

TROPICAL MEDICINE RESEARCH INSTITUTE



Professor Susan Walker, BSc *Bristol*, MSc, PhD *Lond*
Director

OVERVIEW OF THE DEPARTMENT

The Institute comprises of the Epidemiology Research Unit (ERU), Sickle Cell Unit (SCU) and Tropical Metabolism Research Unit (TMRU) on the Mona campus, and the Chronic Disease Research Centre (CDRC) at Cave Hill. This report covers the Mona units with the report for CDRC submitted to the Cave Hill Principal. The TMRI continues to contribute substantially to the 2012–17 Strategic Objectives of the UWI with key areas being Research and Innovation, Graduate Studies, Income source diversification and Outreach through Clinical Services.

ACADEMIC PROGRAMMES

The Institute offers Masters and Doctoral programmes in Nutrition and Epidemiology. In the 2013–14 academic year the MSc Epidemiology was offered and the MSc Nutrition will be offered in the coming year.

Visiting faculty members from St. Georges University, The University of Manchester, Centres for Disease Control and Prevention and the University of Arizona contributed to the MSc Epidemiology and their visits allowed for the development of collaborations.

We also coordinate the nutrition module for the MBBS programme and members of staff teach on several other courses within the MBBS, as well as the MPH and DrPH programmes and supervise of DM candidates. We have active collaborations with the Faculty of Medical Sciences in research training for staff through the FMS-TMRI research fellowships which involves a two-year placement of FMS faculty in the TMRI for training in research with the objective being to conduct and publish a research project. The fellowships continue to be successful and help to strengthen research capacity and build collaborations with other departments. Our Annual Research Skills Workshops (Basic and Advanced) were delivered in July with increased attendance as a result of changes made to the timing and delivery of the lectures. Staff at the ERU also conducted a workshop on the WHO/TDR Effective Project Planning and Evaluation (EPPE).

CLINICAL SERVICE

The Institute provides significant outreach to communities through clinical service. The Sickle Cell Unit (SCU) operates the only comprehensive facility for the care of persons with Sickle Cell Disease (SCD) in the English speaking Caribbean, as well as monthly clinics in Black River and Montego Bay. The SCU also operates neonatal screening for the South East region with discussions underway with the Ministry of Health to provide training and technical support for island-wide screening. This is coordinated by a joint working group comprising the Ministry of Health, the SCU and the Sickle Cell Trust. The objectives are to establish island wide screening and improve access to quality early childhood care for SCD patients.

During this year resources were obtained from Sagicor and the Government of Brazil for the SCU newborn screening programme to purchase essential

equipment. The Sickle Cell Unit also conducted a summer Teen Camp for children with SCD, aimed at increasing knowledge of the disease and their ability to cope with living with a chronic disease, especially at an age when they begin to assume more responsibility for self-care. The TMRU provides in-patient care for children with severe under-nutrition, and subject volunteers of various clinical trials and experimental studies, and provides nutritional consultations for hospitalized patients. The nutrition consultation service is currently being expanded to include fee paying services in areas such as body composition analysis and weight management. Staff from all three units provide specialist clinical services to the UHWI serving in several outpatient clinics such as internal medicine, hypertension, diabetes, endocrinology and pulmonology.

RESEARCH AND PUBLICATIONS

We continue to review our research programmes through annual scientific meetings. The 2013 meeting was held December 10-11, and was attended by two members of our advisory group, Professor Alan Jackson (University of Southampton) and Professor Nishi Chaturvedi (University College, London). The meetings contribute to the quality of the research programmes and assist with identifying opportunities for collaboration. The main research programmes are Human Nutrition and Metabolism, Endocrinology, Genetic underpinnings of Disease Susceptibility and Severity, Sickle Cell Disease, Child Development, Chronic Non-Communicable Diseases –Surveillance, Epidemiology and Interventions, Inflammation and Wound healing. Collaboration across units and research programmes continues to be strengthened. The NIH funded USA-Caribbean Alliance for Health Disparities Research (USCAHDR) is a major collaborative project between the ERU Chronic Disease Group, CDRC at Cave Hill and the Sullivan Alliance for Health Disparities, USA.

The Caribbean Branch of the USA Cochrane Collaborating Centre (CBUSCC) which was launched in June 2013 is based at the Epidemiology Research Unit. In the current academic year a Cochrane Author Training Workshop was held with support from the US Cochrane Centre at

Johns Hopkins University. The CBUSCC also has a number of systematic reviews in progress in collaboration with faculty at TMRI and the wider FMS.

Staff of the Institute has obtained grant funds to support research from a variety of agencies, with significant funding from Grand Challenges Canada, NIH, the Wellcome Trust, Sagicor and the Government of Brazil. Additional training and mentorship for staff in writing grant proposals is needed as well as continued strengthening of UWI's grant administration support. Investment in this by the UWI will be critical for achievement of the Strategic Objective, Income source diversification.

PUBLIC SERVICE

Staff members contribute leadership in numerous professional organisations and provide technical advice to the Ministries of Health and Education. Several staff members also serve on committees in national and regional institutions and international agencies. Details are listed under Public Service below.

PAPERS PRESENTED

- Aiken W., Dillard P., Dubroy T., Goldmon M., **Younger N., Francis D.,** Morrison B., **McFarlane S.**, "Prostate cancer knowledge of Jamaican men age 40 or older diagnosed with prostate cancer." Faculty of Medical Sciences, Annual Research Day, Faculty of Medical Sciences Teaching and Research Complex, UWI Mona, November 7–8;, 2013. Oral presentation.
- **Asnani M.** "Pregnancy in Sickle Cell Disease." Invited lecture to Mandeville Regional Hospital's 13th Annual O+G Conference. Golf View Hotel, Mandeville, Jamaica. May 26, 2014.
- **Badaloo A.** "Management of severe malnutrition." International Paediatric Association pre-congress workshop on the Management of Malnutrition, August; Australia: Oral Presentation; 2013.
- **Badaloo A.** "Body Composition and Catch-up in Height after

Treatment of Malnourished Children.” International Symposium on Understanding Moderate Malnutrition in Children for Effective Interventions May, 2104, Austria: Poster Presentation.

- **Badaloo A.** “Body composition assessment during rehabilitation of malnourished infants and children in a clinical setting.” 20th International Congress of Nutrition, September 2013, Spain: Poster Presentation
- **Baker-Henningham H.** “Reducing inequalities and improving developmental outcomes for young children in low and middle income countries.” Centre for Evidence Based Early Intervention Annual Conference, April, 2104, Bangor Wales: Oral Presentation.
- **Bhatt K.** “Body Image and Depressive Symptoms in Jamaican Adolescents with Sickle Cell Disease.” Presented at the: Dying to be beautiful? Body Image, Eating Behaviours and Health In the Caribbean Conference, Faculty of Medical Sciences Teaching and Research Complex, UWI Mona, June 28, 2014; Oral Presentation.
- **Boyne M.** “Case study in bioethics: Decision-making, consent and competency.” FMS 22nd Annual Research Conference – Grey Matters in Medical Ethics workshop; UWI Mona, November 4, 2013.
- **Boyne M.** “Fat genes: the origin of obesity in the Caribbean.” The 2nd dying to be beautiful? Body image, eating behaviours and health in the Caribbean, Faculty of Medical Sciences Teaching and Research Complex, UWI Mona, June 28, 2104; Oral Presentation.
- **Clare-Pascoe N., Lee M.G., Murphy T., Ferguson T.** “Clostridium difficile associated diarrhoea (CDAD) at the University Hospital of the West Indies over a six-year period.” Faculty of Medical Sciences, Annual Research Day, Faculty of Medical Sciences Teaching and Research Complex, UWI Mona, November 7–8, 2013, Poster Presentation
- **Dubroy T., Aiken W., Dillard P., Goldmon M., Younger N., Francis D., Morrison B., McFarlane S., Martin K., Banks B., Mapp**

- J. “A quantitative analysis of lifestyle practices of Jamaican men 40 and older with prostate cancer: A KAP study”, Faculty of Medical Sciences, Annual Research Day, Faculty of Medical Sciences Teaching and Research Complex, UWI Mona, November 7–8, 2103; Oral Presentation
- **Francis D.** “The Impact of Scientific Research on Nutrition Care.” Nutrition Week, College of Allied Health and Nursing, Northern Caribbean University, Jamaica, March 24–27, 2014.
 - **Francis D.** “Evidence-based Nutrition Care in Cardiovascular Diseases.” Jamaica Association of Professionals in Nutrition and Dietetics Quarterly General Meeting, Cornwall Regional Hospital, Jamaica, March 7, 2014.
 - **Francis D.** “Conducting Systematic Reviews.” University of the West Indies School of Nursing (UWISON) Annual Research Internship for Health Researchers, UWI Mona, June 2–27, 2014.
 - **Francis D.** “Prostate Cancer in Jamaican Men, Issues and Challenges.” Panel Discussion, 3rd Shaw University Health and Social Disparities Conference, Sheraton Downtown Raleigh, NC, September 18–20, 2013.
 - **Francis D.** “Nutritional approach to Heart Disease: A review of the various diets.” Faculty of Medical Sciences, Annual Research Day, Faculty of Medical Sciences Teaching and Research Complex, UWI Mona, November 7–8, 2013.
 - **Ferguson T.** “The Metabolic Syndrome in Jamaica and its Implications for Heart Disease.” Faculty of Medical Sciences, Annual Research Day, Faculty of Medical Sciences Teaching and Research Complex, UWI Mona, November 7–8, 2013.
 - **Ferguson T.** “Prevalence of Chronic Kidney Disease among Patients with Diabetes Mellitus at UHWI.” Renal Week Symposium. Nephrology and Hypertension Service, Department of Medicine, UHWI, Kingston Jamaica, March 14, 2014.

- **Ferguson T.S., Tulloch-Reid M.K., Younger-Coleman N.O.,** Wright-Pascoe R.A., **Boyne M.S.,** Soyibo A.K., Wilks R.J. “Chronic Kidney Disease among Patients Attending a Specialist Diabetes Clinic in Jamaica.” Faculty of Medical Sciences, Annual Research Day, Faculty of Medical Sciences Teaching and Research Complex, UWI Mona November 7–8, 2013; Oral Presentation
- **Ferguson T.S., Younger-Coleman N.O., Tulloch-Reid M.K.,** Hambleton I.R., MacLeish M.Y., Hennis A.J., Wilks R.J., Harris E.N., Sullivan L.W., The US-Caribbean Alliance for Health Disparities Research (USCAHDR) Investigators. “Educational Health Disparities in Cardiovascular Disease Risk Factors in Jamaica: Findings from the Jamaica Health and Lifestyle Surveys.” Faculty of Medical Sciences, Annual Research Day, Faculty of Medical Sciences Teaching and Research Complex, UWI Mona, November 7–8, 2103; Oral Presentation
- Hanchard N., **Howell S.,** Forrester T., **Reid M.,** Belmont J.W., **McKenzie C.A.** “Edematous Severe Childhood Malnutrition is Associated with Wide-Spread DNA Hypomethylation.” American Society of Human Genetics Annual Meeting, October, 2013; Boston: (K. Marshall presented paper at conference, however highlighted are the authors).
- Harris M., James K., **Ferguson T.S.,** Figueroa J.P. “Minimal improvement in management of diabetes in primary care in Jamaica, over two decades: A clinical audit.” Caribbean Public Health Agency 59th Annual Scientific Meeting Renaissance Convention Centre, Aruba: May 1–3, 2104; Oral Presentation
- Ilonze A., Francis A., Hermer L., Goldmon M., Dubroy T., Aiken W., **McFarlane S., Younger-Coleman N.** “Prostate Cancer Knowledge and Quality of Life among Jamaican Men.” 10th Annual National Symposium on Prostate Cancer, Clark Atlanta University, March 16–19, 2014
- Kerr K.A., Chang S.M., Walker S.P., Wright A.S., Taveras E.M., **Tulloch-Reid M.K.** “Investigating the role of sleep duration and TV

time on infant overweight/obesity: A cross sectional study of Caribbean children.” Faculty of Medical Sciences, Annual Research Day, Faculty of Medical Sciences Teaching and Research Complex, UWI Mona, November 7–8, 2013; Oral Presentation

- **McFarlane S., Tulloch-Reid M., Bernard O., Mathurin C., Castillo A.** “Diabetes in Caribbean Youth, International Society for Paediatric and Adolescent Diabetes 39th Annual Conference, Gothenburg Sweden; October, 2103; Poster Presentation.
- **McFarlane S.** “Strategies for Building and Maintaining Successful Research Partnerships.” 3rd Shaw University Health and Social Disparities Conference, Sheraton Downtown Raleigh, NC, September 18–20, 2013.
- **McFarlane S.R., Younger-Coleman N.O., Francis D.K., Wilks R.J.** “Early Life Resiliency and Cardiovascular Risk Factors in Jamaican Adolescents 15–19 years.” Caribbean Public Health Agency 59th Annual Scientific Meeting Renaissance Convention Centre, May 1–3, 2104; Aruba: Oral Presentation
- **McFarlane S.** “Prostate Cancer in Jamaican Men, Issues and Challenges.” Panel Discussion, 3rd Shaw University Health and Social Disparities Conference, Sheraton Downtown Raleigh, NC, September 18–20, 2013.
- **Powell C., Mundy-Parkes E., Francis D.** “Students’ perception of a conditional cash transfer program which provides them with subsidized school lunches in Jamaica.” IUNS 20th International Congress of Nutrition. Granada, Spain, September, 2103: Poster Presentation
- **Sumner A.E., Thoreson C.K., O’Connor M.Y., Ricks M., Tulloch-Reid M.K., Chung S.T., Lozier J.N.** “A1C Combined with Fasting Glucose Is Superior to A1C Alone in the Detection of Glucose Tolerance Status in Africans.” American Diabetes Association, 74th Annual Scientific Meeting, San Francisco, CA: June 13–17, 2014; Oral Presentation
- **Tulloch-Reid M.** “Pituitary Diseases: Common disorders of the

anterior pituitary: Recognizing the symptoms and the management of these patients in the GP's office," Caribbean College of Family Physicians, Alhambra Inn, Jamaica, January 26, 2014.

- **Tulloch-Reid M.** "Interpretation of Thyroid Function Tests." Caribbean Endocrine Society Workshop, Hyacinth Chen School of Nursing, Northern Caribbean University, Mandeville, Jamaica; October 27, 2013.
- **Tulloch-Reid M.** "Oral Agents in the Management of Diabetes." Caribbean Endocrine Society Workshop, Hyacinth Chen School of Nursing, Northern Caribbean University, Mandeville, Jamaica; October 27, 2013.
- **Tulloch-Reid M.K., Knight-Madden J.M., Samms-Vaughan M., Ashley D., McCaw-Binns A., Cruickshank J.K., Molaodi O., Harding S., Wilks R.J.** "Early Life Social and Biological Determinants of Blood Pressure at 18–20 years old: the 1986 Jamaica Birth Cohort Study". Caribbean Public Health Agency 59th Annual Scientific Meeting Renaissance Convention Centre, May 1–3, 2104; Aruba: Oral presentation
- **Walker S., Chang S., Wright A., Osmond C., McGregor S.** "Do early childhood experiences affect development in the next generation? The Jamaica Intergenerational Study". UWI/IDB Conference on Early Childhood Development in the Caribbean: Identifying Cost Effective Interventions, November 14, 2103; Kingston, Jamaica: Oral Presentation
- **Walker S.** "Putting child development at the heart of the health agenda." Grand Challenges Meeting, Rio de Janeiro, Brazil; October 28–30, 2013; Oral presentation
- **Walker S.** "Does iron supplementation benefit development in children under age 2?" Symposium on Iron and children: Implications for programs. International Congress of Nutrition, September 14–20, 2103; Granada, Spain: Oral Presentation
- **Weeks N., Banks A., Kienka L., Dillard P., Dubroy T., Goldman**

- M., **Younger N.**, **Francis D.**, **McFarlane S.**, Aiken W. “Health seeking behaviours of Jamaican men age 40 or older with prostate cancer.” Faculty of Medical Sciences, Annual Research Day, Faculty of Medical Sciences Teaching and Research Complex, UWI Mona; November 7–8, 2013; Oral presentation
- Wilkin N., Smith S., Hermer L., Goldmon M., Dubroy T., Aiken W., **Younger-Coleman N.**, **McFarlane S.** “Examining the Relationship between Attitudes and Health Seeking Behaviours of Jamaican Men with Prostate Cancer” Student Research Conference, Fayetteville State University, March 28–29, 2014; Poster Presentation
 - **Wilks R.** “Chronic Non-Communicable Diseases (CNCDs): Alternate Paradigms for Enquiry and Intervention (Community Based Participatory Research).” Keynote Speaker: 12th William Dennis Memorial Lecture; UWI Mona, July 18, 2013.
 - **Wilks R.** “Advancing the Population’s Health- Shifting the Curve.” “Diagnosing and Treating Communities: Planning the Nation's Health Outcomes.” The University of the West Indies, Nassau, Bahamas, 7th Annual Research Conference, September 19–20, 2013.
 - **Wilks R.** “Non communicable diseases. Important Gaps in the Region’s Response to the CNCD Epidemic: thoughts on the way forward.” Keynote Speaker: Ross University School of Medicine Research Day Symposium on Portsmouth Campus, Dominica, West Indies, January 24, 2014.
 - **Wilks R.** “Dying to be Beautiful? Body Image, Eating Behaviours and Health in the Caribbean.” “Facing the Childhood Obesity Challenge: getting the community involved.” Keynote Speaker, Opening Ceremony. The Second Biennial International Conference: Faculty of Medical Sciences Teaching & Research Complex, UWI, Mona, June 27–29, 2014.
 - Witting E., **Younger-Coleman N.**, Dillard P., Dubroy T., Goldmon M., Francis D., **McFarlane S.**, Morrison B., Aiken W. “Correlates of Prostate Cancer Knowledge of Jamaican Men Age 40 of Older Diagnosed with Prostate Cancer” 10th Annual National Symposium

on Prostate Cancer at Clark Atlanta University, March 16–19, 2014;
Poster Presentation

- **Younger-Coleman N.** “Communicating Effectively – Reporting Statistics to Non-Statisticians.” The Jamaica Statistical Society – Monthly Members’ Meeting, Faculty of Science and Sport Conference Room, University of Technology, Jamaica; June 6, 2014.
- **Younger-Coleman N., Riley C., Morrison E., McFarlane S.** “A Culture Sensitive lay Diabetes Education Programme for adults with Type 2 Diabetes in Six Caribbean countries” World Diabetes Congress, December 2–6, 2103; Melbourne Australia: Poster Presentation

PUBLICATIONS

Books and Monographs

- **Asnani M.R., Quimby K.R., Bennett N.R., Francis D.K.** “Interventions for patients and caregivers to improve knowledge of sickle cell disease and recognition of its related complications (Protocol).” *Cochrane Database of Systematic Reviews*, 2014; 6 DOI: 10.1002/14651858.CD011175. Available at: <http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD011175/abstract>.
- **Badaloo A., Marshall K.** “Oxidative Stress in Childhood Severe Acute Malnutrition.” In *Role of Oxidative Stress in Chronic Diseases*. Ed. By I. Dichi, J.W. Breganó, A.N.C. Simão, and R. Cecchini: CRC Press, 2014:349–372.
- **Francis D.K., Lazzarini P.A., Ferguson T.S., Jen S.D., Cumberbatch C., Welch V.** “Education of health professionals for preventing diabetic foot ulceration (Protocol).” *Cochrane Database of Systematic Reviews* 2013, Issue 3. Art. No.: CD010433. DOI: 10.1002/14651858.CD010433.
- **Supraha V., Francis D.K., Utrobicic A., Choy E.H.S., Tenzera D., Kordic A.** “Probiotics for fibromyalgia (Protocol).” *Cochrane Database*

of *Systematic Reviews* 2013, Issue 3. Art. No.: CD010451. DOI: 10.1002/14651858.CD010451.

Refereed Journal Articles

- Anderson M.E., **Tulloch-Reid M.K.** “She is trying her best, even though she gets on my nerves.” The caregiver-child relationship in Jamaica.” *Diabetes Spectrum* 26, 2(2013):131–136.
- **Asnani M.R., Bhatt K., Younger N., McFarlane S., Francis D., Gordon-Strachan G., Reid M.E.** “Risky behaviours of Jamaican adolescents with sickle cell disease.” *Haematology* 19, 7(2013); 373–379.
- **Asnani M., Reid M.** “Diagnostic accuracy of spot and timed measurements of albumin: creatinine ratios to determine microalbuminuria in sickle cell disease.” *West Indian Medical Journal* 62, 9 (2013):808–816.
- **Asnani M., Reid M.** “Cystatin C: A useful marker of sickle glomerulopathy?” *Blood Cells, Molecules and Disease*. DOI: 10.1016/j.bcmed.2014.07.018.
- **Baker-Henningham H.** “Targeted, preventive interventions in primary school prevent mental health problems in adolescence.” *Evidence Based Mental Health* 2014-101864. Published online first 30 July 2014.
- **Baker-Henningham H.** “The role of early childhood education in the prevention and promotion of child and adolescent mental health.” *International Journal of Epidemiology* 43, 2(2014):407–433.
- **Bhutta Z.A., Das J.K., Rizvi A., Gaffey M.F., Walker N., Horton S., Webb P., Lartey A., Black R.E. & the Nutrition Interventions Review Group, the Maternal and Child Nutrition Study Group.** “Evidence-based interventions for improvement of maternal and child nutrition: what can be done and at what cost?” *The Lancet*, 382, 9890 (2013):452-477 (S Walker member Maternal and Child Nutrition Study Group).

- Black R.E., Victora C.G., **Walker S.P.**, Bhutta Z.A., Christian P., de Onis M., Ezzati M., Grantham-McGregor S., Katz J., Martorell R., Uauy R., and the Maternal and Child Nutrition Study Group. “Maternal and child undernutrition and overweight in low-income and middle-income countries.” *The Lancet*, 382, 9890 (2013):427–451.
- Black R.E., Alderman H., Bhutta Z.A., Gillespie S., Haddad L., Horton S., Lartey A., Mannar V., Ruel M., Victora C.G., **Walker S.P.**, Webb P. “Maternal and child nutrition: building momentum for impact.” *The Lancet*, 382, 9890 (2013):372–375.
- **Boyne M.S.**, Thame M., Osmond C., Fraser R.A., **Reid M.**, Gabay L., Forrester T.E. “The association of puberty with cardiometabolic risk factors in Afro-Caribbean children.” *Journal of Pediatric Endocrinology and Metabolism*, 27(2014):453–60.
- **Boyne M.S.**, **Thompson D.S.**, Osmond C., Fraser R.A., Thame M.M., **Taylor-Bryan C.**, **Soares-Wynter S.**, Forrester T.E.. “The effect of antenatal factors and postnatal growth on serum adiponectin levels in children.” *Journal of Developmental Origins of Health and Disease* 4, 4 (2013): 317–323.
- **Bowers A.S.**, Reid H.L., Greenidge A., Landis C., **Reid M.** “Blood viscosity and the expression of inflammatory and adhesion markers in homozygous sickle cell disease subjects with chronic leg ulcers.” *PLoS One*. 8, 7 (2013):e68929.
- Cunningham-Myrie C., **Younger-Coleman N.**, **Tulloch-Reid M.**, **McFarlane S.**, **Francis D.**, **Ferguson T.**, Gordon-Strachan G., **Wilks R.** “Diabetes mellitus in Jamaica: sex differences in burden, risk factors, awareness, treatment and control in a developing country.” *Tropical Medicine & International Health* 18, 11(2013):1365–78.
- East-Innis A.D., **Thompson D.S.** “Stevens - Johnson syndrome and Toxic Epidermal Necrolysis at the University Hospital of the West Indies, Jamaica.” *West Indian Medical Journal* 62, 7 (2013):589–92.
- Fletcher K., Alfred R., Penn K., Gayle F., Gilbert T., Elliot V., **Ferguson T.S.** “Guillain-Barre Syndrome and its Variants: A Case of

- Acute Motor-Sensory Axonal Neuropathy in Jamaica.” *West Indian Medical Journal* 2013; 62, 7(2013):658–666.
- Fletcher H.M., Dawkins J., Rattray C., Wharfe G., **Reid M.**, Gordon-Strachan G. “Morindacitrifolia (Noni) as an Anti-Inflammatory Treatment in Women with Primary Dysmenorrhoea: A Randomised Double-Blind Placebo-Controlled Trial.” *Obstetrics and Gynaecology International*. 2013 (2013).6 pages.
 - Francis P.M., **Thompson D.S.**, Barnett A.T., Osmond C., Byrne C.D., Hanson M.A., Gluckman P.D., Forrester T.E., **Boyne M.S.** “Glucose metabolism in adult survivors of severe acute malnutrition.” *Journal of Clinical Endocrinology and Metabolism*. 99, 6(2014):2233–2240.
 - Frederick S., Frederick J., Fletcher H., **Reid M.**, Hardie M., Gardner W. “A trial comparing the use of rectal misoprostol plus perivascular vasopressin with perivascular vasopressin alone to decrease myometrial bleeding at the time of abdominal myomectomy.” *Fertility and Sterility*. 100, 4 (2013):1044–9.
 - Gertler P., Heckman J., Pinto R., Zanolini A., Vermeerch C., **Walker S.**, **Chang S.**, Grantham-McGregor S. “Labour market returns to an early childhood stimulation intervention in Jamaica.” *Science* 344, 6187(2014):998–1001.
 - Gibson R.C., Morgan K.A., Abel W.D., Sewell C.A., Martin J.S., Lowe G.A., HayeWde L., Edwards C.L., O’Garro K.N., **Reid M.E.**, **Asnani M.R.** “Locus of control, depression and quality of life among persons with sickle cell disease in Jamaica.” *Psychology Health & Medicine* 18, 4(2013):451–60.
 - Gillespie S., Haddad L., Mannar V., Mennon P., Nesbitt N. and the Maternal and Child Nutrition Study Group. “The politics of reducing malnutrition: building commitment and accelerating progress.” *The Lancet* 382, 9891(2013):552–569 (S **Walker** member Maternal and Child Nutrition Study Group).
 - Grantham-McGregor S.M., Fernald L.C.H., Kagawa R.M.C., **Walker S.P.** “Effects of integrated child development and nutrition interventions

on child development and nutritional status.” *Annals of New York Academy of Science* 1308, 1(2014):11–32.

- Green C.O., **Badaloo A.V.**, Hsu J.W., **Taylor-Bryan C.**, **Reid M.**, Forrester T., Jahoor F. “Effects of randomized supplementation of methionine or alanine on cysteine and glutathione production during the early phase of treatment of children with edematous malnutrition.” *The American Journal of Clinical Nutrition* 99, 5(2014):1052–1058.
- Gridley N., Hutchings J., **Baker-Henningham H.** “The Incredible Years parent-toddler programme and parental language: a randomised controlled trial.” *Child Care Health and Development* (2014). Article first published online: 19 May 2014.
- Gridley N., Hutchings J., **Baker-Henningham H.** (2013) “Associations between socioeconomic disadvantage and parenting behaviours.” *Journal of Children’s Services* 8, 4(2013):254–263. (Awarded ‘Highly Commended Paper’).
- Hunt A.C., Eldemire-Shearer D., **Tulloch-Reid M.K.** “Establishing a System for Health Professional Training and Certification in Diabetes Self-Management Education in the Caribbean.” *Diabetes Spectrum* 26, 4 (2013): 255–258.
- Hutchings J., Griffith N., Bywater T., Williams M.E., **Baker-Henningham H.** “Targeted versus universal provision of support in high-risk communities: comparison of characteristics in two populations recruited to parenting interventions.” *Journal of Children’s Services* 8, 3(2013):169–182.
- Hsu J.W., **Badaloo A.V.**, Wilson L., **Taylor-Bryan C.**, Chambers B., **Reid M.**, Forrester T., Jahoor F. “Dietary supplementation with aromatic amino acids increases protein synthesis in children with severe acute malnutrition.” *Journal of Nutrition* 144, 5(2014):660–666.
- Jones D.Z., Ragin C., Kidd N.C., Flores-Obando R.E., Jackson M., McFarlane-Anderson N., **Tulloch-Reid M.**, Kimbro K.S., Kidd L.R. “The impact of genetic variants in inflammatory-related genes on prostate cancer risk among men of African Descent: a case control study.” *Hereditary Cancer in Clinical Practice*. 11, 1(2013):19.

- **Knight-Madden J.M.**, Greenough A. “Acute pulmonary complications of sickle cell disease.” *Paediatric Respiratory Reviews* 15, 1(2014):13–16.
- **Knight-Madden J.M.**, Connes P., Bowers A., Nebor D., Hardy-Dessources M.D., Romana M., Reid H., Pichon A.P., Barthélémy J.C., Cumming V.B., Elion J., **Reid M.** “Relationship between acute chest syndrome and the sympatho-vagal balance in adults with hemoglobin SS disease; a case control study.” *Clinical Hemorheology and Microcirculation* 53, 3(2013):231–8.
- **Knight-Madden J.M.**, Barton-Gooden A., Weaver S.R., **Reid M.**, Greenough A. “Mortality, asthma, smoking and acute chest syndrome in young adults with sickle cell disease.” *Lung* 191, 1(2013):95–100.
- Kutlar A., **Reid M.E.**, Inati A., Taher A.T., Abboud M.R., El-Beshlawy A. “A dose-escalation phase IIa study of 2,2-dimethylbutyrate (HQQ-1001), an oral fetal globin inducer, in sickle cell disease.” *American Journal of Hematology* 88, 11(2013):E255–60.
- Mani K.A., Hoo Sang M., **Younger-Coleman N.O.**, **Ferguson T.S.** “Ischaemic Heart Disease at the University Hospital of the West Indies: Trends in Hospital Admissions and Inpatient Mortality Rates 2005–2010.” *West Indian Medical Journal*, 2014; Published-ahead-of-print. Available at: <http://myspot.mona.uwi.edu/fms/wimj/article/1799>.
- Melbourne Chambers R., Morrison-Levy N., **Chang S.**, Tapper J., **Walker S.**, **Tulloch-Reid M.** “Cognition, academic achievement, and epilepsy in school-age children: A case-control study in a developing country.” *Epilepsy & Behaviour* 33(2014):39–44.
- Nebor D., **Bowers A.**, Connes P., Hardy-Dessources M.D., **Knight-Madden J.**, Cumming V., **Reid M.**, Romana M. “Plasma concentration of platelet-derived micro-particles is related to painful vaso-occlusive phenotype severity in sickle cell anemia.” *PLoS One*. 9, 1(2014):e87243.
- Nwokocha C.R., **Younger-Coleman N.**, Nwokocha M., Owu D.U., Iwuala M. “A comparative study of the effect of some nutritional medicinal plants effect on lead accumulation in the liver following

different modes of administration.” *Pharmacognosy Research*. 6, 4(2014):306–311. [Epub ahead of print]

- **Rankine-Mullings A.E., Knight-Madden J.M., Reid M., Ferguson T.S.** “Gangrene of the digits of the right lower limb in a patient with homozygous sickle cell disease and ulcerative colitis.” *Clinics and Practice* 4, 1(2014):610.
- **Reid M.** “Nutrition and sickle cell disease.” *Comptesrendusbiologies*. 336, 3(2013):159–63.
- **Morrison B.F., Reid M., Madden W., Burnett A.L.** “Testosterone replacement therapy does not promote priapism in hypogonadal men with sickle cell disease: 12-month safety report.” *Andrology*.1, 4 (2013):576–82.
- **Reid M.E., El Beshlawy A., Inati A., Kutlar A., Abboud M.R., Haynes J. Jr., Ward R., Sharon B., Taher A.T., Smith W., Manwani D., Ghalie R.G.** “A double-blind, placebo-controlled phase II study of the efficacy and safety of 2, 2-dimethylbutyrate (HQK-1001), an oral fetal globin inducer, in sickle cell disease.” *American Journal Hematology*; 89, 7(2014):709–13.
- **Roberts P.O., Plummer J., Leake P.A., Scott S., de Souza T.G., Johnson A., Gibson T.N, Hanchard B., Reid M.** “Pathological factors affecting gastric adenocarcinoma survival in a Caribbean population from 2000–2010.” *World Journal of Gastrointestinal Surgery* 6, 6(2014):94–100.
- **Rogers E.N., Jones D.Z., Kidd N.C., Yeyeodu S., Brock G., Ragin C., Jackson M., McFarlane-Anderson N., Tulloch-Reid M., Sean Kimbro K., Kidd L.R.** “Toll-like receptor-associated sequence variants and prostate cancer risk among men of African descent.” *Genes & Immunity* 14, 6(2013):347–355.
- **Royal-Thomas T, Younger-Coleman N., Forrester T., Cooper R., Wilks R.** “Simplifying Measurement of Cardiovascular Risk in Urban Jamaica: The Role of Multivariate Methods.” *JP Journal of Biostatistics* 10, 1(2013):1–18.

- Ruel M.T., Alderman H and the Maternal and Child Nutrition Study Group “Nutrition-sensitive interventions and programmes: how can they help to accelerate progress in improving maternal and child nutrition?” *The Lancet* 382, 9891(2013):536–551 0. (S Walker member Maternal and Child Nutrition Study Group)
- **Smith J.A., Francis D.K., Ferguson T.S.** “Race, Gender and Adiposity in Children.” *West Indian Medical Journal.* 67, 7(2014): 573–574.
- Sioka C., Skarulis M.C., **Tulloch-Reid M.K.**, Heiss J.D., Reynolds J.C. "Hidden" bonemetastasis from thyroid carcinoma: a clinical note.”*Revista Espanola de Medicina Nuclear e Imagen Moecular.* 33,1 (2014):36–38.
- Sumner A.E., Furtado J.D., Courville A.B., Ricks M., **Younger-Coleman N., Tulloch-Reid M.K.**, Sacks F.M. “ApoC-III and visceral adipose tissue contribute to paradoxically normal triglyceride levels in insulin-resistant African-American women.” *Nutrition & Metabolism* (London) 10,1 (2013):73.
- Tennant I.A., Barnett A.T., Kips J., **Thompson D.S., Boyne M.S.**, Chung E., Chung A.P., Osmond C., Hanson M.A., Gluckman P.D., Segers P., Cruickshank J.K., Forrester T.E. “Impaired cardiovascular structure and function in adult survivors of severe acute malnutrition.” *Hypertension* 64, 3 (2014) 664–671.
- **Thompson D.S., Boyne M.S., Osmond C., Ferguson T.S., Tulloch-Reid M.K., Wilks R.J.**, Barnett A.T., Forrester T.E. “Limitations of fasting indices in the measurement of insulin sensitivity in Afro-Caribbean adults.” *BMC Research Notes* 7, 98(2014).
- **Thompson D.S., Ferguson T.S., Wilks R.J., Phillips D.I., Osmond C., Samms-Vaughan M., Forrester T.E., Boyne M.S.** “Early life factors are associated with nocturnal cortisol and glucose effectiveness in Afro-Caribbean young adults.” *Clinical Endocrinology* (Oxford). (2014). [Epub ahead of print].
- **Walker S.Y., Pierre R.B., Christie C.D.C., Chang S.M.** “Neurocognitive function in HIV-positive children in a developing country.” *International Journal of Infectious Diseases* 17, 10(2013):e862-e867.

Non-Refereed Journal Articles

- **Baker-Henningham H.**, López Boo F. “Intervenciones de estimulación infantil temprana en los países en vías de desarrollo Lo que funciona, porqué y para quién Banco Interamericano de Desarrollo Protección Social y Salud.” *NOTA TÉCNICA* # IDB-TN-540 (2013).
- Morrison E., **McFarlane M.**, Riley C., **Younger-Coleman N.** “Education to change the course of diabetes in the Caribbean.” *Diabetes Voice* 59(2014):44.

INCOME GENERATION

1. Title: **Home Visiting Programs to Improve Early Childhood Development and Maternal Mental Health – Evidence from the Western Region Project**

Funding Agency: Grand Challenges Canada

Investigators: A. Brentani (University of Sao Paulo), S. Grisi, M. Simões, G. Fink, S. Chang-Lopez, C. Powell.

Period of Award: 2014–2016

Value of Award: CAN\$ 250,000

2. Title: **Integrating a parenting intervention with routine care to improve early developmental outcomes in children with sickle cell disease**

Funding Agency: Grand Challenges Canada

Period of Award: 2014–2016

Investigators: J. Knight-Madden, S. Chang-Lopez, M. Asnani, L. King, S Walker

Value of Award: CAN\$178,101.00

3. Title: **Expanding access to a proven early stimulation package through a web-based package and technical support**

Funding Agency: Grand Challenges Canada

Period of Award: 2013–2016

Investigators: S. Walker, C. Powell, S. McGregor, S. Chang, H. Baker-Henningham, M. Rubio-Codina & J. Hamadani

Value of Award: CAD\$2 million

4. Title: **Promoting young children's social & emotional competence & preventing conduct problems: Follow-up of a cluster randomised controlled trial**

Funding Agency: The Wellcome Trust

Investigators: H. Henningham, S. Walker

Period of Award: May 11, 2011–October 30, 2014

Value: GBP351, 892.00

5. Title: **Inter-Generational Impacts of Early Childhood Experience**

Funding Agency: Inter-American Development Bank

Investigators: S. Walker, S. Chang, S. Grantham-McGregor

Period of Award: November 2010–June 2014

Value: US \$150,000 and J\$2,502,187

6. Title: **Pilot of parenting interventions in the Caribbean**

Funding Agency: Inter-American Development Bank

Investigators: S. Walker, S. Chang, C. Powell, H. Baker-Henningham, S. Grantham-McGregor, F. Lopez-Boo

Period of Award: January 2011–June 2015

Value: US \$750,000

7. Title: **National Institute on Minority Health and Health Disparities Cooperative Agreement No.1U24MD006959-01, NIH**

Funding Agency: USA-Caribbean Alliance for Health Disparities Research (USCAHDR)

Co-investigator: E. Nigel Harris, R. Wilks, T. Ferguson, N. Bennett, N. Younger-Coleman, D. Francis, B. Collins

Period: 2011–2016

Value: US\$4,799,063

8. Summer and other self-financing programmes

Title: **PhD/MSc Epidemiology Programme** (Tuition 2014/2015)

Contributing Staff: M. Tulloch-Reid, R. Wilks

Value: \$ 6,120, 000.00

Title: Basic and Advance Research Skills Workshops

Contributing Staff: N. Younger-Coleman, S. McFarlane

Value: \$ 713,000.00

Programme: CBUSCC Systematic Review Workshop

Contributing Staff: Professor M. Tulloch-Reid, D. Francis, N. Bennett

Value: \$ 105,263.61

9. Title: **‘Know-It Study’: An educational intervention to improve disease knowledge among adolescents with sickle cell disease.**

Funding Agency: Principal’s New Initiative Grant, University of the West Indies, Mona Campus

Principal Investigator: A. Barton-Gooden

Co- Investigators: J. Knight-Madden, M. Asnani, M. Grindley

Period of Award: August 2013–2014

Value: J\$ 1.5 Million

10. Title: **Integrative Global Research on Sickle Cell Disease**

Funding Agency: Bass Connections Grant, Duke University

Investigator: M. Asnani

Period of Award: July 1, 2014–June 30, 2015

Value: US\$ 25,000.00

11. **Title: Beneficiaries of Sagicor-Sigma Walk/Run/Wheel 2014**
Funding Agency: Sagicor
Contact: J. Knight-Madden, L. King
Period of Award: Feb 2014–June 2015
Value: J\$7,500,000

12. **Title: Mutual Sickle Cell Agreement; Brazil, Jamaica, PAHO**
Funding Agency: Ministry of Health, Brazil through PAHO
Principal Investigator: J. Knight-Madden
Period of Award: 2013–2015
Value: US\$180,000.00

13. **Title: A Phase II, Multicenter, Randomized, Placebo-Controlled, Double-Blind, 12-Month Study to Assess Safety and Efficacy of SelG1 With or Without Hydroxyurea Therapy in Sickle Cell Disease Patients with Sickle Cell-Related Pain Crises. (SUSTAIN)**
Funding Agency: Selexys Pharmaceuticals
Investigators: Jennifer Knight-Madden, Angela Rankine-Mullings
Period of Award: 2013–2016
Value: USD\$100,000.00 (estimated, depends on patient enrolment)

14. **Title: A cost benefit analysis of early interventions in sickle cell disease**
Funding Agency: Principal's Awards
Investigators: T. Logan, A. Rankine-Mullings, J. Knight-Madden
Period of Award: 2013–2015
Value: J\$1,500,000

15. **Title: Association between renal function and risk of cardiovascular disease in homozygous sickle cell disease**

Funding Agency: Caribbean Public Health Agency

Investigators: A. Bowers, M. Asnani, J. Knight-Madden

Period of Award: 2014–2016

Value: US\$ 7,809

16. **Title: Expanding Treatment for Existing Neurological Disease (EXTEND). An open label Phase II clinical trial to investigate the effects of hydroxyurea on the TCD velocities of children with sickle cell anaemia and a conditional or abnormal pre-treatment TCD velocity.**

Funding Agency: National Institutes of Health

Principal Investigator: R. Ware, M. Reid

Co-Investigator: J. Knight-Madden, C. Lobo, R. Adams

Period of Award: 2014–2016

Value: About USD\$80,000

17. **Title: A longitudinal study of respiratory morbidity in a Jamaican Birth Cohort**

Funding Agency: University of the West Indies, Principal's awards

Principal Investigator: K. Bailey, Department of Child and Adolescent Medicine

Co-investigators: J. Knight-Madden, M. Asnani, M. Grindley

Value: J\$1.5m

18. **Title: Chronic Illness in Jamaican Adolescents (CIJA)**

Funding Agency: UNICEF

Principal Investigator: A. Harrison-Kong, Department of Child and Adolescent Medicine

Tropical Medicine Research Institute

Co-investigators (SCU): J. Knight-Madden, M. Asnani, M. Tulloch-Reid, R. Pierre, S.Chang-Lopez, S. Clatoday-Scarlet, C. James, M. Walker

Period of Award: June 2014–2015

Value: USD\$34,950

19. Title: **Non alcoholic fatty liver disease among adult survivors of severe childhood undernutrition**

Principal Investigator: D. Thompson

Funding Agency: Mona Campus Research and Publications Graduate Awards

Value: US\$3,000.00

Funding Agency: Caribbean Public Health Agency (CARPHA)

Value: US\$10,000.00

20. Title: **Prevalence of disordered eating behaviours and attitudes in Jamaican Adolescents**

Funding Agency: Caribbean Public Health Agency (CARPHA)

Principal Investigator: A. Harrison-Kong, Department of Child and Adolescent Medicine

Co-investigators (SCU): S. Chang-Lopez, S. Clatoday-Scarlet, C. James, M. Williams

Period of Award: March 2014–March 2015

Value: USD\$6,030

PUBLIC SERVICE

Monika Asnani

- Caribbean Representative: Worldwide Initiative on Social Studies in Hemoglobinopathies (WiSSH) since 2011.

- Caribbean College of Family Physicians: Honorary Secretary: 2006—present
- Co-Chair, CME Committee. 2006—present
- Member, Accreditation & Certification Committee. 2006- Present
- Scientific Committee. 4th Annual Family Medicine Conference of Caribbean College of Family Practitioners. “Obesity: A 21st Century Epidemic – Impact and Interventions”. Held in Kingston, Jamaica. February 9, 2014.
- Executive Committee Member: Indian Cultural Society in Jamaica: July 2011—Present.

Asha Badaloo

- Voluntary nutritional consultant at Prema’s free medical clinic at 10 Henderson Avenue, Kingston 11, 2006—present.

Nadia Bennett

- Honorary Consultant Internal Medicine, University Hospital of the West Indies

Komal Bhatt

- Participated in Media promotions (radio and television) to increase awareness of Sickle Cell Disease:
- Radio talk show on Bess FM speaking on Sickle Cell Disease (2013)
- Television series ‘The Teller’ on TVJ for Sickle Cell Awareness promotion (2014).
- News Talk FM – World Sickle Cell Day (June 17, 2014)

Michael Boyne

- Member, Board of the Diabetes Association of Jamaica
- Member, National Health Fund Expert Panel of Physicians.

Susan Chang-Lopez

- Malnourished Children’s Foundation Board Director

Tropical Medicine Research Institute

- Early Childhood Commission (ECC)
- Research and Data Management Sub-committee Member – 2009 to present

Trevor Ferguson

- Member, National NCD Committee (Ministry of Health, Jamaica) 2011–present
- Member of Ministry of Health (Jamaica) Hypertension Guidelines Review Committee (2013–2014)
- Member of CARPHA (Caribbean Public Health Agency) Hypertension Guidelines Review Committee (2013–2014)
- Assistant Editor, *West Indian Medical Journal* (2011–present)
- Associate Editor, Cardiovascular Epidemiology section of *Frontiers in Cardiovascular Medicine* (published by Frontiers in partnership with Nature Publishing Group)
- Member, Review Editorial Board *Frontiers in Diabetes* section of *Frontiers in Endocrinology* (published by Frontiers in partnership with Nature Publishing Group)
- Staff Advisor to UWI branch of the University and Colleges Apostolic Ministries

Damian K Francis

- Standard and Regulations Committee Chair, Jamaica Association of Professionals in Nutrition and Dietetics (2012–present)
- Member, Council for Professions Supplementary to Medicine (2013–present)
- Co-Director, Caribbean Branch of the United States Cochrane Centre (2013–present)
- Member, Cochrane Centre and Branch Directors Committee (2014)
- Member, Cochrane and Campbell Equity Methods Group (2010–present)
- Member, The WHO Collaborating Centre for Knowledge Translation and Health Technology Assessment in Health Equity (2014–present)

- Director of Community Affairs, New Harbour Village II Citizen Association, Old Harbour St Catherine

Jennifer Knight Madden

- Ministry of Health: A working group to implement island-wide neonatal screening for sickle cell disease
- Vice President of Caribbean Network of Researchers on Sickle Cell and Thalassemia (CAREST)
- Co-chair of Sickle Cell Disease Working Group, Sick kids Caribbean Initiative
- Development of Public Service Announcements regarding sickle cell disease

Shelly McFarlane

- Project Manager, International Diabetes Federation – North American and Caribbean Region
- Member, University Diabetes Outreach Programme
- Member, The Obesity Society
- Member, International Society for Paediatric and Adolescent Diabetes
- Member, Ministry of Health Annual Research Conference Planning Committee
- Treasurer, Jamaica Statistical Society
- President, Kiwanis Club of Constant Spring

Nadine Morrison-Levy

- Executive Member of Paediatric Association of Jamaica

Debbie Thompson

- Jamaica Autism Support Association – Advocate/Parent Counsellor

Marshall Tulloch-Reid

- Consultant Physician and Endocrinologist, The University Hospital of the West Indies. Diabetes Clinic
- Member of the Jamaican Ministry of Health Expert Panel – to revise the Guidelines for the Management of Diabetes in Jamaica
- President, The Caribbean Endocrine Society
- Member, The Endocrine Society Research Affairs Core Committee (2012–present)
- Member, The WHO Collaborating Centre for Knowledge Translation and Health Technology Assessment in Health Equity
- Co-Director, The Caribbean Branch of the US Cochrane Centre
- Andrews Memorial SDA Church – Education Committee Member, Advisor to the Health Committee

Suzanne Soares-Wynter

- Board of Directors, Nutrition Products Limited. Ministry of Education, Youth and Culture (Government of Jamaica) School Feeding Division.
- Member, Audit Committee
- Member, Operations Committee
- Council for Professions Supplementary to Medicine, Ministry of Health (Government of Jamaica) – Registered Nutritionist
- Codex Committee on Nutrition and Foods for Special Dietary Uses (CCNFSDU) – Sub-committee on Nutrition and Foods for Special Dietary Uses – A Joint FAO/WHO Food Standards Programme of the Codex Alimentarius Commission.
- Academy of Nutrition and Dietetics – International Member
- Academy of Nutrition and Dietetics – Dietetic Practice Group (DPG) Member
- Research DPG
- Sports, Cardiovascular and Wellness Nutrition DPG

- Weight Management DPG
- Nutrition Entrepreneurs DPG
- American Overseas Dietetic Association (AODA)

Susan Walker

- Chair, Board of Trustees, Environmental Foundation of Jamaica Trust Fund
- Member, Advisory Committee on Health Research, Pan American Health Organization
- Member, Public Health Nutrition Advisory Committee, Caribbean Public Health Agency
- Steering Committee, Global Child Development Group
- Member, Forum on Investing in young children globally, The Institute of Medicine

Rainford Wilks

- Member, Board of Directors, Heart Foundation of Jamaica
- Member, Technical working group advising the Ministry of Health on the management of hypertension and diabetes mellitus
- Chairman, Gibson Relays Organizing Committee
- Member, PAHO/WHO Regional Expert Group charged with developing a population-based salt reduction strategy reduce cardiovascular disease
- Commissioner, Jamaica Anti-Doing Commission and member of the JADCO Technical Sub-committee
- Public Health Nutrition Advisory Committee (PHNAC) of the Caribbean Public Health Agency (CARPHA)
- Director, Healthy Caribbean Coalition (HCC)