



A Letter from the SGI Chairman

Dear colleagues and friends of *icipe*,

We are pleased to update you on the latest developments at *icipe*, starting with the decision by the Government of Germany to grant the centre 'unrestricted' contribution to support the Centre's policy research in 2012. This assistance is a significant boost to *icipe*'s overall goal of poverty reduction while protecting natural resources. We also highlight two key recognitions, which demonstrate the increasing acknowledgment of *icipe*, its leadership and expertise within the international scientific and development community. The first is the designation of *icipe* as a Reference Centre of the Food and Agriculture Organization (FAO) of the United Nations, while the second is the election of the Director General, Christian Borgemeister, as a Fellow of the Entomological Society of America (ESA). Further, we report on *icipe*'s evolving relationship with policymaking institutions in the continent. Statements made by the High Commissioner of the United Republic of Tanzania, Her Excellency Ms Batilda Salha Burian, during a visit to the centre, signify this. It is also indicated by the signing of a Memorandum of Understanding (MoU) between *icipe* and the Intergovernmental Authority on Development (IGAD). In addition, we discuss scientific findings by the Centre's researchers, which will aid in better diagnostics and control of two important crop diseases. We also report on the findings of a tracer study of *icipe*'s African Regional Postgraduate Programme in Insect Science (ARPPIS), which confirms its profound impact in scientific capacity building in Africa, as well as some challenges, which the centre will endeavour to address. Finally, I would also like to take this opportunity to introduce my colleague David Lymer of the Swedish International Development Cooperation Agency (Sida), who in November 2012 will take the lead of the Sponsoring Group of *icipe* (SGI). I have thoroughly enjoyed the 3 years I have been the Chairman of this informal group, among other reasons because of all the positive developments at *icipe* during the period. I wish my successor good luck and I certainly will remain committed to *icipe* and its important mandate in and for Africa.

Dr Wolfgang Kasten – GIZ; outgoing Chairman, SGI.

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NEW FUNDING

icipe granted 'unrestricted' contribution by the Government of Germany

In August 2012 *icipe* received for the first time an 'unrestricted' contribution from the Government of Germany in support of the centre's **policy research**. As an international, pan-African research centre, *icipe* plays a crucial role in building expertise across the continent. The Centre's R&D **activities** focus on research, strategy, policy and programme design, as well as the evaluation and implementation of projects in the thematic areas of arthropod pests and diseases, health, environment, capacity building, social policy and technology transfer. Against this backdrop, policy research and development offers a good approach for the systemic, integrated development of farming communities in Africa. *icipe* recognises that arable and grazing land and water resources are on the decline. Therefore, the Centre aims to develop scientific strategies that could circumvent the changing cropping conditions to increase food production and secure the prospects of future generations without harming the environment or compromising biodiversity. The support from the Government of Germany is a significant boost to *icipe*'s important role of promoting agriculture while also protecting natural resources for poverty reduction and development.





RECOGNITION

icipipe designated FAO Reference Centre



Front view of icipe's R&D lab complex. This building houses the Centre's research labs in Nairobi, and is scheduled for structured upgrading in design and construction soon

Effective 1st August 2012, *icipipe* has been designated as a Food and Agriculture Organization of the United Nations (FAO) Reference Centre for vectors and vector-borne animal diseases, which include tsetse flies and animal trypanosomosis, as well as arthropod-transmitted viral animal pathogens.

FAO Reference Centres are selected by the Director-General of the organisation on the basis of their high level scientific expertise as well as their commitment to capacity building and provision of services.

The designation of *icipipe* as a Reference Centre follows a thorough evaluation of its mandate, main activities and competencies. It is also based on *icipipe's* extensive experience and prior collaboration with FAO.

As a Reference Centre, *icipipe* will contribute in four key areas that are vital to the control of vectors and vector-borne animal diseases. First, *icipipe* will provide FAO and its members with specific, independent technical and scientific advice, as well as recommendations on interventions against these issues. Second, the Centre will facilitate the identification of African trypanosomes and arthropod-transmitted viral diseases, and provide advice on their ecology. *icipipe's* third contribution will be in the building of the capacity of researchers in FAO member countries and/or in the African region; for instance, through training courses, workshops and the development of technology innovation and transfer programmes. Fourth, *icipipe* will help to improve the performance and harmonisation of vector and disease diagnostic services, by sharing biological materials and its relevant data with FAO and other Reference Centres. More information can be found at <http://www.icipipe.org/news/622-icipipe-designated-fao-reference-centre.html>

RECOGNITION

icipipe Director General, Christian Borgemeister, elected Fellow of the Entomological Society of America

On 1st August 2012, the Governing Board of the Entomological Society of America (ESA)—the largest entomological society in the world—elected 10 new Fellows for the year 2012. Among them was Christian Borgemeister, the Director General of *icipipe*, who was honoured for his contribution to biological control and integrated pest management (IPM) in the tropics. Borgemeister follows in the footsteps of *icipipe* scientist Zeyaur Khan, who was elected a Fellow of ESA in 2010. More information at <http://www.entsoc.org/press-releases/2012-fellows>



Christian Borgemeister



STRATEGIC PARTNERSHIPS

Tanzanian High Commissioner to Kenya visits icipe

On 27th September 2012, the Tanzanian High Commissioner to Kenya, Her Excellency Ms Batilda Salha Burian visited *icipe*. Ms Burian, who was accompanied by Ms Kemilembe Salome Mutasa, the Environment Attaché at the Tanzanian High Commission in Kenya, obtained an overview of *icipe*'s activities from the Centre's Director General, Christian Borgemeister; Onesmo ole-MoiYoi, an *icipe* Emeritus Scientist and former Director of Research and Roger Finan, Director of Finance and Administration. The two diplomats then toured *icipe*'s Fruit Fly and Commercial Insects programmes and the Centre's recently inaugurated Martin Lüscher Emerging Infectious Diseases Laboratory (<http://eidlab.icipe.org>).



Her Excellency Batilda Salha Burian and Kemilembe Salome Mutasa, accompanied by *icipe* scientists, in the newly inaugurated Martin Lüscher Emerging Infectious Diseases Laboratory, that was named after a famous scientist and great friend of *icipe*



Clockwise from left: Roger Finan, Onesmo ole-MoiYoi, Her Excellency Batilda Salha Burian, Kemilembe Salome Mutasa, and Christian Borgemeister

Ms Burian was extremely impressed by the variety and high quality of *icipe*'s R&D activities, as well as effective contribution towards food security, human and plant health, and their contribution towards meeting the millennium development goals (MDGs). Further, she was most gratified by the wide range of partnerships and research activities between *icipe* and Tanzanian institutions and communities. Indeed, Ms Burian expressed great interest, on behalf of the Tanzanian Government, towards enhancing such linkages. *More information:* <http://www.icipe.org/news/625-the-high-commissioner-of-the-united-republic-of-tanzania-and-icipe-hold-strategic-discussions.html>

icipe signs MoU with IGAD

On 2nd August 2012, *icipe* and the Intergovernmental Authority on Development (IGAD) signed a Memorandum of Understanding (MoU) to facilitate cooperation in promoting food security and environmental protection through scientific research and capacity and institutional building.

The MoU was signed by *icipe* Director General, Christian Borgemeister and Eng. Mahboub Maalim, the Executive Secretary of IGAD, with Suresh Raina, *icipe*'s Head of the Adaptation to Climate Change and Ecosystem Services cluster, with Dr Mario Margiotta, *icipe*'s Head of the Capacity Building and Institutional Development Programme and Dr Solomon Munyua, IGAD Coordinator, as observers.

The MoU will enable IGAD and *icipe* to implement a range of initiatives in several areas of mutual interest, including integrated vector management (IVM) in animal and human diseases, as well as in enhancing animal production, health and marketing. The two institutions also intend to cooperate in apiculture, for instance in promoting good sericulture practices and also in addressing bee health, and in quality assurance and value addition of bee products. Collaborations in IPM of key crops of the region, and in overall capacity building activities are additionally envisaged.



A light moment during Christian Borgemeister's introductory speech



INSTITUTIONAL EVENTS

icipe participates in the XXIV International Congress of Entomology, Daegu, Republic of South Korea



icipe's Director General, Christian Borgemeister delivering one of the 5 plenary lectures at the 24th International Congress of Entomology held in Daegu, South Korea from 19 to 25 August 2012. It was entitled: "Insect Science and Poverty Alleviation—Tales from Africa", further attracting a record number of visitors to the icipe booth

The 24th International Congress of Entomology (XXIV 'ICE 2012') was held in Daegu, South Korea from 19 to 25 August 2012, attracting 2500 delegates from across the globe. The deliberations at ICE ranged from issues regarding genetically modified organisms (GMOs), biological control and IPM for improving food security and sustainable development, to developments in commercial insects and climate change.

icipe was represented by a 17-strong delegation drawn from the centre's research clusters: Integrated Pest Management (IPM), Integrated Vector and Disease Management (IVDM), and Adaptation to Climate Change & Ecosystem Services (ACCES), as well as the Capacity Building Programme.

The icipe delegation participated actively in the symposia, through oral

and poster presentations. Significantly, of the six plenary speakers, two were associated with icipe—the Director General of icipe, Christian Borgemeister and icipe Governing Council Member, Kongming Wu. Certificate of Distinction was awarded to the icipe Governing Council Chair, John A. Pickett.

Throughout the Congress, icipe's exhibition booth attracted a great number of visitors, who were thoroughly impressed by the Centre's publications, commercial products (generated through its research) and African-inspired promotional material, which included the 2013 Calendar and artefacts embossed with beaded insects. The general consensus seems to be that icipe truly and totally represented Africa at the ICE 2012 symposium. [Photos from ICE2012 Symposium are available here.](#)



Visitors are pictured at icipe's exhibition booth, which was very popular at the Congress. The decor gave a clear picture as to what our Centre is about



To showcase our research results, icipe displayed a number of publications and products, and a special edition of the 2013 calendar and beaded artefacts with an insect theme





RESEARCH FINDINGS

icipe scientists make first report of two plant diseases in Kenya

icipe reported for the first time the *Tomato Yellow Ring Virus* (TYRV) (Tospovirus, Bunyaviridae) infecting tomatoes in Kenya. Tospoviruses are the only plant pathogens of the Bunyaviridae exclusively transmitted by thrips, causing important yield losses worldwide. Thrips and Tospoviruses threaten sustainable and profitable production of tomatoes in Kenya. For years, symptoms of tospoviruses were often confused with those caused by other fungal and bacterial pathogens resulting in farmers' application of fungicides with no tangible results. TYRV has only been reported in various host crops in Iran, and *icipe's* study is the first confirmation of the presence of the disease in Africa. The scientists intend to continue their research on vector competence of thrips species infesting tomato, risk assessment in neighbouring countries where it is found infesting tomatoes, and the bio-ecology and epidemiology of the disease, in order to come up with ecological management strategies for the virus and vector. The full report can be found at <http://apsjournals.apsnet.org/doi/abs/10.1094/PDIS-05-12-0462-PDN>

icipe has also newly reported *Hyparrhenia* grass white leaf disease (HGWL), caused by 16SrXI phytoplasma in Kenya. *Hyparrhenia rufa* is a thatching grass commonly found throughout the tropics where it also serves as a valuable fodder and border grass to prevent soil erosion. To our best knowledge, this is the first record of the group 16SrXI, 'Ca. *Phytoplasma oryzae*' associated with the white leaf disease of *H. rufa*, and the first record of the thatching grass as a host for a phytoplasma. This report also shows that *H. rufa* may be an alternative host plant for the dreaded Napier grass stunt phytoplasma and might play a role in the epidemiology of Napier grass stunt disease in East Africa. As the disease spreads, it will affect the continued use of *H. rufa* as cattle fodder and thatching grass. Moreover, the disease might impact on soil conservation efforts in parts of East Africa where *H. rufa* is the main border grass. The full report can be found at <http://www.ndrs.org.uk/article.php?id=024017>

CAPACITY BUILDING

icipe ARPPIS tracer study conducted

In November 2011, *icipe* celebrated 40 years as a leading research and capacity building centre in Africa (with its African Regional Postgraduate Programme in Insect Science [ARPPIS] having trained over 242 PhD and 120 MSc-level scientists from 29 African countries since 1983).

icipe recently conducted a tracer study on its ARPPIS programme, targeting scientists trained since inception. The report confirmed the programme's profound impact in scientific capacity building in Africa.

According to the study, majority of the ARPPIS-trained scientists consider the programme to be one of the most important experiences in their lives and careers. They said that they found the mentorship and networking with scientists from *icipe* and partnering universities, as well as the exposure to quality research methodologies and equipment, an invaluable source of knowledge and skills. The scientists also commended the opportunity to engage in real-life research projects.

Most of the scientists trained through ARPPIS have gone on to become successful professionals in a variety of institutions, primarily in Africa. Indeed, the tracer report strongly indicated that ARPPIS has contributed to food and health security, and overall sustainable development in Africa.

However, the study revealed several challenges for the programme. First, is the need to expand the programme's reach to include scientists from countries that are currently under-represented, including from Franco- and Lusophone region countries. Second, is the need to put in place institutional and financial measures to secure ARPPIS' sustainable future, which should include stronger and wider linkages with regional and national research and training institutions. The ultimate aim should be the incorporation of a more integrated research-for-development framework within ARPPIS, aligned to the long-term, regional-continent vision. Third, is the need to assess possibilities of post-study support,



Yvonne Ukamaka, a Nigerian ARPPIS student in the Molecular Biology and Biotechnology Department (MBBD) whose research interest is on mosquito vectors of arboviruses

for instance through follow-up programmes, that would enable ARPPIS alumni to establish their own research projects to replicate and transfer their training.

icipe will endeavour to address these challenges. We are encouraged by a key finding of the report—the pledge by the ARPPIS alumni (that congregates an unrivalled platform of scientific leadership and expertise) of their support to collaborate with *icipe* towards these goals.