

UNIVERSITY OF PORT HARCOURT

MAN: KNOW THYSELF!

An Inaugural Lecture

By

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DEDICATION

This piece of work is dedicated to my ordained queen whom I call Priscilla (PC) and to those I named Chijioke, Uzodiana, Chizenim, Chenimozo and Lemchi who constitute my manageable nuclear family that continually urge me to push on.

MAN: KNOW THYSELF!

BY

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The Vice Chancellor Sir,
The Deputy Vice Chancellor (Admin),
The Deputy Vice Chancellor (Acad.),
The Registrar
Other Principal Officers
Provost, CHS
Dean, School of Graduate Studies,
Deans of Faculties
Distinguished Professors and Scholars
Heads of Academic and Non Academic Departments
Distinguished Alumni,
Unique Students of *Unique Uniport*, Distinguished guests,
My Lords Spiritual and Temporal,
Gentlemen of the Press,
Ladies and Gentlemen,

Knocking Around

Mr. Vice Chancellor Sir, I beg that you excuse me to begin with what I term mere knocking around. Today's lecture is the 78th in the series of our inaugural lectures. It therefore means that I am not doing anything new; in fact, it does not seem as if I am inaugurating anything. I am therefore just *talking*, which of course is what I am employed to do. I pray you should have no problem listening to me and that at the end, we will leave here very happy with ourselves.

I had been told that inaugural lectures should come a few months after one is made a professor. However, the practice here and in most other places does not support that information. But just in case it is true, I want to apologize for my doing it late. It is so because I had been relatively very busy as Head of Department, Dean of Faculty, Provost of College, member of Council and not excluding my teaching load, etc.

Let me however thank God Almighty that He has kept me alive today to do some talking. I am also deeply indebted to my late parents Chief and Mrs. Ezekiel Ordu Didia who believed until death that God is great and school is good. They did not mind going naked just to pay one's school fees.

Let me in the same vein show my gratitude to Professor O. J. Odia and Professor E Elechi who believed in my ability and also to that Great Egyptian Anatomist, Professor Tadros who is a giant in human anatomy; the impressions he left on me are what brought me here today.

THE TOPIC

The topic of my inaugural lecture is ‘Man know thyself!’ The great philosopher Socrates, who lived between 469 and 399 BC, had used this same phrase to admonish people. The topic appears crude and rude when interpreted in vernacular:

Ikwerre	<i>Mara ahui!</i>
Or	<i>Mara ahi!</i>
Ibo	<i>Mara owe gi</i>
Kalabari	<i>I bu mini</i>

In vernacular it could mean an ‘insult’ a ‘warning’ or even a ‘rebuke’. Considering the way I have put it in English, it is just a topic for discussion because I think that people have been so busy pursuing other things without bothering to know what and whom man is. As for the choice of topic, I will rightly emphasize that I chose it because I am a Human anatomist, a man who deals with the study of the structural and functional features of man. That is what I do in this university for a living, so I am also a lecturer. I am on the other hand also a Medical Doctor, treating the diseases that afflict man. Anatomist, lecturer, medical doctor – a trinity? I must therefore talk of man but let me now add that I did not take any course from the Faculty of Education and that is why I am not a teacher, unless by implication since my wife is one. You should therefore permit my methodology and excuse my entry behavior.

Man

‘Man’ is difficult to define as no definition can be complete. Simply put, Man is just a ‘human being’ as used in this inaugural lecture it includes male and female. He is of the kingdom Animalia, phylum chordate, subphylum vertebrata (vertebral column). He is a complete vertebrate *animal*

belonging to the order of biped (two legged) mammal (Breast) who are anatomically related to the great apes (Gibbons, Orangutan, Gorilla and Chimpanzee) and restricted to the sub specie of *Homo sapiens sapiens* (modern man) noted for greater brain development, and tremendous capacity for articulate speech and abstract reasoning. I can further say from my knowledge of man, that any animal you see having sex for fun and/or money is Man; a wrong application of his intellectual capacity.

In our everyday life Man does not like to be called animal (*Anu-ohia*) which he considers as derogatory, but that is what he is. Anatomically, Humans are in many ways not very different from Macaques monkeys. Both are primates that are curious, manipulative, inquisitive, omnivorous and social. However, Man is the greatest animal on earth; highly intelligent yet mean, greedy, dangerous, wicked/kind, wise/foolish, poisonous, tricky, industrious and lazy, loving and full of hatred, authoritarian and submissive. But why all these qualities? It appears that these qualities have arisen because of a highly refined large brain, two specialized feet that have taken over locomotion, two highly able but unspecialized hands, and the ability to communicate through language. Man prefers to be called Agu (lion) or to belong to lions club yet Agu (lion) is an animal. Man is an animal. Whatever bad thing I have said of man here, is supported by the Bible and I quote “And God saw that the wickedness of man was great in the earth and that every imagination of the thoughts of his heart was only evil continually” [Gen. 6: 5].

BODY ORGANIZATION

The whole of man’s body is characterized into structural and functional levels and all the parts come together to constitute

the organisms. About four functional and structural levels can be identified. Kent Van Da Graaf (2000).

The first level is the cell

Man is a multi cellular organism having between 60 to 100 trillion cells. The cell is a microscopic factory responsible for vital functions such as metabolism, repair, replacement (replication) and irritability. The hub of the cell is its nucleus and nuclear death results in death of the cell. Within the cell also you find other minute functional structures (organelles) which carry out specific functions within the cells. Such organelles include the nucleus, mitochondria, smooth and rough endoplasmic reticulum. We shall return to the cell later. The body is not made up of just one type of cell. Liver cells are different from bone cells just as fat cells, nerve cells, blood cells, kidney cells, are different from each other. The basic principle is that each cell is uniquely structured to serve its functions.

The second level is the tissue

The cells combine to make up the tissue. There are four types of tissues recognized in the body. They include muscular, nervous, epithelial and connective tissue. The basic thing is that layers of similar cells group together to form tissue which perform a common function. The heart muscle (cardiac muscle) contain similar cells that function as a pump. The skin is covered by stratified squamous epithelium (keratinized) which covers the body surface and offer protective shield for the body.

The third level is the organ

The organ is formed by the aggregation of two or more tissues. The liver, pancreas, ovary, testes, skin, bone and stomach for

example are all organs. In an organ the primary tissue exists while other tissues constitute the secondary tissue.

The last level of organization is the system

The system consists of various organs and thus we have the circulatory, nervous, digestive, endocrine, respiratory and skeletal systems for example. Some organs in the body can serve more than one system. For example, the pancreas serves the endocrine and digestive systems. The liver serves circulatory digestive and haemopoetic systems and the pharynx serves the respiratory and digestive systems. However, the most important thing is that all systems of the body are highly related and coordinated as they function in accord to make up the organisms.

THE ORIGIN OF LIFE

You will agree with me that the world itself in both advanced and primitive societies is still a mystery. So is life and by extrapolation man. People therefore hold numerous belief about the origin of life, some ridiculous and some unbelievable. If we refuse to blame the people of old for their ridiculous beliefs and unintelligent deductions because their understanding was limited by the technology of their time, what can we say of ourselves in these modern times? What do we believe?

The first systematic reports on origin of life appear in the works of ancient Greece. Aristotle, 384 – 322 BC, postulated that life arose spontaneously and his example was that maggot formed spontaneously from decaying meat. This formed the theory of *Spontaneous Generation* which of course was based on not too careful observation. During the Renaissance, science was beginning to extricate itself from philosophy and to begin to objectify and systematize its theories according to a

new set of criteria. However one other theory, ***Theory of Pre-formation*** was also popular. This theory held that the young animal was contained in the fertilized egg of its mother as a miniature. For over two thousand years from the time of Aristotle these theories remained unchallenged. It was not until 1668 that Redi, an Italian Biologist, opened the attack on spontaneous generation. Experimenting with meat, he left a set of fresh meat in the open while completely covering the other set. Maggot appeared in the open but not in the covered one. He therefore concluded that something else in the environment had introduced maggot unto the unprotected meat. The description of microorganisms (animalcules) in the seventeenth century dealt more blow on the theory of pre-formation but it was Louis Pasteur (1862) who described series of bacteriological experiments which proved that microorganisms did not arise spontaneously from decaying materials. In ***Theory of Pauspermie***, Svante Arrhenius (a Swedish chemist) also proposed that since life did not arise spontaneously it must have been introduced from another planet. He assumed that organisms reached the earth from another solar system aided by the pressure of radiation .I have always regarded this theory as ridiculous because it does not solve the problem of the origin of life; it merely transfers the problem to another planet.

Theory of Special Creation

This theory of creation is well known to many that are here because it is well explained in the Bible Gen. 1:1-31.

It is believed as explained in the Bible that God used six days to do all creation including man, the earth and all life therein. The woman was created from the man's rib which was dissected out while he was asleep. That sleep is the beginning of the practice of anesthesiology while removal of the rib was

the first surgical operation known. Many scientists believe in special creation but they have continued to probe it even today, the reason being that the process cannot be explained scientifically. It remains a mystery as I am sure it was intended to be.

As a young lecturer in the 1980s, a student had confronted me to ask why males still had 12 pairs of ribs after one had been removed to make the woman. For fear of blasphemy, I told him that God did not tell us the original number and that I had seen some human beings with 13 pairs of ribs (which is true) and I concluded by telling him that biology is a science of exception and that I would not be surprised to find somebody with 10 pairs of ribs. The truth is that the mischievous boy set me thinking ever since and I still don't have an answer.

Darwinian Evolution Theory

Much as the theories of spontaneous generation, pre-formation and Pauspermie may appear ridiculous, the Darwinian evolutionary theory tended to make the theory of special creation scientifically unacceptable. Darwin and Russel advanced independently that species vary slowly over time and they believed that life could have evolved from inorganic materials on the primitive earth. Their theory generated a very big controversy between religion and biology. Darwin wrote in his famous book *The Origin of species* "I view all beings not as special creations, but as the lineal descendants of some few beings" (ref. *Origin of species*).

It is obvious that right from beginning man was aware that life must have started somewhere and somehow but he could not put his finger on how it started. Various writing in Greek, Chinese, India, and even Egyptian literature point to incidental observations on origin of life, growth and development. An

Egyptian hymn to the sun god (1400 BC) expresses the timeless and universal awareness of man's beginning: (P.S. Timiras, 1972).

“Creator of the germ in woman
Maker of seed in man
Giving life to the son in the body of his
mother
Soothing him that he may not weep
Nurse (even) in the womb
Giver of breath to animate everyone that he
maketh
When he cometh forth from the womb on
the day of his birth.”

Chemical Evolution/Chemosynthesis

The human understanding of the universe is highly limited. Human beings are an inquiring and curious specie who continuously strive to comprehend the intriguing world they live in.

Chemical evolution is essentially the process by which increasingly complex elements, molecule and compounds developed from the simple chemical elements in the Big Bang (Astrobiology, 2007). The atmosphere of primitive earth had no oxygen in the free gaseous state unless as bound in water and metallic oxides, but it had hydrogen (H₂), methane (CH₄), ammonia (NH₃) and water vapour (H₂O). Without oxygen in the free state organic compounds could not be degraded. The early atmosphere was therefore strongly reducing in nature. The old world experienced a lot of heavy rain falls, lightening and volcanic activities. The heavy rainfall washed eroded rock and minerals into the sea where these conglomerations of chemicals mixed freely and reacted to form a wealth of

hydrocarbons (compounds containing hydrogen and carbon). Amino acids were also formed as a result of the mixture of water, hydrocarbons and ammonia. Amino acids are the building blocks of larger protein molecules. Amino acids and proteins are called organic, because they are normally made by living organisms. It is believed that the energy for this reaction came from lightening, ultraviolet rays from the sun and heat from frequent volcanic eruptions. Our reason for believing this is that similar conditions have been simulated in the laboratory by Friedrich Wohler (1828), Stanley Miller, (1953) and Sidney W. Fox in 1964 with the production of proteinoids which are similar to natural proteins and the proteinoids were degraded by bacteria enzymes as it does to natural proteins.

When Fox examined the proteinoids under the microscope he observed small spherical cell-like units in aggregations and he called them microspheres and postulated that these have been the forerunners of the first living organisms. Recent astronomical observations have discovered that chemical evolution has even led to the synthesis of complex organic molecules in space.

However we look at it, there are still many unanswered questions. How did the earth metamorphose from the lifeless planet to a world teeming with living organisms that we have today? How could complex life have originated from non-living chemical elements? These are definitely difficult questions to answer but scientists are not resting, because they have developed a theory that describes how the very first microscopic life on primitive earth could have evolved as a result of a series of chemical reactions. This theory is called ***chemosynthesis***, and it explains the origin of cells. For whatever it is, the chemosynthesis theory is gaining popularity

because it implies that all life on earth evolved from a common cellular ancestor. Scientifically speaking there are a number of molecular similarities existing between all life forms that indicate that all life could have indeed evolved from a single ancestor.

Secondly, molecules of living organisms, including man are rich in hydrogen-containing carbon compounds, suggesting that there was no free oxygen on primitive earth. Further proof rests in the fact that DNA and RNA are the genetic basis of all life forms on earth and ATP is the universal energy currency of all living organisms, suggesting a common origin of metabolism. These molecular 'proofs' support the chemosynthetic theory, making it the most widely accepted scientific theory for the chemical origin of cellular life. Do you believe?

FOSSIL FINDS AND GEOLOGICAL TIME SCALE

Fossils are the remains of life that is now extinct. The geological time scale is a scale used by geologists which divides the earth into years of existence and formations, so the earth is divided into Eras and their years of duration viz:

Table 1: Eras and estimated years ago

No	Era	Estimated years ago
1.	Archeozoic: Oldest era	1, 55,000,000
2.	Proterozoic	900,000,000
3.	Paleozoic	368,000,000
4.	Mesozoic	125,600,000
5.	Cenozoic: Most recent era	60,000,000

The Eras are further divided into Epochs and of interest to us are the Epochs under the Cenozoic viz – Pliocene; Pliocene, Miocene, Oligocene and Eocene from the most recent to the oldest because this is where Apes and Man seem to have appeared on earth.

Table 2: Geological time scale

			Epoch	Organisms	Vegetation and plant life	Advances in animal life	Geological climate,	
Cenozoic (60,000,000)	Quaternary	(2,000,000)	Pleistocene	Age of herbs and man	Increasing dominance of herbs.	Man; rise of civilization.	Periodic glaci	
			Pliocene	Age of Angiosperms, mammals and birds	Extinction of many trees. Increase in number of herbs.	Extinction of great mammals.		
	Tertiary	Late Tertiary	Increasing restriction of plant distribution and of forests. Rise of herbs.		Appearance of man.	Continued cool climate with zones appearing in Alps, Andes, Ranges.		
		Early Tertiary	Oligocene		Restriction of distribution of plants - retreat of polar floras. Forest reduction.	Culmination of mammals.	Climate great changed - cool semi-arid. Monsoons, Himalayas.	
			Eocene		World-wide distribution of tropical forests.	Primitive mammals disappear. Rise of higher mammals and birds. First anthropoids.	Climate warm Pliocene.	
	Late Mesozoic	(60,000,000)	Upper Cretaceous		Age of higher Gymnosperms and reptiles	Modernization of flowering plants. Development of extensive forests - to polar regions. Sequoia prominent. Tropical flora in Arctic regions.	Modern birds and marine mammals appear.	Climate cool arid; then wet humid.
			Middle Cretaceous			Angiosperms dominant; Gymnosperms dwindling. Modern tropical plant families within Arctic Circle.	Rise of primitive mammals.	Climate fluct Rocky Mts. & Great Con
	Mesozoic (125,000,000)	Early Mesozoic	(125,000,000)		Lower Cretaceous	Rapid development of angiosperms - many living genera present.	Extinction of great reptiles.	Climate fluct
					Jurassic	Rise of Angiosperms. Conifers and cycads dominant; cordaites disappear.		Climate very
		Late Paleozoic	(223,000,000)	Triassic	First known angiosperms; Caytoniales; conifers and cycads dominant; cordaites disappear.	Primitive birds and flying reptiles (ptero-dactyls). Dinosaurs abundant. Higher insects.	Climate war Sierras. Great extant near in Western N.	
Permian				Floras not luxuriant; increase (Cycadophytes, conifers, ginkgoes). Seed ferns disappear.	Rise of land vertebrates.	Climate wa semi-arid.		
Paleozoic (368,000,000)	Middle Paleozoic	(354,000,000)	Age of lycopods, seed ferns, and amphibians	Dwindling of ancient groups, extinction of many. First cycads and conifers.	Rise of land vertebrates.	Climate dry with periodic gl. Appalachians drainage from conti		
				Pennsylvanian (Upper Carboniferous) (271,000,000)	Dominant lepidodendrons, calamites, ferns, seed ferns, and other primitive gymnosperms (Cordaites). Extensive coal formation in swamp forests.	Period of unreat, al marine an condition.		
				Mississippian (Lower Carboniferous) (309,000,000)	Dominant lycopods, horsetails, and seed ferns. Early coal deposits.	Rise of primitive reptiles and insects.	Widespread seas on N. Atlantic M.	
	Early Paleozoic	(553,000,000)	Age of algae and higher invertebrates	Devonian (354,000,000)	Early land plants (Psilophyales-Rhynia, etc.). Primitive lycopods, horsetails, ferns, and seed ferns. First forests.	Rise of amphibians. Fishes dominant.	Broad shallow N. America du. Silurian and De	
				Silurian (381,000,000)	First known land plants. Algae dominant.	Lungfishes and acordions (air breathing animals).	Taconic Mts.	
				Ordovician (448,000,000)	Rise of land plants (?). Marine algae dominant.	Coral, star fishes, pelagic yods, etc. First vertebrates - armored fishes.	Broad shallow on the N. Am continent.	
Cambrian	(553,000,000)			Algae - especially marine forms.	Many groups of invertebrates - dominance of trilobites.	Narrow seas w. the borders of N. America. Climat warm, uniform o earth.		

Fossil remains of apes are not many but they are numerous enough to indicate a wide spread all through Europe, Asia and Africa during the middle and later periods of Cenozoic times. They include:

- (i) **Aegyptopithecus:** Found in the Oligocene epoch of Cenozoic Era at the Fayun region of Egypt and he dated 28m years ago. Has a tail unlike any living man or ape.
- (ii) **Dryopithecus:** Occurred in early Miocene ten millions years ago and lived in North Africa. They are thought to be the ancestors of modern Ape (pongids).
- (iii) **Ramapithecus:** Occurred in late Miocene in China, Northern India and Kenya. He is the earliest find of a primate that was definitely not an ape and could very easily be ancestral to man. He was only 3 to 4feet tall, stood erect and was an omnivore.
- (iv) **Gigantopithecus:** Lived in same area of Northern India as *Ramapithecus*. His features were like that of man and he lived for about 4 million years. He does not appear to be a direct ancestor of man nor any modern ape.

Fossil remains of man are even fewer than that of apes and this can be explained by the fact that there are four animals classified as apes – Gibbon, Orang-utan, Chimpanzee and Gorilla but man is the only Hominid. Fossil man is known as *Australopithecus*. He is dated as having lived 5 ½ million years ago. The first evidence of him was found in 1924. That was in the form of a juvenile skull which was found in South Africa and brought to Prof. Raymond Dart. From then over 300 individuals have been found in South Africa, the Omo fossils beds in Ethiopia and various other sites in Kenya and Tanzania, the most famous being the L.S.B. Leakey's site, Oldovai George in Tanzania. No further evidence of the

creature occurs later than one million years before present and no other areas of world has yielded Australopithecus.

Nevertheless, it is the thinking that Natural selection has shaped population from the point of Australopithecus towards a more upright posture. This new creature so produced is the *Homo erectus* who had a large brain, clever hands, was able to speak and worked in a social context. He was a culture bearing creature and the evolutionary beneficiary of the works of the previous creatures over millions of years. The first example of the new creature is the *Pithecanthropus erectus* (Java man). This fossil man was found by Eugene Dubois, a Physician, in 1901. The find was a skull and a femur in an exposed river bank. Other fossil man found are recorded as *Heidelberg Jaw*. A massive jaw found in Heildenberg, Germany. **Peking man:** Another find from Peking that resembled the Java man. The similarities were too great to justify a species generic name but he nevertheless got one; *Sinanthropus pekinensis* (the Chinese man from Peking.)

The Java man and Peking man are recorded to have existed half a million years ago, and they were cave dwellers and archaeological evidence suggests they knew how to make fire and were cannibals.

Let me say straight away that in spite of numerous theories, it is only logical to assume that human evolution must have been from Australopithecus to *Homo sapiens*. But then, from where did *Australopithecus* come from? There is an obvious missing link between ape and Australopithecus and between Australopithecus and modern man. Verhaegen in 1996, after comparing thirty seven cranio-dental characteristics of fossils, living apes and humans concluded that there is no indication that any of the australopithecine species has evolved in the

human direction. South African australopithecine skulls are morphologically closest to the chimpanzee among the living hominids.

In other to tie up this segment of the lecture I must say categorically that scientists and other scholars are still in search of the origin of man as evidenced in the many religions that are springing up and the different beliefs that abound, and the numerous chemical, medical, anthropological and archaeological researches. Not to mention Astrological researches and space travels that are taking place. Man wants to reach all the planets in search of knowledge, and though unwritten, I suspect in search of God. They perhaps intend to ask God some personal questions. I will in the later part of this lecture make a declaration on what I believe in as a researcher on man.

YOUR ANATOMY IS YOUR IMAGE

Some wonders of our body.

My studies and research work expose me daily to the wonders that exist within the human body; the greatest self propelled intelligent engine ever designed. The human engine is a multipurpose conglomeration of numerous industries. Let us return to the cell.

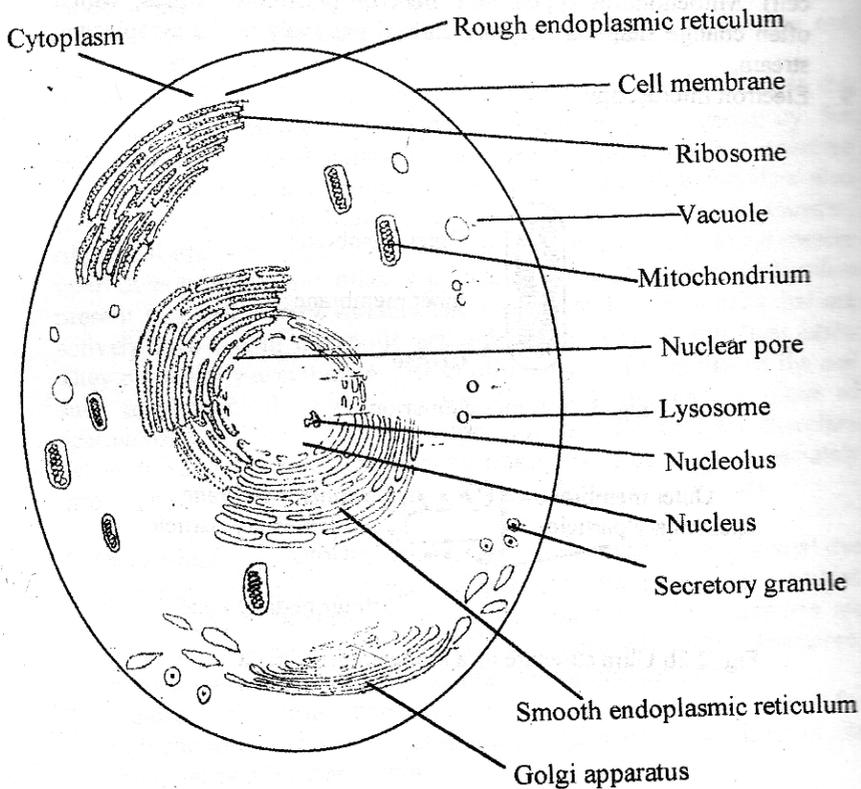


Figure 1: Atypical eukaryotic cell.

The cell (a small room) is a name coined by the Biologist Robert Hook who first built a microscope with which he observed small compartments in small slices of cork (non living) and he later observed this compartments in plants (living). The point had been made that the cell is the smallest (microscopic) functional unit of the body. The material contained within the cell is called protoplasm (first plasma). This material has been described by Huxley as the physical basis of life, (Arthur W. Ham, 1905). Life is not a static property of protoplasm but depends on, and arises out of, the continuous chemical activity that occurs in protoplasm. Protoplasm is not a static medium, but because it is always involved in the chemical processes of life, it is always changing. There are a lot of chemical reactions going on in the cell and all these constitute its metabolism (metabolite – change). Some of the reactions result in breakdown of protoplasm, and are termed catabolic while others result in synthesis of protoplasm and termed anabolic. Growth results when anabolic reactions exceed catabolic reaction. The reactions that occur in cell are made possible by the presence of catalytic enzymes (proteins) present in protoplasm and each enzyme is specific and acts on the substrate by combining with it thereby forming a reactive complex which enters into a reaction which it wouldn't ordinarily have been able to in the ordinary existing conditions in the cell. In the laboratory, most of the reactions taking place in the cell can only be simulated with the use of excessive heat and strong chemicals.

The wonder here is that in a small microscopic unit as the cell a lot of chemical reactions are taking place resulting in manufacturing, waste management, production and synthesis,

absorptions and assimilation, excretion and secretion, respiration, conductivity and cell signalling, irritability, growth and reproduction. These processes go on almost unnoticed by us.

In contrast, these same activities when we carry them out go on in big companies and industries situated in vast acre of land and involve a lot of human workforce and capital. In the body all these industries are located in a simple microscopic room called the cell.

The Hand of Man

The hand is the area from the wrist to the distal end of the fingers. It is the greatest implement possessed by man and functions in both coarse and fine movements. The beauty of the hand as an implement is that it has been designed to take many postures depending on the action that is intended. The hand can be brought into flexion, extension, adduction, opposition, position of rest, fist, and cup and so the hand can be used to pinch, button a shirt, lift, grasp, hold a pen (writing position) punch, scoop, dig up, scratch, rub and push. The functions performed by the hand can be taken for granted until we compare the hand to some heavy machines used by construction companies such as bulldozers, and excavators.

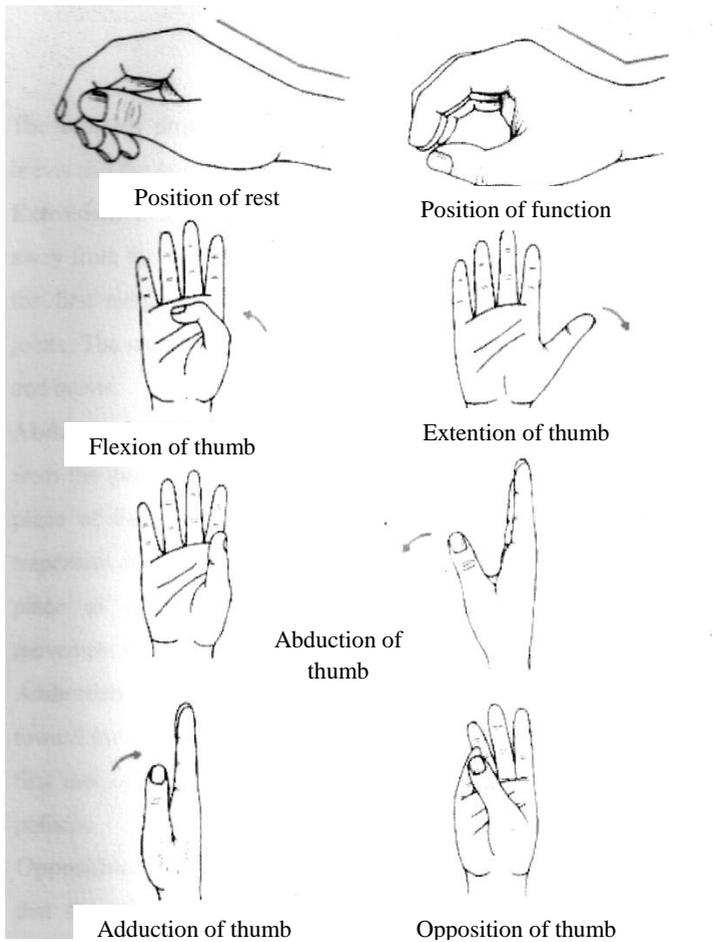


Figure 2: Various positions of the human hand and movement of the thumb



Figure 3: Excavators: A mimicry of the human hand

The heavy machines designed to perform almost mono functions mimic the hand, are manned by man take time and money to acquire yet all the resource spent on them cannot buy one functional perfect human hand. The hand is a wonderful implement.

Memory

It is not possible for me in this inaugural lecture to begin to teach the anatomy of different systems but I will need to use the functions of the different systems and structures to show how wonderful man is. William James (1850) defines memory as the retention of the remembered fact and its reminiscence, recollection reproduction or recall. In essence therefore, memory is a record of past experiences which enable animals to relate what is happening now with previous experience. Man has a complex brain and so is at least curious, intelligent

and able to depend on learning as a major survival trait. We do have short term and long term memories as the major subdivisions of memory and they constitute perhaps what I regard as the most important function of the brain. The nervous system (brain) receives all information, processes information and stores it – memory. Superficially therefore, I can say that man’s attempt at reproducing the brain is in the electronic computer. For the purpose of comparison, the human brain has as its processing unit the neuron, and there are about 15 billion neurons as compared to a few million transistors in the microprocessor of the computer. In the brain, each neuron can receive input from thousands of other neuron, so the brains connections number well into the trillions. Computers do not even approach this number despite their seeming complexity (Becker et al, 2003). I will not carry this analogy too far, since in many ways the man made computer is very far from and inferior to the human brain in structure and function. You can delete the information in the computer but you can’t consciously delete the stored memory in a human brain.

When a man tells you he has forgiven you, you still must be watchful because he has not deleted the originally stored offending information in his brain.

The Eyes.

The Eyes are the organs of vision. They normally refract and focus light rays into the retina (photoreceptors) located at the back of the eye ball. The light impulse are converted by photoreceptors (Rods and cones) to light energy which is transmitted by the optic nerve and visual pathways within the brain to the visual cortex at the occipital lobe for interpretation. The specialized photoreceptors are capable of:

- (i) Responding to 1 billion different stimuli each second

- (ii) Being sensitive to 10 million gradations of light intensity
- (iii) Differentiating 7 million different shades of colour

The eyes are set to achieve binocular vision (stereoscopic) i.e. can define distances and depth and can record size and shape. The importance of the eye is underscored by the many cranial nerves that supply it and its accessory structures. The eye is responsible for approximately 80% of associated knowledge. Again, man looked at the eye and made its analogues, the camera.

Mr. Vice Chancellor Sir, I have used cell, brain, hand and eyes to show the wonders inbuilt in man because the brain, the hand, the attainment of bipedalism, Stereoscopic and colour vision combined with language, serve as a foundation for the technical and intellectual achievements of mankind.

All these examples notwithstanding there are many other parts of man that teach me that there is nothing made or manufactured by man that is new. Man has simply been copying from the structures in human body or other animals or living things (the original).

- i Our Electrical Engineers have copied extensively from the human nervous system
- ii. Water engineers have copied seriously from the human circulatory and urinary systems
- iii. Furniture makers copy profusely from the various joints of man.
- iv. The aeroplane is simply a flying bird
- v. The artificial pacemakers are no better than the AV and SA nodes of the heart.
- vi. The aircraft's wings resemble a whale's flippers; etc.

- vii. What is a compass when many birds navigate with pin point accuracy over long distances and in all types of weather? AS the Bible puts it;

“Ask please, the domestic animals (beasts), and they will instruct you; also the winged creatures of the Heavens and they will tell you. Or show your concern to the earth, and it will instruct you; and the fishes of the sea will declare it to you. Who knoweth not in all these that the hand of the Lord hath wrought this?” (Job 12:7 – 9)

Man and surely all living things provide huge evidence of intelligent design.

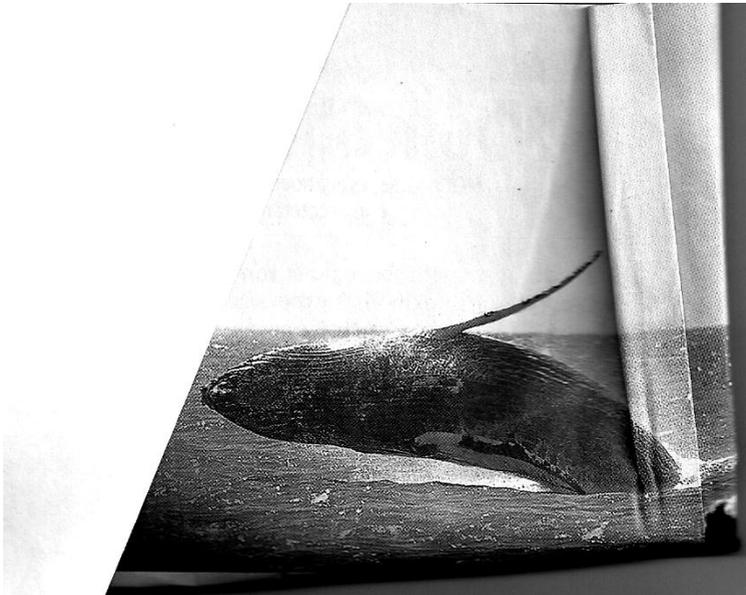


Figure 4: A whale has the semblance of an aeroplane

There is proportionality in man

Mr. Vice Chancellor Sir, I am driving to something and I will not rest until I have given my personal experiences. Like this sub title says, most of you are probably aware that your height from foot to the vertex (head) is same as if you measured from the tip of the longest finger on the left to the tip of the longest finger on the right hand. Same shoe size for both left and right foot; and the same size of hand gloves for both right and left hands. There are much information hidden in our bodies and it is our responsibility to find them before the find us. When we find them, mankind benefits. Take for example the measurement the lengths of the second and fourth digits of the hand that might appear ordinary, yet when properly analysed exposes a lot of information concerning our body. The second digit (2D-next to the thumb) and the fourth digit (4D-next to the little finger) carry lots information for us. 2D divided by 4D (2D:4D ratio) provides an index of how you have been exposed to testosterone while in your mother's womb. How? The HOX gene family is required for the growth and patterning of digits and the differentiation of the genital bud. Hoxd and Hoxa genes are well expressed in the gonads and are also required for the growth and differentiation of digits. This sharing of causal factors in digit and gonad differentiation allows patterns of digit formation to be a marker for prenatal sex hormone concentration (Manning et al, 1998). Low values of 2D:4D are associated with high concentrations of testosterone. In males the 2D:4D ratio is related to sperm count, a lower 2D:4D ratio (indicating higher exposure to testosterone relates to higher sperm count), though the impact of this on fertility requires further research. Digit ratio is significantly different between members of Science Faculty and members of the HaSS/Management Faculty, those with children and those without children (Manning et al, 1998).

When the proportionality does not exist then there is disequilibrium.

Having this in mind I set out to determine and establish values that will be important in both clinical practice and reconstructive surgery in man because these were lacking in existing literature. My first interest was the 'foot'. That part of the lower limb that begins from the ankle downwards, that is important in erect posture and locomotion and is constantly afflicted by wounds and disease. Injury to it does not heal as fast as in the other areas of the body probably because it is far away from the heart, the source of blood supply and surgeons are very much aware of this. I set out to determine the incidence of flat foot in Port Harcourt children of school age.

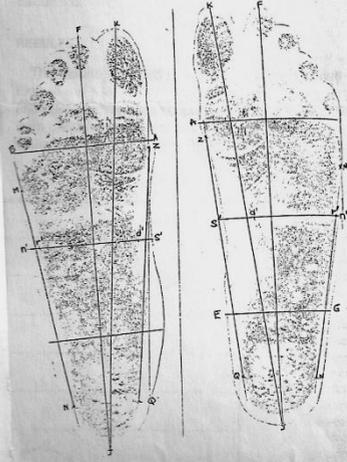


Fig. 2. Footprints of unilateral flat foot.

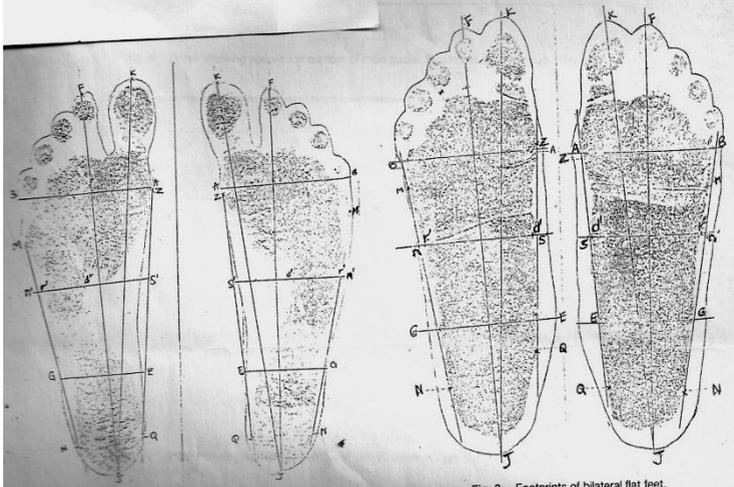


Fig. 1. Footprints of normal feet.

Fig. 3. Footprints of bilateral flat feet.

Figure 5: Footprints of unilateral, bilateral flat and a typical normal feet

We found out that bilateral flat foot is not common among children of school age in Port Harcourt (0.60%). It is however more common in females (0.75%) than males (0.44%). Unilateral flat foot is more common than bilateral flat foot. Early introduction to the use of shoes may predispose to flat foot. Flat foot becomes important when it coexists with painful feet or even with pain extending to the vertebral column (Didia et al 1987). Having related flat foot to foot pain it remained for us to determine the mediators of foot (heel) pain. We dissected the foot and established against all previous postulations that when heel pain is considered the medial calcanean nerve must be considered (Didia et al, 1990). We were not yet done with the foot. We measured foot breadth in children to find out any relationship between it and limb dominance (The phenomenon by which in an organism with paired faculties, the performance of certain tasks, afferent or efferent succeeds better or one side than the other) and age. The mean for left foot was found to be 7.807 ± 0.533 and 7.785 ± 0.583 for the right. No significant relationship was found between foot breath and limb dominance but an ipsilateral relationship was found to exist between the two forms of limb dominance – 92.37% of right handers are right footed while 51.85% of left handers are left footed. Using linear regression method, an offshoot of our work provided a formula for the estimation of a child's age from his foot breadth as; $\text{Age} = 3.64 (\text{foot breath} - 19.64)$.

This formula can be used to calculate the ages of children for under 12 year's competitions. This work is published in Foot and Ankle (American based) and it received so many positive comments because it for the first time disapproved a long held

assertion by Chibbe & Singh (1979) that the left lower limb is dominant in majority of individuals.

We also proceeded to determine the mean value of foot dimensions in young adult Nigerians (Obikili & Didia 2006), and showed sexual dimorphism in foot dimensions among adult Nigerians, Bob-Manual & Didia (2009).

We also carried our investigation to the great toe (hallux) which is often involved in lateral deviations due to intrinsic and extrinsic factors.

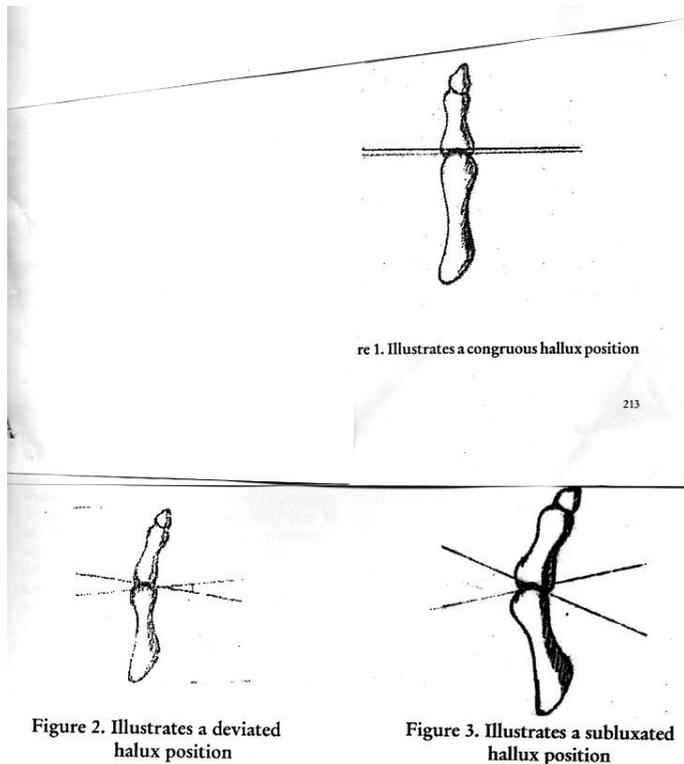


Figure 6: Positions of the big toe [hallux]

The position of the hallux and the first metatarsophalangeal joint angle in indigenous Nigerians was determined from radiographs. (Didia & Dapper 2008). Then the first intermetatarsal (IM) angles and their relationship to the first metatarsophalangeal (MTP) joint angle was determined (Didia et al, 2008).

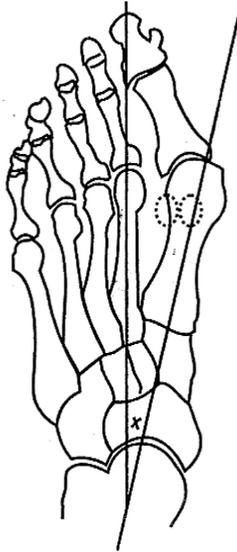


Figure 7: Measurement of first inter metatarsal angle

B.C. Didia, G. S. Oladipo, T. M. Archer and C. Agi

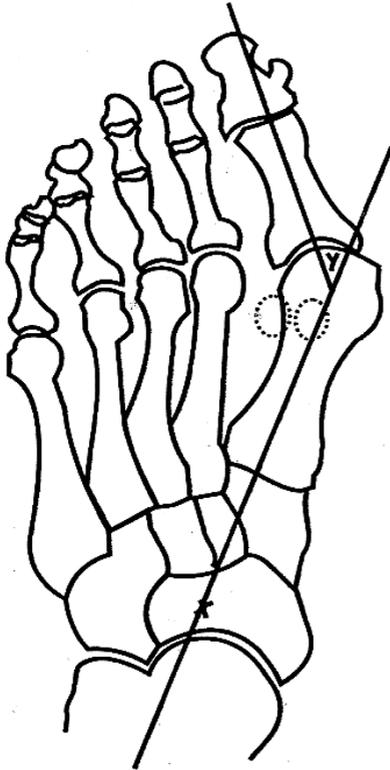


Figure 8: Measurement of the first inter metartasophalangeal joint angle

We concluded that the correction of hallux valgus deformity is indicated in the presence of painful and disturbing symptoms. Our established normal values here for the Nigerian community should be noted by surgeons. Not done with the foot we went ahead to measure the calcaneal angle in Nigerians. The calcaneus is the largest and probably the most important of the seven tarsal bones of the foot (Didia et al 1999).

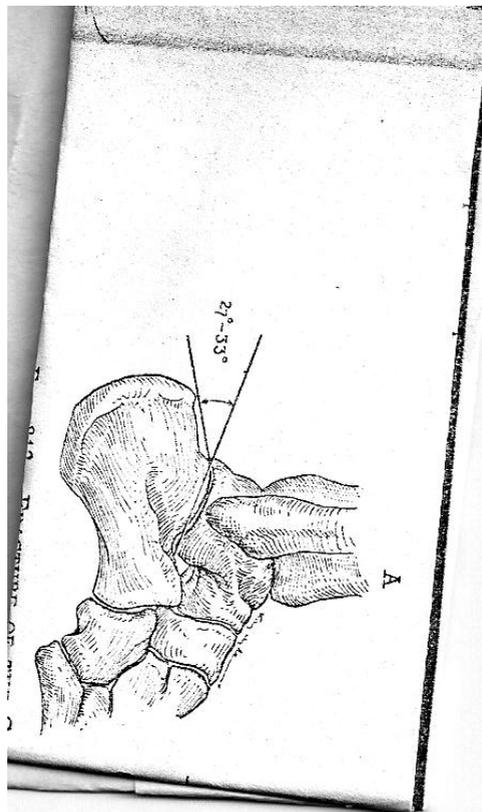


Figure 9: Measurement of the calcaneal angle

Table 3: Comparison of the Calcaneal angles found in various studies

Table 3. Comparison of Calcaneal Angles Found in Various Studies			
Study	Year	Race	Range of Calcaneal Angle (°)
Chew ¹⁰	1950	Whites	29–40
Du Plessis and Decker ⁸	1970	Whites	25–40
Harty ¹¹	1973	Whites	30–40
Meschan ¹²	1977	Whites	28–40
Anson and McVay ³	1984	Whites	27–33
Crenshaw ¹³	1987	Whites	25–40
Resnick ⁴	1989	Whites	25–40
Chen et al ¹⁴	1991	Whites	15–50
Present authors	1999	Nigerians (blacks)	28–38

We found this angle to range from 28° to 38° with a mean of 32.83±2.84 in Nigerians. The angle did not vary by sex, age or side of the body. Failure to restore this angle when necessary will lead to a derangement of the foot anatomy, with consequent tendon, muscle, and joint problems and probably loss of height. Therefore the calcaneal angle as determined by us must be born in mind whenever reconstructive surgery of the foot is performed. Another condition that is a frequent course of pain in the foot and ankle is tarsal coalition, which is an abnormal fusion between two or more foot (tarsal) bones (Joel and Aurthor 2000). We have determined the incidence of this condition in our society to be 2.44%. The incidence was higher in males 56.67% than in females 43.33%. The incidence is similar to what was found in other population. Tarsal

coalition must be borne in mind when intractable foot pain is considered.

Mr. Vice Chancellor Sir, I have not only looked at the foot, I worked also on the knee joint which is a very important joint in both posture, ambulation and sporting activities I have determined the normal tibio-femoral angle in Nigerians to be 169.9° and deviation from this will lead to either knock-knee (Genu-Valgus) or Bowleg (Genu varum) (Didia, et al 1998). The femoral inter-condylar Notch width in Nigerian is $2.24\text{cm} \pm 5.77$ (22.4mm). This value is important and of clinical significance as it should be used in screening of individuals who are predisposed to anterior cruciate ligaments (ACL) injuries. A person with a stenosed ICN width is a candidate for ACL ruptures (Didia et al 2002). Our study on the femoral ICN geometry, shape index and Notch width index (NSI and NWI) indicates that the difference in incidence of ACL injuries between male and females is as a result of differences in NWI and the diameter of distal end of the femur in both sexes, (Didia et al 2003).

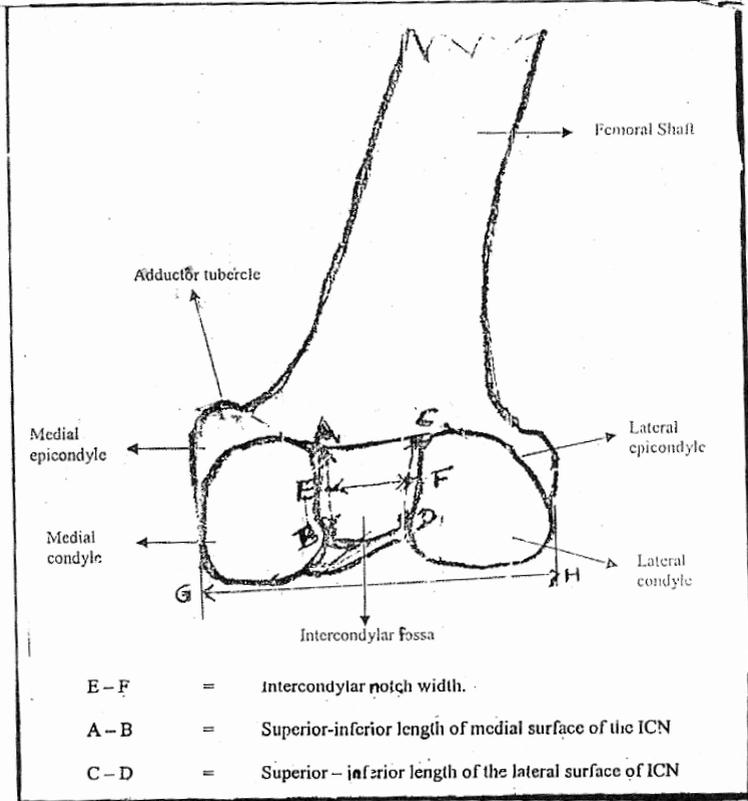


Figure 10: Measurements of the ICM from the posterior view of lower end of femur

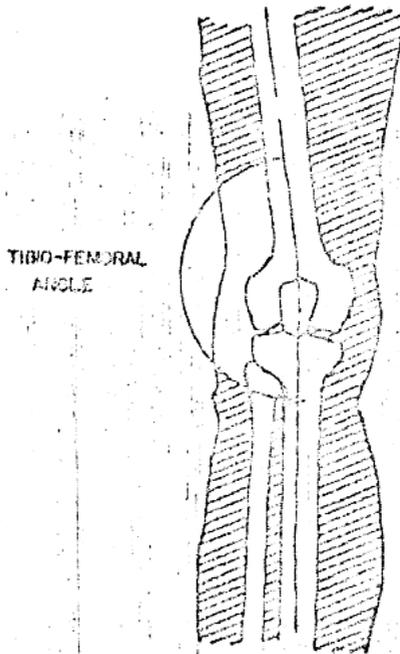


Figure 11: Measurements of the tibio-femoral angle

We have also determined the posterior slope of the tibial plateau (PSTP) (Didia et al 2009) and the normal tibial metaphyseal diaphyseal angles (MDA) (Oranusi et al 2007) in Nigerians, while the PSTP is important as a veritable means of sex differentiation in forensic anthropology, the MDA is important in making early diagnosis of physiologic bowing as well as monitor remodelling or development of Blount's disease.

A study I started in 2005 on stature estimation formula for Nigerians using tibia length has been published in American Journal of Forensic Sciences in January 2009. This formula now makes it easy to reconstruct the stature of any dead Nigerian once we can get hold of the tibia.

Stature= $46.8421+2.9289 \log$ (tibia length) for males

Stature= $190.42+95.191 \log$ (tibia length) for females

This study is important because with increased intertribal and religious wars, political assassinations, secret cult killings, and deaths from road traffic accidents, time has come for Nigerians to develop a formula specific for the reconstruction of stature in view of the fact that we may need to identify individuals in mass graves. In Nigeria we have become No. 1 in this area of forensic anthropometry (Didia et al 2009).

Another important part of the body that we investigated is the vertebral column which functions to protect the spinal cord, support body weight and provide it with a partly rigid and flexible axis (William P.I. 1995). Normally, there is an anatomically normal forward tilt of the cervical vertebra (cervical lordosis) normal backward tilt of the thoracic vertebrae (thoracic kyphosis) and a normal lumbar lordosis. These three curves secure the antero-posterior balance of the trunk. There is also a slight lateral tilt of the vertebrae which has been associated with handedness (William P.I. 1995).

Unlike structural kyphosis (Hunchback) structural scoliosis appears to be under reported in Nigerian with the implication that effective management of the condition is yet to be adequately evaluated among Nigerians. Luckily, using the Cobb angle method we have been able to describe the pattern,

magnitude, direction of rotation of spinal curvatures in Nigerians with structural scoliosis. For the first time we have highlighted briefly the biomechanical bases of curve progression and underscored the need for a programme of early identification of young persons who may be at risk of the progressive disease in our locality(Jaja et al 2005).

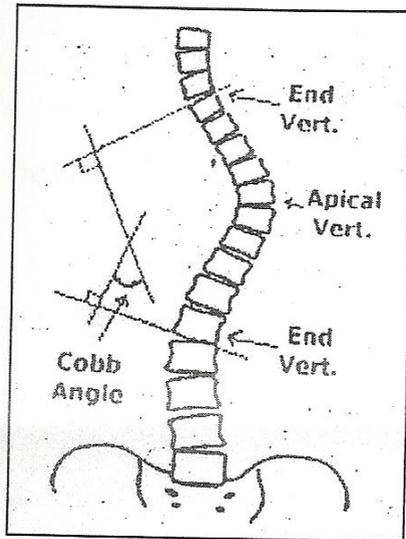


Figure 12: Measurement of Cobb angle

I had earlier on mentioned that there is proportionality in man. You may have noticed that some nose, ear, size of eyeball and size of mouth at times stand out prominently in disregard to proportion. These disproportionate parts may function well anatomically but may also induce ugliness. Beauty, ugliness and handsomeness are subjective attributes ascribed to facial appearance (Didia et al, 2005). Though the determination of each is personal and subjective, it is obvious that the human face is the most beautiful and attractive of all the mammals. Appreciation of beauty by the human mind leads to an attraction to proportion in harmony with the Golden section i.e. 1.618. Robanus (2004) successfully explained ‘Golden Proportion by stating that it results from a division of a straight line in such a way that the shorter part is to the longer part as the longer part is to the whole. Ideal facial proportions are universal regardless of race, sex, age and are based on the phi ratio of 1.618. For example if the width of the face from cheek to cheek is 10 inches, then the length of the face from the top of the head to the bottom of the chin should be 16.18 inches to be in ideal proportion. Deviations from this ideal can result in health problems. People with longer than ideal faces tend to have breathing problems while people with shorter than ideal faces tend to have jaw problems. (<http://www.sublimx.prop.bluaaprovider.co.uk/...>). Having these in mind we have in 2005 established the ideal facial, nasal, maxillary, mandibular, and oro-facial heights of adult Nigerians. These values are important to the Dentist, the plastic surgeon, Anaesthetist, the prothodontist and ENT surgeon when corrective surgery and facial aesthetic is to be improved upon. I must stress here that truly, ‘your anatomy is your image’(Didia et al 2005).

Simple Measurement Guide

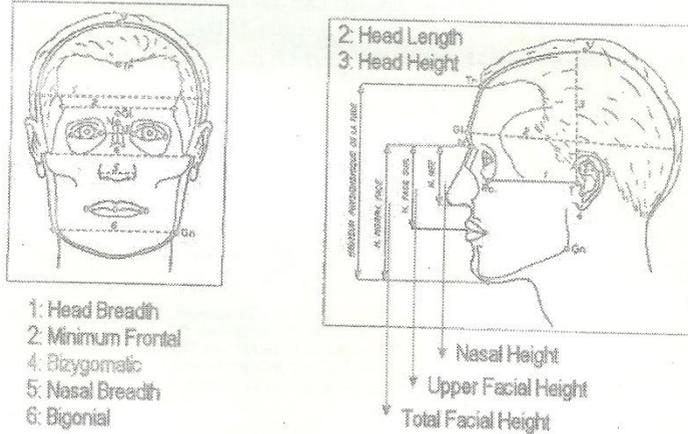


Figure 13: Measurement of simple facial parameters

Vice Chancellor Sir, I am having fun in this unique university, while still on the head region, we have advanced research in areas that have focused on improvement of health. The cribriform plate is one of the four components of the ethmoid bone which is located on the floor of the cranium, between the orbits where it forms the roof of the nasal (nose) cavity. The bone is perforated (cribriform) but these perforations decrease with age (Kalmey et al 1998). Knowledge of the deep lying cribriform plate which is important in endoscopic sinus surgery has become an increasingly popular procedure for the management of paediatric sinus disease (Anderhuber et al; 1998). Furthermore, it has been observed that obstruction of CSF transport through the cribriform plate increased the peak intracranial pressure after infusion, and so the cribriform plate,

is an important site for CSF clearance (Silver et al 2002). Not only that, the cribriform plate is often affected in injuries of the ethmoid bone, which could be as a result of an upward blow to the nose on striking an automobile dash board in a collision. These kinds of injury often lead to the drainage of CSF into the nasal cavity. Similarly blows to the head can also cause damage to the olfactory nerves that pass through the cribriform plate and cause anosmia and a reduction in the already jeopardized man's sense of smell. No previous study had been done on the cribriform plate of Nigerians but I have in 2008 established that only an insignificant level of asymmetry can be found in the cribriform plate of ethmoid bone of Nigerians. The metrical measurements are presented in the table below.

Table 3: Mean, standard deviation and standard error of mean for the length, width and perforations of the cribriform plate

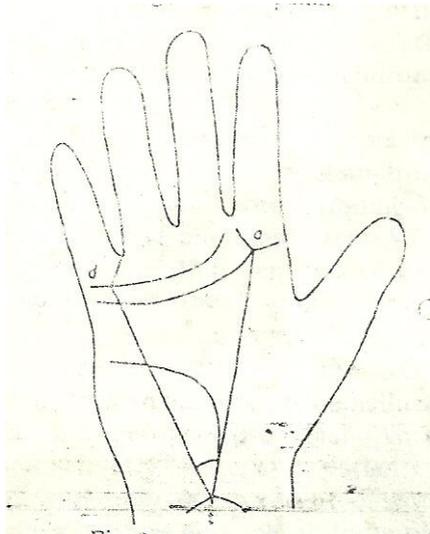
Table 1: Mean standard deviation and standard error of mean for the length, width and perforations of the cribriform plate.

Length (cm)	N	X	SD	S.E
Right	12	2.66	0.26	0.05
Left	21	2.62	0.28	0.06
Width				
Right	21	0.64	0.13	0.02
Left	21	0.63	0.09	0.02
Perforations				
Right	19	32.2	7.85	1.80
Left	19	34.3	6.54	1.50

N= No. of skulls, x= mean, S.D= standard deviation, S.E standard error.

The results presented here will improve microsurgical techniques as it concerns the cribriform plate of ethmoid bone and its related structures (Didia et al 2008).

In the realm of forensic anthropology I have again done a lot of work on both the planter (sole) and palmer (palm) dermatoglyphics of several Nigerian ethnic groups. Dermatoglyphics is the study of the epidermal ridges that are found in the skin of the palm, fingers, soles and toes of primates and other mammals. These ridges are natural and specific for individuals and are genetically controlled. No two individuals can have the same pattern of ridges. A number of studies including Penrose (1965) Pons (1962), Jantz and Brehme (1978) have brought to fore the usefulness of dermatoglyphics in criminology, ethnography or racial studies as well as in diagnosis of hereditary disease (Komatz et al and 1980).



ATD - angle

Figure 14: Measurement of ATD angle

Dermatoglyphics

In Nigeria the pioneering work on dermatoglyphics was stated by Boroffice (1978), then Jantz and Brehme (1978). They all worked on Yoruba and Ibo tribes. In this University we resumed studies of Dermatoglyphic patterns in the 1980s and published our first work on ‘Palmer and Digital Dermatoglyphics of two Ethnic communities (Ibo and Yoruba) in Nigeria’ in 1994. We found little intersex and intergroup variations in patterns between the Ibos and Yoruba’s. The difference becomes significant only with the ATD angle. In the total finger ridge count (TFRC) we found very close similarity even with the previous work of Jantz and Brehme (1978). Is it possible that the Yoruba’s and Ibos are from the same stock? This question obviously cannot be answered from the history of their origin which is mainly based on poorly recorded oral traditions that look like folklore. Our result supports the linguistic studies and studies of human skeletal remains which suggest that the various peoples of Nigeria descended from a single ancestral origin. The Yoruba and Ibo speak the “kwa” languages which are classified within the Benue-Congo family of languages in Nigeria. Although the “kwa” languages are related, there are enough differences to suggest that divergence among Nigerian groups began during a distant time period, not less than 4,000 years ago, Isichei (1983). We have also studied the Urhobo's, Hausa's, Ikwerre's and the Ogoni's. The dermatoglyphic pattern confirm a close relationship between the Ikwerre and Ibo that one is forced to conclude that it is either that the Ibos had come from Ikwerre or Ikwerre from Ibo, Oladipo et al (2005).

Vice Chancellor Sir, it will not be possible for me to discuss the over 70 (seventy) research works that I have so far published in both international and Nigerian Journals. All my works appear either in the Index Medicus, African Journals

online or in African Index Medicus and I will plead with the audience to do well to assess them online.

AGEING AND DYING

Age, as I want to use it here refers to the number of years, months or days that have elapsed since a particular point in time (birth).

There are four types of age

- (a) **Chronological Age:** Number of years in months since birth. Its measurement is independent of physiological, psychological and socio-cultural factors and so it is an insufficient measure of senescence.
- (b) **Biological Age:** This one emphasizes the senescent changes in biological or physiological processes and their subsequent effects on behaviour. This will show the extent to which an individual is aging in relation to persons of same chronological age. This is what has led to the folkloric observation that a person is as old or as young as he feels.
- (c) **Psychological Age:** This refers to an individual's capabilities along the lines of mental or cognitive functioning, including self-esteem and self-efficacy, learning, memory and perception (Birren 1959).
- (d) **Social Age:** This refers mainly to the notion that society often has fairly rigid expectation of what is and is not appropriate behaviour for a person of a particular age.

The anatomist considers all these types of age in assessing a human being.

Ageing itself is always difficult to define since the point that the aging process starts is difficult to determine. Because aging is a continuous and slow process, we observe its effects

only when they have progressed sufficiently to induce alterations that can be identified or validated by available testing methods.

Old age in humans is conventionally accepted to start at 65 years of age and terminate with death but it is difficult to circumscribe its temporal boundaries in physiological terms. Generally its onset has remained at some indeterminate point following maturity.

In my opinion, to the anatomist, it will be safer to regard aging as a continuous and necessary process that begins at conception. Andrew Weil (2005) suggests that wherever you are on the continuum, it is important to learn how to live in appropriate ways in order to maximise health and happiness. What is appropriate when you are in your 20s is likely not going to be appropriate in your 50s.

The human life span is roughly divided into:

Infancy	-	up to 2 years
Childhood	-	up to 12 years
Adolescence	-	up to 20 years
Maturity	-	after 20 years

Generally human beings are expected to live up to 172 years since the longest authenticated records says Jeanne Calment (1875 – 1997) lived for that much (Wikipedia Encyclopaedia). I must say that fiction, legend and mythology have in the past proposed or claimed vastly longer life span but science cannot accept such without verifiable records.

Rate of Aging

We must agree that beginning from conception, growth and maturation begins, though we do not all grow or age at the same rate. While some people experience rapid declines in

physiological and psychological functioning as they grow older, others undergo significantly less pronounced changes over time and this account for differences when you look at people of the same chronological age.

Control of individual differences in the rate and extent of Aging

There are two major factors:

- (i) Genetic (hereditary factor)
- (ii) Environmental factor

Aging research is carried out by geneticists, molecular biologists, zoologist, physiologist, anatomist and gerontologist. From different researches carried out it is observed that there is coded in the genes an instruction that specifies the age beyond which a species cannot live – maximum life span is written in the genes and as the end of that life span approaches, all body function start slowing down, cells stop replicating and start dying, and the reason for these remains one of the great mysteries in aging research (Chozko-Zajko 1981).

Signs of Aging

Skin: Wrinkles & Folds obvious in heavy use areas such as those overlying muscle of facial expression.

Delayed wound healing due to age changes in density of fibroblasts.

Greying and hairless due to reduced activity of melanocytes especially in axillary and pubic sites but less reliable in scalp hair where it appears to be more genetically determined.

Nail growth slows with aging

Loss of subcutaneous adipose (fat) tissue

Mouth and Teeth

In the mouth aging is expressed by loss of teeth with consequent impairment of chewing. After age 50 years there is also reduction in salivary flow due to perhaps loss of taste and smell sensation. Loss of teeth is more common in the maxilla (upper jaw) than in the mandible (lower jaw).

Sensory changes

Hearing: Virtually everyone experiences some degree of hearing impairment by age seventy. Soft and high-pitched sounds begin to fade from one's hearing repertoire.

Visual: Loss of visual acuity arise from the tendency of the eye lenses to turn yellow and become harder and less elastic with age giving rise to a condition called presbyopia. Secondly depth perception is affected by the aging process with the result that elderly people must take extra care in climbing and descending stairs and even crossing the street. Other visual afflictions are: modifications in night vision, cataracts and glaucoma.

Taste: Taste threshold for sweetness and table salts increases and may aggravate existing conditions like diabetes and hypertension.

Smell: The sense of smell is even more vulnerable to the process of aging than is taste. A decreased sensitivity to food odour may reduce appetite and so elderly people become less enthusiastic about eating at all. It is suggested that people preparing meals for the elderly need to recognise the possible changes in eating due to modified taste and smell threshold. (Mullen et al, 1996)

Changes in Sexual functioning

Apart from menopausal and climacteric changes which may affect operation of sexual organs to some extent sexual desire and sexual function decline significantly after middle age. However, many women see the cessation of menstrual cycle as a welcome relief and report a renewed interest in sexual activity while in men, because of the reduction in production of testosterone and some psychological feelings there is delayed erection time, a reduction in ejaculatory volume, and decreased fertility. These changes occur gradually and may be problematic for some men. Thus, while the penis may require a longer time to become erect, intercourse is frequently enjoyed for a longer period. (Mullen *et. al.*, 1996). Other not easily noticed age related changes occur in the

Blood

Cardiovascular function

Lungs and pulmonary function

Kidney

Alimentary tract

Brain

Body composition (fat, muscle mass, and strength, and joint flexibility) and

Bone, leading to a lot of body dysfunction;

When we consider structural and functional consequences of aging we see that:

Atrophy ↑

Dystrophy ↑

Oedema ↑

Elasticity ↓

De-myelination ↑

Neoplasm ↑

Speed ↓

Range ↓

Endurance ↓

Coordination ↓

Stability ↓

↓

Mutation ↑

Accuracy ↓

Function ↓

Cure of Aging

Strength

Many scientists had reasoned that if aging has a cause it must have a cure.

However, after decades of effort, scientific research has not revealed the cure of aging. As recently as 2004, the magazine, scientific American published a warning issued by 51 scientists who study ageing “No currently Marketed intervention – none has yet been proved to slow, stop or reverse human ageing”. Although sensible diet and exercise may improve health and lower the risk of your dying prematurely from disease, nothing has been proved to retard ageing. This reminds me of the words of Jesus in Matthew 6:27:

“Who of you; by being anxious can add one cubit to his life span”?

Contemporary medical treatment are less beneficial in old age because we are reaching a time when our vital force is diminished and repair is difficult because your anatomy has been deranged by age and man must die. Currently treatments in old age are palliative (relieving) rather than curative (Sharma Rajendra, 1998).

Conclusion

Respectable audience, I have in this lecture taken you to the mythology and scientific ideas of the origin of life. I have described to you what man is and my humble additions to the study of man. I have in a nutshell taken you through what you are to expect as you age but I failed to tell you, from my studies, how men arose. I must therefore give you my conviction, from the inner recesses of my brain, of how I think

man came to be on earth. This conviction I have, had earlier on been voiced by most scientist especially Astronauts who were cowed by the very nature of the universe and its creatures. Man is the intelligent being whose structure, brain cells, tissues, and organs cannot be duplicated by anybody. He is the greatest machine ever made and he mimics his anatomy to make other inanimate structures. It therefore means that all manufacturers, designers, inventors have been copying from the original – man, and yet even in this 21st century scientists have not fully understood man’s structure and ways. Man is the perfect ‘original’ made by, I believe, a perfect, most intelligent designer whom we must give the credit. Man is beyond being the product of an unintelligent chemical evolution or an orally transmitted mythology, nor can he be the descendant of an earlier ape. Most people today seek miracles in hidden or open places, they criss-cross churches or prayer houses asking for miracle but unknown to them man is the ‘miracle’ I know that I am a miracle, because no person can completely understand me. Let me boldly say that in my own town, Omerelu, I don’t know about yours, in spite of all healing services, crusades and intercessions, all those born deaf, blind and crippled remain so until death. Jesus and his disciples are the only persons that performed miracles, raised the dead, and walked on water as witnessed by other people who were around then.

To me therefore, I confess that man is the miracle designed, produced, invented, packaged and delivered by none other but **God** the Almighty as confessed by the Psalmist - “How many your works are, O Jehovah! All of them in wisdom you have made. The earth is full of your productions” (Psalm 104:24).

THANK YOU!

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CITATION ON
PROFESSOR BLESSING CHIMEZIE DIDIA
[JP, KSC, FASN]

Introduction:

Mr. Vice-Chancellor Sir, the 78th Inaugural Lecturer of the University is none other than Professor Blessing Chimezie Didia, a clinical anatomist of international repute and the immediate past Provost of the College of Health Sciences, University of Port Harcourt, Nigeria.

Professor Blessing Didia was born on the 20th April 1952 to the family of Chief and Mrs. Ezekiel Ordu Didia in Omugwere Omopi in Omerelu in present day Ikwerre Local Government Area of Rivers State, Nigeria. Professor Didia is the second son in a family of nine siblings from his mother. He was the product of the third set of consecutive twins by his mother. Unfortunately, his twin brother who would have lived to be as successful as him today did not live to see his first birthday.

Education:

Professor Didia started his educational career at St Stephens State School, Omerelu in 1956 where he commenced infant one. On account of following his Father to his many places of posting as a civil servant, he equally attended Holy Trinity Primary School, Choba and Community Primary School, Okehi Etche. However, he returned to St Stephens State School, Omerelu where he obtained his First School Leaving Certificate in 1963.

He then proceeded to the famous County Grammar School Ikwerre-Etche in 1964 and graduated in 1971 with the West

African School Certificate Ordinary Level; the delay in graduation for two years being due to the effect of the Nigerian civil war. Professor Didia obtained his General Certificate of Education Advanced Level in 1974 from the then Rivers State College of Science and Technology, [now Rivers State University of Science and Technology] Port Harcourt.

He attended the Ahmadu Bello University, Zaria, Nigeria from 1974 to 1976 where he completed his pre-clinical studies. He completed his undergraduate medical education at the University of Benin, Benin City, Nigeria in 1979 with an MB; BS degree.

In 2003, Professor Didia obtained the Doctor of Medicine [MD] degree from the University of Port Harcourt with specialization in Clinical Anatomy and Sports Injuries. It is on record Mr. Vice-Chancellor, Sir that Professor Didia was the first candidate to graduate with the prestigious MD degree of this University.

Academic career:

Professor Didia joined the services of the University in 1981 as Lecturer Grade II in the Department of Anatomy, Faculty of Basic Medical Sciences of the College of Health Sciences. He was initially employed into the residency program of the University of Port Harcourt Teaching Hospital as a senior house officer in Surgery. However, due to his love for Anatomy and his desire to expand the frontiers of knowledge in the basic medical sciences he transferred his services to the University as an academic and researcher in Anatomy.

Professor Didia was promoted Lecturer Grade I in 1986; and promoted to the rank of Senior Lecturer in 1990. He was

subsequently appointed to a full chair as Professor of Clinical Anatomy in 2005; a Chair he occupies till date.

Membership of Professional Bodies:

Professor Didia is member of several professional bodies including the Nigerian Medical Association, Anatomical Society of West Africa, Anatomical Society of South-South and South-East Nigeria. He is currently the President and Fellow of the Anatomical Society of Nigeria. Professor Didia is member Public Responsibility in Medicine and Research USA and member Applied Research Ethics National Association USA.

Professor Didia is member of Editorial Board of Journal of Experimental and Clinical Anatomy; Journal of Biomedical Sciences in Africa; Port Harcourt Medical Journal, Journal of Anatomical Sciences and North American Journal of Medical Sciences.

Administrative experience and academic leadership:

As Head of the Department of Anatomy, Professor Didia is on record as one of the longest serving Head of Department in this University. Professor Didia was variously Head of Anatomy from 1990 to 1991; 1995 to 2005.

In 2006, Professor Didia was elected Dean, Faculty of Basic Medical Sciences and in 2007 was elected to the exalted office of Provost of the College of Health Sciences of this University.

Professor Didia was elected into Council on the platform of University Congregation in 2005 and served till 2009. Furthermore, he has served in almost all Committees in the University including the time-table committee, member of UDPS Board, member of the Board of the printing press,

member of the UDSS Board just to mention a few. While in Council he was member Project Monitoring Committee and Finance and General Purpose Committee. As Provost, Professor Didia was member of Board of the University of Port Harcourt Teaching Hospital; where he also served on several Committees of the Board.

Professor Didia was Chairman, College of Health Sciences ICTC Committee and Chairman, College of Health Sciences Research Ethics Review Committee. Currently, he is chairman of the University of Port Harcourt/Host Community Relationship Committee a position he has used to endanger a cordial relationship between the University and our host Community.

In sister Nigerian Universities, Professor Didia is external examiner in Anatomy at the Universities of Benin, Calabar, Jos and Nsukka and at Nnamdi Azikiwe University, Abia State University, Ebonyi State University, Madonna University, Elele and Bayero University, Kano.

Research career:

Professor Didia has had an outstanding research career as attested to by the quality and number of his publications and attendance at various conferences within and outside the country. Professor Didia has over 76 publications and journal articles in various learned journals within and outside the country. This is in addition to 2 monographs and 2 chapters in two books on the subject of human anatomy.

His research thrust has been on Clinical Anatomy, Anthropometry and toxicology; areas in which he has published widely and is universally acknowledged.

Professor Didia has supervised several undergraduate and post-graduate students: 5 Masters; 2 Doctor of Philosophy [Ph. D] and 2 Doctor of Medicine [MD]. Many more are in the making.

National and Community Service:

Professor Didia has served his Community and the Nigerian nation in several capacities. These include: Member, Board of Directors of Risonpalm Nigeria Limited [1985 to 1986]; Member, Rivers State Football Association [1987 to 1991]; and later Chairman, Rivers State Football Association [1993 to 1995]; Member, Ikwerre Local Government Development Committee [1990 to 1991]; Elected Executive Chairman, Ikwerre Local Government Area [1991 to 1993]; Member, Rivers State Funds Raising Committee for Super Eagles USA 1994 World Cup Campaign; Match Commissioner, Nigerian Football Association since 1986; Member, LOC, Junior World Cup in Nigeria [Nigeria '99]; and Member, Sharks Management Committee 2002 to 2003 to mention but a few.

He is currently the Chairman of the Nigerian Red Cross Society, Rivers State Branch.

In 1992, Professor Didia was enthroned as a chief in his home town Omerelu and given the title: *Omeherawhu* which translates to 'the performer of difficult tasks' a position he has used to bring advancement to his home town.

Awards and Honours:

In 1992, Professor Didia was recognized as the Most Outstanding Local Government Chairman in Nigeria by Compact Communications Limited. In 1998, he was recognized with a merit award by the Rivers State Referees Council.

In 2004, he further got another merit award in recognition of excellence by the College of Health Sciences, University of Port Harcourt. He also got an award of honour by the Senior Staff Club of the University of Port Harcourt in 2004. He was awarded a certificate of honour by the Old Boys Association of County Grammar School Ikwerre-Etche in 2007. In 2008, he obtained another award of honour this time by the University of Port Harcourt Alumni Association. And yet in 2010 another merit award by the University of Benin Alumni Association.

Private Life:

Professor Didia is happily married to Lady Pricilla Chika Didia and the marriage is blessed with 4 children: Chijioke, Uzodiana, Chizenim, Chenimozo and 2 grandchildren Lemchi and Nmaezi.

Professor Didia is a devout Christian of the Anglican Communion. He is a Knight of St Christopher [KSC]. He is currently Chairman of the Parsonage Building Committee of St Stephens Church, Omerelu. He is also a Diocesan board member of the Diocese of Ikwerre, Anglican Communion.

Professor Didia is a footballer and at present still plays the round leather game with All Stars Football Club of Port Harcourt and the Football Section of Port Harcourt Club. He was once Captain of the football team of County Grammar School Ikwerre-Etche and was a member of football teams of the then College of Science and Technology, Ahmadu Bello University and University of Benin. He managed the University of Port Harcourt Football Team in 1988 to win the NUGA Gold in football.

In addition, he plays dart and snooker and has kept both sports alive at the University.

He loves reading and singing and was in fact the lead singer and member of the choir of St. Stephens Anglican Church, Omerelu.

Conclusion:

Professor Blessing Chimezie Didia is an academic who has devoted his life to the service of the University of Port Harcourt, his community, his country and to humanity. We have before us a loving husband and a devoted father; a clinical anatomist of international repute, a sportsman per excellence, an avid researcher, an outstanding medical doctor and medical teacher. A community leader and a University administrator, a mentor and role model worthy of emulation to several young academics in Nigeria especially in the University of Port Harcourt.

Mr. Vice-Chancellor Sir, I would want to end this citation by quoting once again Socrates [469-399 BC] the great Greek philosopher. A quotation I believe fairly captures the mood of most of us here present. Socrates said and I quote:

As for me, all I know is that I know nothing.

Ladies and gentlemen it is my honour and indeed a privilege to present to you Professor Blessing Chimezie Didia, the 78th Inaugural Lecturer of the University to come do once again what he knows best!

Mr. Vice-Chancellor Sir, I am done. Ladies and gentlemen, thank you all for your kind attention.

Professor DV Dapper