

CURRICULUM VITAE

NAME ERIC KARANJA MWANGI

A) Date of Birth: 8th August 1959

B) Nationality: Kenyan

C) Marital Status: Married with three children

D) Academic Background (Higher Education only):

1979 – 1984 University of Nairobi, Kenya. Qualification - Bachelor of Veterinary Medicine (BVM).

1989 – 1993 University of Glasgow, Scotland UK. Qualification - Doctor of philosophy (PhD) in Veterinary Medicine.

E) Work Experience:

i) 1984 – 1986 - **Position - Veterinary Field Officer** – Veterinary practice involving clinical services and disease control in the government’s Ministry of Livestock Development, Kenya.

Duties

Clinical work, disease control, vaccination campaigns and extension services.

ii) 1987 – 1993 - **Position - Veterinary Research Scientist** at Kenya Trypanosomiasis Research Institute (KETRI) attached to the Overseas Development Administration (ODA, UK, currently DFID) funded project on animal health research. My PhD thesis was part of the work in this project.

Duties

- Laboratory based research on disease pathology and parasitology
- Epidemiological field research on disease control strategies (mainly on tsetse, ticks and tick-borne diseases).
- Training local communities in the field research zones on disease control technology adoption.
- Training laboratory technicians.
- In 1991, I was attached for 9 months at ILRI for training on serodiagnostic technics.

iii) 1993 and 1997 - **Position - Programme Leader / Post Doctoral Research Scientist.** During this period I supervised and managed two donor funded projects (details on page 3).

1996 – 1998 - **Position – Senior Research Officer**

Duties (while in the two above positions)

- Head of Pathology and Haematology Section
This section provided the relevant laboratory support services to experimental units that involved a variety of animal species namely, cattle, sheep, goats, laboratory animals and primates.
- Supervise and carry out research on disease control technology development and technology transfer from donor funded projects and prepare project reports as required.
- Lead and coordinate animal health research in the laboratory and in the field in various parts of Kenya.
- Train fresh graduate students on research methodologies and supervise MSc students

- Senior member of the Institutional Scientific Review Committee whose duties included;
 - Review scientific proposals to donors
 - Prepare departmental scientific programmes and annual work plans.
 - Identify and design areas of collaboration with local research organisations, government bodies and NGO's
 - Prepare institutional strategic plans
 - Review of policies related to staff development and
 - Departmental staff administration
- In 1997 and 1998, I was the Chairman of the Annual Scientific Review Committee.
- Consultancy – In 1998, I was awarded consultancies to conduct training courses for MSc students at the University of Harare, Zimbabwe and ICIPE on trypanosomosis, ticks and tick-borne diseases.

iv) 1998 – 1999 – **Position – One year sabbatical leave-Research and Technical Services Coordinator**, Cooper Kenya Limited. (After January 2000, I formally joined the commercial animal health sector)

Duties

- Research on the development of new chemotherapeutic products mainly, antihelmintics, antiprotozoals, insecticides, acaricides and vaccines
- investigations on the efficacy of products in market and resistance development related aspects.
- Lead and coordinate development of new animal health disease control technologies and products. The above three activities were done in liaison with the regional companies (Cooper Uganda, Cooper Tanzania and Cooper Zimbabwe). The technical backup was from Sherling Plough, France.
- Manage research technology development and transfer.
- Liaison of animal health technology service deliveries with government bodies, private organizations and NGO's
- Design annual work plans and budget
- Prepare and implement technical training programmes for field staff in collaborating Government institutes, extension services and private organisations
- Administrative responsibilities

v) July 2001 - January 2003 - **Position – Technical Services Manager** – Unga Farm Care East Africa Ltd.

Duties

- Basically, the technical duties in this position were similar to those described above under Cooper Kenya Ltd. except that the products were different and product ranges varied.

The key additional duties were:

- Staff supervision and training – I had bigger team to supervise (13 diploma level and 8 graduate level animal health field team)
- formulating affordable and economical animal health packages for livestock farmers in all categories, namely, large scale, small scale and pastoralists.
- I was also exposed to preparation of business and financial plans.

vi) August 2003 to date – **Animal Health project consultancy** on contract for HighChem East Africa Ltd – on development of antiparasitic agents, specifically for ticks (acaricides), tsetse and other external parasites.

vii) July 2005 to date – **Lecturer** – Department of Zoological Sciences, Kenyatta University.

While in the private sector, I have interacted with NGO's that have interest in livestock and agricultural development programs, e.g., Action Aid, Plan International, Heifer Project International, Technoserve, Land 'O' Lakes and Intermediate Technology Development Group (ITDG) among others.

F) Research Interests

1. Parasitic diseases – pathology, epidemiology, diagnosis and control.
2. Vector borne diseases – pathology and the vector/host/parasite interactions.
3. New and emerging biotechnologies.
4. Technology transfer and conversation of developed technologies into profitable agribusiness.

G) Post Doctoral Experience /Funded Projects

I was awarded the following grants for my post doctoral research work on disease pathology and epidemiology.

- i. Wellcome Trust, UK (1993 – 1997)
STG 38, 400 pounds – Duration – 3 years; Main collaborator – University of Glasgow Veterinary School.
- ii. International Foundation for Sciences (IFS) (1995 – 1997)
Amount; USD – 12,000 – Duration – 2 years
- iii. International Foundation for Sciences (IFS) 1997 – 1998) – renewal grant
Amount – USD – 12,000 – Duration – 2 years.

Other collaborating organizations; Centre for Tropical Veterinary Medicine, Edinburgh UK, Kenya Agricultural Research Institute (KARI), the International Livestock Research Institute (ILRI) and ICIPE.

H) Conference Proceedings/and published reports on the research projects conducted from 1989 to 2002;

- Stevenson P. Mwangi E.K. Muriithi, R. M. and Gitau D. (1989). Treatment of trypanosomiasis in Maasai cattle with Homidium chloride. In: *The Kenya Trypanosomiasis Research Institute/Kenya Medical Research Institute (KETRI/KEMRI) Annual Scientific Conference*, February 1989, Nairobi. Kenya. PP 80 – 82.
- Stevenson P., Mwangi E. K. Muriithi, R. M. and Njogu A. R. (1989). Trypanosomiasis in Maasai Livestock in the Nguruman area of the Rift Valley in Kenya. In: *The International Scientific Council for Trypanosomiasis Research and Control (ISCTRC)*, 20th Meeting, April 1989, Mombasa, Kenya.
- Mwangi E. K. Stevenson P., Njogu A. R. and Gitau D. The epidemiology of trypanosomiasis in Maasai cattle. In: *The Kenya Trypanosomiasis Research Institute/Kenya Medical Research Institute (KETRI/KEMRI) Annual Scientific Conference*, February 1990, Nairobi, Kenya.
- Mwangi E. K. Stevenson P., Nantulya V., Murray M. and Gettinby G. (1991). Comparison of different methods for the diagnosis of trypanosomiasis in cattle under field conditions at Nguruman, Southwestern Kenya In: *The Kenya trypanosomiasis Research Institute/Kenya Medical Research Institute (KETRI/KEMRI) Annual Scientific Conference*, February 1991, Nairobi, Kenya.
- Mwangi E. K., Stevenson P., Murray M. and Gettinby G. (1991). Variation in susceptibility to trypanosomiasis among *Bos indicus* cattle breeds. In: *The International Scientific Council for Trypanosomiasis Research and Control (ISCTRC)*, 21st Meeting, October 1991, Yamoussoukro, Cote d'Ivoire 163 – 164.
- Stevenson P., Mwangi E. K. and Gitau D. (1991). The epidemiology of trypanosomiasis in domestic livestock constantly exposed to tsetse flies. In: *The Kenya Trypanosomiasis Research Institute/Kenya Medical/Research Institute (KETRI/KEMRI) Annual Scientific Conference*, February 1991, Nairobi, Kenya.
- Mwangi E. K., Stevenson P., Murray M. and Gettinby G. (1993), Variation in susceptibility to trypanosomiasis among *Bos indicus* cattle breeds. In: *The International Scientific Council for Trypanosomiasis Research and Control (ISCTRC)*, 22nd Meeting, October 1993, Kampala, Uganda pp 125 – 128.

- Mwangi E. K. (1993). Variation in susceptibility to trypanosomiasis among *Bos indicus* cattle breeds under conditions of varying tsetse challenge. *PhD Thesis*.
- Mwangi E. K. (1993). Variation in susceptibility to trypanosomiasis among *Bos indicus* cattle breeds in East Africa. In: "Towards increased use of trypanotolerance : current and future directions." Proceedings of a workshop organized jointly by ILRAD and ILCA, pp 81 – 89.
- Mwangi E. K., Stevenosn P., Gettinby G. Murray M. and Nantulya V. (1994). Comparison of parasitological techniques, antibody and antigen detection enzyme immunoassays in the diagnosis of trypanosome infections in cattle. In *15th Health Sciences Congress, Nairobi, February 1994*.
- Mwangi E. K., (1995). Tick infestation studies among trypanotolerant *Bos indicus* cattle breeds. *The National Veterinary Research Centre, NVRC, Muguga, annual Conference 6-8th December 1995*.
- Mwangi E. K. (1996). Are *Bos indicus* cattle breeds that possess a degree of trypanotolerance resistant to ticks and their consequences? IFS Seminar on "*Parasitology Research in Africa*". Bobo-Dioulasso, Burkina Faso November 6-10, 1995. Gray, G. D. and Uilenberg, G. (editors), pp. 133-141.
- Stevenson, P., K., R., Gicheru M. M. and Mwangi, E. K., (1995). Comparison of isometamidium chloride and homidium chloride for the treatment of trypanosomiasis in Maasai cattle in Kenya. *Acta Tropica*, 59, (2): 77-84.
- Mwangi E. K., Stevenson P. Ndungu J., Stear M. J., Reid S. W, J, Gettinby G. and Muray M. (1997). Studies on host resistance to tick infestations among trypanotolerant *Bos Indicus* cattle breeds. In: *The 4th Biennial Society for Tropical Veterinary Medicine Conference*, 5th – 9th May, 1997, Montpellier, France.
- Nantulya V. M., Lindqvist, K. J. Stevenson P. and Mwangi E. K. (1992). Application of monoclonal antibody based antigen detection enzyme linked immunosorbent assay (antigen ELISA) of field diagnosis of bovine trypanosomiasis at Nguruman, Kenya, *Annals of Tropical Medicine and Parasitology*, 86, 225-230.
- Mwangi E. K., and Stevenson P. Reid S. W: J, Gettinby G. and Murray M. (1998). Susceptibility to trypanosomiasis among three *Bos Indicus* cattle breeds in areas of differing tsetse fly challenge. *Veterinary Parasitology*, 79, 1-17.

(NB:Between 1998 and 2004, Iwas invloved in research in on the development of new chemotherapeutic products mainly, antihelmintics, antiprotozoals, insecticides, acaricides and vaccines within the private sector (animal health pharmaceuticals). Most private companies regard their results as patented due to business competition, hence these could not be published inscientificjournals).

D) Other presentations

- Mwangi E. K., Gicheru M. and Stevenson P. (1991). Studies on trypanosomiasis and helminths in sheep and goats of Nguruman, S. W. Kenya. In: *Small ruminant collaborative support programme (SR-CRSP) – 9th Scientific Workshop, February 27-28th, 1991, KETRI, Muguga, Kenya*.
- Mwangi E. K. and Stevenson P. Trypanotolerance among Maasai Zebu cattle. (1991). In: "*Tsetse and trypanosomiasis control for farmers with limited resources*". 12th – 15th June, 1991. ODA/KETRI animal trypanosomiasis research project workshop at Nguruman, S. W. Kenya.
- Olaho W. and Mwangi E. K. (1994). Parasitological and serological diagnosis of trypanosomes in mammals and tsetse. Nairobi Cluster Symposium on "*Parasitic infections in humans and animals – New diagnostic techniques and their application*", Louis Leaky Memorial Hall, National Museums of Kenya, 23rd June 1994.
- Mwangi E. K. (1996). Cattle breed resistance to protozoal infections and ectoparasites: case studies-trypanosomiasis and tick infestations. In: *The Kenya Veterinary Association Annual General Meeting and Scientific Conference*, 24th – 26th April 1996, Mombasa.
- Mwangi E. K. (2001). The logistics of the commercialization to the East Coast fever Immunization. *The Kenya Veterinary Association Annual General Meeting and Scientific Conference, April 2001*.
- Mwangi E. K. (2002). The management of communal dips programme in Kenya for tick borne diseases control. *The Kenya Veterinary Association Annual General Meeting and Scientific Conference, April 2001*.

J) Other Short Courses attended locally:

1. *Scientific Communication* – A short course for KARI in association with the British Council and the University of Edinburgh, 27th to 3rd March 1995, KARI, Nairobi.
2. *Finance for Non-finance Managers course* -conducted by PACE Management Consultants (International) in association with the British Council, 22nd to 26th January 1996, KETRI, Muguga, Kenya.
3. One-day Workshop of the Kenya Chapter of the *African Technology Policy Studies (ATPS)* in association with the international Development Research Centre (IDRC), 10th May 1996, Hilton, Nairobi, Kenya.
4. *Developing communication skills* – November 2002 – AMREF Centre – Conducted by Unga Ltd. Human Resource Department and Peak performance Consultants, Ngong Road, Nairobi.
5. *Powerful presentations* – 13th – 15th February 2002. Conducted by Peak performance Consultants, Ngong Road, Nairobi.

Professional Memberships

1. Kenya Veterinary Association
2. Society for Tropical Veterinary Medicine (STVM)
3. Association of Institutes of Tropical Veterinary Medicine (AITVM)
5. Integrated Ticks and Tick-borne Disease Control (ITTDC)

Referees

2. Prof. M. Gicheru
Dean – SPAS,
Kenyatta University.
- 3 Prof. Stuart Reid
Dean – Faculty of Veterinary Medicine
Glasgow University Veterinary School
Bearsden Road, G61, IQH
Bearsden, Glasgow
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