SOUTH AFRICAN MEDICAL RESEARCH COUNCIL

Grants, Innovation and Product Development (GIPD)

NIOH Presentation
Thursday, 19 November 2020

An organisation…”advancing life”
EVOLUTION OF MRC GRANT FUNDING

Prior to revitalization in 2012

- SIR grant program
- (Research Capacity Development Awards)
- (Extra-mural Unit Funding)
- Very little innovation funding
EVOLUTION OF MRC GRANT FUNDING

2012-2020 – **220 grants**

- SIR grant program
- FLAGSHIP grant program
- SAMRC/NIH grant program
- SHIP grant program
- SA Grand Challenges
- SAMRC – Sweden grant program
- SAMRC – UK grant program (Newton Fund)
- SAMRC – India grant program
- SAMRC – Sudan grant program
- SAMRC – BGMF grant program
- SAMRC – Anglo American Platinum grant program
- SAMRC – CIHR grant program
- Big move towards standardized protocols
OVERVIEW OF GIPD: CURRENT GRANT PROGRAMS

▪ GIPD co-funding with International partners:
  ▪ Newton Fund (UK MRC, UK Government),
    ▪ Non Communicable diseases (with GSK)
    ▪ TB Implementation Science
    ▪ Anti- microbial resistance
    ▪ Precision Medicine (co-funded with DST)
    ▪ Mental Health
  ▪ Gates Foundation:
    ▪ Grand Challenges SA
    ▪ Global Health Innovation Accelerator (GHIA)
  ▪ National Institutes of Health
    ▪ HIV, TB and HIV comorbidities
    ▪ TB REPORT
  ▪ Sweden FORTE
  ▪ SA-India (DST Funded)
  ▪ CIHR – HeLTI
  ▪ NEISHIE
  ▪ Large COVID portfolio – >30 projects
SOUTH AFRICAN POPULATION RESEARCH INFRASTRUCTURE NETWORK
MOU SIGNING BETWEEN SAMRC & BGI

25 APRIL 2017 | SAMRC PRETORIA SOUTH AFRICA

The SAMRC and BGI (Beijing Genomics Institute) have signed an MOU which will see the two organisations come together in a partnership to establish a Whole Genomic Sequencing Facility.

For more information, please contact: Grants, Innovation & Product Development
richard.gordon@samrc.ac.za | richard.joel@samrc.ac.za

GRAND CHALLENGES
ANNUAL MEETING 2014

Welcome
Cape Town - South Africa
HOW WE SELECT FUNDING TOPICS

Key Message: This is aligned with the disease burden of SA

- **SHIP**: (DST, DOH, DTI, SAMED, SANAC)
  - SHIP SteerCo (See SHIP section)

- **FLAGSHIP Grants**: (MRC)
  - Based on quality proposals aligned with national disease burden

- **Newton Fund** (MRC, UKMRC, GSK)
  - NCD: Based on quality proposals aligned with national disease burden, GSK and UKMRC
  - TB: Based on TB Think Tank priority areas – DOH, MRC, BMGF
  - AMR
  - Mental Health – parliament/Board

- **Grand Challenges South Africa** (MRC, BMGF)
  - MRC aligned with Grand Challenges “Saving Lives at Birth” call
SHIP INNOVATION PROJECTS

Research
- TB Drug Discovery
- Malaria Drug Discovery
- Microbicides
- Asphalatin
- GIFT
- Diabetes POC
- HIV Vaccine projects
- GCSA
- TB Vaccine projects
- TB Diagnostics

Inbound technology
- Disa PGM
- LifeAssay GCSA
- LifeAssay PGM
- GCSA

Home grown IP
- Disa PGM
- LifeAssay
- GCSA
- TB Vaccine projects
- HIV Vaccine projects
- Levofloxacin
- Darinavir

Development
- Essential Medical Guidance
- Hanks
- Asphalatin

Commercialisation
- Diabetes POC
- Levofloxacin
- Darinavir
**PUBLIC HEALTH UMBIFLOW**

- Abnormal Umbiflow reading observed in 10% low-risk pregnancy population (9 province study)
- Absent end-diastolic flow in low-risk pregnancy population is $8\sim10 \times$ higher than in high-income countries
- Umbiflow screening followed by appropriate interventions resulted in **40% reduction in stillbirth rate** in study group
- ELMA Philanthropies and Clinton Health Access Initiative have provided **funding to support the implementation study for national roll-out**
• Sinapi UBT demonstrated to be feasible for the management of postpartum haemorrhage in a rural regional hospital without specialist supervision (St. Elizabeth’s Hospital, Lusikisiki)

• Case series was conducted on 10 patients by medical officers without specialist supervision.

• The overall success rate was 90% (9/10). No immediate complications resulted from the use of the Ellavi UBT. All patients included in the case series arrived at the referral hospital and had a good outcome.

• UBT has received a CE mark for the UBT
  • adopted by 31 South African hospitals (in 5 provinces) in 2019
  • received regulatory approvals in Kenya and Ghana in January 2020
  • Already on the market in Botswana, Lesotho, Swaziland, Kuwait, Puerto Rico, and Brazil

• An RCT that includes the Ellavi UBT is planned by WHO in Vietnam in 2021
SELECTED PROJECT HIGHLIGHTS

- Enrolment and infusion of the first participant into the CAPRISA 012B first-in-human phase 1 trial of CAP256V2LS in July 2020
- New large-scale image-based analytical method for mycobacterial functional genomics developed and contributed to the TB Drug Accelerator (3rd assay developed through SHIP funding)
- Content management system (CMS) developed for EML App to allow NDOH to manage its own content updates.
  - Same CMS being applied to TB and HIV clinical guide Apps

PROJECT FUNDS LEVERAGED

- Chibale (TB and malaria drug discovery): Gates Foundation
- Chibale (malaria drug discovery): MMV
- Chibale/Masamba: NIH
- Warner: NIH & Gates Foundation
- Pattinson: CHAI and Elma Philanthropies
HOW DO WE MEASURE PROGRESS/SUCCESS?

• Practice
  – Changing practise
    • TB Active case finding – Newton
    • Transmission – MRC/Gates
    • Lung challenge projects – MRC Gates
    • Breast Cancer – SUN/TIA.
  – Lives saved
    • UBT with PATH
    • Doppler with CSIR
    • TB Newton
  – Prescribing
    • Low dose Darinivir (co-funded with US funder)
    • ADVANCE study
    • TB CHAMP – paediatric levofloxacin (Co-funded with UKMRC)
  – Manufacturing
    • CBT
KEY LEARNINGS

• Don’t send 1 proposal! Success rates are 10-25%
• Include data! – reviewers need to see this. They review under confidentiality
• Collaborations trump single institution applications
• Capacity development and transformation are very important
• Evolve with the times and research priorities.
FUNDING OPPORTUNITIES

- Keep checking out SAMRC website
- Self Initiated research calls
- SHIP
- Newton
- SAMRC & private sector