MRC Extramural Research Units

Request for Applications (RFA)

MRC-RFA-GSAD-02-2014

22 April 2014
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1. **INTRODUCTION**

The Report on the Revitalisation of the MRC\(^1\) notes that the MRC should drive a new initiative to broaden and deepen its involvement in health research in South Africa. The report further recommends that the number of MRC Extramural Research Units that should be funded at any one time should not exceed 26 (twice the number of proposed MRC Intramural Research Units). There are 17 MRC Extramural Research Units as at 1 April 2014 (Units are listed in section 2 below).

This Request for Applications (RFA) is for the establishment of new MRC Extramural Research Units. These new Units will be approved for funding if they meet specific criteria, e.g. to provide scientific leadership in key research areas, or to research important research questions where the need cannot easily be addressed through short-term grant funding.

The funding for MRC Extramural Research Units represents a secure, discretionary, financial incentive which is approved in 5-year cycles, and in all probability 15 years, and should facilitate efforts to leverage external research funding. It is expected that the sum of these external grants or contract funding should exceed several-fold the amount invested by the MRC.

2. **CURRENT MRC EXTRAMURAL RESEARCH UNITS**

The current MRC Extramural Research Units are tabulated in Table 1 below.

**Table 1: MRC Extramural Research Units as at 1 April 2014**

<table>
<thead>
<tr>
<th>Unit/Group/Centre</th>
<th>Institution</th>
<th>Director</th>
<th>Estab.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respiratory &amp; Meningeal Pathogens Research Unit</td>
<td>NHLS</td>
<td>Prof S Madhi</td>
<td>1995</td>
</tr>
<tr>
<td>Cancer Epidemiology Research Group*</td>
<td>NHLS</td>
<td>Dr Chantal Babb</td>
<td>1999</td>
</tr>
<tr>
<td>Anxiety and Stress Disorders Research Unit</td>
<td>SU/UCT</td>
<td>Prof D Stein</td>
<td>1998</td>
</tr>
<tr>
<td>Exercise Science and Sports Medicine Research Unit</td>
<td>UCT</td>
<td>Prof T Noakes</td>
<td>1989</td>
</tr>
<tr>
<td>Inter-University Cape Heart Research Group</td>
<td>UCT</td>
<td>Prof P Zilla</td>
<td>1998</td>
</tr>
<tr>
<td>Drug Discovery Research Unit</td>
<td>UCT</td>
<td>Prof K Chibale</td>
<td>2007</td>
</tr>
<tr>
<td>Molecular Mycobacteriology Research Unit</td>
<td>UCT</td>
<td>Prof V Mizrahi</td>
<td>2000</td>
</tr>
<tr>
<td>Medical Imaging Research Unit</td>
<td>UCT</td>
<td>Prof T Douglas</td>
<td>2000</td>
</tr>
<tr>
<td>Immunology of Infectious Diseases Research Unit</td>
<td>UCT</td>
<td>Prof F Brombacher</td>
<td>2000</td>
</tr>
<tr>
<td>Human Genetics Research Unit</td>
<td>UCT</td>
<td>Prof R Ramesar</td>
<td>2001</td>
</tr>
<tr>
<td>Receptor Biology Research Unit*</td>
<td>UCT</td>
<td>Prof A Katz (Acting)</td>
<td>2002</td>
</tr>
<tr>
<td>Diarrhoeal Pathogens Research Unit</td>
<td>UL</td>
<td>Prof J Mphahlele</td>
<td>1996</td>
</tr>
<tr>
<td>Maternal &amp; Infant Healthcare Strategies Research Unit</td>
<td>UP</td>
<td>Prof R Pattinson</td>
<td>1998</td>
</tr>
<tr>
<td>Bioinformatics Capacity Development Research Unit</td>
<td>UWC</td>
<td>Prof A Christoffels</td>
<td>2001</td>
</tr>
<tr>
<td>Health Policy Research Unit*</td>
<td>Wits</td>
<td>Prof L Rispel</td>
<td>1998</td>
</tr>
<tr>
<td>Rural Public Health and Health Transition Research Unit</td>
<td>Wits</td>
<td>Prof S Tollman</td>
<td>2003</td>
</tr>
<tr>
<td>Developmental Pathways for Health Research Unit</td>
<td>Wits</td>
<td>Prof S Norris</td>
<td>2010</td>
</tr>
</tbody>
</table>

* In transitionary funding phase

\(^1\) Revitalising the MRC – Current state of the organisation and a proposal for the way forward. MRC, 30 July 2012.
2. CRITERIA FOR MRC EXTRAMURAL RESEARCH UNITS

The most important criterion for an MRC Extramural Research Unit is the scientific excellence of the individual applying as the Unit Director (UD). The UD, as the Principal Investigator of the application, is expected to be a scientist of note with an outstanding publication track record, including several highly cited articles. The awarding of an MRC extramural unit flows from the track record of scientific leadership of the UD, as demonstrated by the number of impactful scientific papers from studies led by the UD. Further consideration is accorded to the UD’s leadership, stature and track record as well as recognition by peers in the field, for example through invited plenary conference presentations and awards for his/her achievements at both the national and international levels. The application may only list one UD, who must have a PhD, MBChB or equivalent degree and be in the permanent employ of a South African research institution declared for National Research Foundation (NRF) funding (http://www.gov.za/documents/download.php?f=205712).

In reviewing applications, consideration is also given to the UD’s proposed scientific programme and the proposed capacity development activities in the Unit. Units are expected to attract and develop outstanding students and have a major impact through developing future research leaders in their specialist areas.

In applying for MRC Extramural Research Unit status, a well-qualified and productive research team with access to the necessary infrastructure should preferably already exist at the host institution. The research team should include well-established scientists, early career scientists (eg. post-docs), postgraduate students and adequate research infrastructure within the proposed Unit.

An MRC Extramural Research Unit has a potential life-span of up to 15 years, comprising 3 five-year cycles. Funding is approved in the first instance for a single 5-year cycle. Unit reviews with a view to continuation funding from the MRC for further 5-year periods are conducted during the 4th or 5th year of every 5-year cycle. At the end of the third term, the MRC Extramural Research Unit status and the accompanying funding will be terminated. After completing its 15-year life-span, the UD may re-apply to become an MRC Extramural Research Unit again – such an application will be treated as a new application. Several factors may inform the decision to continue funding for each subsequent 5-year cycle including, the scientific productivity of the Unit, the Unit’s high-impact publications and the availability of funds from the MRC.

A Unit is assessed on six criteria, with the first criterion, viz, the scientific stature of the UD being the most important:

- The scientific track record of the UD, including publication track record, especially highly-cited journal articles, the impact of studies led by the UD and the UD’s overall scientific stature in the field of study.
- The scientific merit and potential impact of the proposed Unit’s research programme.
- The strength of the research team, including the range of disciplines involved and the scientific standing of the proposed senior investigators, besides the UD, in the Unit.
- Proposed capacity development activities, including the proposed number of postgraduate research students and post-docs that the Unit is planning to host.
• Translation of scientific findings in policy and practice to impact on health. The extent of past success in converting research findings into impact on health or impact on the field of research. In addition, plans for future endeavours to enhance the impact of the Unit’s research on improving health policy, medical/public health practice and/or the nation’s health status

• Available co-funding from other sources that would foster the sustainability of the Unit and the level of institutional support available to the Unit.

3. RESEARCH MANDATE OF UNITS
The key activities of proposed Units include:

   i. Generation of new knowledge;
   ii. Enhancement of the leadership role of South African research globally;
   iii. Publishing scientific articles, including articles in high impact journals;
   iv. Contributing to human capacity development, through training and mentoring of post-graduate students and post-doctoral fellows; and
   v. Where applicable, conversion of knowledge into new or improved products, processes, policies and practises for impact through research translation and the protection, management and commercialization of intellectual property.

4. SCOPE OF RESEARCH
Units are expected to define an integrated interdisciplinary research effort distinguished by scientific excellence and driven by a clear vision of research progress, new knowledge, new discoveries, or technological developments having national and global scientific impact.

The scope of work of proposed Units is broad and includes research in one or more of the following areas:

   • Basic laboratory research;
   • Clinical;
   • Biomedical;
   • Behavioural;
   • Public Health; and
   • Implementation research.
5. **APPLICATION SCHEDULE**

The timelines for the application process are shown in Table 2.

**Table 2. Application timelines**

<table>
<thead>
<tr>
<th>Stages</th>
<th>Date/period</th>
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<tbody>
<tr>
<td>1. Publication of RFA</td>
<td>22 April 2014</td>
</tr>
<tr>
<td>2. Deadline for submitting applications</td>
<td>30 June 2014</td>
</tr>
<tr>
<td>3. Evaluation period (indicative)</td>
<td>3 months from receipt of application</td>
</tr>
<tr>
<td>4. Results of the evaluation - notification letter (indicative)</td>
<td>September 2014</td>
</tr>
</tbody>
</table>

6. **APPLICATION GUIDELINES**

Eligible institutions are allowed to submit a maximum of two applications. All applications must be submitted on a MRC Extramural Research Unit application form posted on the MRC website or obtainable from the extramural grants administrator, Clive Glass (clive.glass@mrc.ac.za). The length of the application should not exceed 20 single spaced pages, excluding annexures. The application must address the following areas:

- **PROPOSED NAME OF UNIT**

- **OUTLINE OF THE UNIT DIRECTOR’S SCIENTIFIC TRACK RECORD**

- **DESCRIPTION OF THE PROPOSED RESEARCH**
  - A brief description of the research area(s) that will be addressed by the proposed Unit.

- **BACKGROUND**
  - A scientific rationale for the proposed research; and
  - An indication of how the proposed research is expected to contribute to an integrated, cross-disciplinary research programme advancing scientific knowledge and/or contribute to improvements in health outcomes.

- **AIMS/OBJECTIVES**
  - The main aim(s) of the proposed research and the research objectives that are to be achieved.

- **OUTLINE OF RESEARCH PLAN**

An account of the overall research approach and the following:

- specifics of the research plan, including any multi-disciplinary aspects;
- the research methods and/or experimental techniques to be employed, including human subjects protection plan for clinical studies; and
• the data collection and analysis strategies / approaches to be adopted.

The research plan and methods should be well aligned with the stated research aims and objectives.

- RELEVANCE AND IMPORTANCE OF THE RESEARCH
  • The rationale for undertaking the proposed research.

- INSTITUTIONAL INFRASTRUCTURE
  • Description of existing and required research infrastructure.

- INSTITUTIONAL SUPPORT
  • Financial, technical, administrative support, etc. from the institution.

- KEY UNIT MEMBERS
  • List of the key scientific members of the proposed Unit and a short biosketch of each member which includes their qualifications and research experience.

- COLLABORATORS
  • List of scientific collaborators, both intra- and extra-institutional.

- CAPACITY DEVELOPMENT PLAN
  • Postgraduate students and Post-doctoral fellows; and
  • Staff/student exchange programme, if applicable

- EXPECTED OUTPUTS/OUTCOMES/IMPACT
An outline of the expected direct and/or indirect outputs/outcomes/impact of the research in terms of the Unit’s mandate. This includes:

  • the advancement of scientific knowledge;
  • knowledge generation to improve South Africa’s scientific competitiveness on the world stage;
  • the development of research infrastructure to conduct cutting edge, world class research;
  • human capacity development (number of post graduates trained and post-docs mentored);
  • specific research outputs (e.g. publications, books, reports, etc.); and
  • new intellectual property, products, processes, policies and practises developed; and
- BUDGET

The core funding cap for MRC Extramural Research Units is **R1 million per annum**. Incentivised funding - based on the Unit’s previous year’s publication record - will be in addition to the core funding. At present, a Unit’s total budget, ie., core plus incentivised funding, is capped at R2.5m. A draft budget with justification for the first 5 years of the Unit on a Microsoft Excel spreadsheet must be provided. UD’s are allowed maximum flexibility to use the funds to achieve the objectives of the Unit.

Non-allowable costs include:

- Student bursaries, scholarships, etc. However, top-ups of bursaries and scholarships are allowed as per the host institution’s policies;
- Indirect costs or Institutional overhead costs;
- Purchase or construction of a building;
- Rental costs for space that is owned by the host institution; and
- Purchase of office furniture.

- ATTACHMENTS

1. Full CV of the UD and key research staff
2. Letter of support from the host institution (the letter should give an indication of the infrastructure and resources that will be provided to the Unit).

7. INSTITUTIONAL RESPONSIBILITY

Institutions submitting applications for funding are required, through the Institutional Research Office or relevant institutional office, to:

- Ensure completeness of applications, approve and authorise all applications submitted; and
- Ensure timely submission of research reports and audited annual financial statements.

8. APPLICATION PROCESS

All applications must be approved by the Deputy Vice Chancellor (DVC): Research or equivalent position of the research administration at the institution submitting the application.

8.1 Submission of applications

The call for applications will open on 22 April 2014 and close on 30 June 2014. Applicants are encouraged to submit their applications as soon as possible so that the peer review process can be expedited. All applications must be made on the [MRC Extramural Research Unit’s application form](mailto:clive.glass@mrc.ac.za) or obtainable from the administrator, Mr Clive Glass (clive.glass@mrc.ac.za). It is imperative that all applications are approved and submitted by the relevant institutional authority.
9. EVALUATION PROCESS
There will be a two-step review and evaluation process, viz,

- Internal MRC screening for responsiveness to all the specified administrative and procedural provisions required in the RFA, and
- Peer-review to assess the scientific merit (and other review criteria as specified below) of applications found to be responsive to the RFA provisions.

9.1 Internal screening
All applications will be screened by the MRC for completeness and responsiveness to the goals of the RFA and its administrative requirements/provisions. If the application is found to be incomplete or unresponsive to the provisions described in the RFA, the application will be returned to the institution without further review.

9.2 Peer-review of qualifying applications
Each responsive application will be reviewed by local and international reviewers. These review comments will be provided to an unconflicted selection committee which will consider these comments and further review all the eligible applications to provide an assessment of the scientific merit of each application and a funding recommendation to the MRC for its consideration.

9.3 Rating of applications
Reviewers will consider each of the review criteria below in the determination of scientific, technical, and administrative merit:

**Track record of the UD.** Does the UD have an outstanding track record in research excellence and leadership? Is the UD experienced and well-suited to the research envisaged? Does the UD have a good record of scientific publications (quantity and quality of publications, high impact publications, number of citations)? Is the UD recognised both nationally and internationally for his/her scientific contributions?

**Research team.** Are the Unit’s investigators, collaborators, and other researchers well suited to the research envisaged? If Early Stage Investigators or New Investigators, or in the early stages of independent careers, do they have appropriate experience and training? If established, have they demonstrated an ongoing record of accomplishments that have advanced their field(s)? Is the leadership approach, governance and organisational structure appropriate for the research?

**Research focus and strategy.** Does the proposed research address an important problem or a critical barrier to progress in the field? If the aims of the Unit are achieved, how will scientific knowledge, technical capability, and/or clinical practice be improved? How will successful completion of the Unit’s research projects change the concepts, methods, technologies, treatments, services, or preventative interventions that drive this field? Is the overall research strategy, methodology, and analyses well-reasoned and appropriate to accomplish the specific aims of the Unit? If the research involves clinical research, are the plans for the protection of human subjects from research risks adequate? What is the potential for the research to impact on health?

**Innovation.** Does the application challenge and seek to shift current research or clinical practice paradigms by utilizing novel theoretical concepts, approaches or methodologies, instrumentation, or interventions? Are the concepts, approaches or methodologies, instrumentation, or interventions
novel to one field of research or novel in a broad sense? Is a refinement, improvement, or new application of theoretical concepts, approaches or methodologies, instrumentation, or interventions proposed?

**Research infrastructure and institutional support.** Will the scientific environment in which the research will be done contribute to the probability of success? Are the institutional support, equipment and other physical resources available to the investigators adequate for the research/research projects proposed? Will the Unit benefit from unique features of the scientific environment, subject populations, or collaborative arrangements?

**10. RESPONSIBILITIES OF THE UNIT DIRECTOR**

**10.1 Reporting**
All UDs must submit annual reports from the year of receipt of the grant. Reports must be completed timeously on the template provided by the MRC.

**10.2 Scientific compliance**

**10.2.1 Ethics**
All UDs are required to maintain the highest ethical and safety standards in conducting the research, particularly when human and animal subjects are involved. It is the responsibility of the UD to comply with all relevant regulations in this regard, including those of the institution at which the research is carried out.

**10.2.2 Intellectual Property Rights**
Funding by the MRC is subject to the provisions of the Intellectual Property Rights from Publicly Financed Research and Development Act 51 of 2008. Further, the MRC requires that intellectual property is managed in a manner that ensures “Global Access.” Global Access requires that (a) the knowledge and information gained from funded projects be promptly and broadly disseminated, subject to intellectual property protection, where appropriate, and (b) the intellectual property be made available and accessible at an affordable price to people most in need within developing countries.

**11. IMPORTANT INFORMATION**
Please take note of the following important information:

i. Applications may only be submitted by the Institution’s Research Office.

ii. Each institution is allowed to submit a maximum of two applications.

iii. The MRC will utilise the results of the peer review to determine which meritorious applications receive funding. The MRC may also consider additional factors such as a balance in the range of research areas supported in making its final determinations;

iv. The MRC may use text, video or other visual representation submitted by applicants on the MRC website or on MRC materials for publicity and/or public awareness;

v. The MRC will provide written summaries of the review findings for those applications found responsive and submitted to the review process. Note that reviewers’ names will not be shared with the applicants.
vi. When a UD resigns or retires from the Institution or is unavailable for any other reason, the MRC Extramural Research Unit status and associated funding will be terminated within six (6) months of such resignation, retirement, or notice of unavailability.

vii. The MRC Extramural Unit status and support shall be terminated should the research conducted in the Unit breach the regulations that apply to research integrity or research ethics or any regulatory, legislative and institutional guidelines governing research.

viii. The MRC must be acknowledged in all publications from the Unit as an affiliated institution.

ix. MRC Extramural Research Units are required to carry the MRC name as follows, South African Medical Research Council/[Name of University] [Name of Research Unit], shortened as MRC/[Abbreviated Name of University] [Name of Research Unit], and researchers in the Unit are required to include this Unit name as part of their affiliation in all publications emanating from the Unit.

CONTACT DETAILS
Please direct your requests for information and questions/queries to:

Dr Niresh Bhagwandin
Strategic Research Initiatives
Phone: (021) 938 0652
Email: niresh.bhagwandin@mrc.ac.za

Mr Clive Glass
Grants and Scholarship Administration Division
Phone: (021) 938 0225
email: clive.glass@mrc.ac.za

Ms Jo-Anne Valentyn
Grants and Scholarship Administration Division
Phone: (021) 938 0217
email: jo-anne.valentyn@mrc.ac.za
**ABBREVIATIONS**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CV</td>
<td>Curriculum Vitae</td>
</tr>
<tr>
<td>MRC</td>
<td>Medical Research Council</td>
</tr>
<tr>
<td>NHLS</td>
<td>National Health Laboratory Service</td>
</tr>
<tr>
<td>RFA</td>
<td>Request For Application</td>
</tr>
<tr>
<td>SU</td>
<td>Stellenbosch University</td>
</tr>
<tr>
<td>UCT</td>
<td>University of Cape Town</td>
</tr>
<tr>
<td>UD</td>
<td>Unit Director</td>
</tr>
<tr>
<td>UL</td>
<td>University of Limpopo</td>
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<tr>
<td>UP</td>
<td>University of Pretoria</td>
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<td>UWC</td>
<td>University of Western Cape</td>
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<td>Wits</td>
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