

SPECIAL FEATURE

THE AURUM INSTITUTE

This month *Mining News* begins a series of features showcasing the projects currently underway at The Aurum Institute, an internationally recognised, specialist research and health systems management organisation based in Johannesburg.

Aurum focuses on TB and HIV prevention, treatment and care. The negative impact of the poor understanding and management of these epidemics is vast, affecting individuals, communities and economies, so Aurum is dedicated to improving the understanding and treatment of TB, HIV/AIDS and workplace disease in developing countries. Aurum receives grants for research and other activities from South African and international agencies and institutions for this work.

Aurum was originally founded as Aurum Health Research by AngloGold Ashanti in 1998, in recognition of the fact that most of South Africa's mineral deposits are found in remote areas not serviced by state or private health services. As a result, Aurum was set up as the industry's own medical service to care for the needs of its workforce.

Aurum Health Research was originally established to unite the large body of *ad hoc* research, treatment knowledge and scientists working on or with the mines, into one institution. It was tasked with conducting research into the surveillance, treatment and management of epidemic, occupational and other diseases occurring among mineworkers and their dependents. Aurum later expanded its activities beyond mining industry needs, especially in response to international demand for quality treatment and research sites and programme development around HIV/AIDS-related projects.

In 2005 The Aurum Institute was promulgated as an independent, not-for-profit Public Benefit Organisation. This positions the Aurum Institute to impartially represent the interests of working South Africans, their employers and the public. It has enjoyed significant success in informing, developing and working with communities within which its research work takes place.

Aurum, managed by an independent Board, is acknowledged by funders, companies, NGO's and communities as a partner capable of conducting ethical research and delivering reliable results. The Institute adds value by supplying the context, expertise and experience for our partners to make better informed health-related management and treatment decisions.

This month Mining News showcases the Aurum Institute's Thibela TB project

A PROJECT THAT COULD MAKE MEDICAL HISTORY

'We can't fight AIDS unless we do much more to fight TB as well...'

Nelson Mandela, CREATE launch 2004

Taking up former president Nelson Mandela's challenge, The Aurum Institute is spearheading the development of a strategy to provide a blueprint for reducing tuberculosis (TB) by up to 60%.

In spite of well-implemented control programmes which exceed international standards, TB infection rates in South Africa's mining industry continue to rise. Many countries in sub-Saharan Africa are reporting a fourfold increase in TB incidence rates. It has been universally accepted that new strategies are needed to fight the disease.

The World Health Organisation has reported that while global TB prevalence has declined by more than 20% since 1990, it has actually trebled in Africa and continues to rise by 3% to 4% every year.

How did the Thibela TB project come about?

In 2000, recognising that TB was not only a persistent, but also an increasing problem, Aurum Health submitted a proposal to SIMRAC (Safety In Mining Research Advisory Council) requesting funding for a study that would evaluate strategies it hoped would lead to improved TB control in the South African mining industry.

Aurum had developed a unique proposal based on the results of a computer model that could provide a solution for reducing TB in communities by up to 60%. Since this was a massive project, additional funding was secured from the Consortium to Respond Effectively to the AIDS and TB Epidemic (CREATE), which is funded by a large grant from the Bill and Melinda Gates Foundation and has Nelson Mandela as its patron.

Backed by this funding, Aurum Health embarked on a unique research programme involving many thousands of people who work in the South African gold mining industry.

Implemented in 2006, the research project is being conducted by Aurum, under the auspices of the Mine Health and Safety Council (MHSC) and CREATE and follows extensive consultation and collaboration with three South African gold mining companies — AngloGold Ashanti, Gold Fields and Harmony, as well as the Departments of Health, Labour and Minerals and Energy. Wide-ranging discussion and debate has also been held with representatives from the National Union of

Mineworkers (NUM) and other labour unions representing mineworkers, to obtain their support for the study.

In addition, Aurum is collaborating with the London School of Hygiene and Tropical Medicine, as well as the Johns Hopkins University in the United States in the conduct of the study.

What is the Thibela TB project?

The Thibela TB Project — meaning “prevent TB” — involves asking for the help of more than 60 000 gold miners in three provinces of South Africa who do not have TB. Half of these miners are required to take daily medication for nine months and to attend monthly check-ups at the various Aurum Health clinics. The other half is acting as a control sample. These miners do not take the medication, but are also monitored for TB.

This study, also being rolled out in Zambia and Brazil, will help Aurum’s researchers test the theory that treating an entire community to prevent TB could have a rapid and large impact on TB rates — reducing them by as much as 60% — and maintaining these low levels for as long as 10 years. These researchers are world class experts from the United Kingdom, the United States of America and South Africa.

If the results support the preliminary computer models, the outcome could lead the way to controlling and ultimately eliminating one of the greatest causes of death in many developing countries.

Challenges

The first challenge has been to encourage thousands of miners to agree to participate in this project. Volunteers are asked to visit an Aurum Health THIBELA Clinic, where they are given a full briefing. It’s easy to become a volunteer and encouraging for participants to know that as a volunteer, they are playing an important part in a project which could be of immense benefit to themselves, their families and the country as a whole.

The second challenge is getting volunteers to stick to the programme by taking their medication for nine months. Taking one tablet every day for nine months and going for a monthly check up does not seem difficult, but people can become forgetful or be distracted. All volunteers need to stick to the daily schedule of medication for the entire nine months and present themselves for medical check-ups every month.

The Aurum Institute says the Thibela TB programme would not have been possible without the support of industry and labour. **Mining News** will follow up on the operational rollout and progress of this innovative initiative in a future issue.

For more information, contact The Aurum Institute on 012 643 1004.

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