WORK OF THE DEPARTMENT

The Department continued to mount a full programme of undergraduate teaching in Geography and Geology despite another year in which there was a shortage of qualified and experienced lecturers. Difficult challenges were imposed by an operational budget which was unchanged for the third consecutive year. The budget severely limited opportunities to improve physical plant and infrastructure, and to acquire new equipment and replace aging equipment. A particular challenge was to maintain a full programme of undergraduate field classes, given the rising costs of transport.

In Geography, Dr David Miller was on sabbatical for Semester 1. Dr Susan Mains was on leave at the beginning of the Semester 1, and left UWI at the end of Semester 1. Dr Kevon Rhiney was appointed on a three-year contract in geography, subject to a probationary first year, while Robert Kinlocke was re-appointed on a temporary one-year appointment as a full-time Assistant Lecturer. Donovan Campbell was re-appointed for a second year as a Teaching Assistant. In Geology, an overseas candidate selected for a lectureship declined the offer after protracted issues over his contract, so Professor Trevor Jackson was brought from Trinidad to cover some of this teaching. Mr Rafi Ahmad was re-appointed on another one-year post-retirement contract.

The Department began a complete overhaul of its undergraduate curricula as part of the Faculty’s transition to new 3-credit course degrees. The Department’s new 3-credit courses will be introduced on a phased basis over three years, and new first year Geography and Geology courses will
start in September 2011. One goal is to facilitate new cross-faculty degrees, to allow students to combine Geography with cognate subjects like Economics, Sociology and History.

The research output was outstanding even by the high standards achieved in the past. In total, 33 papers were presented at international, regional and local conferences and workshops by staff and postgraduates, and there were 23 peer-reviewed publications out of a total of 27 publications including edited volumes. Professor D. Barker and Donovan Campbell received the Principal’s Research Day Award for the best Faculty publication for an article which appeared in a Special Issue of the Annals of the Association of American Geographers on Climate Change. Donovan Campbell was one of three international postgraduate students to received an award for their doctoral research at Third International Conference on Climate Change: Impacts and Responses, in Rio de Janeiro, Brazil in July, and his research was also featured on the NASA on-line publication ‘Sensing Our Planet: NASA Earth Science Research Features’.

Members of the department were once again prominent in conference activities. The Department, in conjunction with the Geological Society of Jamaica, hosted the Ninth International Congress on Rudist Bivalves at Mona campus in June 2011. Professor Simon Mitchell was conference convenor and Chair. The meeting involved 40 presentations with delegates representing countries including: Croatia, France, Germany, Jamaica, Japan, Italy, Mexico, Puerto Rico, Spain, UK, USA, and UAE. The meeting included a pre-conference field trip to the Benbow area in St. Catherine, and a three-day trip to central and western Jamaica. Delegates had the opportunity to examine the rudist collections in the University of the West Indies Geological Museum. The meeting was supported from grants and assistance from Graduate Studies and Research, the Lawrence Chubb Fund (DOGG), Sagres Energy, Petroleum Corporation of Jamaica, and the Mines and Geology Division, GOJ.

Geography staff and postgraduates were again well represented at the Annual Meeting of the Association of American Geographers held in Seattle in April 2011, with some 8 papers presented at the conference. Professor David Barker, Dr David Miller, Dr Kevon Rhiney and Dr
Susan Mains were involved in organizing panel sessions at the meeting. Geology staff attended the 19th Caribbean Geology Conference which was held in Guadeloupe and 5 papers were presented.

Several staff obtained external funding to attend overseas and local conferences and workshops: Professor Simon Mitchell 4th Cuban Conference on Earth Sciences in Havana Cuba (April); Rafi Ahmad Global Earthquake Model (GEM) Workshop, Trinidad (May); Professor David Barker Responding to Climate Change in the Caribbean, Institute for the Study of the Americas, London (June); T. Stemann Creative writing workshop on coral reef education in the Caribbean, The Bahamas; S. James-Williamson Regional Workshop for the Caribbean on Education for Sustainable Development, Trinidad & Tobago, organized by Cropper Foundation, April; K. Rhiney, expert workshop at Mona Visitor’s Lodge, on Impact of Climate Change on Tourism, Agriculture, National Economic Growth and Development in Jamaica, OXFAM/International Institute of Environment & Development/ CARIBSAVE (January) and workshop Livelihoods and Disaster Risk Reduction Caribbean Workshop, at SuperClubs Breezes Resort, Trelawny, organized by OXFAM, (January); and Dr Mike Burn, XVIII International Quaternary Association Congress in Bern, Switzerland, (July).

The Jamaican Geographical Society (JGS) and the Geological Society of Jamaica (GSOJ) continue to be the major arms for the Department’s outreach activities. Lecturers and postgraduates are actively involved on the organizing committees and as executive officers of these societies. Outreach activities include guest lectures, field trips and film shows. The GSOJ was closely involved in the organization of the International Rudist conference in June, while the JGS hosted a well-attended panel discussion on ‘Progress of the Downtown Redevelopment Project’ in March.

As a result of the torrential flood rains experienced during September and October, the Geology Museum and a teaching classroom were flooded on three separate occasions. The first occasion was the worst and resulted in considerable water damage to the museum furniture and materials stored there. The Museum experienced similar flood damage several years ago, and the resulting remedial work to improve the drains proved to be totally ineffective.
Kevon Rhiney successfully completed his PhD in Geography and Ian Brown was awarded an MPhil in Geology.

The Department continued to administer the Earthquake Unit, the Unit for Disaster Studies, and the Marine Geology Unit

INCOME GENERATION

Dr Kevon Rhiney obtained funding of US$18,000 from OXFAM GB for the JAMAI project on promoting market access for small farmers in Jamaica, and US$9,000 from the International Center for Tropical Agriculture (CIAT) in Colombia for a project on Adaptation to Climate Change among small farming communities across Jamaica. The latter led to further funding for a two-week training workshop in Crop Suitability Modeling in July for a group that included Dr Kevon Rhiney, Donovan Campbell and geography postgraduates.

Professor Simon Mitchell received grants totaling US$5,000 from the Petroleum Corporation of Jamaica, Sargress Energy and CaribX for graduate research and travel on a variety of small-scale consultancies.

Dr Mike Burn (Geography) received a UWI New Initiative Grant for J$1.5 million for a project titled ‘A 6000-year record of hurricane activity in Jamaica and impacts on coastal ecosystems and human settlement’. The grant is to be spent on installing a new fume cupboard for a new Paleoeocology laboratory to facilitate the pollen, charcoal and ostracod analysis and for storing cores taken from coastal sediments and coring equipment.

Dr Sherene James-Williamson, Geology Museum Curator, received a grant of J$36,000 from ICWI for an educational discovery centre for early childhood, based in the geology Museum.

The Marine Geology Unit received a grant of J$2.8 million to support preparation of a catalogue and database of historical aerial photographs of the Jamaican coastline. The Unit also received a grant of J$198,925 from the Environmental Foundation of Jamaica and J$95,000 from the UWI Disaster Risk Reduction Centre (DRRC) to assist preparation of a book on hurricane impacts on the Jamaican coastline.
PAPERS PRESENTED


- **A. Mandal**. ‘Flooding and Modelling of rainfall-induced river flooding of Port Maria, St Mary, Jamaica’. 8th International Conference on Disasters, Havana, Cuba, June 14-18, 2010.

- **A. Mandal. & A. Maharaj** ‘Modelling high intensity rainfall-driven river flooding of Port Maria, Jamaica’, 5th Caribbean Conference on Comprehensive Disaster Management (CDM), Rose Hall, Montego Bay, December 5-11.

- **A. Maharaj & A. Mandal** ‘Analysing High-Intensity, Rainfall-Driven, RiverFlooding in Port Maria, St. Mary, Jamaica. How Has Climate Change Exacerbated the Situation?’, American


- **S. James-Williamson** ‘Learning beyond the Classroom’, World Academy of Sciences Regional Office for Latin America & Caribbean, 8th Young Scientists Regional Conference, Brazilian Academy of Sciences, Rio de Janeiro, Brazil, Nov. 29 – Dec. 2010


**Papers presented at the XVIII INQUA Congress, Bern, Switzerland, July 20-27, 2011.**

- **M. Burn, A. Bain, L. Kennedy, A. LeBlanc, A. Faucher, & S. Perdikaris** ‘A Late-Holocene record of Human Ecodynamics from Barbuda, Lesser Antilles’.
• S. Palmer & M. Burn ‘A Late-Holocene record of marine washover events from a coastal lagoon in Jamaica, West Indies’.

• B. Whitney, F. Mayle, S. Punyasena, K. Fitzpatrick, M. Burn, R. Guillen, E. Chavez, D. Mann, R. Pennington & S. Metcalfe ‘A 45,000-yr palaeoclimate record from the heart of tropical South America’.

**Paper presented at Annual Conference of Association of American Geographers, Seattle, April 12-16, 2011.**

• D. Campbell & D. Barker ‘Jamaican agro-ecological zones and climate change: a comparison of farmers’ perceptions of changing weather and climate and their capacity to respond to global change’.

• L. Kennedy, M. Burn, A. Bain, A. LeBlanc, A. Faucher, & S. Perdikaris, ‘Long-term Human Ecodynamics of Barbuda/Antigua from Sedimentary and Archaeological Records’.

• R. Kinlocke ‘Fortified enclaves, fear and attachment to place in a fragmented city’.

• D. Miller ‘Tropical Storms and Hurricane Impacts on a Caribbean beach: Manatee Bay, St Catherine, Jamaica.

• K. Rhiney & R. Kinlocke ‘Urban livelihood responses to new trade regulations for the Jamaica scrap metal industry’.

**Papers presented at the Ninth International Congress on Rudist Bivalves, June 18-25, 2011, Kingston, Jamaica.**

• S.F. Mitchell ‘Interpreting *Texicaprina* and its relationship with other Albian ‘Caprinuloidids’.

• S.F. Mitchell, P. Skelton, H. Santos & M. Martínez-Colón ‘Exceptionally preserved hippuritid rudists from Puerto Rico – a new analysis of the New World hippuritids’.

• S.A. James-Williamson & S.F. Mitchell ‘Provenance, use and interpretation of the Rudist Collections at the University of the West Indies Geology Museum (UWIGM)’.

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• S. F. Mitchell ‘American rudist zones for the Turonian to Maastrichtian time interval’.

• G.C. Gunter & S. F. Mitchell ‘The biostratigraphy of the Maldon Inlier, parish of St. James, north-western Jamaica’.

• J. Fisher & S.F. Mitchell ‘Foraminiferal biostratigraphy and palaeoenvironmental analysis of some late Cretaceous basinal successions of Jamaica’.


• T.A. Stemann, G.C. Gunter, & S.F. Mitchell ‘Contrasting patterns in rudists and corals from the uppermost Maastrichtian of Jamaica’.

PUBLICATIONS

Book and Edited Volumes


Peer-reviewed articles


* C. Beckford, **D. Campbell**, & **D. Barker** ‘Sustainable food production systems and food security: economic and environmental imperatives in Yam cultivation in Trelawny, Jamaica’, *Sustainability*, 2011, 3, pp541-561.


* S.F. Mitchell, & S. James-Williamson ‘Rudist bivalves in Jamaica: from Barrett and Sawkins to Chubb, S.F. Mitchell (ed)


Non-refereed publications


**POSTGRADUATE CONFERENCE PAPERS**
(excluding those presented with supervisors and other staff members)


**PUBLIC SERVICE**

R. Ahmad
– Technical sub-committee, Water Resources Authority

D. Barker
– Editor, *Caribbean Geography*.
– Convenor, CAPE Geography.
– Editorial Committee *CaribXplorer Magazine*.
– Editorial Board *Caribbean Quarterly*
– Council member, *Jamaican Geographical Society*
S. James-Williamson
– Council member, Jamaica Institute of Environmental Professionals.
– Vice-Chair and Treasurer, National Environmental Education Committee; Chairperson since April 2010.
– Member, Steering Committee, NEEC/PANOS Caribbean Climate Change Project.
– Council member, Geological Society of Jamaica; Vice President since March 2010.
– Member, Publications Committee, Natural History Museum of Jamaica, Institute of Jamaica.
– Member, Steering Committee, International Conference on Rudists 2011.

A. Mandal
– Member, Technical sub-committee, Water Resources Authority

S. Mitchell
– Permanent member, Standing Committee for the Caribbean Geological Conference.
– Member, Scientific Committee, International Rudist Congress.
– Chairman, Commission on Jamaican Lithostratigraphy.
– Council member, Geological Society of Jamaica.
– Chairman, Ninth International Congress on Rudist Bivalves, Kingston, Jamaica, 2011.

E. Robinson
– Member, Jamaican National Council on Ocean and Coastal Zone Management.
– Fellow, Third World Academy of Science.
– Member, Coastal Education and Research Foundation.
– Member of the Board, International Centre for Environmental and Nuclear Science.
– Member, Geological Society of Jamaica.
– Member, Jamaica Institute of Environmental Professionals.
– Member of the Board, Centre for Marine Sciences.
– Member, Graduate Faculty, Florida International University, U.S.A.

K. Rhiney
– President, Jamaica Geographical Society.
– Technical advisor to the Steering Committee for the National Food and Nutrition Security Policy.
– Member of the UWI at Denbigh Strategic Committee
– Research Fellow for Centre for Leadership and Governance
– Co-author for the National Youth Mainstreaming Strategy and Manual with the IDB/GOJ
– Co-editor for the Caribbean Online Atlas http://atlas-caraibe.meabilis.fr/

T. Stemann
– Council Member Geological Society of Jamaica

CATEGORIES OF STUDENTS

Undergraduate Students: Geography

Year I: 95
Year II: 56
Year III: 26

Undergraduate Students: Geology

Year I: 72
Year II: 39
Year III: 34

Postgraduates:

MPhil Geography: 5
MPhil Geology: 7
PhD Geography: 8
PhD Geology: 1