



BUILDING BIOMEDICAL ENGINEERING CAPACITY IN THE DEVELOPING WORLD: NECESSARY TO ADVANCE ANESTHESIOLOGY *Call for Volunteer Faculty and Test Equipment Donations*

The advancement of anesthesiology practice and safety in the developing world depends on many components. One of the most neglected is the availability of functioning technology to support patient care. Even in sites with abundant donation of used equipment, this problem persists and the equipment "graveyard" is a constant reminder of the critical need for the biomedical engineering skills necessary to maintain and repair equipment for anesthesia and many other aspects of patient care.



In your home institution, you are surrounded by complex and sophisticated equipment and have access to biomedical engineering support for your practice. We hope that you can take advantage of this anesthesiology-biomed relationship to raise awareness of the needs in less fortunate corners of the world.

The ASA Committee on Global Humanitarian Outreach has identified several non-governmental agencies training a biomed workforce in low-resource settings. **They all share a need for (a) volunteer faculty and (b) donated test equipment.** You may be able to inspire your own biomed colleagues to respond to this need. Here's a little about some of these organizations, including contact information for volunteers or equipment donors, that we ask you to share with your engineering colleagues:



Engineering World Health

Engineering World Health initiated its BMET training program in late 2009 in response to this dire need. Our mission is to build a local, sustainable, trained workforce of BMETs in developing countries to repair and maintain medical equipment. The program began in Rwanda through the generous funding of the GE Foundation, with the goal of creating a local school training enough technicians to service every hospital in that country. Now, Rwanda has over 58 trained biomedical engineering technicians, with an additional 83 in training. Building on the success of this program,

biomed training programs are operating in Cambodia, Honduras, Ghana, and Nigeria.

Learn more at <http://www.ewh.org/professionals/bmet-training>

Please consider contributing to the EWH BMET digital library: <http://library.ewh.org>

Contact: BMET@ewh.org

Tropical Health Education Trust

THET is working with Zambia's Northern Technical College (NORTEC) and Ministry of Health to implement the first pre-service Diploma for BMETs. We currently have 60 students across two years and expect to graduate our first cohort in early 2017. We are looking for skilled individuals to deliver quality hands-on corrective maintenance and troubleshooting sessions on all kinds of medical equipment in our newly developed skills workshop, and via hospital attachments. This

biomedical technology program is supported alongside a Master of Medicine course in Anesthesia through the University of Zambia's School of Medicine. The THET programs in Zambia were launched in 2010.

For more information: <http://www.thet.org/our-work/zambia-programme/human-resources-for-health-programme>

Contact: Edward Tonkin edward@thet.org

Almathea Trust

Since 2010, Amalthea Trust has been working with Kyambogo University, the main technical university in Uganda, to help them develop and implement their own 2 year Diploma in Biomedical Engineering. This Diploma course is the first in the country and aims to reduce the problems associated with broken, malfunctioning, and incorrectly used medical equipment throughout the country's hospitals. The Amalthea Trust is committed to improving medical engineering within Uganda and the surrounding countries. The Trust has been working closely with the graduates who are now placed in hospitals throughout Uganda.

For more information: www.amaltheatrust.org.uk

Contact: Steven DGLISH stevend@amaltheatrust.org.uk

American College of Clinical Engineering

The ACCE was formed in 1990 and has supported international training programs worldwide almost since its inception. The training workshops have been offered in dozens of low and middle income countries on every continent in collaboration with leading global health groups such as WHO and its Regional Office for the Americas, Pan American Health Organization (PAHO).

These workshops provide an educational forum whereby clinical engineers (CE) and related health professionals in other countries are introduced to the best CE/health technology management (HTM) systems and working methods worldwide, and to exchange information and ideas in the participating countries.

For more information:

<http://accenet.org/International/Pages/Default.aspx>

Contact: Antonio Hernandez, International Committee Chair hernandezantonio@comcast.net

