

# Grant for innovating global health research

The University of Pretoria received a Grand Challenges Explorations Grant to the value of US\$100 000 from the Bill and Melinda Gates Foundation last year. The grant will support an innovative global health research project, entitled 'Development of indoor spray to control malaria transmission', conducted by Prof Walter Focke, Director of the Institute of Applied Materials.



→ Prof Walter Focke.

Prof Focke's project is one of 81 that received grants from the Gates Foundation in the second round of the Grand Challenges Explorations, an initiative to help scientists around the world explore bold and largely unproven ways to improve health in developing countries. The grants were provided to scientists in 17 countries on six continents. To receive the funding, Prof Focke showed, in a two-page application, how his idea falls outside current scientific paradigms and might lead to significant advances in global health. The initiative is highly competitive, and received more than 3 000 proposals in this round.

Malaria causes approximately one million deaths a year and more than 300 million cases of severe illness. The World Health Organisation (WHO) regards indoor residual spraying as the primary mosquito control intervention to reduce and

eliminate malaria transmission. In developing countries such as South Africa, DDT is currently used for indoor residual spraying.

With DDT, an annual application may suffice, whereas safer WHO-approved alternatives may require up to two to four spray cycles. The problem with DDT is that it is a persistent organic pollutant (POP) that accumulates in animal tissue. Consequently, its use for indoor residual spraying is contentious and risky. The need for a non-controversial, environmentally friendly and affordable alternative to DDT is therefore a high priority.

The ultimate intended outcome of the project proposed by Prof Focke's group is a cost-effective and environmentally stable pesticide-based 'whitewash' or equivalent 'paint' to substitute DDT in indoor residual spraying. 🌱