

OVERSEAS ANESTHESIA INITIATIVES: HVO AND GPAS

Berend Mets, M.B., Ph.D., F.F.A.R.C.S., Anesthesia Director
Health Volunteers Overseas

Gerald Dubowitz, M.B., Ch.B., Director
Global Partners in Anesthesia and Surgery

Health Volunteers Overseas

Health Volunteers Overseas (HVO) is best described as a network of health care professionals, organizations and donors with a common commitment to improving global health through education.

HVO has as its vision "to be recognized as a global leader in the development and implementation of educational programs designed to empower health care providers in developing countries." The idea for HVO was developed in 1984 by Ralph Crawshaw, M.D., who invited fellow medical practitioners to "make a substantial difference to your colleagues in developing countries." In 1986, the first group of anesthesiologist volunteers went to Ethiopia.

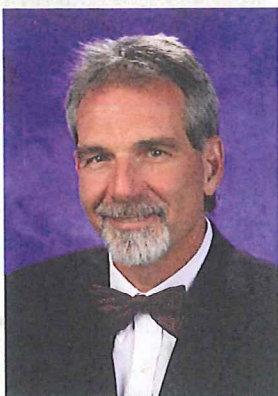
Twenty-five years later, HVO has more than 80 clinical education programs in 25 developing countries involving the disciplines of anesthesiology, dentistry, orthopedics, dermatology, pediatrics and internal medicine as well as hematology, oncology and physical therapy. HVO is financially supported by volunteer donations as well as by lifetime memberships, memorial or tribute gifts, and the willing of estates. In addition, there is sponsorship on an annual basis by American academic or medical groups such as the American College of Physicians.

HVO currently has anesthesia sites in Ethiopia, Malawi, Peru, Viet Nam, India and South Africa. Anesthesiologists are invited to join HVO and volunteer to travel to these sites to



Three HVO volunteers with a group of nurse anesthesia students who we taught, in a café in Addis Abeba. (Photo courtesy of Berend Mets, M.B., Ph.D., F.F.A.R.C.S.)

educate anesthesia providers on site for periods of two to eight weeks. Each location has an on-site director who is usually the consultant in charge of the local program. In addition, there is an assigned American-based program director who oversees the applicants and sites to ensure that there is a good match and that appropriate training is provided. At the conclusion of the visit, each volunteer provides a written trip report that is posted on the HVO website and made available to future volunteers <http://www.hvousing.org>.



Berend Mets, M.B., Ph.D., F.F.A.R.C.S. is Eric A. Walker Professor and Chair, Department of Anesthesiology, Pennsylvania State University College of Medicine, Hershey.



Gerald Dubowitz, M.B., Ch.B. is an Assistant Professor of Anesthesiology, University of California San Francisco.

HVO volunteers join the society on a subscription basis at an annual cost of \$150 a year. Membership confers the ability to volunteer at the anesthesiologist's own expense in travel and accommodation. HVO provides guidance in travel, visa and accommodation arrangements by a very active administrative staff at the headquarters office in Washington. HVO members become part of an efficiently structured volunteer organization and will receive a quarterly bulletin, *The Volunteer Connection*, and have access to the HVO website "Anesthesia Knownet" section, which is a repository for all the above-mentioned volunteer Trip Reports (since 2007) as well as volunteer-provided teaching materials/lectures that can be used by prospective volunteers in teaching at the mentioned sites.

Addis Ababa, Ethiopia – Black Lion Hospital

Volunteers teach anesthesia in a structured master's-level nurse anesthesia program. Volunteers supervise trainees in the hospital and provide lectures in a well-structured and coordinated curriculum in anesthesia.



*The Blacklion Hospital in Addis Abeba, Ethiopia.
(Photo courtesy of Berend Mets, M.B., Ph.D., F.F.A.R.C.S.)*

Blantyre, Malawi – Queen Elizabeth Central Hospital

Volunteers teach in the Anesthesia Clinical Officers program, providing hands-on teaching, small-group discussions and teaching in the hospital simulation center.

Lima, Peru – EsSalud Hospital System

Training includes neuro and pediatric anesthesia, open-heart procedures, acute and chronic pain management, and regional anesthesia.

Ho Chi Minh City, Vietnam – Hospital for Traumatology and Orthopaedics

The resident anesthesiology staff welcomes volunteers to help upgrade their skills through lectures and demonstrations, and particularly training in regional anesthesia.

Mthatha, South Africa – Mthatha Hospital Complex

Volunteers provide clinical training and lectures to junior anesthesiologists, trainees and rotating medical students, and co-treat patients through instruction.

Vellore, India – Christian Medical College

This institution is one of the foremost medical schools in India, so volunteers assist in providing advanced clinical training in a wide variety of subjects to anesthesia residents and assist members of the department of anesthesia in training.

To learn more about these programs, contact the HVO office telephone U.S. (202) 296-0928, email us at info@hvousa.org or visit our website www.hvousa.org.

Global Partners in Anesthesia and Surgery

Global Partners in Anesthesia and Surgery (GPAS) is a capacity-building initiative currently working in Uganda. In Uganda, there are five physicians per 100,000 people, an average annual per capita income of U.S. \$510 (2010), and a life expectancy of 53 years. It is among the poorest and most medically underserved countries in the world.

GPAS was formed in 2007 at the University of California, San Francisco (UCSF) from an existing collaboration between UCSF and Makerere University (MU) in Kampala, Uganda. The original UCSF-MU partnership focused on trainee and faculty



*A new Ugandan resident on his first day in the O.R. supervised by a recently graduated Ugandan anesthesia attending (GPAS-AAGBI scholar).
(Photo courtesy of Gerald Dubowitz, M.B., Ch.B.)*

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teaching exchange. Subsequent to local needs assessments in 2006 by Ugandan surgeons, the focus of the UCSF-MU partnership shifted from faculty/trainee exchange to capacity building.

Problems identified in early needs assessments included the low number of trainees, high costs of training, "brain drain," inadequate post-graduate job opportunities, perceived increased risk of HIV exposure and a poor learning environment.

Based on these concerns, a task force formed and adopted the name GPAS. This multi-national, multi-disciplinary group included anesthesia, surgery and emergency medicine representation from both UCSF and MU.



O.R. with two tables at Soroti District Hospital in Uganda (note "new" machine pushed into a corner, unused). (Photo courtesy of Gerald Dubowitz, M.B., Ch.B.)

At the time GPAS formed, several other international anesthesia and surgery groups were also working in Uganda, and many foreign health care initiatives in Uganda existed in parallel and with little collaboration. GPAS has worked to bring together the many groups visiting MU and other hospitals in Uganda with similar missions.

GPAS projects focus on the following areas:

1. Workforce Expansion

Scholarships and partnership with the Ugandan Ministry of Health have been aimed at increasing postgraduate job opportunities and addressing the high cost of graduate tuition. At approximately U.S. \$2,000 (2008), more than four times the average Ugandan income, tuition is a significant barrier to training.



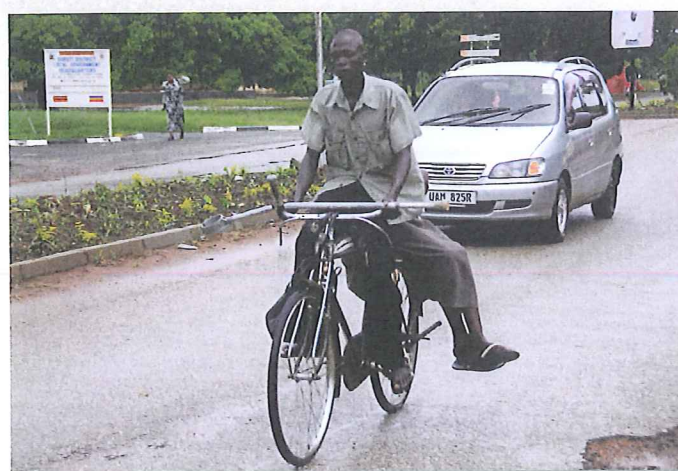
Visiting GPAS anesthesiologist Matt Giudice, M.D. trains anesthesia staff at Soroti District Hospital on "new" anesthetic machines. (Photo courtesy of Gerald Dubowitz, M.B., Ch.B.)

2. Improved Service and Education Infrastructure

Insufficient educational resources, insufficiently functioning equipment, lack of biomedical engineering, and the risk of occupational exposure to blood-borne pathogens are among many infrastructural challenges being addressed by GPAS projects.

3. Increased Collaborative Research

A significant research agenda by local surgery and anesthesia leaders exists, though few local resources are available to pursue projects. As data in these areas are essential to help guide interventions, GPAS has helped actively pursue academic support as well as financial and human resources to complete research projects.



Patient being brought to the hospital by bicycle transport, Soroti, Uganda. (Photo courtesy of Gerald Dubowitz, M.B., Ch.B.)

4) Improved Collaboration

As the number of international groups working in parallel in Uganda continues to rise, greater harmonization of these public health efforts has been identified as a key local priority. The GPAS approach has focused on a multi-disciplinary approach to all projects. GPAS has helped increase the number of anesthesia trainees in Uganda from two in 2008 to 18 in 2012 and the number of trained and practicing anesthesiologists from 11 to over 20, with similar results in surgery. We have expanded from surgery, anesthesia and emergency medicine and now have projects and partners in obstetrics and critical care as well as biomedical engineering and collaborations and partnerships with the Association of Anaesthetists of Great Britain and Ireland, ASA's Global Humanitarian Outreach, Alliance for Surgery and Anesthesia Presence (ASAP-Today), University of British Columbia, Brigham and Women's Hospital, Duke University, Emory University, Harvard University and the University of Washington. The Third Annual Conference on Medical Collaboration in Uganda, originally initiated and hosted by GPAS at UCSF in 2009, will be held in October 2012 in Ontario, Canada.

In the future, GPAS will continue to expand current projects in Uganda, building sustainable partnerships and applying lessons learned to programs in similar settings in other low-income countries.

More information can be found at www.GlobalPAS.org or through email at partners@GlobalPAS.org.



OMV and EMO are used in an intubated patient (note no monitors, just a finger on the temporal artery). Soroti District Hospital, Uganda. (Photo courtesy of Gerald Dubowitz, M.B., Ch.B.)



One O.R., two tables, two patients, two surgeries. Soroti District Hospital, Uganda. (Photo courtesy of Gerald Dubowitz, M.B., Ch.B.)