UNIVERSITY OF NAIROBI
COLLEGE OF HEALTH SCIENCES
DEPARTMENT OF HUMAN ANATOMY

ANNUAL REPORT, 2014

The year 2014 was again eventful. The department has continued to emphasize on quality in service delivery. Our research agenda continues to place the Department on the global anatomy map while our students benefitted from innovations in learning and embraced e-histology, digital anatomy and the skills courses. We have done well as a team and hopefully, 2015 will present even more exciting opportunities to do better.

1. TEACHING AND ASSESSMENTS

1.1 Undergraduate programs

We received 583 new students in January (357 Medicine, 36 in Dentistry, 83 in Pharmacy, 73 in Nursing and 34 in Medical laboratory programs) and examined them in August 2014. A second intake of 595 students (MBChB 313, BParm 96, BDS 44, BScN 95, BSc (MLT) 47) in September 2014 will go till May, 2015. The August End of year results are shown in Table 1 below.

<table>
<thead>
<tr>
<th></th>
<th>January 2014 to August 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MBChB.BDS</td>
</tr>
<tr>
<td>Distinctions</td>
<td>14</td>
</tr>
<tr>
<td>Credits</td>
<td>52</td>
</tr>
<tr>
<td>Passes</td>
<td>162</td>
</tr>
<tr>
<td>Fail</td>
<td>117</td>
</tr>
<tr>
<td>Incomplete/ Deferred</td>
<td>47</td>
</tr>
</tbody>
</table>
The intercalated BSc program in the 2013-2014 year recruited three students into the program:

(i) Brian Kariuki: Research project: Age and gender influence on the structure of the gall bladder
(ii) Brian Wambua: Research project: Gender dimorphism of the patella tendon
(iii) Nelson Mphekethu: Research project: Topography and structural organization of the intraabdominal part of the testicular artery

They were all awarded 1st class honors degrees after a rigorous training and examination process. The external examiner was Prof. Amadi from the University of Witswatersrand, South Africa.

1.2 Postgraduate programs

1.2.1 MSc Anatomy

Three MSc Anatomy students successfully defended their thesis during the year and were awarded the degree:

(i) Anne Pulei
   Project: Influence of Parity on Uterine Structure in Pregnant Rabbits: A Light Microscopy and Immunohistochemical Study
(ii) Beda Olabu
   Project: Structural Changes in the Rabbit Penile Architecture in induced hypogonadism
(iii) Phillip Mwachaka
   Project: Histomorphometric Changes in the Rabbit Neural Retina following Monocular Deprivation

1.2.2 M.Med (Surgery)

Fifty one students who joined different Masters in Surgery and OMF programs reported to the Department in September 2013. Forty five presented themselves for the end of year examinations in August and posted the following results:

• Passes – 27 students
• Fails – 18 students
1.2.3 PhD in Anatomy

One PhD Anatomy candidate successfully defended their thesis during the year and was awarded the degree

(i) Moses Obimbo - Research project: Correlation of Structure, Estrogen And Estrogen Receptor Distribution in The Uterine Artery of The Domestic Pig (Sus scrofa domesticus)

1.2.4 Doctorate of Medicine

One MD candidate successfully defended his thesis during the year and was awarded MD degree of the University of Nairobi

(i) Julius Ogeng’o - Research project: Pattern of Complications And Anatomical Risk Factors For Atherosclerosis Among Black Kenyans

2. COURSE EVALUATION BY STUDENTS:

Students got another chance to rate their instructors and professors on professionalism, knowledge, presentation skills, interaction with students and communication skills.

There were two categories of evaluations, both were online and the results were shared with the teachers.

2.1 Evaluation of dissection

This was done on a weekly basis where the table leaders give a report of the demonstrators and teaching staff who attended to them during the week.

2.2 Evaluation of teaching staff

This was done at the end of the semester. The mean score at the end of the year was 76%.
3. SCHOLARLY AND CREATIVE ACTIVITIES

3.1 Kimani’s text and atlas
The Kimani’s text and atlas project in histology was finally published. The academic staff have also completed the online material for histology and these are currently in use.

3.2 E-learning modules of microscopic anatomy

3.2.1 The Modules
Three modules of microscopic anatomy teaching on e-learning platform were also uploaded and is actively running. These are:

- Module I: Cytology and Basic Histology
- Module II: Integument and Integration systems
- Module III: Respiratory, cardiovascular, digestive and urogenital systems

These three modules are available for the following classes:

a. MBChB
b. BDS
c. B.Pharm
d. BSc Nursing
e. M.Med Surgery

The MSc Anatomy students access the M.Med modules while the BSc Anatomy students access the MBChB modules.

3.2.2 Online Histology exercises
There are ongoing weekly histology exercises related to the histology modules that the students do. A student is expected to read the content of the module a week before the practical. At the end of their reading the students is supposed to attempt an online exercise which is automatically marked by the system and the results posted real-time both to the students and the administrators privately. A student is expected to get at least 15/20 to attend the practical.
3.3 Digital systems in the laboratories
The Department has also completed the installation of Gross Anatomy and histology laboratories with LED/Plasma screens for digital teaching. We acquired a HD camera system to facilitate digital teaching and have installed and implemented a biometric student logging system.

3.4 Curriculum development and revision
The following curricula have been approved at the Department and await discussions from the level of the school and college.

a) BSc Anatomy (Revision)
b) MSc Anatomy (Revision)
c) PhD Anatomy (New)
d) Intercalated PhD Anatomy (New)
e) Intercalated MSc Anatomy (New),
f) Diploma Course Mortuary Science & Practice (New).

3.5 Nairobi Surgical Skills Center
The number of courses held at the NSSC between January and December 2014.

a) 35 external courses with 638 trainees
b) 1 internal course (5th year medical students) with 329 trainees

3.6 Research and Publications
Publications in referred journals/Book chapters/Thesis abstracts
1. Histomorphometric Changes in the Rabbit Neural Retina following Monocular Deprivation (Dr. Philip Maseghe Mwachaka MSc thesis)
2. Influence of Parity on Uterine Structure in Pregnant Rabbits: A Light Microscopy And Immunohistochemical Study (Dr. Anne Naipanoi Pulei MSc thesis)
3. Structural Changes in The Rabbit Penile Architecture In Induced hypogonadism (Dr. Beda Otieno Olabu MSc Thesis)
4. Correlation Of Structure, Estrogen And Estrogen Receptor Distribution in The Uterine Artery of The Domestic Pig (Sus scrofa domesticus) (Dr. Moses Obimbo Madadi) PhD thesis
5. Pattern of Complications And Anatomical Risk Factors For Atherosclerosis Among Black Kenyans (Prof. Julius Alexander Ogeng’o MD thesis)


53. Saidi H, Mutiso B., Trauma deaths outside the hospital: Uncovering the typology in the Kenyan Capital.


3.6 Conferences
Staff attending other academic fora:
1. Dr. Fawzia Butt attended International Symposium on HPV infection in Head and Neck Cancer, from November 13 to 14, 2014, Poznan, Poland
2. Prof Saidi attended the annual clinical congress of the American College of Surgeons, from October 26-30, 2014, San Francisco, CA
3. Dr. Kirsten Awori attended the XXVI SICOT Triennial World Congress from 19 to 22 November 2014, Rio de Janeiro, Brazil
4. Dr. Kaisha attended the 7th Hepatology and Gastroenterology Post Graduate Course, from December 11 to 12, 2014, Cairo, Egypt
5. Dr. James Kigera attended 8th Congress of the Kenya Orthopaedic Association (KOA) held on 11th -13th June 2014
7. Dr. Moses Obimbo attended training in PhD Supervision, June 17th-19th at the University of Nairobi
8. Prof. Saidi Hassan attended three days training in PhD Supervision, June 17th-19th, 2014.
9. Surgical Society of Kenya (SSK) conference attended by most surgeons in the department

3.7 External Examinerships
Dr. Obimbo – Uzima College
Dr. Kaisha – KeMU

3.8 Editorships of journals
Prof. Ogeng’o and Saidi are respectively the editor and deputy editors of the Anatomy journal of Africa. Dr. Ongeti is the managing editor. With them includes Mwachaka and Pulei, the journal is three issues in the year.
Prof. Saidi and Dr. Kigera are respectively the editor in chief and the deputy editor in chief of the Annals of Africa surgery. Issues published in 2014

4. SPACE IMPROVEMENT AND INFRASTRUCTURE DEVELOPMENTS

4.1 By the time of writing, work to complete the 50-seater classroom adjacent to the parking area is still ongoing

4.2 Laboratories

- Repair of NSSC leakages was completed
- Both histology and gross labs were fitted with LCD screens which are functional

4.3 Biometric system – is actively being used.

4.4 Environment – has been maintained clean. The toilets are sometimes smelly

4.5 Challenges

- Laboratories
  - Repairs for ‘Siberia’ are still pending
  - Shelves for storage of bodies
  - Resolution in Histology lab screens needs to be improved
  - The microphone sometimes malfunctions
- Office space
  - Technicians have requested for partitioning and reorganization of available space
  - Academic staff – partitioning of Dr. Butt’s and Dr. Gikenye’s offices still pending
- Toilets for staff and students
  - Inadequate for female staff. There is need for another one.
  - Still have leakages in both male and female toilets
- Storage space
  - There are unused equipment and furniture lying on the corridors
○ Students’ bags – current shelves are inadequate. There is need for additional shelves or lockers

4.6 Proposed Action Points

• Laboratories
• Office space partitions
• Repair of embalming room floor at Gross Anatomy

5. STAFF MATTERS

5.1 Staff Retreats
The academic staff had a successful retreat at the Swahili Beach in Mombasa in June, 2014. All academic, technical and CFP staff also had an opportunity to bond as they climbed Mt. Longonot and enjoyed spending time together at the Simba lodge in Naivasha.

5.2 Staff welfare
The Departmental welfare groups (HUMANA, HATSWA, HAASWA) continued to explore ways of growing their funds. They have undertaken to invest in and run a Café by CFP as a welfare project.

5.3 Staff movements and promotions
1. Prof. Hassanali – retirement
2. Prof. Gichangi got promoted to Professor
3. Dr. Awori got promoted to Senior Lecturer
6. CHIROMO FUNERAL PARLOUR

6.1 Admissions and Dispatches

<table>
<thead>
<tr>
<th></th>
<th>Total bodies admitted</th>
<th>Bodies &lt; 10 years</th>
<th>Bodies &gt; 10 years of age</th>
<th>NO. OF DISPATCHES</th>
</tr>
</thead>
<tbody>
<tr>
<td>JANUARY</td>
<td>172</td>
<td>32</td>
<td>140</td>
<td>203</td>
</tr>
<tr>
<td>FEBRUARY</td>
<td>172</td>
<td>29</td>
<td>143</td>
<td>172</td>
</tr>
<tr>
<td>MARCH</td>
<td>195</td>
<td>29</td>
<td>166</td>
<td>185</td>
</tr>
<tr>
<td>APRIL</td>
<td>197</td>
<td>32</td>
<td>165</td>
<td>197</td>
</tr>
<tr>
<td>MAY</td>
<td>187</td>
<td>33</td>
<td>154</td>
<td>215</td>
</tr>
<tr>
<td>JUNE</td>
<td>185</td>
<td>35</td>
<td>150</td>
<td>152</td>
</tr>
<tr>
<td>JULY</td>
<td>210</td>
<td>19</td>
<td>191</td>
<td>221</td>
</tr>
<tr>
<td>AUGUST</td>
<td>171</td>
<td>33</td>
<td>138</td>
<td>162</td>
</tr>
<tr>
<td>SEPTEMBER</td>
<td>195</td>
<td>36</td>
<td>159</td>
<td>200</td>
</tr>
<tr>
<td>OCTOBER</td>
<td>200</td>
<td>35</td>
<td>165</td>
<td>196</td>
</tr>
<tr>
<td>NOVEMBER</td>
<td>240</td>
<td>31</td>
<td>209</td>
<td>217</td>
</tr>
<tr>
<td>DECEMBER</td>
<td>189</td>
<td>27</td>
<td>162</td>
<td>213</td>
</tr>
<tr>
<td>TOTAL</td>
<td>2313</td>
<td>371</td>
<td>1942</td>
<td>*2333</td>
</tr>
</tbody>
</table>

Note: Bodies waived – 16; post mortems – 385; Repatriation-7

*20 bodies were carried forward from the previous year.

a) **Infrastructure improvements**

During this year there was installation of the Mortuary Information Management System from Sycom Africa Limited. This system is still on trial and is anticipated to meet the expectations such as making the workload easier and more efficient once we go live.

b) **Disasters handled**

We were able to successfully handle two tragedies which followed each other closely i.e. the Kapendo and Mandera incidences. This was done in collaboration with the Kenya Red Cross Society who set up a psychosocial tent for the bereaved families.
c) **Transportation services**

The three departmental vehicles (i) Toyota Hiace KAH 091F (ii) Hearse KAV 643E (iii) KBV 769T Bus have been well maintained. The fourth vehicle, i.e. the Toyota land cruiser is due for rebranding of by TOYOTA KENYA Co.

Below is a summary of the trips made during the year.

<table>
<thead>
<tr>
<th>Destination</th>
<th>Number of trips</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western</td>
<td>28</td>
</tr>
<tr>
<td>Nyanza</td>
<td>32</td>
</tr>
<tr>
<td>Rift Valley</td>
<td>14</td>
</tr>
<tr>
<td>Eastern</td>
<td>5</td>
</tr>
<tr>
<td>Central</td>
<td>4</td>
</tr>
<tr>
<td>Nairobi</td>
<td>9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>92</strong></td>
</tr>
</tbody>
</table>

d) **EMBALMING AND STORAGE SERVICES**

Laying of tiles was done in the Autopsy Lab and an autopsy table procured. The main embalming floor will be replaced with terrazzo so as to ensure a high level cleanliness. The staffs have ensured that they maintain quality embalming services despite the challenges encountered with the maintenance of the cold cabinets.

e) **STAFF MATTERS**

The staffs have been vaccinated against Hepatitis B. There has been a follow-up on the issuance of Job Identity Card, Salary adjustment, contract extension to one year period, medical cover by University Health Services, NHIF, and NSSSF cover to boost their morale.
f) **VISITORS TO CFP**
During the year we had several visitors including the former Prime Minister Right Hon. RAILA ODINGA, Senators Hon. MOSES WETANGULA, Hon. Dr. BONNY KHALWALE, Knut secretary-general Wilson Sossion amongst senior Union officials. This has enhanced visibility of the facility to the public.

g) **Mortuary training programme**
Nine(9) students successfully completed the mortuary certificate programme and are due for graduation this month.

h) **WORK STUDY PROGRAMME STUDENTS.**
CFP continued to offer support to financially needy students by giving them a chance every month to exploit their skills and abilities in different areas. This was done on rotational basis to at least three students per month.

i) **PROCUREMENT**

<table>
<thead>
<tr>
<th>Date</th>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>28/01/2014</td>
<td>Installation of lightboxes</td>
<td>37,539.92</td>
</tr>
<tr>
<td>31-01-2014</td>
<td>Notice boards</td>
<td>4,988.00</td>
</tr>
<tr>
<td>27-02-2014</td>
<td>Computers</td>
<td>122,495.00</td>
</tr>
<tr>
<td>14-04-2014</td>
<td>Trolley repairs</td>
<td>173,640.40</td>
</tr>
<tr>
<td>12-05-2014</td>
<td>Tanks</td>
<td>150,000</td>
</tr>
<tr>
<td>27-05-2014</td>
<td>Computers</td>
<td>129,351.60</td>
</tr>
<tr>
<td>27-05-2014</td>
<td>Dstv</td>
<td>10,188.00</td>
</tr>
<tr>
<td>09-06-2014</td>
<td>Hardware Materials</td>
<td>21,600.00</td>
</tr>
<tr>
<td>09-06-2014</td>
<td>Hardware Materials</td>
<td>77,700.00</td>
</tr>
<tr>
<td>02-05-2014</td>
<td>Hardware Materials</td>
<td>59,375.00</td>
</tr>
<tr>
<td>09-06-2014</td>
<td>Tiles</td>
<td>162,500.00</td>
</tr>
<tr>
<td>17-07-2014</td>
<td>SLA Support</td>
<td>59,500.00</td>
</tr>
<tr>
<td>17-07-2014</td>
<td>Electricals</td>
<td>30,100.00</td>
</tr>
<tr>
<td>17-09-2014</td>
<td>Projector</td>
<td>55,625.00</td>
</tr>
<tr>
<td>Date</td>
<td>Description</td>
<td>Amount</td>
</tr>
<tr>
<td>------------</td>
<td>----------------------</td>
<td>------------</td>
</tr>
<tr>
<td>08-10-2014</td>
<td>Staff retreat</td>
<td>511,000.00</td>
</tr>
<tr>
<td>13-11-2014</td>
<td>Plumbin materials</td>
<td>63,545.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>1,647,547.92</strong></td>
</tr>
</tbody>
</table>

j) **Income and Expenditure for** CFP January-December 2014

**Distributable income**

- Embalming and storage: 24,360,300.00
- Handling charges: 2,678,887.00

**Total Distributable Income**: 27,039,187.00

**Other Income**

- Hire of hearse: 4,192,000.00
- Miscellaneous charges: 2,109,000.00
- Sale of coffins: 5,386,500.00
- Training fees: 575,500.00

**Total other income**: 12,263,000.00

**TOTAL INCOME**: 39,302,187.00

7. **ENGAGEMENT**

Visitors to the department: 13

Involvement at national, regional levels by staff.

Thank you.

Prof. Saidi Hassan

Chairman