

Abbreviated CV :

BRIEF CURRICULUM VITAE

1. PERSONAL INFORMATION:

Full Name	Date Of Birth	EE/AA	Civil Status	Nationality:
Erna Marais	11/06/1967	Female	Married	South African

(nee Tromp)

Phone Number

+27 21 938-9254 (work) or +27 82 8554725 (cell) or +27 21 938-9476 (fax)

Email Address

et4@sun.ac.za

Location

HOME ADDRESS:	1 Lynwood Rd	WORK ADDRESS:	Dept of Biomedical Sciences
	Durbanville		Division of Medical Physiology
	Cape Town		PO Box 19063
	7550		Tygerberg
	South Africa		7505
			South Africa

2. EDUCATION/TRAINING:

(a) Ph.D. degree (Medical Biochemistry), University of Stellenbosch (2002), (b) M.Sc. degree (Biochemistry), University of Stellenbosch (1997), (c) B.Sc. Hons. degree (Biochemistry), University of Stellenbosch (1989), (d) B.Sc. degree (Biochemistry and Physiology), University of Stellenbosch (1988), (e) Matriculate, Central High School, Beaufort West (1985).

3. POSITIONS HELD:

(a) Permanent Lecturer, Department of Medical Physiology, Faculty of Medicine, University of Stellenbosch, Tygerberg Campus (2009-present), (b) Permanent Technical Officer, Department of Medical Physiology, Faculty of Medicine, University of Stellenbosch, Tygerberg Campus (1999-2009), (c) Temporary Technical Officer at Prof A. Lochner, Department of Medical Physiology and Biochemistry, Faculty of Medicine, University of Stellenbosch, Tygerberg Campus (1997-1999), (d) Temporary Research Assistant at Prof A. Lochner, Department of Medical Physiology and

Biochemistry, Faculty of Medicine, University of Stellenbosch, Tygerberg Campus (1993-1996), (e)  
Temporary Research Assistant, Medical Research Council, Parow (1990-1992)

#### 4. TEACHING EXPERIENCE AND STUDENT DEVELOPMENT:

##### i) Undergraduate Student Teaching:

2003:Lectured to Medical students (MBChB 1) in Muscle Physiology.

2005:Lectured to Medical students (MBChB 1) in Cell Membrane Physiology.

2009:Lectured Hematology in the Physiology AGB278 program.

2010:Lectured Hematology, Neurology and Digestive System in the Physiology BChD2 program and  
Lectured Digestive System in the Physiology AGB278 program

2011-present:Lectured Hematology, Neurology and Digestive System in the Physiology BChD2,  
AGB278 and MBChB2 programs; Neurology in the Physiology MBChB3 program

##### ii) Postgraduate Student Teaching:

1997-present: Presented practical courses on High Performance Liquid Chromatography and  
Western Blotting Techniques to Honours Students.

2003-present: Lectured to BSc Honours Students from Medical Physiology, Human Physiology and  
Medical Biochemistry on Signal Transduction Pathways.

2009-present: Involved in Research Development and Support Division Training Courses: 1-Day  
Research Overviews in February and August, Lecturing on "Tips For Research Presentations And  
Posters".

2010:Lectured to students from Interdisciplinary Health Sciences and M Clin Epi on "Preparing an  
oral presentation (planning, communicating without words, the slide presentation)"

##### iii) Postgraduate Student Supervision:

2008-2010: Co-supervisor for M.Sc student, Mr GJ Maarman on a research project titled: "The effect  
of Acute and Chronic CPT-1 inhibition on myocardial tolerance to ischaemia and mitochondrial  
function in a rat model of obesity."

2011: Supervisor for Hons student, Ms M Fortuin on a research project titled: "Intracellular signalling  
in the development of cardiac hypertrophy and susceptibility to ischaemia/reperfusion injury in  
obesity-induced insulin resistance".

2012: Supervisor for Hons student, Mr R Jansen van Rensburg on a research project titled: "EPAC  
Mediated Cardio Protection: Ischemic Reperfusion Pre- & Post-treatment"

2013: Supervisor for Hons student, Mr LJ Adams on a research project titled: "Optimization of the HPLC".

2013: Co-supervisor for M.Sc student, Dr A Assalhin on a research project titled: "The role of the  $\beta$ -adrenergic receptor in cardioprotection".

iv) Postgraduate Student Examiner:

2006: External examiner for a MSc (Med) student, Mr SJ Somers, from the Faculty of Health Sciences at the University of Cape Town

2010: External examiner for a MTech Biomedical Technology student, Wongama Given Pantsi, from the Faculty of Health and Wellness Sciences at the Cape Peninsula University of Technology

2010: Internal examiner for a MSc student, Mashudu Mudau, from the Faculty of Health Sciences at the University of Stellenbosch

2012: Internal examiner for a PhD student, Me Margareta de Vos, from the Faculty of Health Sciences at the University of Stellenbosch

2013: Internal examiner for a PhD student, Me Gina Leisching, from Physiological Sciences at University of Stellenbosch.

v) Postgraduate Student Reviewer:

2008: Referee in a Bursary application for Master's degree to the NRF by Ms DA McAlister at Stellenbosch University

2008: Reviewer in University Research Funding Application of M. Tech Biomedical Technology student, Ms ET Thamahane on behalf of the Cape Peninsula University of Technology, Faculty of Health and Wellness Sciences.

2009: Reviewed application for ethical clearance for the use of animals requested by Subcommittee B of the Research Committee, Stellenbosch University: by Dr F Macaluso, Department of Physiological Sciences, Stellenbosch University

2009: Reviewed application for ethical clearance for the use of animals requested by Subcommittee B of the Research Committee, Stellenbosch University: by Dr Carine Smith, Department of Physiological Sciences, Stellenbosch University

2011 Member of evaluation committee for approval of application for a PhD study by Ms Anjo Steyn (CSIR). from the Faculty of Health Sciences at the University of Stellenbosch.

2011 Reviewed funding application for a D. Tech Biomedical Technology student, Mrs ETM Thamahane from the Faculty of Health and Wellness Sciences at the Cape Peninsula University of Technology.

2011 Reviewed funding application for a MTech Biomedical Technology student, Ms T Olivier from the Faculty of Health and Wellness Sciences at the Cape Peninsula University of Technology.

2012 Member of evaluation committee for approval of application for a PhD study by Michelle Smit van Schalkwyk from the Faculty of Health Sciences at the University of Stellenbosch.

2012 Member of evaluation committee for approval of application for a PhD study by Margot Flint from the Faculty of Health Sciences at the University of Stellenbosch.

#### 5. RESEARCH FOCUS AREA:

Basic biomedical sciences: Cardiovascular Physiology; Myocardial Ischaemia/Reperfusion Injury; Cardioprotection; Cell signalling: Exchange Protein directly Activated by cAMP (Epac).

#### 6. PUBLICATIONS: Summary

(i) Total of 24 peer reviewed publications (1993-2012), four as first author and a chief author of two invited chapter in book (2002, 2008); (ii) Total of 16 refereed/peer reviewed Conference Proceedings; (iii) Total Conference Proceedings International (11) and national (43).

#### 7. ACHIEVEMENTS:

(i) Personal:

2000: Winner of the Young Investigators Award at the South African Heart Association, Cape Town.

2001: Winner of the Poster Prize at the International Society for Heart Research, Winnipeg, Canada.

2002: Invited for an Oral Presentation by the prestigious European Society of Cardiology, Berlin, Germany.

2003: Winner of the Young Investigators Award at the South African Heart Association, Stellenbosch.

2007-2011: NRF-Rated Researcher (Y2). A researcher in this group is recognized by reviewers (locally and internationally) as having the potential to establish him/herself as a researcher. The rating system recognizes researchers who produce quality research outputs and remain inter-nationally competitive.

(ii) Student accomplishments:

2009: Mr Gerald Maarman (MSc) won the prize for the best Young Investigator presentation at the Annual Academic Day of the Faculty of Health Sciences at Tygerberg campus.

2012: Mr Ryan Jansen van Rensburg (Hons) received a Merit award for one of the top three Honors students at the nationally attended conference of the Physiological Society of Southern African.

8. MEMBERSHIP:

(i) Member of the Physiological Society of Southern Africa (PSSA).

(ii) Member of the Annual Academic Day Committee as Representative of Basic Sciences, Faculty of Health Sciences, Stellenbosch University.