

# CURRICULUM VITAE

## 1. BIOGRAPHICAL SKETCH

### 1.1 GENERAL INFORMATION

<b>Surname</b>	Mabeta									
<b>First names</b>	Peaceful Lucy									
<b>Citizenship</b>	South African					<b>Title</b>	Dr	<b>Female</b>	x	<b>Male</b>
<b>Population group</b>	<b>African</b>	x	<b>Coloured</b>		<b>Indian</b>		<b>White</b>	<b>Other (Please specify)</b>		
<b>Department</b>	Anatomy and Physiology					<b>Position</b>		Senior Lecturer		
<b>Direct Telephone</b>	012 – 5298354					<b>Direct Telefax</b>		012 – 5298305		
<b>E-mail</b>	<a href="mailto:peace.mabeta@up.ac.za">peace.mabeta@up.ac.za</a>									
<b>Date of appointment</b>	March 2005					<b>Permanent full-time</b>		X	<b>Temporary full-time</b>	

### 1.2 ACADEMIC QUALIFICATIONS OBTAINED

Degree/ Diploma	Field of study	Higher education institution	Year
BSc	Biochemistry	Medunsa	1997
BSc(Hon)	Physiology	Medunsa	1999
MSc	Physiology	University of Pretoria	2002
PhD	Physiology	University of Pretoria	2008

### 1.3 NON ACADEMIC TRAINING

Management	Project Management course by CE @ UP in 2004.
Technical	<ul style="list-style-type: none"> <li>Basic techniques in Molecular Biology offered by Medunsa in 1996.</li> <li>HPLC course offered by Varian Inc. in 2004.</li> <li>Advanced Nanoscience course: Health, offered by the South African Nanoscience Summer School in 2009.</li> <li>Angiogenesis and Metastasis, offered by Harvard Medical School in</li> </ul>



## 4. OTHER TEACHING CONTRIBUTIONS

**4.1 Participation in national and international teaching associations, bodies, committees**

**4.2 Visits to local and overseas universities as guest professor or lecturer in regard to teaching**

## 5. RESEARCH ACTIVITIES

### 5.1 Former supervision or co-supervision

Name of student	Degree/Title of dissertation/thesis and date	Supervisor	Co-supervisor(s)	Duration of studies (years)
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### 5.2 Current students

Name of student	Degree and year of first registration	Project title	Supervisor	Co-supervisor
Abdulahi Abdullahi Muhammad	MSc – 2010	Investigation of the focal adhesion kinase signaling pathway as a therapeutic target in cancer	Dr P. Mabeta	Prof H. Groenewald

### 5.3 Obtaining research funds

Origin of research funds	Title of research project or programme	Duration	Money allocated (R)
NRF (Thuthuka, Researchers in training)	Evaluation of the antitumour and antiangiogenic effects of quinolone derivatives.	1 Year	R 20 000.00
RDP	Determination of the differential effects of various compounds on tumour angiogenesis.	3 Years	R 30 000.00 per year
Knowledge Interchange and Collaboration Programme – NRF	N/A	1 Year	R 25 000.00
NRF (Thuthuka, Women in	Markers of angiogenesis	1 Year	R 40 000.00

Research)		(renewable for 4 more years)	
Knowledge Interchange and Collaboration Programme – NRF	N/A	1 Year	R 15 000.00

## 6. RESEARCH OUTPUTS

### 6.1 Publications in peer-reviewed or refereed journals

1. Mphahlele MJ., Nwamadi MS, **Mabeta P**. Synthesis, transformation and antitumour activity studies of the 2-aryl-3-halogenoquinolin-4(1*h*)-one derivatives. J. Heterocyclic Chem 2006; 43: 255-260.
2. **Mabeta P**, Davis PF. The mechanism of bleomycin in inducing haemangioma regression. SAMJ 2008; 98:538-539.
3. Ionescu G, **Mabeta P**, Dippenaar N, Muir T, Fourie P, Shelper G. Bleomycin plasma spill-over levels in paediatric patients undergoing intralesional injection for the treatment of haemangiomas. SAMJ 2008; 98:539-541.
4. **Mabeta P**, Auer R, Mphahlele MJ. Evaluation of the Antiangiogenic Effects of 2-Aryl-3-bromoquinol-4(1*H*)-ones and their NCH<sub>3</sub>-4-oxo derivative. Biol. Pharm. Bull; 2009; 32:937-40.
5. **Mabeta P**, Pepper MS. A comparative study on the anti-angiogenic effects of DNA-damaging and cytoskeletal-disrupting agents. Angiogenesis 2009; 12:81-90.
6. **Mabeta P**, Pepper MS. Hemangiomas -current therapeutic strategies. Int. J. Dev. Biol. 2011; 55: 431-437.

## 7. OTHER SCHOLARLY RESEARCH-BASED CONTRIBUTIONS

### 7.1 Participation in conferences, workshops and short courses – specify type of contribution

#### 7.1.1 National

1. **Mabeta P**, Pool R. The role of flow cytometry in monitoring HIV infected patients. Paper at the congress of the Physiology Society of Southern Africa. Stellenbosch, South Africa. **1999**.
2. **Mabeta P**, Lottering M-L, Joubert A. A comparative study of the effects of prostaglandin A<sub>2</sub> and 2-methoxyestradiol in squamous esophageal carcinoma. Poster at the 3<sup>rd</sup> International Congress of the African Association of Physiological Sciences, Pretoria, South Africa. **2000**.
3. **Mabeta P**, Shelver G, Dippenaar N. An assay method for the determination of bleomycin profiles in hemangioma patients. Paper at the congress of the Physiology Society of Southern Africa. Stellenbosch, South Africa. **2002**.
4. **Mabeta P**, Soley JT, Davis PF. Assessment of the effects of bleomycin and interferon  $\alpha$ -2a on angiogenesis in a human vascular tumour model. Paper presented at the congress of the Microscopy Society of Southern Africa. Port Elizabeth. **2006**.
5. **Mabeta P**, Davis PF, Pepper MS. Assessment of the mechanism of antiangiogenic action of bleomycin and interferon alpha. Poster at the congress of the Physiology Society of Southern Africa. Muldersdrift, South Africa. **2007**.
6. **Mabeta P**, Pepper MS. The effect of Paclitaxel on neovessel formation *in vitro*. Poster at the congress of the Physiology Society of Southern Africa. Muldersdrift, South Africa. **2007**.
7. **Mabeta P**, 2-methoxyestradiol induces apoptosis in cultured endothelial cells. Paper presented at the congress of the Microscopy Society of Southern Africa. Gaborone, Botswana. **2008**.
8. **Mabeta P**, Pepper MS. 2-methoxyestradiol inhibits angiogenesis *in vitro*. Poster presented at the congress of the Microscopy Society of Southern Africa. Gaborone, Botswana. **2008**.
9. **Mabeta P**, Pepper MS. Effects of bleomycin colchicine on angiogenesis *in vitro*. Paper at the congress of the Physiology Society of Southern Africa. Pretoria, South Africa. **2008**.
10. **Mabeta P**, Pepper MS. Assessment of the effects of bleomycin and interferon alpha on human haemangioma and angiogenesis *in vitro*. Poster at the congress of the Physiology Society of Southern Africa. Pretoria, South Africa. **2008**.
11. Mphahlele MJ, **Mabeta P**. Evaluation of the Antiangiogenic Effects of 2-Aryl-3-bromoquinolin-4(1H)-ones and their NCH<sub>3</sub>-4-oxo derivative. Poster - Symposium on the applications of synthetic organic and medicinal chemistry towards drug discovery. Modderfontein, South Africa. **2009**.
12. **Mabeta P**, Pepper MS. Suppression of Protein Kinase B activity correlates with the inhibition of angiogenesis and haemangiogenesis. Poster at the congress of the Physiology Society of Southern Africa. Cape Town, South Africa. **2011**.

## 7.2 International

1. Dippenaar N, Ionescu G, Muir T, **Mabeta P**. An assay method for the blood determination of bleomycin after intralesional infiltration therapy for congenital vascular malformations. Poster at the 34<sup>th</sup> International Congress of Physiological Sciences, Christ Church, New Zealand. **2001**.
2. **Mabeta P**, Shelver G, Dippenaar N. Development of an HPLC method for the determination of bleomycin profiles in urine. Paper at the International Immunopharmacology Congress, Pilanesburg, South Africa. **2001**.
3. **Mabeta P**, Shelver G, Dippenaar N, Davis PF, Tan ST. Levels of bleomycin in haemangioma patients undergoing intralesional bleomycin injection (IBI). Poster at the congress of the International Society for the Study of Vascular Anomalies. Wellington, New Zealand. **2004**.
4. **Mabeta P**, Davis PF, Pepper MS. Interferon alpha and bleomycin exert antiangiogenic activity through different mechanisms. Poster at the Nature Biotechnology Angiogenesis Symposium. Miami, USA. **2006**.
5. Muir T, Abouzeid M, **Mabeta P**, Dippenaar N, Ionescu GO. United Kingdom experience of Intralesional Bleomycin treatment in vascular anomalies. 16th International Workshop On Vascular Anomalies, Milan, Italy, **2006**.
6. **Mabeta P**. Mechanism of bleomycin-induced apoptosis in cultured murine haemangioma cells. Poster, International Cell Death Society Symposium, Muldersdrift, South Africa, **2009**.
7. **Mabeta P**, Pepper MS. Bleomycin inhibits angiogenesis and induces apoptosis in cultured bovine microvascular endothelial cells. Paper, 17th Congress of the International Federation of Associations of Anatomists, Cape Town, South Africa, **2009**.
8. **Mabeta P**, Mphahlele MJ. Evaluation of the antiangiogenic effects of 3-bromo-2-(4-fluorophenyl)quinolin-4(1H)-one. Poster, 17th Congress of the International Federation of Associations of Anatomists, Cape Town, South Africa, **2009**.
9. **Mabeta P**, Ndabenhle S, Tshikhudo R, Pepper MS. Nano-based chemotherapy inhibits tumour-associated angiogenesis. Invited Lecture, International Conference on Drug Discovery, Dubai, UAE, **2010**.
10. **Mabeta P**, Ndabenhle S, Tshikhudo R, Pepper MS. Nanoparticle-vinblastine conjugates inhibit angiogenesis and tumour growth. Poster, NanoBiotech Conference, Montreux, Switzerland, **2010**.
11. **Mabeta P**, Pepper MS. Suppression of Akt activity and bcl-2 expression is associated with the inhibition of hemangiogenesis. The 14th International Symposium on Anti-Angiogenic Therapy. San Diego, USA, **2012**.

## 7.2 Teamwork and collaboration with others:

- Department of Medicine, Otago University, New Zealand
- Department of Pediatric Surgery, Pretoria Academic hospital
- Department of Plastic Surgery, Pretoria Academic hospital

- Department of Pediatric Oncology, Kalafong Hospital
- Department of Chemistry, UNISA
- Department of Physiology, University of Pretoria
- Department of Immunology, University of Pretoria
- MINTEK
- Varian Inc.

### **7.3 Membership in national and international bodies**

Member of the Physiology Society of Southern Africa

### **7.4 Visits to local and overseas universities or research institutes as guest professor or researcher**

Researcher, Institute of Wine Biotechnology, University of Stellenbosch - 1999

Researcher, Bioactivity Investigation Group Laboratory, Wellington School of Medicine, New Zealand – 2001; 2004

Researcher, University of Geneva, Switzerland – 2009

## **8. MANAGEMENT AND ADMINISTRATIVE DUTIES**

## **9. COMMUNITY SERVICE OR PROFESSIONAL SKILLS**

## **10. AWARDS AND SCIENTIFIC/SCHOLARLY RECOGNITION**

### **10.1 Evaluation status as scientist/scholar**

### **10.2 Research awards and prizes**

- First Runner up, Wyndham Award – International Immunopharmacology Congress, 2001

- Finalist (1<sup>st</sup> runner up), SA Woman in Science Awards, Gender Responsive Research, 2005
- Award for Most Innovative Research Technique – Microscopy Society of Southern Africa, 2006
- Junior researcher of the year – 3<sup>rd</sup> price – Faculty of Health Sciences, University of Pretoria, 2007
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**10.3 Teaching awards and prizes**

Lecturer of the Year - Veterinary Nurses 2008.

Lecturer of the Year - Veterinary Nurses 2010.

**10.4 Involvement with other universities/scientific institutions**

Served as external examiner for undergraduate Human Physiology at the Faculty of Health Sciences, University of Pretoria, 2009.

**10.5 Referee duties**

Reviewer for Journal of Cell Death.

Reviewer for Cancer Letters.