

## **Dr. Felix O. Omoruyi**

Texas A&M University-Corpus Christi  
Science & Engineering, Life Sciences

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### **Education**

PhD, University of Benin, 1991.

MS, University of Benin, 1988.

BS, University of Benin, 1985.

### **Licensures and Certifications**

SC (ASCP), American Society for Clinical Pathology Board of Registry, USA. (2008 - Present).  
NRCC-CC, National Registry of Certified Chemists (Clinical Chemistry), USA. (2008 - Present).

### **Professional Employment**

Associate Professor, Texas A&M University-Corpus Christi. (September 2016 - Present).

Assistant Professor of Clinical Laboratory Science, Department of Life Sciences, Texas A&M University-Corpus Christi. (2010 - Present).

- Teaching of Clinical Chemistry and other Clinical Laboratory Sciences.
- Coordination of practicum with local hospital laboratories.
- Participation in recruiting activities.
- Participation in curriculum and program reviews
- Coordination and execution of research projects
- Mentoring students.
- Membership on committees as opportunities become available.

Associate Professor, Departments of Biology & Chemistry and Medical Technology, University of Northern Caribbean University, Mandeville, Jamaica. (2006 - 2010).

- Teaching of Clinical Chemistry courses for medical technologists
- Teaching of Biochemistry/Nutrition courses
- Coordination and execution of research projects
- Member of several university committees

Fellow, Department of Pathology, University of Texas Medical Branch, Galveston, Texas. (2006 - 2008).

- Presentation of weekly case review in rounds
- Journal club review of peer-review publications
- Organ club review of human organs relative to anatomy, physiology and pathophysiology
- Rotation through molecular diagnostic laboratory
- Rotation through the clinical chemistry laboratory
- Daily quality control, proficiency testing review and management issues in the clinical chemistry laboratory
- Co-ordination and execution of several R&D projects

Clinical Research Coordinator, Kriger Research Center Inc., Toronto, Canada. (2005).

- Member of clinical development team
- Managed assigned investigational study sites and performed on-site quality reviews of case report form data

- Created research site evaluation form
- Developed study time lines
- Conducted routine monitoring visits to ensure investigator and staff were in compliance with protocol, TDP, FDA and ICH regulations, GCPs and pertinent SOPs
- Ensured informed consent was administered properly and advised site of any execution issues
- Performed drug accountability and reconciled counts with CRF, source data and dispensing logs
- Oversaw and evaluated subject enrolment, and compiled and reviewed patients' status tracking information
- Developed and implemented site initiation, routine monitoring and closure checklists

Research Fellow, Department of Basic Medical Sciences, University of the West Indies, Mona Campus, Kingston, Jamaica. (2000 - 2004).

- Taught undergraduate medical and science students in the areas of nutrition and metabolism
- Coordinated research projects
- Collected, identified, screened and assessed selected variety of Caribbean and Mexican food crops and spices
- Preserved the selected food crops and spices in a germ plasm collection
- Bred and induced diabetes and malnutrition in albino rats and performed feeding trials using different extracts from selected food crops and spices
- Performed biochemical, morphological and physiological analysis on vital organs and tissues
- Executed chemical analysis of anti-nutritional factors in selected legumes, greens, ackee, fruits, tubers, spices, bush tea and seeds with high fat concentrations
- Quantified the levels of anti-nutritional substances in the form which foods are eaten
- Performed research in the area of nutritional biochemistry
- Supervised and trained graduate students and research assistants
- Developed and introduced various nutritional biochemistry courses and research techniques to research students
- Prepared and submitted half-yearly progress reports and prepared series of technical reports of the research
- Presented research findings at seminars, conferences, and meetings

Visiting Research Scientist, Department of Human Nutritional Sciences, University of Manitoba, Winnipeg, Manitoba, Canada. (2003).

- Conducted research on the inhibition of angiotensin converting enzyme (ACE) activity by peptide hydrolysates from food proteins

Researcher, Department of Basic Medical Sciences, University of the West Indies, Mona Campus, Kingston, Jamaica. (1998 - 2000).

- Conducted research on the medicinal potentials of some Caribbean tuber crops
- Supervised and trained graduate students and research assistants

Director of Research, College of Agriculture, Science and Education, Port Antonio, Portland, Jamaica. (1996 - 1998).

- Coordinated research activities in three faculties: Agriculture, Science and Education
- Prepared research proposals to obtain external research funding
- Developed research policy statement, faculty evaluation instrument, annual research budget and annual and long-term research plans for the college
- Solicited to other institutions for collaborative linkages
- Managed college research budgets and monitored the implementation of research programs
- Chair, Chemistry Program Committee

Visiting Research Scientist, Department of Biochemistry, University of the West Indies, Mona Campus, Kingston, Jamaica. (1996).

- Planned and executed research on the effect of yam extracts (*D. Cayenensis*) and dasheen (*Colocassia esculenta*) on diabetic rats; and the effect of organic extracts from yam (*D. Cayenensis*) on malnourished rats
- Studied yam tissue cultures

Lecturer 1, Department of Biochemistry, University of Benin, Benin City, Nigeria. (1990 - 1996).

- Taught medical, pharmacy and science students biochemistry courses and supervised final year projects
- Coordinated seminars
- Students' course advisor
- Planned and prepared timetables, and coordinated all examinations
- Drafted academic curricula for diploma programs in Brewing Science, Nutrition and Food Science
- Conducted chemical and biological analyses of water

Teacher, Government College, Kawaji-Kano, Nigeria. (1985 - 1986).

Taught students in the areas of biology and chemistry

Research Assistant, Department of Biochemistry, University of Benin, Benin City, Nigeria. (1984).

Analysed the nutritional composition of Nigerian foods and feeding stuffs

Laboratory Assistant, Department of Biochemistry, University of Benin, Benin City, Nigeria. (1980 - 1981).

- Prepared students' practical classes and examinations
- Supervised examinations

## Professional Memberships

American Society for Clinical Pathology  
American Association for Clinical Chemistry  
Caribbean Academy of Sciences  
International Biopharmaceutical Association  
Biochemical Society of Nigeria  
Nigeria Institute of Food Science and Technology

## TEACHING

### Teaching Experience

BIMS 3100, ESSENTIALS FOR APP LAB SCIENCE  
BIMS 3102, ESSENTIALS LAB FOR CLIN LAB SC  
BIMS 3103, ESSENTIALS LAB FORENSIC SCI  
BIMS 3200, ESSENTIALS FOR APP LAB SCIENCE  
BIMS 4200, PROF SKILLS FOR CLIN LAB SCIEN  
BIMS 4297, PROFESSIONAL PRACTICUM I  
BIMS 4325, CLINICAL CHEMISTRY I  
BIMS 4326, CLINICAL CHEMISTRY II  
BIMS 4327, INTRODUCTION TO TOXICOLOGY  
BIMS 4382, ADVANCED MEDICAL LAB PROCEDURE  
BIMS 4384, PROF SKILLS FOR CLIN LAB SCI  
BIMS 4396, DIS: Metabolism in streptozotocin-induced diabetic rats fed phytic acid supplement  
BIMS 4599, PROFESSIONAL PRACTICUM III  
BIMS 5327, TOXICOLGY

BIOL 1407, BIOLOGY II  
BIOL 4396, DIS: Oxidative Stress Markers in the Liver and Kidney of Streptozotocin-induced Diabetic Rats  
BIOL 5102, GRADUATE DEFENSE SEMINAR  
BIOL 5392, THESIS PROPOSAL  
BIOL 5393, THESIS RESEARCH  
BIOL 5394, THESIS SUBMISSION  
BIOL 5940, PROJECT RESEARCH

## Teaching Awards and Honors

Honors Program Faculty, Member, Texas A&M University-Corpus Christi. (2012).

## SCHOLARLY AND CREATIVE ACTIVITIES

### Publications

#### Refereed

##### Book Chapters

Omoruyi, F. O. (2010). *Beneficial and adverse effects of phytic acid extract from Sweet Potato (Ipomoea batatas)*. In *Biometals: Molecular Structures, Binding Properties and Applications* (Biometals: Molecular Structures, Binding Properties and Applications ed., pp. 119-137). New York: Nova Science Publishers, Inc.

Omoruyi, F. O., Okorodudu, A. O. (2010). *Fecal electrolytes and Osmolality* (Methods in Clinical Chemistry, An Accessory work to the 5th Edition of Kaplan & Pesce's; Clinical Chemistry: Theory, Analysis, Correlation ed.). Mosby, Inc., an affiliate of Elsevier Inc.

##### Journal Articles

Olumese, F., Onoagbe, I., Eze, G., Omoruyi, F. (2016). Safety assessment of Uvaria chamae root extract: acute and subchronic toxicity studies. *Journal of African Association of Physiological Sciences*, 4(1), 61-65.

Foster, S., Omoruyi, F., Bustamante, J., Lindo, R., Dilworth, L. (2016). The effect of combined inositol hexakisphosphate and inositol supplement in streptozotocin-induced type 2 diabetic rats. *International Journal of Experimental Pathology*, 97(5), 397-407.

Nguyem, K., Sparks, J., Omoruyi, F. (2016). Investigation of the cytotoxicity, antioxidative and immune-modulatory effects of Ligusticum proteri (Osha) root extract on human peripheral blood lymphocytes. *Journal of Integrative Medicine*, 14(6), 465-472. [jcmjournal.com/jim](http://jcmjournal.com/jim) or [elsevier.com/locate/issn/20954964](http://elsevier.com/locate/issn/20954964)

Mehon, N., Sparks, M. J., Omoruyi, F. O. (2016). Oxidative Stress Parameters and Erythrocyte membrane Adenosine Triphosphatase Activities in Streptozotocin-induced Diabetic Rats Administered Aqueous Preparation of Kalanchoe Pinnata Leaves. *Pharmacognosy Research*, 8(2), 85-88. [www.phcogres.com](http://www.phcogres.com)

McKoy, M.-L., Thomas, P.-G., Asemota, H., Omoruyi, F. O., Simon, O. (2014). Effects of Jamaican bitter yam (*Dioscorea polygonoides*) and diosgenin on blood and fecal cholesterol in rats. *Journal of Medicinal Food*, 17(11), 1183-1188.

- Omoruyi, F. O., Budiaman, A., Eng, Y., Olumese, F., Hoesel, J., Ejimele, A., Okorodudu, A. (2013). The Potential Benefits and Adverse Effects of Phytic Acid Supplement in Streptozotocin-Induced Diabetic Rats. *Advances in Pharmacological Sciences*, 7.
- Daley, T., Omoregie, S. N., Wright, V., Omoruyi, F. O. (2013). Effects of phytic acid and exercise on some serum analytes in rats orally exposed to diets supplemented with cadmium. *Biological Trace Element Research*, 151(3), 400-405.
- Wright, V., Jones, S., Omoruyi, F. O. (2012). Effect of bauxite mineralized soil on residual metal levels in some post harvest food crops in Jamaica. *Bulletin of Environmental Contamination and Toxicology*, 89(4), 824-830.
- Dilworth, L. L., Gardner, M., Asemota, H. N., Omoruyi, F. O. (2012). Intestinal morphology assessments of rats fed phytic acid extract from Sweet Potato (*Ipomoea batatas*). *Basic and Applied Pathology*, 5(4), 84-90.
- Omoruyi, F. O., Mustafa, G. M., Okorodudu, A. O., Petersen, J. R. (2012). Evaluation of the Performance of Urine albumin, Creatinine, Albumin-Creatinine Ratio Assay on Two POCT Analyzers Relative to a Central Laboratory Method. *Clin Chim Acta*, 413(5-6), 625-629.
- Powell, M., Wheatley, A. O., Omoruyi, F. O., Asemota, H. N., Williams, N. P., Tennant, P. F. (2010). Comparative effects of dietary administered transgenic and conventional papaya on selected intestinal parameters in rat models. *Transgenic Research*, 19(3), 511-518.
- Daley, T., Omoregie, S., Wright, V., Omoruyi, F. O. (2010). Effects of phytic acid and exercise on some serum analytes in rats orally exposed to diets supplemented with cadmium. *Clinical Chemistry*, 56(6), Supplement, A4.
- Petersen, J. R., Omoruyi, F. O., Mohammad, A. A., Okorodudu, A. O., Shea, T., Ju, H. (2010). Hemoglobin A1c: assessment of three POC analyzers relative to a central laboratory method. *Clinica Chimica Acta*, 14(411(23-24)), 2062-2066.
- Omoruyi, F. O., Okorodudu, A. O., Mohammad, A. A., Petersen, J. R. (2009). Hepatorenal syndrome in a 52 year old male patient. *LABMEDICINE*, 40(5), 274-276.
- Dillon, P., Ahnadi, C., Grant, A., Delaney, C., Schiff, E., Okorodudu, A., Omoruyi, F. O., Anostario, M., Bauer, R., Saxton, C. (2008). A Multi-Center Evaluation of the Analytical Performance of the ADVIA Centaur Hepatitis Assays on the ADVIA Centaur CP Immunoassay System. *Clinical Chemistry*, 54(6), Supplement, A63.
- Omoruyi, F. O., Okorodudu, A. O., Mohammad, A. A., Petersen, J. R. (2008). Acute renal failure in the presence of chronic renal disease in a 31 year old Caucasian female. *LABMEDICINE*, 39(9), 533-535.
- Dilworth, L. L., Omoruyi, F. O., Reid, W., Asemota, H. N. (2008). Bone and Faecal Minerals and Scanning Electron Microscopic Assessments of Femur in Rats Fed Phytic Acid Extract from Sweet Potato (*Ipomoea batatas*). *Biometals*, 20, 37-42.
- Powell, M., Wheatley, A., Omoruyi, F. O., Asemota, H., Williams, N. P., Tennant, F. P. (2008). Effects of subchronic exposure to transgenic papayas (*Carica papaya* L.) on liver and kidney enzymes and lipid parameters in rats. *Journal of the Science of Food and Agriculture*, 88, 2638-2647.
- Omoruyi, F. O. (2008). Jamaican Bitter Yam Sapogenin: Potential Mechanisms of Action in Diabetes. *Plant Foods for Human Nutrition*, 63(3), 135-140.

- Russell, K. R., Omoruyi, F. O., Pascoe, K. O., Morrison, E. Y. (2008). The hypoglycemic Activity of *Bixa orellana* Extract in the Dog. *Methods and Findings in Experimental and Clinical Pharmacology*, 30(4), 301-305.
- Dilworth, L. L., Omoruyi, F. O., Asemota, H. N. (2007). Anti-nutritional factors, zinc, iron and calcium in some Caribbean tuber crops and the effect of boiling or roasting. *Nutrition and Food Science*, 37(1), 8-15.
- Dilworth, L. L., Omoruyi, F. O., Asemota, H. N. (2007). In vitro availability of some essential minerals in commonly eaten processed and unprocessed Caribbean tuber crops. *Biometals*, 20(1), 37-42.
- McAnuff-Harding, M. A., Omoruyi, F. O., Asemota, H. N. (2006). Faecal lipids and minerals in streptozotocin-induced diabetic rats fed Bitter yam (*Dioscorea polygonoides*) steroidal sapogenin extract. *Pakistan Journal of Pharmaceutical Sciences*, 19(4), 269-275.
- McAnuff, M. A., Omoruyi, F. O., Asemota, H. N. (2006). Intestinal disaccharidases and some renal enzymes in streptozotocin-induced diabetic rats fed sapogenin extract from bitter yam (*Dioscorea polygonoides*). *Life Sciences*, 78(22), 2595-2600.
- McAnuff, M. A., Omoruyi, F. O., Morrison, E. Y., Asemota, H. N. (2005). Changes in some liver enzymes in Streptozotocin-induced diabetic rats fed sapogenin extract from bitter yam (*Dioscorea polygonoides*) or commercial diosgenin. *West Indian Medical Journal*, 54(2), 97-101.
- Dilworth, L. L., Omoruyi, F. O., Asemota, H. N. (2005). Digestive and transport enzymes in rats fed Phytic acid extract from sweet potato (*Ipomea batatas*). *Diabetologia Croatica*, 34(2), 59-65.
- McAnuff, M. A., Harding, W. W., Omoruyi, F. O., Jacobs, H., Morrison, E. Y., Asemota, H. N. (2005). Hypoglycemic effects of steroidal sapogenins isolated from Jamaican bitter yam (*Dioscorea polygonoides*). *Food and Chemical Toxicology*, 43(11), 1667 - 1672.
- McAnuff, M. A., Omoruyi, F. O., Sotelo-Lopez, A., Asemota, H. N. (2005). Proximate analyses and some anti-nutritional factor constituents in selected varieties of Jamaican yam (*Dioscorea* and *Rajana* spp). *Foods for Human Nutrition*, 60(2), 93-98.
- Dilworth, L. L., Omoruyi, F. O., Simon, O., Morrison, E. Y., Asemota, H. N. (2005). The effect of phytic acid on the levels of Blood glucose and some enzymes of carbohydrate and lipid metabolism. *West Indian Medical Journal*, 54(2), 102-106.
- Omoruyi, F. O., Dilworth, L. L., Asemota, H. N., Jacobs, H., Morrison, E. Y. (2004). An evaluation of cyanoglucoside, total phenol, protease inhibitors, phytic acid and zinc contents in some Caribbean food crops. *Bioscience Research Communications*, 15(3), 225-229.
- Dilworth, L. L., Omoruyi, F. O., Simon, O., Morrison, E. Y., Asemota, H. N. (2004). Effects of Sweet Potato (*Ipomea Batatas*) Phytic Acid Extract on Blood Glucose, liver function enzymes and faecal mineral Loss: A case Study with Rat Model. *West Indian Medical Journal*, 52(Suppl. 2), 45-46.
- McKoy, M. G., Omoruyi, F. O., Asemota, H. N., Simon, O. R. (2004). Evaluation of Toxicological Effects of a Sapogenin-Rich Yam (*Dioscorea* sp.) Preparation with Potential for Treating Hypercholesterolemia. *The FASEB Journal*, 18(5), A999.

Omoruyi, F. O., McAnuff, M. A., Dilworth, L. L., Morrison, E. Y., Asemota, H. N. (2004). Exploitation of Jamaican tuber crops for natural products utilization". *Science, Technology and Innovation, University of the West Indies*, 33 – 36.

Omoruyi, F. O. (2004). Hepatic carbohydrate and lipid metabolizing enzymes and the transaminases in rats fed phytic acid extract from sweet potato (*Ipomea batatas*). *West Indian Medical Journal*, 53(Suppl 2), 31-32.

Dilworth, L. L., Omoruyi, F. O., Simon, O., Morrison, E. Y., Asemota, H. N. (2004). Hypoglycaemia and faecal minerals in phytate fed rats. *Nutrition and food science*, 34(2), 60-64.

Dilworth, L. L., Omoruyi, F. O., Asemota, H. N. (2004). Intestinal enzymes and bone minerals in rats fed Phytic acid extract from Sweet Potato (*Ipomea batatas*). *The FASEB Journal*, 18(8), C44, Abstracts, 1.1-147.3.

McAnuff, M. A., Omoruyi, F. O., Gardner, M., Asemota, H. N., Morrison, E. Y. (2003). Alterations in intestinal morphology of streptozotocin-induced diabetic rats fed Jamaican bitter yam (*Dioscorea polygonoides*) sapogenin extract. *Nutrition Research*, 23(11), 1569-1577.

Asemota, H., Omoruyi, F. O., McAnuff, M., Dilworth, L., Harding, W., Jacobs, H., Anderson, N., Ahmad, M., Morrison, E. (2003). Analyses of Natural Products in Jamaican Tuber Crops: The need for Biotechnological Exploitation. *Jamaica Journal on Science and Technology*, 14, 3-8.

Omoruyi, F. O., McAnuff, M. A., Morrison, E. Y., Asemota, H. N. (2003). Exploitable potentials of sapogenin extract from Jamaica bitter yam (*D. polygonoides*) in the management of diabetes mellitus. *West Indian Medical Journal*, 52(Suppl. 2), 38-39.

McAnuff, M. A., Omoruyi, F. O., Morrison, E. Y., Asemota, H. N. (2003). Hepatic function enzymes and lipid peroxidation in streptozotocin-induced diabetic rats fed Bitter yam (*Dioscorea polygonoides*) steroidal sapogenin extract. *Diabetologia Croatica*, 32(1), 17-23.

McKoy, M., Omoruyi, F. O., Simon, O., Asemota, H. (2003). Investigation of the effects of a sapogenin rich preparation from a Jamaica yam (*Dioscorea sp.*) on blood cholesterol levels in rats. *Proceedings of the Western Pharmacology Society*, 46, 156-159.

Powell, M. P., Wheatley, A. O., Tennant, P. F., Omoruyi, F. O., Asemota, H. N., Gonsalves, D., Morrison, E. Y., Ahmad, M. (2003). Rat intestinal transport enzymes: Effect of the consumption of transgenic Papaya (*Carica papaya L.*). *Molecular and Cellular Proteomics*, 2(9), 881.

Grindley, P. B., Omoruyi, F. O., Asemota, H. N., Morrison, E. Y. (2002). Carbohydrate digestion and intestinal ATPases in streptozotocin-induced diabetic rats fed extract of yam (*Dioscorea cayenensis*) or dasheen (*Colocasia esculenta*). *Nutrition Research*, 22(3), 333-341.

McAnuff, M. A., Omoruyi, F. O., Asemota, H. N., Morrison, E. Y. (2002). Plasma and liver lipid distributions in streptozotocin-induced diabetic rats fed sapogenin extract from wild yam. *Nutrition Research*, 22(12), 1427-1434.

Powell, M., Wheatley, A., Tennant, P., Omoruyi, F. O., Gonsalves, D., Asemota, H., Ahmad, M. (2002). The effects of consumption of coat protein transgenic papaya (*Carica papaya l*) on liver and kidney enzyme functions in rats. *West Indian Medical Journal*, 51(Suppl. 4), 18.

- Grindley, P. B., Omoruyi, F. O., Asemota, H. N., Morrison, E. Y. (2001). Effect of yam (*Dioscorea cayenensis*) and dasheen (*Colocassia esculenta*) extracts on the kidney of streptozotocin-induced diabetic rats. *International Journal of Food Sciences and Nutrition*, 52(5), 429-433.
- Omoruyi, F. O., Grindley, P. B., Asemota, H. N., Morrison, E. Y. (2001). Increased plasma and liver lipids in streptozotocin-induced diabetic rats: Effects of yam (*Dioscorea cayenensis*) or dasheen extract (*Colocassia esculenta*) extract supplements. *Diabetologia Croatica*, 30(3), 87-92.
- Grindley, P. B., Omoruyi, F. O., Asemota, H. N., Morrison, E. Y. (2000). Hyperglycaemia, Hyperlipidaemia and Liver Lipid Metabolism in Streptozotocin-Induced Diabetic Rats Fed Organic Extracts of yam (*D. Cayenensis*, cv. Round leaf yellow yam) and Dasheen (*C. esculenta*). *Medical Science Research*, 28(2), 127-130.
- Grindley, P., Omoruyi, F. O., Asemota, H., Morrison, E. Y. (1998). Blood Lipids and Lipid Metabolism in the liver of Streptozotocin-induced Diabetic Rats Fed Organic Extracts of Yam (*D. Cayenensis*, cv. round leaf yellow yam) and Dasheen (*C. esculenta*). *West Indian Medical Journal*, 47(Suppl. 1), 31.
- Eriyamremu, G. E., Omoruyi, F. O. (1997). Effect of Dikanut (*Irvingia gabonensis*) on Fat Digestibility and Serum Lipid Profile in the Rat. *Nigeria Medical Journal*, 32(1), 3-6.
- Omoruyi, F. O., Osagie, V., Oboh, I. (1996). Hyperglycemic and hypolipidemic effects of *vernonia amygdalina* extract. *Journal of Medical Laboratory Sciences*, 5, 129-132.
- Omoruyi, F. O., Usifoh, C., Odukoya, O., Idaewor, P., Aziegbe, A. (1995). Biochemical effects of some local medicinal herbs in rats. *Nigerian Journal of Physiological Sciences*, 11, 53-55.
- Omoruyi, F. O., Osagie, A. U., Adamson, I. (1994). Blood protein and tissue enzymes in malnourished rats rehabilitated with corn-crayfish-protein diets. *Bioscience Research Communications*, 6(1), 1-6.
- Omoruyi, F. O., Adamson, I. (1994). Early enzyme changes caused by a dietary fiber (Dikanut) in the kidney of streptozotocin-induced diabetic rat. *Journal of Nutritional Biochemistry*, 5(193-196).
- Omoruyi, F. O., Adamson, I. (1994). Effect of supplements of dikanut (*Irvingia gabonensis*) and cellulose on plasma lipids and composition of hepatic phospholipids in streptozotocin-induced diabetic rat. *Nutrition Research*, 14, 537-544.
- Omoruyi, F. O., Illegben, M., Ena-Umweni, O., Akpobome, I. (1994). Effects of dikanut (*Irvingia gabonensis*) on blood glucose level and some enzyme activities in rat intestine and liver. *Journal of Medical Laboratory Sciences*, 4, 149-153.
- Omoruyi, F. O., Adamson, I. (1994). Increase hepatic metabolism of glucose in streptozotocin-induced diabetic rats fed dikanut (*Irvingia gabonensis*) and cellulose. *Bioscience Research Communications*, 6(1), 11-16.
- Omoruyi, F. O., Adamson, I. (1993). Digestive and hepatic enzymes in streptozotocin-induced diabetic rats fed supplements of dikanut (*Irvingia gabonensis*) and cellulose. *Annals of Nutrition and Metabolism*, 33, 14-23.
- Omoruyi, F. O., Adamson, I. (1993). Effect of supplements of dikanut (*Irvingia gabonensis*) and cellulose on the activities of intestinal lipase and some enzymes of lipid metabolism in



the liver of streptozotocin- induced diabetic rats. *Journal of Medical Laboratory Sciences*, 3, 85-88.

Omoruyi, F. O., Nwankwo, C., Akporugo, U. (1993). Metabolic activities in rats fed dietary supplement of dikanut (*Irvingia gabonensis*). *Bioscience Research Communications*, 5(2), 117-119.

#### Periodicals

Omoruyi, F. O. (2006). *Does the Biopharmaceutical Industry really want to Cure Hypertension?* (April Edition ed., pp. 9p). International Biopharmaceutical Association.

Omoruyi, F. O. (2006). *The Future of Safety Pharmacology Studies for Human Pharmaceuticals* (March Edition ed., pp. 12p). International Biopharmaceutical Association.

#### Non-Refereed

##### Abstract

Menon, N., Eng, Y., Mercado, A., Sparks, M. J., Omoruyi, F. O. (2014). *Anti-diabetic Activity and Inflammatory Response in Streptozotocin-induced Diabetic Rats Administered Aqueous Preparation of Kalanchoe pinnata Leaves*. AACC Abstract # 439.

#### Presentations

Foster, S. (Author), Lindo, R. (Author), Dilworth, L. (Author & Presenter), Bustamante, J. (Author), Omoruyi, F. (Author), "Anti-diabetic Properties of Combined Inositol Hexakisphosphate and Inositol in Streptozotocin-induced Type 2 Diabetic Mellitus Sprague-Dawley Rats," 68th American Association for Clinical Chemistry Annual Scientific Meeting, AACC, Philadelphia, Pennsylvania. (2016).

Olumese, F. (Author & Presenter), Onoagbe, I. (Author), Eze, G. (Author), Omoruyi, F. (Author), "Histopathological Changes in some Organs of Diabetic Rats Administered Aqueous or Ethanolic Extract of *Uvaria chamae*," 68th American Association for Clinical Chemistry Annual Scientific Meeting, AACC, Philadelphia, Pennsylvania. (2016).

Diaz, G. (Author & Presenter), Kirby, M. (Author & Presenter), Quintanilla, M. (Author & Presenter), Sparks, J. (Author), Omoruyi, F. (Author), "Biochemical Changes Associated with HbA1c Levels in Diabetes," American Society for Clinical Laboratory Science Annual Meeting, ASCLS, Philadelphia, Pennsylvania. (2016).

Rios, L. (Author & Presenter), Sparks, J. (Author), Omoruyi, F. (Author), "Treatment of Type 2 Diabetes with *Kalanchoe pinnata* Preparation," American Society for Clinical Laboratory Science Annual Meeting, ASCLS, Philadelphia, Pennsylvania. (2016).

Diaz, G. (Author & Presenter), Kirby, M. (Author), Quintanilla, M. (Author), Sparks, M. J., Omoruyi, F. O., "Biochemical Changes Associated with HgbA1c in Diabetes," American Society of Clinical Laboratory Science 2016. (July 2016).

Rios, L. (Author & Presenter), Sparks, M. J., Omoruyi, F. O., "Treatment of Type 2 Diabetes with *Kalanchoe pinnata* preparation," American Society of Clinical Laboratory Science 2016. (July 2016).

Olumese, F. E. (Author & Presenter), Omoruyi, F. O. (Author), Onoagbe, I. O. (Author), "Organ Function and Oxidative Stress Indices in Streptozotocin-induced Diabetic Rats Administered

Aqueous or Ethanolic Extract of Uvaria Chamae Roots," AACC Annual Meeting, American Association for Clinical Chemistry, Atlanta. (2015).

Nguyen, K. (Author & Presenter), Sparks, M. J. (Author), Omoruyi, F. O. (Author), "Effects of Ligusticum porteri on Human Peripheral Lymphocytes," Conference, American Society for Clinical Laboratory Science Annual Meeting, Atlanta. (2015).

Foster, S. R. (Author & Presenter), Dilworth, L. (Author), Omoruyi, F. O. (Author), Bustamante, J. (Author), Lindo, A. (Author), "Inositol Hexakisphosphate (IP6) and Inositol Combination Lowers Fluid and Food Intake in Type 2 Diabetes Mellitus Sprague-Dawley Rats," Kingston, Jamaica. (2015).

Foster, S. R. (Author & Presenter), Lindo, R. L. (Author), Omoruyi, F. O. (Author), Bustamante, J. (Author), Dilworth, L. L. (Author), "The Effects of Inositol and Inositol Hexakisphosphate (IP6) Combination on Blood Glucose Concentration and Lipid Metabolism in Type 2 Diabetes Mellitus Sprague-Dawley Rats.," University Diabetes Outreach, 21st International Conference: New Developments in Diabetes and Kidney Disease, University of the West Indies, Mona, Jamaica, Kingston, Jamaica. (2015).

menon, n. (Author & Presenter), Sparks, M. J., Omoruyi, F. O., "Serum Lipid Levels and Oxidative Stress Parameters in Streptozotocin-induced Diabetic Rats Administered Aqueous Preparation of Kalanchoe pinnata Leaves," NASCE 2015 Conference, North American Society of Comparative Endroecology, Canada. (June 2015).

Menon, N., Eng, Y., Mercado, A., Sparks, M. J., Omoruyi, F. O., "Anti-diabetic Activity and Inflammatory Response in Streptozotocin-induced Diabetic Rats Administered Aqueous Preparation of Kalanchoe pinnata Leaves," AACC Annual Meeting, American Association for Clinical Chemistry, Chicago. (2014).

Olumese, F. E. (Author & Presenter), Omoruyi, F. O. (Author), Onoagbe, I. O. (Author), "Effects of Uvaria chamae Extracts on Blood Glucose, Inflammatory Markers, Hematological and Renal Status in Streptozotocin-induced Diabetic Rats," AACC Annual Meeting, Ammerican Association for Clinical Chemistry, Chicago. (2014).

Omoruyi, F. O. (Presenter), "Diabetes Mellitus Epidemic: An Update on Prevalence and Laboratory Testing," Conference, Texas Association for Clinical Laboratory Science Annual Meeting, Corpus Christi. (2014).

Budiaman, A. (Author & Presenter), Eng, Y. (Author), Omoruyi, F. O. (Author), "The Potential Benefits and Adverse Effects of Phytic Acid Supplement in Streptozotocin-induced Diabetic Rats," College of Pharmacy Research Colloquim, TAMUK, Kingsville. (2013).

Eng, Y. (Author & Presenter), Mercado, A. (Presenter), Menon, N. (Presenter), Sparks, M. J. (Other), Omoruyi, F. O. (Other), ". "Evaluation of Kalanchoe pinnata aqueous extract in streptozotocin-induced diabetic rats.," Texas A&M System Thirteenth Annual Undergraduate Research Symposium, Texas A&M-Corpus Christi, Corpus Christi. (2013).

Menon, N. (Author & Presenter), Eng, Y. (Author), Mercado, A. (Author), Sparks, J. (Author), Omoruyi, F. O., "Serum Proteins and Inflammatory Response in Streptozotocin-induced diabetic Rats Administered Aqueous Preparation of Kalanchoe pinnata Leaves," Texas A&M University System Eleventh Annual Pathways Student Research Symposium, Texas A&M University System, Kingsville. (2013).

Eng, Y. (Author & Presenter), Mercado, A. (Author), Menon, N. (Author), Sparks, J. (Author), Omoruyi, F. O. (Author), "Evaluation of Kalanchoe Pinnata Aqueous Extract in Streptozotocin-

Induced Diabetic Rats.," Thirteenth Annual Undergraduate Research Symposium, TAMUCC, Corpus Christi. (2013).

Budiaman, A. (Author & Presenter), Omoruyi, F. O. (Author), "Phytic Acid Supplement: Any Benefits in Diabetes?," Twelfth Annual Undergraduate Symposium, TAMUCC, Corpus Christi. (2013).

Olumese, F. E. (Author), Menon, N. (Author), Onoagbe, I. O. (Author), Omoruyi, F. O. (Presenter), "Hepatic and renal function enzymes and lipid profile in normal rats administered extracts of *Uvaria chamae*," Collaborative Basic and Translational Research in the Sciences, The University of Texas at San Antonio College of Sciences, San Antonio. (2012).

Omoriegie, S. N. (Author & Presenter), Omoruyi, F. O. (Author), Zimba, P. (Author), Wright, V. (Author), Jones, L. (Author), "Anticancer Activities of Lesser Galangal (*Alpinia officinarum* Jam1), Turmeric (*Curcuma longa*) and Ginger (*Zingiber officinale*) against Acute Monocytic Leukemia: A Preliminary Study," American Association for Clinical Chemistry Annual Meeting, Los Angeles. (July 2012).

Krueger, A. (Author & Presenter), Rodriguez, H. (Author & Presenter), Omoruyi, F. O. (Author), "Assessment of Erythrocyte Membrane ATPases and Serum Alkaline Phosphatase and Amylase in Diabetes Mellitus," Eleventh Annual Undergraduate Research Symposium. (2011).

Dilworth, L. L. (Author & Presenter), Gardner, M. (Author), Asemota, H. N. (Author), Omoruyi, F. O., "Morphological Changes in the Intestine of Rats Fed Phytic Acid Extract from Sweet Potato (*Ipomoea batatas*)," American Association for Clinical Chemistry, Atlanta. (July 2011).

Omoruyi, F. O., "Anti-nutritional Factors in Foods: Potential Mechanisms of Action in Health and Diseases," Public Lecture, Northern Caribbean University, Mandeville, Jamaica. (April 2010).

Omoruyi, F. O., "Nuts and bolts of doing research," Research Day, Northern Caribbean University, Mandeville, Jamaica. (March 2010).

Omoruyi, F. O., "Point of Care Testing: The Role of Laboratory Professionals," Continuing Education Seminar, The Caribbean Association of Medical Technologists, Northern Caribbean University, Mandeville, Jamaica. (2009).

Omoruyi, F. O., "Phytic acid (IP6) in health and disease," Grand Rounds, Department of Pathology, University of Texas Medical Branch, Galveston, Texas. (May 2008).

Dilworth, L. L., Omoruyi, F. O., Asemota, H. N., "Overview of the in vitro availability of some essential minerals in commonly eaten processed and unprocessed food crops," Seventh Conference, Faculty of Pure and Applied Sciences, University of the West Indies, Mona, Kingston, Jamaica. (2005).

Powell, P., Wheatley, A. O., Williams, N., Omoruyi, F. O., Asemota, H. N., Tennant, P. F., "Safety assessment of transgenic papaya (*Carica papaya*) in rat models: Histopathology studies," Seventh Conference, Faculty of Pure and Applied Sciences, University of the West Indies, Mona, Kingston, Jamaica. (2005).

Dilworth, L., Omoruyi, F. O., Simon, O., Morrison, E. Y., Asemota, H. N., "Hepatic carbohydrate and lipid metabolizing enzymes and the transaminases in rats fed phytic acid extract from sweet potato (*Ipomoea batatas*)," 49th Annual Caribbean Health Research Council, Caribbean Health Research Council, St. Georges, Grenada. (2004).

Dilworth, L. L., Omoruyi, F. O., Simon, O., Morrison, E. Y., Asemota, H. N., "Effects of Phytic Acid Extract from Sweet Potato (*Ipomoea Batatas*) on Blood Glucose and Loss of Zinc and Iron in the

Faeces of Rats," 17th Annual Conference on Science and Technology. Science and Technology for Economic Development: Technology-Driven Agriculture and Agro-Processing, Scientific Research Council, Kingston, Jamaica. (2003).

Dilworth, L. L., Omoruyi, F. O., Morrison, E. Y., Asemota, H. N., "Effects of consumption of phytic acid extract from sweet potato (*Ipomoea batatas*) on some digestive enzymes, blood glucose and lipid distributions in rats," HUPO 2ND Annual & IUBMB XIX Joint World Congress, HUPO/IUBMB, Montreal, Canada. (2003).

Dilworth, L., Omoruyi, F. O., Jacobs, H., Morrison, E. Y., Asemota, H. N., "Anti-nutritional factors and minerals contents in some Caribbean tuber crops: Effects of processing," The sixth conference, Faculty of Pure and Applied Sciences, University of the West Indies, Mona, Kingston, Jamaica. (2003).

Powell, M. P., Wheatley, A. O., Tennant, P. F., Omoruyi, F. O., Asemota, H. N., Gonsalves, D., Morrison, E. Y., Ahmad, M., "Effects of consumption of transgenic papaya (*Carica papaya* L.) on rat intestinal disaccharidases," The sixth conference, Faculty of Pure and Applied Sciences, University of the West Indies, Mona, Kingston, Jamaica. (2003).

McAnuff, M. A., Omoruyi, F. O., Gardner, M. T., Morrison, E. Y., Asemota, H. N., "Intestinal morphometric alterations in streptozotocin-induced diabetic rats fed bitter yam (*D. polygonoides*) sapogenin extract," The sixth conference, Faculty of Pure and Applied Sciences, University of the West Indies, Mona, Kingston, Jamaica. (2003).

Omoruyi, F. O., McAnuff, M., Asemota, H. N., Morrison, E. Y., "Jamaica wild yam as a source of cholesterol-reducing properties in the blood," Ethnopharmacology Seminar with the Theme: The Role of Ethnopharmacology in the Development of Medicinal Products from Plants, Organization of America States through the National Commission on Science & Technology, Kingston, Jamaica. (2002).

Dilworth, L., Omoruyi, F. O., Wheatley, A., Morrison, E. Y., Asemota, H. N., "Blood Glucose and some faecal minerals in rats fed phytic acid extract from sweet potato (*Ipomea batatas*)," The 16th Annual Conference on Science and Technology. Science and Technology for Economic Development: Towards Health, Wealth and Knowledge, Scientific Research Council, Kingston, Jamaica. (2002).

McAnuff, M. A., Omoruyi, F. O., Morrison, E. Y., Asemota, H. N., "Oxidative stress and liver function enzymes in streptozotocin-induced diabetic rats fed Jamaican wild yam (*Dioscorea* sp) Steroidal Sapogenin extract," The 16th Annual Conference on Science and Technology. Science and Technology for Economic Development: Towards Health, Wealth and Knowledge, Scientific Research Council, Kingston, Jamaica. (2002).

Omoruyi, F. O., McAnuff, M., Dilworth, L., Harding, W., Anderson, N., Jacobs, H., Morrison, E., Asemota, H., "Sustainable development potential of Jamaican tuber crops through exploitation of the natural products," Research Day, University of the West Indies, Mona, Kingston, Jamaica. (2001).

McAnuff, M., Omoruyi, F. O., Harding, W., Anderson, N., Jacobs, H., Morrison, E., Asemota, H., "Extraction and Characterization of Steroidal Sapogenins from the Jamaican wild Yam," The 15th Annual Conference on Science and Technology, Scientific Research Council, Kingston, Jamaica. (2001).

Omoruyi, F. O., Asemota, H., Jacobs, H., Morrison, E., "Anti-nutritional Factors in selected food crops of the Caribbean," The fifth conference, Faculty of Pure and Applied Sciences, University of the West Indies, Mona, Kingston, Jamaica. (2001).

Omoruyi, F. O., Dilworth, L., Asemota, H., Jacobs, H., Morrison, E., "Effect of cooking on phytic acid levels in some Caribbean tuber crops," The fifth conference, Faculty of Pure and Applied Sciences, University of the West Indies, Mona, Kingston, Jamaica. (2001).

McAnuff, M., Omoruyi, F. O., Harding, W., Wheatley, A., Anderson, N., Jacobs, H., Morrison, E., Asemota, H., "Jamaican Yams: Nature's Own Medicine," The fourth conference, Faculty of Pure and Applied Sciences, University of the West Indies, Mona, Kingston, Jamaica. (2001).

Knight, O. S., Omoruyi, F. O., Hamilton, M. A., Asemota, H. N., "Cell wall degrading enzymes in in-vitro derived plantlets of round-leaf yellow yam (*Dioscorea cayenensis*) infected with *Xanthomonas campestris*," The Fourth Conference, Faculty of Pure and Applied Sciences, University of the West Indies, Mona, Kingston, Jamaica. (1999).

Grindley, P., Omoruyi, F. O., Asemota, H., Morrison, E. Y., "Effect of yam and dasheen extracts on lipid metabolism in streptozotocin-induced diabetic rats," The fourth conference, Faculty of Pure and Applied Sciences, University of the West Indies, Mona, Kingston, Jamaica. (1999).

Grindley, P. B., Omoruyi, F. O., Asemota, H. N., Morrison, E. Y., "Blood Glucose and lipids in streptozotocin-induced diabetic rats fed organic extracts of yam (*Dioscorea cayenensis*) and dasheen (*Colocassia esculenta*)," Faculty of Medicine Conference, University of the West Indies, Mona, Kingston, Jamaica. (1998).

Omoruyi, F. O., "Formulation and assessment of high protein low-cost weaning foods using local raw materials," The Twenty-fourth (24th) Annual Conference of the Nutrition Society of Nigeria, Nutrition Society of Nigeria, Port-Harcourt, Nigeria. (1991).

Omoruyi, F. O., Adamson, I., "Metabolic activities of Dikanut (*Irvingia gabonensis*) in the liver of streptozotocin-induced diabetic rats," The Twenty-third (23rd) Annual Conference of the Nutrition Society of Nigeria, Nutrition Society of Nigeria, Sokoto, Nigeria. (1990).

## **Contracts, Grants and Sponsored Research**

Omoruyi, Felix (Principal), Sparks, Jean (Co-Principal), "University Betterment Grant to Upgrade CLS Laboratory," Sponsored by TAMU-CC\SOAR Betterment Program, Texas A&M University-Corpus Christi, \$37,141.72. (2016).

### **Contract**

Omoruyi, Felix O, "Phytic acid (IP6) supplement in the management of Type 2 diabetes," Other, \$4,438.00. (March 2014 - September 2014).

### **Grant**

Sparks, Mary Jean (Co-Principal), Omoruyi, Felix O (Principal), "Kalanchoe pinnata Preparation in the Treatment of Type 2 Diabetes," Sponsored by ASCLS, Private, \$5,000.00. (June 2014 - June 2015).

Sparks, Mary Jean (Co-Principal), Omoruyi, Felix O (Principal), "Mode of Action of Kalanchoe Pinnata Aqueous Extract in," Sponsored by University Research Enhancement Grant, Texas A&M University-Corpus Christi, \$5,000.00. (December 2012 - June 2013).

Omoruyi, Felix O (Principal), Sparks, Jean (Co-Principal), "Mode of action of kalanchoe pinnata aqueous extract in streptozotocin-induced diabetic rats," Texas A&M University-Corpus Christi, \$5,000.00. (December 2012 - June 2013).

Omoruyi, Felix O (Principal), "Potential Benefits of Dikanut (*Irvingia gabonensis*) and Phytic acid," Texas A&M University-Corpus Christi, \$9,328.87. (September 2011 - 2012).

Omoruyi, Felix O, "Evaluation of some Biochemical Changes in the Red Blood Cell Membrane and Serum of Diabetic Patients," Sponsored by TRDF, Texas A&M University-Corpus Christi, \$5,000.00. (January 2011 - 2012).

## **Scholarly and Creative Awards and Honors**

Winning presenter at the Diabetes Conference Poster Session, University Diabetes Outreach Program of the University of the West Indies, Jamaica. (2003).

Alumni Award, Edo Boys' High School Old Boys Association. (1994).

## **SERVICE**

### **Department**

Committee Member, Graduate Committee. (2012 - Present).

Faculty Mentor. (2011 - Present).

### **College**

Committee Member, College of S&E Library Committee. (2016 - Present).

Committee Member, S&E Curriculum Committee. (2011 - 2016).

Committee Member, Member, Marine Environmental Microbiology Search Committee. (2012 - 2013).

Chemistry Clubs Science Innovation. (2012).

### **University**

Committee Member, Academic Misconduct Committee. (2016 - Present).

Chairperson, IACUC (Vice-Chair 2014-15). (2012 - Present).

Committee Member, Institutional Biosafety Committee. (2012 - Present).

Committee Member, Inclusive Excellence Committee. (2013 - 2015).

Committee Member, Library Committee. (2011 - 2014).

### **Professional**

Officer, Treasurer, American Association for Clinical Chemistry, Texas Section. (January 2017 - Present).

Member, Network of Minority Health Research Investigators. (2015 - Present).

Conference-Related, American Association for Clinical Chemistry (AACC) ANNUAL MEETING. (2011 - Present).

Reviewer, Journal Article, Journal of Pediatric Biochemistry. (2010 - Present).

Member, American Society for Clinical Pathology. (2008 - Present).

Member, American Association for Clinical Chemistry. (2006 - Present).

Reviewer, Journal Article, BMC Complementary and Alternative Medicine. (2016).

Reviewer, Journal Article, International Journal of Molecular Sciences. (2016).

Reviewer, Journal Article, Journal of the Pancreas. (2016).

Reviewer, Journal Article, *Molecules*. (2016).  
Reviewer, Journal Article, *Nutrients*. (2016).  
Reviewer, Journal Article, *Pharmaceutical Biology*. (2016).  
Officer, Secretary, American Association for Clinical Chemistry, Texas Section. (January 2014 - December 2016).  
Reviewer, Journal Article, *Journal of the Pancreas*. (2015).  
Reviewer, Journal Article, *Nutrition Research*. (2015).  
Reviewer, Journal Article, *Environmental Geochemistry and Health*. (January 2015 - February 2015).  
Reviewer, Journal Article, *International Journal of Biodiversity*. (2014).  
Reviewer, Journal Article, *International Journal of Environmental Research and Public Health*. (2014).  
Reviewer, Journal Article, *Journal of African Association of Physiological Sciences*. (2014).  
Reviewer, Journal Article, *Nutrition Research*. (2014).  
Reviewer, Journal Article, *Pharmaceutical Biology*. (2014).  
Reviewer, Journal Article, *Journal of Medicinal Food*. (2013).  
Reviewer, Journal Article, *Journal of Medicine and Medical Sciences*. (2013).  
Reviewer, Journal Article, *Pesquisa Agropecuária Tropical scientific journal*. (2013).

## **Public**

Participation in Island Days. (2010 - Present).  
Science Fair Judge, School of Science and Technology. (2012).