

**UNIVERSITY OF NAIROBI  
COLLEGE OF HEALTH SCIENCES  
SCHOOL OF PHARMACY**

**INTERNAL MEMO**

**FROM:** Dean, School of Pharmacy

**DATE:** 27<sup>th</sup> February, 2012

**TO:** Vice-Chancellor, UoN  
Attn: Mr. Sikulu

**REF:** UON/CHS/SOP/1/22

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**RE: 2012 UNIVERSITY OF NAIROBI ANNUAL REPORT**

Your memo dated 07 January, 2013 refers.

Attached herewith please find 2012 Annual Report for the School of Pharmacy both hard and soft copy.

Thank you.

**PROFESSOR ANASTASIA N. GUANTAI**  
**AG.DEAN**  
**SCHOOL OF PHARMACY**

PNM/iam

## **1. BRIEF HISTORY OF THE SCHOOL**

The School of Pharmacy started as a Department of Pharmacy in the Faculty of Medicine in 1974 and attained a Faculty status in July 1995. It is one of the five Schools which, together with University of Nairobi Institute of Tropical and Infectious Diseases (UNITID) and CHIVPRI constitute the College of Health Sciences of the University of Nairobi. The School comprises of three departments based on thematic areas that existed since 1974 namely:- Department of Pharmaceutical Chemistry, Department of Pharmacology & Pharmacognosy and Department of Pharmaceutics and Pharmacy Practice. Pre-clinical courses are taught by a complement of service departments within the University.

The School is charged with the mandate of training high caliber pharmaceutical health care personnel who provide Pharmaceutical Services to the community, industry and conduct innovative research in relevant areas. The location of the School within the Kenyatta National Hospital (KNH) complex provides a favourable environment for training, research and practice due to the wide variety of challenging health issues by virtue of the referral status of the Hospital. Additionally, the presence of all cadres of health professionals provides an ideal environment for teamwork as recommended by the World Health Organization.

## **2. COURSES OFFERED**

### **Undergraduate**

1. Bachelor of Pharmacy

### **Postgraduate**

1. Master of Pharmacy in Clinical Pharmacy
2. Master of Science in Pharmacognosy and Complementary Medicine
3. Master of Pharmacy in Pharmaceutical Analysis
4. Postgraduate Diploma in Pharmaceutical Analysis
5. Master of Pharmacy in Industrial Pharmacy
6. Master of Pharmacy in Pharmacovigilance & Pharmacopidemiology
7. Master of Science in Molecular Pharmacology

## **3. ENROLLED STUDENTS**

Postgraduate - 66  
Undergraduate - 370  
**Total 436**

#### 4. INTERNATIONAL STUDENT COMPONENT

Bachelor of Pharmacy Tanzanian Student	-	1
Master of Pharmacy in Clinical Pharmacy Ugandan Student	-	2
Master of Pharmacy in Pharmacy Industrial Pharmacy Ugandan Student	-	1
Master of pharmacy In Industrial Pharmacy Ugandan Student	-	1
Doctor of Philosophy Cameroon student	-	<u>1</u>
<b>Total</b>	-	<b><u>6</u></b>

#### 5. RESEARCH ACTIVITIES UNDERTAKEN

- i. Investigation of Phytochemical and antimalarial activity of *caesalpinia volkensii* harms seeds **Dr. Ngomo Jeremiah Ndingu'**
- ii. "Formulation development of Zidovuldine, lamivudine fixed dose combination paediatric mini matrices by hot melt extrusion" Dr. Shital Maru
- iii. Phytochemical and Pharmacological investigation of *Acmella caulirhiza*. **Dr. K.A. Sinei.**
- iv. Neurotoxicity of Cassava Cyanogen analogues: Relevance to the pathogenesis of Konzo (Spastic Paraparesis). **S.K. Thuo, Prof. C.K. Maitai, Dr. K.A. Sinei**
- v. Evaluation of the medicinal properties and safety of a polyherbal product (NEFANG). **Dr. G.A Agbor, Prof. A. N. Guantai, Dr. F. A. Okalebo.**
- vi. A Cohort study: comparison of the safety and effectiveness of anti-diabetic herbal preparations and allopathic therapies. Ethics approval obtained on 25<sup>th</sup> of October, 2012 (P446/08/2012) . **Irene Njeri Chege, Faith Apolot Okalebo, Solomon Derese, Prof A. N. Guantai.**
- vii. Phytochemical Investigation and Anthelmintic Activity of *Hegenia Abyssinica* **Dr. Esther Wamuyu Karumi**
- viii. Quality of Ginseng Products in the Kenyan Market **Dr. Ronald Mwende Inyangala**
- ix. Gynandropsis gynandra on the haematological profile of lactating mothers **Dr. Kefa O. Bosire**
- x. Evaluation of the efficacy of selected Kenyan plants on wound healing. **Dr. Lydia Magdaline Oliayo**

- xi. Comparative Study of the Artemisinin Content of *Artemisia annua* L. Cultivated in Kenya.  
*Dr. Sarah W. Mwangi*
- xii. Anti-malarial Activity of Annonaceae found in Kenya. *Dr. Nelly N. Mungai*
- xiii. Genetic Polymorphism of Drug Metabolizing Enzymes and Clinical Implications for Kenyan Populations. *Dr. M.O. Oluka*
- xiv. Clinical Response and pharmacokinetics of antiretroviral drugs in Kenyan HIV patients.  
**Dr. M.O. Oluka.**
- xv. Production of Carotenoids *Dr. G. O. Osanjo.*
- xvi. Development of Camelid antibodies for diagnostics and therapeutics. **Dr. G. O. Osanjo**
- xvii. Assesment of Human pharmaceutical products in Kenya by route of administration and type of dosage form. Dr. N. N. Nyamweya & Dr. Lucy J. Tirop
- xviii. Molecular characterization of resistance Mechanisms among *Escherichia coli*, *Klebsiella Pnuemoniae* and *Pseudomonas aeruginosa* causing infections at Kenyatta National Hospital Nairobi. Dr. J. M. Bururia
- xix. Genetic Determinants of Warfarin response in Kenya Patients Dr. D. G. Nyamu
- xx. Efficacy and safety of low dose stavudine versus tenofovir in HIV infected Adults. Dr. E. M. Mwangangi
- xxi. Challenges in tuberculosis chemotherapy the trends of resistance and adverse reactions Dr. Peter Karimi

## 6. INTERNATIONAL LINKS AND COLLABORATIONS

- a. The School has international links with Tianjin University of Traditional Chinese Medicine and Aibst of Zimbabwe.
- b. EDULINK MEDISHARE Project. - Initiators: Prof. G.N. Thoithi.
- c. Katholieke Universiteit Leuven, Belgium - Initiators: Prof. I.O. Kibwage.
- d. Kings College, Dept. of Pharmacy in London UK- Initiators: Prof. I.O. Kibwage
- e. Mercer University - Initiators: - Prof. G. N. Thoithi

- f. Kansas University - Prof. G. N. Thoithi
- g. Tianjin University of Traditional Chinese Medicine – Initiator Prof. Mwangi
- h. University of Cape Town, South Africa (through GIBEX project) **Initiator: Prof. G.N. Thoithi**
- i. University of Cape Town, South Africa (KeSA- NCST-NRF grant - Anti-helminthic Activity Bio-prospecting). Initiator: Prof. G.N. Thoithi

**Linkages with Industry On Drug Analysis and Good Manufacturing Practices:**

- a. Namm Pharmaceutical Ltd.
- b. Laboratory and Allied Ltd.
- c. Glaxosmithkline Ltd.
- d. Galaxy Pharmaceuticals Ltd.
- e. Dawa Limited
- f. Pharmaceutical Manufacturing Company
- g. Lesukut Limited
- h. YSP Industries
- i. Medox Pharmaceuticals Ltd
- j. Plethico Pharm
- k. Flamingo Pharma
- l. Reckit Benckiser Ltd.
- m. Medisel (Kenya) Ltd.
- n. Norbrook Kenya Ltd.
- o. Medipharm Industries Ltd., Kampala, Uganda.
- p. Pfizer Laboratories
- q. Nerix Pharma Ltd.
- r. Nabros Pharma PVT. Ltd.
- s. PSA International
- t. Healthcare Pharmaceuticals Ltd.
- u. Universal Corporation Ltd.
- v. High Chem Pharm. Ltd.
- w. Panaceau Pharmaceuticals Ltd.
- x. Vetcare (K) Ltd.
- y. Kenya Agricultural Research Institute (KARI)
- z. Ally Pharma Options Out Ltd.

## 7. PUBLICATIONS

- a. **Prof. Maitai C.K.:** A Cascade of biochemical and physiological markers East Central Afri. J. Pharm Sci., Vol 15(2012) 1-2.
- b. Dr. Nyamu D.G., **Maitai C.K.**, Trends of acute poisoning cases at the Kenyatta National Hospital, Nairobi. East Central Afri. J. Pharm Sci. Vol. 15 (2012) 29-34.
- c. **Prof. J. Mwangi:** Inaugural Lecture: Herbal Medicines: Do They Really Work? 14<sup>th</sup> March 2012.
- d. **Dr. E. M. Guantai** and **K. Chibale.** (2012) ‘Natural product-based drug discovery in Africa: the need for integration into modern drug-discovery paradigms. In: Drug Discovery in Africa, eds. Chibale K., Masimirembwa C. and Davies-Coleman, M., Springer: Germany (Pg. 101-126).
- E. **Protus ArreyTarkang, Faith A. Okalebo, Gabriel A. Agbor, Nolé Tsabang, Anastasia N. Guantai, Geoffrey M. Rukunga.** Indigenous Knowledge and Folk Use of a Polyherbal Antimalarial by the Bayang Community, South West Region of Cameroon. *J. Nat. Prod. Plant Resour.*, 2012, 2 (3):372-380
- F. **Dr. N. N. Nyawmeya and Dr. Lucy J. Tirop** Assessment of Human Pharmaceutical Product registered in Kenya by root of admistration and type of dosage form. East Central Affrican Journal of Pharmaceutical Sciences.
- G. **Dr. Sylvia A. Opanga** The Child Health Evidence week and GRADE grid and transparency in the deliberative process of guideline development
- h. **P.M. Njogu, G.N. Thoithi, J.W. Mwangi, F.N Kamau, I.O. Kibwage, S.T. Kariuki, A. Yenesew, H.N. Mugo** and J.M. Mwalukumbi (2011). Phytochemical and Antimicrobial Investigation of *Girardinia diversifolia* (Link) Friis (Urticaceae). East and Central African Journal of Pharmaceutical Sciences Vol. 14 (2011) 89-94.
- i. **Esther N. Matu, Peter G. Kirira, Elizabeth V. M. Kigundu, Enock Moindi and Beatrice Amugune (2012).** Antimicrobial activity of organic total extracts of three Kenyan Medicinal plants. *Afr. J. Pharmacol. Ther.* 1(1): 16-20.

## 8. CONSULTANCIES

No.	Name of Staff	Type of consultancy	Place
1.	Prof. C.K. Maitai	Member - Pest Control Product Board (PCPB)	Pharmacy and Poisons Board, Nairobi
	“ ”	Editor, Est African Journal of	School of Pharmacy,

		Pharmaceutical Sciences	UoN
	“ ”	Chairman - Technical and Registration Committee of PCPB.	Nairobi
3	Prof. Julius Mwangi	Intellectual Property Coordinator	University of Nairobi
4	Prof. G. Muriuki	Chairman, Training and Assessment Committee	Pharmacy and Poison Board - Nairobi
	“ ”	Member of Academic Board – Kenya Institute of Education (KIE)	KIE Nairobi
	Pharmacognosy Section: Prof. J. W. Mwangi, Dr. E. Karumi, Dr. N. Mukungu, Mr. Josephat Mwalukumbi	Interview and screening of herbalists for purposes of issuance of certificates for practice under the Ministry of Culture and Social Services.	Mitishamba Lab, Dept. of Pharmacology & Pharmacognosy, UoN
5	Prof. A.N. Guantai	Setting and moderation of the registration examination for degree and Pharmacy and diploma holders.	Pharmacy and Poisons Board
	“ ”	Chairman	Pesticides Control Board
7.	Dr. G.O. Osanjo	Member of CEBIB Board	College of Biological and Physical Sciences, UoN
	“ ”	Member, Steering Committee on CHS International Scientific Conference	College of Health Sciences, UoN
8.	Dr. K O. Bosire	Co-ordinator, PRIME-K, MEPI	CHS - UoN
9.	Dr. Peter Karimi	Setting and moderation of the registration examination for degree and Pharmacy and diploma holders.	Pharmacy and Poison Board - Nairobi
10.	Dr. Evans Mwangangi	Setting and moderation of the registration examination for degree and Pharmacy and diploma holders.	Pharmacy and Poison Board - Nairobi
11.	Department	Drug Analysis and Good Manufacturing Practices by Drug Analysis & Research Unit (DARU)	
12.	Prof. G.N. Thoithi	WHO Expert Advisory Panel on Drug Policies and Management.	WHO
13.	(Dr. B.K. Amugune)	University of Nairobi/Kenyatta National Hospital – Ethical Review Committee.	KNH
15.	Committee (Dr B. K. Amugune).	Kenya Bureau of Standards Nutrition and Special Dietary Uses Technical	

## 9. MEMBERS OF STAFF

S/N	DESIGNATION	Dept.of Pharmacetics	Dept.of Pharmacology	Dept.of Pharm.chem	Dean's Office
1.	Professor	1	3	1	
2.	Associate Professor	0	1	2	
3.	Senior Lecturer	1	5	2	
4.	Lecturer	8	5	2	
5.	Tutorial Fellows	3	4	3	
6.	Principal Technologist	1	1	1	
7.	Assistant Registrar				1
8.	Chief Technologist	1	1	1	
9.	Senior Technologist	3	2	2	
10.	Technologist	1	2	2	1
11.	Junior Technologist	1	1		
12.	Secretary	1	1	1	3
13.	Statistician				1
14.	Librarian				1
15.	Animal Attendant		2		
16.	Driver				1
17.	Messenger	1	1	1	2
18.	Grounds man				1
19.	Cleaner	1		1	1
	<b>Total</b>	<b>23</b>	<b>29</b>	<b>19</b>	<b>11</b>

## 10. GRADUANDS 2011/2012 ACADEMIC YEAR

- Undergraduates- 73
- Postgraduates - 5
- **Total** - **78**

## 11. PAPERS PRESENTED AT CONFERENCES

No.	Member of Staff	Title of Papers	Venue	Date
1.	Dr. Shital M. Maru	Characterization of hot melt extruded sustained release mini matrices of zidovudine and lamivudine with kolidon sr poster presentation	Chikago IL USA	14/10/2012
2.	Dr. K.A. Sinei, Prof. J.W. Mwangi, Mr. A.M.	The contractile action of Adenia globosa Engl. on isolated preparations of mammalian smooth muscle	National Council for Science and	7 <sup>th</sup> – 11 <sup>th</sup> May, 2012.



	Mwaura, Mrs. R.W. Munenge:		Technology, KICC Nairobi	
3.	Prof. J.W.Mwangi:	Traditional Medicine and Intellectual Property.	Kerugoya	31 <sup>st</sup> Aug 2012.
4.	Dr. M. Oluka:	Annual review meeting 2012 of the University of Nairobi STD/Aids collaborative group Presented a paper entitled: Cyp2b6 pharmacogenetics and nevirapine clinical outcomes in HIV-1 seropositive Kenyan women receiving antiretroviral therapy	at Mayfair Court Southern Sun, Nairobi from	Mon 23 <sup>rd</sup> Jan – Fri 27 <sup>th</sup> 2012.
5.	<b>Faith A Okalebo,</b> Lawrence E Mwangangi, Kepha O Bosire, Moses Mwangi.	Comparison of the Renal Safety of Tenofovi and Stavudine in Patients on Antiretroviral Therapy at a Kenyan Referral Hospital [201 (Kenya).. International Society for Pharmacoepidemiology <a href="http://www.pharmacoepi.org/meetings/28ICPE/ICPE2012_program_pages50-89.pdf">http://www.pharmacoepi.org/meetings/28ICPE/ICPE2012_program_pages50-89.pdf</a>	Poster Session A. 2012. Barcelona, Spain. Poster number 106	August 24th,

## 12. CORPORATE SOCIAL RESPONSIBILITY

None

## 13. ANY OTHER ACTIVITY

- The reopening of Pharmacy Practice and Drug information unit Laboratory for the purpose of teaching practical