



C U R R I C U L U M V I T A E -2011

NAME: TITUS IKUSYA KANUI
DATE OF BIRTH: 10TH MARCH 1953
MARITAL STATUS: MARRIED WITH FOUR CHILDREN

EDUCATIONAL INSTITUTIONS ATTENDED

	Awards
1961-1967 - Kakutha Primary School:	C.P.E.
1968 -1971- Machakos High School:	K.C.E.
1972 – 1973 - Machakos High School:	K.A.C.E.
1974 – 1978 - University of Nairobi:	B.V.M.
1979 – 1983 - University of Edinburgh:	Ph.D.

- a) **Commonwealth University Scholar** – specialized in basic electronics and electrophysiology
- b) **Wilson Tindal Scholar** - Specialised in visceral sensory mechanisms and pain.

1987 -University of Bergen, NORAD Visiting Scientist,

1991 -University of Bergen, NORAD Visiting Fellow,

1992 -1993 Norwegian College of Veterinary Medicine, NAC Visiting Scientist,

1993 -University of Bonn, Visiting Professor,

1993 -University of Munich, Visiting Professor,

1993 -University of Zimbabwe, Visiting Professor,

1995 -University of Zimbabwe, Visiting Professor.

} Position not taken.

2006 -University of Uppsala, Visiting Professor,

2007 -University of Uppsala, Visiting Professor,

2009 – 2010 -South Eastern University College, Coordinator School of Environment

2010 – South Eastern University College, Successfully completed a course in Environmental Impact Assessment.

APPOINTMENTS

- i. **1978 – 1984 -Tutorial Fellow** in the Department of Animal Physiology.
- ii. **1984 – 1988 -Lecturer** in the Department of Animal Physiology, University of Nairobi.
- iii. **Honorary Lecturer** in the Department of Medical Physiology, University of Nairobi,.
- iv. **1986-1992 - Chairman** in the Department of Animal Physiology, University of Nairobi.
- v. **1986 - Part-time Lecturer** in the Department of Wild-life Management, Moi University,
- vi. **1988 -1992-Senior Lecturer** Department of Animal Physiology,
- vii. **1992 - Associate Professor**, Department of Vet. Anatomy and Physiology.
- viii. **2009- 2011** External Examiner, Faculty of Veterinary Medicine, Makerere University.
- ix. **2009** -Coordinator School of Forestry and Environmental Management, South Eastern University College, Kitui’
- x. **2010 - Ag. Dean**, School of Agricultural Sciences and Technology, South Eastern University, Kitui.
- xi. **2010-** External Examiner, Faculty of Veterinary Medicine, Makerere University.
- xii. **2010-** Appointed Professor, School of Agriculture and Veterinary Sciences, South Eastern University, College.
- xiii. **2010-** Appointed to act as Deputy Principal, Administration and Finance
- xiv. **2011-** Elected Dean, School of Agriculture and Vet. Sciences, South Eastern University

AWARDS

2002 -Certificate of Merit by the College of Agriculture and Veterinary Sciences (U.O.N.) for outstanding contribution towards income generation (**Concieving and developing a new undergraduate degree programme –Biomedical Technology**) in the College, **2002**.

TEACHING EXPERIENCE

Courses Taught

- i) **Physiology** – Bachelor of Veterinary Medicine, Food Science and Technology, Agriculture, Biomedical Laboratory Technology Range Management and Wildlife Management Undergraduate students, **1978 -**.
- ii) **Physiology** - M.Sc. Biology of Conservation, M.Sc. Comparative Mammalian Physiology and M.Sc. Animal Production, **1984 -**.

- iii) **Membrane Biophysics, Neurophysiology-** M.B.Ch.B., B. Pharmacy 1st year, M. Medicine and B.Sc. Physiology honours students (1985-1987).
- iv) **Instrumentation, Haematology, Laboratory Management-** B.Sc. Biomedical Laboratory Technology students, 2000 -
- v) **Hepertology, ornithology -** BSc. Wildlife, 2000 -

Practical Attachment Supervision

- a) - B. Sc. Biomedical Technology students (3), 2006
 - b) – Diploma and Craft certificate in General Agriculture students (5), 2010, 2011
- vi) **Postgraduate Supervision: -**

13 M. Sc. and 3 PhD supervised to completion

Faculty of Veterinary Medicine University of Nairobi:

M. Sc. Completed

- a) **C.N. Kimwele** – Effects of recombinant human growth hormone in juvenile Nile crocodiles.
- b) **F. Karim** - Effects of commonly used analgesics and anti-inflammatory drugs on acute and chronic pain, in the formalin test in the naked mole-rat (*Heterocephalus glaber*).
- c) **E.M. Onyango** – Effects of experimental pulmonary embolism on electrocardiographic parameters, blood pressure, exercise tolerance and cardiac morphometry in the dog.
- d) **P.K. Towett** – Evaluation of the commonly used analgesics in the naked mole-rat and the root-rat mole-rat using the hot plate test.
- e) **S.M. Hamisi** – Non-invasive assessment of reproductive status in free ranging African elephant (*Loxodonta africana*) females.
- f) **E.M. Okindo** – Endometriosis in the Baboon.
- g) **S. N. Wambugu** – A study of the nociception and analgesic effects of opioids NSAIDS and SAIDS in the African Hinge Back Tortoise and African Helmeted Turtle(the Marsh Terrapin).
- h) **C. Kaluwa** - Physiological effects of extracts from herbs used by traditional birth attendants in Kenya.
- i) **T. D. Dulu** – Effects of cholinergic drugs on pain behaviour in the naked mole-rat
- j) **C. M. Makau** – The role of noradrenergic system in formalin induced pain in the tortoise and the Marsh terrapin.

Ph. D**Completed**

- a) **P. K. Towett** – Subtypes, distribution and physiological functions of opioid receptors in the CNS of the naked mole-rat (*Heterocephalus glaber*).
- b) **C. G. Githinji**. - Antinociceptive effects of *Mondia Whytei* aqueous, ethanol, chloroform extracts.
- c) **P. M. Waweru**. – **Neuropharmacological evaluation of three** *Ocimum* species found in Kenya.

Continuing (1)

- a) **S. N. Wambugu** – Evaluation of pain alleviating , anti-inflammatory and anti-rheumatic properties of selected Kenyan medicinal plants.

School of Medicine:**M. Sc.****Completed (1)**

- a) **H. N. Kariuki** – The analgesic effects of clomipramine and carbamazepine individually and in combination with pethidine using the formalin test.

Continuing (1)**Ph. D.**

- a) **H.N. Kariuki**. – Antinociceptive effects of *Myrica Salicifolia* in mice and rats.

External Postgraduate Student Supervision (M. Sc.)**Completed**

- a) Lindsay L. Bisiker –An examination into the role of Traditional Healers and their management of of pain in rural Kenya. – **2007** – Kings College, University of London, UK.
- b) Joakim Dahlin –Cholinergic antinociceptive mechanisms in Testudines. – **2007** – University of Uppsala, Sweden.

Continuing

- a) Lawrence Kisengeu Matolo. A multipurpose seed based _____ absorber. – **2009** - Jomo Kenyatta University College of _____ Agriculture and Technology, Kenya.

COURSES CO- DEVELOPED

- a) **M.Sc.** Comparative Mammalian Physiology (U.O.N.)
- b) **M.Sc.** Animal Production (Physiology), (U.O.N.).

- c) **M.Sc.** Reproductive Biology (U.O.N.).
- d) Animal Physiology and Biological Physics for **B.Sc.** Range Management (Moi University)
- e) **B. Sc.** Dryland Animal Science

Chaired the development of: -

- a) **B.Sc.** Biomedical Laboratory Technology course – **2001**.
- b) **B.Sc.** in Sports Science course – **2002 - 2003**.
- c) **Diploma** in Sports Science course – **2002 - 2003**.
- d) **M. Sc.** Laboratory Animal Science – **2007 – 2008**.

THESIS EXAMINED

1. Doctor of Philosophy (Ph.D.) (**4**).
2. Master of Science (M.Sc.) (**13**).

MEMBERSHIP TO PROFESSIONAL BODIES

- i) Member of the Kenya Physiological Society.
- ii) Member of the Kenya Veterinary Association.
- iii) Member and Assistant Secretary General Society of African Neuroscientists up to 1992.
- iv) Member of the International Brain Research organization.
- v) Member of the International Association for the study of pain.
- vi) Member of the Society of Neuroscience.
- vii) Member of the Zoological Society of Japan.
- viii) Editorial Consultant, Indian Journal of Pain.
- ix) Deputy Assistant Secretary General, Association of African Physiologists up to 1992.
- x) Elected to membership of New York Academy of Sciences, 1990.
- xi) Member, and Chairman Kenya Society of Neuroscientists 1994 - 2001.
- xii) Member, and Chairman Kenya Association for the Study of Pain 1993 – 2008.
- xiii) Member of the executive, Kenya Association for the study of pain, 2009-

MAJOR CONSULTANCIES

- a) Dawa Pharmaceuticals Kenya LTD. 1983 – 1986. Quality control of manufactured drugs.
- b) Kenya-Nordic Small Scale Coffee Farmer Dairy Programme: 1994 -1999. Advised cooperative societies and donors on choice of animals and necessary infrastructural support. Taught farmers about care of animals and produce.

RESEARCH GRANTS OBTAINED

- i) **1980** - Wilson Tindal Scholar
- To study visceral nociceptive mechanisms in the spinal cord University of Edinburgh
- ii) **1985** - University of Nairobi
- To study endogenous pain controls that is triggered by physical and thermal therapy.
- iii) **1987** - University of Nairobi.
- To study chemical and thermal control of chemogenic pain.

- iv) **1989** - University of Nairobi.
- To study endogenous pain control.
- v) **1989-90** - NORAD. To study: -
 - a) Levels of chlorinated hydrocarbons in crocodile eggs.
 - b) Nociception in crocodiles, the naked mole-rat and the vervet monkey.
 - c) Growth in the Nile crocodile.
- vi) **1991** - NORAD
- To study antinociception by α -adrenoceptor antagonists and clonidine.
- vii) **1992** - University of Nairobi.
- To study the effect of bovine growth hormone in stunted Nile crocodiles.
- viii) **1992** - Agricultural Research Council (Norway)
- To study amino acid absorption, degradation and outflow in the cow.
- ix) **1993** - Norwegian College of Veterinary Medicine.
- To study growth of crocodiles under farm conditions.
- x) **1994** - Biologische Heilmittel Heel, GMBH.
- To study the effects of homeopathic dilutions of Nux Vomica on gastrointestinal motor and electrical activity.
- xi) **1999** - Biologische Heilmittel Heel, GMBC
- To study effects of homeopathic drugs:-
 - a) Hepar compositum ad us. vet.
 - b) Coenzyme compositum ad us. vet.
 - c) Cardius marianus – injeel forte.
 - d) Hepar suis – Injeel forte on recovery of injured liver cells.
- xii) **2006 - 2008** - Swedish International Development Agency
Grant to facilitate student and staff exchange
University of Nairobi and the University of Uppsala.
- xiii) **2007** - Deans Committee (UON) to study distribution
of nociceptive afferents in the trigeminal nerve
of testudines.
- xiv) **2007** - J. Bisiker Medical Foundation – A 1 year grant support a M. Sc. Student.
- xv) **2008 -2010** - J. Bisiker Medical Foundation – A 2 year grant to support a M. Sc. Student.
- xvi) **2008** - International Association for the Study of Pain- Grant to support two International Scientists to attend a Pain Symposium (July / August 2008) during the 5th International Congress of the African Association of Physiological Sciences, 2008 in the University of Nairobi.

CONGRESS TRAVEL GRANTS AWARDED

- i) I.U.P.S.- **1987**
- To attend I.U.P.E. Congress, Budapest, Hungary.

- ii) NORAD - **1987**
 - To attend the Nansen Symposium of Neuroscience, Bergen, Norway.
 - To attend the Vth World Pain Congress, Hamburg, Germany.
 - 1988
 - To attend the IVth Annual Congress of the Indian society for the Study of Pain, Hyderabad, India.
 - To attend the 18th Annual Meeting of the Society of Neuroscience, Toronto, Canada.
- iii) Scandinavian Pain Society - **1993**
 - To attend Joint Meeting of the British and Scandinavian Pain Societies, Edinburgh, Scotland.
- iv) Norwegian College of Veterinary Medicine - **1993**
 - To present a guest lecture to the Norwegian Physiological Society.
- v) University of Uppsala(Linnea-Palme) - **2006**
 - To lecture on Experimental Surgery in large Animals.
- vi) University of Uppsala(Linnea-Palme) - **2007**
 - To lecture on Experimental Surgery in large Animals.

INVITED AND GUEST LECTURES

- i) Is there a neurophysiological basis for thermal analgesia? - University of Edinburgh (**1982**).
- ii) Referred testicular pain – University of Edinburgh (**1983**).
- iii) Somatovisceral convergence: a neuronal basis for referred pain – University of Nairobi (**1985**).
- iv) Thermal analgesic mechanisms in the spinal cord – University of Bergen, Norway (**1987**).
- v) The naked mole-rat: A subterranean rodent with a special physiology and breeding behaviour – University of Oslo (**1991**).
- vi) Pathophysiology of pain: What does the clinician need to know? Lectures delivered to the Kenya Medical Profession on the launching of Tramadol in Kenya by Grunethal GMBH Nairobi (**1994**).
- vii) Husbandry, analgesia and anaesthesia in reptiles, with reference to the Nile crocodile. University of Uppsala, Department of Neuroscience. (**2006**).

SYMPOSIA/CONFERENCES ORGANISED

In the past, I have participated in the organization of International workshop/symposia held in Kenya: -

- i) IBRO/UNESCO Workshop on Neuroscience in Africa, Nairobi (**1985**).
- ii) IBRO/UNESCO Workshop on Neuroscience in Africa, Nairobi (**1988**).
- iii) IBRO/UNESCO Workshop on Neuroscience in Africa, Nairobi (**1989**).
- iv) First Congress and Workshop of the African Association of Physiological Sciences, Nairobi (1992).
- v) Joint Scientific Conference of the Kenya Society of Neuroscientists, the Kenya Psychiatric Association and the Kenya Study of Pain, Nairobi (**1994**).
- vi) Tramal Launch Symposia, Eldoret (**1994**).

- viii) IBRO Third African Neuroscience School, Nairobi (2002).
- ix) First Course on Interdisciplinary Pain Management, Nairobi (2004).
- x) Congress of the African Association of Physiological Sciences, Nairobi (2008).
- xi) Teaching of Agrobiodiversity in Universities- 2011

APPOINTMENT TO COMMITTEES AND OTHER CONTRIBUTIONS

- a) **Represented** the Nairobi University Senate in many appointment committees for up to Senior Lecturer and Associate Professor.
- b) **Provided technical support** in the establishment of a viable Dairy Industry in the Kangundo, Mwala and Machakos Districts.
- c) **Chaired** the translation of two (2) papers on pain, by the International Association for the study of pain, into Swahili, 2002.
- d) **Participated** in a workshop on the role of Private Veterinarians in sustainable animal health service delivery, disease surveillance and reporting, Machakos, 2003.
- e) With Prof. Jorgen Madsen **initiated** the collaborative talks which have resulted in the development of a MOU between the University of Nairobi and Life, Copenhagen, Denmark, 2007.
- f) **Chairman** of Departmental welfare fund, 2007.
- g) **Member** the College Research Committee, 2007.
- h) **Appointed Member** of the South Eastern University **Tender Committee**, February 2010.
- i) **Appointed Chairman of the Scholarship Awards Committee**, South Eastern University College, May 2010,
- j) **Appointed Member of Shortlisting Committee**, South Eastern University College, March, 2010.
- k) **Appointed Chairman of Shortlisting Committee**, South Eastern University College, January 2011.
- l) **Appointed Chairman Board of Postgraduate Studies**, South Eastern University College, March, 2011
- m) **Appointed Member of the Management Board, Directorate Research, Innovation and Technology**, South Eastern University College, April, 2011.
- n) **Appointed Member of the Disposal Committee**, the South Eastern University College, August 2011,
- k) **Appointed Member of the Senior Staff Disciplinary Committee**, the South Eastern University College, October, 2011.

COMMUNITY DEVELOPMENT

- a) **Treasurer** of the Akitondo clan ,2004 - 2009.
- b) **Board Member and Chairman** of Kyevaluki Secondary School 2005-2008.
- c) **Board Member and Chairman** of Kyevaluki Secondary School 2008-2011.
- d) **Board Member**, Kangundo District Think Tank, 2006-
- e) **Quest lecturer**, A. I. C. Bible College 2007 -
Lectures on Animal Health and Care.
- f) **Council Member** South Eastern Kenya Intergrated Theological University College 2008 –
- g) **Member Board of management** of African Brotherhood Church Educational Institutions, 2011 - 2016

PUBLICATIONS

CONFERENCE ABSTRACTS

1. **Kanui, T.I.** Thermal inhibition of spinal cord units in the rat. *Journal of Physiology*, 349 (1983) 38P.
2. **Kanui, T.I.** Spinal cord neurons in the rat excited by testicular compression. *Journal of Physiology*, 346 (1983) 51P.
3. **Kanui, T.I.** Thermal analgesia: Analgesia of the present, future and the past. Paper presented during an IBRO/UNESCO Workshop on Neuroscience in Africa, Nairobi, (1985).
4. **Kanui, T.I.** Thermal alleviation of Capsaicin chemogenic pain in rats. *Pain Supplement*, 4 (1987) 551.
5. **Kanui, T.I.** and Maloiy, G.M.O. Analgesic effects of cold thermal treatment. A comparison with Pethidine and the effects of Naloxone A. *The Nansen Symposium on New Concepts in Neuroscience*, (1987) 7P.
6. **Kanui, T.I.** and Maloiy, G.M.O. Analgesic effects of cold thermal treatment. A comparison with pethidine and the effects of Naloxone B. *Neuroscience Supplement*, Vol. 22 (1987) 955P.
7. **Kanui, T.I.** Thermal excitation of spinal cord neurons. Paper presented during an IBRO/UNESCO workshop on Neuroscience in Africa, Nairobi, (1988).
8. **Kanui, T.I.** and Maloiy, G.M.O. Thermal analgesia: Neuropharmacological basis. Fourth Annual Conference, Indian Society for the Study of Pain, (1988) 3P.
9. **Kanui, T.I.** and Maloiy, G.M.O. Autotomy induced by subcutaneous injection of hypertonic saline in the tail of the rat. 18th Annual Meeting of the Society for Neuroscience, (1988) 505, 3.
10. **Kanui, T.I.** Dissociation between the analgesic effects of temperature (2°C, 40°C) and tactile stimulation (massage) in physical therapy for the treatment of pain. *Kenya Medical Research*

- Institute (KEMRI) and Kenya Trypanosomiasis Research Institute, 10th Annual Medical Scientific Conference, (1989). 32/89.
11. **Kanui, T.I.** The hot plate and formalin tests in crocodiles: Experimental models for the study of nociception and antinociception in reptiles. First East African Conference on Laboratory Animal Science, Nairobi, (1989).
 12. **Kanui, T.I.** Indigenous Kenyan fauna as a source of new experimental models for neuroscience research. IBRO/UNESCO Workshop on Neuroscience in Africa, Nairobi, (1989).
 13. **Kanui, T.I.** Influence of temperature on the growth of the Nile Crocodile. Faculty of Veterinary Medicine, Animal Scientific Conference; 1989 5 p.
 14. Aulie, A., **Kanui, T.I.** and Maloiy, G.M.O. Temperature effects on the oxygen uptake of eggs and hatchlings of the Nile Crocodile. Thermal Physiology Symposium of the XXI International Congress of Physiological Sciences, Tromso, (1989) 1P.
 15. **Kanui, T.I.** and Hole, K. Analgesic effects of morphine, nefopam and paracetamol in the naked mole rat (*Heterocephalus glaber*) using the formalin test. Neuroscience Supplement Vol. 23 (1991), P 10.
 16. **Kanui, T.I.**, Hole, K. and Miaron, J.O. Nociception in crocodiles and analgesic effects of opioids. Neuroscience Supplement Vol. 23, (1991), 29P.
 17. **Kanui, T.I.** Pain and its modulation in animals. Kenya Veterinary Association Neurology Meeting, ILRAD, Nov. 1991.
 18. **Kanui, T.I.** Pain Management problems in wildlife. The Kenya Veterinary Association Annual Scientific Conference, Kabete, April, 1992.
 19. Karim, F., **Kanui, T.I.** and Mbugua, S. Effects of codeine phosphate, naproxen and dexamethasone phosphate on early and late phase pain in the naked mole-rat (*Heterocephalus glaber*). Proceedings of The First International Congress of The African Association of Physiological Sciences, Nairobi, Kenya, September, 21-28, 1992, 17, P 8.
 20. Onyango, E.M., Buoro, I.B.J. and **Kanui, T.I.** The normal electrocardiogram in mongrel dogs in Kenya. Proceedings of The First International Congress of the African Association of Physiological Sciences, Nairobi, Kenya, September, 21-28, 1992, 91 P 39.
 21. Aulie, A., **Kanui, T.I.** and Kimwele, C.N. Growth spurt in anorexic crocodiles given growth hormone. Winter Meeting of the Norwegian Physiological Society, 1993, P1, Gulo.
 22. **Kanui, T.I.**, Karim, F., Towett, P.K., and Hole, K. The opioid system and underground living in the naked mole-rat (*Heterocephalus glaber*). Winter Meeting of the Norwegian Physiological Society, 1993 P2, Gulo.
 23. Karim, F., **Kanui, T.I.** and Mbugua, S. Effects of pethidine, acetylsalicylic acid and hydrocortisone on formalin-induced pain in the naked mole-rat (*Heterocephalus glaber*). African Journal of Neuroscience 1 (1993) 97.
 24. **Kanui, T.I.** Pathophysiology of pain: What does the clinician need to know. Symposium held on the Launch of Tramal, Eldoret 1994 P1.

25. **Kanui, T.I.** Physiology of pain and possible site of action of analgesics. Proceedings of a refresher course and annual scientific conference organized by Kenya Society of Anaesthesiologists, World Federation of Societies of Anaesthesiologists and Society of Anaesthesiologists of East Africa **1996** IP.
26. **Kanui, T.I.** Behavioural methods used in the study of pain and evaluation of analgesic drugs in experimental animals. Workshop of the IBRO Third African Neuroscience School, **2002** 34P.
27. **Kanui, T.I.** Pain: Pain mechanisms and beliefs about pain and suffering in Africa. Symposium of the Kenya Society of Neuroscientists and Kenya Association for the study of Pain, **2002** 4P.
28. **Kanui, T.I.** Animal models used in the study of pain and pain regulation. 1st Course on Interdisciplinary Pain Management Nairobi, **2004**.
29. Rajput M., Rajput B., **Kanui T. I.** Lacoux P. Macrae W. A. Healthcare professionals views about pain at the inaugural meeting of the Kenya Chapter of IASP. Proceeding of the Annual Meeting of the British Pain Society, **2005**.
30. Rajput M., Rajput B., **Kanui T. I.**, Kopf, A., Lacoux P. Macrae W. A. The challenges of pain in Africa: Views from an inaugural meeting of the Kenyan Chapter of IASP. Proceeding of the 8th World Congress of Pain Sydney, **2005**.
31. **Kanui, T.I** Livestock feeding practices in the Arid and Semi-Arid regions of Kenya. Proceeding of the 5th Biennial Scientific conference, **2006** 4P.
32. **Kanui, T.I.** Ethnoveterinary medicinal practices in the Arid and Semi-Arid regions of Kenya. Proceedings of the 5th Biennial Scientific Conference, **2006** 8P.
33. **Kanui T.I.** Multipurpose trees, shrubs and herbs used in pain management in Eastern Kenya: Income generation, sustainability and enviromental challenges. Proceedings of The 1st KDSA Regional Conference. **2006**, 14 P.
34. Wambugu S. N., Joakim D., Towett P. K., Kiama S. G., **Kanui, T. I.** Laboratory Management Captive Hingeback Tortoises Workshop on Reptile Care, Health and Welfare. **2007**.
35. **Kanui, T.I.** Comparative analysis of nociception in some wild vertebrates found in Kenya. Proceedings of the 17th Scientific Conference of Institute of Primate Research, **2007**, 26P No. 1.
36. Bisiker, L., Jenkins R. M., **Kanui, T. I.** The use of traditional healers in the management of Pain. 12th congress of the International Association for the Study of Pain, Glasgow U. K. **2008**.
37. Wambugu, S. N., Towett, P. K., Kiama, S. G., **Kanui, T. I.** Composition of nociceptive afferents in the trigeminal nerve in the Marsh Terrapin (*Pelomedusa subrufa*). Proceedings of the 6th Biennial Scientific Conference, **2008** 14 P.
38. Maloba, F., Waititu K., Ngotho J. M. **Kanui, T. I.**, Wambugu, S. N., Towett, P. K., Kiama, S. G. Faecal parasites found in the hingeback tortoise (*Kinixys Speckii*) . Proceedings of the 6th Biennial Scientific Conference, **2008** 24 P.
39. Wambugu, S. N., **Kanui, T. I.**, Towett, P. K., Kiama, S. G., Abelson, K. Nociception in tortoises: the formalin, hot plate and cetic acid instillation tests. 5th International Congress of the African Association of Physiological Sciences (AAPS), **2008** 28 P.

40. Wambugu, S. N., **Kanui, T. I.**, Towett, P. K., Kiama, S. G., Abelson, K. The formalin test and capsaicin instillation tests in the Marsh terrapin (*Pelomedusa subrufa*). 5th International Congress of the African Association of Physiological Sciences (AAPS), **2008** 30 P.
41. Mwangi, P. W., Mbugua, P. M., Kariuki, D. K., **Kanui, T. I.** The analgesic activity of ethanol, chloroform and chloroform/ethanol extracts of *Ocimum kilimandscharicum* roots.). 5th International Congress of the African Association of Physiological Sciences (AAPS), **2008** 29a P.
42. Githinji, C. G., Mbugua, P. M., **Kanui, T. I.**, Kariuki, D. K. A 5th International Congress of the African Association of Physiological Sciences (AAPS), **2008** 29b P.

FULL PUBLICATIONS

43. **Kanui, T.I.** An electrophysiological study of spinal cord thermoreceptive neurones in the rat. Ph.D. thesis, University of Edinburgh, U.K., (**1983**).
44. **Kanui, T.I.** Thermal inhibition of nociceptor-driven spinal cord neurones in the rat. *Pain*, 21 (**1985**) 234-240.
45. **Kanui, T.I.** Responses of spinal cord neurones to noxious and non-noxious stimulation of the skin and testicle of the rat. *Neuroscience Letters*, 58 (**1985**) 315-319.
46. **Kanui, T.I.** Thermal inhibition of nociceptor-driven spinal cord neurones in the cat. A possible neuronal basis for thermal analgesia. *Brain Research*, 402 (**1987**) 160-163.
47. **Kanui, T.I.** Receptive field analysis and electrophysiological properties of scrotal thermoreactive neurones in the rat. *Experimental Brain Research*, 71 (**1988**), 508-514.
48. **Kanui, T.I.** Autotomy induced by chronic pain. *Indian Journal of Pain*, Vol. 3 No. 2 (**1988**) 13-16.
49. **Kanui, T.I.** Dissociation between the analgesic effects of temperature (2°C, 40°C) and tactile stimulation (massage) in physical therapy for the treatment of pain. Proceedings of the Kenya Medical Research Institute (KEMRI) and Kenya Trypanosomiasis Research Institute, 10th Annual Medical Scientific Conference (**1989**) 116-118.
50. Aulie, A., **Kanui, T.I.**, Maloiy, G.M.O. The effects of temperature on oxygen consumption of eggs and hatchlings of the Nile Crocodile (*Crocodylus niloticus*). *Comparative Biochemistry and Physiology* Vol. 93A No. 2 (**1989**) 473-475.
51. **Kanui, T.I.** The hot plate and formalin tests in crocodiles: Experimental models for the studyh of nociception and antinociception in reptiles. Proceedings of the 1st East African Conference on laboratory Animal Science Nairobi, **1989** pp. 63-65.
52. **Kanui, T.I.** The influence of temperature on the growth of the Nile crocodile (*Crocodylus niloticus*). *Bulletin of Animal Health and Production, Africa. Special Issue*, (**1989**) 73-74.
53. **Kanui, T.I.** and Hole, K. Morphine induces aggression but not analgesia in the naked mole-rat (*Heterocephalus glaber*). *Comparative Biochemistry and Physiology*, 96C (**1990**) 131-133.
54. **Kanui, T.I.**, Hole, K. and Miaron, J.O. Nociception in crocodiles: Capsaicin instillation, formalin and hot plate tests. *Journal of Zoological Science*, 7 (**1990**) 537-540.

55. Andersen, O., Kimwele, C.N., Aulie, A. and **Kanui, T.I.** Effects of recombinant human growth hormone in juvenile Nile crocodiles (*Crocodylus niloticus*). *Comparative Biochemistry and Physiology*, 97A (1990) 607-609.
56. Buoro, I.B.J., **Kanui, T.I.**, Atwell, R.B., Njenga, K.M., Gathumbi, P.K. Polymositis associated with Ehrlichia canis infection in two Alsatian cross dogs. *The Journal of Small Animal Practice*, 31 (1990) 624-627.
57. **Kanui, T.I.**, Mwendia, C., Aulie, A. and Wanyoike, M. Effects of temperature on growth, food uptake and retention time of juvenile Nile crocodiles (*Crocodylus niloticus*). *Comparative Biochemistry and Physiology*, 99A (1991) 453-456.
58. **Kanui, T.I.** and Hole, K. Morphine and pethidine antinociception in the crocodile. *Journal of Veterinary Pharmacology and Therapeutics*, 15 (1992) 101-103.
59. **Kanui, T.I.** Effects of cold and warm baths on pain behaviour. *Indian Journal of Pain*, 5 (1991) 3-8.
60. Skaare, J.U., Ingerbrigtsen, K., Aulie, A., **Kanui, T.I.** Chlorinated hydrocarbons in crocodile eggs from Kenya. *Bulletin of Environmental Contamination and Toxicology*, 47 (1991) 126-130.
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1. Nociception and pain regulation in naked mole-rats.
2. Nociception and pain regulation in reptiles.
3. Evaluation of Herbal pain therapies used in the Kenya.
4. Studies on the management of captive reptiles.
5. Endo- and Ecto-parasites of Marsh Terrapins and Speke Hingeback tortoise.

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