

Priobe : a specific, biological initiating or priming agent, implicated as the sufficient and necessary antecedent cause of an infection

The turn of a year is a good time to review the challenges of the past year and anticipate what the coming year has in store for the *Priobe Network*.

2010 in review

- viral infections
- [influenza](#) A/H1N1 (2009)
- dengue & other [arboviruses](#)

- [bacteræmia](#)
- [tuberculosis](#)
- [malaria](#)
- [carpox](#)
- [Lab Without Walls](#)
- [Wilderness & Expedition Medicine](#)

Facing up to 2011

The main theme this year will be placing clinical microbiology closer to the patient, whether septicaemia patients in a teaching hospital emergency department, regional hospitals in our own State, or under-resourced locations in the developing world.

- **rapid confirmation of bacteræmia**
- **earlier high sensitivity detection of Mycobacteria**

- **early, high sensitivity detection of malaria parasites**

It follows that we will have to sharpen up rapid identification of bacteria, viruses, parasites and fungi in clinical samples, including blood. The work-horse will increasingly be molecular methods, particularly by nucleic acid amplification.

- **rapid detection of tropical bacterial infections**
- **molecular analysis of multi-resistant invasive bacteria**

Emerging molecular microbiology techniques have allowed us to take a growing test repertoire out of the large reference centres and into the field in proof-of-concept activities, usually of one to two weeks' duration. In 2011 we will improve our appreciation of logistic and quality assurance aspects of this work in order to establish a sustained laboratory contribution to clinical decision-making beyond the boundaries of the main metro area.

- **operation of molecular microbiology in regional centres**
- **molecular reagent regional supply chain & QC**

There is a growing awareness of the potential to influence the outcome of serious infections by placing clinical laboratory support close to the point of care. We believe this will most evident when molecular enhancements to clinical laboratory services are field-led, particularly in regional centres.

- **support from *Lab Without Walls***

This year we intend to examine more closely how environmental health threat assessments can be used to inform specific enhancement to the clinical lab. Northwestern Australia should be front and centre of our concerns with its key contribution to the State through mining, agriculture and tourism.

- **geographic analysis of infective agents**

It's going to be a busy year. Why not join the action? Follow the [MicroGnome](#) on Facebook, Twitter or via our RSS feed.

For specific priobes click on highlighted text below or 'Priobe' on menu to right of screen:

- [Burkholderia pseudomallei](#) (Melioidosis)
 - [Plasmodium](#) species (Malaria)
 - [Arboviruses](#) (dengue, yellow fever etc)

 - [Neglected bacterial diseases](#) (Leptospirosis, Scrub Typhus, Melioidosis)
 - Rabiesvirus & other Lyssaviruses ([Rabies](#))
 - [Schistosoma](#) (schistosomiasis)
 - [Leishmania species](#) (leishmaniasis)
-

Regular features:

1. μ Gnome: regular updates by the MicroGnome (<http://micrognome.priobe.net>), a site supported by the [LifeInTheFastLane](#) medical educators at the UTEM with [Fascinellas](#) and [Crazy Bug Hunters](#).

For expedition reports, see the [Expeditions](#) section of the MicroGnome site.

2. [Lectures on line](#) : open source teaching media (publications)
3. [Self-directed learning](#) : self-assessment questions and clinical case outlines

4. [Language of Infection](#) : an off-the-wall introduction to medical microbiology
5. [Conference reports](#) : personal notes on specialist meetings.