



Australian Government
**Cotton Research and
Development Corporation**

TRAVEL & CONFERENCE REPORT

Part 1 - Summary Details

Please use your TAB key to complete Parts 1 & 2.

CRDC Project Number: DAN 1004

**Project Title: TO ATTEND THE WORLD FORUM
CONFERENCE IN CAMBRIDGE UNIVERSITY
IN THE UNITED KINGDOM**

Project Commencement Date: 15/08/10 **Project Completion Date:** 27/08/10

Select Research Program (from CRDC Strategic R&D Plan 2008-2013):

2- Farming systems

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Part 3 – Travel Report

(Maximum two pages)

1. A brief description of the purpose of the travel.

Background of trip to attend the World Forum conference

The Australian cotton industry generates, on average, over \$1.5 billion per year in export revenue. About 80 per cent of cotton farms are irrigated and the farms are generally mixed enterprise operations. The returns for irrigated cotton range from \$4,500 to \$6,000/ha of income with profit before interest ranging from \$1,000 - \$1,500/ha. Thus, a cotton grower not only produces cotton, they produce other agricultural products such as grains, oilseeds, beef and wool. Cotton growers are very dynamic, innovative and adopt technologies which spill over to other broadacre food production industries. There are about 1,500 cotton farmers and about 800 cotton producing businesses in Australia. The industry employs about 10,000 people, most of them in the regional areas of Australia. About 70% of Australia's cotton is grown in the state of New South Wales and contributes about \$1.05 billion to the state economy.

The World Forum conference is aimed at gathering all men and women from all over the world who have excelled in their professional accomplishments, ideas and talents and either still active in their field or are Emeritus or Adjunct professors linked with Universities to present their work to the entire delegation of the forum. Delegates to the conference are by invitation only, and in 2010, delegates from 45 countries were invited to attend. The conference also attracts professional officers, scientists, high profile business executives of big medical companies, administrators, marketers, agriculturalists etc around the world for a symposium covering Agriculture, education, technology, science, international issues, health, publishing and the arts. It serves as a forum where these professional experts can interact and learn from each other. Scientists, particularly renowned agriculturalists, medical professionals, physicists, inventors are normally invited to attend the conference to present the papers in their area of specialty. In addition, an International Exhibition Gallery is opened at the entire duration of the conference for delegates to display their art, books, papers and other creative works. The World Forum conference is held every two years in different countries in the world.

Thus this provides an opportunity for researchers and eminent professionals to discuss and address pertinent research issues in their areas of specialty. Therefore, attendance to the conference not only increases one's knowledge in their area of speciality but also broadens one's knowledge about other science oriented areas. For example Dr Robert Mensah an agricultural scientist was invited by the World Forum directorate to chair the Health Science symposium where neurosurgeon, cancer specialist, and community health specialists presented their fascinating research. Therefore, it is important for researchers from different science fields attend the World Forum to enable them not only update their knowledge in their specialty area but other science related areas.

The venue for the World Forum conference was St John's College in Cambridge University in the United Kingdom from the 15 – 22 August 2010. The conference was well organised and provided an excellent forum for the participants to exchange ideas, update knowledge and discuss subjects of particular interest.

2.0 Objectives of attending the conference

- To attend, chair and present a paper at the World Forum conference organized by the International Biographical Institute (IBI) and American Biographical Institute (ABI) in Cambridge University from the 17-22 August 2010.

- To meet, interact and update research counterparts and agricultural product development company representatives participating in the World Forum conference about NSW DII biopesticide research at ACRI and seek research collaboration and investment.

2. What were the:

- a) major findings and outcomes**
- b) other highlights**

The World Forum Conference was held in the Fisher Building at the St John's College in Cambridge University in the UK from the 17 – 23 August 2010. The conference attracted 195 professional officers, medical practitioners, community healthcare executives, high profile business executives, medical companies, administrators, marketers, agriculturalists, entomologists, administrators, agro-chemical companies and marketers all over the world. The conference included 6 Unitary sessions each with a Plenary speaker and 3 concurrent sessions (See Program details in Appendix 1)

Title of symposium Chaired by Dr Mensah by Dr Mensah at the conference

Dr Mensah chaired the “Health and Science Symposium, Part 2” at the World Forum conference. The symposium was held between 11.00 am to 12.30 pm and papers presented were as follows:

- Set up and Delivery of innovative Healthcare system in New Orleans after Cyclone Katrina (Prof. Jack Kushner – USA),
- Cancer, Early diagnosis and the impact of low dose chemotherapy on survival of patients in remission (Prof. Savvas John Lionis – Greece),
- Seniors living at own home: factors that may impact on survival (Dr Patricia Ann Booth – USA) and
- Health care in Rural Georgia in the USA (Dr Barbara Dalrymple – USA)

Prof. Kushner spoke about the innovative healthcare delivery system in New Orleans he helped to put together after the cyclone Katrina epidemic. Dr Booth spoke about the importance of seniors in the USA having medicare instead of Health and Medical Organization insurance. She indicated the importance of the community and governments realizing that seniors have a lot to offer and contribute to society. She said that it is important for the governments to provide resources that will enable seniors to remain in independent living rather than sending them to old age homes so quickly in their old age.

Prof. Lionis also spoke about early diagnosis of cancer. He stated the importance of preventive oncology in relation to prolonged and continuous combination of cancer chemotherapy as a different approach in the management of cancer. He also spoke about low dose chemotherapy and prevention in 6 common forms of carcinoma.

Dr Babara Dalrymple spoke about healthcare in Georgia and the importamnce of all American citizens to have access to healthcare.

All of the papers presented were well received and well supported, as indicated by larger numbers of attendees for these talks.

Details of paper submitted and presented by Dr Robert Mensah at the conference

The title of the paper presented by Dr Mensah was “Cotton production in Australia: role of biopesticides and transgenic varieties in cotton farming landscapes”. Dr Mensah delivered the paper at the Communication symposium. Dr Mensah said that cotton is the most commonly produced natural fibre and worn by majority of people worldwide. He said that cotton fibre represents about 39% of the world textile market. Thus, cotton production is the source of the majority of clothing in the world. According to Dr Mensah, the Australian cotton industry generates, on average, over \$1.5billion per year in export revenue. In Australia, about 80 per cent of cotton farms are irrigated and the farms are generally mixed enterprise operations. The returns for irrigated cotton range from \$4500 to \$6000/ha of income with profit before interest ranging from \$1000 - \$1500/ha. Thus, a cotton grower not only produces cotton, she/he produces other agricultural products such as grains, oilseeds, beef and wool. Cotton growers in Australia are very dynamic, innovative and adopt technologies which spill over to other broadacre food production industries. There are about 1,500 cotton farmers and about 800 cotton producing businesses in Australia. The cotton industry employs about 10,000 people, most of them in the regional areas of Australia. About 70% of Australia’s cotton is grown in the state of New South Wales and remainder grown in Queensland.

Dr Mensah said that in 1996, the first commercial release of transgenic cotton crops (code-named “Ingard®”) expressing delta-endotoxin genes from *Bacillus thuringiensis* (Bt) was approved for planting in Australia. The “Ingard®” cotton crops expressed Cry 1Ac Bt toxin and provided in-built protection against *Helicoverpa* spp. In cotton fields planted to Ingard® cotton crops, the need to spray *Helicoverpa* spp. was dramatically reduced. However, despite the efficacy of the “Ingard®” (Bt) cotton crop against *Helicoverpa* spp., the level of expression of the Bt toxin was inconsistent throughout the cotton growing season. As a result, cotton crops containing two Cry proteins (Cry 1Ac and Cry 2Ab), called “Bollgard II®”, were developed. These were more effective against *Helicoverpa* spp. larvae than the “Ingard®” cotton crops and were commercially released in 2003. The adoption of transgenic traits and Best Management Practices (BMP) by cotton growers in Australia has enabled the industry to reduce synthetic insecticide use against the major cotton pest *Helicoverpa* spp.

Despite, the advantages achieved through the adoption of transgenic crops, there are disadvantages relating to the adoption of the transgenic technology. The presentation will cover pest control issues relating to transgenic cotton adoption and strategies that have been developed to maximize the opportunities and contain the threats arising from the adoption of transgenic cotton varieties in Australia.

All the participants were interested in my paper and many have expressed interest in collaborating with me to help contribute to IPM programmes in our respective countries. Overall I found the conference valuable, particularly for the opportunity to catch up with colleagues and to make new connections.

Plenary lectures

There were 6 plenary papers given at the conference. The plenary lectures were given before any session commenced. The lecture was given by an invited renowned scientist in the particular subject area. The plenary speakers were chosen from expertise from different specialties. Thus the plenary papers were mixtures of science, arts, health, agriculture and other socio-economic topics. Informal discussions follow each plenary session. This allowed participants and speakers to interact and discuss the subject in detail. This allowed all participants to attend the session. The plenary speakers and their papers are given in Table 1.

TABLE 1. Plenary speakers and lectures organised at the World Forum Conference in Cambridge University, 17 - 23 August 2010.

Speakers	Position	Title of paper	Date of Talk
Prof. Sergey Suchkov, MD, PhD	Professor in Clinical Immunology, I.M. Sechenov Moscow Medical Academy & Moscow State Medical & Dentistry University	On the future of preventive medicine associated with pre-clinical diagnostics in the modern society	17 August 2010 at 08h30
Prof. Jacqueline W. A. Scheepmaker	National Institute of Public Health and Environment, Centre for Substances, Bilthoven, The Netherlands	Entomopathogenic fungal biocontrol agents in soil in relation to risk assessment and accordance with EU regulations	18 August 2010 at 08h30
Prof. Savvas John Lionis	MD, DPH, DDG, Fellow of the Royal Society of Medicine; Life Fellow/IBA, USA, Secretary General United Cultural Convention	Cancer: Early diagnosis Low dose Chemotherapy and prevention in 6 common forms of carcinoma	19 August 2010 at 08h30
Prof. Margaret Warner	Dip.S.M.S., A.C.P., M.A., F.Coll.T. MAW Education, Cambridge, UK	Changing Education: a challenge across the world for the 21st century	20 August 2010 at 08h30
Prof. Francisco M. del Amor	Instituto Murciano de Investigación y Desarrollo Agrario y Alimentario (IMIDA), C/Mayor s/n, 30150 Murcia, Spain	Antitranspirant on photosynthesis and water relations: A study of pepper plants under different levels of CO ₂ and water stress	21 August 2010 at 08h30
Prof. Sharon Stroud	Professor of Theology, Tulane University, New Orleans, LA, USA	The Biology of belief – What you think creates your life	22 August 2010 at 08h30

The plenary paper given by Prof. Sergey Suchkov stressed on the fact that one third of the able-bodied population of our planet belongs to areas of potential risk for diseases. He said that humans have 10^{12} bacteria on skin, 10^{10} bacteria in mouth, 10^{14} bacteria in the alimentary canal and shed 10^{10} skin scales every 24 hours and these will harbour 4×10^7 bacteria.

He said that there are putative biomarkers identified by mass spectrometry that are potentially useful for diagnosis. For example, Apolipoprotein A1 is a biomarker for ovarian and pancreatic cancer, heptaglobin α -subunit is for ovarian, pancreatic and lung, transthyretin fragment for ovarian, inter-alpha-trypsin inhibitor fragment for ovarian and pancreatic, vitamin D binding protein for prostate and breast cancer, serum amyloid A for naso pharyngeal, pancreatic and ovarian cancer, alpha-antitrypsin and alpha 1 antichymotrypsin for pancreatic and osteopontin for ovarian and prostate.

According to Prof Suchkov, application of predictive markers in pre-clinical diagnostics is to (1) predict the likelihood of developing the disease, (2) estimate the length of the asymptomatic period, (3) provide information about disease course, severity and

complications, (4) to serve as a warning to avoid potential disease triggering factors and (5) identify high risk individuals who might be suitable candidates for preventative intervention trials.

Prof. Suchkov indicated that those that should be screened are the first-degree relatives of patients, genetically prone to HLA groups. Those special groups may benefit more from the screening compared to the general population. Accordingly, testing high-risk groups may change the positive diagnostic or predictive value of the panel tests used. Once biomarkers have been found, a risk of future disease is established. This information may have great implication regarding one's future, and thus its distribution should be handled with great care. The question is should family members be informed, especially taking into account their associated risk? This some of very hard decisions they have to make.

Prof. Scheepmaker's presentation was the one in my area of research because it dealt with entomopathogenic fungus in the soil in relation to risk assessment and in accordance with EU regulation. My project is in the process of submitting regulatory and efficacy data to support registration of an entomopathogenic fungus. Therefore the presentation gave me an insight into the type of regulatory data required for the registration of the entomopathogenic fungus I am currently developing.

According to Prof. Scheepmaker entomopathogenic fungus being developed as biocontrol agents may have a potential to spread and become established in the environment. As a result the registration authorities need to evaluate the risks concerning their persistence according to the EU regulation which requires the decline of such entomopathogens to levels below related risks. Thus, the information on the persistence and natural background levels of any entomopathogen to be released is very important. Prof. Scheepwater indicated that risk assessors and registration authorities need to know and obtain guidance on how to evaluate data on natural background levels of native occurring species.

Prof. Scheepwater said that *Metarhizium anisopliae*, *Beauveria bassiana* and *Beauveria brongniartii* densities were relatively low and introduced strains of these fungi decreased with time in her studies. Hence the environmental fate of any entomopathogen after application is an important data that needed to be collected to support product registration. According to Prof. Scheepwater the questions that needed to be answered are (1) what is the level of propagation (is uncontrolled growth expected)?, (2) what are the upper natural background levels and which level should be used?, (3) what are accumulated plateau highest realistic concentrations following repetitive applications, (4) what should be done when concentrations do not decline to the upper natural background levels?, (5) what factors influence persistence?, (can crops, soils be categorised into different persistence types?, (6) Can persistence be expressed in time for 50% (LD50) degradation of inoculum?, (7) Are chronic non-target effects be expected if background levels do not reach the original baseline?. The need for an urgent review of current data requirements for the registration of entomopathogenic fungi being developed for pest control is crucial.

The next plenary lecture was given by Prof. Lionis. The paper dealt with early diagnosis of cancer and the use of low dose chemotherapy to prevent six common forms of carcinoma cancers. The 6 common forms of carcinomas he discussed were breast cancer, cervical carcinoma, colon, rectum and anus carcinoma, urinary bladder cancer, prostate cancer and testicle carcinoma. Prof Lionis discussed the studies undertaken in Washington State University in 2007 on the effect of prolonged combination cancer chemotherapy and also work undertaken in Oxford University in 2008 in the preventive oncology in relation to prolonged and non-stop combination of cancer chemotherapy as a different approach in the management of cancer. In addition he presented the results of studies undertaken in 2010 in Cambridge University on the low dose chemotherapy and prevention in 6 common forms of carcinoma. He provided a data on the survival rates of the various forms of cancer and

concluded that under low dose chemotherapy survival rates of patients in 6 carcinomas in a 5 year period were over 70% except large bowel cancer which was 67.6%.

Prof. Margaret Warner's plenary paper dealt with the changing education in the 21st century. She said that education has always been changing in the 21st century. Therefore, educating children today must ensure that they are equipped to live and succeed in a very different world from that of our predecessors. According to her, what influences change are (1) people's different understanding of the purpose of education at different times, (2) the different sociological and geographically contexts in which education is provided and (3) the changing needs of societies.

The question of who influences change was addressed as the educationists in the past and their legacies and also the present day educational and scientific researchers. Prof. Warner said that new teaching methods are needed so that all students have an equal chance of success. These teaching methods needed to match to students' different learning styles, recognised through educational and brain research. There are different types of teaching namely 1964 - Froebel training – emphasis on children learning through doing and teaching from a text books. She said that curriculum teaching is providing for students' different intelligences through the traditional curriculum or providing for students' different intelligences through the environment and personalised learning.

Prof. Warner's presentation addressed how to start teaching and methods to use to plan and assess student's understanding. She said that using formative assessment to plan lessons in new ways and checking students' understanding in a variety of ways such as investigative and problem solving. She said that, in order to identify students multiple intelligences, one should include the following methodologies and observation techniques:

Linguistic student

- *Likes to:* read, write and tell stories.
- *Is good at:* memorising names, places, dates and trivia.
- *Learns best by:* saying, hearing and seeing words.

Logical / mathematical student

- *Likes to:* do experiments, figure things out, work with numbers, ask questions and explore patterns and relationships.
- *Is good at:* maths, reasoning, logic and problem solving.
- *Learns best by:* categorizing, classifying and working with abstract patterns/relationships.

Spatial student

- *Likes to:* draw, build, design and create things, daydream, look at pictures/slides, watch movies, play with machines.
- *Is good at:* imagining things, sensing changes, mazes/puzzles and reading maps, charts.
- *Learns best by:* visualising, dreaming, using the mind's eye and working with colours/pictures.

Musical student

- *Likes to:* sing, hum tunes, listen to music, play an instrument and respond to music.

- *Is good at:* picking up sounds, remembering melodies, noticing pitches / rhythms and keeping time.
- *Learns best by:* rhythm, melody and music.

Bodily / Kinaesthetic student

- *Likes to:* move around, touch and talk, and use body language.
- *Is good at:* physical activities (sport / dance / acting) and crafts.
- *Learns best by:* touching, moving, interacting with space and processing knowledge through bodily sensations.

Naturalistic student

- *Likes to:* be outside, with animals, geography and weather; interacting with the surroundings.
- *Is good at:* categorising, organising a living area, planning a trip, preservation and conservation.
- *Learns best by:* studying natural phenomenon, in a natural setting, learning about how things work.

Interpersonal

- *Likes to:* have a lot of friends, talk to people and join groups.
- *Is good at:* understanding people, leading others, organising, communicating, manipulating and mediating conflicts.
- *Learns best by:* sharing, comparing, relating, co-operating and interviewing.

Intrapersonal

- *Likes to:* work alone and pursue own interests.
- *Is good at:* understanding self, focusing inwards on feelings / dreams, following instincts, pursuing interests / goals and being original.
- *Learns best by:* working alone, individualised projects, self-paced instruction and having own space.

Prof. Amor presented studies in which she and her colleagues examined the response of sweet pepper to the foliar application of anti-transpirant (AT) under two [CO₂] (380 and 2000 mol mol⁻¹) and two drought intensities (4 or 8 d without irrigation). She said that stomatal conductance and transpiration were reduced, while AT impaired photosynthesis at standard, but not at elevated [CO₂] of fully irrigated plants. She said that drought had a minor impact on chlorophyll fluorescence (Fv/Fm). She also said that root respiration was increased at elevated [CO₂] but, after 8 d of drought, it was higher for plants treated with AT than for non-sprayed plants. According to Prof del Amor, leaf water potential was affected more by drought at ambient compared to elevated [CO₂], and, especially after 8 d of drought, AT minimized the reductions in leaf water potential. Leaf concentrations of proline and starch were affected by both [CO₂] and AT, especially after 8 d of drought. She concluded that there is a beneficial effect of elevated [CO₂] on drought stress, and that application of AT can significantly improve drought tolerance in sweet pepper plants.

Prof. Sharon Stroud spoke about the biology of belief and what human beings think created your life. She said that the biology of belief is a groundbreaking work in the field of New Biology. The work was undertaken by Dr. Bruce Lipton who was a former medical school professor and research scientist. Prof. Stroud said that Dr Lipton's experiments, and those of other leading-edge scientists, have examined in great detail the processes by which cells receive information. The implication of their research is radically changing our understanding of life. It shows that genes and DNA do not control our biology; that instead DNA is controlled by signals from outside the cell, including the energetic messages emanating from our positive and negative thoughts. Dr. Lipton's profoundly hopeful synthesis of the latest and best research in cell biology and quantum physics is being hailed as a major breakthrough showing that our bodies can be changed as we retrain our thinking.

Symposia

All symposia were organized in unitary sessions in the Palmerston room in the Fisher building at St John's College (see Appendix 1). In all, there were 9 symposia on 17th, 18th, 19th, 20th, 21st and 22nd August 2010. Each symposium session consisted of a series of papers on a wide range of topics from Agriculture, Health, education, technology, medical science, social sciences, international issues, publishing and arts. Different speakers and poster sessions in the exhibition gallery was also used to address the topics. Each session has a morning (am) and afternoon (pm) sessions. The morning session started from 8.30 am to 10.45 am – 11.00 am (morning tea/coffee break); 1.00 pm – 2.00 pm (Lunch); 3.30 pm - 3.45 pm (afternoon tea/coffee break); 6.30 pm (Close). Participants have the choice to and not to attend sessions unrelated to their area of interest or research.

There was a wide range of sessions of interest to entomologist undertaking research in Agriculture particularly into IPM, biological pesticides, semiochemicals and population dynamics of insects as well as papers dealing with health, governments, economics etc.

The topics of interest to agricultural research included (1) Management strategies for maximizing carbon storage in agricultural landscapes, (2) Agro-ecological evaluation of aquaculture integration into farming systems, (3) Soil organic carbon storage changes with climate change, landform and land use conditions, (4) Density-dependent intraguild predation of an aphid parasitoid, (5) Mechanism of action of insecticidal secondary metabolites of plant origin, (6) Landscape composition influences the activity and density of Carabidae and Arachnida in soybean fields, (7) Mechanisms underlying the success of invasive insect generalist predators, (8) Area-wide suppression of the Mediterranean fruit fly, *Ceratitis capitata*, and the Oriental fruit fly, *Bactrocera dorsalis*, in Kamuela, Hawaii, (9) Fluorescent pseudomonads as biocontrol agents for sustainable agricultural systems, (10) Validation of a fast gas chromatographic method for the study of semiochemical slow release formulations, (11) Debilitation in conidia of the entomopathogenic fungi *Beauveria bassiana* and *Metarhizium anisopliae* and implication with respect to viability determinations and mycopesticide quality assessments

In addition, there were papers on health, social science, education and international issues that were important and of significant interest to researchers. These include (1) Learning into the second decade of the 21st century, (2) Fine tuning the focus of dynamic communication, (3) Development of pancreatology in Ukraine, (4) Methods for the prevention of blindness from Glaucoma, (5) Overview and Implication of Pandemic influenza in the USA Navy, (6) Pandemics, the enemies of humanity: Past, present and future, (7) Global concerns, issues and interests in the 21st century, (8) Promotion of science & technology for rapid socio-economic development in developing countries, (9) Challenging the Urban divide, (10) The need for de-linking of Dominica.

Prof. Wade of University of Reading shared his view on how to manage the trade-offs between agricultural yields, biodiversity and ecosystem services. According to him, one option is to adopt high yields and undertake intensive farming that allows land sparing. Another option is to adopt low yield and undertake extensive farming over a greater area that retains more biodiversity and protects ecosystem services. The presentation showed that the best land management strategy for biodiversity and ecosystem services might differ depending on details of the farming systems involved. He said that management of the trade-offs between agriculture, biodiversity and ecosystem services in tropical forest landscapes needs to consider current and expected future yields.

Prof. J. Chacon presented a study on the effect of shared resource density on IGP of an aphid parasitoid in an open field setting where prey dilution and predator aggregation could occur at the same time. He presented a data that showed that predator aggregation was higher at the higher aphid densities on experimental plants and this resulted in lower adult emergence of the aphid. He concluded that the effect of shared resource density on IGP may be more pronounced in a field setting than in microcosms due to predator aggregation.

Dr Martin presented a paper on soil carbon storage changes with climate change and concluded that the Soil Organic Carbon (SOC) storage was significantly higher on hilltops (31.7–42.4 kg m⁻²) as compared to hillside slopes (13.5–34.7 kg m⁻²). The SOC was significantly lower in valleys and piedmonts due to the higher temperature in valleys and the intensive agriculture causing higher mineralization of SOC in soils. He suggested the need for further investigations using geospatial techniques and spatial data on regional scales because input data for simulation models to measure SOC changes over time in natural ecosystems is influenced by vegetation, crops, landforms and climate under natural ecosystems.

Dr Ellen Gilmer shared her view of dynamic communication as an art which will enable people of all walks of life to convey thoughts and ideas in a direct and efficient manner so they may be clearly and immediately understood. This shows mastery of the psychology of the person she/he is communicating to. According to Dr Gilmer, the key to success in dynamic communication is precision thinking along with clear focus on ideas and expressions. In her presentation, he displayed a road map to guide others who seek to achieve the same goals. She gave a short video clip to illustrate the kinetics of language.

Dr Keyes paper was about learning into the second decade of the 21st Century. Dr Keyes' presentation introduced a new concept which consists of combining and blending structured academic classroom learning with informal learning. He believed that this could be accomplished through the use of sense of stimulation by creating and doing. Dr Keyes was concerned that countless gifted but informally trained individuals who possess brilliant ideas but who are given very little opportunity to shine and share their talent simply because they have fallen victims of impartiality. Dr Keyes believe that the solution of the problem may be found through the application of information technology, the advancement of interpersonal communication skills and the development of individuals potentialities and capabilities by dedicated open-minded educators. His suggestion was that using cognitive awareness and communication skills as a means of developing people's awareness, participation and sharing of their experiences so that they too can attain success.

Prof. H. Udo's presentation compared ecological sustainability of integrated Agriculture-Aquaculture (IAA) systems with different forms and intensity of aquaculture integration in the Mekong Delta of Vietnam. The study monitored orchard-based and low-input fish (O-LF); rice-based and medium-input fish (R-MF); and rice-based and high-input fish (R-HF)

farming systems. He presented the use of ECOPATH models that is based on nitrogen flows and produced 19 agro-ecological system attributes that were reduced to four factors by factor analysis (Productivity-Efficiency; Diversity; Maturity; Aquaculture Integration), explaining 76.8% of total variance. The results showed that R-HF farms scored higher on Productivity-Efficiency, R-MF on Diversity, and O-LF farms on Maturity than the other systems. The differences in land use, financial and crop disease constraints, market possibilities, and family conditions caused variability within the three farm systems. The ponds and ditches served as a trap to capture nutrients and re-distribute them to other parts of the farms.

Prof. Volodymyr Lupaltsov presented a paper on the development of pancreatology in Ukraine. Prof. Lupaltsov said in his presentation that the frequency of Acute pancreatitis (AP) continue to rise. Over the past 20 years, the frequency of AP has grown in more than twenty times. Its incidence is increasing every year, and over the recent years it has climbed from 200 to 800 cases per 1 million. In Ukraine more than 30,000 patients are hospitalized annually, and up to 20% of them have severe AP. Prof. Lupaltsov presentation showed that pancreatic tumour lesions continue to be one of the most difficult parts in pancreatology. There is a high mortality to the disease and this is due to the difficulties of their diagnosis at an early stage, which hinders many surgeons from performing radical surgical interventions. He said that to increase medical knowledge of pancreatology in the near future, studies should continue in-depth study of the pathogenesis of AP, using new technologies and development of pathogenetically substantiated conservative therapy. Also, studies should focus on improvement of the diagnostic methods of tumour lesions of pancreas at early stages of their development.

Dr Francis Y. Falck from the USA presented a paper on the methodology for the prevention of blindness from glaucoma. He said that the prevalence of the disease is 3 million blind and 100 million at risk. The risk factors are race, family history, diabetes, eye injuries and steroid medications. He said that glaucoma is a silent thief of sight. There is no change of vision until the disease is of advance stage. The initial diagnostic testing may be normal. The causes of glaucoma are eye is filled with a clear fluid- aqueous humor. The fluid is produced by microscopic faucet- ciliary body. The eye has internal fluid drain- trabecular meshwork, impaired drainage causes pressure fluctuation which damages the optic nerve.

According to Dr Falck, effective treatment is available but optic nerve damage is not reversible. Therefore vision loss is not reversible. Therefore to prevent optic nerve damage and vision loss the disease must be diagnosed and treated early. The disease problem is impaired drainage, hence the need for diagnostic test to noninvasively measure internal drainage system is very crucial. The solution in glaucoma cases are as follows:

- Falck Medical Inc Tonography Device
- Non-invasive painless 90 second test
- Small sterile disposable single use plastic prism contacts the eye
- Measurement of fluid outflow through the internal drainage system
- Clinically validated- risk assessment and glaucoma treatment

Dr Rattan presented a paper on the mechanisms of action of insecticidal secondary metabolites of plant origin. Dr Rattan said that identification of novel effective insecticidal compounds is essential to combat increasing resistance rates. He said that plant extracts containing active insecticidal properties are promising and can be used to support pest management. He stressed the need for research to continue to explore new active molecules with different modes of action. He presented a data that shows that secondary plant compounds can function as plant defensive compounds which can inhibit insect reproduction and other processes. He said that phyto-chemical bio-molecules could be used for maximizing the effectiveness and specificity in future insecticide design with specific or

multiple target sites, while ensuring the economic and ecological sustainability.

Dr Snyder presented a paper on the mechanisms underlying the success of invasive insect generalist predators. He said that insect generalist predators sometimes introduced or accident tally through commercial activities outside of their native range with the intention to improve biological control but can become invasive with subsequent widespread impacts on the communities they have invaded. They can consume both herbivores and other predators. He said that invasive predators may often reach higher densities because they left their natural enemies behind and so can displace similar native species. He explained that a wide variety of mechanisms might contribute to invasive success by these species. These species often drive resources to lower levels than do natives, leading to intense resource competition and sometimes competitive exclusion of other predators. He said that coexistence among native and invasive generalists could be achieved when species differ in their niche requirements. According to Dr Snyder, future research should continue to explore the roles of competition and niche partitioning on larger spatial scales, and in both the native and invasive ranges of invasive species

Prof Gardner presented a paper on the influence of landscape heterogeneity and composition on the pitfall trap catch of Carabidae, Araneae, and Opiliones in soybean fields. He said that the distribution and abundance of semi-natural and crop habitats within agricultural landscapes is likely to greatly influence population dynamics of ground-dwelling arthropods. He continued that each predator group would increase with landscape heterogeneity and the amount of semi-natural habitat. He said that the activity density of Araneae increased in soybean fields in landscapes with an abundance of forests and grasslands. Also the diversity of Carabidae in soybean fields increased in landscapes with an abundance of grassland habitat but the activity density of Carabidae declined. This decline was driven extensively by prey availability. He suggested that understanding taxon-specific relationships to landscape variables should be considered in analyses of arthropod response to landscape structure.

Dr Mau presented studies on area-wide suppression of Mediterranean and oriental fruit flies in Hawaii. The suppression techniques included sanitation, Fruit Fly bait sprays, male annihilation, Biolure (R) traps, and parasitoids against flies. He said that there was a reduction of 90.7% Mediterranean fruit flies and 60.7% of the Oriental fruit flies throughout the treatment period. He concluded that a suppression technique be included in any areawide approach.

Prof. Hofte presented a paper on the fluorescent pseudomonads as biocontrol agents for sustainable agricultural systems. He said that the genus *Pseudomonas* contains very effective biocontrol agents that can increase plant growth and improve plant health. He said that screening isolates remains essential to find suitable strains. He indicated the importance of large local collections for disease suppression and plant-growth promotion or by targeted screening for *Pseudomonas* spp. which produce desirable secondary metabolites. He said that it is essential that research need to have access to reference strains from public and private collections for identification of phylogenetic studies and metabolite characterization.

Prof. Heuskin presented a fast gas chromatographic method for the study of semiochemical slow release formulations. He described the methodology and application techniques for the validation of a fast GC-FID analytical method for the quantitative determination of semiochemical sesquiterpenes (E-beta-farnesene and beta-caryophyllene) to be used in an integrated pest management approach.

Dr Hotchkiss presented a study that determined the germination of *Beauveria bassiana* (Bb) and *Metarhizium anisopliae* (Ma) conidia from a fast-rehydration (FR) protocol. He

compared it with another study that determined the germination of the two organisms obtained when dry conidia were subjected to slow rehydration (SR) by holding under high humidity conditions prior to aqueous suspension. He said that differences in viability estimates obtained using the FR vs. SR protocols increased markedly after conidia were exposed to various stress factors in storage (high temperature, and O₂ concentrations), with the SR protocol producing higher estimates of viability in all cases. He said that conidia were stored under moist conditions for 21 days at 25 degrees C, the SR estimate of viability was >21% greater than the FR estimate. He presented viability protocols that may provide more reliable assessments of overall entomopathogenic quality.

Ms Karen Morrisey presentation was about urban areas in developed countries being increasingly becoming the centre of power and that urban dwellers are having more and more tenuous links to the rural areas. She said that special effort needs to be made to ensure that urban dwellers develop a better understanding of their inter-relationship with those that live in rural and remote regions. According to her, while cities grow and prosper, it is the rural regions which usually hold the key to the nation's heartland and soul and provide the signposts for its survival.

Mr George Deyer from Dominican Republic also presented a paper on the need to de-link Dominica. He said that from colonial times, the Judicial Committee of the Privy Council led by Great Britain has been the final court of appeal for the majority of the Commonwealth Caribbean States. However in 2001, the Caribbean government set up the Caribbean Court of Justice and they were given both original and appellate jurisdictions. He mentioned that there is also the fear in the Caribbean Court of justice that it has been established to continue to impose the death penalty because the British House of Commons has ruled that the death penalty should be abolished in the colonies and protectorates. Dominican republic is an independent nation with rights and obligations to legislate laws to suit their own circumstances. However, there is an ongoing divide in Dominican between those who are in favour of and those against de-linking from the Privy Council. While acknowledging the arguments for and against, Mr Dyer is of the opinion that Dominicans have come of age and therefore be allowed to make their own decisions without any interference from Great Britain.

Prof. Serafim G. Kastanakis spoke about pandemics, the enemies of humanity: Past, present and future. He defined pandemics as an epidemic that is so large that it spreads and affects the entire world. The mentioned the 3 great plagues of the centuries are the following:

■ Plague- Black Death Pandemic

Three great pandemics:

- 1st during 5th and 6th centuries in middle East to the Mediterranean killing about half the population of those areas
- 2nd pandemic struck Europe between 8th and 14th centuries destroying nearly 40% of Europe's population
- 3rd pandemic started in 1855 in China and spread to every major continent.

■ Pandemics of the 19th century

Cholera and malaria.

■ Pandemics of the 20th century

AIDS, Ebola, Spanish Flu, West Nile Virus, Tuberculosis.

■ Pandemics of the 21st century

S.A.R.S. (Nov 2002- July 2003), Bird Flue (H5N1), Swine Influenza(H1N1).

Prof. Kastanakis also mentioned that the 7 catastrophic pandemics in history are (1) smallpox (430B.C -1979), killed more than 300million people worldwide in the 20th century alone, and most of the native inhabitants of the Americas; (2) Spanish Flu (1918-1919) killed 50 to 100 million people worldwide in less than 2 years; (3) Black Death (1340-1771) Killed 75 million people worldwide; (4) Malaria (1600-today) Kills about 2 million people per year; (5) Aids (1981-today), killed 25 million people worldwide; (6) Cholera (1817- today) 8 pandemics; hundreds of thousands killed worldwide; (7) Typhus (430 B.C. – today) Killed 3 million people between 1918 and 1922 alone, and most of Napoleon’s soldiers on Russia. In each pandemic, Prof Kastanakis gave advise as to how to prevent the disease and also the current medical control available.

Dr David Blazes spoke about an overview and implications of pandemic influenza in the USA Navy. He said that during a sneeze by an infected person, millions of tiny droplets of water and mucus are expelled at about 200 miles per hour (100 meters per second). The droplets initially are about 10-100 micrometers diameter, but they dry rapidly to droplet nuclei of 1-4 micrometers, containing virus particles or bacteria. This is a major means of transmission of several diseases of humans.

Dr Blazes indicated that the potential for pandemics worldwide is very high. This is because millions of lives are at stake, potential economic losses, potential political destabilization and potential social and cultural incapacitation.

He said that surveillance of pandemics is very important because (1) vulnerability is universal and (2) international public health security – both a collective aspiration and a mutual responsibility. The leading causes of death worldwide infectious are given in Table 1 below:

Cause	Rank	Estimated Number of deaths
Respiratory infections	1	3,871,000
HIV/AIDS	2	2,866,000
Diarrheal diseases	3	2,001,000
Tuberculosis	4	1,644,000
Malaria	5	1,224,000
Measles	6	645,000
Pertusis	7	285,000
Tetanus	8	282,000
Meningitis	9	173,000
Syphillis	10	167,000

Source: David Blazes, MD, CDR MC USN, GEIS Operations, Armed Forces Health Surveillance Center; WHO 2004 World Health Report

Professor Kobina Yankson spoke about promoting science and technology for Rapid Socio-economic Development in developing countries. Prof. Yankson spoke about (1) the power of science & technology for socio-economic development, (2) the nature of Development Partner interventions, (3) potential for Science and technology development in developing countries, (4) the way forward to achieve outcomes and (5) anticipated benefits for developing countries. He said that many industrialized countries continue to allocate substantial investments in Science & technology but can’t see benefits coming out of these in developing countries. He attributed some of the reasons to long gestation period of science & technology investment and also the developed countries give grants and loans for importation of their own technological products and so no room for developing countries to learn and developed their own products. Most of the development agencies providing investments to

countries in Africa are: The World Bank, ECOWAS Protocol and NEPAD all stipulate not less than 1% GDP allocation to science & technology in developing countries. Other agencies include: CIDA (Canada), ODA (United Kingdom), NORAD (Norway), SIDA (Sweden), USAID (United States of America), AUSAID (Australia), JICA (Japan) and DAAD (Germany). Multilateral Agencies including UNDP, UNICEF, UNESCO, OXFAM, Kellogg Foundation, Ford Foundation, Billgate Foundation, Carnegie Foundation etc. According to Prof. Yankson the majority of the assistance given has been short term amelioration interventions targeting social, health and environmental issues with little or no infrastructural and human capacity development components. They are therefore largely unsustainable; and their effects are short-lived.

Prof. Emmanuel Santos made a strong presentation of the global issues, concerns and interests. He started with the issues such as wars, migration, globalization and environmental issues such as climate change and global warming. He then spoke about concerns and interests contained in the UN Millenium Development goals (a set of time-bound and meadsurable goals and targets to combat poverty, hunger, diseases, illiteracy, environmental degradation and discrimination against women). The UN Millinium Goals consists of 8 goals and 48 indicators to cover the period from 1990-2015. Prof. Santos said that when the world balances the forces of violence, wars, terrorism, greed, ignorance, inequity and injustice against understanding, love, compassion and universal peace, the weight of history tilts in favour of the latter. Until this is achieved mankind will continue to suffer and pay the consequence of injustice and inequities towards each other.

Many papers were presented which I could not get the opportunity to attend because of my preference for the papers that deals with agriculture.

Post-conference tour

The tour was undertaken during lunch break on 20 August 2010 from 2.00 – 5.30pm. A tour guard was hired by the conference organizers to send participants around the colleges of Cambridge outlining the history of each college. Due to time constraints the participants could only complete tours around St John's College, Trinity College, Kings College and the King's Chapel.

St John's College tour:

The St John's college was founded in 1511. According to the tour guard the college was founded by Lady Margaret Beaufort mother of King Henry VII, who had died in 1509. She began transforming the ancient hospital of St John the Evangelist, Cambridge into a college for students in the liberal arts and theology. King Henry VII started with a small nucleus of fellows and scholars in First Court of the college from 1511-16 on the College's endowment fund left by his mother. The number of students and college fellows grew by 1545 to 152. More full-fee paying undergraduate students were admitted and this created pressure on existing accommodation. This led eventually to the building of Second Court from 1599-1601. It was the first major expansion of the College. Dr John Williams who was the Bishop of Lincoln and keeper of the Great Seal endowed a new Library building to Charles I in 1624-26. A modern technically-enhanced extension was made to the college in 1990-92. The river Cam was bridged and new buildings to form a New Court was established in 1826-31. The great chapel which was designed by George Gilbert Scott was built in 1863-69. A new extensive undergraduate accommodation in the Cripps Building, straddling Bin Brook was built in 1964-67. Successive codes of statutes for the government of the College made by John Fisher, Bishop of Rochester and executor of the Foundress, between 1516 and 1530 were superseded by those given by the Crown in 1545 and 1580, until the 19th-century Royal Commissions ushered in a period of frequent reform and reorganization. The College is now

governed by statutes made in 1926-7, under powers given to the Universities Commission in 1923, as amended by the Governing Body of the College and approved by the Privy Council, which has been recently modified by the Order of the University Commissioners in 1995.

Originally the college focused on seminary chiefly on the liberal arts, theology, and the biblical languages but over the years the St John's college has become a centre also for the training in classics and mathematics, and in the twentieth century for the latest developments in the full range of the humanities, medicine, and the experimental sciences. The alumni of the college have included the classicist Roger Ascham, the social reformer William Wilberforce, the poet William Wordsworth, the physicist Paul Dirac, and the athlete Christopher Brasher. It has embraced all social classes, from nobles and fellow-commoners of the eighteenth century, to those assisted by scholarships designed since early times to make it possible for those of academic merit but less means to benefit from a university education. Since 1998 this aim has been encouraged by The Eagle project, based in the borough of Lambeth, to help pupils of state schools to go to the university.

From the main gate of the college the tour took us to the First court which is the oldest part of the college. The College started from the First court and gradually spread westward over the years. The first court is mainly for accommodation but also contains the Samuel Butler Room (which is a common room for graduate students) and alongside the Porter's Lodge.

From the First court we went into the Second court. As you go through a passageway you see a dining hall and college kitchens. The Dining Hall is used for student and Fellows' evening meals during term time as an alternative to the self-service. All meals are optional in St John's. In Second Court, the entrance to the *Buttery* (self-service breakfast, lunch and dinner for students, Fellows and staff), *Bar* and Undergraduate Common Room (*J.C.R.*) is in the far left-hand corner. Most of the rest of the rooms in the second court are used as general College meeting rooms, but a few are used for either Fellows or undergraduate accommodation.

The next court was the Chapel court. The Chapel court contains the Admissions office, Chapel and the College library. It is an excellent place to work with a good many reader places enjoying pleasant views into Chapel Court or the Master's Garden. The Library contains two computer rooms. The Library is accessible to College Members 24 hours a day, with the front door locked outside borrowing hours but operable with an undergraduate library swipe card.

From the Chapel court we went to the Third court. It contains mainly undergraduate accommodation. The First, Second and Third Courts are the usual home for final year undergraduates.

From the Third court, we crossed the bridge on River Cam also known as the Bridge of Sighs. After crossing the bridge we entered the New court where most of the second year students are housed. In the New court are the Cripps and Fisher buildings where the conference was held. The Fisher Building houses a number of useful facilities. The Film Club uses the Palmerston Room, for twice weekly film nights. The seating also pushes back to form a badminton court and a venue for some of the larger events or as a space for dance/aerobics. The Jazz Club makes good use of the foyer, as do various other College societies. Upstairs is a *drawing room* for architects and engineers, music practice rooms and an *art room*. There are also a number of other general-purpose rooms in the Fisher Building, which serve as meeting rooms for societies, clubs, etc. The Castlereagh Room has satellite links and serves as another TV room during term. As we passed underneath the Cripps building we entered the School of Pythagoras where Newton developed the "Pythagoras theory".

Trinity college tour

The Trinity college was founded by King Henry VIII in 1546 out of the Kings Hall and Michalhouse colleges. There is a big statue of King Henry VIII set up in 1615. The Trinity college now consists of 160 fellows most of whom are engaged in teaching and about 320 postgraduate students and 650 undergraduates. It is the largest college in the University. Among the important occupants of the Trinity college was Sir Isaac Newton (1642-1727). He was a mathematician and natural philosopher. He lived in a room on the first floor of the Great court. Behind his room and between the Cobbles and the Chapel was once his garden is where an apple tree from which he described the “laws of gravity” has been planted. The tree descended from one of his apple trees in his home at Woolsthorpe in Lincolnshire and planted in Trinity garden in 1954. The Great court houses the Clock Tower, known as King Edward III Tower. The clock chimes the hours twice over.

Kings college tour

King Henry VI laid the foundation stone of the King’s college in 1441. Kings college was one of the two royal and religious foundations. The other is called the Eton college. Both Kings and Eton colleges were asked to admit only 70 scholars drawn from poor families. The boys from Eton college are given automatic and exclusive admission to Kings college. Henry built the King’s chapel and went to great length that the chapel was the greatest and without equal in magnificence in Oxford or Cambridge. The chapel is 88 metres long, 12 metres wide and 24 metres high.

3. Detail the persons and institutions visited, giving full title, position details, location, duration of visit and purpose of visit to these people/places. (NB:- Please provide full names of institutions, not just acronyms.)

After the conference I visited research colleagues in Pesticide Action Network of the UK to update knowledge on cotton projects in West Africa and the potential of seeking international funding and research collaborators for the proposed International Biopesticide Research Centre in ACRI in Narrabri.

4. a) Are there any potential areas worth following up as a result of the travel? b) Any relevance or possible impact on the Australian Cotton Industry?

The Australian Cotton Industry are world leaders in the production of the best management cotton in the world. Despite this achievement, most cotton producers in the world especially Africa and Europe do not know about our cotton production techniques especially the fact that our cotton production techniques are far more environmentally friendly than any country in the world. We need to communicate this to the rest of the world. Dr Mensah is well respected in Europe, China and Africa as one of the top IPM researchers and is in a better position to sell Australian cotton overseas. Ability to do this will provide more market and premium prices for Australian cotton farmers.

5. How do you intend to share the knowledge you have gained with other people in the cotton industry?

I intend to give a seminar in ACRI to my research colleagues. It is also my intention to present what I have learnt at the conference to the CRDC in the form of a seminar.

APPENDIX

Appendix 1. Unitary sessions and presentations attended at the World Forum Conference, St John's College in Cambridge University, United Kingdom, 17-23 August 2010.

17 August 2010				
Presentation time	Sessions	Presentation titles	Presenting Author	Presentation Room
08.30 – 12.00	Unitary	Pre-forum Tour of Buildings, International Exhibition Gallery, Conference Registration Conference opening	Conference Organizers	Fishers building
2.00 – 2.15pm	Unitary session	Official welcome	Dr N. Law (CEO IBC)	Fishers building
2.30 – 2.45pm	“	Official Roll call of participants	J. Evans (President ABI)	Fisher Building
2.45 – 3.00pm	“	Welcome address	Prof. Dr P. Tuglaci	Fisher building
3.00-3.40 pm		On the future of preventive medicine associated with pre-clinical diagnostics in the modern society	Prof. S. Suchkov	Palmerston Room, Fishers building
3.40 – 4.30pm	“	Meeting with conference Chairpersons	C. Emmett	Palmerson room
5.00- 7.30pm	“	Welcome reception	Conference organizers	The Great Hall, Cambridge
18 August 2010				
8.30 – 9.00 am	Plenary session	Entomopathogenic fungal biocontrol agents in soil in relation to risk assessment and accordance with EU regulations	Prof. J. A. Scheepmaker	Palmerston Room, Fishers building
9.15 - 9.30 am	Education symposium	Management strategies for maximising Carbon storage in Agricultural landscapes Part 1	Prof. Wade	Palmerston Room
9.30 – 9.45 am	“	Learning into the second decade of the 21 st century,	Dr Keyes	Palmerston room
9.45 - 10.00 am	Health & Science Symposium Part 1 Dr Jack Kusher - Chairman	Pandemics, the Enemies of Humanity Past – Present - Future	Prof S Kastanakis	Palmerston room
10.00- 10.15 am	“ “	Preclinical Diagnostics as a new Trend in Philosophy in Modern Society	Dr S. Suchkov	“
10.15- 10.30 am	“	Development of Pancreatology in Ukraine: Achievements and Prospectives	Prof. V. Lupaltsov	“

10.30-10.45 am	“	Strategy for worldwide prevention of glaucoma	Dr. F. Falck	“
10-45-11.00 am	TEA BREAK	TEA BREAK	TEA BREAK	Fishers building
11.00 – 11.20 am	Health & Science Symposium Part 2 Dr Robert Mensah - Chairman	Innovative Healthcare Delivery systems in New Orleans	Dr J. Kushner	Palmerston room
11.20-11.40 am	“	Why Seniors should have traditional medicare instead of and HMO	Dr P. Booth	“
11.40-12.00 am	“	Cancer: Use of High dose chemotherapy to prevent 6 carcinomas	Prof. S. Lionis	“
12.00 – 12.20 pm	“	Healthcare in Rural Georgia	Dr B. Dalrymple	“
12.20-12.45 pm	SESSION DISCUSSION	SESSION DISCUSSION	Dr Robert Mensah	Palmerston room
1.00 – 2.00 pm	LUNCH BREAK	LUNCH BREAK	LUNCH BREAK	Great Hall
2.15 – 2.35 pm	Education symposium Part 1 Dr Emmanuel Lantin	Management strategies for maximising Carbon storage in Agricultural landscapes Part 2	Prof. Wade	Palmerston building
2.35-2.55 pm	“	Soil organic carbon storage changes with climate change, landform and land use conditions	Dr. D. Martin	“
2.55 – 3.15 pm	“	Fine tuning the focus of dynamic communication	Dr E. Gilmer	“
3.15-3.30 pm	“	Density-dependent intraguild predation of an aphid parasitoid	Prof. J. Chacon	“
3.30-3.45 pm	TEA BREAK	TEA BREAK	TEA BREAK	Fishers building
3.45 – 4.05pm	Education symposium Part 2 Prof. G Keyes - Chairman	Devotio Moderna: Theological Dialogue within Celestina Don Quixote de la Mancha	Prof. M. Garcia	Palmerston room
4.05-4.25pm	“	Agro-ecological evaluation of aqua culture integration in farming systems	Prof. Y Udo	“
4.25-4.45pm	“	The Great Global warming: Is it a really a great swindle	Prof. G. Fontaine	“
4.45-5.05pm	“	Music education in Slovakia	Prof. E. Blahova	“
6.30-7.30pm	DINNER BREAK	DINNER BREAK	DINNER BREAK	DINNER BREAK

8.45 – 10pm	Conference Organizers	Performers: An Dalton – Soprano – (England) Duncan Reid – Piano – (England) Tzu Yang Hwang , - Vocal (USA) Wei Chih Hwang - Vocal & Piano (USA) Anne Yarrow – Violin (USA) Herbert Rothgarber – Violin - (USA) Dr Agim Islami – Vocal (Kosovo)	Performers	Great Hall
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19 August 2010				
8.30 – 9.00 am	Plenary session	Cancer: Early diagnosis Low dose Chemotherapy and prevention in 6 common forms of carcinoma	Prof. Savvas John Lionis	Palmerston Room, Fishers building
9.15 - 9.30 am	International focus, Education symposium Dr Louis Gonzalez - Chairperson	The need for De-linking of Dominica, The Organization of Eastern Caribbean States and the Wider Caribbean From the commonwealth Privicy Council	Mr G. Dyer	Palmerston Room
9.30 – 9.45 am	“	Challenging the Urban Divide – Living in Outbacks of First World Countries	K. Morrissey	Palmerston room
9.45 - 10.00 am	“	Global concerns, Issues and interests in the 21st Century	Prof. E. Santos	Palmerston room
10.00- 10.15 am	“ “	Taking out the violence, Promoting peace by expanding the mind and engaging the love of humanity: An UN ideology	Dr U. Anderson	“
10.15- 10.30 am	“	Promoting Science & Technology in the developing countries for Rapid Socio-Economic Development	Prof. K. Yankson	“
10.30- 10.45 am	“	Nations and Governments: A case of democracy and Rule of law	Dr S. Mulcky	“
10-45- 11.00 am	TEA BREAK	TEA BREAK	TEA BREAK	Fishers building
11.00 – 11.20 am	Communication and Technology symposium Dr Florence Onochie - Chairman	Ancient chemistry of life from Chemical dawns to living fossils	Dr N. Aylward	Palmerston room
11.20- 11.40 am	“	Cotton production in Australia: role of transgenic varieties and biocontrol in cotton farming landscapes	Dr R. Mensah	“
11.40- 12.00 am	“	Mechanism of action of insecticidal secondary metabolites of plant origin	Dr M. Rattan	“
12.00 –	“	Mechanisms underlying the success of	Dr R. Mau	“

12.20 pm		invasive insect generalist predators,		
12.20-12.45 pm	SESSION DISCUSSION	SESSION DISCUSSION	Dr F. Onochie	Palmerston room
1.00 – 2.00 pm	LUNCH BREAK	LUNCH BREAK	LUNCH BREAK	Great Hall
2.15 – 2.35 pm	Authors & Artists symposium Part 1 Dr Nicholas Law - Chairperson	Dr J. Kusner –Book review	Dr J. Kusher	Palmerston building
2.35-2.55 pm	“	Paula Compo-Pratt – Book Review	Dr. P. Pratt	“
2.55 – 3.15 pm	“	Dr Kathleen Duyck – Techniques in Book publication	Dr K. Duyck	“
3.15-3.30 pm	“	Dr Michael Presley-Roy – Publication techniques for new publishers	Dr M. Presley - Roy	“
3.30-3.45 pm	TEA BREAK	TEA BREAK	TEA BREAK	Fishers building
3.45 – 4.05pm	Authors & Artists symposium Part 2 Dr Nicholas Law - Chairperson	Prof. Tzu-Yang Hwang - Music	Prof. Hwang	Palmerston room
4.05-4.25pm	“	Dr Sandra Morgan - MUSIC	Prof. Morgan	“
4.25-4.45pm	“	Prof. Leikny Annadotter – Music in the 21 st Century	Prof. Annadotter	“
4.45-5.05pm	“	Music education in Slovakia Part 2	Prof. E. Blahova	“
6.30-7.30pm	DINNER BREAK	DINNER BREAK	DINNER BREAK	DINNER BREAK

20 August 2010				
8.30 – 9.00 am	Plenary session	Changing Education: a challenge across the world for the 21st century	Prof. Margaret Warner	Palmerston Room, Fishers building
9.15 - 9.30 am	Communication and Technology symposium Part 2 Dr Guy Fontaine - Chairperson	Fluorescent pseudomonads as biocontrol agents for sustainable agricultural systems,	Prof. Hofte	Palmerston Room
9.30 – 9.45 am	“	Validation of a fast gas chromatographic method for the study of semiochemical slow release formulations,	Prof. Heuskin	Palmerston room
9.45 - 10.00 am	“	Debilitation in conidia of the entomopathogenic fungi Beauveria bassiana and Metarhizium anisopliae and implication	Dr Hotchiss	Palmerston room

		with respect to viability determinations and mycopesticide quality assessments		
10.00-10.15 am	“ “	Landscape composition influences the activity and density of Carabidae and Arachnida in soybean fields	Prof. Gardener	“
10.15-10.30 am	“	Mechanisms underlying the success of invasive insect generalist predators	Dr Synder	“
10.30-10.45 am	SESSION DISCUSSION	SESSION DISCUSSION	Dr Fontaine	“
10-45-11.00 am	TEA BREAK	TEA BREAK	TEA BREAK	Fishers building
11.00 – 11.20 am	Communication and Technology symposium Dr N. Law	Ancient chemistry of life from Chemical dawns to living fossils Part 2	Dr N. Aylward	Palmerston room
11.20-12.00	“	Nations and Governments: A case of democracy and Rule of law Part 2	Dr S. Mulcky	“
11.40-12.00 am	“	WHO’S is WHO and WHO’S New at the World Forum	Dr N. Law	“
12.00 – 12.40 pm	“	SESSION DISCUSSION	Dr N. Law	“
1.00 – 2.00 pm	LUNCH BREAK	LUNCH BREAK	LUNCH BREAK	Great Hall
2.00 – 5.30 pm	Walking Tour of Cambridge	Walking Tour of Cambridge	Cambridge Guard	Great Hall
6.30-7.30pm	DINNER BREAK	DINNER BREAK	DINNER BREAK	DINNER BREAK

21 August 2010				
8.30 – 9.30 am	Plenary session	Antitranspirant on photosynthesis and water relations: A study of pepper plants under different levels of CO2 and water stress	Prof. F M. Amor	Palmerston Room, Fishers building
9.30 - 11.30		International Exhibition opens -	Dr J. Evans	Boys Smith Room, Fishers building
11.30 – 1.00 pm	“	International poster session	C. Emmett	Castlereagh room, Fishers Building
1.00 – 2.00 pm	LUNCH BREAK	LUNCH BREAK	LUNCH BREAK	Boys Smith Room, Fishers building
2.00 – 5.30 pm		Exhibition and Poster session	C. Emmett	Castlereagh room, Fishers Building

6.30-7.30pm	DINNER BREAK	DINNER BREAK	DINNER BREAK	DINNER BREAK
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22 August 2010					
8.30 – 9.15 am	Unitary session	Plenary	The Biology of belief – What you think creates your life	Prof. Sharon Stroud	Palmerston Room, Fishers building
9.30 - 10.15 am	Closing session	Unitary	Reports from Symposium Chairpersons	Dr J. Evans	Palmerston room
10.20 – 10.45 pm	“		Messages from Ambassadors	Dr Philippe Perez-Mirlo	“
10.45-11.45 am			Presentation of Awards	Dr J Evans (ABI) and Dr N. Law (IBC)	“
1.00–2.00 pm	LUNCH BREAK		LUNCH BREAK	LUNCH BREAK	Great Hall
2.00 – 5.30 pm			Closing remarks from World Forum Directors Announcement of the 2011 World Forum	Dr J Evans (ABI) and Dr N. Law (IBC)	Castlereagh room, Fishers Building
6.00pm			Closing of Forum Office and International Exhibition gallery		
8.00pm	GALA CLOSING BANQUET		GALA CLOSING BANQUET	GALA CLOSING BANQUET	GALA CLOSING BANQUET BREAK

23 August 2010					
7.30 – 9.00 am			Departure Breakfast	Dr N. Law	Great Hall
10.00 am			World Forum departure		