

## <sup>1</sup>Africa as the Cradle of Biomedical Engineering I

The origin of biomedical engineering is traceable to the African continent. Specifically, to Egypt where a 3,000-year-old mummy from Thebes was uncovered with a prosthetic toe tied to its foot, called the *Greville Chester toe*. Wear on the artificial toe's bottom surface suggests that it could be the oldest known limb prosthesis. Ancient Egyptians are also said to have used hollow reeds for endoscopy, stethoscopy and dental abscess drainage.

Though, the origins of modern biomedical engineering, often linked to the pioneering electrophysiology studies of Galvani and Volta was more than 200 years ago. It was not until the era of the world wars that biomedical engineering started emerging visibly with laboratory researches in biophysics and biomedical engineering.

Modern African Biomedical Engineering arguably started in the 1950s with the first recorded activity at the University of Cape Town and Groote Schuur Hospital in South Africa. This climaxed in Allan Cormack's work in nuclear medicine that eventually led to computer assisted tomography and the Nobel Prize in Physiology or Medicine in 1979. In Nigeria, Biomedical Engineering activities started in the early 1970s with the establishment of the Biomedical Engineering department in the College of Medicine of University of Lagos.

Recent Egyptian Biomedical Engineering activities occurred in 1976, when Cairo University established a Biomedical Engineering department. One of the late comers into biomedical engineering activities that is currently making waves in African biomedical engineering is Ghana, which started in the late 1990s, thanks to the combined efforts of the pioneering stakeholders in the field.

Until recently, any survey on global Biomedical Engineering education, training, practice or even professional societies would exclude Africa. The situation is worsened by the paucity of data on biomedical engineering activities where such exist. Nevertheless, there were concerted efforts by the WHO to train biomedical engineers, mostly technicians, in the early 1980s. This occurred across the sub-regional divide: eastern, central, northern, southern and western Africa. Most times, the Northern African countries are grouped with the Arab world, which leaves the remainder as the so-called Sub-Saharan Africa. Even so, the South Africans usually either stand alone or align with Europe.

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