Meeting report

2nd International Caribbean Biomedical Research Days (CBRD-2015)
ISBS Conference, St. Lucia, January 16-19, 2015

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Abstract

Rodney Bay (St. Lucia) hosted the 2nd International Caribbean Biomedical Research Days (CBRD-2015) conference January 16-19, 2015. The annual meeting, organized by the International Stress and Behavior Society (ISBS), brought together clinicians, basic scientists, educators and community activists from 18 countries worldwide. The meeting provided an informal multidisciplinary exchange between recognized experts in biomedicine, with a particular focus on mental health and translational research. CBRD-2015 also addressed the existing challenges and the future of biomedical research and education globally, and in the Caribbean region in particular. This report highlights the topics and selected neuroscience-related presentations discussed during the CBRD-2015 meeting.

Keywords: Biomedicine, translational research, psychiatry, mental health, animal models

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January 16-19, 2015, Rodney Bay, St Lucia, was the host to the 2nd annual International Stress and Behavior Society (ISBS) Caribbean Biomedical Research Days conference (CBRD), where a range of biomedical topics were presented by doctors, researchers and community members from around the globe. Sable Systems, Inc. (USA), a leading developer of metabolic and neurophenotyping research equipment, was the official sponsor of the meeting.

The conference, held in the scenic Rodney Bay Village, opened on 16 January 2015 with an introduction and history of ISBS and CBRD, as well as by welcoming addresses by Professor AV Kalueff, ISBS President, and Past and Present Presidents of St. Lucian Allied Health Commission, Drs U Seraphin and D Charles (Fig. 1).

The Opening Plenary Lecture was given by Professor M Pletnikov (Department of Psychiatry and Behavioral Sciences of Johns Hopkins University School of Medicine, Baltimore, USA). The lecture discussed genetic risk factors and adverse environmental interactions in schizophrenia, and how recent advances in genetics have led to animal models instrumental in the discovery of the molecular, cellular and circuitry mechanisms involved in gene-environmental interactions in schizophrenia and related neuropsychiatric disorders. Following the talk, ISBS announced that Dr. Pletnikov has been inducted as a new ISBS Fellow, in recognition of his long-term contribution to biological psychiatry and neuroscience education, and for his long-standing support of the Society.

The ISBS Presidential Lecture was delivered by Professor AV Kalueff (ZENEREI Research Centre, USA and Guangdong Ocean University, China) on the role of Vitamin D in the brain and aging. Based on clinical and preclinical evidence, the speaker highlighted the CNS effects of vitamin D deficiency and its role in brain aging, particularly, in worsening cognitive deficits in the elderly and
neurodegenerative disorders in general.

A special invited lecture was next presented on comprehensive interventional management of chronic lower back pain by Professor W Parris (Duke University Medical Centre, Durham, USA), a renowned pain scientist and past President of the World Society of Pain Clinicians (WSPC). The lecture was followed by an informal Q&A session on pain management, and by a roundtable discussion on perspectives and challenges of biomedical education in the Caribbean, moderated by Professor L Newman, Dean of Destiny Medical School (Gros Islet, St Lucia). The Day 1 program ended with an excellent, inspiring presentation of the book "Mentally Speaking" written by Dr. S Stokl (Southlake Regional Health Centre, ON, Canada), based on his long career as a practicing psychiatrist.

On Day 2 morning, Professor GN Pandey (University of Illinois at Chicago, IL, USA), an internationally recognized expert in neurogenetics, presented an important update on genetics of suicide, and the role of hypothalamic-pituitary-adrenal (HPA) axis in their modulation. The lecture was followed by students’ presentation from the University of West Indies on several rare cases of unilateral sternalis muscle in Caribbean males. Professor AV Kalueff (USA) then delivered a lecture on zebrafish (Danio rerio) models for translational biomedical and neuroscience research. It was noted that the zebrafish is rapidly becoming a popular organism for disease modeling, and complements traditional mammalian models in several critical areas of research, including neoplastic, neurological and neuropsychiatric disorders, as well as drug and gene discovery.

The “Cannabis in Biomedicine Symposium” took place in the afternoon session of Day 2, beginning with a welcoming note by its Chair, Dr. G St Rose (St. Lucia, Fig. 1). Following the introduction, ISBS announced the induction of Dr. St Rose as a new ISBS Fellow, in recognition of her work to advance biomedical research and education in St. Lucia, her activism in improving well-being in the region, and for her role in promoting ISBS efforts in the Caribbean.

Figure 1. The conference sessions and participants (left to right, top down): Symposium speakers gather for a group photo; a warm welcome address by Presidents of Allied Health Committee, Drs. U Seraphin and D Charles; session on Caribbean biomedical education moderated by Prof. L Newman (St. Lucia); “Mentally Speaking” book presentation by Dr. S Stokl (Canada); Sen. Dr. S King (St. Lucia) talks about societal and medical problems of cannabis use; Dr. G St. Rose, ISBS Fellow (St. Lucia) opens the Symposium on cannabis neurobiology; informal interactive poster session on Day 3; enjoyable Caribbean hospitality, music and the scenic views of the Rodney Bay.
The program was followed by a presentation from M Fraites (St. Lucia) on cannabis neurobiology, with a brief history and recent updates in the field. Next, Senator and former Chief Medical Officer of St Lucia, Dr. S King, presented arguments for reviewing existing laws with an end to mitigating negative effects of cannabis and allowing its many benefits to be realized. Co-founder of the Industrial Hemp Initiative and “Green” political proponent, A De Caires (St. Lucia) presented on the economic, human rights and legal reasons for decriminalization of cannabis.

Head of Caribbean Drug and Alcohol Research Institute, Dr. M Day, OBE (St. Lucia), further highlighted the negative social implications of prohibition of cannabis on the young male population of St Lucia. Dr. G Marcelle (Grenada), presented his talk via online conference call, summarizing nearly 20 case studies on discontinuation of multiple medical symptoms and conditions following use of cannabinoid-containing herb extracts. The symposium concluded with a talk by Dr. St Rose (Eden Herbs, St. Lucia), who spoke on medical benefits of herb-derived cannabis.

Finishing the afternoon session, R Posvar, a registered nurse from Angels of the West Indies (St. Lucia), presented her observations on how dementia contributes to caregiver stress in eldercare.

The third day of the conference commenced with an interactive poster session, during which captivating presentations were given by Sable Systems, Inc. (USA), as well as by researchers from USA, Ireland, India, Caribbean, China and Saudi Arabia (Fig. 1).

Materials of the CBRD-2015 meeting were published in vol. 3 of STRESS, BRAIN AND BEHAVIOR (this Issue). Concluding the conference, it was announced that the next International CBRD-2016 meeting will be held in Rodney Bay, St. Lucia, in January 16-18, 2016.

Conflict of interest

The author declares no conflicts of interest.