

The RAMPage: The Official Newsletter of Asia Pacific College

Quesada in Advancing eHealth in the Philippines

by Kareen Gancio

The RAMpage once celebrated APCians who have demonstrated “passion beyond labor”. These are the people whose love for what they do did not only earn them institutional recognition and respect, but most importantly enabled them to inspire other people. This time, we throw the spotlight on another APCian who, along with his passion for the advancement of the country’s eHealth system, has placed the name of Asia Pacific College (APC) in the global eHealth map.

But before we proceed, it is imperative that we ask the question: What is eHealth and why should it matter in our life today? The World Health Organization (WHO) defines eHealth as “the transfer of health resources and health care by electronic means” (WHO, 2014). It involves the delivery of health information, for health professionals and consumers, through the use of the internet and telecommunications. It also involves the use of e-commerce and e-business practices in health systems management. Simply put, it is currently a global project that maximizes the potentials of IT and e-commerce to improve public health.

In the Philippines, the Department of Health (DOH) and the Department of Science and Technology (DOST), together with other eHealth-enthusiastic institutions and individuals have been taking part in this global movement by developing our own National eHealth system. Just recently, the WHO recognized the Philippine eHealth Strategic Framework and Plan (PEHFP) for advancing the country ahead of its contemporaries (Usman, 2014).

Research plays a very significant role in developing an eHealth system in the country. This is where our fellow APCian fits in the picture. Mr.

Jose Eugenio Quesada, whom we simply call “Joe Gene”, has been actively participating in this movement through his research.



In 2012, he launched his first full blown research on the development of eHealthcare information system in the Philippines through his paper entitled, “Deploying Innovative Mobile-based Telemedicine Systems using Open Source tools in Resource-poor Areas of the Philippines.” This study centered on the implementation and assessment of the Sana Mobile Telemedicine system. The SANA project, which he initiated in 2009, in partnership with Massachusetts Institute of Technology (MIT), is a system that maximizes the IT characteristics of customizability, user-friendliness, and accessibility on the Android, mobile platform.

A collaborative output of Mr. Quesada, and colleagues from United States, Mr. Leo Anthony Celi of the Laboratory of Computer Science, Massachusetts General Hospital, and Christopher Moses of the Massachusetts Institute of Technology, the paper was presented at the Med-e-Tel 2012 Conference Program in Luxembourg.

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Med-e-Tel is an event of the International Society for Telemedicine & eHealth (ISfTeH), a Switzerland-based Non-Government Organization (NGO) that facilitates the international dissemination of knowledge and experience in Telemedicine and eHealth. It also provides access to recognized experts in the field worldwide.

In 2013, ISfTeH accepted his paper entitled, “Building a National Electronic Health Record Infrastructure on top of an Innovative Open Source Mobile Platform Using a Cloud-based Server Infrastructure. In this paper, he explored the potentials of Cloud Computing and Artificial Intelligence (AI) in improving mobile eHealth system.



In early June 2014, Mr. Quesada returned to Switzerland to present his paper, “Building an Ecosystem to Provide Sustainable eHealth Technical Capability for the Philippines” at the 2014 Tech4dev International Conference in Lausanne. In this research, Mr. Quesada emphasized the essential roles of the key concepts such as ecosystem, education, technology, and capability building in developing sustainable eHealth systems for the country.



In early August of this year, Mr. Quesada co-organized a seminar at APC entitled "eHealth in the Philippines, Current State and Research Opportunities". Invited guest speakers were Ms. Grace Halcon and Ms. Roren Chin from the Department of Health, and an international World Health Organization consultant, Mr. Balwant Godara, who delivered his talk via Skype.



In late August of the same year, Mr. Quesada left the country once again to co-deliver a lecture on “Free/Libre Open Source Hospital Information System: Introduction to GNU Health” in Istanbul, Turkey. His discussion focused on the application of free software, a characteristic of GNU operating system, on the improvement of Health and Hospital Information System.

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Free/Libre Open Source Software in Health Care (FLOSS) – A tool for global capacity building

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Objectives: To provide a framework for global capacity building for eHealth in low resource settings based on free/libre open source software principles, ecosystems theory and previous experience.

Introduction: The philosophy of free and open source software has influenced biomedical informatics from the very beginning. A fruitful and strong community has developed in different subfields e.g. Bioinformatics Open Source Conference (BOSC), medical informatics (see e.g. MedFLOSS.org) and recently FLOSS principles have influenced the development of drugs and led to the field of open drug discovery (e.g. osdd.net). Other related areas are open data, open standards, open access and open science. The global health informatics community has addressed the topic of capacity building in low resource settings in numerous events and activities e.g. in the IMIA WG Health Informatics for Development (imia-wg4dev.org) or the Asia eHealth Information Network (aehin.org). In this paper the free and open health & hospital information system GNU Health [1] is used as a central node in an ecosystem for capacity building for eHealth in low resource settings.

Finally, one of Mr. Quesada's major outputs for this year is the publication of "Free/Libre Open Source Software in Health Care (FLOSS) – A tool for global capacity building", a research paper he co-authored with three other researchers from the fields of IT and Medicine: Thomas Karopka, Project Manager of the BioCon Valley® GmbH in Germany; Luis Falcón, Author and Project Leader of the GNU Solidario; and Dr. Alvin Marcelo, consultant for the WHO Western Pacific Regional Office in Manila.

"I like very challenging projects," Mr. Quesada tells the RAMpage as he describes what drives him to research more about this very young field. But he further shares that what really makes him fall for eHealth is the fact that it allows him to use his knowledge on IT in providing efficient healthcare to the general public; such an empowering opportunity that only comes to those who never stop learning.

Mr. Quesada has been a member of the APC family since 2001 and is currently an Associate Professor of the School of Computer Science and Information Technology and Founder and President of Integrated Open Source Solutions.

To learn more about eHealth and the most recent developments in this field, you may visit: <http://health.gnu.org>