WORK OF THE INSTITUTE

The Natural Products Institute (NPI), saw the establishment of several staff posts during this academic year, the first such cohort in the Institute, thus allowing for the formulation of a five year strategic plan. We are thankful to the Principal for the establishment of these posts of Research Fellows and a Senior Scientific Officer, which we anticipate will allow the growth of the Institute.

Combined with the approval of grants from the National Health Fund (NHF), Caribbean Health Policy Agency (CARPHA) in association with US, National Cancer Institute (NCI), in addition to Principal’s New Initiative, totaling up to approximately J$21M, we look forward to a year of research in cancer, (treatment and prevention leads) mosquito vector control, drug-herb interactions and cannabis (details of which are
provided in sections below). Following the invitation of several members of staff to join national bodies in natural product development, NPI looks forward to having national and international impact. Our staff continued to engage in high quality publications, presentations at several international conferences, as well as organization of the Faculty of Science and Technology conference, and also hosted several internationally renowned scientists. The year also saw the conclusion of the hosting period for Biotech R&D, a privately owned company.

PAPERS PRESENTED

Invited plenary and oral presentations:


- **Yee, T**, “Hypoglycaemic and hypotensive constituents from *Eucalyptus camaldulensis*”, 8th biennial meeting of the International Society for the Development of Natural Products, Shanghai, China, October 10—2, 2014.

- **Delgoda, R**, “Meeting the gaps for developing natural products in the Caribbean: a Jamaican model”, 8th biennial meeting of the International Society for the Development of Natural Products, Shanghai, China, October 10–12, 2014.


Papers presented as posters

- Delgoda, R, Kandagatla, S, Ranor, G, Brantley, E, Badal, S, Francis,


PUBLICATIONS

Refereed Journal Articles and book chapters


- Francis, S and Delgoda, R “Patent review on the development of cytochrome P450 inhibitors”, *Expert Opinion on therapeutic patents*, 2014, 24(6), 1–19

- Delgoda R, Picking D, “The pivotal role of scientific research in the development of the nutraceutical industry in Jamaica” in *Jamaica's...*
Nutraceuticals: Opening the door to their potential, Lowe, H and Morrison, E (Eds), Pelican Publishers, Jamaica, 2015


Patent applications


Training workshops attended by Staff

- Murray, J and Foster K (student), cell culture and cytotoxicity assessments, hands on training provided by Dr. G. Huang, Clemson University, Clemson, South Carolina, USA, July 2015.

INCOME GENERATION

1) Caribbean Public Health Agency (CARPHA) and National Cancer Institute (NCI) (US$50,000); “Identifying novel cancer treatment and prevention leads from the Jamaican biodiversity”, Awarded to Dr. R. Delgoda (PI) and collaborators.

2) National Health Fund (J$7.0M); Cancer treatment and prevention value of Jamaican natural products” awarded to Dr. R. Delgoda.

3) National Health Fund (J$7.5M); “Anticancer screens of Jamaican natural and synthetic products using mice models; A necessary step for drug development “ awarded to Dr. S. Badal.
4) University of the West Indies New Initiative Grant 2015, (J$1.5M), “Evaluating Jamaican Natural Extracts as Effective Pesticide Synergists to Control the Spread of ChikV & Dengue” awarded to Dr. S. Francis.


PUBLIC SERVICE

Simone Badal
– Science Policy chair, Society for Scientific Advancement (SoSA)

Rupika Delgoda
– Member, Steering Committee, National Nutraceutical Industry, Jamaica
– Member, Cannabis Research and Development Evaluation and Monitoring Committee
– Member African Caribbean Cancer Consortium
– Secretary, International Society for the Development of Natural Products
– Co-Chair, 10th conference of the Faculty of Science and Technology, UWI
– Co-Licencee and organizer of TEDxJamaica
– Member International Society for Study of Xenobiotics
– Member American Society for Pharmacognosy

Sheena Francis
– Board Member of the Caribbean Diaspora for Science, Technology and Innovation (CADSTI)
- Organizing Committee, 10th conference of the Faculty of Science and Technology, 2015
- Organiser for Sagicor Visionaries Competition
- Member, American Society of Tropical Medicine and Health
- Member, Caribbean Academy of Sciences
- Member, Jamaica Organic Agriculture Movement
- Jamaican Young Scientist Forum
- Member, Caribbean Coastal Area Management Foundation

David Picking
- Advisory Panel, Jamaican Ministry of Health – Complementary and Alternative Medicine (CAM)
- Advisory Panel, Bureau of Standards
- Board of Directors, Perishables Jamaica
- Lecturer, All American Institute of Medical Sciences, Black River, Jamaica
- Collaborator, New York Botanical Garden (NYBG)

Trevor H. Yee (Retired, honorary member)
- Treasurer, the International Society for the Development of Natural Products (ISDNP)
- Executive Committee, the Natural History Society of Jamaica (NHSJ).

AWARDS

1) Principal’s Research Award for Most Outstanding Researcher, Faculty of Science and Technology (R Delgoda), January 2015

2) Award for best poster, 8th biennial meeting of the International Society for the development of natural products, October, 2014, Shanghai, China. (R Delgoda and D Picking)
3) Award for best poster, 3rd meeting of the Society for Scientific Advancement, Mona, November, 2014 (D Picking)

4) Award for most outstanding worker, Faculty of Science and Technology, Faculty Award ceremony, Ms. Kimone Stewart, Senior Administrative Assistant, March 2015

STUDENT MATTERS


NEWLY ESTABLISHED OVERSEAS COLLABORATIONS

1) Colorado State University, Fort Collins, USA
2) University of North Carolina, Greensboro, USA
3) New York Botanical Gardens, NY, USA

Visiting academics hosted by NPI


2) Dr. George Huang, Clemson University, South Carolina, USA, July 6–23, 2015