



## Discovery Foundation

*What is the Discovery Foundation doing to increase the quality and quantity of PhDs in the clinical sciences?*

Dr Maurice Goodman



# Background to the Discovery Foundation

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- Set up in 2006 as part of Discovery's BEE transaction
- Awards focus on strengthening SA's specialist skills and public healthcare system
- Focus on:
  - Rural areas
  - Academic Medicine and research
  - Sub-specialist training programmes
  - Promoting the number of previously disadvantaged students who become specialists
- Awards include scholarships, bursaries, fellowships and support for teaching and research institutions
  - Train some 300 medical specialists by 2016
  - R100 million investment



## A targeted intervention to address challenges in our healthcare sector

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- Important boost for specialist training across South Africa
- Recipients committed to serving public healthcare in South Africa
- Direct positive impact on communities , delivering key services to communities
- Support for academic institutions to train clinicians in research and Academic Medicine – boosting the pool of medical knowledge in South Africa
- Fields of research and specialty training focus on critical areas: HIV and AIDS, TB, cardiology and oncology
- Discretionary grant of R1 940 000 to the Colleges of Medicine of South Africa in 2008 to support a project aimed at strengthening specialist training and Academic Medicine in South Africa

Since 2006, a commitment of over R66 million to **143** recipients, including eight organisations working in public healthcare





# Investing in individuals and institutions

- Over the last five years the Foundation has invested over R66 million in individual and institutional awards.
- The majority of this investment (approximately R37 million) has gone towards funding Academic fellowships (including MMed and PhD research)

Financial Year	Academic	Rural	Specialist/ Subspecialist	Excellence	Total
<b>2006/2007</b>	R8 765 000	R687 500	R400 000	R2 000 000	<b>R11 852500</b>
<b>2007/2008</b>	R7 202 000	R375 000	R1 250 000	R2 000 000	<b>R10 827000</b>
<b>2008/2009</b>	R7 537 400		R3 600 000	R2 000 000	<b>R13 137 400</b>
<b>2009/2010</b>	R7 500 000	R2 525 999	R4 045 000	R1 000 000	<b>R15 070 999</b>
<b>2010/2011</b>	R5 579 880	R2 958 454	R6 500 000	R1 000 000	<b>R16 038 334</b>
<b>Total</b>	<b>R36 584 280</b>	<b>R8 000 000</b>	<b>R6 546 953</b>	<b>R15 795 000</b>	<b>R66 926 233</b>

Table 1: Spend per award per financial year, excluding the grant of R1 940 000 to the Colleges of Medicine



## Number of awards since 2007

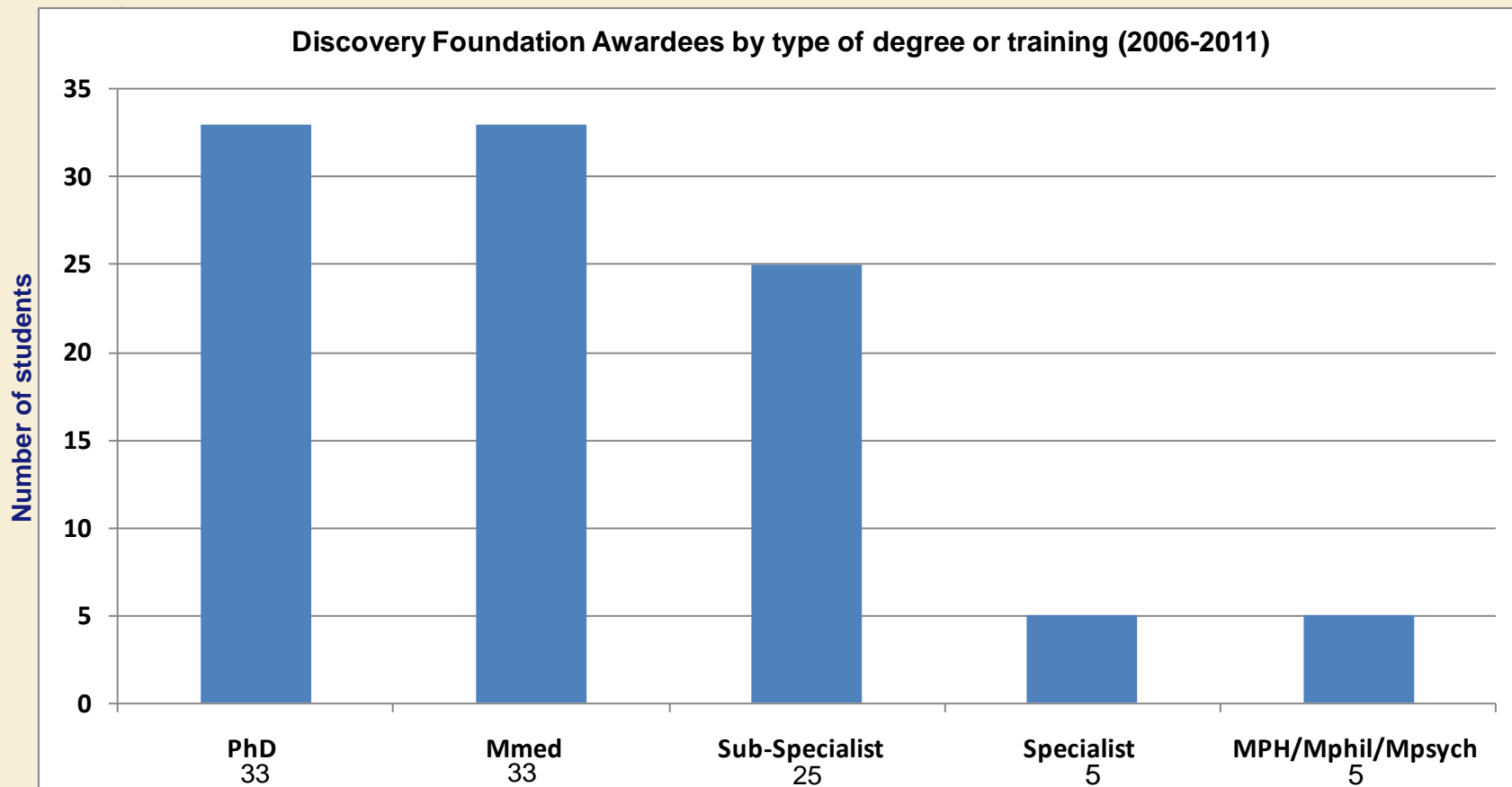
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Year	Academic	Rural	Specialist/ Subspecialist	Excellence	Total
2007	14	6	7	2	29
2008	11	0	9	2	22
2009	11	10	9	2	32
2010	15	13	5	1	34
2011	10	10	5	1	26
	<b>61</b>	<b>39</b>	<b>35</b>	<b>8</b>	<b>143</b>



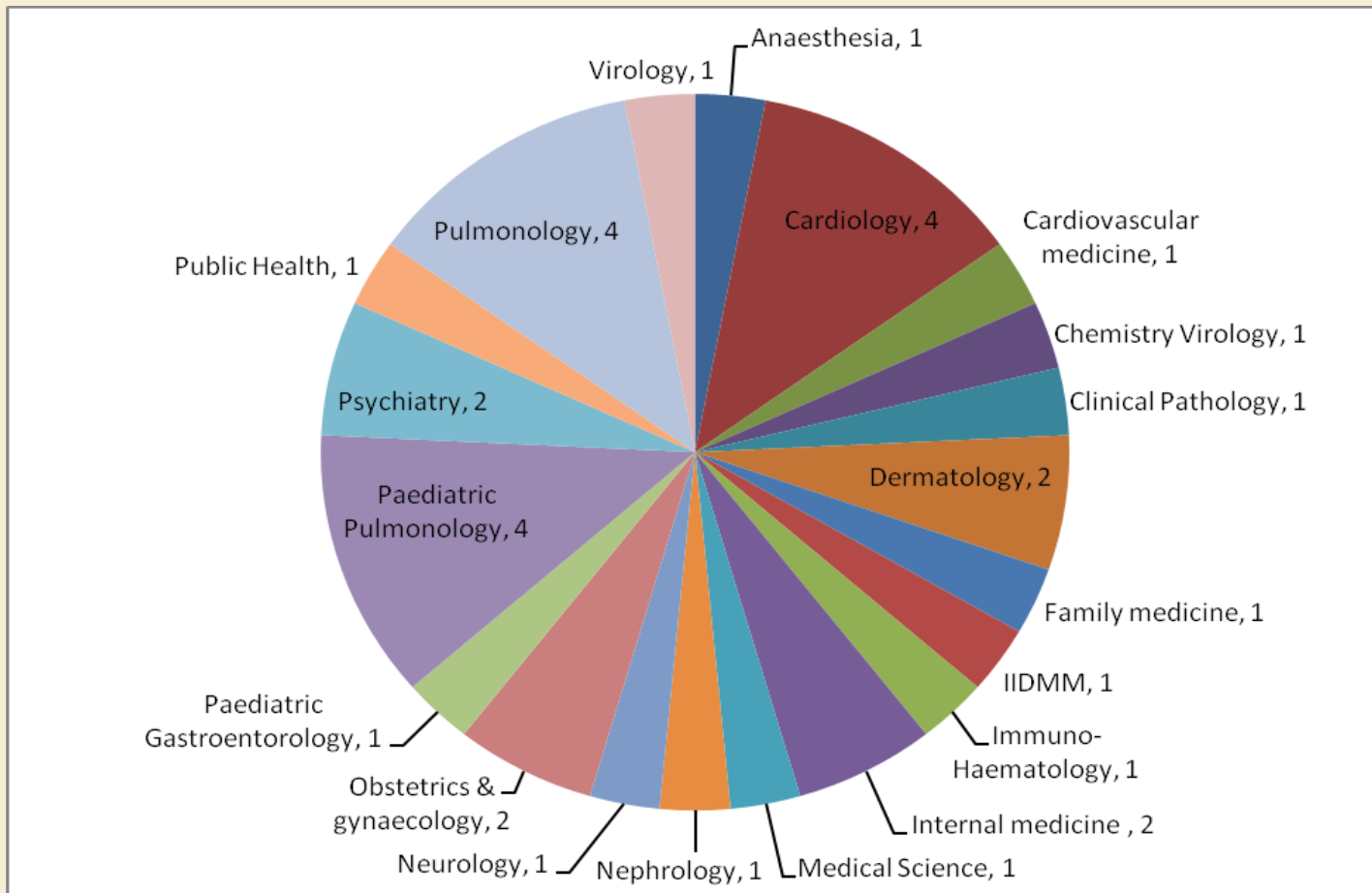
Over 5 years the Discovery Foundation has funded students pursuing MMed and PhD research as well as training subspecialists

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# The 33 PhDs which have been funded cover a wide range of departments





# Half of all the funded PhD students are affiliated with UCT

Academic Institutions	PhDs
University of Cape Town	11
UCT - Groote Schuur Hospital	5
University of KwaZulu Natal	3
University of Pretoria	3
Stellenbosch University	2
University of the Witwatersrand	2
Charlotte Maxeke Academic Hospital	1
Helen Joseph Hospital	1
National Health Laboratory Service	1
Oxford University	1
University of the Free State	1
University of Limpopo	1
Walter Sisulu University	1
Total	33





# Summary of PhD Research Topics

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Institution	Unit	Research Topic
U/CT	Internal medicine	Metabolic Complications and cardiovascular effects in the inception cohort of patients at King Edward VIII hospital
U/CT	Pulmonology	Cells and cellular mediators involved in the abnormal healing process
U/CT	Dermatology	Determining the aetiologic , pathogenetic and pharmacogenomic characteristics of the South African population who develop SCADR, comparing, as a sub-analysis, HIV positive and negative cohorts.
U/CT	Dermatology	The effect of chemical straightening on African hair, a microscopic study
U/CT	Obstetrics & gynaecology	To evaluate the role of two dimensional (2D) ultrasound vs. hysteroscopy in assessment of uterine abnormalities
U/CT	Pulmonology	High dose isoniazid(INH) in the treatment of Extensively Drug Resistant (XDR) TB
U/CT	Pulmonology	To enlighten the medical fraternity as regards the common aetiologies causing pulmonary disease in patients with advanced HIV.
U/CT	Pulmonology	Cells and cellular mediators involved in the abnormal healing process
U/CT	Paediatric Pulmonology	Isoniazid Prophylaxis in HIV infected children on HAART
U/CT	Paediatric Pulmonology	Paediatric respiratory medicine and in particular TB and HIV associated lung disease
U/CT	IIDMM	Exploring the role of neutrophil-related peptides in disease pathogenesis in patients with TB meningitis immune reconstruction inflammatory syndrome



# Summary of PhD Research Topics

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Institution	Unit	Research Topic
U/CT - Groote Schuur Hospital	Neurology	The neurological consequences of primary HIV infection of the brain
U/CT - Groote Schuur Hospital	Nephrology	Vascular calcification and its correlation with bone health and vascular function in a South African dwelling dialysis population
U/CT - Groote Schuur Hospital	Cardiovascular medicine	Tissue Characterisation in Rheumatic Diseases by Multi-parametric Cardiovascular Magnetic Resonance Imaging
U/CT - Groote Schuur Hospital	Internal medicine	The investigation of the management of Pericarditis Pilot Trial
U/CT - Groote Schuur Hospital	Cardiology	A retrospective study of patients with tachycardia- induced cardiomyopathy
Charlotte Maxeke Academic Hospital	Cardiology	Can a B- adrenergic receptor blocker reverse or at least attenuate left ventricular remodeling due to chronic non ischaemic mitral regurgitation?
Helen Joseph Hospital	Anaesthesia	
NHLS	Immuno-Haematology	Develop and validate a novel method of quantification of antigen specific T-cells
Oxford University	Medical Science	The function of dendritic cells in mucosal infection, comparing HIV-1 and HIV-2 Infection
U/FS	Psychiatry	A prospective study of cognitive deficits in first episode psychosis



# Summary of PhD Research Topics

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Institution	Unit	Research Topic
U/KZN	Cardiology	1-2 year clinical fellowship in the Electrophysiology (EP) Lab at Hamilton General Hospital MacMaster University Canada
U/KZN	Paediatric Pulmonology	1. Thinking differently about pneumocystis pneumonia in HIV infected children: Describing a new syndrome 2. The Costs of Admission for Paediatric Pneumonia in a Setting of Human Immunodeficiency Virus (HIV) Infection
U/KZN	Chemistry Virology	Novel nanoparticle to inhibit HIV
U/LIMPOPO	Virology	To investigate the extent to which drug resistance mutations are missed by standard genotyping methods in various patient populations
U/PTA	Clinical Pathology	To utilise new technology in the selective suppression of cytokines and chemokines associated with the more severe RSV disease, in an attempt to possibly use this as a future therapy in reducing the morbidity and mortality in premature infants
U/PTA	Paediatric Gastroenterology	Cholestatic Jaundice in Infants less than 2 years of age : A review of liver biopsies and etiology in the Pretoria Academic Hospital referral area.
U/PTA	Family medicine	Civil servant and professional - Understanding the challenges of being a public service doctor in a plural health care setting in rural south africa.



# Summary of PhD Research Topics

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Institution	Unit	Research Topic
U/Stel	Obstetrics & gynaecology	Minimal stimulation artificial reproductive techniques (ART)
U/Stel	Paediatric Pulmonology	Chronic lung disease in HIV positive adolescents
U/Wits	Public Health	Patterns of health system utilisation among people living with HIV/Aids in rural South Africa
U/Wits	Cardiology	Novel interventions for economically devastating lifestyle disorders such as hypertension and other associated cardiovascular diseases.
Walter Sisulu University	Psychiatry	To evaluate the current status of mental health services in the Eastern Cape, South Africa





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