof. John Mackenzie's Scoping Study">the Department of Health's response to Prof. John Mackenzie's Scoping Study</a>.

- \* Retrospective investigation of chronic cases of Lyme disease like syndrome.
- Clinical studies of patients presenting with symptoms suggestive of Lyme disease or Lyme disease-like syndrome.
- ❖ Experimental programme to determine whether there is a *Borrelia* species in ticks in Australia causing Lyme disease-like syndrome, or whether another tick-borne pathogen is involved in human Lyme disease-like syndrome.
- ❖ Do we have the best reagents for detecting novel *Borrelia* species, including *B. miyamotoi*, especially in clinical specimens?
  - A validation study on the methods currently used in Australian laboratories and if possible relevant international laboratories to diagnose borreliosis.
- Are Australian ticks competent to maintain and transmit *B. burgdorferi* s.l. genospecies, or other *Borrelia* species associated with relapsing fever?
- Epidemiological research
  - An initial epidemiological study into patients presenting with symptoms of a Lyme disease-like syndrome in Australia.
  - An epidemiological study on returned travellers from overseas endemic areas.
- **Section** Examine parallels with other countries that have detected a novel *Borrelia* species.
- Research into the incidence of neuroborreliosis cases using cerebrospinal fluid samples already collected from aseptic meningitis patients.
- A clinical randomised control trial (blinded) on the treatment of patients diagnosed with Lyme diseaselike syndrome.
- The development of a register of patients with chronic neurological symptoms in partnership with neurologists and treating GPs to compare if treatment with antibiotics demonstrates any improvement in patient outcomes.
- The role of the host immunological response in the pathophysiology of infection caused by *Borrelia* species and the implications for diagnostic testing.
- Research into tick bite allergies and the prevention of tick bites in Australia.

## **Research funding**

Potential researchers are asked to note that the Department of Health is not a research funding agency.

The majority of Australian Government health and medical research funding is administered by the National Health and Medical Research Council (NHMRC). The Australian Research Council (ARC) has funded some

Special Research Initiatives in the health and medical areas however the ARC does not generally fund medical research. The ARC Medical Research Policy is available on the <u>ARC web site</u>. Researchers may also seek other avenues for funding including the higher education sector, business sector or the private non-profit sector.