

**1. BACKGROUND INFORMATION**

- a) **FULL NAME:** Dr (MRS) AUGUSTA INEGBEDION  
 b) **DATE OF BIRTH:** August 8, 1973  
 c) **STATE OF ORIGIN:** Edo state  
 d) **NATIONALITY:** Nigerian  
 e) **PRESENT STATUS:** Senior lecture  
 f) **PERMANENT HOME ADDRESS:** 94, Royal Market Road, Ekpoma.  
 g) **CORRESPONDING ADDRESS:** Department of Medical Biochemistry,  
 Faculty of Basic Medical sciences,  
 Ambrose Alli University,  
 Ekpoma.  
 h) **E-MAIL ADDRESS:** mails4augusta@yahoo.com  
 i) **MOBILE PHONE NUMBER:** 08075358250  
 j) **MAITAL STATUS:** Married  
 k) **NUMBER AND AGE OF CHILDREN:**

S/N	NAME	SEX	DATE OF BIRTH	AGE (yrs)
1.	Wealth Osagumwenro Eromosele Inegbedion	Male	09/01/2014	5

- l) **NAME OF SPOUSE:** Mr. Marvelous Inegbedion  
 m) **OCCUPATION OF SPOUSE:** Higher executive officer,  
 Irrua Specialist Teaching Hospital,  
 Irrua.  
 Edo state

**2. EDUCATIONAL INSTITUTIONS ATTENDED WITH DATES**

- a) Oliha primary school, Benin City. 1979 - 1984  
 b) Baptist High School, Benin City. 1985 - 1990  
 c) Edo State University, Ekpoma 1994 - 1998  
 d) University of Benin, Benin City 2002 - 2004  
 d) University of Benin, Benin City 2008 - 2010  
 d) University of Benin, Benin City 2012 – 2016

**3. ACADEMIC QULIFICATIONSOBTAINED WITH DATES**

- a) Primary school leaving certificate (Credit) 1984  
 b) Senior school certificate 1990  
 c) Senior school certificate/GCE O/L 1992

d) B.Sc (Hons) in Biochemistry)	1998
e) M.Sc (Biochemistry)	2004
f) M.phil (Biochemistry)	2011
g) Ph.D (Biochemistry)	2016

#### 4. WORK EXPERIENCE SINCE BASIC QUALIFICATION

- a) **Industrial training** at Chemical pathology department, University of Benin, Benin City. 1996.
- b) **Biology and Chemistry Teacher**, Fred Peters High School, Ogida, Benin City. 1998- 1999 (Part time)
- c) **Biology and Chemistry Teacher**, Eroms comprehensive College, Ogida, Benin City. 1998 – 1999
- d) **J.S.S. Mathematics teacher, (N.Y.S.C. )** at Aggrey memorial College, Arochukwu, Abia State. 1999 - 2000
- e) **Chemistry Teacher**, Spring field High school, Uselu, Benin City. 2000 – 2006
- f) **Assistant Lecturer**, Department of medical Biochemistry, Faculty of Basic Medical Sciences, Ambrose Alli University, Ekpoma. 4<sup>th</sup> January 2007-1<sup>st</sup> October 2010
- g) **Lecturer II**, Department of medical Biochemistry, Faculty of Basic Medical Sciences, Ambrose Alli University, Ekpoma. 1<sup>st</sup> October 2010-1<sup>st</sup> October, 2013
- h) **Lecturer I**, Department of medical Biochemistry, Faculty of Basic Medical Sciences, Ambrose Alli University, Ekpoma. 1<sup>st</sup> October 2013-1<sup>st</sup> October, 2016
- i) **Senior lecturer**, Department of medical Biochemistry, Faculty of Basic Medical Sciences, Ambrose Alli University, Ekpoma. 1<sup>st</sup> October 2016 till date

#### 5. SUBSTANTIVE POSITIONS HELD IN AMBROSE ALLI UNIVERSITY WITH DATES

- a) Examination Officer of Medical Biochemistry department, Ambrose Alli University, Ekpoma. 2016
- b) A member of the Faculty of basic Medical sciences seminar committee, Ambrose Alli University, Ekpoma. 2016
- c) A member of the Faculty of basic Medical sciences Business committee, Ambrose Alli University, Ekpoma. 2016
- d) Acting Head, Medical Biochemistry department, Ambrose Alli University, Ekpoma. 2016 till date.

#### 6. ACCOMPLISHMENT AS A LECTURER

- a) Prepared and presented lecture materials and set examination questions in all aspects of Biochemistry such as Protein and amino acid Biochemistry, Enzymology, Nutritional Biochemistry, Endocrine Biochemistry , Tissue Biochemistry and Xenobiotics.

- b) Mentored students during the practical components of the various courses
- c) Participated in and made presentations at several local and national conferences and workshops.

## 7. RESEARCH ACTIVITIES

Cancer is a leading cause of death worldwide and the incidence of cancer is on the increase in every country of the world (Jemal *et al*, 2010 ; Bray *et al*, 2013) hence there has been a great deal of interest of late in the role of complementary and alternative drugs for the treatment of cancer and other acute and chronic diseases. Different types of medicinal plants have exhibited high potential for use as good chemoprotective agents in the treatment of cancer due to their high concentration of antioxidants and many other types of compounds with the capability to inhibit cell proliferation of different cancer cells, One of such plants with proven anti-breast cancer activity is *Vernonia amygdalina* (Izevbogie, 2003).

*Vernonia amygdalina* (commonly called Bitter Leaf) is an edible vegetable which grows to about five meters high especially around forest margins (Khalafalla *et al*, 2009). The plant is scientifically classified as belonging to the Kingdom Plantae. It is an angiosperm, of the order Asterales, of the family Asteraceae, genus *Vernonia* and species *V. amygdalina*. The full binomial name is *Vernonia amygdalina* Del (Farombi and Nwoye, 2011). The leaves are very bitter due to the presence of octahydrovernodalin and bitterness can be abated by boiling or in the young leaves by soaking in several changes of water, although processing could affect the nutritional contents of bitter leaf (*Vernonia amygdalina*) as revealed by the work of Yakubu and Hamza (2012). *Vernonia amygdalina* is well known for producing anticancer agent, vernodaline and vernolide (Khalafalla *et al*, 2009).

Folic acid has also been shown to reduce the risk of colorectal and breast cancers (Langenohl *et al*, 2001). Folic acid is a vital nutrient in the diet. It is a water soluble B complex vitamin, which has alternative names such as folate, folacin, folacid, folbal, PGA, Pterol-L-glutamic acid, Pterol-L-monoglutamic acid, and vitamin B<sub>9</sub> (American Chemical Society, 2002). Folic acid contains 3 different parts necessary for its vitamin activity. They include pteridine, para aminobenzoic acid, and glutamic acid (Groff and Grooper, 1998). Folic acid plays an important role in the pathophysiology of several disorders in humans, including macrocytic anemia, cardiovascular diseases (Boushey, 1995), thromboembolic processes (Ray, 1998), neural tube and congenital defects (Berry *et al*, 1999), adverse pregnancy outcomes (George *et al*, 2002), and neuropsychiatric disorders (Seshadri, 2002).

In Our current research, we examined the effect of Nigerian-like and Western-like diets supplemented with folic acid and bitter leaf (*Vernonia Amygdalina*) on some Biochemical parameters in early stages of colon Carcinogenesis. It was also aimed to determine if any of the observed effect (s) of folic acid and bitter leaf is/ are potentiated before the onset of colon carcinogenesis or also occur during the process. Results obtained from the study showed that bitter leaf and folic acid significantly ( $P < 0.05$ ) decreased the levels of lipid peroxidation, sugar, cholesterol, phospholipid as well as glucose-6-phosphate dehydrogenase activity, magnesium ATPase activity and calcium ATPase activity but significantly ( $P < 0.05$ ) increased the activity of

antioxidant enzymes and sodium – potassium ATPase. These results suggest that folic acid and bitter leaf may protect against colon cancer before and after its onset.

**8. FUTURE RESEARCH:** To investigate the mechanisms by which folic acid and bitter leaf may protect against colon cancer before and after its onset.

**9. AREA OF INTEREST:** Clinical/ Medical Biochemistry

**10. SKILLS:** Computational Skill, administrative skill, team working skill, time management skill, communication skill and project management skill. These skills were acquired through teaching (see work experience).

**11. SUPERVISION OF POST GRADUATE STUDENTS:**

M.Sc : One (1) 2016/2017 session

**PUBLICATIONS:**

1) **A. Osagie**, G. Eriyamremu and T.P. Prohp. (2008). Effect of a Nigerian type diet on indices of cell proliferation. Pakistan journal of Nutrition. 7 (2):262 – 265

2) Ikewuchi Jude Chigozie, Osaghae Blessing Eloghosa and **Osagie Augusta** (2008).The Hypocholesterolemic effect of stachytarpheta Cayennensis Tea: Implication for the Management of Obesity and Hypertention. Asian journal of Biochemistry. 3 (4): 267 – 270

3) T.P.Prohp, K.E. Ekpo, E.V. Osagie, **A. Osagie** and H.Obi (2009). Polyphenol contents and polyphenol Oxidaseactivities of some Nigerin Kolanuts. Pakistan journal of Nutrition. 8 (7):1030 – 1031

4) Israel O. Okoro, **Augusta Osagie** and Edith O. Asibor. (2010).Antioxidant and Antimicrobial activities of polyphenols from ethnomedicinal plants of Nigeria. African journal of Biotechnology. 9(20):2989 -2993

5) **Augusta O. Inegbedion**, George E. Eriyamremu, Proph the Prophet, Ute Inegbenebor, Israel O. Okoro and Roland O. Osagie (2011). Biochemical observations in rats fed with cycads, Nigerian-like and Western-like folic acid supplemented diets. African journal of Biotechnology.10 (41):8101-8106.

6) **Augusta O. Inegbedion**, George E. Eriyamremu, O. Lolodi, Israel O. Okoro and Osarogie R. Osagie (2012). Alterations in glucose-6-phosphate dehydrogenase and Mitochondria Oxygen

consumption in rats fed with cycads, Nigerian-like and Western-like folic acid supplemented diets. African journal of food science. 6 (6):421-426

7) **Augusta O. Inegbedion** and George E. Eriyamremu (2016). ATPases in the colon of rats fed a Nigerian-like-diet supplemented with folate and bitter leaf (*Vernonia Amygdalina*). International journal of current research and academic review. 4 (2): 316-327.

8) **Augusta Inegbedion**, George E. Eriyamremu, Ugborbor Gilbert, and Israel O. Okoro .(2016). Lipid peroxidation level and antioxidant enzyme activities in the liver and kidney of rabbits exposed to cadmium and aqueous leaf extract of *Bryophyllum pinnatum*. point journal of medicine and medical research. 2(2):108 – 111

9) **Augusta Inegbedion** and George E. Eriyamremu .(2016). Energy metabolism in the colonic tissues of rats fed a Nigerian like diet supplemented with folate and bitter leaf (*Vernonia amygdalina*). point journal of medicine and medical research. 2(1):070 – 078

10) **Augusta Inegbedion**, George E. Eriyamremu and Israel O. Okoro. (2016). Some heavy metals in Ikpoba river and its effect on hepatic and intestinal antioxidant enzymes in some fish species. point journal of medicine and medical research. 2(2):103 – 107

11) **Augusta Inegbedion** and George E. Eriyamremu .(2016). Lipid changes in the colonic mucosa of rats fed : A Nigerian like diet supplemented with folate and bitter leaf (*Vernonia amygdalina*). point journal of medicine and medical research. 2(2):79 – 88

12) **Augusta Inegbedion** and George E. Eriyamremu .(2016). Stress indicators in the colon of rats fed : A Nigerian like diet supplemented with folate and bitter leaf (*Vernonia amygdalina*). point journal of medicine and medical research. 2(2):89 – 102

13) **Augusta Inegbedion** and George E. Eriyamremu. (2016). Weight loss potential of bitter leaf (*Vernonia amygdalina*). point journal of medicine and medical research. 2(2):112 – 118

14) Okoro, J.O; **Inegbedion, A.O.** and Okoro, E.O. (2017). Phytochemical screening and antibacterial activity of different solvent extracts of *Acanthospermum hispidum* DC aerial parts. Nigerian Annals of Natural sciences. 16(1): 43-47

15) Agbonson, O. P.; **Inegbedion, A.** and Prohp, T.P. (2018). Effect of African star apple (*Chrysophyllum Albidum*) on the glucose and triacylglycerol concentrations in Albino rats. Journal of medical science and clinical research. 6(8):772-777

16) Prohp, T.P; **Inegbedion, A.** and Onoagbe, I.O. (2018).Hepatotoxicity of higher doses of stem bark extracts of Triplochiton Scleroxylon in normal rats. Journal of medical science and clinical research. 6(8):791-797

17) Prohp, T.P; **Inegbedion, A.** and Onoagbe, I.O. (2018).Similarities in the pattern of glucose reduction by extracts of Triplochitonscleroxylon and insulin in Streptozotocin induced diabetic rats. Journal of Asian academic research associates. 5(8)2319-2801

18) Idonije, O.B; Agbebaku, S.O; **Inegbedion, A.** and Festus, O.O.(2019).Lipid Profile and Atherogenic indices in obese hypertensive and diabetic patients. International journal of Science and research.8(5):1264-1268

19) Agbebaku, S.O; Festus, O.O; Idonije, O.B and **Inegbedion, A.** (2019).Effect of Cigarette Smoking on serum Cholesterol and Triglyceride levels; Implication for Cardiovascular Morbidity. International journal of Science and research.8(5):1260-1263

20) Abiodun, I.K.;Amaralam, E.C; Abiodun,M.O and **Inegbedion, A.** (2019).Studies on effects of gmelina arborea bark extract in blood glucose level and pancreatic histology. International journal of innovative science and research technology.4(5)1106-1111

## **12. REFEREES:**

### **Professor George Eriyamremu**

Department of Biochemistry,  
Faculty of Life sciences,  
University of Benin,  
Benin City.

### **Professor A.O. Onigbinde**

Department of Biochemistry,  
Faculty of Natural science,  
Ambrose Alli University,  
Ekpoma.

### **Mr. Marvelous Inegbedion**

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