

EARLY NIGERIAN DOCTORS, THEIR EDINBURGH CONNECTION AND THEIR CONTRIBUTION TO MEDICINE IN WEST AFRICA

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INTRODUCTION

Freetown, the capital of Sierra Leone in West Africa, was established in 1787 as a settlement for freed slaves from the British Empire following the abolition of the slave trade and slavery (Figure 1). Initially, only freed slaves from Britain, North America and the West Indies were settled in Freetown. In the early nineteenth century, to enforce the abolition of the trans-Atlantic trade in slaves, the British Navy began to patrol the Atlantic Ocean along that segment of the west coast of Africa then known as the 'Slave Coast' (between the present-day Benin Republic and the Democratic Republic of the Congo) where the lucrative but obnoxious trade was still occurring. Slaves recaptured at sea by the Navy were taken to Freetown where they were settled, mostly in the care of missionaries. This way, many southern Nigerians from coastal tribes, mostly of Yoruba and Ibo origins, ended up in Freetown and its adjacent villages (Figure 2).

The missionaries, mainly those of the Church Missionary Society (CMS), established schools in the settlement where the recaptives and other residents received preliminary education. In 1827, Fourah Bay Institute of the CMS was founded in Freetown. In 1847, the Institute was converted to Fourah Bay College for those interested in higher education. The College prepared students for the ministry, for government service and for further education in Britain.

The life of Samuel Ajayi Crowther, the first student to enrol in the Institute, was not much different from those of early Nigerian doctors of modern medicine. Born in the early nineteenth century in the Yoruba village of Oshogun, near Abeokuta, in the present-day Ogun State in south-western Nigeria, he was captured in his village by slave raiders when he was about 12 years old and sold to be transported across the ocean. Rescued by the British Navy in the mid-Atlantic he was taken instead to Freetown, set free and placed under the care of CMS missionaries. There he received his early education. From Fourah Bay Institute he went to Britain for further studies. Some years later he was ordained a priest in the Anglican Church and returned to Freetown. From there he was transferred to Nigeria, his original home. Most of his adult life in Nigeria was spent preaching the word of God, establishing CMS missions in different parts of the country and translating the Bible into local languages. He was consecrated a Bishop in 1864, the first African to be made a Bishop of the Anglican Church. He died on 31 December 1891 and was buried in Lagos, Nigeria.

Throughout the nineteenth century there was not a single medical school in West Africa. Indeed until 1930, when the Yaba Medical School in the suburb of Lagos was opened, Nigeria had no medical school. During the last century, residents of West Africa who wished to study

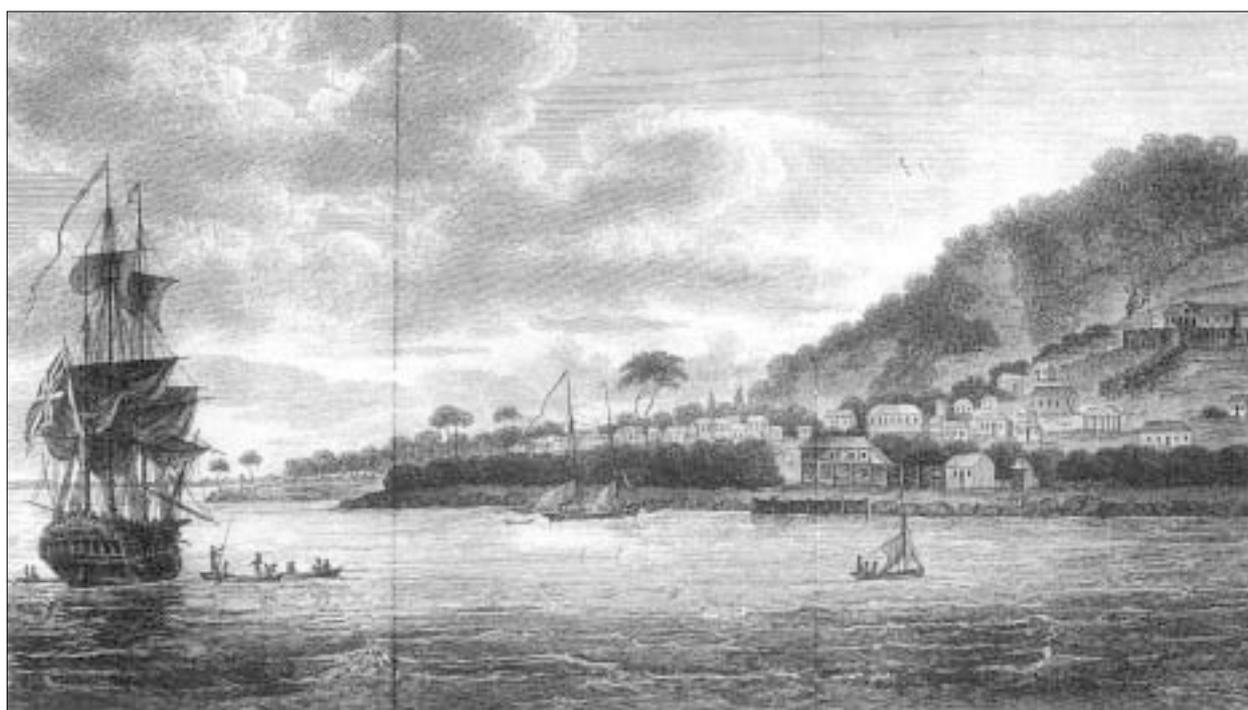


FIGURE 1

A view of Freetown on the river Sierra Leone. Reproduced from Thomas Winterbottom's *An account of the native Africans in the neighbourhood of Sierra Leone*; 1803.

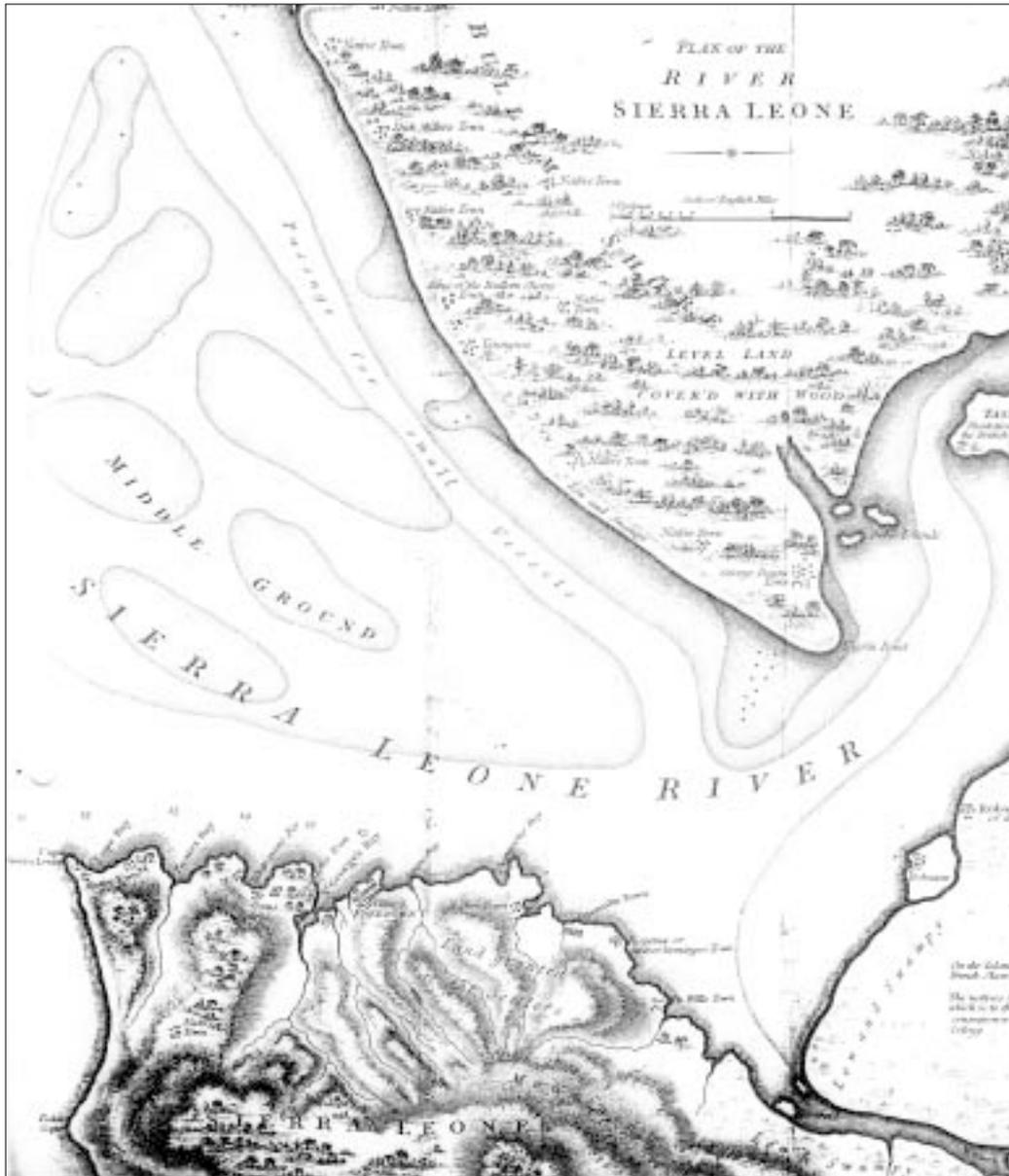


FIGURE 2

Plan of the river Sierra Leone. Reproduced from Thomas Winterbottom's *An account of the native Africans in the neighbourhood of Sierra Leone*, 1803.

medicine had to do so in Europe. Virtually all those who left from Freetown for this purpose went to Britain and many of them did part, or all, of their training in Edinburgh.

What was the special attraction of the Edinburgh Medical College for these pioneer West African students of modern medicine? Perhaps it was this College's excellent reputation during the eighteenth and early nineteenth century. John Stephenson, co-founder in 1829 of McGill Medical College in Montreal, Canada, graduated from Edinburgh Medical College in 1820. He called this College 'the most famous seat of learning in Europe'.¹ Throughout the late eighteenth and the beginning of the nineteenth century hundreds of foreign students from the English-speaking world, particularly North America, were admitted into the College. Even in the middle of the nineteenth century Edinburgh was still a major centre of medical education, rivalled only by Glasgow and London. This

could not have been unknown to the pioneer medical students from West Africa and it was from their ranks that the early Nigerian doctors of modern medicine emerged. The following is a brief account of some of these doctors.

DR JAMES BEALE AFRICANUS HORTON

James Horton was born in the village of Gloucester, Sierra Leone, on 1 June 1830. His parents were freed Ibo slaves from present-day south-eastern Nigeria. After completing elementary school in Gloucester, he was admitted into the CMS Grammar School in Freetown in 1847. Four years later he gained an admission to Fourah Bay College where he spent two years with the hope of entering the ministry. It was a remarkable coincidence that the year Horton left Fourah Bay College (1852) was also the year the Council of the British Army decided to recruit suitable Africans for training in medicine with the hope of making them serve

with the troops in West Africa. Those were the days when it was not easy to attract European doctors to serve in a part of the world then known in some European circles as 'The White Man's Grave' because of the high European mortality from malaria and other deadly infectious diseases. The Army requested the CMS, which then owned and controlled some of the schools in Sierra Leone, to submit a list of students who could be trained in medicine. James Horton was one of those selected and in 1855 he was admitted into King's College, London, to study medicine. While there, he won prizes in comparative anatomy, physiology and surgery. In the summer of 1858 he obtained the Membership of the Royal College of Surgeons of England (MRCS) and Licentiate of Medicine (LM), and on the recommendation of the College's principal he was elected to the Associateship of the College, a top student academic honour.

He arrived in Edinburgh in October 1858 and settled into a room in Rankeillor Street, and enrolled at Edinburgh University. Among the University's medical staff at the time were some of the leading lights of the day in medicine. John Hughes Bennett, who in 1845 was the first to identify the disease now known as leukaemia and who had sparked off the controversy still raging in 1858 over bloodletting by his denunciation of the practice, was the Professor of the Institute of Medicine of the University. The Chair of Clinical Surgery was held by Professor James Symes, the renowned surgeon, under whom a young Joseph Lister (later to become famous for his discovery which initiated the antiseptic era) worked and whose daughter Lister later married. James Young Simpson was the Professor of Midwifery. He discovered the anaesthetic properties of chloroform on 4 November 1847 and six days later presented a report of the first use of chloroform as an anaesthetic agent in surgery and obstetric patients to the Medico-Chirurgical Society of Edinburgh.

Horton could not have been uninfluenced by the high degree of intellectual ferment then pervading Edinburgh and its University. It was at Edinburgh that Horton showed the first clear sign of his potential to become a prolific and

versatile writer. Within six months of his arrival in Edinburgh, he submitted his thesis for the MD degree on 'The medical topography of the west coast of Africa including sketches of its botany'. In August 1859 he was awarded the doctorate,² becoming the first African graduate of the University (Figure 3). A month later he was commissioned in the medical services of the West African Army as Staff Assistant Surgeon for duties in West Africa.

In mid-October of the same year Horton returned to the Gold Coast (now Ghana) where he served for most of the next 20 years holding various posts, both civil and military, and carefully recording his experiences. For a brief time during this period, he was in charge of the medical department of the Army in Lagos which then was still a separate Crown colony, not a part of Nigeria as we know it today. Like the few West African doctors then in government service, Horton faced much discrimination and prejudice in the hands of Europeans throughout his career. He was convinced that one way to overcome the problem of prejudice in the services was to train more African doctors to serve in the Army. He also believed that it was better to use African doctors to treat Africans in those parts of West Africa that were in the British Empire, including the newly-annexed colony of Lagos in 1861. Hence in July 1861 Horton wrote to the War Office in London requesting the establishment of a medical school in West Africa.³ That same year he wrote 'Horton's treatise on tropical diseases', a long and detailed article on tropical diseases and on how to prevent and survive them. It was not published but a copy was sent to the CMS headquarters in London.⁴

His book entitled *The physical and medical climate and meteorology of the West Coast of Africa* was published in 1867. It was an extension of his Edinburgh University thesis. In it Horton provided ideas on how to improve sanitation in Sierra Leone and prevent diseases among its citizens. The book was an eye opener. Shortly after its publication the Board of Health for Sierra Leone was established for the first time.⁵ It was followed in 1868 by the publication of Horton's monograph on 'Guinea-worm or *Dracunculosis*: its symptoms and progress, causes, pathological anatomy, results and radical cure'. Undeterred by his earlier failure to persuade the British to open a medical school in West Africa in 1873, he published an article in *The Negro*, a Sierra Leonean newspaper, in which he argued for the establishment of a university in West Africa.⁶ His book, *The diseases of tropical climates and their treatment* (Figure 4) was published in 1874 and included his personal experiences during his long career: it was the fulfilment of the promise he had made after leaving Edinburgh University to write a book on tropical diseases which could be used by others for reference. In 1875 he was promoted to the rank of Surgeon-Major. Probably in response to his advocacy for the establishment of a university in West Africa, Fourah Bay College became affiliated to Durham University in England in 1876. Horton retired from the Army in September 1880 and died three years later in Gloucester, Sierra Leone.

By standards in Africa during his time Horton's writings were remarkable both in number and quality. He did more than any of his African predecessors or contemporaries to inform the world of the state of West African medicine. In addition, because of his extensive writings on West African politics, he is regarded as one of the pioneers of African nationalism.



FIGURE 3

Plaque erected in memory of James Africanus Horton outside the Centre of African Studies at the University of Edinburgh. Photograph by Mr A. Harrower.

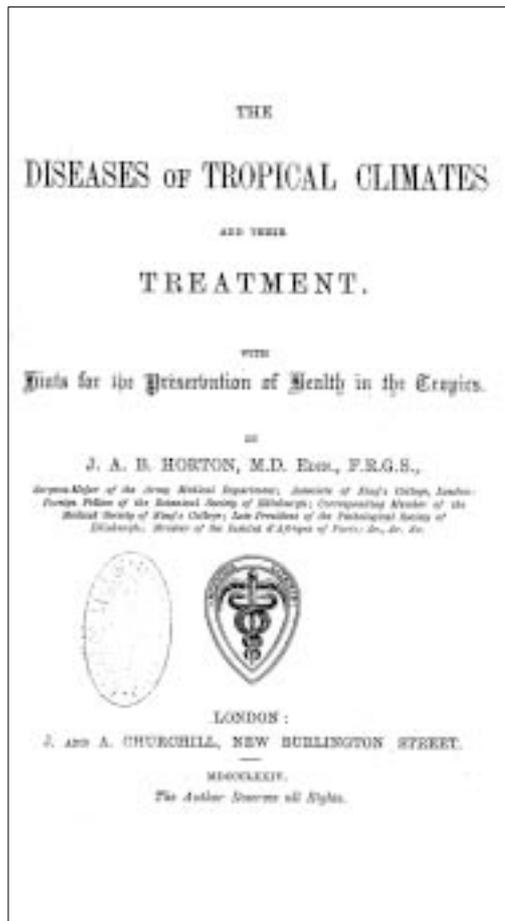


FIGURE 4

Frontispiece of John Horton's *The diseases of tropical climates and their treatment*; 1874.

DR OBADIAH JOHNSON

Obadiah Johnson (Figure 5) was born on 29 June 1849 in the village of Hastings, Sierra Leone. His parents were freed Yoruba slaves from south-western Nigeria. His early education began in Hastings, then continued in Ibadan, Nigeria (1857) and Lagos (1864-1868). He returned to Sierra Leone in 1871 and gained admission into the Grammar School in Freetown. After completing his secondary education, Johnson taught at Holy Trinity School, Kissy Road, Freetown. He was still working as a teacher when he won a scholarship to attend Fourah Bay College in 1877. He obtained the BA degree of Durham University two years later. Shortly thereafter, Obadiah Johnson left for the United Kingdom to study medicine at King's College, London. His academic performance there was excellent and he won most of the science prizes, gaining the MRCS of England and the LSA, after which he was honoured with election to the Associateship of the College in April 1884.

He then went to Edinburgh and qualified MB ChB in 1886: that same year he returned to Lagos and started his private medical practice. In 1887 he went to Sierra Leone to work as Assistant Colonial Medical Surgeon in Sherbro, Sierra Leone. There he took on the responsibilities of Justice of the Peace, Registrar of Births and Deaths, and Commissioner of the Court of Requests. A year later he returned to Lagos at the invitation of the then Governor of Lagos, Captain Alfred Moloney, to work for the colonial

medical service in Lagos. Johnson took up his appointment in early 1889 and became the first Nigerian to be made Assistant Colonial Surgeon in Lagos. That same year, he was awarded the MD degree by Edinburgh University for his thesis on 'West African therapeutics'. Unfortunately he felt constantly frustrated by the racial discrimination and prejudice that were rampant in the colonial services, and barely eight years after joining the colonial medical service, he resigned his appointment and returned to private practice in Lagos.

The Governor of Lagos, Sir William Macgregor, appointed him to the Legislative Council of Lagos in 1901 where he made invaluable contributions for 13 years. Much of the improvement in public health and sanitation, in particular in Lagos, during this period has been attributed to Johnson. In later life he finished and edited *The history of the Yorubas* from the notes and drafts left by his brother, Reverend Samuel Johnson, who had died prematurely in 1901 before the book was completed.⁷ It was published in England and reached Lagos in August 1921. Johnson died at the age of 71 in London on 13 September 1920 and was buried there, leaving five thousand pounds sterling 'to the Church Missionary Society as trustees for the benefit of Fourah Bay College towards the endowment of a chair of science in the College for ever'.

DR JOHN RANDLE

John Randle (Figure 6) was born on 1 February 1855 of freed Yoruba parents in the village of Regent, Sierra Leone, and was educated first in Regent and then at the Grammar School in Freetown. He trained as a student dispenser at the Colonial Hospital in Freetown, qualifying in 1877.



FIGURE 5
Dr Obadiah Johnson.



FIGURE 6
Dr John Randle.

Thereafter he was posted to the Gold Coast to take part in the vaccination exercise in response to a smallpox outbreak. He left West Africa in 1884 to study medicine at Edinburgh University, and four years later he obtained the MBCM degree, winning the gold medal in *materia medica*. He returned to West Africa the same year and took up an appointment as Assistant Colonial Surgeon in the colonial medical service of Lagos.

Like his African predecessors, Randle faced many problems arising from what he regarded as prejudice in the colonial medical service of West Africa and he had many confrontations with the authorities. When, in September 1893, he refused a Government order to alternate tours of duty to Ijebu-Ode (about 60 miles outside of Lagos) with Dr Obadiah Johnson to care for the Government troops stationed there, he was summarily dismissed.⁹ Randle refused to leave Lagos because he was sure that his absence from the colony would destroy his part-time practice, and there was no opportunity for private practice in Ijebu-Ode. Following his dismissal, Randle entered and thrived in full-time private practice. He had a reputation for successfully treating blackwater fever and yellow fever which brought him many patients, especially Europeans. Randle published an article entitled 'The treatment of guinea worm' in the *Lancet* (1894; i:143) (Figure 7).

In 1899 Sir William Macgregor appointed Randle as a 'provisional member' of the Legislative Council of Lagos. He made many useful contributions to debates and became involved in the politics of Lagos. Together with D.A. Taylor, Orisadipe Obasa and others, Randle launched the

People's Union in Lagos, Nigeria's first political party, on 26 November 1908, of which he became chairman for life. While recovering from a surgical operation in England in 1910, he read a paper in the *British Medical Journal* of 3 September 1910 on 'Spread of cancer among descendants of the liberated Africans or Creoles of Sierra Leone' by William Renner, a medical officer in Freetown. Renner claimed that there was an increasing number of cases of cancer of various organs, especially of the breast, among the descendants of the liberated Africans or Creoles of Sierra Leone, whereas cancer was rare among the aborigines of West Africa. He concluded that the rarity of cancer among the latter group was because of 'their primitive mode of living' - eating mainly grains and vegetables - whereas the relatively well-to-do Creoles had adopted the civilised habits of Europeans, consuming, among other things, large quantities of meat. Randle's reaction was a lengthy essay, 'Cancer among the African Creoles', written from his sick bed and published in the *British Medical Journal* of 15 October 1910. In it he disagreed with Dr Renner, arguing that cancer was seen less frequently among natives in hospital because natives with these diseases preferred to visit the 'country-fetish doctors whose stronghold amongst our people' was considerable.

Randle made several donations to Lagos, to Regent, the village of his birth, and to Fourah Bay College as well as funding many scholarships for deserving students to study undergraduate medicine. He began the first annual swimming competition in Lagos in 1922; this remained the only public swimming competition in Nigeria. Dr John Randle died in Lagos on 27 February 1928.

DR OGUNTOLA ODUNBAKUN SAPARA

Dr Sapara (formerly Dr Alexander J. Williams) was born in Freetown, Sierra Leone, on 9 June 1861. His parents were freed Yoruba slaves from present-day south-western Nigeria. After completing his primary education at the Government Model School in Freetown, he proceeded in 1874 to Wesleyan Boys' High School, Freetown, for his secondary education. He left after two years, travelling with his family to Lagos where he attended the CMS Grammar School. When his secondary school days ended in 1878, he held various jobs in Lagos and the Gold Coast before departing for England in 1887 to study medicine. The following year he entered St Thomas' Hospital Medical School, London, winning honours in midwifery. In 1895 he obtained the Licentiate of the Royal College of Physicians of Edinburgh (LRCP), the Licentiate of the Royal College of Surgeons of Edinburgh (LRCS), the Licentiate of the Faculty of Physicians and Surgeons of Glasgow (LFPS), and the Fellowship of the Royal Institute of Public Health (FRIPH) (Figure 8). He returned to Lagos in late 1895, joining the colonial medical service as Assistant Colonial Surgeon.

Sapara (Figure 9) served in different stations in and around Lagos, making significant contributions to the understanding of the practice of traditional medicine in Lagos,¹⁰ to the improvement of sanitation in Lagos and its environs,¹¹ to the control and the prevention of many infectious diseases¹² and to the diminution of the high rates of infant mortality and maternal death in labour.¹³ At the turn of the century infant and maternal death rates in Lagos were unacceptably high and most children died before the age of three years; even as late as 1922, the infant mortality rate was 290.5 per 1,000 births.¹³ Sir William Macgregor

144.

REGISTER OF CANDIDATES who have		Passed the FINAL EXAMINATION.	
No.	DATE	FULL NAME	SIGNATURE OF EXAMINER
2068	1895	ROY ARTH. BODDINGTON	Edinburgh
2069	"	FRANCIS MOUNTAIN	Edinburgh
2070	"	FRANCIS MOUNTAIN	Edinburgh
2071	"	ARMANDO L. G. L. L. L.	Edinburgh
2072	"	W. W. W. W. W.	Edinburgh
2073	"	ROBERT HAMILTON ROSS	Edinburgh
2074	"	ARTHUR PAUL	Edinburgh
2075	"	COLIN VALENTINE	Edinburgh
2076	"	PETER RATTING	Edinburgh
2077	"	JAMES MOORE	Edinburgh
2078	"	OGUNTOLA SAPARA	Edinburgh
2079	"	JOHN FRANCIS KAVILLE	Edinburgh
2080	"	MARIETTA KATE CAMPBELL	Edinburgh
2081	"	JAMES MILNER BOUTER	Edinburgh
2082	"	JOHN WILSON SHIELS	Edinburgh

CANDIDATES RESIDENCE	CANDIDATES PLACE OF BIRTH
1/4 West 2, Anderson 10, St. Lawrence Place	Bombay
Royal Infirmary Glasgow	Edinburgh
31 Buccleuch Place, Edinburgh	Edinburgh
19 Rutland St. Edinburgh	Edinburgh
14 Leith Walk, Leith, Edinburgh	Edinburgh
13 East Princes Street, Edinburgh	Edinburgh
15, W. Newington, N. L. L.	Bombay
18 Buccleuch St. Edin.	Edinburgh
29 Marchmont Rd. Edin.	Edinburgh
18 Waverley Pl. Edin.	Edinburgh
221 Morrison's Rd. Edin.	Edinburgh
Marine House Co. Cork	Cork
Edin. Chatterham	Edinburgh
Edin. The Grange, Gonnachully	Edinburgh
6 Newcastle Place	Edinburgh

FIGURE 8 Triple qualification of the Royal Colleges of Physicians and Surgeons of Edinburgh, and the Faculty of Physicians and Surgeons of Glasgow. Register of candidates who have passed their final examination showing Dr Oguntola Sapara's entrance.



FIGURE 9
Dr Oguntola Sapara.

who qualified as doctors between 1876 and 1914 did all or a part of their training in that city. Among those who trained there during the first quarter of the twentieth century, one name stands out: Sir Samuel Layinka Ayodeji Manuwa. He qualified MB ChB in 1926 and was awarded the MD in 1934 for his thesis 'Chronic splenomegaly in West Africa, with special reference to Nigeria: an enquiry into the observation on the common signs of this disease among West African negroes'. He was elected Fellow of the Royal College of Surgeons of Edinburgh in 1938 - the first Nigerian Fellow of the College. The Royal College of Physicians of Edinburgh elected him to the Fellowship in 1960 - again the first Nigerian Fellow of the College. That same year he received a knighthood. He rose to become the Director of Medical Service in Nigeria, acting for the Governor on occasions. His overall contribution to medicine in Nigeria is probably unsurpassed.

The efforts of the former students of Edinburgh University along with those of other Nigerian pioneer doctors have been rewarded. From a humble beginning around 140 years ago, Nigeria today has 20 medical schools and about 40,000 doctors trained mainly in Nigeria, with many medical centres educating students at postgraduate level in most specialities. The West African College of Physicians was inaugurated in 1976. Its first president, Professor J. Olu Mabayoje, was also the first Nigerian to become a Member of the Royal College of Physicians of Edinburgh in 1951; he was elected to the Fellowship in 1963. He was the first Registrar of the Nigeria Medical Council, and in 1969 was appointed the first Nigerian

Professor of Medicine at the College of Medicine of the University of Lagos. With the help of a World Health Organisation award, I was able to study as an elective student under Professor Mabayoje in 1975; it was a most rewarding experience.

Nigeria is heavily indebted to Edinburgh University and to the Royal College in Edinburgh for the training received by those early Nigerian doctors who laid the solid foundation on which Nigeria's present health care system is built.

FURTHER READING

Adeloye, A. *African Pioneers of Medicine*. Ibadan University Press Limited, 1985.

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REFERENCES

- ¹ Entin MA. John Stephenson's secret. *Fontanus* 1995; 8:137-45.
- ² Shepperson G. An early African graduate. *University of Edinburgh Gazette* 1962; 32:23-6.
- ³ Horton JAB. *West African countries and peoples*. London: WJ Johnson; 1868:46-50.
- ⁴ CMS Papers, CA 1/0/117-120, Letters of Horton, 1859-1863, RM Jelf on Horton, 3 November 1858.
- ⁵ Horton JAB. *Physician and medical climate and meteorology of the West Coast of Africa*. London: Churchill; 1867:82-4.
- ⁶ Thompson TJ. *The jubilee and centenary volume of Fourah Bay College, Freetown, Sierra Leone*. Freetown, 1830:24.
- ⁷ Johnson S. *History of the Yorubas from the earliest times to the beginning of the British protectorate*. London: Routledge and Kegan Paul; 1921.
- ⁸ Johnson, *op. cit.* ref. 7, 153-4.
- ⁹ *Nigerian Government Gazette*. December 1893; 19:605.
- ¹⁰ *The Lagos Weekly Record*. 7 December 1919.
- ¹¹ Sapara O. *Lagos Annual Report*. Medical Department, 1901-1902.
- ¹² Dalziel JM, Sapara O. Leaflet on Tuberculosis. *The Lagos Weekly Record*. 6 September 1919.
- ¹³ *The Nigerian Pioneer*. Friday 15 December 1922.
- ¹⁴ *Lagos Daily News*. Thursday 2 February 1928.
- ¹⁵ *The Nigerian Pioneer*. Friday 22 June 1923.
- ¹⁶ *The Nigerian Pioneer*. Friday 28 September 1923.
- ¹⁷ *The Nigerian Daily Telegraph*. Thursday 3 October 1935.