



science  
& technology

Department:  
Science and Technology  
REPUBLIC OF SOUTH AFRICA



## Call for Research Proposals Deadline for submissions: 15 May 2009

The South African Malaria Initiative (SAMI) is a consortium of South African institutions which was established with seed funding from the Department of Science and Technology (DST) in 2006. Following some early successes and submission of a business plan for renewal of funding, the DST recently awarded funding for SAMI to pursue the following objectives:

1. *Develop a portfolio of validated drug targets leading to the in silico design of innovative potential inhibitors.*
2. *Identify hit compounds with in vitro antimalarial and/or chloroquine resistance-reversing activity through a targeted biological and in silico screening programme.*
3. *Identify lead compounds with selective in vitro and in vivo (mouse and primate model) activity.*
4. *Advance a portfolio of selected leads into one or more optimized drug candidates, with potent and selective activity, for further progression into commercial antimalarials.*
5. *Identify and validate new biomarkers for development of new malaria diagnostic methods.*
6. *Develop new affordable, sensitive and robust rapid diagnostic test kits appropriate for the African continent.*
7. *Develop and validate new methods for surveillance of parasite drug resistance.*
8. *Contribute to knowledge about the interaction between parasites and the mosquito vector, which would enable the development of new, environmentally friendly vector control methods.*

SAMI is managed by BioPAD, one of the Biotechnology Regional Innovation Centres. In an effort to realize these objectives, SAMI seeks proposals which are aimed at delivering the outputs stated above, and which fall into the focus areas described below.

### Focus Areas

- **Antimalarial Drug Discovery and Development:**
  - Projects focussing on the **Target-to-Hit** end of Drug Discovery, i.e. the identification and validation of new drug targets, rational design of inhibitors, and elucidation of mechanisms of action of inhibitors

- Projects focussing on the **Hit-to-Drug Candidate** end of the Drug Discovery pipeline, with emphasis on compound classes where there is some evidence of antimalarial activity
- **Diagnostics Development:**
  - Development of new or improved diagnostic tests for malaria
  - Identification and validation of new biomarkers for (a) diagnosis of malaria, (b) monitoring disease progression, and (c) distinguishing between new infections and recrudescence.
- **Vector- Parasite Biology:**
  - Innovative new vector control methods

### Eligibility criteria

- At least one SAMI member institution must be involved as a leading institution in the project (a list of SAMI member institutions is available at <http://www.sami.org.za>)

### Evaluation criteria and assets

- Originality
- Scientific rationale and potential to contribute to the SAMI mission of developing new tools to treat malaria, as well as improve malaria prevention and control
- Collaborative research work is encouraged, especially where institutions have complementary expertise, and equipment can be shared
- Involvement of young researchers, especially the previously disadvantaged
- Collaborative research work between the public and private sector is also encouraged

### Period of funding

- Funds may be awarded for periods ranging from one (1) to three (3) years. For proposals for projects exceeding one year there should be a time-line provided, showing how the different aspects of the work proposed will be prioritised.

### Application process

A template for proposals is available at <http://www.sami.org.za> or may be obtained on request from [Zoleka@biopad.org.za](mailto:Zoleka@biopad.org.za). Only proposals submitted using the template provided will be considered. Proposals of **no more than 5 pages** should be submitted electronically to Ms Zoleka Ngcete ([Zoleka@biopad.org.za](mailto:Zoleka@biopad.org.za)). **The closing date is 15 May 2009.** Additional information may be requested from applicants during the review process.