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 George Alleyne-Chronic Disease Research Centre (GA-CDRC) at Cave Hill. This report covers the Mona units with the report for CDRC submitted to the Cave Hill Principal. The CAIHR 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 2016–2017 academic year, the MSc programmes
Epidemiology & Nutrition were not offered as they were under revision, however the MSc Epidemiology will be offered in the coming year. Visiting faculty members were Dr Louise Goffe and Professor Kennedy Cruikshank from Kings College, London, Dr. Barry M. Popkin, W. R. Kenan, Jr. Distinguished Professor Gilling’s School of Global Public Health, University of North Carolina, Chapel Hill and members of Bloomberg Philanthropy, Dr Aja Murray representing the Evidence for Better Lives Consortium, University of Cambridge, Professor Sally McGregor, University College London and Dr. Simon Anderson from the University of Manchester.

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 supervision of DM candidates. We have active collaborations with the Faculty of Medical Sciences in research training for staff through the FMS-CAIHR research fellowships which involves a two-year placement of FMS faculty in the CAIHR 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 the 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, collaborating with the Ministry of Health, provides island wide neonatal screening. Additionally, the SCU provides training and technical support for this programme. The programme is coordinated by a joint working group comprising the Ministry of Health,
the SCU and the Sickle Cell Trust. The Sickle Cell Unit also conducted the 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 undernutrition, 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**

The research programme of the Unit falls under the Institute’s 3 themes of i) Biological Expression of Disease; ii) Determinants of Health along the Life Course; iii) Health Interventions, Evaluation, Translation and Implementation Research and are centred on Alignment Axis of The University of the West Indies Triple A strategic plan. 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 UWI team will also be part of a new Global Diet and Physical Activity Network, following the successful application to National Institute for Health Research in the UK by the University of Cambridge. UWI will be the only Caribbean site with other partners from Cameroon, Kenya and South Africa complementing the team.

CAIHR also became part of the Global Evidence Synthesis Initiative (GESI) in May 2017. GESI was created by a number of global or internationally oriented research organizations committed to the production
and use of evidence syntheses to enhance professional practice and public policy. The goal of the network is to build partnerships and collaborations and strengthen capacity in multidisciplinary evidence synthesis production and use in low and middle income countries (LMICs). This will be done through identifying established Centers of Evidence Synthesis in LMICs and connecting them through the network. The ERU continues to be a part of the Caribbean Branch of the USA Cochrane Collaborating Centre (CBUSCC) with a number of systematic reviews in progress in collaboration with faculty at CAIHR 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 and the IAEA. Initiatives were implemented to strengthen grant management support through the training of administrative staff in NIH Program Funding and Grants Administration. Continued investment in this by the UWI will be critical for achievement of the Strategic Objective, Income source diversification.

The upcoming academic year (2017/18) will see a continuation of our current activities, the execution of newly funded projects that will be coming on stream, submission of grant applications to support planned research activities and forging new partnerships to complement the skills and resources within the Institute and increase the visibility of the Institute and its research work. Identification and mentoring of the next generation of bright academic staff will also be another area of focus. There is currently a critical need to expand the current physical plant to accommodate new staff and project activities associated with current and future grants and training activities and negotiations on short and long term solutions for our needs will need to be given priority.

PAPERS PRESENTED

Annual Research Conference of the Faculty of Medical Sciences, UWI, Mona. Kingston, Jamaica. November 2016. Received ‘Dean's Award for Best Oral Presentation, FMS Annual Research Conference 2016’.


- **Govia, I.O.** “Dementia research in the Caribbean as a policy
instrument”. The 4th Alzheimer’s disease International non-Latin Caribbean Conference on Alzheimer’s and Other Dementias, Port of Spain, Trinidad. June, 2017

- **Govia, I.O.** “Aging, mental health, and dementia”. Caribbean Preparatory Meeting for the 4th Regional Conference on Aging and the Rights of Older Persons, Port of Spain, Trinidad. June 2017


**Posters**


metabolic and nutritional status in children with sickle cell anaemia: baseline data from the EXTEND trial.” The American Society Pediatric Haematology/Oncology Conference, Montreal Conference Centre, April 24–27, 2017


**Invited Lectures**


- **Asnani M.** “Management of Sickle Cell Disease in Primary Care.” Invited lecture to Family Medicine Faculty and Residents. Department of Family Medicine, Faculty of Medical Science, UWI. January 25, 2017.

- **Asnani M.** “The Role of Hydroxyurea in the management of Sickle Cell Disease.” Invited lecture at Advancement in Medicine Conference 2017. May Pen Hospital, Jamaica. February 27–March 1, 2017


• **Knight-Madden J.** “Pulmonary Complications of Sickle Cell Disease.” Leila Wynter Conference – Bustamante Hospital for Children. November, 2016

• **Knight-Madden J.** “Newborn Screening in Jamaica and the Caribbean, 3rd Global Congress on Sickle Cell Disease.” India, February 2017

• **Knight-Madden J.** “Sickle cell disease: Pain.” The Society for Inherited and Severe Blood Disorders (T’DAD & T’GO), Inherited Blood Disorders Symposium. Trinidad and Tobago, March, 2017


• **Knight-Madden J.** “Newborn Screening for Sickle Cell Disease during Pregnancy.” The Society for Inherited and Severe Blood Disorders (T’DAD & T’GO), Inherited Blood Disorders Symposium. Trinidad and Tobago, March, 2017.


• **King, LG.** “Optimal Management of SCD – Adults and Paediatrics.” Sickle Cell Conference, St. Thomas, USVI. May 26th, 2017.


• **Simmonds Patrice L.** “The Role of Hydroxyurea in the Management

PUBLICATIONS

Book Chapters


Referred Journals


trial of a universal violence prevention programme in Jamaican preschools”. Mental Health Protocol. 6, 5 (2016):e012166


- Ueda P, Woodward M, Lu Y, Hajifathalian K, Al-Wotayan R, Aguilar-


- Black MM, **Walker SP**, Fernald LCH, Andersen CT, DiGirolamo


**Technical Reports:**

PUBLIC SERVICE

Angela Rankine-Mullings
– Member, Jamaica Pain Collaborative
– Member, Lyndhurst Methodist Church Health Fair August 13, 2017
– Member, Church Women United Health Fair April, 2017

Carolyn Taylor Bryan
– Member, Medical Association of Jamaica
– Member, Paediatric Association of Jamaica
– Member, National Infant and Young Child Feeding Committee

Damian Francis
– Member, WHO Cochrane Cornell Summer Institute Faculty, Cornell University
– Member, Pan American Health Organization / World Health Organization
– Member, World Health Organization Expert Advisory Panel on Drug Evaluation
– Member, Essential Medicine List Strategic Fund List Expert
– Member, Caribbean Public Health Agency Research to Policy Evidence Portal Committee
– Member, Jamaica Association of Professionals in Nutrition and Dietetics (JAPINAD) Standards and Regulations
– Member, Jamaica Food Industry Taskforce

Ishtar Govia
– Member, Jamaica Mental Health Advocacy Network, Executive Board Member
– Member, Alzheimer’s Associations of the Caribbean, Scientific Committee Co-Chair
– Member, Caribbean Alliance of National Psychological Associations (CANPA)
– Member, At-Large of the Executive Council
– Member, CANPA Caribbean Regional Conference of Psychology Standing Committee, Co-Chair
– Member, CANPA Publications and Communications Standing Committee, Co-Chair

**Jennifer Knight-Madden**

– Sickkids Caribbean Initiative – Co-chair Sickle Cell Disease Working Group
– Member, Ministry of Health Sickle Cell Technical Working Group
– Member, Caribbean Network of Researchers in Sickle Cell Disease and Thalassemia, Vice President

**Marshall Tulloch-Reid**

– Member, Caribbean Endocrine Society Immediate Past President
– Member, Support group for children with diabetes and their families

**Marvin Reid**

– Member, Research Advisory Committee, Caribbean Public Health Agency (CARPHA)
– President, Caribbean College of Family Physician

**Monika Asnani**

– Member, Term Graduate Faculty Appointment. Duke University Graduate School. 2017–2019
– Member, Co-Chair, Caribbean Primary Care Research group (CAPCRG), Caribbean College of Family Physicians. 2015–Present
– Member, Caribbean Representative to Worldwide Initiative on Social Studies in Hemoglobinopathies (WiSSH)
– Board Member of Caribbean Network of Researchers in Sickle Cell Disease and Thalassemia
– Academic Editor, Plos One Journal
– Vice President, Indian Cultural Society in Jamaica

Novie Younger-Coleman
– Member, Jamaica Statistical Society

Patrice Simmonds
– Member, Medical Manager for Netball Jamaica (The Sunshine Girls) and Kingston and St. Andrew Football (KSAFA)

Rainford Wilks
– Member, Jamaica Ministry of Health – Essential National Research Committee
– Board Member, Heart Foundation of Jamaica
– Chairman, Gibson-McCook Relays
– Member, Essential National Research Committee

Shelly McFarlane
– Member, WHO/TDR Latin American and Caribbean Regional Training Network
– Member, University Diabetes Outreach Programme
– Member, Cannabis Licencing Authority Science & Research Committee
– Member, Jamaica Statistical Society
– Member, International Society for Paediatric & Adolescent Diabetes
– Board Member, World Walk Foundation
– Member, Kiwanis Club of Constant Spring and Division 23E –
Kiwanis Clubs of Eastern Canada & Caribbean
– Member, Support group for children with diabetes and their families
– Member, Jamaica Ministry of Health – National Health Research Committee

**Susan Chang-Lopez**
– Member, Early Childhood Commission
– Member, Franciscan Ministries Classical Harmony Committee

**Susan Walker**
– Member, Pan American Health Organization / World Health Organization – Advisory Committee on Health Research

**Trevor Ferguson**
– Member, Association of Consultant Physicians Executive

**INCOME GENERATION**

**Monika Asnani**


Funding Agency: Cincinnati Children’s hospital Medical Centre PI: Punam Malik.

Co-Investigator: Monica Asnani

Value: US $70,000

Period: November 2016 (15 years project)

**Jennifer Knight-Madden**

- Title: *A Phase 3, Double-blind, Randomized, Placebo-controlled, Multicenter Study of BT440 Administered Orally to Patients with Sickle Cell Disease*

Funding Agency: Global Blood Therapeutics, Inc.
Co-Investigator: Jennifer Knight-Madden
Value: estimated income USD$70,000
Period: 2016–2018

Susan Walker
• Title: The gains at age 30 years from the Jamaica supplementation and stimulation study. 2016–2018.
Investigators: S. Walker, S. Chang, S. Grantham-McGregor, P. Gertler, J Heckman, C. Vermeersch
Funder: World Bank Strategic Impact Evaluation Fund US$399,491
• Title: Sustainability of benefits from parenting interventions in health centres. 2017
Investigators: S Walker, S Chang, J Smith, F Lopez-Boo
Funder: Inter-American Development Bank, US$ 90,000

Ishtar Govia
• Title: Exploring dementia health and social care systems and services across the Caribbean diaspora. 2016–2017.
Investigators: Reena Lasrado, Dawn Edge, Ishtar Govia, Maria Zubair, Louise Tanner, Polly Kaiser, Veena Lasrado
Funder: Manchester Institute for Collaborative Research on Ageing (MICRA), GBP 5500
• Title: Improving Access to Mental Health Services through Collaborations with Faith-Based and Spirituality-focused Organisations and Leaders
Investigators: Dawn Edge, Ishtar Govia
Funder: Biotechnology and Biological Sciences Research Council (BBSRC) Global Challenges Research Fund (GCRF), GBP 10,000
• Title: Global Diet and Activity Research (GDAR) Group and Network 2017–2019
Investigators: Nicholas Wareham, Nigel Unwin (Primary Applicants – University of Cambridge). UWI partners – MK Tulloch-Reid, TA Samuels, I Hambleton

Funder: National Institute for Health Research (UK) GBP 2.0M

Start Date: June 1, 2017

Marvin Reid

- **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.

  Funder: Cincinnati Children’s Medical Hospital; USD $180860 (2015–2017)

- **Title:** JAM6012 “Re-Establishing Nuclear Medicine Capacity In Jamaica”.

  Funder: IAEA EU 800,000 (2014–2017)

- **Title:** Microelements in Life Expectancy and Ageing (MILEAGE) – Project Number: 734931


Clinical Trials with Industry

- **Title:** A Multi-Centre, Phase II, Randomized, Double-Blind, Placebo-Controlled Study to Explore Efficacy and Safety of Sevuparin Infusion for the Management of Acute Vaso-Occlusive Crisis (VOC) in Subjects with Sickle-Cell Disease (SCD”

  Funder: MODUS Pharmaceuticals

- **Title:** United Cannabis / Cannabinid Research and Development Pharmacokinetic Kinetic Study On The Prana Line Of Bionutrients. An open-label, Single-centre, Crossover Clinical Trial to Assess the Pharmacokinetic (PK) Properties and Tolerability of Multiple Oral Doses of PRANA bio nutrients.

  Funder: United Cannabis USD180,000
Sherine Whyte

- **Title:** The assessment of the Prevalence of Environmental Enteric Dysfunction and the Relationship with linear Growth in Urban Jamaican Infants.
  
  Funder: IAEA Euro €35,000.00.

- **Title:** The Determination of Amino Acid requirement in persons with sickle cell disease.
  
  Funder: CARPHA Grant Fund US$5,000

Asha Badaloo

- **Title:** Improving the quality of life of older people through the early diagnosis of sarcopenia in Latin America & the Caribbean- a regional project.
  
  Funding Agency: IAEA Contract No: RLA/6/073
  
  Value: €855,000.00 (for 11 countries)
  
  Period of Award: September 2014–October 2017

- **Title:** Bioavailability of protein from the common bean in Jamaican diets. A coordinated research project
  
  Funding Agency: IAEA contract No. 19284, Value: €50,000.00
  
  Period of Award: 2015–2020

Marshall Tulloch-Reid (PI) & Asha Badaloo (Co-PI)

- **Title:** Promoting healthy growth in children: Assessing the role of parenting and early life influences on body composition and energy expenditure: National project.
  
  Funding Agency: IAEA. Value: €228,000.00
  
  Period of Award: 2015–2017

Carolyn Taylor-Bryan

- **Title:** Assessment of risk factors for childhood obesity and the impact of an educational intervention on infant feeding on growth and body composition: A co-ordinated Research Project.
Funding Agency: IAEA contract No. 22428 Value: €50,000.00
Period of Award: 2017–2022

STUDENTS

- MSc Nutrition
  Shanique Williamson
  Georgette Gayle-Ricketts
  Alexander Ligea