

Partners in innovation

A modest focus on the activities of three of our Publishing Partners for 2010. Each has elected to support us throughout the year, and in return we've asked them to tell us a little more about them.

We have had the Publishing Partnership programme with commercial companies for a number of years but this year we decided that we'd add a dedicated page to feature some of their activities. We appreciate their investment which is very much an enabling facet for the journal, and with this issue we are pleased to feature two new members to the club: **Inverness Medical Innovations** and **Partec GmbH**; and one old-stager in **GSK Pharmaceuticals**.

Inverness Medical Innovations, Inc. is at the forefront of the convergence between medical diagnostic testing and health management. The company is a major global developer, manufacturer, and marketer of advanced, pioneering professional and consumer medical diagnostic products, as well as a leader in specialised health management services. Its latest area of focus in diagnostics is the application of patented technologies and professional diagnostics products, principally in the fields of infectious disease, cardiology, oncology, drugs of abuse, and women's health. The health management programmes provide interventions designed to cover the entire lifespan from pre-cradle (maternity programmes) to end-of-life care (complex care programmes).

Identifying HIV-infected individuals is critical for two reasons. Firstly, undiagnosed individuals miss out on the opportunity to receive timely, highly active antiretroviral therapy and secondly, individuals unaware of their HIV status are disproportionately responsible for new infections. The benefits of expanding HIV screening in countries where there are high rates of prevalence are significant. However, poor and resource limited environments have no access to recent technologies such as NAAT to detect early infections in a point-of-care and cost-effective approach.

Combined HIV antigen and antibody tests (4th generation) enable earlier detection of HIV infection than that afforded by antibody-only-tests (3rd generation). Rapid 4th generation screening tests designed for use at the point-of-care have not been commercially available, until now. A novel immunochromatographic rapid test, the Determine HIV 1/2 Ag/Ab Combo, enables the simultaneous differential detection of HIV-1 p24 antigen and antibodies to HIV-1 and HIV-2 in human serum, plasma or whole blood. Performance of the Determine HIV 1/2 Ag/Ab Combo has been evaluated at nine clinical sites in Africa, Asia, Europe, and Latin America. It improves upon the detection of HIV infection as compared to 3rd generation assays by detecting the presence of viral antigen before the appearance of antibodies. Due to separate signals for HIV-1 p24 antigen and HIV antibodies it enables rapid detection of acute infection cases. Moreover, the test is suitable for use in the developing world where

equipped laboratory infrastructures are limited.

HIV remains an important public health issue that continues to demand evolution of testing technologies and testing algorithms, as well as sustained funding and involvement of laboratories.

Partec from Germany is also working in the HIV field and specifically targets the measurement of CD4+ T-lymphocytes which lead to CD4 cell destruction. It is the critical measure to assess a patient's immune status and as described elsewhere in this edition of *Africa Health*, WHO has recently recommended a significant increase in the point at which antiretroviral treatment should commence.

Partec's CyFlow® instruments are clinically validated and employ a true volumetric absolute counting technology and a new no lyse-no-wash preparation protocol. With this technology, HIV monitoring by highly precise CD4+ T-cell counting now is possible at an affordable cost level of only US\$2–3 per test. This particular technology is extremely robust and designed for use in resource-poor areas far away from the central laboratories.

Recently, **Partec** introduced a unique 'dry'/lyophilised mAb reagent kits for flow cytometric enumeration of CD4 T-cells and CD4% (percentages among lymphocytes). For the first time, the need for cold chain and cold storage is therefore eliminated. Especially for Africa this is an important breakthrough in order to improve patient support programmes which often lack the required infrastructure and consistent electricity/power lines.

GlaxoSmithKline is of a size which means that it is rarely out of the news, but it has recently been positioning itself to take a lead among 'big pharma' in trying to redress some of the imbalances in research against some of the diseases of the tropics. Its latest initiative is an 'open innovation strategy' which allows US\$8 million of seed funding for an Open Lab for new research; puts 13 500 malaria compounds from its library of research onto the open market; and introduces a new collaboration to share intellectual property for neglected diseases. The company has also pledged to create a sustainable pricing model for the world's most advanced malaria candidate vaccine.

In a speech given at the Council on Foreign Relations in New York, GSK's Chief Executive, Andrew Witty said, 'Since I took over at **GSK** I have been focused on changing the business model for the company to improve performance. But equally important is the imperative to earn the trust of society, not just by meeting expectations, but by exceeding them.'

'We want to be a company that is truly a partner in addressing the healthcare challenges in the world's poorest countries, no matter how difficult they are.'