

# CURRICULUM VITAE

**PROF. ZIPPORAH WANGUI WATHINGIRA NGUMI**

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**Date of Birth:** September 7th, 1949

**Nationality:** Kenyan

**Marital Status:** Married with two children

**Official Address:** University of Nairobi, School of Medicine, Department of Surgery  
P.O. Box 19676-00202 (KNH), Nairobi, Kenya.  
Tel. +254 722218921

**Languages:** English, Kiswahili and Kikuyu

**Present Position:** Associate Professor (Anaesthesia), Chairman, Department of Anaesthesia, University of Nairobi. Joined September 1, 1987.

**Career Objective:** I am an Anaesthesiologist and Critical Care Physician whose interest is to teach and practice medicine with compassion and integrity as I impact on people at all levels of my interactions. My desire is that health will become accessible and affordable to all in the foreseeable future and in this regard, as a lecturer, play a role in producing healthcare manpower who are well equipped to deliver quality anaesthetic care. My area of expertise is cardiac, renal transplant anaesthesia and critical care. In the year 2010 I became the PI in a CDC-funded project whose goal is to make Kenyatta National Hospital and Pumwani Maternity Hospital, Centres of Excellence in care and treatment of HIV/AIDS in Kenya. Currently, I am the PI in a new grant "Centres of Excellence in HIV Medicine" from October 2016 to September 2019, which is the successor of the previous grant. I am also a resource person for the Ministry of Health for Anaesthesia and Critical Care and Infection control and for Commission for University education for the Curriculum development and implementation for the training of Physicians in Kenya.

**Service at Board Level:**

1. Past Member - Medical Practitioners and Dentists Board for 10years
2. Currently, Resource Person – Medical Practitioners and Dentists Board
3. Past Chairman- Christian Medical and Dental Association for 5 years
4. Past Member- Kenyatta National Hospital Board for 6 years

5. Vice- Chairman- Institute of Family Medicine
6. Trustee- Great Lakes University
7. Trustee- Nairobi Baptist Church
8. Resource Person- Commission for University Education (CUE) and Ministry of Health for Anaesthesia and Critical Care Medicine
9. Chairman- Department of Surgery for six years, 2000 to 2006
10. Dean, School of Medicine for four years, 2006 to 2010
11. Chairman, Department of Anaesthesia for three years, 2013 to 2016

**Recent Trainings Attended:**

1. Corporate Governance, 2011
2. Leading High Profile Health Institutions in Kenya, at Strathmore University 2012
3. HIV Training course in the University of Maryland, USA; Institute of Virology, 2013
4. Grant Proposal writing, in the University of Nairobi 2016

**ACADEMIC QUALIFICATION:**

**Universities:**

<b>1994</b>	Fellowship in Clinical Sciences – University of Maryland, School of Medicine
<b>1979 – 1981</b>	Fellowship in Anaesthesia – examination by Faculty of Anaesthetists of the Royal College of Surgeons of England – FFARCS now FRCA
<b>1978 – 1979</b>	Diploma in Anaesthesia of the Royal College Physicians/Surgeons of England (D.A., London)
<b>1970 – 1975</b>	MBChB, University of Nairobi

**TEACHING/EXAMINATION RESPONSIBILITIES**

<b>Sept. 2001 to date</b>	Associate Professor in Anaesthesiology
<b>1991 – 2001</b>	Senior Lecturer in Anaesthesia, Department of Surgery, University of Nairobi (Appointed on June 27, 1991).
<b>1987 – 1991</b>	Lecturer in Anaesthesia, Department of Surgery, University of Nairobi
<b>1985 – 1987</b>	Honorary Lecturer in Anaesthesia, University of Nairobi

**Postgraduates:** MMed. Anaesthesia (first, second and third year students)  
 MMed. Surgery and Paediatrics (second and third year students)

**MMed Examination:** Setting and marking MMed Part I and II examination in Anaesthesia and Surgery. Supervision of MMed dissertations

**Undergraduates:** Bachelor of Medicine Bachelor of Surgery - MBChB (third and fifth year students)  
Bachelor of Dental Sciences - BDS (second year students)

**Paramedics:** Diploma in Anaesthesia for Clinical Officers, Intensive Care Nurses, Postgraduate Diploma

**Internal Examiner:** Diploma in Anaesthesia, Kenya Medical Training Centre (KMTC)

### **MMED DISSERTATIONS SUPERVISED TO COMPLETION**

1. **Dr. Angela Gitau**, Assessment of the antibiotic resistance patterns in the critical care unit of Kenyatta National Hospital, 2016.
2. **Dr. Faizan Mohammed Yaseen**, Factors influencing the choice of anaesthesiology as a specialty, 2015.
3. **Dr. Angela A. Onyando**, The effect of pre-operative volume loading on the incidence of post operative nausea and vomiting at K.N.H, 2014.
4. **Dr. Kimberly Kamau**, Assessment of block height for satisfactory spinal anaesthesia for caesarian section at K.N.K, 2013.
5. **Dr. Carolyne Kariba**, A Study on Incidence, Risk Factors and Outcomes of Patients with Acute Kidney Injury at the KNH ICU Using RIFLE Classification, 2013.
6. **Dr. Mwasaru Nestor**, Post-operative residual paralysis after use of atracurium or cisatracurium in main operating theatres post anaesthesia care unit of the Kenyatta National Hospital, 2012.
7. **Dr. Emily Nkatha Mugambi**, A comparison study of cardiovascular response to laryngeal mask airway insertion and endotracheal intubation in elective surgery patients at the Kenyatta National Hospital, 2012.
8. **Dr. Mumba James Chitibwi**, Anthropometric and biochemical assessment of nutritional status of critically ill patients at the Kenyatta National Hospital Critical Care Unit, 2010.
9. **Dr. Mutie Peter Kyatha**, Assessment of patients progress and clinical outcomes three months post intensive care unit discharge, 2008.
10. **Dr. Ngari Benson**, Utilisation of fresh gas and volatile agents in patients using re-breathing systems at Kenyatta National Hospital, 2008.
11. **Dr. Okello Stephen**, Immediate postoperative pain management in adult patients following orthopaedic surgery at the Kenyatta National Hospital, 2007.
12. **Dr. Njoroge Peter Ngugi**, A study on the practice of mechanical ventilation in Kenyatta National Hospital Intensive Care Unit, 2007.

13. **Dr. Muithya Thomas K.**, A clinical audit of the short-term outcome of cardiac surgery patients admitted to Kenyatta National Hospital Intensive Care Unit, 2007.
14. **Dr. Ondigo O.S.**, Study of Serum Potassium Level in Adult Patients After Elective Gastrointestinal and Hepatobiliary Surgery at Kenyatta National Hospital. 2006.
15. **Mr. Mark Lewa N.,(BSN)** Determination of the Needs of Families of Patients Admitted in the ICU and the extent to which these needs are met at Kenyatta National Hospital. 2006.
16. **Dr. Thikra Sharif**, Intrathecal Opioid Therapy in the Management of Chronic Pain of Cancer and non-malignant Origin, University of Sydney. 2004.
17. **Dr. Kennedy K. I.**, Use of Analgesia During Labour at the Kenyatta National Hospital. 2004.
18. **Dr. Jamala Adam T.**, A Prospective Study of Anaesthesia Associated Maternal Morbidity Necessitating ICU Management. 2002.
19. **Dr. Benard K.K.**, Comparison of 5-hydroxytryptamine (serotonin) Receptor type 3 (5HT<sub>3</sub>) antagonist ondansetron with metoclopramide in the Control of Postoperative Nausea and Vomiting. 2002.
20. **Dr. Saminar Mir**, A Comparative Study of Neuromuscular and Cardiovascular Effects of Cisatracurium Besilate at different Doses in Adult Surgical Patients at Kenyatta National Hospital. 2001.
21. **Dr. Misango D.O.**, Extent of Myocardial Damage after Open Heart Surgery as Assessed from Serial Plasma Enzyme Levels. 2001.
22. **Dr. Nyamai K.**, A Comparative Study of the Haemodynamic Effects of Thiopentone and Propofol used as Intravenous Induction Agents for Caesarean Section in Pre-eclampsia/eclampsia Mothers. 2001.
23. **Dr. Kituyi P.W.**, Outcome of Medical Cases Admitted to Kenyatta National Hospital ICU – a Five-Year Retrospective Study. 2001.
24. **Dr. Gitahi J.**, A study of Postoperative Paralysis in the Operation Theatre Recovery Room at Kenyatta National Hospital. 2000.
25. **Dr. Chokwe T.M.**, Cardiac Autonomic Neuropathy in Patients with Diabetes Mellitus in Outpatient Diabetic Clinic at Kenyatta National Hospital. 2000.
26. **Dr. Kinyua G.**, Preoperative Blood Sugar Levels in Paediatric Surgical Patients at Kenyatta National Hospital. 2000.
27. **Dr. Muchiri V.**, A Comparative Study of the Cardiovascular Effects and Antisialogue Properties of Atropine and Glycopyrrolate. 2000.

28. **Dr. Gacii M.V.**, A Survey of Practice and Perception of Training and Needs Among Clinical Officer Anesthetists. *1998*.
29. **Dr. Wanyonyi M.V.**, A Study of the Neuromuscular Blocking Properties and Cardiovascular Effects of Rocuronium. *1998*.
30. **Dr. Okutoi Praxedes M.**, A Comparison Between Propofol Relaxant and Halothane Relaxant Anaesthesia Techniques in Elective Surgery at Kenyatta National Hospital. *1996*.
31. **Dr. Etiang H.**, Patients Attitude to Anaesthesia in Kenyatta National Hospital. *1993*.
32. **Dr. Said Hassan G.**, A Prospective Study Comparing Ketamine Anaesthesia with Conventional General Anaesthesia for Emergency Caesarean Sections at the Kenyatta National Hospital, Nairobi, Kenya. *1992*.
33. **Dr. Muriithi J.M.W.**, Postoperative Complications of Anaesthesia Needing Intensive Care Management. *1991*.
34. **Dr. Mkubwa J.M.W.**, A Ten Year Review of the Mortality Among Tetanus Cases Admitted to the ICU in Kenyatta National Hospital. *1991*.
35. **Dr. Opere H.O.**, Comparison Between Pre-treatment with Lysine Acetyl Salicylate and 10% Calcium Gluconate in Prevention of Post Suxamethonium Muscle Pains. *1990*.
36. **Dr. Noorani R.A.**, The Effect of Atropine Premedication on Body Temperature of Children in Tropics. *1990*.
37. **Dr. Julius Mugo Muriithi**, Anaesthetic associated, poestoperative complications treated in Kenyatta National Hospital intensive care unit between 1985 and 1989. *1990*.

## **EXTERNAL EXAMINATION**

2008 – 2010	Muhimbili University College of Health Sciences, Muhimbili, Tanzania
2010 – 2012	National University of Rwanda, Rwanda
2015	Aga Khan University Hospital, Nairobi to Date

## **PROJECTS OF INTEREST**

1. The Global Perioperative Outcomes study, *2015*.
2. Kenya Surgical Outcomes Study, *2016*.
3. Evaluation of Universal Anaesthesia Machine

4. Development of Master in Family Medicine in Mission Hospitals and Faculty of Health Sciences, Moi University – commenced in January 2004.
5. Development of Master of Family Medicine in the University of Nairobi.
6. Fellowship in Paediatric Anaesthesia, 2013.

## CONFERENCES AND WORKSHOPS ATTENDED

Since 2012 to Date	WCDN Conferences
Annually	The Kenya Society of Anaesthesiologist (KSA) conferences to date.
25 – 26 May 2012	World Christian Doctors Network Conference, Nairobi, Kenya
25 – 30 March 2012	World Anaesthesia Congress, Buenos Aires, Argentina
14 – 16 Sept. 2009	All Africa Anaesthesia Congress, Nairobi, Kenya
20 – 25 Oct. 2006	Operation Smile 25 <sup>th</sup> Anniversary Summit at Adare Manor, Limerick, Ireland
7 – 20 Sept. 2006	Ngelazane Hospital Kwa Zulu Natal Province, South Africa: Operation Smile Inaugural Mission. Gave lecture to postgraduate students in Anaesthesia
16 – 20 July 2006	Corporate Governance Workshop, Simba Lodge, Naivasha
10 – 13 May 2006	Ngelazane Hospital Kwa Zulu Natal Province, South Africa: Fact Find Survey for Operation Smile
30 Nov. – 9 Dec. '05	Inaugural Operation Smile Mission, Ethiopia. Gave a lecture
11 – 15 July 2005	Nosocomial Infections at Kenyatta National Hospital Cains, Australia
15 – 18 July 2005	Operation Smile Central Region Conference – Europe, Africa & Middle East, Cairo, Egypt
14 – 26 Feb. 2005	Operation Smile Surgical Mission, Manila Phillipines
20 – 25 July 2004	Operation Smile Workshop on Specialty Standards of Practice in Surgical Missions, Panama, Central America
26 Jan. – 16 Feb. '04	Deesa Hospital Operation Smile Mission, India
May 2003	International Medical Council of Operation Smile International
8 – 12 Aug. 2001	ICMDA Eastern African Region, Nairobi, Kenya

1997	Trauma Life Support Workshop, Nairobi, Kenya
1994	Anaesthetic Refresher Course, Chicago, USA
1992-1993	Operation Smile – Participant Training Program, Virginia, USA
1992	Youth for Christ Staff Training, Johannesburg, South Africa
1990	Clinical Epidemiology Workshop, Mombasa, Kenya
	Prenatal and Maternal Mortality, Mombasa, Kenya
	Women and Health, Nairobi, Kenya
	African Association of Nephrology Conference, Nairobi, Kenya
	AIDS Seminar, Nairobi, Kenya
	Fifth Scientific Congress of UNAPSA/ISOTP; Kenya Paediatric Association

## **PUBLICATIONS**

1. S. Ndiritu, **Z.W.W. Ngumi** and O. Nyaim, Burns; the Epidemiological Pattern, Risk and Safety Awareness at Kenyatta National Hospital, East African Medical Journal (EAMJ): Vol. 83 No.8 August 2006.
2. **Ngumi Z.W.W.**, Nosocomial Infections at Kenyatta National Hospital ICU in Nairobi, Kenya. *Dermatology* 2006; 212 (Suppl. 1): 4-7.
3. **Ngumi Z.W.W.** and Muriithi J.M., Anaesthesia and Associated Post Operative Complication at the Intensive Care Unit of Kenyatta National Hospital – Accepted for publication in *Medicom* 2001.
4. Magoha G.A.O. and **Ngumi Z.W.W.**, Renal Transplantation during the 20<sup>th</sup> Century: A Review, *EAMJ* Vol.78: 317-321, 2001.
5. Magoha G.A.O. and **Ngumi Z.W.W.**, Cancer of the Penis at Kenyatta National Hospital, *EAMJ*, Vol. 77 526-530, 2000.
6. Magoha G.A.O. and **Ngumi Z.W.W.**, Training of Surgeons in Kenya at the University of Nairobi Teaching Hospital, *EAMJ* Vol. 76: 462-464, 1999.
7. **Ngumi Z.W.W.**, Mortality at the Intensive Care Unit of the Kenyatta National Hospital in 1996.

8. **Ngumi Z.W.W.**, Respiratory Support in Patients with Multiorgan Failure – Course Monogram – African Association of Nephrology Proceedings of – Pan African Course in Renal Failure, September 24 – 27, 1996.

#### **PAPERS PRESENTED AT CONFERENCES**

1. **Nosocomial Infections at Kenyatta National Hospital ICU**, Cairns, Australia, July, 2005.
2. **Leaving the comfort Zone**. International Christian Medical and Dental Associations of East African Regional Conference, Methodist Guest House, Nairobi, Kenya, August 2001.
3. **Serving the Youth**. International Christian Medical and Dental Associations of East African Regional Conference, Methodist Guest House, Nairobi, Kenya, August 2001.
4. **Surgical Prophylaxis**. Anaesthetic Society of Kenya Annual Conference, Nairobi Hospital, Kenya.
5. **Ngumi Z.W.W.**, The role of the Anaesthesia in Reducing Maternal Mortality: Obstetrics Workshop, Mombasa, 1998.
6. **Ngumi Z.W.W.**, Anaesthesia for Craniotomy – the Challenges, Kenya Society of Anaesthesiologists, Nairobi, Kenya, 1998.
7. **Ngumi Z.W.W.**, Transportation of Open Heart Surgery Patients from Theater to Intensive Care Unit, Kenya Cardiac Society, 1997.
8. **Ngumi Z.W.W.**, Neonatal Intensive Care, Kenya Society of Anaesthesiologists, Nairobi, Kenya, 1997
9. **Ngumi Z.W.W.**, Trauma Injury and Violence; Intersociety Collaboration Workshop, Matuu, Kenya, 1997.
10. **Ngumi Z.W.W.**, Transportation of the Trauma Patient, Nairobi, Kenya 1997.
11. **Ngumi Z.W.W.**, Management of Post Operative Pain, Nairobi, Kenya, 1996.
12. **Ngumi Z.W.W.**, Anaesthesia and Health, Intersociety Collaboration Workshop, Machakos, Kenya, 1996.
13. **Ngumi Z.W.W.**, Anaesthesia as a Speciality of Medicine – The Scope, Kenya Society of Anaesthesiologists – key note address, Nairobi, Kenya, 1995.
14. **Ngumi Z.W.W.**, Care of the Terminally Ill Patients in Intensive Care Unit: Christian Medical Fellowship, Nairobi, Kenya, 1995.
15. **Ngumi Z.W.W.**, Management of Severe Pregnancy Induced Hypertension with Sodium Nitroprusside: Obstetrics and Gynaecological Conference, Nairobi, Kenya, 1992.



16. **Ngumi Z.W.W.**, One in a Lifetime Rupture Uterus in Patients with Congenital Trismus' SAEA: Scientific Conference, Nairobi Kenya, 1987.
17. **Ngumi Z.W.W.**, Management of Pain: The Role of the Anaesthetist.
18. **Ngumi Z.W.W.**, Alfentanyl – A new Analgesic Drug: Annual Scientific Conference Society of Aneesthesiologists of East Africa, Nairobi, Kenya, 1981.

#### **ADMINISTRATIVE RESPONSIBILITIES**

2010 to date & 200 to 2004	Medical Practitioners and Dentists Board member
2008 - 2009	Member of the Steering Committee of East African Community Health Policy Initiative
2006 to date	Commission for University Education – Resource person
2006 to 2010	Member – College Management Board, College of Health Sciences, University of Nairobi to date
2006 to 2010	Member – Joint Admissions Board, University of Nairobi to date
2006 – 2010	Member – College Appointment Committee, College of Health Sciences, University of Nairobi
2000 – 2010	Member, University of Nairobi Senate to date
2000 to date	Ministry of Health – Resource Person

#### **CURRENT MEMBERSHIP TO PROFESSIONAL SOCIETIES**

1. Kenya Society of Anaesthesiologists (Treasurer 1985 – 1988)
2. Kenya Medical Women Association (Council Member 1985 – 1986)
3. Kenya Medical Association
4. Christian Medical and Dental Association (Chairman 2007 – 2011)
5. Institute of Family Medicine Board, Vice-Chairman
6. International Medical Council – Member of Operation Smile International (1997 to 2004)
7. Operation Smile Mission in Kenya – Board Member Chair 1997 – 2001
8. Kenya Surgical Society

9. World Christian Doctors Network (Director, Kenya – 2012)

### **MEMBERSHIP TO NON-PROFESSIONAL BODIES**

1. Kugeria Women's Group – my rural village self help group.
2. Parklands Sports Club
3. Karen Country Club

### **AWARDS/HONOURS**

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| 2000 | Vice-Chancellor's Commendation (University of Nairobi) for work done in Operation Smile to the Kenyan Children |
| 1994 | International Scholarships Programme – Scholarship to study Anaesthesia in Maryland, USA                       |
| 1978 | British Council – Scholarship to study Anaesthesia in Britain  |