BRIEF PROFILE

Victor Jonathan Temple, M. Sc. (Biochemistry); Ph.D. (Biochemistry/ Enzymology); C. Biol., M.S.B (M. I. Biol.);

- I am a Biochemist with special interest in Nutrition and Toxicology. Have taught Biochemistry, Clinical Biochemistry, Molecular Biology, and Aspects of Nutrition and supervised undergraduate and postgraduate research projects in universities in Africa, Europe and the South Pacific. Expert in the didactic and problem based learning curricula. Expert in the use of laboratory analytical techniques such as: PCR, HPLC, EIA, AAS, ICP-MS, etc. Successfully completed several high quality research funded projects in Micronutrients, Endocrinology, Drug Discovery and Toxicology (see details on my web site: www.victorjtemple.com).
- Currently: Chairman of the Division of Basic Medical Sciences (BMS) in the School of Medicine and Health Sciences (SMHS), University of Papua New Guinea (UPNG). Head of the discipline of Biochemistry and Molecular Biology, BMS, SMHS UPNG.

- Research focus: Experimental documentation of the extent and impact of micronutrient deficiencies on maternal and child health in resource limited countries. I have done a lot of work in applied nutritional studies aimed at improving maternal and child health. I have also done and continue to do extensive research on maternal and child malnutrition with emphasis on micronutrient deficiencies (Iodine, Iron, Copper, Zinc, Vitamin A and Vitamin B1) in infants and mothers, and in people living with HIV/AIDS in some resource limited countries. Additional research focus in the new decade is on food security with particular interest on issues related to the accessibility, availability, affordability and stability of adequate supply of micronutrients and macronutrients to infants and mothers, and also to people living with HIV/AIDS in resource limited countries; impact of adequate nutrition on the efficacy of anti-retroviral therapy.

- Member of several professional organizations: Member of the Institute of Biology (M. I. Biol.), London, England; Chartered Biologist (C. Biol.) of the Institute of Biology, London, England; Member of the Medical Association of Papua New Guinea; Member, Papua New Guinea Biodiversity Network.

Some achievements:

- Extracted and purified Mitochondrial Creatine Phosphotransferase (Mitochondrial Creatine Kinase), determined the mode of interaction of mitochondrial Creatine Kinase (Mit-CK) with the inner mitochondrial membrane, the kinetic parameters of bound and unbound forms of Mit-CK and the kinetic differences between Mit-CK and CK-MM.

- Set up and coordinated the Health and Nutrition Resource Group (HNRG) in the Dietetics and Rehabilitation Unit (DRU) in Jos University Teaching Hospital (JUTH), Plateau State, Nigeria. The main focus of the HNRG was to identify major nutritional problems in various communities in Plateau State

and to find optimal solutions to them. This effort was recognised by UNICEF – they sponsored many of our community-based nutritional activities. The HNRG developed and nutritionally evaluated a number of complementary foods for infants, made from locally available foodstuffs. The success of this project was acknowledged by the DRU in JUTH. UNICEF sponsored the implementation of this project (under the names of “Community Initiative on Complementary Feeding” and “Hospital Initiative on Complementary Feeding”) in some community-based and teaching hospitals in Nigeria.

- Conducted a mini-survey of Vitamin A status of pre-school age children in the Plateau State Nigeria; the survey findings prompted the UNICEF Vitamin A intervention in Plateau State in 1992 – 1993;

- Set up and coordinated the Herbal Medicine Research Group (HMRG) in the Faculty of Medicine, University of Jos (UniJos), Plateau State Nigeria. Main focus of HMRG was to analyse the therapeutic efficacy of commonly used herbs. Convincing scientific data obtained supported the dose dependent effects of the aqueous extracts from leaves of African Mistletoe (Loranthus begwensis) in the control of hypertension and diabetes mellitus (both Type I and Type II). Data also provided insight into the host dependent toxic effects of mistletoe leaf extracts. One of our major deductions made, which has been supported by others in the field, is that the variation in the medicinal efficacy of mistletoe aqueous extracts is directly related to and dependent on the host plant. Our findings generated a lot of research interest in the area of drug discovery.

- Set up and coordinated the Micronutrient Research Group (MRG) in BMS, SMHS UPNG. The MRG established the Micronutrient Research Laboratory (MRL) that collaborates with international institutions such as Centres for Disease Control and Prevention (CDC) Atlanta Georgia, USA, and the Institute of Chemical Pathology and Medical Research (ICPMR), Westmead Hospital, Sydney, Australia. The MRL is officially registered with the International Resource Laboratories for Iodine Network (IRLI), the International Council for the Control of Iodine Deficiency Disorders (ICCIDD) and the International Vitamin A Consultative Group (IVACG). The MRL is also a registered member of the external quality control programs, Ensuring the Quality of Urinary Iodine Procedures (EQUIP) in the CDC and the International Iodine Network.

- Coordinator and Principal Researcher of the Iodine Deficiency Disorder (IDD) Research Project in PNG.

- Member, PNG National Nutrition Task Force: Major functions included planning, implementation and coordination of the PNG National Nutrition Survey (NNS) in 2005. The NNS project was in collaboration with CDC USA, UNICEF, WHO, PNG National Department of Health (NDOH) and SMHS UPNG.

- National Scientific coordinator working in collaboration with the external coordinators from the CDC USA, Mahedol University, Bangkok, Thailand and UNICEF during the PNG NNS 2005 project.

- External Evaluator in Drug Registration, PNG NDOH;

- Member, PNG National Technical Working Group (NTWG) on the National Programme to Eliminate Lymphatic Filariasis

- Member, PNG Food Fortification Inspection and Monitoring Committee

- Co-ordinator of laboratory issues involving Diethylcarbamazine (DEC) Fortified Salt as a Strategy for the Control and Elimination of Lymphatic Filariasis (LF) in PNG (WHO funded project)

- Chairman, PNG Food Fortification Technical Committee: A sub-committee of the PNG Food Sanitation Council, NDOH

- Member, Task Force for Training in Human Nutrition and Dietetics: National Health Service Standard Division, NDOH, PNG

- Co-ordinator of research projects on disease trends in PNG, with emphasis on retrospective assessment of laboratory data obtained in the Clinical Biochemistry unit in PMGH: Metabolic disorders (diabetes mellitus, gestational diabetes, thyroid dysfunction, anaemia, oxidative stress, and hypertension) with special interest in diagnosis and clinical biochemical assessment at the subclinical stages.

- Co-ordinator of research group on: Food Insecurity and its implications for maternal and child health and also for people living with HIV/AIDS in PNG: Projects involve data collection and advocacy

- International Reviewer: “Journal Thyroid” On-Line reviewer of scientific manuscripts

- Member, Editorial Board, West African Journal of Biological Sciences, (Reviewer of papers on Enzymology and Micronutrients)

- External Reviewer, PNG J. of Agriculture, Forestry and Fisheries

Published several scientific papers in a wide range of peer reviewed scientific journals; Resume, CV and Academic Portfolio can be obtained from my web site: www.victorjtemple.com.

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