



**THE UNIVERSITY
OF THE
WEST INDIES**



The State University
of New York

The UWI-SUNY partnership began in 2012 and currently involves 10 SUNY campuses and an initial work plan devised by 60 administrators and faculty from both universities. A formal Memorandum of Understanding was signed in January 2013.

Both institutions allocated seed funds in support of this partnership, which is co-ordinated by UWI Central's Office for Regional and International Affairs and SUNY's Office of Global Affairs. The top proposals for this award were selected based upon the strength of the team and the feasibility of the proposed project in terms of expertise in the research or instructional area and potential project sponsors. The UWI-SUNY team is also required to identify potential sponsors who may provide funds for the implementation of the joint graduate instructional programme.

"UWI continues to strengthen its outreach to the region and the wider world as witnessed through our engagement with the State University of New York system and other university partners. We look forward to the maturing of this partnership with benefits accruing both to communities in the Caribbean and New York"

UWI Vice Chancellor E. Nigel Harris

"International partnerships allow University systems around the world to work together to study and solve global issues while providing exciting opportunities for students and faculty."

SUNY Chancellor Nancy Zimpher

UWI-Led Projects

MARINE INVASIVE ALIEN SPECIES IN TROPICAL AND TEMPERATE CLIMATES

Dr. Dayne Buddo

A new postgraduate course, Marine Invasive Alien Species in Tropical and Temperate Climates, will be developed by the team of Drs Judith Gobin (St. Augustine), Joseph Warren (SUNY), Bradley Peterson (SUNY) and Dayne Buddo (Mona).

This course is intended to be offered to both UWI and SUNY students and will include a combined class with field components in each region. It will focus on the biology and ecology of these species and will examine the wide range of impacts and management strategies in each region, using relevant case studies.

The Draft Course Outline was developed in August and during a November visit to SUNY, Dr Buddo will give seminars on Marine Invasive Species, and hold discussions on course administration and logistics. The course will be further developed and refined while field visits will be conducted near the SUNY SOMAS Campus.

IMPROVING CARDIOVASCULAR HEALTH IN NATIVE AND MIGRANT CARIBBEAN POPULATIONS

Dr Marshall Tulloch-Reid

The approach has been finalised for the formative work to guide the development of a proposal to improve cardiovascular health in the Caribbean. This will involve conducting (i) focus group

interviews in Jamaica, Barbados, Trinidad and Tobago and New York with patient with cardiovascular disease; (ii) key informant interviews with local experts in internal medicine, cardiology, epidemiology, public health and migrant health; and (iii) a scoping review of the literature on cardiovascular health in Caribbean Migrants. This information will inform the development of the proposal (estimated completion date April 2014).

Dr Cornelia Gruel, a medical anthropologist from the Faculty of Medical Science, Cave Hill Campus with a special interest in migrant health, has joined the project team.

Achievements so far:

- The focus group discussion guide and key informant interview guide have been finalized
- A template proposal for Ethics/IRBs from all four sites (Jamaica, Barbados, Trinidad &

- Tobago and the USA) has been developed. Each institution will modify for its requirements
- Ethics Approval for the focus groups and key informant interviews has been received in Jamaica, the Barbados application for ethics approval is under review and the application for the Trinidad and Tobago ethics committee and the New York IRB is to be submitted.
 - A SUNY Doctor of Public Health Candidate has been identified to help with the literature review on Caribbean migrant health and her scope of work defined
 - The first conference call for development of the project plan for the proposal has taken place.

CARIBBEAN RAINFALL VARIABILITY AND CLIMATE CHANGE

Professor Michael Taylor

Professor Taylor and the Climate Studies Group Mona (CSGM) are finalizing plans to meet with SUNY collaborators Professors Elinor Martin, Justin Minder, Oliver Timm and Brian Tang as well as Dr. Isabelle Gouirand (UWI Cave Hill collaborator) in January 2014 (before teaching resumes).

During this period the team is engaging in:

- Proposal Preparation: (a) Finalize proposal for the Partnership for Enhanced Engagement in Research (PEER) Science due on January 13, 2014; (b) Identify other funding opportunities and draft outline.
- Public Lecture on the ‘State of Caribbean Climate Research’
- Discuss graduate student exchange – Work out plans for one Mona graduate student to visit the SUNY campus in 2014 to work with the hurricane research group for 2-3 months.

SUNY Led Projects

SUNY/UWI HEALTH-RELATED RESEARCH AND EDUCATIONAL COLLABORATIONS IN NATURAL PRODUCTS AND MEDICINAL CHEMISTRY

Dr Ruel McKnight, SUNY Geneseo

SUNY Geneseo Professors Ruel McKnight, Kazushige Yokoyama, Eric Helms visited UWI-Mona and met with potential collaborators, Professors Yvette Jackson, Nadale Downey-Riley and Roy Porter. The UWI-Mona collaborators were interested in the project(s) and should be sending trial compounds to the SUNY Geneseo team for preliminary studies on the proposed projects (e.g., Investigation of Potential Inhibitors of Alzheimer's Disease and Characterization of the DNA Binding Capabilities of Anti-Cancer Compounds – see original proposal). This is in order to assess the viability of each proposed project, as well as to get preliminary results for submission of a grant proposal to the National Science Foundation (NSF) in 2014.

The team from SUNY Geneseo also met Professors Helen Jacobs (Head of Chemistry Department), Ishenkumba Kahwa (Deputy Principal), Paul Reese (Dean, Pure and Applied Sciences), Hermine Tyrell (Student Exchange and Study Abroad Coordinator), as well as other potential collaborators.

Meetings with other potential collaborators from UWI-Mona yielded an expressed interest in additional research partnerships:

- Prof Mohammed Bakir (inorganic chemistry) - working with two scientists from SUNY Geneseo (Professors James McGarrah and/or Dave Geiger) to acquire X-ray diffraction data on some of his compounds.
- Prof Lisa Lindo (biochemistry) - providing assistance with the genetics of the biosynthesis of Prof. Eric Helms compounds.
- Prof Trevor Yee (Natural Products Institute) – find related plant species on the island of Jamaica, including taking us out to harvesting and extraction. Prof. Eric Helms would then do the analysis at SUNY Geneseo.
- Prof W.H. Mulder – starting a collaboration in the “Simulation of Peptide Self-Assembly Over Charged Surfaces.” Prof. Mulder's group has been working on the characterization of electrostatic surface. The targeted surface includes charged colloids, which can be applied to the gold nanocolloidal surface investigated in Prof. Yokoyama's group. As the first step, a characterization of surface potential can be a point of initial collaboration.

Collaborators from UWI-Mona are preparing a library of compounds to be sent to SUNY Geneseo. In December UWI-Mona collaborators will send compounds to SUNY Geneseo for preliminary studies.

In early Spring 2014, a UWI-Mona team (Professors Roy Porter and Nadale Downey-Riley) will

visit SUNY Geneseo for meetings with potential collaborators, other interested parties and campus/research facility tour. While there, The UWI-Mona team will also discuss the development of an advanced course in natural products and medicinal chemistry. Preliminary ideas will be fine-tuned and hopefully finalized.

Between Spring and Summer 2014, a proposal for an external grant to the National Science Foundation (NSF): Catalyzing New International Collaboration (CNIC) will be prepared and submitted during that period.

Future Funding 2015: Since the NSF-CNIC grant is only for one year, the team plans to apply for a more sustainable and long-term NSF proposal (likely from the NSF Division of Molecular and Cellular Bioscience, NSF-MCB) and explore other funding options such as those from the National Institutes of Health (NIH).

ENHANCING CITIZEN SECURITY IN THE CARIBBEAN

Dr Lisa Meyer and Dr William Lofquist, SUNY Geneseo

This SUNY-UWI research and teaching partnership is advancing, and is in close correspondence with the initial proposal. A conference is being planned at The UWI Mona campus in Jamaica in February 2014 that will bring together approximately a dozen scholars from across two SUNY campuses (Geneseo and Buffalo) and the four UWI campuses. There will be two groups: one focusing on criminology-related projects, particularly as it relates to development, and the second focusing on issues of gender and development. Together and separately, they will also consider opportunities for teaching collaborations and faculty and student exchanges. Initial exchanges have produced some fruitful ideas for further discussion.

At these meetings, emphasis will be placed on developing the frameworks for grant proposals. Subsequent to the meetings, the focus will be on developing grant proposals, with an aim to make initial submissions by summer, 2014.

UNDERSTANDING THE EFFECTS OF LAND PRACTICES AND POLLUTION ON THE HEALTH OF CORAL REEFS OF THE CARIBBEAN

Professor Mark Teece, SUNY College of Environmental Science and Forestry

SUNY-ESF and UWI have been in contact and are currently exchanging ideas and data for an upcoming research proposal. The team plans to meet in Jamaica in January 2014 to continue the preparation of a proposal and do a site visit.

March 2014 is targeted for submission of the proposal to NSF Ocean Sciences directorate.