

TROPICAL MEDICINE RESEARCH INSTITUTE



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

OVERVIEW OF THE DEPARTMENT

The Institute comprises 3 units on the Mona campus: Epidemiology Research Unit (ERU), Sickle Cell Unit (SCU) and Tropical Metabolism Research Unit (TMRU), 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 contributes substantially to the 2012–2017 Strategic Objectives of the UWI with key areas being Research and Innovation, Graduate Studies and Income source diversification.

ACADEMIC PROGRAMMES

The Institute offers Masters and doctoral programmes in Nutrition and in Epidemiology. We also coordinate the nutrition module for the

MBBS programme and staff taught on several other courses within the MBBS as well as the MPH programme. We continue training and mentorship at the doctoral and post-doctoral levels through research fellowships within the TMRI and in collaboration with the Faculty of Medical Sciences, Mona. The goal of the FMS fellowships is to strengthen research capacity within FMS departments and build collaborations. The fellowships allow two-year placement of FMS faculty in the TMRI for training in research with the objective of conducting and publishing a research project during the fellowship. Staff at TMRI also contribute to research supervision of DM students in various FMS departments.

CLINICAL SERVICE

The Institute provides significant outreach to communities through clinical service. The Sickle Cell Unit 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 Sickle Cell Clinic. 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 summer, the Sickle Cell Unit ran the inaugural Teen Camp for children with SCD, increasing their knowledge of the disease and ability to cope with living with a chronic disease. The TMRU provides in-patient care for children with severe under-nutrition, and subject volunteers of various clinical trials and experimental studies, and provides a nutritional consultative service to hospitalized patients across the island. 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

The Institute continues to review its research programmes through annual scientific meetings. Current 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 grow with collaboration on disparities research and cardiovascular disease between the CDRC and ERU; between the child development programme and the chronic disease programme (ERU) and the Sickle Cell research programme; between the Sickle cell programme and metabolism programme at TMRU. Presentations and publications for the academic year are listed below.

Expertise in systematic reviews continues to expand and the Caribbean Branch of the USA Cochrane Collaborating Centre (CBUSCC) was launched in June 2013, a significant achievement for UWI and the region.

Staff of the institute obtains grant funds to support research from a variety of agencies. More needs to be achieved and will require increased staff capacity to obtain grant funds, through training in writing grant proposals and expansion of collaborative arrangements. These initiatives are critical to the UWI Strategic Objective related to Income source diversification and support for staff training in this area as well as more robust central grant administration support is essential.

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 AT CONFERENCES AND SEMINARS

- **Asnani M.** “Pregnancy in Sickle Cell Disease.” Invited lecture to Physicians and Midwives at Victoria Jubilee Hospital, May 21, 2013; Kingston.
- **Asnani M, Anderson M.** “Jamaicans living with sickle cell disease: What do they know about SCD.” 58th Annual scientific Meeting of the Caribbean Public Health Agency; Barbados, May 2–4, 2013.
- **Asnani M.** “Sickle Cell Disease in Jamaica.” School of Public Health Nursing, University of Technology workshop: A Transition in the Non-Communicable Diseases in the Caribbean through Health Promotion, April 11, 2013, Kingston.
- **Asnani M, Reid M.** “Chronic Kidney Disease and Sickle Cell Disease in Jamaica.” 5th Caribbean Institute of Nephrology Conference; January 24–26, 2013, Montego Bay.
- **Asnani M, Reid M.** “Determining Glomerular Filtration Rate in sickle cell disease.” 5th Caribbean Institute of Nephrology Conference; January 24–26, 2013, Montego Bay.
- **Asnani M, Reid M.** “Glomerular Filtration Rate estimating equations in SS disease.” 58th Annual Scientific Meeting of the Caribbean Public Health Agency; May 2–4, 2013, Barbados.
- **Badaloo A, Green C, HSU J, Taylor-Bryan C, Reid M, Forrester T, Jahoor F.** “Effects of methionine supplementation on cysteine and glutathione production in oedematous malnourished children.” 58th Annual Scientific Meeting of the Caribbean Public Health Agency; Barbados, 2013.
- **Bennett N, Tulloch-Reid M, Francis D, Ferguson T, Younger-Coleman N, McFarlane S, Wilks R.** “Investigating sex differences in type 2 diabetes mellitus and its risk factors in the Caribbean.” The Endocrine Society, Health Disparities Summit; Baltimore, MD, 2013.

- **Boyne M.** “Facebook, Twitter and doctors: good medicine? FMS 21st Annual Research Conference – Grey Matters” The Faculty of Medical Sciences Research Day November 4; The University of the West Indies, Mona, 2012.
- **Boyne M.** “Metabolic syndrome and diabetes in the West Indies.” The 2nd Global Diabetes Summ; November 15, 2012, Ohio State University; Columbus, Ohio.
- **Boyne M.** “Current trends in type 2 diabetes mellitus treatment: the role of DPP4 inhibitors.” Caribbean Cardiac Society; July 14, 2013, Castries, St. Lucia.
- **Boyne M.** “Gut hormones in the treatment of obesity.” 2nd Caribbean Obesity Forum; March 2, 2013, Montego Bay, Jamaica.
- **Boyne M.** “Primary prevention of obesity.” 2nd Caribbean Obesity Forum; March 2, 2013; Montego Bay, Jamaica.
- **Boyne M, Thame M, Osmond C, Fraser R, Reid M, Gabay L, Forrester T.** “The association of puberty with cardiometabolic risk factors in Afro-Caribbean children.” Endocrine Society 95th Annual Meeting; June 18, 2013, San Francisco, CA: *Poster*.
- **Chang SM, Powell C, Lopez-Boo F, Grantham-McGregor SM, Walker SP.** “Parental knowledge of child development in clinic attendees in three Caribbean countries.” 58th Annual Scientific Meeting of the Caribbean Public Health Agency; May 2–4, 2013, Barbados.
- **Duncan J, Weir P, Strachan S, Tulloch-Reid M.** “Opportunities for improving health outcomes among persons with chronic diseases in Jamaica.” The Faculty of Medical Sciences Research Day, The University of the West Indies, Mona, 2012.
- **Francis D, Tulloch-Reid M.** “Utilizing Evidence to address the chronic disease epidemic – bringing research, clinical practice and policy together.” The Faculty of Medical Sciences Research Day, The University of the West Indies, Mona; 2012.

- **Francis D**, Welch V, Kristjansson E. “Feeding programmes for improving the physical and psychosocial health of children aged 6 months to 5 years: Methodological challenges and approaches.” *The Annual Campbell Colloquium*; Copenhagen, 2012.
- **Francis D**, Welch V, Kristjansson E. “Preschool feeding programmes for improving the health of disadvantaged infants and young children.” *The Annual Campbell Colloquium; Copenhagen Abstract Booklet* 2012. p. 22–3.
- Howell S, Barton-Gooden A, Bowers A, Marshall K, Weaver S, McKenzie C, Landis R, Reid M, Greenough A, **Knight-Madden J**. “Association between restrictive lung disease and haptoglobin polymorphisms in adults with sickle cell anemia.” Grant Writing Workshop, Foundation for Sickle Cell Disease Research; April, 2013, Miami.
- Howell S, Barton-Gooden A, Bowers A, Marshall K, Weaver S, McKenzie C, Landis R, Reid M, Greenough A, **Knight-Madden J**. “Association between restrictive lung disease and haptoglobin polymorphisms in adults with sickle cell anemia.” 7th Annual Sickle Cell Disease Research and Educational Symposium and 36th National Sickle Cell Disease Meeting; April, 2013, Miami.
- **King L**, Bortuloso-Ali S, Chang-Lopez S, Reid M. “Academic performance in children with sickle cell disease in Jamaica.” 58th Annual Scientific Meeting of the Caribbean Public Health Agency; May 2–4, 2013, Barbados.
- **King L**, Bortuloso-Ali S, Cunningham-Myrie C, Reid M. “Impact of a comprehensive sickle cell centre on early childhood mortality in a developing country.” 58th Annual Scientific Meeting of the Caribbean Public Health Agency; May 2–4, 2013, Barbados.
- **Knight-Madden J**. “Sickle cell disease and the dengue epidemics in the French West Indies and Jamaica.” 3rd Conférence Caribéenne sur la drépanocytose May, 2013, Cuba.

- Etienne-Julan M, **Knight-Madden J**. “Sickle cell disease neonatal screening program in Jamaica.” 3rd Conférence Caribéenne sur la drépanocytose May, 2013, Cuba.
- **Knight-Madden J**, Barton-Gooden A, Weaver S, Reid M, Greenough A. “Mortality, asthma, smoking and acute chest syndrome in young adults with sickle cell disease.” The Faculty of Medical Sciences Research Day, The University of the West Indies, Mona, 2012.
- **Knight-Madden J**, Hibbert J, Reid M, Ofori-Acquah S, Landis R, McKenzie C, Stiles J. “The lungs and brain in sickle cell disease: Organs at risk of injury due to perturbations in the heme degradation pathway.” Grant Writing Workshop, Foundation for Sickle Cell Disease Research; April, 2013, Miami.
- **Mani K**, Hoo Sang M, Younger-Coleman N, Ferguson T. “Ischaemic heart disease at the University Hospital of the West Indies: hospital admission rates and inpatient mortality rates, 2005–2010.” The Faculty of Medical Sciences Research Day November; The University of the West Indies, Mona, 2012.
- **Mansingh G**, Osei-Bryson K, Asnani M. “Determinants of Quality of Life of Sickle Cell Patients: A KDDM Process Model based Exploration.” Conf-IRM 2013: Managing IT in a Consumerized IT world; May 22–24, 2013, Natal, Brazil.
- Martí-Carvajal A, **Knight-Madden J**, Martinez-Zapata M, Francis D. “Interventions for treating leg ulcers in people with sickle cell disease: a metanalysis.” The Faculty of Medical Sciences Research Day, The University of the West Indies, Mona, 2012.
- **McFarlane S**, Bernard O, Mathurin C, Castillo A. “Issues in the Management of Diabetes in Youth of three Caribbean countries and their Caregivers’ International Society of Paediatric and Adolescent
McFarlane S, Bernard O, Mathurin C, Castillo A. “Issues in the Management of Diabetes in Youth of three Caribbean countries – the Caregivers’ Perspectives . . .” University Diabetes Outreach Programme, 14th Annual Conference; Ocho Rios, Jamaica, 2013.

- **McFarlane S**, Francis D, Younger N, G G-S, Wilks R. “Association of Depressive Symptoms and BMI in Jamaican Adolescents.” 58th Annual Scientific Meeting of the Caribbean Public Health Agency; May 2–4, 2013, Barbados.
- **McFarlane S**, Tulloch-Reid M, Francis D, Ferguson T, Younger-Coleman N, Wilks R. “Chronic Disease and Overweight/Obesity in Jamaica.” Caribbean Obesity Society, 3rd Annual Conference; January, 2013.
- **Orimoloye A**, Hurlock L, Ferguson T, Lee M. “A study of energy drinks consumption among the students of the University of the West Indies, Mona, Jamaica.” The Faculty of Medical Sciences Research Day November, The University of the West Indies, Mona; 2012.
- **Rankine-Mullings A**, Knight-Madden J, MooSang M, Lynch O, Reid M. “Sickle cell disease; a risk factor for fatal dengue fever in the 2012 Epidemic in Jamaica: A preliminary report.” 58th Annual Scientific Meeting of the Caribbean Public Health Agency; May 2–4, 2013, Barbados.
- **Stephenson D**, Powell C, Chang S, Walker S. “Caregiver training benefits the development of children aged 6–42 months living in child care institutions in Jamaica.” 58th Annual Scientific Meeting of the Caribbean Public Health Agency; 2013 May 2–4, 2013, Barbados.
- **Stephenson D**, **Powell C**, Chang S, Walker S. “Caregiver training benefits care-giving practices in children’s homes in Jamaica.” 58th Annual Scientific Meeting of the Caribbean Public Health Agency, May 2–4, 2013, Barbados: *Poster*.
- **Tulloch-Reid M**, Ferguson T, Wilks R. “The Lipid Accumulation Product is Not Better than Anthropometric Measurements in Identifying Insulin Resistant Black Youth.” American Association of Clinical Endocrinologist 21st Annual Scientific Meeting, Philadelphia, Pennsylvania, 2012.

- **Tulloch-Reid M.** “Dyslipidemia in 2012”. Vanderbilt University School of Medicine and The Heart Institute of the Caribbean Advances in Cardiovascular Care, Jamaica Conference Centre, December 6–8, 2012.
- **Tulloch-Reid M.** “The Epidemiology of Childhood Diabetes in the Caribbean” International Society for Pediatric and Adolescent Diabetes Training Course, Trinidad, July 27–28, 2013.
- **Tulloch-Reid M.** “Guidelines for the Management of Youth with Diabetes in the Caribbean” International Society for Pediatric and Adolescent Diabetes Training Course, Trinidad, July 27–28, 2013.
- **Vergara C, Murray T, Rafaels N, Lewis R, Campbell M, Foster C, Gao L, Faruque M, Riccio OR, Carvalho E, M A, Cruz A, Watson H, Mercado D, Knight-Madden J, Ruczinski I, Dunston G, Ford J, Caraballo L, Beaty T, Mathias R, Barnes K.** “African Ancestry Is a Risk Factor for Asthma and High Total IgE Levels in African Admixed Populations.” American Society of Human Genetics, Annual Meeting San Francisco, 2012.
- **Walker S.** “Sustained benefits of early intervention. Integrating Nutrition and Early Childhood Development.” The Sackler Institute for Nutrition Science, The New York Academy of Sciences; August 29–30, 2102, New York.
- **Walker S.** “Use of media for behavior change to improve parenting and child development. Integrating Nutrition and Early Childhood Development.” The Sackler Institute for Nutrition Science, The New York Academy of Sciences; August 29–30, 2012, New York.
- **Walker S.** “Perspectives on investing in young children’s health, education, nutrition & social protection.” Investing in Young Children Globally, Institute of Medicine; March 7–8, 2013, Washington DC.
- **Walker S.** “Promoting young child development: The role of the health sector” 58th Annual Scientific Meeting of the Caribbean Public Health Agency; May 2–4, 2013, Barbados.
- **Wilks R.** “The Epidemic of Non-Communicable Diseases ‘Moving

on Up²– 50 Years Onwards. Are we better off?” Association of Consultant Physicians of Jamaica 10th Annual Symposium; September 9, 2012. Terra Nova Hotel, Jamaica.

- **Wilks R.** “Epidemiology Research Unit CNCD Group Overview.” Ministry of Health Inaugural National Review on Non-Communicable Diseases (NCDs); November 16, 2012. Jamaica Conference Centre.
- **Wilks R.** “Hypertension Update” University Health Services (UHS) Seminar; August 30, 2012. UWI Health Centre.
- **Wilks R.** “Overview of the Risk factors and Non-Communicable Disease Epidemic in the Caribbean” Faculty of Medical Sciences 21st Annual Research Conference and Workshop November 7–9, 2012. The University of the West Indies, Mona.
- **Wilks R.** “Chronic Non-Communicable Diseases; Alternate Paradigms for Inquiry and Intervention.” William Bill Dennis Memorial Lecture July 18, 2013. Faculty of Medical Sciences, UWI.
- **Wilks R.** “Epidemiology of Hypertension in Jamaica.” *Advancements in Medicine and Healthcare* April 26–27, 2013. Department of Medicine, Faculty of Medical Sciences, UWI.
- **Wilks R.** “Facing CNCD Epidemic in Developing Countries: Community Based Participation Research (CBPR).” 58th Annual Scientific Meeting of the Caribbean Public Health Agency; May 2–4, 2013, Barbados.

PUBLICATIONS

Book Chapter

- **Walker SP, Chang SM.** “Intra-uterine growth restriction in developing countries: Impact on child mental development and behaviour”, In: *Handbook of Growth and Growth Monitoring in Health and Disease*. ed. by VR Preedy. Springer Science + Business Media, LLC. 2012, 147–158.

Refereed Journal Articles

- Anderson M, **Asnani M**. “You just have to live with it”: coping with sickle cell disease in Jamaica.” *Quality Health Research Journal* 2013;23(5):655–64.
- **Asnani MR, Lynch O, Reid ME**. “Determining glomerular filtration rate in homozygous sickle cell disease: utility of serum creatinine based estimating equations.” *PLoS One* 2013;8(7):e69922.
- **Asnani MR, Williams A, Reid M**. “Splenic enlargement in adults with homozygous sickle cell disease: the Jamaican experience.” *Hematology* 2013;18(1):46–9.
- **Baker-Henningham H, Scott S, Jones K, Walker S**. “Reducing child conduct problems and promoting social skills in a middle-income country: cluster randomised controlled trial.” *British Journal of Psychiatry* 2012;201:101–8.
- Bhutta ZA, Das JK, Rizvi A, Gaffey MF, Walker N, Horton S, Webb P, Lartey A, Black RE & Maternal Child Nutrition Study Group (**S Walker**, member). “Evidence-based interventions for improvement of maternal and child nutrition: what can be done and at what cost?” *Lancet* 2013 ;382(9890):452–77.
- Black RE, Victora CG, **Walker SP**, Bhutta ZA, Christian P, de Onis M, Ezzati M, Grantham-McGregor S, Katz J, Martorell R, Uauy R. “Maternal and child nutrition: building momentum for impact.” *Lancet* 2013 ;382(9890):372–5.
- Black RE, Victora CG, **Walker SP**, Bhutta ZA, Christian P, de Onis M, Ezzati M, Grantham-McGregor S, Katz J, Martorell R, Uauy R. “Maternal and child undernutrition and overweight in low-income and middle-income countries.” *Lancet* 2013 ;382(9890):427–51.
- **Bowers AS, Reid HL, 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* 2013;8(7):e68929.

- **Boyne M, Thompson D, Osmond C, Fraser R, Reid M, Taylor-Bryan C, Soares-Wynter S, Forrester T.** “The effect of antenatal factors and postnatal growth on serum adiponectin levels in children.” *Journal of Developmental Origins of Health and Disease* 2013;4:317–23.
- Dawkins JC, Fletcher HM, Rattray CA, **Reid M**, Gordon-Strachan G. “Acute pyelonephritis in pregnancy: a retrospective descriptive hospital based-study.” *ISRN Obstet Gynecol* 2012;2012:519321.
- **Ferguson T, Tulloch-Reid M, Younger N, Wright-Pascoe R, Boyne M, McFarlane S, Francis D, Wilks R.** “Diabetic Foot Complications among Patients Attending a Specialist Diabetes Clinic in Jamaica: Prevalence and Associated Factors.” *West Indian Medical Journal* 2013;62.
- **Ferguson TS, Tulloch-Reid MK, Gordon-Strachan G, Hamilton P, Wilks RJ.** “National health surveys and health policy: impact of the Jamaica Health and Lifestyle Surveys and the Reproductive Health Surveys.” *West Indian Medical Journal* 2012;61(4):372–9.
- Fletcher HM, Dawkins J, Rattray C, Wharfe G, **Reid M**, Gordon-Strachan G. “Morinda citrifolia (Noni) as an Anti-Inflammatory Treatment in Women with Primary Dysmenorrhoea: A Randomised Double-Blind Placebo-Controlled Trial.” *Obstetrics and Gynecology International* 2013;2013:195454.
- 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.” *Fertil Steril* 2013 July 19.
- **Gayle K, Tulloch-Reid M, Younger N, Francis D, McFarlane S, Wright-Pascoe R, Boyne M, Wilks R, Ferguson T.** “Footcare and footwear practices among patients attending a specialist diabetes clinic in Jamaica.” *Clinics Pract* 2012:e85.
- Gibson RC, Morgan KA, Abel WD, Sewell CA, Martin JS, Lowe GA, Haye Wde L, Edwards CL, O'Garro KN, **Reid ME, Asnani**

- MR. “Locus of control, depression and quality of life among persons with sickle cell disease in Jamaica.” *Psychology Health and Medicine* 2013;18(4):451–60.
- Gordon CD, **Wilks R**, McCaw-Binns A. “Effect of aerobic exercise (walking) training on functional status and health-related quality of life in chronic stroke survivors: a randomized controlled trial.” *Stroke* 2013 ;44(4):1179–81.
 - Jackson M, **Tulloch-Reid M**, **Walker S**, McFarlane-Anderson N, Bennett F, **Francis D**, Coard K. “Dietary patterns as predictors of prostate cancer in Jamaican men.” *Nutr Cancer* 2013;65(3):367–74.
 - Jackson MD, **Tulloch-Reid MK**, McFarlane-Anderson N, Watson A, Seers V, Bennett FI, Egleston B, Ragin C. “Complex interaction between serum folate levels and genetic polymorphisms in folate pathway genes: biomarkers of prostate cancer aggressiveness.” *Genes Nutr* 2013;8(2):199–207.
 - Jackson MD, **Walker SP**, Simpson-Smith CM, Lindsay CM, Smith G, McFarlane-Anderson N, Bennett FI, Coard KC, Aiken WD, Tulloch T, Paul TJ, Wan RL. “Associations of whole-blood fatty acids and dietary intakes with prostate cancer in Jamaica.” *Cancer Causes Control* 2012;23(1):23–33.
 - Kidd LR, Jones DZ, Rogers EN, Kidd NC, Beache S, Rudd JE, Ragin C, Jackson M, McFarlane-Anderson N, **Tulloch-Reid M**, Morrison S, Brock GN, Barve SS, Kimbro KS. “Chemokine Ligand 5 (CCL5) and chemokine receptor (CCR5) genetic variants and prostate cancer risk among men of African Descent: a case-control study.” *Hereditary Cancer in Clinical Practice* 2012;10(1):16.
 - **Knight-Madden J**, Etienne-Julan M, Romano M, Watkins N, Calder D. “Sickle Retinopathy in Persons Reputed to have Sickle Cell Trait.” *Case Reports in Genetics* 2012;2012(Article ID 136582).
 - **Knight-Madden JM**, Barton-Gooden A, Weaver SR, **Reid M**, Greenough A. “Mortality, asthma, smoking and acute chest syndrome in young adults with sickle cell disease.” *Lung* 2013 ;191(1):95–100.

- **Knight-Madden JM**, Connes P, **Bowers A**, Nebor D, Hardy-Dessources MD, Romana M, Reid H, Pichon AP, Barthelemy JC, Cumming VB, Elion J, **Reid M**. “Relationship between acute chest syndrome and the sympatho-vagal balance in adults with hemoglobin SS disease; a case control study.” *Clin Hemorheol Microcirc* 2013;53(3):231–8.
- Kutlar A, Ataga K, **Reid M**, Vichinsky EP, Neumayr L, Blair-Britt L, Labotka R, Glass J, Keefer JR, Wargin WA, Berenson R, Perrine SP. “A phase 1/2 trial of HQK-1001, an oral fetal globin inducer, in sickle cell disease.” *American Journal of Hematology* 2012;87(11):1017–21.
- Kutlar A, **Reid M**, Inati A, Taher A, Abboud MR, El-Beshlawy A, Buchanan GR, Smith H, Ataga K, Perrine S, Ghalie R. “A dose-escalation phase IIa study of 2,2-dimethylbutyrate (HQB-1001), an oral fetal globin inducer, in sickle cell disease.” *American Journal of Hematology* 2013 July 5.
- Marti-Carvajal AJ, Conterno LO, **Knight-Madden JM**. “Antibiotics for treating acute chest syndrome in people with sickle cell disease.” *Cochrane Database Syst Rev* 2013;1:CD006110.
- Marti-Carvajal AJ, **Knight-Madden JM**, Martinez-Zapata MJ. “Interventions for treating leg ulcers in people with sickle cell disease.” *Cochrane Database Syst Rev* 2012;11:CD008394.
- Morgan ND, **Ferguson TS**, **Younger NO**, **Tulloch-Reid MK**, **Francis DK**, **McFarlane SR**, Grant A, Lewis-Fuller E, **Wilks RJ**. “Prevalence of high-risk sexual behaviour in Jamaican adults and its relationship to socio-demographic and religious factors: findings from the Jamaica Health and Lifestyle Survey 2007–2008.” *West Indian Medical Journal* 2012 December;61(9):873–80.
- Morrison BF, **Reid M**, **Madden W**, Burnett AL. “Testosterone replacement therapy does not promote priapism in hypogonadal men with sickle cell disease: 12-month safety report.” *Andrology* 2013 ;1(4):576–82.
- Ragin C, Davis-Reyes B, Tadesse H, Daniels D, Bunker CH, Jackson

- M, **Ferguson TS**, Patrick AL, **Tulloch-Reid MK**, Taioli E. “Farming, reported pesticide use, and prostate cancer.” *Am J Mens Health* 2013;7(2):102–9.
- Rogers EN, Jones DZ, Kidd NC, Yeyeodu S, Brock G, Ragin C, Jackson M, McFarlane-Anderson N, **Tulloch-Reid M**, Sean Kimbro K, Kidd LR. “Toll-like receptor-associated sequence variants and prostate cancer risk among men of African descent.” *Genes Immun* 2013 ;14(6):347–55.
 - Sargeant T, Harris T, **Wilks R**, Barned S, Galloway-Blake K, **Ferguson T**. “Rhabdomyolysis and dengue Fever: a case report and literature review.” *Case Rep Med* 2013;2013:101058.
 - Sioka C, Skarulis MC, **Tulloch-Reid MK**, Heiss JD, Reynolds JC. ““Hidden” bone metastasis from thyroid carcinoma: A clinical note.” *Rev Esp Med Nucl Imagen Mol* 2013 July 8.
 - Taioli E, Sears V, Watson A, Flores-Obando RE, Jackson MD, Ukoli FA, de Syllos Colus IM, Fernandez P, McFarlane-Anderson N, Ostrander EA, Rodrigues IS, Stanford JL, Taylor JA, **Tulloch-Reid M**, Ragin CC. “Polymorphisms in CYP17 and CYP3A4 and prostate cancer in men of African descent.” *Prostate* 2013 ;73(6):668–76.
 - Tayo BO, Kramer H, Salako BL, Gottesman O, **McKenzie CA**, Ogunniyi A, Bottinger EP, Cooper RS. “Genetic variation in APOL1 and MYH9 genes is associated with chronic kidney disease among Nigerians.” *Int Urol Nephrol* 2013 ;45(2):485–94.
 - Terao C, Bayoumi N, **McKenzie CA**, Zelenika D, Muro S, Mishima M, Connell JM, Vickers MA, Lathrop GM, Farrall M, Matsuda F, Keavney BD. “Quantitative Variation in Plasma Angiotensin-I Converting Enzyme Activity Shows Allelic Heterogeneity in the ABO Blood Group Locus.” *Ann Hum Genet* 2013 August 13.
 - **Tulloch-Reid MK**, Younger NO, **Ferguson TS**, Francis DK, Abdulkadri AO, Gordon-Strachan GM, **McFarlane SR**, **Cunningham-Myrie CA**, **Wilks RJ**, Anderson SG. “Excess Cardiovascular Risk Burden in Jamaican Women Does Not Influence Predicted 10-Year

CVD Risk Profiles of Jamaica Adults: An Analysis of the 2007/08 Jamaica Health and Lifestyle Survey.” *PLoS One* 2013;8(6):e66625.

- Vergara C, Murray T, Rafaels N, Lewis R, Campbell M, Foster C, Gao L, Faruque M, Oliveira RR, Carvalho E, Araujo MI, Cruz AA, Watson H, Mercado D, **Knight-Madden J**, Ruczinski I, Dunston G, Ford J, Caraballo L, Beaty TH, Mathias RA, Barnes KC. “African ancestry is a risk factor for asthma and high total IgE levels in African admixed populations.” *Genet Epidemiol* 2013 ;37(4):393–401.
- Walker S, Pierre R, Christie C, **Chang S**. “Neurocognitive function in HIV-positive children in a developing country.” *International Journal of Infectious Diseases* 2013;17:e862-e7
- **Walker SP, Chang SM, Powell CA, Baker-Henningham H**. “Building human capacity through early childhood intervention: the Child Development Research Programme at the Tropical Medicine Research Institute, the University of the West Indies, Kingston, Jamaica.” *West Indian Medical Journal* 2012;61(4):316–22.

Non-refereed Articles

- **Ferguson TS**. “Foot Care and Footwear Practices in Patients with Diabetes: Simple Interventions and Adherence to Guidelines May Be Limb Saving.” *West Indian Medical Journal*. 2012; 61(7): 657–658 (letter to the editor)
- **Reid M**. “Nutrition and sickle cell disease.” *Comptes rendus biologies* 2013;336(3):159-63.
- Mayosi BM, **Forrester T**. “Commentary: ‘serum-cholesterol, diet, and coronary heart-disease in Africans and Asians in Uganda’ by AG Shaper and KW Jones.” *The International Journal of Epidemiology* 2012 ;41(5):1233-
- **Walker S**. “Double burden of malnutrition.” *Development and Cooperation* 2013;40:304–5.”
- **Walker S, Chang S**. “Effectiveness of parent support programmes in

enhancing learning in the under-3 age group.” *Early Childhood Matters* 2013;120:45–9.

Technical Reports

- Walker S, Powell C, Chang S, Henningham H (2012). “Pilot of parenting interventions in the Caribbean. Report on baseline survey. Regional Non-reimbursable Technical Cooperation No. ATN/SF-12300-RG.” *Inter-American Development Bank*.

Systematic Reviews/Protocols

- Francis DK, Lazzarini PA, Ferguson TS, Jen SD, 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 DK, Utrobicic A, Choy EHS, Tenzera D, Kordic A. “Probiotics for fibromyalgia (Protocol).” *Cochrane Database of Systematic Reviews* 2013, Issue 3. Art. No.: CD010451. DOI: 10.1002/14651858.CD010451.
- Kristjansson E, Francis DK, Liberato S, Benkhalti Jandu M, Welch V, Batal M, Greenhalgh T, Rader T, Noonan E, Shea B, Janzen L, Wells GA, Petticrew M. “Feeding interventions for improving the physical and psychosocial health of disadvantaged children aged three months to five years (Protocol).” *Cochrane Database of Systematic Reviews* 2012, Issue 6. Art. No.: CD009924. DOI: 10.1002/14651858.CD009924.

INCOME GENERATION

Title: **Management of Severe Acute Malnutrition during Early Life; Addressing Nutritional Requirements by Stable Isotope Techniques.**

Funding Agency: IAEA

Contract No: 15268

Principal Investigator Asha Badaloo

Period of Award: September 2008–September 2012

Value: €60000.00

Title: Glutathione homeostasis and oxidant damage in kwashiorkor: Role of sulphur amino acids in GSH deficiency childhood malnutrition.

Funding Agency: NIH

Contract No: 5R01 DK056689

Principal Investigator: Terrence Forrester

Period of Award: 2008–2013

Value: US\$1,125,000

Title: Variation in Severity of Sickle Cell Disease among the Yoruba

Funding Agency: FIC/NIH

Contract No: 1R03TW008695-01A1

Investigators Marvin Reid Colin McKenzie

Period of Award: 07/01/2011 – 06/30/2014

Value: USD\$96,000.00

Title: Genetics of Hypertension in Blacks

Funding Agency: NIH/NHLBI f

Contract No: 2R01HL053353-12A1

Principal Investigator Richard Cooper, Colin McKenzie (consultant)

Period of Award: 06/15/2009-04/30/2014

Value: USD\$1,000,000.00

Title: Utility of Cystatin-C estimating equations in determining glomerular filtration rate in Sickle Cell Disease

Funding Agency: Caribbean Health Research Council

Principal Investigator Monika Asnani

Period of Award: September 2011–August 2013

Value: US\$ 10,000.00

Title: Shaw in Jamaica Project

Funding Agency: National Institutes of Health

Principal Investigator: William Aiken, Co-Investigators: Shelly McFarlane, Novie Younger

Period of Award: 2012–2013

USD\$75,261.00

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

Duration: 2011–2016

Co-investigator Professor Rainford Wilks

Funding Agency: National Institute on Minority Health and Health Disparities Cooperative Agreement No.1U24MD006959-01, NIH – US\$4,799,063.00

Title: New Approaches for Empowering Studies of Asthma in Populations of African Descent

Funding Agency: NHLBI, HL104608-01

Principal Investigator: Kathleen Barnes, John's Hopkins University

Key Investigator/Consultant: Jennifer Knight-Madden

Value: USD\$1,706,590

Title: Know-it study: An educational intervention to improve disease knowledge among adolescents with Sickle Cell Disease

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

Principal Investigator: Antoinette Barton-Gooden, UWISON

Co-investigators: Jennifer Knight-Madden, Monika Asnani, Marilyn Grindley

Value: \$1,500,000.00

Title: The association of cortisol awakening response with blood pressure and adiposity in Caribbean children

Funding Agency: Caribbean Health Research Council

Principal Investigator: Michael Boyne

Period of Award: July 2012–December 2013

Value: US \$2,850.00

Title: Efficacy of combination therapy-hydroxyurea and enalapril in slowing the progression of sickle nephropathy in children ECP 127, 10/11

Funding Agency: Caribbean Health Research Council

Principal Investigator: Lesley King

Period of Award: 2012–2013

Value: US \$10,000.00

Title: Effects of β -hydroxy- β -butyrate supplementation and resistance exercise on strength and body composition in Sickle Cell Anaemia

Funding Agency: Caribbean Public Health Agency (CARPHA) formerly CHRC

Principal Investigator: Marvin Reid

Period of Award: May 2013 – April 2014

Value: US \$10,000.00

Title: Parenting and growth in Caribbean Children

Funding Agency: Harvard Pilgrim Health Centre

Principal Investigator: Marshall Tulloch-Reid

Period of Award: July 1 2012–June 30, 2013

Value: US \$29,566.00

Title: Improvement health care in persons and preventing Stroke in persons with Sickle Cell Disease

Funding Agency: National Health Fund

Principal Investigator: Marvin Reid

Period of Award: July 1 2012–June 2015

Value: US \$172,349.89

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

Funding Agency: The Wellcome Trust

Principal Investigator I: Helen Henningham

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

Value: GBP351, 892.00

Title: Inter-Generational Impacts of Early Childhood Experience

Funding Agency: Inter-American Development Bank

Principal Investigator: Susan Walker

Period of Award: November 2010–October 2013

Value: US \$150,000

Title: Pilot of parenting interventions in the Caribbean

Funding Agency: Inter-American Development Bank

Principal Investigator: Susan Walker

Period of Award: January 2011–December 2013

Value: US \$750,000

PUBLIC SERVICE

Monika Asnani

- Caribbean Representative: Worldwide Initiative on Social Studies in Hemoglobinopathies (WiSSH) since 2011.
- Caribbean College of Family Physicians
- Honorary Secretary
- Co-Chair, CME Committee
- Member, Accreditation & Certification Committee
- Executive Committee Member, Indian Cultural Society in Jamaica

Asha Badaloo

- Voluntary Nutritional Consultant, Prema's free medical clinic

Michael Boyne

- Member, Medical Association of Jamaica Ethics Committee
- President, Caribbean Endocrine Society
- Member, Board of Diabetes Association of Jamaica
- Member, National Health Fund Expert Panel of Physicians.

Susan Chang-Lopez

- Member, Research and Data Management Sub-committee, Early Childhood Commission (ECC).

Damian Francis

- Nutrition and Dietetics Representative, Council for Professions Supplementary to Medicine
- Member, Policy Committee, Caribbean Public Health Agency

Trevor Ferguson

- Member, National Non-Communicable Disease Committee
- Member, Editorial Board for *West Indian Medical Journal*
- Member, Editorial Board, *Frontiers in Diabetes*
- Member, National Ministerial Council, Bethel United Church of Jesus Christ (Apostolic).

Jennifer Knight-Madden

- Member, Ministry of Health: Working group to discuss the ‘The Strategic Plan for Asthma/COPD’
- Ministry of Health: Working group to implement islandwide neonatal screening for sickle cell disease.
- Vice President, Caribbean Network of Researchers on Sickle Cell and Thalassemia (CAREST).

Shelly McFarlane

- Member, Jamaica Statistical Society (JSS)
- Observer on the International Diabetes Federation (IDF) Board.

Colin McKenzie

- Director, NCB insurance Company Limited

Marvin Reid

- Executive Member, Caribbean Network of Researchers on Sickle Cell and Thalassemia (CAREST)
- Member, Global Network on Sickle Cell Disease
- Executive Member, Medical Association of Jamaica with responsibility for Education and Planning of the annual MAJ symposium

- Chairman, Caribbean College of Family Physician Jamaica Chapter
- Executive Member, Rotary Club New Kingston.

Marshall Tulloch-Reid

- Member, Research Affairs Core Committee, The Endocrine Society
- Member, International Committee, and Health Disparities Committee, The American Association of Clinical Endocrinologists
- Consultant Physician and Endocrinologist, University Hospital of the West Indies
- Member, Education Committee, and Health Committee, Andrews Memorial SDA Church
- Examiner, Caribbean Certified Diabetes Educator (CCDE)
- Trainer / Facilitator, Pediatric and Adolescent Diabetes

Susan Walker

- Chair, Board of Trustees, Environmental Foundation of Jamaica Trust Fund
- Member, Advisory Committee on Health Research, Pan American Health Organization
- Member, Steering Committee, Global Child Development Group

Rainford Wilks

- Director, Heart Foundation of Jamaica
- Chairman, Medical Committee, St. Joseph's Hospital
- Chairman, Gibson Relays Organizing Committee
- Commissioner, Jamaica Anti-Doing Commission; Member of the JADCO Technical Sub-committee
- Member and Co-Chairman for the Caribbean, PAHO/WHO Regional Expert Group on Cardiovascular Disease Prevention through Dietary salt Reduction
- Member, Wesley Parker Foundation

Tropical Medicine Research Institute

- Member, Technical working group advising the Ministry of Health on the Epidemiology of Violence
- Member, Technical working group advising the Ministry of Health on the Management of Hypertension and Diabetes Mellitus
- Member, Ministry of Agriculture and Fisheries National Food and Nutrition Security Action Plan Group
- Member, EU-LAC Health Expert on Prevention of Diseases and Promotion of Well Being Committee