My thirteenth trip to Haiti will have just concluded by the time you are reading this newsletter, scheduled for the end of April 2016. Every trip is different; this year, team members and I have been sending a flurry of emails regarding the Zika virus and what that may mean to those traveling to Haiti. Whether it’s the Zika virus, a hurricane or an earthquake, the obstacles of practicing global medicine are small compared to the need.

Back when I was in medical school and starting my clerkships, I thought about family medicine and perhaps geographic medicine (as infectious disease medicine was called back then) as an ideal way to meld my passion for working with the underserved with travel. A rotation I pursued with the Indian Health Service illustrated a real need even here in the U.S. When I realized during my surgery clerkship that this was the field I loved, it didn’t occur to me then that I would be involved with anything globally. Global surgery at that time was in the realm of retired or missionary surgeons who worked in relative obscurity in terms of the academic and private world of the U.S. I had the privilege to obtain jobs in some very underserved communities at county hospitals, the largest of which was located within a U.S./Mexican border city, and then later in inner city Houston, which fit my passion perfectly. It wasn’t until we were living in Portland that my husband Marty (Martin Schreiber, M.D.) and I were invited to join a surgical group rotating in the mountains of Guatemala and I got my first taste of actual international surgery. It turned out that my previous experience working in underserved settings did pair well with practicing overseas; the “MacGyver” problem-solving skills I’d developed resurfaced quickly and allowed me to work with whatever equipment was available rather than demanding a special instrument! Back then, Marty and I thought it was crazy that our med school classmate Nick Gideonse, M.D., went to Haiti for medical missions. So I never would have predicted that I would be going there after the 2010 earthquake for disaster relief, nor later being a part of developing a regional medical group and bringing residents regularly to Haiti at their request. I certainly didn’t think, with the help of many friends here, that I would be trying to build a school with internet access in a remote fishing village for kids who couldn’t afford public school, nor attempt to build an educational radio station there to warn people about hurricanes and to teach that diseases were not the result of a Vodou curse. While I couldn’t build a university there, we could, with my NGO and umbrella non-profit, help sponsor higher education in Haiti for some of our volunteers there to become engineers and doctors for Haiti’s infrastructure.

Karen Kwong, M.D., leads the Global Health Advocacy Program in Surgery (GHAPS)

Karen Kwong, M.D., is Director of the Global Surgery Program and Associate Program Director of the General Surgery Residency

Rural Haitian children learn how to use computers at the school Dr. Kwong and her group helped build following the 2010 earthquake.
At the other end of the spectrum in Global Surgical Education, I am an Adjunct Professor for Queen Mary University of London/Barts and The London School of Medicine where I serve as an advisor and evaluator for their Masters in Trauma program. My current students are surgeons from Singapore, England, and Australia. Learning about their different medical systems through their assignments has also broadened my own horizons and ideas about global surgical care.

As surgeons, we are in the unique position to make a lasting impact on people's lives. With the internet making the world more accessible, it's no surprise that the majority of our resident applicants, as well as current residents and surgeons, are interested in Global Surgery. This interest is reinforced by The Lancet Commissions Global Surgery 2030 report, which notes that 5 billion people lack access to basic surgical care (Lancet 2015;386:569–624). In developing countries, 143 million operations are required each year to prevent death and disability. In addition, the surgical workforce needs to double by 2030 to reach 80 percent coverage of worldwide surgical needs. Although costly, the gains in the disability-adjusted life year provide far more economic gains than the related costs and are also justified on the humanistic level.

We're training our surgeons to work in areas of physician shortages, whether that's the rural U.S. or around the world

Beginning with the development of the rural surgery program in 2003, the OHSU Department of Surgery has supported the training of surgeons to work in areas of physician shortages. This program, developed by Drs. Karen Deveney and John Hunter, provides rotation opportunities in rural communities to surgery residents where they are exposed to a broader base of surgery and work directly with specialists. Residents trained in a rural surgery setting receive more hands-on training and encounter a greater variety of conditions and procedures, which perhaps best prepares these residents for the scope of the surgical needs that they encounter during any subsequent overseas experience. The OHSU rural rotations include a year in Grants Pass at the senior resident level or six months in Coos Bay at the third- or fourth-year level.

We are very fortunate to have department leadership from our Surgery Chair John Hunter (who himself worked as a student in Thai border camps) and General Surgery Residency Program Director Karen Brasel, M.D., M.P.H., F.A.C.S., who are committed to the OHSU Global Surgery interests. In addition, we have very involved residents such as MacKenzie Cook, M.D., Estin Yang, M.D., Alexis Moren, M.D., Chris Connelly, M.D., Nikki Weighard, M.D., Sara Walcott-Sapp, M.D., and graduates such as Katrine Lofberg, M.D., and Megan Frost, M.D., who helped spearhead and provide leadership for our Global Health Advocacy Program in Surgery (GHAPS), and blazed the way for international options.

Our current residency pathway involves mastering the basic surgical skills in the R1-3 years. Strong surgical skills and training are the backbone of international practice. The PGY1-3 years provide exposure to specialty areas and allow for the development of skills in the fields encountered overseas.

During the fourth year of residency, an opportunity to participate in a research year is available in which research residents take part in our annual Fall surgery elective for MS1’s and MS2’s, called Surgery and Inequalities. This course, the brainchild of current chief resident Dr. Mac Cook, has finished its fourth year running, introducing medical students to the critical role that surgery can play in reducing health inequalities. The course includes an introduction to OHSU surgeons who have participated in a variety of overseas experiences: Jim Peck, M.D., talks about his experiences and lessons learned with MSF (Doctors without Borders); often we have 43-year career UN Official Michael Heyn, M.S., speak on the development of global surgery; Robert Goldman, M.D., discusses surgical inequalities in the U.S.; Kayvan Roayaie, M.D., Ph.D., has talked about his resident grassroots efforts in twinning at UCSF; and Richard Yeager, M.D., about working with PAACS in Cameroon. We will certainly recruit Bruce Ham, M.D., who is experienced in setting up rural surgery coverage and has done volunteer work in Ethiopia. Two of our VA Portland Healthcare System anesthesiologists, John Rompala, M.D., and Dave Wilson, M.D., have spoken about anesthesia and the WHO safe surgery principles in Haiti. I personally speak each year about disaster relief and Haiti and as faculty of this course, I learn something myself each time.

For more information about GHAPS, contact Dr. Karen Kwong at kwongk@ohsu.edu or visit www.ohsu.edu/global-surgery
Resident travel to Tanzania, South Africa and Haiti with OHSU’s GHAPS

Currently the research year is the only period during which residents can participate in the month-long Tanzanian University program (affiliated with the Pacific Coast Surgical Association) where they and a faculty member work alongside Tanzanian University residents. Tanzanian residents were ecstatic with the knot-tying skills lab run by resident Jeff Crawford, M.D., this last year, where they learned how to tie one-handed knots for deep areas, having previously relied mainly on instrument ties for sparing suture. In addition to skills labs, both Jeff Crawford and Mac Cook noted increased autonomy (with the supervision and back-up of board-certified surgeons such as Dr. Peck and other PCSA faculty) during the night calls, adding great value to their experience. This model of “twinning” between universities is one of the best ways to address developing countries’ surgeon and infrastructure shortages, allowing for the sharing of collective knowledge and resources to design appropriate solutions to problems in the host country. PCSA is in the process of developing a scholarship fund to help offset some of the expensive travel costs for the residents.

Also during the research year, residents have the opportunity to study and research abroad at the University of Cape Town in South Africa while simultaneously pursuing a Masters in Public Health. Most recently, Megan Frost, M.D., Katrine Lofberg, M.D., and Estin Yang, M.D., successfully completed the program. Following completion, Dr. Frost noted that principles learned at Cape Town aided her significantly in her now-permanent rural surgery practice in Grants Pass, Ore. Dr. Yang will be joining her in Grants Pass as a colleague later this year following graduation.

A shorter but no less intense global surgery option within the program is our biannual eight-day trip to Haiti, called Lane Haitian Relief (LHR). Offered twice a year for residents at or above the research year, the experience is a grassroots effort developed by Oregon doctors and nurses in Eugene and Portland. Participating residents learn about the “DIY” aspects of global surgery in terms of logistics and how to manage a team. They act as pharmacists in preparation of medications, learn how to prepare for and manage mobile clinics, how to operate and round in an austere environment, and learn about the cultural barriers and joys of practicing where there is great need. We also work side-by-side with medical and nursing students in Haiti, who value the learning experience just as much as the money they earn to help pay their tuitions. Through this connection, we have also been able to arrange a summer-exchange rotation for two Haitian medical students at OHSU, thereby making this program a bi-directional interchange. As with the Tanzanian experience, our residents are paired with Board-certified surgeons for the length of the trip. Thus far, eight surgery residents/fellows, and five OHSU surgeons have traveled to Haiti with LHR, including Drs. Marty Schreiber, Donn Spight, Kevin Billingsley, and Josh Schindler, not to mention a host of Eugene and Portland community surgeons. Our team leader and founder is surgeon Snell Fontus, M.D., of Eugene.

“The model of “twinning” between universities is one of the best ways to address developing countries’ surgeon and infrastructure shortages, allowing for the sharing of collective knowledge and resources to design appropriate solutions to problems in the host country.”

May 2015. Dr. Kwong throws some (peace) signs with five Haitian medical students, two of which came in exchange to OHSU later that year with the other three sponsored at Haiti’s engineering and medical school

Continued: Karen Kwong, M.D. - GHAPS
Looking to the future, our OHSU Global Surgery Program interests include potential “twinning,” or pairing and collaboration between universities, within the countries of Thailand and Laos. A Thailand university hospital is potentially looking for partners to help with further development of their trauma and research programs, and surgical opportunities may exist at public and more rural locations within Thailand and Laos.

As we continue to forge relationships outside of the U.S., there remain challenges to address. Due to ACGME Residency Review Committee rules, barriers still exist in making month-long international rotations available to chief residents. On a logistical level, the resident salary structure inevitably discourages resident participation. On the side of faculty participation, finding satisfactory ways to ease OHSU faculty away from operating and clinic responsibilities for 4-5 weeks in order to travel overseas is always a work in progress. However, as PCSA further develops its scheduling structure, scheduling interested residents and faculty may become easier to plan ahead for and incorporate. We also need to continue to work on contributing to the available scholarly literature with our international activities. For this, we’ve had a nice start, with several of our residents presenting abstracts of their experiences thus far.

Global surgery fulfills many needs. Clearly there is a need for basic surgical care in developing countries. Experiences overseas have also led to projects which have helped our own communities. For instance, our volunteer dentist for LHR realized that there were unmet dental needs right in his hometown of Eugene after his experience in Haiti; he ended up working with local businesses to support annual free dental care in his community. The experiences satisfy our own curiosity, wanderlust, and altruistic tendencies and can also help re-energize, thereby helping to prevent physician burnout. OHSU is unique as a community with surgeons and residents who actively participate in or support global surgery outreach endeavors. Those at OHSU who have a passion to make a difference, whether it’s bringing expertise to rural surgery communities or meeting international needs, can find the training and opportunities required to go out into the world and help those who need it most.

- Karen Kwong, M.D., Global Surgery Program Director

For more information about GHAPS, contact Dr. Karen Kwong at kwongk@ohsu.edu or visit www.ohsu.edu/global-surgery