



South African Medical Research Council (MRC)

Strategic Plan

**for the fiscal years 2011 – 2013
[3 years beginning with 2011]**

Date of tabling

9 March 2011

Official sign-off

It is hereby certified that this Strategic Plan:

Was developed by the management of the South African Medical Research Council (MRC) under the guidance of the National Department of Health

Takes into account all the relevant policies, legislation and other mandates for which the MRC is responsible

Accurately reflects the strategic outcome oriented goals and objectives which the MRC will endeavour to achieve over the period 2011/12 to 2012/13.

Mr B Mahlangu
Chief Financial Officer

Signature: 

Dr M A Dhansay
Acting Chief Executive Officer

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Part A: Strategic Overview

1. Introduction

The South African Medical Research Council (MRC) was established in July 1969 (Act 19 of 1969) as an independent statutory body to co-ordinate health and medical research activities throughout South Africa. Currently, the MRC operates as a statutory Science Council functioning within the ambit of the MRC Act (Act 58 of 1991), as well as the Public Entities Act (Act 30 of 1997 as amended in 2003).

In terms of the MRC Act of 1991, *'the objects of the MRC are, through research, development and technology transfer, to promote the improvement of the health and quality of life of the population of the Republic, and to perform such functions as may be assigned to the MRC by or under this Act'*.

Health research, development and innovation are the core business of the MRC. During the past five years, the MRC research priorities were defined in a way that recognises the complementarities of three quite different, but synergistic, focal areas of health research viz., (i) population health, (ii) disease and disease mechanisms and (iii) systems, settings and policy. In the coming three years and beyond, the MRC's research and innovation activities will continue to impact on all three focal areas.

The MRC is a science council and therefore also a Science, Engineering and Technology Institution (SETI). It falls under the ambit of the DST (Department of Science and Technology) and the NSI (National System of Innovation), while having a direct line function with the National Department of Health (NDOH). A major goal set by the government in the Medium Term Strategic Framework (MTSF) for 2009 – 2014 is to improve the health profile of all South Africans – in line the aims of the South African Constitution. The DST and other departments have committed to help achieving this goal. The Department of Health specifically adopted a new set of priorities called the **Ten-Point Plan**, with a focus on four output areas which are part of the health Negotiated Service Delivery Agreement (NSDA): increasing life expectancy; decreasing maternal and child mortality rates; combating HIV and AIDS

and STIs, and decreasing the burden of disease from TB; strengthening health system effectiveness. These NSDA outputs link to the Millennium Development Goals (MDGs) 4, 5 and 6, respectively, addressing child mortality, maternal health, and combating HIV and AIDS, and other diseases.

The 3-year *MRC Strategic Plan 2011–2013* identifies strategically important outcomes-oriented goals and objectives against which the MRC's medium-term results can be measured and evaluated by Parliament, the National Department of Health (NDoH) and the public. In keeping with this, the structure of the document is aligned with the *Framework for Strategic Plans and Annual Performance Plans* published by the National Treasury in August 2010. A formal strategic planning process with participation of key stakeholders and that considers all inputs, will be conducted in May/June 2011, and it is expected that the new CEO will be in place to lead the process. The current 3-year plan is a bridge between the previous strategic plan and the new 5-year plan; key issues such as reconfiguring and realigning the MRC research portfolio and structures will be addressed at the planning session scheduled for May 2011. This 3-year plan is a first step towards developing a 'new' MRC, one that is able to respond to the challenges of research for health for our country.

2. Vision and Mission

Vision:

Building a healthy nation through research and innovation

Mission

To improve the nation's health and quality of life by conducting and funding relevant and responsive health research, development, innovation and research translation

3. Organisational Culture and Values

Organisational culture

The MRC undertakes health research to contribute to transforming and developing South Africa and building a healthy nation. It does this through the translation of research results into policy, practice, health promotion and health products.

Values

The five key values of the MRC and the keywords relating to each value are:

- **Excellence and innovation:** high quality, original, scientific integrity, peer review
- **Relevance:** high impact, needs-driven
- **Accountability:** responsibility, teamwork, leadership, participation
- **Respect and communication:** dignity, honesty, fairness, integrity, transparency, freedom to challenge
- **Capacity development:** reward and recognition

4. Legislative and other mandates

4.1. Constitutional

The Constitutional base which supports the MRC's mandate is:

The right of Equality of all people to enjoy the basic human rights enshrined in Chapter 2 of the Constitution, which is the Bill of Rights.

Section 9 (1) and (2) of the Bill of Rights states that:

(1) Everyone is equal before the law and has the right to equal protection and benefit of the law.

(2) Equality includes the full and equal enjoyment of all rights and freedoms. To promote the achievement of equality, legislative and other measures designed to protect or advance persons or categories of persons disadvantaged by unfair discrimination may be taken.

Given that the mandate of the MRC is health research, in order to promote the improvement of health care and the quality of life of the people of South Africa, the other human right which supports the MRC's mandate *albeit* indirectly is Section 27(1) and (2) of the Bill of Rights, which is the right of all South Africans to health care. It states that:

- (1) Everyone has the right to have access to:*
- (a) health care services, including reproductive health care;*
 - (b) sufficient food and water; and*
 - (c) social security...*
- (2) The state must take reasonable legislative and other measures within its available resources to achieve the progressive realization of each of these rights.*

Therefore, the establishment of the MRC is one of the State's measures for providing improved health care for our citizens, with innovations in terms of diagnostics, treatments, policies and practices, for those diseases predominantly affecting South Africans.

4.2. Legislative

MRC Act (Act 58 of 1991) at Section 3 states that the Legislative Mandate of the MRC is:

'through research, development and technology transfer, to promote the improvement of the health and quality of life of the population of the Republic,

and to perform such functions as may be assigned to the MRC by or under this Act'.

The MRC operates as a statutory Science Council and has to be in compliance with a whole host of legislation, with the PFMA as the primary legislation followed by the MRC Act, within the context of South Africa's Constitution (Act 108 of 1996) and its Bill of Rights. The National Health Act (No. 61 of 2003) also impacts on the work of the MRC, e.g. health research ethics.

4.3. Policy

The White Papers on Science and Technology (1996) and for the Transformation of the Health System in South Africa (1993) are the basis for the current MRC mandate.

The Health Research Policy in South Africa 2001, guides national health research through regulations of the National Health Act (2003) and the formation of the National Health Research Committee within the NDOH.

MRC research is also subject to the rules and codes of the following:

- The Medicines Control Council
- The National Health Research Ethics Council
- South African National Standards (SANS) 10386 (2008) – Care and Use of Animals for Scientific Purposes
- The MRC Guidelines on Ethics in Medical Research

5. Situational analysis

The table below lists the strengths, weaknesses, opportunities and threats (SWOT analysis) identified by the MRC, in preparation for the drafting of this strategic plan. Items listed under the Weaknesses and Threats columns are addressed in this plan and in the Annual Performance Plan of the organisation.

Strengths	Weaknesses
<ul style="list-style-type: none"> • International reputation as a leading health research organisation in Africa • Cadre of high quality researchers/ scientists (intra- and extramural) with extensive scientific and medical experience of diverse and key health areas • Experienced and competent project teams with strong track records • Ability to conclude and renew major agreements and contracts with some of the world's biggest and most demanding funders. • Proven project management and control system vital to achieving project timelines within budgets • Exerting significant influence on policy and practice, in both clinical/basic areas and in the public health domain • Policy of proactive auditing by sponsors and independent auditors • Strong culture of accountability • Compliance with highest standards of ethics and relevant regulations • Strong ethos of capacity development 	<ul style="list-style-type: none"> • Imbalance in research priorities • Imbalance in research funding (intra-mural vs. extramural research units) • Inadequate facilities (e.g. laboratories, equipment) in some research units • Lack of monitoring and optimization of research entities • Lack of incentives and rewards to back-up excellence • Inadequate risk and resource management processes and systems • Lack of research translation

Opportunities	Threats
<ul style="list-style-type: none"> • Realignment of research priorities on a national basis and concomitant re-organisation of MRC research entities • Providing opportunities for achieving excellence • Promotion of research collaboration, internally and externally • Accelerating inter- and multidisciplinary research • Improvements in the synergies between intra- and extramural activities • Increased focus and support of clinical research • Revisions to the MRC Act (Act 58, 1991) • Reorganisation of the MRC governance structures to respond to the organisation's needs • Scope for reorganizing scientific support services 	<ul style="list-style-type: none"> • Inability to deliver on time due to project administrative delays • Staff turnover – staff poached by competitors offering higher salaries and benefits • Mission creep of other SETIs • Prolonged interim leadership

5.1 Performance environment

5.1.1 Health Sector

Seventeen years of democracy in South Africa has seen considerable achievement in the health sector with improved access to health care, rationalisation of health management and more equitable health expenditure (Harrison, 2009). Comprehensive reviews of the health sector, including the DBSA Roadmap for Health (2009), the Lancet Series on Health in South Africa (2009) and the South African Health Review (2010), have all identified the paradox of poor health outputs and outcomes despite high health expenditure and supportive policies. The failure to

curb the HIV/AIDS epidemic, together with generally weak health systems management and low staff morale in the public sector have been highlighted as major contributors to the poor health outcomes, relative to total health expenditure. This deterioration in health status has contributed to South Africa's drop in the Human Health Index and the country not making significant progress towards achieving the Millennium Development Goals (MDGs).

The 2009 Lancet Series on Health in South Africa, to which many senior MRC researchers contributed, identified major opportunities for strategic shifts in policies and programmes to enable South Africa to develop a strong, stable and equitable health system with tangible outcomes. The Series emphasised the urgent need for a change from *'business as usual'*. In response to the huge challenges faced by the health sector to deliver cost-effective and quality care, a 10 Point Plan has been developed by the National Department of Health in the 2010/11 – 2012/13 Strategic Plan. It further details twenty deliverables for four key areas, which aim to focus efforts on addressing the major burden of disease and improve the quality of health services.

National Department of Health 10 Point Plan for 2009-2014:

- i. Provision of Strategic leadership and creation of a Social Compact for better health outcomes;
- ii. Implementation of a National Health Insurance Plan (NHI);
- iii. Improving Quality of Health Services;
- iv. Overhauling the health care system and improve its management;
- v. Improving Human Resources Planning, Development and Management;
- vi. Revitalization of physical infrastructure;
- vii. Accelerated implementation of HIV & AIDS and Sexually Transmitted Infections National Strategic Plan 2007-11 and increase focus on TB and other communicable diseases;
- viii. Mass mobilisation for better health for the population;
- ix. Review of the Drug Policy;
- x. Strengthening Research and Development.

During 2010, the Negotiated Service Delivery Agreement (NSDA) signed by the Minister of Health in terms of achieving Outcome 2, viz. *A Long and Healthy Life for All South Africans* has focussed attention on four key outputs:

- 1. *Increasing life expectancy***
- 2. *Decreasing maternal and child mortality***
- 3. *Combating HIV and AIDS and decreasing the burden of TB***
- 4. *Strengthening health system effectiveness***

The MRC has a critical role to play in supporting the country's national and provincial health departments in achieving their performance targets. The Lancet Series identified the essential role of research to develop a comprehensive PHC system and enable the translation of knowledge into interventions. The authors of the series highlighted the urgent need for research to:

- allow decision makers to estimate local burden of disease,
- identify and monitor impact of priority interventions both in and outside of the health sector,
- measure the distribution and efficiency of expenditures, and
- evaluate the performance and efficiency of health workers.

These areas of research expand on the focus identified by the National Department of Health's policy on quality health care (Department of Health, 2007).

In addition to these strategic shifts in current programmes and efforts that focus on performance in the health sector, Government has embarked on several investigations to identify longer term reforms required to ensure even development in the country. A committee has been set up to investigate the implementation of a national health insurance (NHI) scheme to ensure universal coverage of quality health care. The national planning committee has been set up to draft a long-term vision and strategic plan for the country and consider critical issues affecting South Africa's long-term development (Presidency, 2009 & 2010). Health policy research has a critical role to play to inform these reforms. The MRC, through its researchers serving on advisory panels, for example, is contributing to these initiatives.

5.1.2 *National System of Innovation*

The mandate and function of the MRC fit in the National System of Innovation (NSI), as the key research council that focuses on health research.

According to the Department of Science and Technology's Ten-Year Plan (DST, 2008), "*The government's broad developmental mandate can ultimately be achieved only if South Africa takes further steps on the road to becoming a knowledge-based economy.*" The plan stresses that for South Africa to join the ranks of wealthier countries, it needs to increase its knowledge output substantially, and increase expenditure in R&D. Outcome 5 of the Negotiated Delivery Agreement is '*A skilled and capable workforce to support an inclusive growth path*'. This implies that, aside from strategic development of human capital, this requires an Increase investment in research and development, especially in science, engineering and technology.

The DST Ten-Year Plan identified key long-range objectives to direct South Africa towards being a knowledge-driven economy, which includes the area of biotechnology and pharmaceuticals, to be based on the nation's indigenous resources and expanding knowledge base. The Department of Science and Technology strategy for 2010-13 identified Biotechnology and Health as an important strategic area and aims to create an enabling environment for innovation. Greater networking and collaboration (domestic and international) across all sectors (academia, science councils, industry and government) will be needed. This needs to be done in the context of the Indigenous Knowledge Systems (IKS) policy to recognise, affirm, develop, promote and protect IKS. Outcome 7 of the Negotiated Delivery Agreement is '*Vibrant, Equitable and Sustainable Rural Communities and Food Security for All*'. Research efforts to support these outcomes will include nutrition interventions, as well as research on food safety. Research on rural development will also be important.

Partnerships with sectors other than Health and DST are also important, viz. Departments of Higher Education (Higher Education Institutions), Agriculture, Trade and Industry. Further, MRC interaction with its sister science councils (HSRC, CSIR, etc.) has not been fully realised, and needs attention.

5.1.3 Clinical Research

The Academy of Science for South Africa has highlighted the decline in clinical research that has occurred through cumulative disinvestment in clinical research in

the past 2 decades arising from the emphasis of provincial health departments on services, the absence of discounts for research tests, chronic underfunding of the Medical Research Council (MRC), and the lack of funding streams to universities that might in principle have been applied to meet the overall shortfall in support (ASSAf, 2009). ASSAf argues for a more strategic approach to clinical research that includes clinical epidemiology, pre-clinical and clinical phase of drug development, and translational research to bridge the gap between basic science and clinical practice. Clinical research should contribute to the improvement of the health of the nation by purposefully addressing the largest burdens of disease. The training and promotion of clinical researchers should seek to address racial and gender imbalances, and ensure that a strong intellectual leadership is built. Initiatives to maintain the supply of skilled clinical researchers, improve facilities for clinical research and increase funding for funding and strengthening translational research are needed.

Translational research ranges from testing or generating hypotheses about disease mechanisms, with the ultimate aim of accelerating the translation of basic science discoveries to useful clinical applications. Emerging and strategic research areas include Nano-medicine, Stem Cells, Synthetic Biology, Structural Biology, Systems Biology, Functional Genomics, Chronic Diseases and Telemedicine and m-Health (mobile phone applications to health).

Ogilvie *et al.* (2009) have developed a more expansive framework for translational research by extending the objectives of translation from that of institutionalising effective interventions to that of improving population health by influencing both individual and collective determinants of health. This framework highlights the integral role of basic and applied research together with synthesis of evidence and surveillance, so as to impact on the health and wellbeing of individuals through policy and practice.

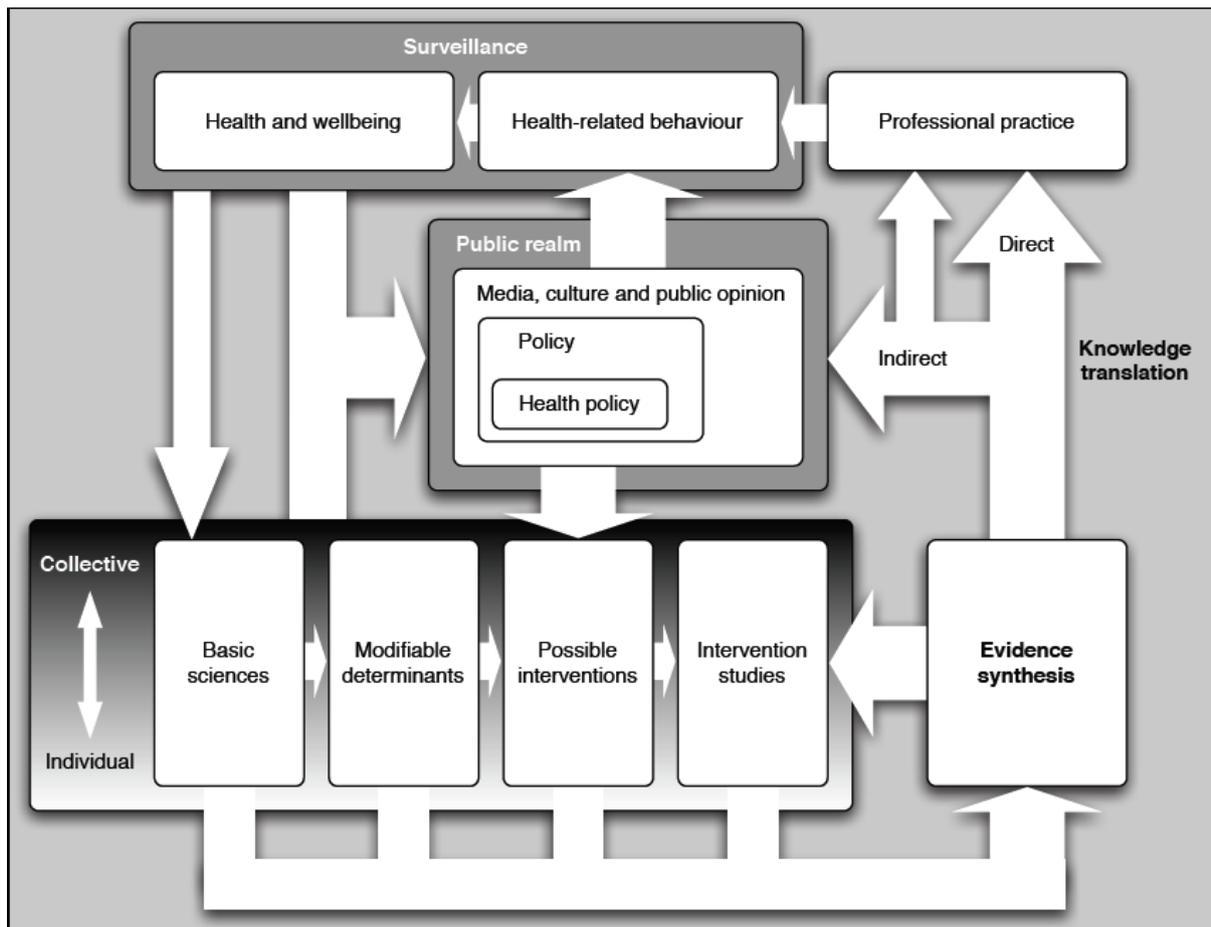


Figure 1: Translational framework for public health research

Source: *Ogilvie et al., 2009*

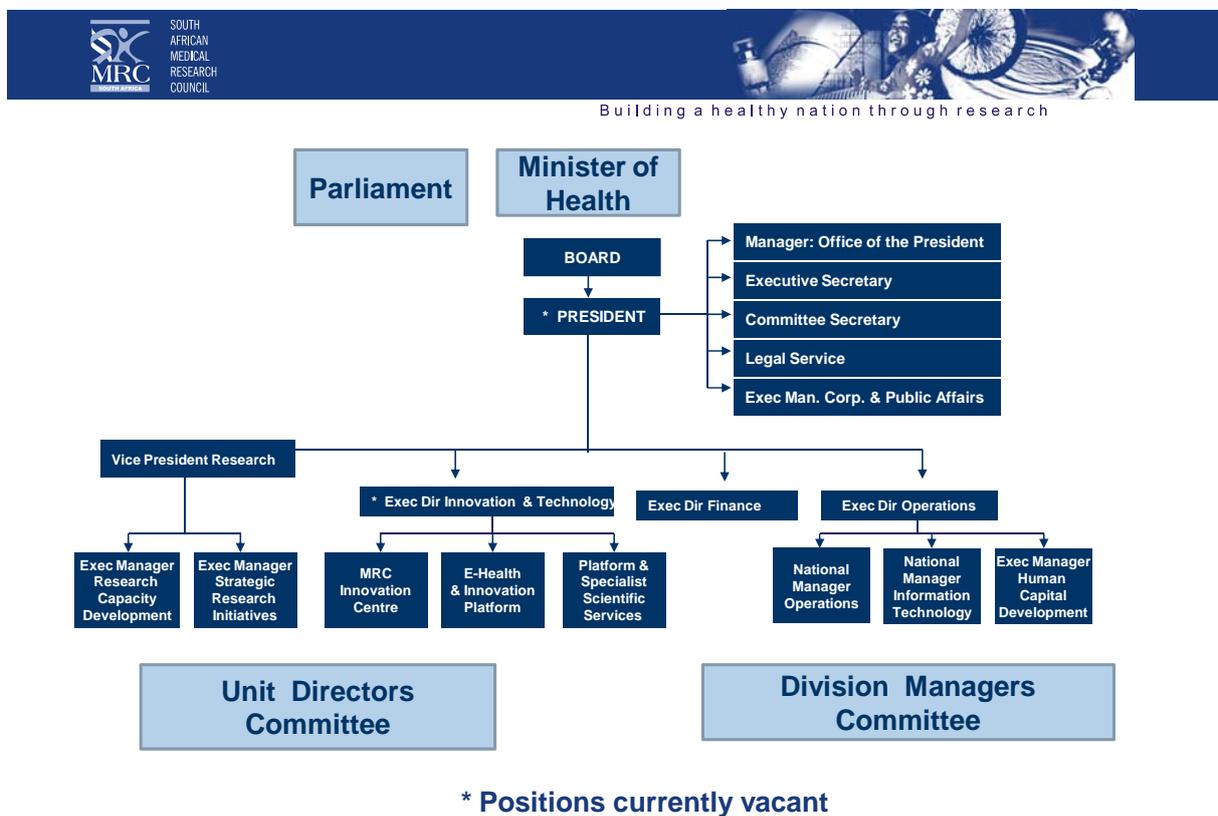
5.1.3 Challenges

- Human capacity – ageing of productive scientists, transformation imperative, the academic deficit arising from poor school education, the high demand for skilled individuals
- Research infrastructure – equipment for research can be costly to keep up to date and maintain
- Cost of enabling technologies
- Collaborations and ability to harness research capacity in academic and research organisations
- Financial sustainability (financial model, flat-lining of baseline budget and international funding sources)

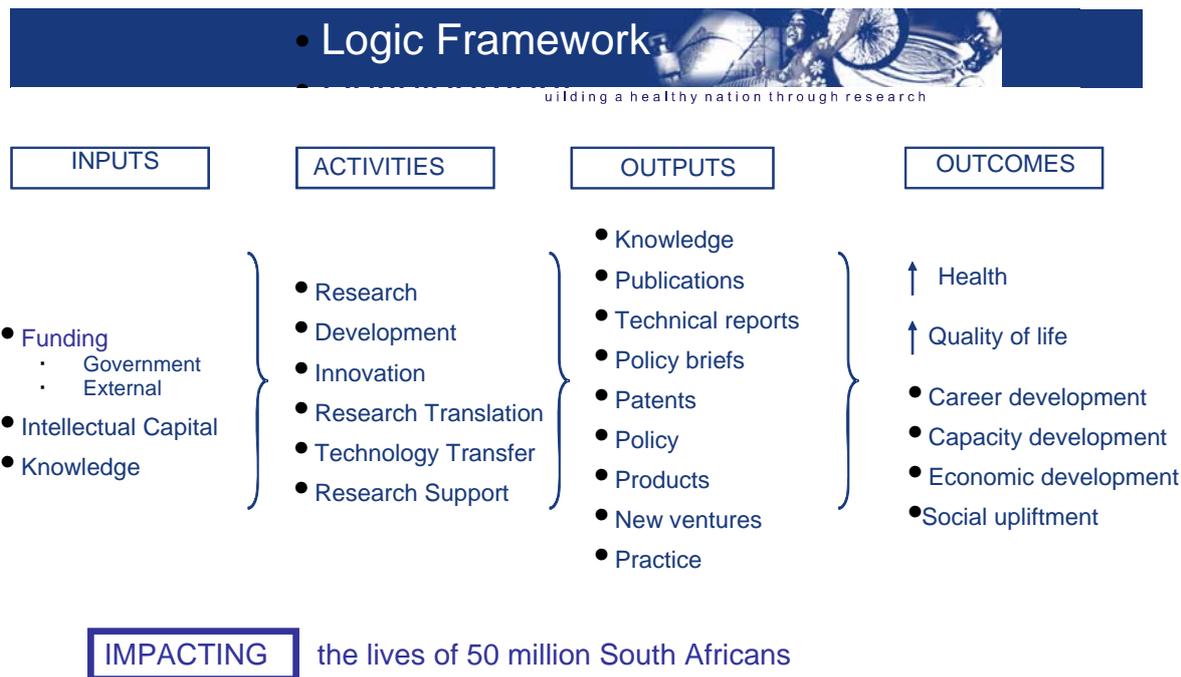
5.2 Organisational environment

The MRC is a well established organisation that has grown over the past 40 years into an internationally, regionally and locally recognised health research organisation. In the early 1990's it experienced considerable re-organisation and has continued to adapt incrementally. The Lancet (2008), in an editorial on the state of international health research, coined the term R8 (Research 8), and ranked the SA MRC among others such as the UK Wellcome Trust and the US National Institutes for Health (NIH).

Organisational structure as at 31 March 2011



5.2.1 Logic Model



5.2.2 MRC Research Structures

The MRC operates through a variety of research structures that make up its intramural and extra-mural activities. This flexibility enables the MRC to harness and support expertise in academic institutions across the country as well as having capacity for national priority areas. A system of scientific review is used in all spheres with Units being reviewed every 5 years and self-initiated grants being award competitively on an annual basis. The structures of the MRC include:

a. *MRC National Collaborative Research Programmes*

National Collaborative Research Programmes (NCRP) have been set up to address priorities of South Africa, where necessary, in a multidisciplinary, multi-institutional fashion:

1. Cardiovascular and Metabolic Disease
2. CARISA

- b. *MRC Collaborative Research Groups*
 Brain and Behaviour
 Environment and Health Research

c. *MRC Research Units*

Research Priorities	Research Units
<i>HIV and AIDS</i>	<i>HIV Prevention Research Unit</i> <i>South African AIDS Vaccine Initiative</i>
<i>Tuberculosis</i>	<i>Tuberculosis Epidemiology and Intervention Research Unit</i> <i>Clinical and Biomedical Tuberculosis Research Unit</i> <i>Molecular Mycobacteriology Research Unit</i> <i>Centre for Molecular and Cellular Biology</i>
<i>Cardiovascular Disease and Diabetes</i>	<i>Chronic Diseases of Lifestyle Research Unit</i> <i>Inter-university Cape Heart Research Unit</i> <i>Exercise and Sports Medicine Research Unit</i>
<i>Infectious Diseases</i>	<i>Immunology of Infectious Diseases Research Unit</i> <i>Diarrhoeal Pathogens Research Unit</i> <i>Inflammation and Immunity Research Unit</i> <i>Respiratory and Meningeal Pathogens Research Unit</i> <i>Malaria Research Unit</i>
<i>Crime, Violence and Injury</i>	<i>Safety and Peace Promotion Research Unit</i>
<i>Cancer</i>	<i>Cancer Epidemiology Research Unit</i> <i>PROMECA</i> <i>Oesophageal Cancer Research Unit</i> <i>Oncology Research Unit</i>
<i>Public Health</i>	<i>Burden of Disease Research Unit</i> <i>Biostatistics Research Unit</i> <i>South African Cochrane Centre</i> <i>Health Policy Research Unit</i> <i>Health Systems Research Unit</i> <i>Rural Public Health and Health Transition Research Unit</i>
<i>Health Promotion</i>	<i>Alcohol and Drug Abuse Research Unit</i> <i>Health Promotion Research and Development Unit</i>

<i>Women, Maternal and Child Health</i>	<i>Gender and Health Research Unit</i> <i>Mineral Metabolism Research Unit</i> <i>Maternal and Infant Health Care Strategies Research Unit</i>
<i>Nutrition</i>	<i>Nutritional Intervention Research Unit</i>
<i>Brain and Behaviour</i>	<i>Anxiety and Stress Disorders Research Unit</i> <i>Medical Imaging Research Unit</i>
<i>Genomics and Proteomics</i>	<i>Bioinformatics Capacity Development Research Unit</i> <i>Bone Research Unit</i> <i>Human Genetics Research Unit</i> <i>Human Genomic Diversity Research Unit</i> <i>Receptor Biology Research Unit</i>
<i>Environment and Health</i>	<i>Environment and Health Research Unit</i>
<i>African Traditional Medicines</i>	<i>Drug Discovery and Development Research Unit</i> <i>Indigenous Knowledge Systems</i>

d. *MRC Research Projects*

- Self-initiated Research Projects
- Developmental Research Projects
- Rapid Response Research Projects

e. *Research and Technology Entities*

- Diabetes Discovery Platform
- Primate Unit and Delft Animal Facility
- IKS ATM manufacturing plant at Delft
- e-Health Research & Innovation Platform (E-HRIP)
- Innovation Centre

f. *Commercialisation Entities*

The MRC Innovation Centre manages new ventures and licensing agreements.

5.2.3 Research priorities

The MRC research priorities in recent years have been guided by the National Priority Setting Conference 2006 (Table 1). Our aim is to have a robust set of research priorities aligned with local, regional and international health research agendas. Alignment with the National Department of Health and National Health Research Committee priorities is paramount and the new CEO and the SETI Review recommendations will have major inputs into this process. The MRC will actively participate in the follow-up National Priority Setting Conference that is planned for 2011 – the need for an updated set of research priorities is urgently required by all stakeholders.

Table 1: Health Priorities Identified by the National Priority Setting Conference 2006.

No.	Health priority	Disease burden ^{1,2} : % total mortality	Total MRC Research Expenditure	Percentage Research Expenditure	Rank with respect to National Priority Setting Conference, 2006
1	HIV and AIDS	36%	R 127 902 310.96	28.1%	1
2	TB	8%	R 63 698 700.39	14.0%	3
3	Pneumonia and influenza	8%	R 1 068 888.10	0.2%	14
4	Cardiovascular disease	20%	R 5 598 103.32	1.2%	8
5	Violence and injury	8%	R 4 208 722.37	0.9%	2
6	Cancer	6%	R 8 277 871.23	1.8%	12
7	Diabetes	3%	R 11 613 148.96	2.6%	8
8	Malaria	1%	R 55 804 193.69	12.3%	13
9	Diarrheal disease	1%	R 1 253 677.75	0.3%	4
10	Mental health	1%	R 4 789 503.69	1.1%	11
11	Nutrition	2%	R 14 171 646.52	3.1%	6
12	Women's and maternal health	2%	R 4 729 055.97	1.0%	10

13	Child health	3%	R 7 918 050.45	1.7%	5
14	African traditional medicines	—	R 8 702 920.52	1.9%	—
15	Genomics and proteomics	—	R 1 911 276.48	0.4%	—
16	Smoking	8%	R 5 217 590.99	1.1%	7
17	Alcohol and drug abuse	6%	R 15 437 191.00	3.4%	7
18	Environment and health	1%	R 8 568 444.21	1.9%	—
19	Health systems	—	R 29 123 510.07	6.4%	—
20	Bioinformatics	—	R 1 616 200.19	0.4%	—
21	Capacity Development		R 13 710 168.00	3.0%	
22	Other priority Areas ³		R 59 768 863.49	13.1%	
			R 455 090 038.35	100%	

1. South African National Burden of Disease Study for 2000
2. The Burden of Disease Research Unit is currently revising the Initial Burden of Disease estimates for the year 2000, with more recent data and analysis to provide coherent estimates of mortality centred around 2008.
- 3 The total amount shown above includes both baseline and contract funding. The funding spent in each priority area is as a result of several MRC Units doing research in more than one priority area, e.g. most units have projects that span all the 4 NSDAs.

'Other Research Priorities', reflects research initiatives that do not form the core of MRC Units, some research platforms, as well as projects that did not entirely fall under any of the research priorities stated above. The research initiatives include the Strategic Research Initiative Division, CARISA, NCRPs, HDI fund, University of Technology Research fund, etc. E-HRIP (consisting of Biomedical Informatics, Health Informatics, Telemedicine and Web and Media Technologies platforms) also contributes to these "Other priority areas". Other examples of research projects were from the SA Cochrane Centre, Bone Research Unit, Exercise and Sports Science Research Unit and Medical Imaging Research Unit.

These "Other priority areas" also contribute to the health priorities listed above. For example, CARISA contributes significantly to cancer, while the SA Cochrane centre and e-HRIP, among others, contribute significantly to health system strengthening.

5.2.4 Research enablement

The intention is to move from decaying infrastructure and atrophy in the skills base to attracting and retaining top scientists, and improving productivity. Both corporate support services and infrastructure (equipment and maintenance) are relevant.

This will involve multifaceted efforts:

- Redesign organisational structure, culture and processes to support research (for example, reviewing oversight of research units, distribution of workload between the various directorates and support for the ethics review and submission process).
- Revitalising tools/instruments/laboratories /equipment /infrastructure, to make the MRC more globally attractive and competitive within a fast changing science and research environment. Motivate to use reserves for infrastructure and maintenance of equipment.
- Review representation of, for example, unit directors and research staff via their forums (Unit Directors Forum (UDF) and Young Scientists Forum (YSF)), and consider capacity building and succession planning.
- Reassess the MRC capacity development strategy to include a focus on organisational capacity to deliver on research mandate.
- Continue the empowerment of HDU researchers via targeted support programmes.

5.3. Strategic Planning Process

This 3-year Strategic Plan builds on the previous MRC Strategic Plan 2005 – 2010 and is structured to meet the requirements of the Treasury Framework for Strategic Plans and Annual Performance Plans. A 3-year plan in line with the MTEF instead of a 5-year plan was decided upon because the usual strategic planning process could not be followed. The main reason was the current tight submission deadlines; other reasons were related to expected feedback on the SETI Report from key stakeholders and the need to follow a structured and formal strategic planning process. The MRC currently has an acting CEO and an Executive Committee with two fewer members, as well as a new Board. Input has been received from intramural and extramural unit directors on the current strategic plan, while a core team of senior staff members together with the EMC have managed the process of drafting the plan.

This plan will link to the five year MRC Strategic Plan 2011-2015 meeting, which will involve key stakeholders, including the Board, NDoH, DST, HEI's and other government departments in May/June 2011. We trust that the new CEO will be in place by that time and be part of this process.

6. Strategic Outcome Oriented Goals

The MRC has 2 strategic goals. These are:

(1) IMPROVE HEALTH THROUGH RESEARCH, DEVELOPMENT AND INNOVATION

- Generate new knowledge through high quality, relevant and ethical health research

(2) ESTABLISH EFFECTIVE AND EFFICIENT RESEARCH SUPPORT

- Ensure efficient, effective and compliant public entity and health research organisation

Part B: Strategic objectives

7.1 Strategic Objectives

The MRC's strategic objectives inform the research agenda and action plans of the organisation for the next three years. Implementation is through the relevant research projects conducted by both intra- and extramural research entities of the MRC, as well through its funding of self-initiated projects and capacity development initiatives. The strategic objectives are shown in Table 2 in relation to each strategic goal.

Table 2: Strategic Objectives of the MRC for 2011 - 2013

STRATEGIC GOALS	STRATEGIC GOAL STATEMENT	STRATEGIC OBJECTIVES	OBJECTIVE STATEMENT
IMPROVE HEALTH THROUGH RESEARCH, DEVELOPMENT AND INNOVATION	Generate new knowledge through high quality, relevant and ethical health research	PRIORITISE AND CONDUCT RESEARCH TO SUPPORT THE 4 OUTPUTS OF THE HEALTH NSDA FOR 2010-2014	To conduct operational research, develop and evaluate innovative interventions, support M&E and development of the Health Information System, and develop tools to support management of health services
		CONTRIBUTE TO NATIONAL SYSTEM OF INNOVATION BY CONDUCTING AND PROMOTING RESEARCH FOR HEALTH	To conduct basic and applied research to understand social and biological determinants of health, and identify and develop novel interventions
		TRANSLATE HEALTH RESEARCH	Synthesize evidence, optimize information and knowledge flow, influence policy and programme management, clinical and health care practice, and

STRATEGIC GOALS	STRATEGIC GOAL STATEMENT	STRATEGIC OBJECTIVES	OBJECTIVE STATEMENT
			technology transfer
		HEALTH RESEARCH CAPACITY DEVELOPMENT	Build future health researchers and institutions, with emphasis on developing black scientists and HDIs
ESTABLISH EFFECTIVE AND EFFICIENT RESEARCH SUPPORT	Ensure an efficient, effective and compliant public entity and health research organisation	EFFECTIVE, EFFICIENT AND COMPLIANT ADMINISTRATION	To ensure excellence in delivery with financial and operational compliance, managed risk, managed human resources and employment equity compliant

Objective 1.1 Prioritise and conduct research to support Health NSDA for 2010-2014

The MRC is currently engaged in numerous research projects that align directly with the NSDA priority areas and which are expected to provide valuable knowledge and information to assist the country in meeting these goals (See **Annexure A**). Over the next 3 years, research will be undertaken aligned to each NSDA output:

1 NSDA Output 1: Increasing life expectancy

Developing surveillance systems to provide credible data to set baselines and monitor progress in reducing mortality, exposure to risk factors and behaviours and monitor social determinants of health. This will be done in collaboration with other stakeholders and will build on the considerable experience that the MRC has through the Youth Risk Behavioural Survey, the Demographic and Health Survey, the National Injury Mortality Surveillance System and the National Burden of Disease Study. It will include a focus on equity.

The other key activity will be the development and evaluation of interventions aimed at reducing major burdens. In addition to the other 2 focus areas of the

NSDA, the MRC will also undertake research to address the emerging chronic disease burden and the considerable burden of violence and injuries.

2 NSDA Output 2: Decreasing maternal and child mortality

Identification of barriers to the successful implementation of current programmes, for example, the PMTC programme. Developing and evaluating models for scale up of key interventions that are known to be effective as well developing and evaluating new approaches to health care e.g. community based interventions. Continued applied research on diarrhoea and pneumonia to identify appropriate prevention strategies and monitor resistance. Continue to support facility based mortality audit systems and explore linkages with community based surveillance.

3 NSDA Output 3: Combating HIV/AIDS and reducing the burden of TB

Develop and evaluate effective prevention interventions to reduce the spread of HIV, test models to promote VCT, explore the link between violence, alcohol and HIV and develop effective interventions. Investigate potential of pre-exposure prophylaxis and continue research on microbicides. Investigate pathways to care for newly-diagnosed people and investigate ARV resistance.

Research will be done to evaluate TB control, investigate adherence and MDR, and progress on new candidate antibiotics, new candidate vaccines and new diagnostics.

4 NSDA Output 4: Strengthening health system effectiveness

Research the key health system pillars: service delivery, health workforce, health information, financing, medical products and technology assessments. Research will be undertaken to strengthen the Health Information System and develop tools to support management of health services. Economic evaluation and policy analysis will also be undertaken.

Objective 1.2 Contribute to National System of Innovation by conducting and promoting research for health

In addition to targeting the 4 NSDA outputs, the MRC will continue to conduct and support high quality basic, applied and interventional research aligned with the South African burden of disease. Clinical research will be strengthened. As a publicly funded research institution, the MRC has to work in concert with the aims and objectives of its line department and the overall National System of Innovation (under the ambit of DST), as well as Higher Education Institutions.

Objective 1.3 Translate health research

- Strengthen capacity to synthesize and disseminate evidence to be used for policy making and health care.
- Strengthen the information and knowledge flow within the MRC and to key stakeholders including the public.
- Engage with national research prioritisation process.
- Leverage intellectual property (IP) for poverty alleviation/eradication and development
- Increase technology transfer and innovation for new and improved products and processes

Objective 1.4 Health research capacity development

The MRC's Research Capacity Development programme will provide support through one time grants, short term grants and extended-period grants to institutions and MRC Units in various classes. They cover support to attend local and international conferences, visiting scientists, technical assistance, and development grants. Value amounts for MRC Career Awards, Post doctoral fellowships, young specialists in HDIs, allied health scholarships, post-intern scholarships and master's and doctoral scholarships. In addition, institutional visits will be undertaken and an MRC research day organised for young scientists.

MRC will increase funding of self-initiated research (SIRs) projects, thereby increasing opportunities for research training of postgraduate students. It will also provide targeted funding and support of Historically Disadvantaged Institutions (HDIs) in order to strengthen research capacity, as well as funding of institutions embarking on new programmes of health research.

Objective 2.1 Effective and Efficient Research Support

Employing systems that will ensure effective management of all resources across the organisation (human, financial, information, etc.) whilst ensuring compliance with government regulations and good corporate governance. Support will be provided to attract, develop and retain human resources needed to conduct excellent health research in order to ensure that the MRC maintains its position amongst the leading health research councils in the world as well as delivers on its mandate.

7.2. Key priorities for the immediate term

- Addressing the problem of interim leadership at CEO and Executive Management levels.
- Coordinating the strategic planning process for finalising the MRC's 5-year Strategic Plan in May/June 2011. Inputs from the Board, NDOH, other key stakeholders and the SETI Report will be considered.
- Finalisation of the Research Strategy, based on the 5-year Plan.
- Considering transformation in its broader sense, we will address the **configuration of the MRC's research structures** so that they focus optimally on health research priorities. This will entail looking afresh at unit budgets, alignment, coordination, and importantly, implementing change management.

7.3. Strategic action initiatives

The CEO will entrust strategic action initiatives to Executive Directors responsible for managing delivery in national performance areas and/or institutional performance

areas. These initiatives will be carried out with the support of administrative units and in collaboration with internal and external research partners.

7.4. Resource considerations

Even though almost 50% of MRC's income is generated from contracts, key employees are employed on a permanent basis, which ensures an element of stability.

Two major expenditure items are salaries and payments to our research collaborators (universities, NPOs, Science Councils, etc). Salaries are expected to increase by 7%, and will also increase as the organisation fills some of the senior positions. Currently, salaries constitute 47% of the total expenditure, and this is expected to increase to 49% by end of 2014.

7.5. Risk management

The MRC has adopted an Enterprise Wide Risk Management model, in order to ensure that risks are not addressed in silos. A critical component of this model will entail establishing a risk appetite threshold and tolerance level.

The Risk Management Committee is chaired by the CFO and reports to the Audit Committee. Its major responsibility is to review the organisation's Risk Management Strategy. The key components of the MRC Risk Management Strategy are:

- The Risk Assessment process (process that includes the identification of risks, their prioritization and the identification of internal controls aimed at mitigating identified risks) conducted annually and derived from the Risk Management Framework that the organisation has implemented.
- The adoption of an integrated approach to development of mitigation plans for identified risks.
- The allocation of management responsibility for identified risks to risk champions within the organisation.

- Compliance to legislation is tested by doing regular in-house compliance audits in various units

In accordance with the risk management strategy, risk champions take responsibility for reviewing mitigation actions and controls as recommended by the Board. Additionally, risk champions have the responsibility of assessing strategic and operational risks as identified by wider management.

The Risk Management Plan developed from the Risk Management Framework is incorporated into the one year and rolling three year internal audit plans that are approved and monitored by the Audit Committee.

The Risk Management Committee receives a progress and monitoring report on the implementation of the Risk Management Strategy on a quarterly basis.

A risk maturity assessment performed recently indicated a 35% ranking, which is an improvement on the assessment done two years ago, which was 26%.

Some areas of MRC's key corporate risks are:

- Potential lack of integrity in research and the main strategy to address this is to make the Research Integrity Office operational. The responsible conduct of research (RCR) will be promoted as a preventive strategy.
- MRC has a heavy involvement in clinical trials, and this entails intensive involvement with communities. Negative experiences and/or views about research can impact on research and may result in a bad name for the MRC. MRC has reviewed its media strategy, and will look at its policy brief strategy related to translation of research. Adherence to ethics codes (human and animal) and GCP and GLP practices are firmly supported.
- An inappropriate funding mix may result in MRC pursuing research that does not necessarily address the main disease areas in South Africa.
- There is a high competition for scientific skills and MRC is reviewing its reward and recognition strategy in order to address the problem.

Given the complexity of the MRC business, the organisation has decided to set up a formal risk management function.

7.6. MATERIALITY AND SIGNIFICANCE FRAMEWORK

In terms of the PFMA, and for purposes of *material* [sections 55(2) of the Act] and *significant* [section 54(2) of the Act], the Accounting Authority must develop and agree on a framework of acceptable levels of materiality and significance with the relevant Executive Authority in consultation with the Auditor General.

In 2009, the significance threshold for the purposes of Section 54 (2) was established at R4m. The MRC is currently revising its framework to include both materiality and significance elements, and the following factors will be taken into consideration.

PFMA Section	Quantitative [Amount]	Qualitative [Nature]
PFMA section 54: Information to be submitted by accounting authorities:		
2) Before a Public Entity concludes any of the following transactions, the Accounting Authority for the Public Entity must promptly and in writing inform the relevant Treasury of the transaction and submit relevant particulars of the transaction to its Executive Authority for approval of the transaction:		
(a) establishment of a company	Any proposed establishment of a legal entity.	Full particulars to be disclosed to the Minister of Health for approval after which it is to be presented to Treasury.
(b) participation in a significant partnership, trust, unincorporated joint venture or similar arrangement;	Qualifying transactions of a strategic nature (being outside the normal business or scope of the MRC) based on x% of the total assets	Full particulars to be disclosed to the Minister of Health for approval after which it is to be presented to Treasury.
(c) acquisition or disposal of a significant shareholding in a company;	Unlisted company greater than 50% shareholding, Listed company greater than 10% shareholding	Full particulars to be disclosed to the Minister of Health for approval after which it is to be presented to Treasury.
(d) acquisition or disposal of a significant asset;	Qualifying transactions of an operational nature (being within the normal business or scope of the MRC based on x% of fixed assets (R109 Million) =	Any asset that would increase or decrease the overall operational functions of the entity, outside of the approved strategic plan and budget
(e) commencement or cessation of a significant business activity	Any activity not covered by the mandate of the organisation	Full particulars to be disclosed to the Minister of Health for approval after which it is to be presented to Treasury.

PFMA Section	Quantitative [Amount]	Qualitative [Nature]
PFMA Section 55: Annual report and financial statements		
(2) The annual report and financial statements referred to in subsection (1) (d) (“financial statements”) must- a) fairly present the state of affairs of the Public Entity, its business, its financial results, its performance against predetermined objectives and its financial position as at the end of the financial year concerned;		
(b) include particulars of—	Losses through criminal conduct • any loss identified (including losses through unauthorized irregular / fruitless / wasteful expenditure)	Any losses due to criminal conduct are considered material by their nature, irrespective of the quantum thereof.
(i) any material losses through criminal conduct and any irregular expenditure and fruitless and wasteful expenditure that occurred during the financial year:		<ul style="list-style-type: none"> • Report quarterly to the Minister of Health. • Report annually in the Annual Financial Statements
(ii) any criminal or disciplinary steps taken as a consequence of such losses or irregular expenditure or fruitless and wasteful expenditure;		<ul style="list-style-type: none"> • Report quarterly to the Minister of Health. • Report annually in the Annual Financial Statements
(iii) any losses recovered or written off;		<ul style="list-style-type: none"> • Report quarterly to the Minister of Health. • Report annually in the Annual Financial Statements
(iv) any financial assistance received from the state and commitments made by the state on its behalf; and		<ul style="list-style-type: none"> • Report quarterly to the Minister of Health. • Report annually in the Annual Financial Statements
(v) any other matters that may be prescribed;		<ul style="list-style-type: none"> • Report quarterly to the Minister of Health. • Report annually in the Annual Financial Statements

Conclusion

This 3-year Strategic Plan plots the course of action for the MRC over the medium term, cognisant of the fact that there are several factors that will influence this journey, e.g. the new CEO, the new Board, the SETI Report, the government departments, and the new 5-year Strategic Plan. Without a doubt, the organisation faces many changes and challenges but it has the capability to enter the next term

with confidence. As a national and regional asset in the realm of research for health, the MRC will emerge from the current changes with a fresh strategy and new leadership, both in form of the Board and the CEO, and supported by its stakeholders. Certainly not business as usual!

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Annexure A: MRC projects currently aligned with NSDA

Note: Only those Units/Divisions/projects that have a link to the 4 NSDA outputs are listed.

Information on the rest is available.

Summary

		Increasing life expectancy	Decreasing child and maternal mortality	Combating HIV/AIDS, STI's and TB	Enhancing health systems
	UNIT/DIVISION NAME	NSDA 1	NSDA 2	NSDA 3	NSDA 4
INTRAMURAL	Nutritional Intervention Research Unit	8	5	1	1
	Oncology Research Unit	5	1	1	5
	Malaria Research Unit	2	0	0	10
	Indigenous Knowledge System Research Unit	2	0	1	0
	HIV Prevention Research Unit	0	0	4	4
	Health Promotion Research and Development Research Unit	2	0	2	3
	Health Systems Research Unit	1	6	6	10
	Gender and Health Research Unit	0	0	8	13
	Burden of Disease Research Unit	3	4	2	4
	Safety and Peace Promotion Research Unit	5	0	0	1
	Environment and Health Research Unit	0	2	0	1
	Chronic Diseases of Lifestyles research Unit	4	0	0	2
	Diabetes Research Unit	2	0	0	0
	PROMECA Research Unit	3	0	0	3
	Tuberculosis Epidemiology and Intervention Research Unit	0	0	19	15
	Biostatistics Research Unit	10	10	11	11
	Clinical and Biomedical TB Research Unit	0	0	13	2
	South African Cochrane Centre	0	0	0	6
	Alcohol & Drug Abuse Research Unit (ADARU)	0	3	9	14
	Innovation Centre	0	0	0	3
	Web and Media Technologies	0	0	1	3
	Biomedical Informatics Research Division	0	0	1	2
	Health Informatics Research Division	0	0	0	4
Telemedicine	0	1	2	3	

	CARISA (Cancer Research Initiative of South Africa)	1	1	0	1
EXTRAMURAL	Maternal and Infant Health Care Strategies Research Unit	0	7	1	6
	Molecular Mycobacteriology Research Unit	0	0	9	0
	Diarrhoeal Pathogens Research Unit	0	9	0	5
	Inter-University Cape Heart Research Unit	10	0	1	0
	Immunology of Infectious Disease Research Unit	0	0	2	1
	Anxiety and Stress Disorders Research Unit	0	0	1	1
	Medical Imaging Research Unit	0	3	2	1
	Centre for Molecular and Cellular Biology Research Unit	0	0	31	1
	Inflammation and Immunity Research Unit	0	0	2	1
	Cancer Epidemiology Research Unit	0	0	1	6
	Rural Public Health and Health Transitions Research Unit	2	7	2	7
	Exercise Science and Sports Medicine Research Unit	1	0	0	6
	Human Genetics Research Unit	0	0	0	5
	Bioinformatics Research Unit	0	0	2	0
	Respiratory and Meningeal Pathogens Research Unit	0	1	8	4
	Health Policy Research Unit	0	0	4	14
	Drug Discovery and Development Research Unit	0	0	1	1

Intramural

UNIT/DIVISION NAME	PROJECT TITLE	Increasing life expectancy	Decreasing child and maternal mortality	Combating HIV/AIDS, STI's and TB	Enhancing health systems
		NSDA 1	NSDA 2	NSDA 3	NSDA 4
1. Nutritional Intervention Research Unit:					
	1 School gardens to address vitamin A deficiency	X	X	-	-
	2 A baseline assessment for the Sustainable food production and nutrition education in schools program implemented by the department of Education	X	X	-	-
	3 Nutritional value and water use of indigenous crops for improved livelihoods	X	-	-	-
	4 A baseline and scoping study on water use and nutrient content of crop and animal food products for improved household food security	X	-	-	-
	5 The vitamin A status of mothers and pre-school children in an area in the Northern Cape with a high intake of preformed vitamin A: implications of blanket vitamin A supplementation	X	X	-	-
	6 Evaluating the efficacy of an optimized complementary food powder mix to improve iron status of young children	X	X	-	-
	7 Consumer acceptability and use of a fortified complementary food supplement for infants and young children in South Africa	-	X	-	-
	8 Iodine studies	X	-	-	-
	9 The fatty acid composition of margarine, vegetable oil and fast foods	-	-	-	-
	10 South African Food Composition Database	-	-	-	X
	11 The influence of helminthes on immune responses to HIV	X	-	X	-
	12 The effect of palm oil antioxidants on the progression of atherosclerosis in a non-human primate model	-	-	-	-

2. Oncology Research Unit:						
	1	Project no. 3851: Study of dietary and Medicinal Wild plants as a risk factor for Oesophageal Cancer	X	-	-	-
	2	Project No. 3852: Risk factors for Oesophageal Cancer in the Eastern Cape Province of south Africa	X	X	X	X
	3	Project No. 3845: Anticancer and Immunomodulatory properties of south African Medicinal Plants	X	-	-	X
	4	Project 3633: Study of complementary and Alternative Medicine use in nuclear Medicine	X	-	-	X
	5	Project 3632: The effect of CAM/ATM use on the biological response modulation of anticancer chemotherapy and its associated side effects	X	-	-	X
	6	Project 3635: The epidemiology of Cancer in South Africa	-	-	-	X
3. Malaria Research Unit:						
	1	Lubombo Spatial Development Initiative (LSDI)	-	-	-	X
	2	Bio-prospecting	X	-	-	X
	3	Malaria Informatics System	-	-	-	X
	4	Mapping malaria risk in Africa: an antimalarial resistance data repository	-	-	-	X
	5	Prevalence of Antimalarial Resistance Markers	X	-	-	-
	6	Health GIS	-	-	-	X
	7	Innovative Vector Control Consortium (IVCC)	-	-	-	X
	8	Spatio-temporal modelling of Malaria in Southern Africa	-	-	-	X
	9	Towards the development of epidemic forecasting models	-	-	-	X
	10	Development of empirical modes of malaria seasonality for Africa	-	-	-	X
	11	Knowledge attitudes and practices (KAP) studies	-	-	-	X
4. Indigenous Knowledge System Research Unit:						
	1	Contract Research Projects				

	a.	City of Cape town: Industrialization of TM in the Cape Metropole	X	-	-	X
	b.	BVM: TM use in the Municipal jurisdiction	X	-	-	X
	c.	Edge2Edge: Cytochrome P450, Nutritional content, Phase I and Phase II clinical trials	X	-	-	-
	d.	Department of Social Services: Traditional Medicines and community Empowerment	-	-	-	X
	e.	CSIR: Toxicology and efficacy studies (<i>in vivo</i> and clinical trials)	X	-	-	-
	2 Current Grant Projects					
	c.	Malaria Projects	X	-	-	-
	d.	Diabetes Research	X	-	-	-
	e.	Immune modulators and HIV and AIDS	-	-	X	-
5. HIV Prevention Research Unit:						
	1	Oral and vaginal routes of preventing HIV infection	-	-	X	X
	2	Broader HIV prevention	-	-	X	X
	3	Integration HIV prevention, treatment and care	-	-	X	X
	4	Operational research as mandated by the Department of Health	-	-	X	X
6. Health Promotion Research and Development Research Unit:						
	1	Youth Risk Behaviour Survey (YRBS) and Global Youth Tobacco Survey (GYTS) 2008	X	-	-	X
	2	SISTA Study	X	-	-	-
	3	Men's Health and Behaviour Research, the Initiation and Circumcision Study	-	-	X	X
	4	The SAAVI Study	-	-	X	X
7. Health Systems Research Unit:						
	1 HIV Prevention					
	a.	Prevention of Mother to Child Transmission (PMTCT)	-	X	X	X
	b.	Voluntary Counselling and Testing (VCT)	-	X	X	X

		c. Positive Prevention	-	X	X	X
		d. Youth	-	X	X	X
		e. High Risk Populations	-	X	X	X
	2	TB Control	X	-	X	X
	3	Surveillance	-	-	-	X
	4	Child Health	-	X	-	X
	5	Health Systems Strengthening	-	-	-	X
	6	Health Service Policy	-	-	-	X
8. Gender and Health Research Unit:						
	1	Research on sexual violence				
		a. Study of rape perpetration and its intersections with HIV	-	-	X	X
		b. Evaluation of an intervention to improve Post Exposure Prophylaxis (PEP) adherence after sexual assault	-	-	X	X
		c. Tracking Justice: a study of the circumstances of rape on women and children, legal outcomes and the nature and role of medico-legal evidence in legal outcome in sexual assault	-	-	-	X
		d. The impact of HIV stigma on the uptake and adherence to anti-retroviral therapy after sexual assault	-	-	X	X
		e. The sexual violence research initiative	-	-	-	X
	2	Evaluation of interventions related to gender and health that aim to build gender equity, reduce violence and prevent HIV				
		a. RCT of the stepping stones behavioural intervention for HIV	-	-	X	X
		b. Evaluation of Vezimfihlo: The integration of gender-based violence screening into VCT services: women's perspectives	-	-	X	X
		c. Respect 4 U: 'Safe dates' adaptation for South Africa and testing	-	-	X	X
		d. A RCT evaluation of a brief woman-focused behaviour change intervention that aims to increase knowledge and skills to reduce substance abuse, sexual risk and victimization in VCT settings	-	-	X	X
	3	Understanding men and masculinities and engaging them in building gender equity				
		a. Study of rape perpetration and its intersections with HIV and analyses of data on men from the Stepping Stones study	-	-	X	X

		b. Intimate femicide: Understanding men who murder their intimate partners in South Africa	-	-	-	X
		c. Men and gender policy project: a study of policies on men and gender equity in South Africa and understanding men who display more gender equitable practices	-	-	-	X
		d. Hegemonic Masculinities and Men in Sweden and South Africa: Theorising Power and Change	-	-	-	X
9. Burden of Disease Research Unit						
		1 National Burden of Disease Study	X	X	X	X
		2 Child mortality	-	X	-	-
		3 Western Cape Burden of Disease Project	X	X	X	X
		4 PROMEC cancer register	-	-	-	X
		5 South African Demographic and Health Survey	X	X	-	X
10. Safety and Peace Promotion Research Unit						
		1 Injury Surveillance	X	-	-	X
		2 Violence Prevention	X	-	-	-
		3 Unintentional Injury Prevention	X	-	-	-
		4 Traffic Injury Prevention	X	-	-	-
		5 The Safe Communities Initiative	X	-	-	-
11. Environment and Health Research Unit						
		1 Urbanisation, Housing and Health	-	-	-	X
		2 Nutrition	-	X	-	-
		3 Climate Change and Health	-	-	-	-
		4 Water Quality and Health	-	X	-	-
12. Chronic Diseases of Lifestyles Research Unit						
		1 WHO – What works study?	X	-	-	-
		2 Lifestyle modification education in chronic diseases of lifestyle: insight into counselling provided by health professionals at primary health care facilities in the Western Cape, South Africa	-	-	-	X

		3 Smoking Cessation Intervention programme	X	-	-	-
		4 Diabetes mellitus and other cardiovascular disease risk factors in the Cape Peninsula urban black population; also known as the CRIBSA (Cardiovascular Risk in Black South Africans) Study	X	-	-	X
		5 The HealthKick Programme – A school-based intervention programme to reduce diabetes risk factors in disadvantaged communities of the Western Cape, South Africa	X	-	-	-
13. Diabetes Research Unit						
		1 Effects of gestational obesity on the outcomes of adult offspring	X	-	-	-
		4 Effects of alternative medicines on obesity and diabetes	X	-	-	-
14. PROMEC Research Unit						
		3 Surveillance of <i>Fusarium</i> Species and Fumonisin in Maize in Rural Subsistence Farming Areas of South Africa	-	-	-	X
		4 Production of Fumonisin by <i>Fusarium verticillioides</i>	-	-	-	-
		5 Antifungal and anti-mycotoxigenic activities of selected plant extracts against mycotoxigenic fungi	-	-	-	-
		6 Identification of food-borne Toxins and Carcinogens	X	-	-	-
		9 Assessment of Fumonisin Exposure in Populations on a Maize Staple Diet in the Transkei region of the Eastern Cape Province and Northern KwaZulu Natal	-	-	-	X
		13 Chemoprevention and Carcinogenesis: Role of Natural Dietary Components	X	-	-	-
		14 Diet, Nutrition and known Risk Factors Associated with Oesophageal Cancer	X	-	-	-
		16 Population-based Cancer registry for oesophageal and other cancers in four selected districts in the Transkei region of the Eastern Cape	-	-	-	X
15. Tuberculosis Epidemiology and Intervention Research Unit						
		1 WHO Supranational Reference Laboratory	-	-	X	X

	2	DOTS-Plus for MDR-TB patients in South Africa	-	-	X	X
	3	Improving access to HIV care for tuberculosis patients in South Africa through a best-practices approach (PEPFAR Project) – expanding to Bergville, KZN	-	-	X	X
	4	MDR-TB transmission dynamics and infection control strategies	-	-	X	X
	5	Improving access to HIV care for tuberculosis patients in South Africa through a best-practices approach (PEPFAR Project) – Expansion to North West, Eastern Cape, Western Cape	-	-	X	X
	6	Preserving the effectiveness of tuberculosis treatment with second-line drugs (PEETS study)	-	-	X	X
	7	Implementation of a TB/HIV Infection Control and Prevention project at 6 TB hospitals and 10 primary health care centres of the Western Cape department of Health	-	-	X	X
	8	International training and research centre for MDR-TB HIV and infection control	-	-	X	X
	9	Improving access to HIV care for tuberculosis patients in South Africa through a best-practices approach (PEPFAR Project) – Model Site Richmond	-	-	X	X
	10	Evaluation of Pheroid as delivery system for first-line TB drugs in a murine model of TB	-	-	X	X
	11	Risk Factors associated with failure from MDR-TB treatment	-	-	X	X
	12	US-XDR Awareness Materials	-	-	X	X
	13	Demonstration Project to determine the effectiveness of rapid assays for rifampicin resistance for presumptive MDR-TB diagnosis in smear-positive specimens from patients in high TB burden countries	-	-	X	-
	14	Rapid Surveys to determine the extent of XDR-TB in Sub-Saharan Africa	-	-	X	X
	15	Novel TB Prevention Regimens for HIV Adults	-	-	X	X
	16	Molecular Characterisation and drug susceptibility of isolates from MDR-TB patients in the Eastern Cape and North West provinces of South Africa	-	-	X	-
	17	Nanoparticle drug release in mice	-	-	X	-

		18 Molecular Diagnostics	-	-	X	-
		19 Challenges of Stop-TB	-	-	X	X
16. Biostatistics Research Unit						
		a. Collaborative Research	X-	X-	X-	X-
		b. Methodological Research				
		7 Relative Survival Using HIOV and TB cohorts in South Africa	-	-	X	-
		8 Statistics for Profiling Health Providers	-	-	-	X
17. Clinical and Biomedical TB Research Unit						
		1 Genolyse Kit evaluation study	-	-	X	-
		2 Multi Centre evaluation study of the Cepheid Xpert MTB/RIF (Xpert) Assay	-	-	X	-
		3 Longitudinal, Multi-centre study	-	-	X	-
		4 M Tuberculosis identification and Drug Susceptibility testing	-	-	X	-
		5 Natural compounds against known M Tuberculosis strains	-	-	X	-
		6 TB HAART: An evaluation of the impact of early initiation of HAART on TB treatment outcomes for TB patients co-infected with HIV	-	-	X	X
		7 PK TB HAART: "Bioavailability of the fixed dose formulation Rifafour containing isoniazid, rifampicin, pyrazinamide, ethambutol and the WHO recommended first line anti-retroviral drugs, zidovudine, lamivudine, efavirenz administered to new TB patients at different levels of immunosuppression."	-	-	X	-
		8 Rifabutin: Pharmacokinetics of Rifabutin Combined with Antiretroviral Therapy in the Treatment of Tuberculosis Patients with HIV Infection in South Africa. Status-Recruitment due to be complete by February 2010 and follow-up by May 2010.	-	-	X	-
		9 TMC 207	-	-	X	-
		10 Rapid Survey of MDR/XDR TB in hospitals of KwaZulu-Natal	-	-	X	X
		11 NOVSEC – TB: Novel secretion systems of Mycobacterium tuberculosis and their role in host-pathogen interaction	-	-	X	-

		12 REMOX: A randomised placebo – controlled double blind trial comparing two treatment shortening regimens with the standard regimen (two months ethambutol, isoniazid, rifampicin and pyrazinamide followed by four months isoniazid and rifampicin) namely	-	-	X	-
		13 Smear Negative TB	-	-	X	-
18. South African Cochrane Centre						
		1 Cochrane reviews	-	-	-	X
		2 Promoting the use of evidence in policy and practice	-	-	-	X
		3 Methodological Research	-	-	-	X
		4 Capacity Building in the Science of research synthesis in the African region	-	-	-	X
		5 Promoting the optimal functioning and sustainable growth of The Cochrane Collaboration	-	-	-	X
		6 Promoting access to Cochrane Reviews and derivative products	-	-	-	X
19. Alcohol & Drug Abuse Research Unit (ADARU)						
		#1. RTI/MRC Women's methamphet-amine study (*A)	-	-	X	X
		#2. South African Community Epidemiology Network on Drug Use: SACENDU (1171)	-	-	-	X
		#3. RCT to test effectiveness of woman focused intervention to reduce substance abuse, sexual risk and victimisation (1175)	-	-	X	-
		#4. Substance abuse treatment audit	-	-	-	X
		#5. Access to substance abuse treatment for historically disadvantaged communities	-	-	-	X
		#6. FAS prevention project	-	X	-	-
		#7. Alcohol and HIV Phase 2)	-	-	X	-
		#8. Workplace Intervention (1232)	-	-	X	-
		#9. CDC/MRC I-RARE: Drug use and HIV (Prev) Phase V	-	-	X	-
		#10. Drug abuse and Pregnancy	-	X	X	X
		#11. Drugs and HIV Patients (1246)	-	-	X	X

		#12. Service Quality Metrics	-	-	-	X
		#13. Alcohol-ART Adherence	-	-	X	X
		#14. Bar based HIV Intervention	-	-	X	X
		#15. Substance use and psychiatric problems	-	-	-	X
		#16. Methamphetamine use & associated health risks among adolescents (1268)	-	-	-	X
		#17. Foetal Alcohol Syndrome (FAS) (1272)	-	X	-	-
		#18. Surveillance system for district social service offices and NGOs in Western Cape	-	-	-	X
		#19. Venue-based interventions for couples reducing alcohol and drug use, HIV risk, and gender based violence	-	-	-	X
		#20. Adolescent tobacco use	-	-	-	X
Innovation Centre						
		1 Commercialisation of IP relating to an endotracheal tube retaining device used during anaesthesia	-	-	-	X
		2 Access to Pharmaceuticals (FP7 project)	-	-	-	X
		3 Medical Device Innovation Platform	-	-	-	X
Web and Media Technologies						
		1 AfroAIDSinfo	-	-	X	X
		2 Home-based caregivers capacity building	-	-	-	X
		3 Accreditation Centre for Health and Medical Web sites	-	-	-	X
Biomedical Informatics Research Division						
		1 National electronic health record project and the associated enterprise architecture	-	-	-	X
		2 HIV drug resistance	-	-	X	X
Health Informatics Research Division						
		1 WHO-FIC Collaborating Centre	-	-	-	X
		2 Assessment of Patient Management Systems (PMS)	-	-	-	X
		3 National eHealth Steering Committee/NHISSA (National Health Information System for South Africa)	-	-	-	X

		4 AMIA Global Partnership Programme	-	-	-	X
Telemedicine						
		1 mHealth Alliance SA - New Project	-	X	-	-
		2 Teleradiology - screening of chest x-rays	-	-	X	-
		3 Teledermatology screening with focus on HIV related dermatological conditions	-	-	X	-
		4 MTN Telemedicine Workstation	-	-	-	X
		5 KZN Telemedicine Strategy	-	-	-	X
		6 SA China Telemedicine Project	-	-	-	X
CARISA (Cancer Initiative of South Africa)						
		1 Identification of Novel Therapeutic Drugs and Drug Targets for Treating Breast Cancer	X	-	-	-
		2 Vaccine and Cervical Cancer Screen Project (VACCS project)	-	X	-	X

Extramural

UNIT NAME	PROJECT TITLE		Increasing life expectancy	Decreasing child and maternal mortality	Combating HIV/AIDS, STI's and TB	Enhancing health systems
			NSDA 1	NSDA 2	NSDA 3	NSDA 4
Maternal and Infant Health Care Strategies Research Unit						
		Maternal and Child Health Integration (MACH 1)	-	X	-	X
		Factors Involved in Implementing, Sustaining and Effecting Change FIISEC)	-	X	-	X
		Study on causes of and health system modifiable factors involved in in-hospital deaths of children (Saving Children)	-	X	-	X
		Severe acute maternal morbidity or maternal near misses	-	X	-	-
		PMTCT Adherence Study	-	X	X	X
		Reproductive Health evidence Based Medicine Trial	-	X	-	X
		Kangaroo Mother Care (KMC)	-	X	-	X
Molecular Mycobacteriology Research Unit						
		Molecular mechanisms of damage tolerance, long-term survival and mutagenesis in mycobacteria	-	-	X	-
		The structure, function and regulation of ribonucleotide reductases (RNRs) in mycobacteria and the impact of altered complements and expression of RNR-encoding genes on dNTP pools	-	-	X	-
		The role of oxidative DNA damage base excision repair (BER) systems in growth and survival of mycobacteria	-	-	X	-
		The role of Rpf-like proteins in growth, survival and resuscitation of mycobacteria	-	-	X	-
		The function, biosynthesis and transport of cobalamin in	-	-	X	-

		mycobacteria and the role of B12-dependent enzymes in growth and persistence				
		The biosynthesis and function of molybdopterin cofactor (MoCo) in mycobacteria	-	-	X	-
		Target-based whole cell screening in <i>M. tuberculosis</i>	-	-	X	-
		The physiological role of VapBC toxin-antitoxin modules in growth, survival and drug susceptibility of <i>M. tuberculosis</i>	-	-	X	-
		The fitness cost of drug resistance mutations in mycobacteria	-	-	X	-
Diarrhoeal Pathogens Research Unit						
		Rotavirus burden of disease studies at the Dr George Mukhari Hospital	-	X	-	X
		Rotavirus surveillance in Oukasie clinic	-	X	-	X
		Ongoing surveillance and genotyping of diarrhoeal viruses from Private Pathology Laboratory	-	X	-	X
		Molecular characterization of group A rotaviruses in adults from Private Pathology Laboratory	-	X	-	-
		Sequence analysis of VP6 gene of rotaviruses	-	X	-	-
		African Rotavirus Network (ARN) and Regional Rotavirus Reference Laboratory functions	-	X	-	X
		Phylogenetic analyses of rotavirus strains bearing a P[6] genotype in Africa	-	X	-	-
		Characterization of rotavirus from children under five years presenting with diarrhoea at the Mbabane Government Referral Hospital	-	X	-	X
		Noroviruses	-	X	-	-
Inter-University Cape Heart Research Unit						
Cardiovascular RU						
		Vein graft restenosis	X	-	-	-
		Synthetic vascular grafts	X	-	-	-
		Vascularisation of polymeric scaffolds	X	-	-	-
		Biomaterial therapies for myocardial infarcts	X	-	-	-

		Prevention of vascular in-stent restenosis in obese and diabetic patients	X	-	-	-
Hatter Institute						
		Obesity, diabetes and heart disease in the Western Cape	X	-	-	-
		Novel ways to counter a heart attack by promoting its immune system	X	-	-	-
		Cost-effectiveness of therapy for the heart	X	-	-	-
Stellenbosch Division						
		HIV/AIDS related ARV therapy and cardiovascular risk	X	-	X	-
Lipidology						
		Hypercholesterolaemia phenotype treatments	X	-	-	-
Immunology of Infectious Disease Research Unit						
		Tuberculosis and Tumour Necrosis Factor	-	-	X	-
		Testing traditional medicine for anti-mycobacterial properties	-	-	X	-
		Rational strategies for vaccination	-	-	-	X
		HIV/AIDS and Primary Care Psychiatry	-	-	X	-
		Mental Health Information Centre	-	-	-	X
Medical Imaging Research Unit						
		Automated microscopy for tuberculosis detection	-	-	X	-
		Facial imaging for foetal alcohol syndrome screening	-	X	-	-
		Neuroimaging studies of children with foetal alcohol spectrum disorder	-	X	-	X
		Techniques for detecting and characterising tuberculosis meningitis	-	-	X	-
		Development of technology for paediatric MRI	-	X	-	-
Centre for Molecular and Cellular Biology Research Unit						

Cardiovascular						
		Identifying LQTS-causing mutations in South Africa	-	-	-	X
		Molecular epidemiology, Mycobacterial genetics and Diagnostics.	-	-	X	-
		Molecular epidemiology of Mycobacterium tuberculosis:	-	-	X	-
		Genotype vs. Phenotype:	-	-	X	-
		New Molecular epidemiology markers:	-	-	X	-
		Interpretation of Molecular Epidemiological Data:	-	-	X	-
		Population Dynamics:	-	-	X	-
		Transmission of drug resistant Beijing strains:	-	-	X	-
Genetic factors affecting bacterial adaptation.						
		Fitness of a Drug-Resistant Strain:	-	-	X	-
		Reinfection induces reactivation:	-	-	X	-
		DNA Methylation in M. tuberculosis:	-	-	X	-
		Protein Phosphorylation:	-	-	X	-
Molecular Immunology: Immune responses in tuberculosis, HIV and worm infections						
Co-infection with HIV and Trichuris muris or Ascaris lumbricoidis lead to an altered immune response in co-infected humans.						
			-	-	X	-
Biomarkers of protective immunity and surrogate markers of TB disease in Africa- Gates Grand Challenge project 6-74.						
			-	-	X	-
Database design						
		Diagnostic pilot study:	-	-	X	-
		Contribution to host gene expression profiling:	-	-	X	-
		Screening new TB antigens:	-	-	X	-
Recruitment of HIV-uninfected household contacts of TB patient and TB patients: Recruitment of HIV-infected participants for WP4 (Gates funded grant) :						
		Identification of biomarkers that are able to predict tuberculosis treatment response	-	-	X	-
		Diagnosis of latent TB infection in adults and children	-	-	X	-
		The Impact of Steroid Hormones on Protective Immunity to Tuberculosis	-	-	X	-
Host genetics						
		Genome scanning:	-	-	X	-
		Case-Control Studies:	-	-	X	-

		Admixture mapping:	-	-	X	-
		Immune reaction to BCG vaccination:	-	-	X	-
Targets for new drug development						
		GS export mechanism	-	-	X	-
		Elucidation of the Global Nitrogen Signalling Cascade in Mycobacterium smegmatis	-	-	X	-
Infection control						
		The anti microbial activity of copper and copper alloys against nosocomial pathogens and Mycobacterium tuberculosis isolated from healthcare facilities in the Western Cape an in-vitro study	-	-	X	-
A study into the detection of airborne pathogens (M.tuberculosis) in a TB clinic environment.						
		Evaluation of existing techniques for the accurate detection of the minimum inhibitory concentrations (MIC's) of new antituberculosis drugs presently under drug trials.	-	-	X	-
		Evaluation of existing techniques for the accurate detection of the minimum inhibitory concentrations (MIC's) of new antituberculosis drugs presently under drug trials.	-	-	X	-
		Evaluation of existing techniques for the accurate detection of the minimum inhibitory concentrations (MIC's) of new antituberculosis drugs presently under drug trials.	-	-	X	-
Inflammation and Immunity Research Unit						
Infectious Diseases						
		HIV/AIDS Research	-	-	X	-
		Tuberculosis research	-	-	X	-
Other inflammatory diseases						
		The Gauteng Rheumatoid Evaluation and Assessment Trial	-	-	-	X
Pharmacogenetics and Stem Cell Research						
Cancer Epidemiology Research Unit						
Johannesburg Cancer Case-Control Study						
		International collaborative study on risk factors for cervical cancer	-	-	-	X
		International collaborative study on risk factors for squamous cell carcinoma of the oesophagus (InterSCOPE)	-	-	-	X

		Gynaecological and breast cancers among black South African women	-	-	-	X
		Occupational risks for cancer	-	-	-	X
		Tobacco and cancer	-	-	-	X
		HIV and cancer	-	-	X	-
		Genetics of cancer in black South Africans	-	-	-	X
Rural Public Health and Health Transitions Research Unit						
		Levels, trends and transitions				
		Mortality	X	-	-	-
		Fertility and reproductive health	-	X	-	-
		Migration	-	-	-	X
		Livelihoods	-	-	-	X
		Child health and development				
		Project PROMISE: Improving the health and nutrition of adolescents and their infants to reduce the intergenerational risk of metabolic disease	-	X	-	-
		Child and adolescent growth studies	-	X	-	-
		Kulani Child Health and Resilience Project	-	X	-	-
		SARI/ROTA - Severe Acute Respiratory Infection (SARI) and Rotavirus diarrhoea surveillance	-	X	-	X
		PVC - Pneumococcal Conjugate Vaccine Introduction	-	X	-	-
		Conditional Cash Transfer Study and Pilot	-	X	-	-
		Adult health and wellbeing				
		Epidemiology and treatment of epilepsy in sub-Saharan Africa	-	-	-	X
		Health and wellbeing of ageing populations in Africa and Asia	X	-	-	-
		HIV/AIDS and Chronic Care				
		HIV/NCD prevalence study	-	-	X	-

		Socio-cultural determinants of HIV treatment uptake and adherence	-	-	X	X
	Household response to shocks and stresses					
		Migration, livelihoods and health	-	-	-	X
		Determinants of socio-economic dynamics	-	-	-	X
Exercise Science and Sports Medicine Research Unit						
	Bone health and physical activity					
		Prevalence of low bone mineral density in HIV-positive South Africans on anti-retroviral therapy	-	-	-	X
	Body composition and metabolic outcomes					
	Evaluation of community-based physical activity and sport-related programmes					
		Programme evaluation of Community Health Intervention Programmes (CHIPs) in the Western Cape	-	-	-	X
		Programme evaluation of the Discovery Healthy Lifestyle Programme - implementation of Community Health Intervention Programmes (CHIPs) in the Limpopo and Gauteng provinces	-	-	-	X
		Impact of the Little Champs programme for motor development on cognitive function in preschool children	-	-	-	X
		World Diabetes Foundation Project: School-Based Intervention Program to Reduce Diabetes Risk Factors In Disadvantaged Communities Of South Africa	-	-	-	X
		Evaluation of short-term outcomes of sport for development interventions aimed at improving life skills of youth	-	-	-	X
	Vitality Insured Persons Research					
		Physical Activity Behaviour Incentive Study	X	-	-	-

Pathways in Developmental Health Research (prev. Mineral Metabolism Research Unit)						
Human Genetics						
		Genetics of Inherited Retinal Disorders	-	-	-	X
		Genetics of Familial Colorectal Cancers	-	-	-	X
		The Genetics of Bipolar Diseases	-	-	-	X
		African Genomic Variation	-	-	-	X
		Genetic Variations in Pharmacogenomically-relevant Genes	-	-	-	X
Rural Public Health Research Unit						
		Intervention research	-	-	-	X
		Multisite research on adult health and aging	-	-	-	X
		Multisite research on Migration and Urbanisation	-	-	-	X
		PRICELESS SA Initiative - Priority Cost effective lessons for systems strengthening	-	-	-	X
		Partnership with Mpumalanga Department of Health	-	-	-	X
Bioinformatics Capacity Development Research Unit						
		To provide relevant bioinformatic services for HIV, Hepatitis C, Cancer and Sleeping sickness researchers	-	-	X	-
		To develop and provide a sequence database and genome annotation tools to describe the epidemiology of drug resistance of HIV	-	-	X	-
Respiratory and Meningeal Pathogens Research Unit						
		Affordable and implementable interventions to reduce neonatal sepsis, a large proportion of which is attributed to respiratory disease due to <i>Streptococcus agalactiae</i> (GBS);	-	-	-	X

		The epidemiology of pneumococcal pneumonia in adults and the role of newer diagnostic modalities to improve pathogen-specific diagnosis in adults with suspected pneumococcal pneumonia	-	-	-	X
		Prevention of tuberculosis in HIV-exposed, infected and non-infected children by way of primary prophylaxis with isoniazid between 3 and 24 months of age	-	-	X	-
		Defining the correlates of protection against nasopharyngeal colonization by pneumococci and the mechanism of protection induced by conjugate pneumococcal vaccines	-	-	X	-
		Determining the impact of PCV introduction on the burden of pneumonia in children and in adults through herd effect	-	-	-	X
		Exploring immunological correlates of likely protection against GBS ano-vaginal colonization in pregnant women	-	X	-	-
		Determining the immunogenicity and efficacy of trivalent inactivated influenza vaccine in HIV infected adults	-	-	X	-
		Determining the immunogenicity and efficacy of trivalent inactivated influenza vaccine in HIV infected children	-	-	X	-
		Surveillance of severe acute respiratory illness with a specific focus on influenza virus. This project is being done in collaboration with the NICD	-	-	-	X
		The evaluation of <i>Haemophilus influenzae</i> serotype b (Hib) routine infant vaccination on a national level. Data on vaccination history of cases are being sought, and the role of HIV coinfection and lack of the booster dose in the schedule are being investigated	-	-	X	-
		The impact of PCV introduction on invasive pneumococcal disease in both HIV-infected and -uninfected adults and children in South Africa	-	-	X	-
		Increased incidence of meningococcal disease in HIV-infected individuals associated with higher case-fatality ratios in South Africa	-	-	X	-
Health Policy Research Unit						

		Exploring Coping Strategies and Life Choices made by HIV-Discordant Couples in Long-Term Relationships in South Africa, Tanzania and Ukraine	-	-	X	X
		The Johannesburg-eThekweni Men's Study (JEMS): A rapid assessment of the HIV Epidemic among Men who have Sex with Men (MSM) in South Africa	-	-	X	X
		CREHS: Consortium for Research on Equity and Health Systems: a multi-year international collaborative research programme with four themes: • Health sector reform • Financial risk protection • Health workforce performance • Scaling up	-	-	-	X
		Gauteng Province Community Health Worker Programme: The extent to which it contributes to the provision of comprehensive primary health care	-	-	-	X
		Health Policy Analysis in Africa (HEPAA)	-	-	-	X
		Health workers' preferences and policy interventions to improve retention in rural areas in Kenya, South Africa and Thailand	-	-	-	X
		Research on the State of Nursing (RESON), a multi-year research project, with three focus areas:• The nature and health system consequences of casualisation, agency nursing and moonlighting in South Africa • Policy analysis of nursing policy development and implementation in South Africa • Nursing supervision and management	-	-	-	X
		Improving the delivery of evidence based care for severely ill children at district level in Kenya	-	-	-	X
		Strengthening health policy and systems research methodologies and promoting sound teaching of such methodologies	-	-	-	X
		REACH: Researching equitable access to health care services	-	-	-	X
		Recruitment, motivation and retention of health workers in developing countries: designing better strategies based on understanding incentives and aspirations	-	-	-	X
		SHIELD: Strategies for health insurance mechanisms to address health system inequities in Ghana, South Africa and Tanzania	-	-	-	X

		Transaction cost economic approaches to TB programme organization	-	-	X	X
		Understanding why patients drop out of ART programmes: improving the provision of chronic care for ART patients	-	-	X	X
Drug Discovery and Development Research Unit						
		Integrating African natural products in modern drug discovery paradigms	-	-	-	X
		Investigation into the pharmacological potential of South African red algae	-	-	-	-
		Screening of Namaqualand plants for biological activity and correlation of activity with phytochemical profiles	-	-	-	-
		Novel antimalarial compounds from Nigerian medicinal plants				
		Isolation and characterisation of compounds with antimycobacterial and antibacterial activity from South African plants	-	-	X	-

SELF-INITIATED RESEARCH PROJECTS

	Increasing life expectancy	Decreasing child and maternal mortality	Combating HIV/AIDS, STI's and TB	Enhancing health systems
Project Title	NSDA 1	NSDA 2	NSDA 3	NSDA 4
Validation study of maternal mental health screen in the context of HIV and low resource settings.	-	-	X	X
HIV-specific T cell immunity in the female genital tract in women with HIV positive partners: Impact of discordant HIV status on mucosal immunity	-	-	X	-
The pharmacokinetics of lopinavir/ritonavir, nevirapine and efavirenz when given with isoniazid in South African HIV-infected individuals	-	-	X	-
Rifampicin concentration monitoring in tuberculosis patients deteriorating on treatment	-	-	X	-
Impact of anti-retroviral therapy on HIV shedding, inflammation and the quality of HIV-specific immunity in the female genital tract of women chronically infected with HIV	-	-	X	-
The identification of HIV-1 subtype C Envelope functional determinants as targets for drug and vaccine design	-	-	X	-
Non-uptake of counselling and testing by TB patients in the Free State: research to inform intervention	-	-	X	-
Evaluation of South African plants for the treatment of HIV opportunistic microbial infections:	-	-	X	-
Metabonomic analysis of HIV-1 patient sera as a means of monitoring the metabolic effects of antiviral therapy	-	-	X	-
Infant hearing loss in Cape Town: A community-based early detection programme	-	-	-	X
Counselling intervention to enhance adherence to antiretroviral therapy among patients receiving care at Helderberg Hospital, Somerset West	-	-	-	X
Cyclopia and breast cancer	-	-	-	-
Promotion of spinal health among high school computer users	-	-	-	X
Improving language access to institutional psychiatric care in the Western Cape Province, South Africa	-	-	-	X
A correlative study of the influence of antiretroviral pharmacogenetic traits and drug (efavirenz) levels in hair on treatment outcome in HIV-positive South African women	-	-	X	-
Implicative personal dilemmas and cognitive conflicts in health-decision making in HIV-positive adults and adults with AIDS	-	-	X	-
Prospective Urban and Rural Epidemiological Study (PURE): A Prospective Cohort Study to Track Changing Lifestyles, Risk Factors and Chronic Disease in Urban and Rural Areas of: Argentina, Brazil, Canada, Chile, China, Colombia, India, Iran, Poland, Russia, South Africa, Sweden, Turkey, UAE, Zimbabwe	-	-	-	X

The molecular and functional characterization of hepatitis B virus (HBV) genotypes isolated from human immunodeficiency virus (HIV) infected southern Africans: part II	-	-	X	-
Unravelling the patho-physiology of HIV-associated TTP	-	-	X	-
Influence of HIV-1 subtype C infection and the treatment thereof on the development of cardiovascular risk factors in Africans.	-	-	X	-
Five year Longitudinal Study of Physical Activity status and the Determinants of Health in Adolescents attending high school in Potchefstroom areas of South Africa (<i>PAHLS-Study</i>)	-	-	-	X
A multi-targeted approach to HIV drug discovery: inhibitors of HIV replication.	-	-	X	-
Mutations in the connection and RNase H domains of HIV-1 subtype C reverse transcriptase in patients exposed to antiretroviral therapy in South Africa	-	-	X	-
mRNA Expression Profiles in Two Clinical Phenotypes of Tuberculosis Pericarditis: An IMPI-Africa Registry Substudy	-	-	X	-
The relationship between Life Style and Bone Health in African women	-	-	-	X
Can cell phones lower language barriers and advance the right of access to health care – and if so how? A case study in a Community Health Centre in Cape Town	-	-	-	X
Health graduates who can provide effective relevant health care - developing education standards for undergraduate community physiotherapy in South Africa: A mixed methods study	-	-	-	X
Global Registry of Rheumatic Heart Disease: Cape Town Component	-	-	-	X
TOPD STUDY - Tuberculosis-Associated Obstructive Pulmonary Disease. A clinical radiological and pathophysiological study of the contribution of previous pulmonary tuberculosis in a community-based cohort of patients with chronic obstructive pulmonary disease.	-	-	X	-
In vitro and in vivo evaluation of spray-dried clofazimine dry powder formulations in the treatment of MDR-TB	-	-	X	-
Measuring the impact of Tuberculosis preventive therapy in HIV-infected children	-	-	X	-
Investigating the role of brain neuronal-derived tumour necrosis factor in protective immunity against <i>Mycobacterium tuberculosis</i> infection	-	-	X	-
Synthesis and Testing of Cage-TB drugs (including MDR and XDR TB)	-	-	X	-
A Trial of Adjunctive Prednisolone and <i>Mycobacterium w</i> Immunotherapy in Tuberculosis Pericarditis	-	-	X	-
T cell responses to MTb proteins in Extensively Drug-Resistant TB patients	-	-	X	-
M. tuberculosis pili in the development of a point of care diagnostic test and their role in TB pathogenesis	-	-	X	-
The role of leptin in HIV associated preeclampsia	-	X	-	-

Note: Only those SIR projects that have a link to the 4 NSDA outputs are listed. The rest of the project names are available.

Annexure B: Acronyms

ARV	Antiretroviral
ASSAf	Academy of Science for South Africa
ATM (IKS)	African Traditional Medicine
CARISA	Cancer Research Initiative of South Africa
CEO	Chief Executive Officer
CFO	Chief Financial Officer
DBSA	Development Bank of South Africa
DST	Department of Science and Technology
e-HRIP	eHealth Research and Innovation Platform
GCP	Good Clinical Practice
GLP	Good laboratory Practice
HDU	Historically Disadvantaged Universities
HEI	Higher Education Institutions
IDT	Independent Development Trust
IKS	Indigenous Knowledge Systems
IP	Intellectual Property
MDG	Millennium Development Goals
MDR	Multi-drug resistant
MOU	Memorandum of Understanding
MRC	Medical Research Council
MTEF	Medium-term Expenditure Framework
NCRP	National Collaborative Research Programme
NDoH	National Department of Health
NHI	National Health Insurance
NPO	Non Profit Organisation
NSDA	Negotiated Service Delivery Agreement
PFMA	Public Finance Management Act
PHC	Primary Health Care
PMTCT	Prevention of Mother to Child
PROMECA	Programme on Mycotoxins and Experimental Carcinogenesis
R&D	Research and Development
RCR	Responsible conduct of research
RU	Research Unit
SAAVI	South African AIDS Vaccine Initiative
SETI	Science, Engineering, Technology and Innovation
SLA	Service Level Agreement
TB	Tuberculosis
UDF	Unit Directors Forum
VCT	Voluntary Counselling and Testing
YSF	Young Scientists Forum