Special Issue on Medical Missions Overseas

72 Exporting America’s Compassion: A Guide to Engagement in Medical Missions
Gordon R. Tobin, MD

80 Practicalities of Medical Missions Overseas
Steve Diamond

86 Supplies Over Seas: Delivering Compassion Worldwide and Savings at Home
Gordon R. Tobin, MD; Bert T. Guinn; Allen K. Montgomery Jr

92 Getting Started Early on Medical Missions
Rinit H. Pancholi, MD

94 Delivering Medical Care Overseas Through the Military
James F. Beattie, MD

97 Honduras: A Church-Related Medical Mission Experience
Rebecca E. Jones; Shawn C. Jones, MD, FACS

101 Global Health Pediatrics at the University of Louisville: A Journey of Over Twenty years
George C. Rodgers Jr, MD, PhD; Tania Condurache, MD, FAAP

Cancer Comments

114 Colorectal Cancer Screening Tip Sheet
Colon Cancer Prevention Project

Editorial

108 Professional Fulfillment Through Medical Volunteerism
Thomas Tu, MD

Association

120 2012 KMA Annual Meeting - Save the Date!
115 Diane Lundbom Elevated to KMA Executive Staff
117 Member-Get-A-Member Campaign
118 People

Departments

68 President’s Page
120 Advertisers’ Guide
112 Alliance Page
110 Letters to the Editor

Copyright 2012 Kentucky Medical Association

The Journal of the Kentucky Medical Association (ESSN 2155-661X) is published monthly by the Kentucky Medical Association, 4965 US Hwy 42, Suite 2000, Louisville, KY 40222, under the direction of the Board of Trustees.

The Journal, its editors, and the Kentucky Medical Association do not assume responsibility for the opinions and statements of its contributors and advertisers. The Journal reserves the right to make the final decision on all content and advertisements.
Albert Schweitzer was the son of a Lutheran pastor, born in 1875 in the Alsace region which was at that time a part of Germany and later became a part of France. He obtained his doctorate in philosophy in 1899 with a dissertation on Immanuel Kant. Though he was a preacher he funded his later medical education at the University of Strasbourg through professional engagements as a concert organist. In fact, he performed well into his eighties. He wrote a biography of Bach in French in 1905 and three years later published it in German. He decided to attend medical school in order to go to Africa as a missionary.

Except for a short stint in a POW camp at the close of WWI and six years subsequently spent in Europe, Schweitzer worked the remainder of his life starting in 1924, in Lambaréné, Gabon. He started his hospital there in 1913. Schweitzer was a doctor and surgeon in the hospital he founded and by the early 1960s the compound he built consisted of over 70 buildings and could care for over 500 patients in residence at a time. He received the Nobel Peace Prize in 1953 and used the $33,000 he received to start a leprosarium. “Do something for somebody everyday for which you do not get paid,” is not just a quotation of Schweitzer’s, it was for him a way of life.

Dr Paul Farmer, the famous subject of the book, Mountains Beyond Mountains, shares a similar lot with Schweitzer, having decided to attend Harvard Medical School because of the need Farmer personally saw by working in Cange, Haiti. He first went to Haiti with an undergraduate degree he obtained in medical anthropology from Duke. He helped establish Partners in Health (PIH), which has developed into a worldwide health organization. In other places like Peru, Russia, Rwanda, and Malawi he oversees projects, and his approach involves ethnographic analysis and practicality in solving problems related to what he terms structural violence. These are essentially issues, institutions, and “ways” that keep people poor and undervalued. He is now chairman of Harvard Medical School’s Department of Global Health and Social Medicine.

“Do something for somebody everyday for which you do not get paid” - A. Schweitzer

A mission is basically an important assignment. Its nuances incorporate military, religious, corporate, and/or humanitarian purposes often involving travel. This edition of the KMA Journal is dedicated to overseas medical missions. While I am not likely to devote my life to mission work as these two cogent examples did and have, I am inspired by them. Additionally noteworthy is the understanding that you do not have to travel overseas, voyage to Vietnam, Romania, or Guatemala in order to relieve suffering, lend encouragement, or treat the oppressed or victimized.
Overseas missions have helped me to realize the profundity of opportunities with which I am blessed every day—opportunities to give to those less fortunate, to essentially be a missionary where I live. I go, because I love it. I go because I have opportunity and feel compelled to go. I go, selfishly, because of what is does for me.

...you do not have to travel overseas, in order to relieve suffering, lend encouragement, or treat the oppressed or victimized.

I hope that you are inspired by what you read and see on these pages. More importantly, I hope that you engage your vision of a better city, state, country, or world. Reach out to lift the spirit of some ailing soul God has placed within your sphere of influence and stretch the borders of your own heart.

Shawn C. Jones, MD
President
NO SMALL ACHIEVEMENT: LEARNING THE BUSINESS OF MEDICINE

CHALLENGE: When Dr. Navalgund came out of medical school, he had all the right medical training. But when he decided to open his own practice, he needed something new — an education in the business side of medicine.

SOLUTION: Dr. Navalgund had the Cash Flow Conversation with his PNC Healthcare Business Banker, who put his industry knowledge to work. Together, they tailored a set of solutions to strengthen his cash flow: loans for real estate and equipment, along with a line of credit to grow his practice, plus remote deposit to help speed up receivables.

ACHIEVEMENT: DNA Advanced Pain Treatment Center now has four private practices and a growing list of patients. And Dr. Navalgund has a place to turn for all his banking needs, allowing him to focus on what he does best.

WATCH DR. NAVALGUND’S FULL STORY at pnc.com/cfo and see how The PNC Advantage for Healthcare Professionals can help solve your practice’s challenges, too. Or call one of these PNC Healthcare Business Bankers to start your own Cash Flow Conversation today:

JOHN ALLEN  502-581-6386
JERE FRITTS  502-640-6728
CHAD NEELY   589-281-5280

PNC CFO
Cash Flow Options

ACCELERATE RECEIVABLES
IMPROVE PAYMENT PRACTICES
INVEST EXCESS CASH
LEVERAGE ONLINE TECHNOLOGY
ENSURE ACCESS TO CREDIT

PNC BANK for the ACHIEVER in us all™
“As physicians, we have so many unknowns coming our way...

One thing I am certain about is my malpractice protection.”

Medicine is feeling the effects of regulatory and legislative changes, increasing risk, and profitability demands—all contributing to an atmosphere of uncertainty and lack of control.

What we do control as physicians: our choice of a liability partner.

I selected ProAssurance because they stand behind my good medicine and understand my business decisions. In spite of the maelstrom of change, I am protected, respected, and heard.

I believe in fair treatment—
and I get it.

ProAssurance.
Treated Fairly

Professional Liability Insurance & Risk Management Services
ProAssurance Group is rated A (Excellent) by A.M. Best.
For individual company ratings, visit www.ProAssurance.com.
Medical missions greatly benefit third-world patients and give inspiring experiences to participants. This paper provides considerations for physicians and students wishing to become involved in missions and principles for physicians wishing to develop new mission programs for offering specific skills or serving new sites abroad.

Physicians find overseas medical missions profoundly inspiring, and sometimes life-changing. The depths of poverty and suffering in third-world countries are unimaginable unless personally witnessed, and enduring commitments to lessen that suffering often follow medical missions. Physicians are fortunate to have skills that allow personal involvement and to directly experience the profound differences they make. These frequently include life-saving interventions. However, returning participants uniformly profess receiving far more in perspective and insight than given in service. Another effect of missions is great appreciation for life in America. After participation, few take for granted our remarkable degree of safety, comfort, opportunities, and freedom.

Medical students and physicians of all ages regularly inquire about becoming involved in missions. Some with special interests envision organizing teams focused on those interests. This paper endeavors to address such questions and to outline principles for both those wishing to begin involvement, and those seeking to increase involvement by organizing specifically focused programs. These principles came from initial experience with established organizations, and then from designing focused burn care programs. The most informative experiences for me came from organizing the Louisville-Vietnam Burn Care Program, which made serial missions to Vietnam throughout the 1990s, and was remarkably successful. But lessons were also learned from disappointing setbacks, as subsequent attempts to duplicate that program in Afghanistan and Pakistan were, and continue to be, obstructed by security concerns. These experiences generated the following principles for both beginning and advanced mission participants.

PRINCIPLES FOR INITIAL INVOLVEMENT

For those without prior experience, I recommend joining established, reputable programs and learning through participation. First, assess your priorities by the following considerations: (1) Some prefer working with friends from their home medical society, hospital, or church. Examples include the annual Nicaragua missions of the Greater Louisville Medical Society Foundation, or Mission Honduras, supported by KMA President Shawn Jones; (2) Others focus on geographical sites of interest. For example, the Kentucky Chapter of Healing the Children serves sites in Manabí Providence, Ecuador, but can place you with other chapters that visit over 50 different sites worldwide. For Plastic Surgeons and Anesthesiologists, Operation Smile and Smile Train offer many worldwide selections; (3) Specialists may prefer programs that use their specialty skills. These may be especially needed, and they give experience from
unique third-world pathology. Most specialty societies maintain program registries. For Plastic Surgeons, Operation Smile and Smile Train are national programs addressing facial deformities and birth defects, such as clefts.

Operation Smile was my introduction to overseas missions. On these, I saw that large numbers of cleft lip teams existed, but none were addressing the profound need for burn care and establishing third-world burn units. This led to the Louisville-Vietnam Burn Program and subsequent endeavors.

With priorities thus defined, one’s call to action becomes “Carpe diem”—seize the opportunity without hesitation.

**PRINCIPLES FOR ADVANCED PROGRAM DEVELOPMENT**

Physicians wishing to develop new programs focused on specific, unmet needs assume more complex challenges, which are served by the following principles.

**Principle 1: Identify Needs New Programs Could Serve**

Third-world medical needs are overwhelming, and opportunities for focused programs are abundant. Some come through requests from specific geographic sites that require organizing teams to meet those requests. Examples include longstanding initiatives by Kentucky physicians, such as Dr Ben Rigor’s teams to the Philippines (Operation Rainbow) and Dr George Rodger’s Romanian pediatric teams. Other programs focus on unmet medical needs, such as the Louisville-Vietnam Burn Program described above. I was struck by the enormous preventable mortality and morbidity of thermal burns in the third world. (Figure 1) Yet, modern burn care was nonexistent, and these needs attracted no missions whatsoever. I also noted absence of teaching in programs of those years (addressed in Principle 3). These factors called for a unique, new program.

![Figure 1. Burns in less-developed nations cause tragic, preventable mortality, disfigurement and disability.](image)

![Figure 2. Courses in burn care for: (A) Hanoi and the northern provinces; and (B) the Danang region and central highland provinces.](image)
PRINCIPLE 2: ASSESS EXPORTABILITY OF YOUR MEDICAL THERAPY

Eye care and cleft lip surgery represent examples of relatively sophisticated therapies being taken to primitive settings with manageable infrastructure. In contrast, cardiac surgery requires enormous infrastructure, including diagnostic cardiology, cardiopulmonary bypass equipment and maintenance, and intensive postoperative care. These are most difficult to export, and they are unmaintainable in third world countries. Thus, such overseas missions are rare, and children needing cardiac surgery are brought to America.

We witnessed enormous numbers of third-world children dying of middle-sized burns that would be successfully treated here. Moreover, infrastructure for their care is reasonably exportable. Only massive burns required high-technology infrastructure beyond easy export, such as respirators. We chose to design an exportable program addressing the overwhelming percentage of burn mortality and morbidity, with plans to later expand to high technology, if possible.

PRINCIPLE 3: CREATE SUSTAINABLE INDEPENDENCE THROUGH EDUCATION

In early experiences, I noted that medical care ended when mission teams left. Nothing then happened until teams returned, often a year later. Our goal was to add education to the service mission, so that burn care was permanently established locally. Thereby, we followed the ancient proverb, “If you give one a fish, they are fed for a day. If you teach fishing, they are fed for life.” We found exceptionally receptive “fishing” partners across Vietnam, who eagerly learned and applied everything taught. Our time at each site was equally divided between lectures covering burn care principles (Figure 2), and operating.

Figure 3. (A) Burn journal featuring our team’s visit and core principles. (B) First Vietnamese text of contemporary western burn care.

Figure 4. Classes in Danang. The table placards indicate the many provinces represented by the participants.
rooms, where these principles were demonstrated. We wrote journal articles and textbooks that were translated into Vietnamese. (Figure 3) Many physicians and nurses walked from remote provinces over four or five days to attend our courses. (Figure 4) Their dedication gave us appreciation for our access to education at home.

**PRINCIPLE 4: MAKE PROGRAMS AS COMPREHENSIVE AS POSSIBLE**

Multidisciplinary teams and comprehensive programs expand both care capability and effective teaching. Our teams included plastic and general burn surgeons, anesthesiologists, pediatricians (for screening), microbiologists (infections are the principal burn mortality), physical and occupational therapists (for rehabilitation), and burn unit nurses. All members had both care and teaching roles. (Figure 5) Anesthesiologists and pediatricians on surgical teams deserve special comment. Risks of anesthesia in the third-world are easily underestimated.\(^2\)\(^3\) Our team benefitted from skilled anesthesiologists with substantial third-world experience, led by Louisville’s Ben Rigor, MD. Pediatric screening is also essential. Malnutrition, undiagnosed cardiac defects, and parasitic diseases unseen at home present unanticipated challenges.\(^4\)\(^5\)

**Figure 5.** All disciplines teach. Elisabeth Tobin, PhD, lectures on bacteriology and burn infections.

**PRINCIPLE 5: INCORPORATE EFFECTIVE LOCAL MEDICAL PRACTICES**

Using local therapies and practices that are effective (or harmless), enhance acceptance by patients and local health care workers. Our team imported, and sought to create local pharmaceutical manufacture of, silver sulfadiazine, an effective burn antimicrobial. Our Vietnamese hosts were using a native plant extract that seemed highly effective. (Figure 6) Therefore, we accepted their practice and encouraged their comparison of both agents. Also, a key component of our therapy was early tangential excision of burn eschar with temporary wound coverage using cadaver or porcine skin. Neither was available in Vietnam, but they produced freeze-dried frog

**Figure 6.** Topical burn therapy with Vietnamese plant extract: (A) farming the plant and extracting the agent; (B) topical application of the agent in a severe burn.
skin, which appeared effective for the same purpose. (Figure 7)

**PRINCIPLE 6: ESTABLISH STRONG SUPPORT IN THE COUNTRY VISITED**

It is both unwise and dangerous to undertake foreign missions without adequate local support. Uninformed missions can step on “landmines” of local customs, patients’ cultural expectations, local physician hostilities, and even political dangers, which put both patients and visiting teams at risk. Extensive connections and information exchange with government officials and local physicians before embarking are essential. Also, pre-visit screening is helpful, and follow-up care is necessary for safety. Throughout Vietnam our team had support of Holt International staff and offices arranged by Larry Florman, MD. We had strong government and physician support in all four cities where we established or upgraded burn units (Hanoi, Danang, Saigon, and Can Tho). In Hanoi, the government began a National Institute of Burns at the time of our initial visit in the early 1990s, and our program merged perfectly with their goals. In my final visit at the decade’s end, I witnessed the pride of physicians and officials at the Institute’s opening. Their program incorporated all the principles taught in our serial visits over the decade.

**PRINCIPLE 7: ESTABLISH ADEQUATE SUPPORT AND PREPARATIONS AT HOME**

Preparation and home support include organizational logistics, safety standards, funding, travel arrangements, and procurement of equipment and supplies. Program needs determine specifics of each element. Guidelines and checklists enhance safety; the American Society of Plastic Surgeons has recently published an excellent set of guidelines.7

Kentucky teams are most fortunate to have Supplies Over Seas (SOS) to enable equipment and supply procurement. SOS can assemble exact equipment needs over months before departure. Our team carried SOS supplies on each Vietnam mission, and

![Figure 7. Temporary burn wound coverage with freeze-dried frog skin.](image-url)

![Figure 8. (A) Gordon Tobin, MD, and Larry Florman, MD, make bedside teaching rounds in Hanoi with the physician teachers. (B) Their students will become teachers of others.](image-url)
an additional container was sent to Saigon’s Children’s Hospital #1, which housed one of our principal burn units and outreach bases.

**PRINCIPLE 8: CREATE A MULTIPLICATION PLAN**

Beyond establishing ongoing programs, we encouraged our hosts to become teachers and further propagate the care principles, and they enthusiastically complied. (Figure 8) The Chief of Surgery and Burn Care at Saigon’s Children’s Hospital, Dr Tran Thanh Trai, incorporated these in his nationally admired teaching and service missions to surrounding regions, and the Hanoi physicians institutionalized these through their National Institute of Burns.

The outcome of our program was most rewarding. In addition to seeing our principles established and measurable benefits produced, we had unforgettable, positive personal experiences. We were overwhelmed by the compliment of a Vietnamese medical leader who stated “this small American team with a large vision greatly improved burn care for an entire nation.”

Foreign missions bring experience of this kind. Vast opportunities exist to deliver and teach therapies where little or none existed before, and to witness their great benefit. One need only embrace the action call, “Carpe Diem”—seize the day of opportunity—and lives will be made permanently better, including your own.

**REFERENCES**

Recovery doesn’t always happen overnight.

CONTINUE THE CARE

Kindred Healthcare understands that when people are discharged from a traditional hospital, they often need continued care in order to recover completely. That’s where we come in.

Kindred offers services including aggressive, medically complex care, intensive care and short-term rehabilitation.

Doctors, case managers, social workers and family members don’t stop caring simply because their loved one or patient has changed location.

Neither do we.

Come see how we care at continuethecare.com

Dedicated to Hope, Healing and Recovery

Kindred Healthcare

NATIONALLY, KINDRED CARES FOR PATIENTS IN:
LONG-TERM ACUTE CARE HOSPITALS • NURSING AND REHABILITATION CENTERS • INPATIENT REHABILITATION HOSPITALS
TRANSITIONAL AND SUBACUTE CARE • ASSISTED LIVING • CONTRACT THERAPY SERVICES • HOME CARE • HOSPICE
Academic Hospitalist
University of Kentucky

The University of Kentucky, Department of Internal Medicine, is hiring academic hospitalists and clinician educators at the Assistant, Associate, and Professor levels. Responsibilities include evaluation and treatment of hospitalized patients on the UK Healthcare General Internal Medicine services. Teaching responsibilities include supervision and instruction of UK Healthcare Internal Medicine residents and medical students from the UK College of Medicine. Candidates must possess an M.D., D.O., or equivalent; residency training in Internal Medicine (36 months); BC/BE in Internal Medicine; and possess an unrestricted license to practice medicine in the Commonwealth of Kentucky.

For confidential consideration, please email your CV and salary requirements to:

T. Shawn Caudill, M.D.
Department of Internal Medicine
University of Kentucky
740 S. Limestone, Room K512
Lexington, KY 40536-0284

UK HealthCare

The University of Kentucky is an equal opportunity employer and encourages applications from minorities and women. Upon offer of employment, successful applicants must pass a pre-employment drug screen and undergo a national background check as required by University of Kentucky Human Resources.
Practicalities of Medical Missions Overseas

Steve Diamond

For the past 32 years Healing the Children (HTC), an international, volunteer-based, 501 c 3 nonprofit organization, has worked to help underserved children around the world with lingering medical issues due to shortages or unavailability of health care services in their home countries or regions and/or financial reasons. With 13 chapters currently across the US, including a Kentucky chapter established in 2007, HTC has helped over 210,000 children in over 95 countries, and with the support of the medical community has delivered over $600 million of donated medical services and supplies around the world.

While HTC works with social services and other organizations to help children in the US, the bulk of our programs are international. Via HTC’s Inbound Program, we have brought over 8,000 kids with the most severe issues, and for whom there were no international alternatives, into the US for urgently needed medical procedures with over 100 participating pediatric hospitals, doctors, and other health care professionals providing care pro bono. But far and away HTC’s largest program is our Outbound Medical Teams program.

On average, and collectively across all of its chapters, HTC plans, organizes, and has responsibility for 50+ missions (often called brigades) per annum across all continents, depending upon the interests of each chapter and international needs.

WHY ARE THEY NEEDED?

Providing effective, cost-efficient health care is a major challenge universally, with differing issues for emerging versus more developed countries. Important progress is being achieved in many emerging nations, but their challenges are exacerbated by pronounced shortages of well educated and trained specialty physicians, particularly pediatric, and in the lesser populated, non-major metro areas where compensation and living conditions are less attractive. Combined with rapidly growing, younger populations, this leaves many international children with unmet medical needs who can be served short-term by non-governmental organizations (NGOs) focused on pediatrics, like HTC, and Medical Teams Aboard-type programs.

HOW TO BE SUCCESSFUL!

As one of the oldest and largest NGOs focused on children with unmet medical needs, we have learned a lot over the years regarding the practicalities and liabilities involved with outbound medical missions and what it means to successfully manage this program. Within HTC, all key learnings for everything we do are captured as Standard Operating Procedures to share organizationally and to eliminate reinvention. Our keys for successful outbound missions include:

Conducting extensive pre-mission, site visit trips to understand the needs, existing resources, and conditions in each emerging country site we are considering and to assess the support of local international partners and governmental agencies. These sites can be suggested either from the interests...
of Kentucky doctors who volunteer with our chapter or international partners located in these emerging nations. During these pre-mission trips, we meet with hospital or clinic administrators and local ministries of health and create written MOUs (Memorandums of Understanding) that detail what HTC and the local hospital/international partner/government will each do and provide. Since the overwhelming majority of our missions are surgical, this includes previewing ORs, equipment, anesthesiology procedures, medications, the expected numbers of types of cases by specialty, and how post-operative follow-ups will be managed. Agreements and understanding about pre-selection of patients and post-operative follow-up arrangements are particularly important, as historically this can be an Achilles heel for short-term brigades as US surgeons return to their home practices. We also work to understand what types of educational lectures and sharing of best practices we can provide for, and receive from, our medical colleagues abroad.

**Identifying and securing strong and committed mission leaders from within the medical community.** Medical missions are outstanding outlets for “American medical ambassadorship.” It’s imperative, therefore, to identify and gain the commitment of strong team leaders from within the medical community who have both a passion for helping kids and can build and lead a medical team of 5-25 professionals. It’s important for these teams to meet and plan prior to the trip to not only map out the many details, but also begin to build the camaraderie needed. Each HTC chapter has its own identified team leaders; and within HTC KY, we are very fortunate to have Dr Elsa Haddad and Dr Julie McWhorter taking the lead on our annual brigades to Manabi Province, Ecuador.

During these week long brigades, HTC KY and our volunteer surgeons, anesthesiologists, nurses, and administrators perform 160-200 surgical procedures for needy children in the province. Without the tireless dedication and attention to detail by Drs Haddad and McWhorter, this would not be possible and our brigades would not achieve their objectives for either the Ecuadorian children or the volunteer doctors and health care professionals. The same could be said about HTC KY’s international partner in Quito, Ecuador, Maria Elena Miranda, who graciously volunteers her time and abilities to help make the brigades from HTC KY chapters successful. Each HTC chapter works with its partners of choice based on past experiences. For some chapters, this may include a Rotary or Lion’s club, or a local, in-country, non-profit or social services agency.

**Working the executional details months in advance.** While the key parameters of the trip are carefully detailed in the MOU, there are many executional details that HTC and the team leader(s) then begin to tackle. The team leader recruits medical professionals willing to commit to a week to 10 days in a foreign country and provide pro bono care to children there. Medical licenses and CVs need to be gathered, notarized, certified, affixed with apostils (requirements vary by country), and sent to the country’s Ministry of Health for approval to work and practice in their country.

Medical supplies and hand equipment that may not be readily available in-country not only need to be gathered, but documented for approval by customs and acceptance into

**Figure 1.** An Ecuadorian girl with Goldenhaar who is getting plastic surgery to build a normal looking ear. She also was earlier brought to Louisville and fitted with a bone conductivity hearing device. This allowed her to hear and speak, and attend school, for the first time.
the country. Supplies Over Seas (SOS) is an active collaborator with HTC KY and extremely helpful in this activity. Most medical supplies and hand equipment are brought with the team on inbound flights to ensure availability upon arrival. As a rule, we encourage team members to carry aboard their personal items and use the typical two pieces of luggage check-through allowance for medical supplies. HTC also advises the team of prevailing electrical systems, monetary currency, inoculations, and other local issues (for example, Ecuador requires a $45 airport exit fee to be paid in cash). And, if six weeks prior we believe that we have inadequately progressed on these details, we are willing to reschedule rather than risk poor executions and outcomes.

Preparing for educational exchanges.

We encourage in-country doctors and other medical personnel to scrub in within their HTC KY counterparts as appropriate, and to advise us of continuing education subjects of interest. Separately but relatedly, HTC KY also collaborates with the University of Louisville, International Pediatrics department, and specifically Drs George Rodgers and Tania Condurache, to encourage multi-year educational exchanges with international medical schools and teaching hospitals in many of the same international sites we focus on. This has worked well. UofL directs this program, and HTC willingly supports this effort as requested. This program is currently active in Ecuador (primarily Quito) as well as the northern or Tamale region of Ghana, and Perm, Russia.

Bringing family members and non-medical friends.

Outbound medical brigades are deeply personal growing experiences for all involved. As such, we receive many requests or notifications that non-medical family members would like participate as well. Clearly, we are indebted to the generosity of the medical team members, but we need to manage this carefully. We prefer to limit non-medical members to one or possibly two administrators to help with essential record keeping. Beyond that, if we know with adequate lead-times, we can often help arrange for non-medical family members to be actively engaged in productive projects (masonry, painting, or constructing wells) in the communities around the hospital or clinic where the medical team is working. This also helps medical team members from having to think about their family members while they are involved in medical procedures, and further promotes that these teams are focused on helping our international colleagues and neighbors.

Proactively managing liability issues.

First, we would note that after 32 years and over 150,000 medical procedures undertaken
in more than 95 countries, we have had only a small handful of initial liability inquiries, all resolved with further clarification and follow-ups. All HTC doctors and medical volunteers are pre-approved by in-country health ministries; we utilize our own HTC surgery/treatment consent forms for parents or legal guardians in addition to local hospital’s forms and procedures; and we arrange in advance and have post-operative follow-up procedures identified and in-place for each patient and type of procedure undertaken on each trip. 

Short-term individual physician medical liability insurance policies are commercially available (~ $15/day or so, depending upon the country). Team members can purchase these if they desire, but to our knowledge doing so is the rare exception.

**Debriefing and Thanking/Publicizing.**

These are two different, but related post-trip steps. We seek feedback from both medical team members, and our site hosts regarding what worked and what did not, so we can learn and continually improve. We also seek feedback on how the particular site worked and whether it should be considered for a new trip the next year. Sometimes this reflects case loads and if other non-HTC medical teams are also working with the site.

At some point in time (usually 4-6 weeks post-return), we like to get the team together to thank everyone. HTC provides some type of memento of the trip. At a minimum HTC includes a summary of the trip and uploads it onto our website (www.healingthechildren.org) for everyone across all of our chapters and the interested public to read. We also will work with pediatric hospitals and other organizations (like SOS) who wish to include news of this medical team and their outcomes on their websites and/or newsletter.

**OKAY, SO YOU’VE READ THIS AND WANT TO GET INVOLVED!**

We certainly hope this is the case and would welcome your involvement in several ways. There certainly are many NGOs that plan these medical brigades, but HTC may be the largest and oldest focused entirely on children. If you would like to volunteer for one of our outbound teams, e-mail us via our website (www.healingthechildren.org) or directly at sdiamond100@earthlink.net. If you’d like consideration and assistance in establishing a new team or international site, we’d also be pleased to discuss this with you. If you work with a pediatric hospital that can help with international children who have more severe issues that may require consideration here in the US, we’d appreciate the opportunity to discuss this as well. And we can really use financial donations or medical supply/equipment donations via SOS. HTC KY is 100% volunteer based and operated with less than 1% overhead, so we believe we generate excellent, much appreciated returns on your involvement, however you may choose to participate.

Managing the practicalities, including the liabilities, of outbound medical missions is no small task. But the rewards are enormous and broad scale . . . whether the smiling face of a 9-year-old from the outreaches of Ecuador, appreciative parents, or the new international medical colleagues we meet and help to become better health care professionals. Government policies and international relationships come and go; the people-to-people, medical professional-to-medical professional ambassadorships and relationships, created and fostered by these medical missions, remain forever, with much deeper and more personal impacts.
stability matters.

If there is one thing to learn from the recent financial turmoil, knowing who to trust is paramount.

Medical Protective, a proud member of Warren Buffett’s Berkshire Hathaway, has always believed that to provide our healthcare providers the best defense in the nation, our financial stability needs to be rock-solid, stronger than any other company.

Stability even in the worst of times. Medical Protective is the only medical professional liability insurance company to protect their healthcare providers through all the business and economic cycles of the last 110 years, including the tough economic times of the Great Depression. We are also proud to have provided unmatched defense and stability during all the medmal crises.

We have received higher ratings from A.M. Best and S&P than any other carrier in the healthcare liability industry.

Trust Stability. Trust Medical Protective.

Serving Kentucky doctors since 1922. Contact Debbie Lopez today for your FREE no-obligation quote.
- Call: 800-4MEDPRO ext. 3939
- Email: experts@medpro.com
- Visit: www.medpro.com
- Contact your local Medical Protective agent
Spend more time seeing patients. And less time looking for information about them.

David Jaco, O.D., knows that high blood pressure and diabetes can be serious issues in eye care. So having an accurate patient history is important to him. But for years he had to rely on patients’ memories about their medications, make phone calls or sort through paperwork.

Then came the Kentucky Health Information Exchange. Thanks to KHIE, all that detective work has been replaced with unprecedented access to comprehensive, electronic health records at his optometry practice.

Getting signed on was easy too. “The KHIE team was great to work with,” he says. “They did all the legwork.” So what are you waiting for? Find out how to join the network.

For a limited time, there are financial incentives for your hospital or practice to join KHIE. Visit www.khie.ky.gov or call 502-564-7932 to learn more.
Kentucky’s Supplies Over Seas (SOS) delivers surplus medical supplies abroad to serve the world’s most needy, while simultaneously benefiting all parties involved. SOS volunteers collect usable supplies and equipment that are surplus, obsolescent or otherwise unused from our hospitals, which would go to landfills. SOS then sorts and delivers these supplies to desperately needy, Third World health facilities. Thus, overseas patients receive otherwise unobtainable supplies and equipment, Kentucky’s hospitals are spared high disposal costs, landfills are spared enormous medical waste, volunteers are given humanitarian service opportunities, and participating hospitals, physicians and volunteers justly receive recognition for these fine efforts.

SOS presents admirable public images for organized medicine, as the Greater Louisville Medical Society (GLMS) and its Foundation founded SOS, many physicians have ongoing involvement, and the Kentucky Medical Association (KMA) and its Foundation for Medical Care are currently facilitating SOS statewide expansion. Accordingly, it is appropriate to review SOS history and reflect on its accomplishment record and great potential.

THE HISTORY OF SOS

In 1992, GLMS President Norton Waterman, MD, was inspired by a JAMA article about a similar, small-scale concept by anesthesiologists at Yale Medical School. Dr Waterman enlisted his GLMS Board of Governors and Executive Director Lelan Woodmansee, CAE, to provide seed money plus office and storage space in the former basement morgue of The Old (UofL) Medical School, which had been renovated as a home for the society. GLMS established a support committee, to gather support from physicians, advice from non-profit programs and surplus supplies from Louisville Medical Center hospitals. Operating room nurses and surgeons were the first to begin collecting supplies.

Important early leadership came from T. Jeffrey Weiman, MD, SOS Medical Director, and Eugene Conner, MD, Anesthesia Chief at Methodist Evangelical Hospital (MEH). Weiman and Conner obtained space in the MEH basement for volunteers to sort supplies, and solicited funding from the medical staff and Norton Hospital system, when it absorbed MEH.

Substantial early funding came from the Humana Foundation through Executive Director Virginia Kelly Judd, who coined the name, “Supplies Over Seas,” and who became a strong SOS advocate. Very generous support also came directly from Betty and David Jones. The GLMS Foundation stepped in to

Dr Tobin is Professor of Plastic and Reconstructive Surgery at the University of Louisville and KMA’s Immediate Past President.

Bert Guinn is the Chief Communications Officer for the Greater Louisville Medical Society and the previous Director of Supplies Over Seas.

Allen Montgomery earned a Juris Doctorate from the University of Kentucky and is the President & CEO of Supplies Over Seas.

Corresponding author: Allen Montgomery
allen.montgomery@suppliesoverseas.org
http://www.facebook.com/pages/Supplies-Over-Seas/341361812552248
provide vital, ongoing support. Dr Waterman helped secure Jewish Hospital Foundation funding.

The first Director was volunteer Toni Linville, retired nurse and physician’s wife, who served that demanding role until sufficient funding allowed employing staff. An energetic staff was hired, including Laura Guess as full-time Organization and Public Relations Director. She enlisted the downtown Rotary Club and volunteers from The Healing Place to expand SOS’s volunteer force (Figure 1).

Later, Bert T. Guinn, MBA, became Director and led the organization for several years, during which SOS collaborated with other humanitarian relief organizations to combine resources and enhance efficiency. When the 2004 Asian Tsunami struck, Mr Guinn worked with Mayor Jerry Abramson and Louisville’s Office of International Affairs to hold a citywide concert that funded multiple, large-scale SOS shipments to grief-stricken Sri Lanka, which also drew public support and praise.

In 2005, Dr Gordon R. Tobin and Mr Guinn established a partnership with the Indiana National Guard, led by Col Jeff Grube, to send substantial supplies and prosthetics to Afghanistan. These were air-lifted to Kabul by Kentucky’s Air National Guard. Through this partnership, two Afghani surgeons were brought by the Indiana Guard to receive cutting-edge surgical fellowship training at UofL’s Burn Unit and surgical units at Jewish, Norton, and Kosair Children’s Hospitals.

Increasing volumes of supplies were being processed and shipped to needy sites, which ultimately included 90 countries. This expanded scope of activities outgrew GLMS Foundation support capabilities, and SOS joined with Hand in Hand Ministries from 2008 to 2010. In 2010, SOS became an independent, non-profit organization under the leadership of Allen K. Montgomery Jr, who has provided insights and inspiration that dramatically revitalized the organization. Mr Montgomery and Board Chair K. Thomas Reichard, MD, envision statewide SOS expansion and greater worldwide service, so SOS asked KMA and its Foundation for Medical Care to facilitate this. KMA is pleased to enable statewide access for this outstanding program (Figure 2).

**SCOPE OF ACTIVITIES**

SOS does its best work in two ways. In disaster relief situations, the impact of a shipment of lifesaving supplies is immediate. Otherwise, it is through developing long-term relationships with beneficiaries that we see health care in a country improve over time. In either case, it is important for SOS to match its surplus with real needs.

To date, SOS has saved over 645 tons of medical surplus from landfills and shipped to...
90 countries worldwide. Supplies are packaged in customized allotments ranging from small, hand-carried quantities, to shrink-wrapped pallets of cartons, to a 40-foot-long seagoing container the size of an 18-wheel commercial truck (Figure 3).

Medical groups embarking on missions visit the warehouse to select specific items to hand-carry with them. For example, our Louisville-Vietnam Burn Care Project used SOS’s services repeatedly to establish burn care units throughout Vietnam, as the volume and variety of needed supplies could never have been assembled by team members individually. In 2011 alone, SOS equipped 63 such small-group missions traveling to 19 countries.

After the devastating January 2010 earthquake in Haiti, the SOS Haiti Relief Initiative was organized, and sent seven containers with 23 tons of relief supplies and equipment valued over $600,000. These helped multiple medical teams from Kentucky that volunteered to serve the disaster-stricken country (Figure 4).

Container shipments are often sponsored by companies, hospitals, civic organizations, and individuals. For example, the Haiti relief containers were sponsored by DePuy Orthopedics, Jewish Hospital & St. Mary’s Healthcare and Medical Staffs, Baptist Healthcare System, and Baptist Hospital East Medical Staffs. Since the Haiti earthquake response, SOS has sent 14 other shipments to meet similar needs worldwide.

In 2011 alone, SOS sent seven containers with 43 tons of medical surplus to Nicaragua, Mauritania, Mali, Haiti, Ecuador, and Ghana. For ongoing Ghana relief, SOS partners with the UofL Medical School, Healing the Children, Louisville Sister Cities, and Rotary Club of Louisville on recurring shipments to the Tamale Teaching Hospital. SOS is partnering with Brown-Forman Corporation and the Mexican Red Cross to open a health clinic in a small Mexican town in 2012.

Although usually directed overseas, SOS shipments also serve humanitarian needs at home. After Hurricane Katrina, then-GLMS Foundation President Timothy S. Brown, MD, drove a truckload of supplies to Louisiana to provide disaster relief for hurricane and flood victims. SOS also helps equip local free clinics, like the Shawnee Christian Healthcare Center in Louisville’s West End, as well as medical mission groups going to Eastern Kentucky and Appalachia. Local nursing schools use expired materials that SOS cannot send overseas.

SOS activities typically focus on distribution of supplies, but other types of humanitarian missions also occur. In 1997, SOS learned of a child at risk of dying from severe burn injuries in a Ukrainian hospital with woefully inadequate medical resources. SOS brought the 9-year-old to Louisville, where Dr Tobin organized and delivered burn care at the...
Medical Missions Overseas

UofL Hospital Burn Unit. The child arrived just before the Christmas holidays, and the GLMS Alliance and SOS provided a warm Christmas welcome, which heralded a good medical outcome (Figure 5).

A Louisville couple gave this story a heartwarming conclusion by adopting him into a permanent, loving home. Upon high school graduation, he achieved a US Air Force Academy appointment. There he recently received commendation for heroic action in service to a severely injured civilian. He views that as “paying forward” past benefits he received from SOS and its medical allies.

VISION FOR THE FUTURE

The needs worldwide are as great as ever—the World Health Organization estimates that 10 million children under age five die each year for lack of adequate medical care. And according to Healthcare Without Harm, US hospitals generate more than two million tons of medical waste each year, much of which is unused medical supplies and equipment.

The SOS mission focuses on both of these critical needs, and the vision is to become a first class MSRO—medical surplus recovery organization—serving all of Kentucky and the surrounding region. Supplies Over Seas is the only MSRO in Kentucky and one of only 15 in the US. It is also a “green” organization, protecting the environment at home while helping developing countries improve their health care.

This environmental stewardship aspect of the SOS program also appeals to hospitals that have green initiatives of their own.

Donations of medical surplus have come primarily from Louisville area hospitals that have supported the SOS mission since its early years. The various facilities of Norton Healthcare, Baptist Hospital East, Jewish Hospital & St. Mary’s HealthCare, and UofL Hospital, along with Floyd Memorial and Clark Memorial Hospitals in Southern Indiana, continue to collect supplies, and the SOS truck does regular pick-ups at these locations (Figure 6).

Figure 5. (A & B) Alex, a severely burned Ukrainian child, at UofL Burn Unit and OR with his surgeon, Dr Tobin; (C) 14 years later at the US Air Force Academy.

Figure 6. Sorting and packing supplies: student volunteers from the Christian Medical & Dental Association with Dr Gerald Larson (right).
Expansion to include other hospitals throughout the state began in 2011 with a new Hospital Recycling Partnership program that includes ongoing financial support as well as surplus donations. Saint Joseph Health System led the way as SOS’s first Hospital Recycling Partner. SJHS also donated several semi-truckloads of equipment and surplus supplies from two hospitals in London and Mount Sterling when its two new hospitals opened. Owensboro Medical Health System became the second partner and the first in Western Kentucky, and Hardin Memorial Hospital in Elizabethtown recently joined the program. Major financial support also came last year from Norton Healthcare, and other hospitals are considering partnership at this time.

To make these long-distance partnerships work, SOS has partnered with Cardinal Health and Owens & Minor, whose trucks back-haul supplies from hospitals they serve to their warehouses in Louisville.

SOS is also expanding its network overseas, to create long-term relationships with reliable beneficiaries as well as with organizations, governments, and individuals that can help connect its surplus with real need.

It’s an exciting time, and the foundation for growth has been laid, but none of these efforts will mean anything if SOS cannot consistently get the supplies and equipment to the people who need it. SOS depends on community support to fulfill its vital, lifesaving mission.

PARTNER WITH SOS

Partnership with SOS can take many forms—volunteers help sort medical supplies, donors support the redistribution program with their gifts, nurses and other staff collect items in SOS bins around their hospitals.

Physicians, of course, can partner in all these ways and more. Consider introducing your hospital to SOS and the benefits of donating equipment and supplies instead of sending them to the dumpster. Your own group or practice could do the same.

Planning a medical mission trip? A visit to the SOS “hand-carry store” can likely equip you and your team with much of what you’ll need, and they welcome the opportunity to meet you and support your good work.

SOS needs partners—it needs YOU—to help save lives and improve health care. You do not have to go on a medical mission trip to heal the hurting around the world. You can make a difference for someone you will never meet by supporting SOS (Figure 7).

We also ask you to tell others about SOS, including your church or synagogue, civic groups, and friends. The staff would be happy to speak to your group or arrange a tour. And SOS needs volunteers—individuals or groups, with or without medical expertise—to help sort donated supplies.

Planning a visit to Louisville? Include a stop at the SOS warehouse, conveniently located just off I-64, east of downtown.

We invite you to find out more and become involved in this exciting and remarkable humanitarian organization. And we encourage you not to wait for the next natural disaster to visit the SOS warehouse and marvel at the volume of supplies and the life-changing possibilities they hold.

Figure 7. Dominican Republic—this child needed an abdominal hernia repair, done by a Louisville team that has been performing surgeries at a clinic there since 2007.

www.suppliesoverseas.org

Supplies Over Seas
1500 Arlington Ave
Louisville, KY 40206
502-736-6360
Academic General Internist
University of Kentucky
College of Medicine

The University of Kentucky, Department of Internal Medicine is seeking an excellent candidate for an academic General Internist position in the Division of General Internal Medicine faculty practice. Our General Internist activities include patient care in the Internal Medicine Group faculty practice and resident continuity clinics, patient care on the Department’s inpatient teaching service, and academic opportunities in residency training and the College of Medicine. Physician will have full clinical faculty appointments, competitive compensation and excellent benefits. Candidates must be board eligible or board certified in Internal Medicine. Salary will be commensurate with the applicant’s qualifications and professional experience.

Our department benefits from an integral association with a vibrant and robust healthcare enterprise, UK Healthcare, that brings state-of-the-art facilities and technology to our campus as we move toward our goal of becoming a top 20 medical center.

Applicants should submit curriculum vitae to:
T. Shawn Caudill, M.D.
Department of Internal Medicine
University of Kentucky
740 S. Limestone, Room K512
Lexington, KY 40536-0284

UK Healthcare

The University of Kentucky is an equal opportunity employer and encourages applications from minorities and women. Upon offer of employment, successful applicants must pass a preemployment drug screen and undergo a national background check as required by University of Kentucky Human Resources.
Getting Started Early on Medical Missions

Rinit H. Pancholi, MD

Why do we go on mission trips? That is the most fundamental question one should ask oneself, before and after embarking on a medical mission trip. The answer is most likely different for different people. In my case, when I was approached by the team leader of the trip to the Ecuadorian Amazon region through the University of Louisville (UofL), it was finding a new sense of purpose and sentiment for a resident physician in the modern, ever-so-connected world!

So let me briefly embark upon my journey to the fascinating world of Ecuadorian Amazon! I was finishing my second year of Family Medicine residency then, and I always had the inmost desire to provide medical care to underserved people. I was fortunate enough to be in a training program where one of the faculty members had not only interest but also experience in this setting, having taken part in a few successful trips of this type. Through him I gained an early insight into the task of a physician’s role for a successful medical mission trip. With his support, I was granted approval from my department to go and obtain elective credit for the time spent on the mission.

Our trip to Ecuador turned out to be somewhat unusual due to the fact that for the first time, in my residency program, a second-year resident had gone on a medical mission trip without an accompanying faculty member. And to my astonishment, at the last moment, a community physician accompanying the group declined to go. I was the only remaining physician in the group. I was told by the team leader that we might have a local Ecuadorian Air Force physician help us for a few days! I must say it was intimidating, but I was determined to be a part of this trip. And I knew an opportunity to be a part of a medical mission trip this early in my medical career might not arise again.

The “Ecuadorian Brigade of 2009” was thus formed. It was a gifted team, which consisted of 13 first-year UofL medical school students, 2 pharmacists from Norton and UofL hospitals, a pharmacy student, and me. The medical student team was truly gifted and noble, in the sense that a majority of the funding to finance this mission (travel and medication cost) was raised by their hard and dedicated effort—working side jobs, raising private donations, and through date auctions. This, in my opinion, made this trip a truly moral and humanitarian mission.

We landed in Quito, the capital of Ecuador, on June 27, 2009, for our two-week stay. We were truly blessed because the logistics of the whole trip in Ecuador were handled by a very competent local team from Quito Eterno Foundation, a non-profit organization that handled all of the trip planning, from meals, boarding, and transportation, to the remote places along the Ecuadorian Amazon we would visit to see local patients in need.

From Quito, at 10,000 feet above sea level, we traveled to our base camp in the small town of Missahualli (Mee-sah-wah-YEE). It lies along the banks of Rio Napo, the largest Amazon River tributary. From there, our clinic days would involve extensive travel along the Rio Napo, via bus or motorized canoes, to see the patients dwelling in different communities along the coast. We held clinics and treated patients in 10 different communities in as many days. We would treat on average 80 patients a day, sometimes with the help of the Ecuadorian physician, and on a few days with just myself as the only physician. Most of these communities only had
access to medical care once a year when the brigade came through, and some were seeing a health care provider for the very first time! It was a truly humbling experience for us.

Our primary goal was to provide much-needed basic medical care and actively teach preventative medicine as often as possible. The most common illnesses we saw and treated were: intestinal parasites, urinary tract infections, contact dermatitis, fungal infections, ear infections, dehydration, and chronic pain. We also performed minor surgeries including laceration repair, mostly from machete injury, and incision/drainage of infected cysts and abscesses. We also came across some conditions which rendered us helpless and hopeless! For instance, the case of a 65-year-old lady who came to see us for chronic pain with a visible tibial varus deformity resulting from a fall from a tree four years prior to our arrival. She had a tibial fracture and had an obvious mal-union, due to no subsequent care and/or any monetary means. And there was the patient with a purulent infection from a spider bite, occurring a month prior to our arrival, resulting in gangrene of her right leg and septicemia. We felt helpless as we injected her with antibiotics, knowing what she needed was emergent surgical care. I shall never forget these cases and some of the images would haunt me for months after my return.

As I look back, going on this mission trip so early in my training was an extremely gratifying experience. I am sure my first-year medical student colleagues would agree. The timing was perfect in the sense that I was open to learning and teaching. Having just recently graduated from medical school, it was easy to build rapport with the medical students, and yet I had just enough basic knowledge to help guide the students as we treated patients. Working with the pharmacists, local nurses, and translators was another aspect of the teamwork inherent in this trip that would help me learn about multidisciplinary teams long before it became a buzz word. For instance, before we started seeing patients, I and the pharmacists conducted an hour lecture on basic pharmacology and the use of different antibiotics and anti-parasitic medication in the Amazonian region. This led to an enhanced practical experience for students, in treating their patients. Every patient, every day, presented a learning opportunity for the students and me. I gained great insight into tropical medicine. I was thrilled to be part of this mission and sincerely learned from it.

There is another aspect of getting started early with medical missions in one’s career that, I think, is long lasting and humbling. These experiences give a unique perspective on the value of human life and giving, before residents start earning a lot more money in their career. You also inculcate a sense of giving back to society, a sense of helping the needy, and as a result, a young physician will be more willing to go help the needy anywhere, after he/she graduates residency! The suffering in the world is untold, and these missions give us the opportunity to alleviate a part of it. This, I reckon, is the true purpose of starting early on medical missions.

In conclusion, let me bring you to the question, why go on mission trips? Well, the truth is I still do not have a complete answer. To me, it is an existential question. Would I do it again? In a heartbeat! As I mentioned earlier, this mission gave me a new sense of purpose and sentiment. The purpose: being a small part in alleviating the immense suffering of this world in the way I know best. And the sentiment of a truly revealing and soul-cleansing experience! The Latin phrase "In Veritatis Amore" (in the love of the truth) really sums up my passion for mission trips. And the truth is that I will keep on going on medical missions as long as I can.

ACKNOWLEDGMENTS:
Soraya Nasraty, MD, Medical Director, Norton Immediate Care Centers.
Stephen Wheeler, MD, Senior Faculty Member, Department of Family and Geriatric Medicine, University of Louisville.

REFERENCES:
Medical care delivered overseas by the military is generally divided into three major types. These three types are predominantly classified by the type of environment in which they are delivered and the environment also dictates the type and amount of medical care which is authorized.

The three different types are:
1. Peacetime
2. Peace Keeping/Peace Enforcement
3. Combat

**PEACETIME**

For peacetime the Department of Defense and the State Department has developed a program called Medical Readiness Exercise, Training (MEDRETS). MEDRETS are sometimes combined with Engineering exercises such as building/repairing clinics and schools, digging wells, and irrigation projects or relief projects such as recovery after Hurricane Mitch in Central America in 1999. Veterinary soldiers are often a part of these exercises treating and vaccinating animals of economic importance. These exercises have several very important purposes:

Predominantly, the medical exercises are designed to help the local population. The MEDRETS are set up by the US State Department in concert with local authorities. The goal is to find a significantly medically underserved area so as to do as much good for the local population as possible. These are arranged to be set up with local health care providers participating in the exercise. MEDRETS are generally scheduled and planned at least one year in advance.

The planning process of the MEDRETS is a very important part of this exercise for the medical soldiers. The planning itself is a training tool for the deploying medical troops, giving them excellent training in planning for potential combat deployments. Soldiers go through a similar although much more rigorous process when deploying to a combat theater. By participating in a MEDRET the soldier is able to gain experience: readying to deploy, leaving his/her job and family, and

*Figure 1. Peacetime in the Honduras—Dr Beattie places a chest tube.*
packing for an overseas deployment, deploying and establishing the training/treatment site. When the soldier establishes the facility and the exercise begins he/she is able to gain experience treating patients who do not speak English and is required to work through interpreters for most patients. Caring for patients who may not have the same traditions, cultures and values as the soldier is commonly exposed to here at home is also a valuable experience.

In addition to all of the above benefits MEDRETs helps establish goodwill for the United States.

**PEACEKEEPING/PEACE ENFORCEMENT OPERATIONS**

Peacekeeping/Peace Enforcement Operations may include medical operations called Civil-Military Exercises (CME). The CME’s are similar to MEDRETs, however, the medical soldier is already deployed overseas to the general location of the exercise.

Again, helping the local population is the most critical portion of the exercise. The CME is always planned with the advice and consent of the local government and is always carried out with the participation of local health care providers. Generally speaking, the location of the exercise is selected usually a week or so in advance by the US Military Command in the region in consultation with the local authorities with local providers participating in the exercise.

Extremely important in the CME is the commander’s ability to “shape the battlefield.” “Shaping the battlefield” is a term used to describe an action where by the commander affects something that allows him/her to better control his Area of Responsibility (AOR) in a way that is beneficial to his/her overall operation. Providing some medical care for the local population may improve intelligence gathering in the area by improving relations with the population which might enhance the operating conditions and safety for the policing/combat troops.

Training for the medical soldier is not as important in a CME as in a MEDRET but training is a part of every exercise. As in the MEDRET, this covers planning, packing, preparing for movement, movement, and establishment of site is critical training.

**COMBAT**

Medical operations in combat are first and foremost concerned with “Preserving the Fighting Force” (the Medical Corps motto). In combat operations, the medical soldier’s primary responsibility is keeping his/her soldiers fit, healthy and ready for any eventuality. Preventive medicine is the most important type of medicine he/she can practice. In every war ever fought there are many more non-combat casualties than combat casualties and the recent wars are no exception.

While it is widely known combat medical care is now providing the lowest mortality rate for soldiers ever, less well known is we also have the best non-combat casualty rate ever in any war. Practicing preventive medicine means the medical soldier must experience the same conditions as the combat troops and should regularly participate in the same activities and risks, at least occasionally, as the combat soldier has to deal with on a daily basis. He/she should go “outside the wire” on convoys, patrols, raids and if possible, participate in combat actions (although if a combat action is anticipated it is often

Figure 2. In Iraq—Dr Beattie on patrol with Battery D, 1st Squadron, 278th Regimental Combat Team near Mandali, Iraq. He is treating a small girl’s foot for skin breakdown after a recent cobra bite.
better for the medical soldier to remain in a better supplied battalion/regimental/brigade aid station that is ready to accept stabilize, transfer or treat injured troops). Keeping soldiers “on the line” is the most critical focus of the Surgeon and those medical soldiers under his leadership (“Surgeon” in this context is the military term for the Senior Medical Officer).

CMEs may also be utilized by the Combat Commander to care for civilians. Caring for the civilian population in a combat zone is not a primary goal of the medical soldier. In the most recent wars caring for civilians (other than for the prevention of loss of life, limb or eyesight) has not been authorized routinely. However, if the Combat Commander thinks that offering some medical treatment to the local population could be beneficial for his operation, he/she may authorize treatment of local civilians. In Afghanistan 70% of MEDEVACs (helicopter or ground ambulance evacuations) have been Afghan civilians or security forces, 10% for US forces and 20% for other NATO forces.¹ These CME operations often make friends of the local people and may contribute to better intelligence in the regions who’s people are cared for by medical soldiers, thereby improving the safety and operating conditions in the AOR.

Of course not all doctors, nurses, medics or MEDEVAC pilots are assigned to a line (combat) unit. Most are assigned to a hospital. The soldiers in hospitals perform duties similar to those they perform here at home, although their working and living conditions are much more austere than here. The medical soldiers in the hospitals may also care for local civilians. Many of the local civilians whom I stabilized/treated at my Regimental Troop Medical Clinic in Iraq were transferred to a Combat Support Hospital at a larger combat post for treatment by the medical soldiers in the hospitals.

In summary, the military offers a wide variety of interesting and challenging medical experiences in overseas missions.

REFERENCES

Honduras: A Church-Related Medical Mission Experience

Rebecca E. Jones; Shawn C. Jones, MD, FACS

In 2004 I (SCJ) had the opportunity to spend a little over two weeks in Romania traveling from small villages such as Periam near the Hungarian border to Timisoara and then Drobeta-Turnu Severin on the Danube at the border with Croatia. I traveled eleven hours by train to Bucharest, the capital. Although the purpose of the trip was primarily related to church activities, when people invariably discovered I was a physician from the United States, a spontaneous clinic formed. Although I had arranged to meet ENT colleagues there and toured several hospitals and other health care facilities in different cities during my stay, the impromptu encounters with those that were suffering with little or no hope of adequate treatment for their maladies touched me deeply.

Subsequently, our family began considering a medical mission trip. We were interested in one that would involve the entire family, if at all possible. We had planned on returning to Romania in the summer of 2008 using the contacts made there on the previous trip, but the translator we had arranged to go with us fell through. Providentially, we discovered that a group going to Honduras in that summer needed two doctors. My wife, Evelyn M. Jones, MD, is a practicing dermatologist. We decided to call the leader of the group going to Honduras. His name is Randy McCadams. In April of 1998, while serving in the Tennessee Army National Guard and conducting military operations in Honduras as a Combat Engineer, Randy McCadams’ life forever changed. While working in a remote village in the southwest corner of Honduras, Randy got his first taste of mission work while constructing schools and water wells for the poor. Upon his departure from Honduras, he pledged that if God was willing, he would return again to continue serving in a more detailed and humanitarian manner. The country was subsequently devastated by Hurricane Mitch, in the fall of 1998. The storm and associated flooding killed about 5,600 people and caused approximately $2 billion in damage. Since 1998, Randy has returned to Honduras several times per year and has been instrumental in taking medical and benevolent mission teams to Honduras as well as an annual trek in December to distribute Christmas gift boxes to children organized by Healing Hands International in Nashville, TN.

When we called Randy about our possible involvement, there was concern about the ages of our children. Rebecca was going to be 18. Her age was not an issue. However, they generally did not take children under 16 and Shawn Jr was 15. Caleb was 12. Randy did not want to compromise the potential effectiveness of the mission because of children who were not prepared to suffer some hardship. We intimated that we understood completely and respected his position, but that our family had prayerfully considered a trip together and we would find something else if

Dr. Shawn C. Jones is the current President of the Kentucky Medical Association. Rebecca Jones is a senior at Centre College in Kentucky.

Corresponding author: Shawn C. Jones, MD
E-mail: scjonesmd@comcast.net
this issue was a “deal breaker” for the group planning a trip to Honduras. We honestly felt convicted that making a trip serving others as a family was what we were being called to do. Randy and I agreed to talk again after 3-4 days of meditation and prayerful consideration. In the end Randy decided to take a chance and our family still felt as though we were being led to Honduras and thus we began preparing to participate.

Honduras, depending on the data utilized and the year in question, is either the second or third poorest country in the Western Hemisphere. It shares this distinction with its neighbor to the south, Nicaragua. Haiti, without a doubt, is the poorest country in this hemisphere. Honduras was named by Columbus and its name means “depths” which relates to its Caribbean waters off the eastern Atlantic coast.

Our family left in July 2008 with approximately 35 other team members to accomplish the following predetermined goals:

- Build a “home” for a needy family which had been identified by the church and its leadership locally near La Cienega, about an hour from Tegucigalpa (Figure 1).
- Distribute clothing, food, and other supplies to approximately 250-300 families in the village, which would be the base of our operation
- Run a free walk-in medical clinic with pharmacy for as many patients as 4 physicians could see in 6 days (Average 900-1200/trip)
- Visit 4 local schools teaching the children proper dental hygiene and fluoridating their teeth (Figure 2).

Much of our work medically in subsequent trips has begun to focus on public health issues and prevention. We continue to run a clinic while present in La Cienega treating common maladies along with the occasional tropical disease that appears. However, we have committed to treating everyone for parasitic infestation, as it is endemic and according to the World Health Organization contributes significantly to malnutrition in the third world. We also have distributed 90 day supplies of multivitamins to everyone who comes to be seen since the typical diet of “la gente pobre” or the poor people in rural Honduras consists primarily of beans, coffee and bananas. The goal of obtaining clean potable water for the village has been a marathon adventure, which continues. We have made strides but there have been many setbacks which space does not allow me to review. These are things we have learned as a group after being with these people in this village for several years. We have made contacts with physicians in Tegucigalpa to care for people for whom we do not have the capability to care with our limited time and resources on such a trip. This has often led us to ‘pass the hat’ to obtain money for blood or a needed surgery.

Figure 1. Typical home built by the team. A family of 5 lives in this structure.

Figure 2. Children assembling for fluoridation.
for example. Remaining flexible, resourceful and resilient is key to being effective. Dr. Tobin’s article in this issue of the KMA Journal beautifully elucidates the principles of mission engagement and we believe you can see many of these principles practically displayed in our mission experience. Dr. Dan Sumrok of McKenzie TN, Dr. Dan Rader of Charleston, West Virginia and Dr. Andy Chunn of Mason, OH are to be given the lion’s share of credit for the development of this trip medically.

It should be noted that there was not an insignificant amount of fear about taking our family to a third world country. We were all immunized against typhus, Hepatitis A and B, and we all took malarial prophylaxis. There was also concern about political instability which actually cancelled a return trip for the family in 2009 when a coup disrupted ‘normal’ activity in the country (See Figure 3).

When Rebecca, my daughter who is now a senior at Centre College, and I returned in 2010, a Dengue fever epidemic infected approximately 50,000 people. These numbers were dramatically up from the routine numbers in an average summer, but the most alarming feature of this outbreak was the relatively high incidence of hemorrhagic Dengue, about 1500 cases, which resulted in 160 deaths. Most of these were concentrated in Tegucigalpa where we were staying. I also, during this trip, visited Hospital Escuela (literally Teaching Hospital) and made rounds with several physicians and residents. Dengue fever victims lined the halls and laid in the entrance to the hospital as there simply were no beds available. Treatment is only symptomatic and thus avoiding the bite of a mosquito becomes one’s best line of defense. I have become obsessive about the use of DEET while in country. However, all of the difficulties, inherent risks and dangers of navigating a third world country in my mind pale in comparison to the good that is done, for the indigenous people as well as the members of the mission team. There is little doubt that the latter benefit as much, if not more, than the former.

In Rebecca’s words, ”When I look at my time in Honduras what truly stands out are the individual faces of those the team has been able to help. Alejandro, for example, received enough money to have a minor surgery allowing him to walk for the first time in six months. Elena was able to have surgery after three months in the hospital because of a pint of blood needed preoperatively. The people of Honduras have taught me medicine is not only a diagnosis and a treatment, but more importantly the sanctity of the individual. Prior to my first trip to Honduras in 2008, I thought the people and their needs would move me. I thought I would be helping them improve their lives through the medicine and food supplies we handed out. Although this is a portion of the work that we have done in Honduras, it is not the entire story. The people of Honduras have instilled in me the value of each human life and thus the value.
I possess personally. Each person is precious and unique and has a part in our world. The Hondurans helped me realize I am valued for who I am, no more and no less. Subsequently I desire to give even more time to these people, helping them to improve their living conditions. This is the reason I keep going back.”

On one of the last trips to Honduras, while leaving the village, a few members of our team ran across some young children getting water from a roadside ditch for their grandmother to use in cooking. While the picture speaks volumes about the living conditions in Honduras, we took heart that no one knew or had previously seen the girls or the grandmother, yet two of the girls wore dresses made by ladies in the church, which had been brought on a previous mission trip. Our efforts were spreading and we were emboldened. Dr Albert Schweitzer, who received the Nobel Peace Prize in 1953 for his work in Africa, once said, “In everyone’s life, at some time, our inner fire goes out. It is then burst into flame by an encounter with another human being. We should all be thankful for those people who rekindle the inner spirit.” It occurs to us that this rekindling is a reciprocal experience in medical mission work where both the ‘giver’ and the ‘recipient’ are reinvigorated through touching one another’s lives.

REFERENCES
This article summarizes more than 20 years of international teaching conducted by the Department of Pediatrics at the University of Louisville. From its beginnings in Eastern Europe in 1990, to its present programs in South America and Africa, the program has focused on teaching current pediatric practice in developing countries. The article summarizes past and current programs with an emphasis on current direction and focus.

HISTORY

For over 20 years the University of Louisville Department of Pediatrics has maintained a significant involvement with international teaching. The program began in 1990 in Romania, an Eastern European country just opening to the west. In 1995 the program expanded to include a neonatology initiative in Poland. While the major efforts in Romania and Poland had wound down by 2006, subsequent programs have been initiated in Moldova, Russia, Latvia, Ecuador, Brazil, Ghana, and Vietnam (Figure 1).

In 1997 the Division of International Pediatrics was established within the Department of Pediatrics. Currently the Division has two major program areas, Tamale (Ghana) and Quito (Ecuador), with small residual efforts in Moldova, Russia, and Romania. The first 16 years of the program in Romania have been captured in a book published by David Jones in 2006.¹

Since its beginning in 1990, the international program has always been funded primarily by generous support from the Humana Foundation and Humana, Inc. In 2006, Mr David Jones, a founder of Humana, and Humana, Inc, helped to establish endowments at the University of Louisville to perpetuate the program in international teaching. The Divi-
sion also receives outside grant support for specific programs. Our financial resources allow us to assume most of the costs of all of our programs, including the travel expenses for faculty traveling abroad, and for foreign faculty visiting Louisville.

OUR MISSION

Since its inception, the program has focused on education in developing countries. The model is a simple faculty exchange program with medical schools or teaching hospitals in areas where we identify needs with which we have the capacity to assist. Our collaborative programs always start with a needs assessment visit to the host site. If the assessment team feels that the host site could benefit from our presence there, and that we have the financial and personnel capacity to fulfill their needs, then a mutually agreed upon program is outlined with our in-country partners (Figure 2).

In both Ghana and Ecuador we currently have five-year, renewable, letters of agreement outlining the program and the responsibilities of each participant. Commitments on our part include visiting faculty teaching teams several times a year, assisting our partners with their teaching and research efforts, and opportunities for some of their faculty to spend time in Louisville learning new skills or updating skills in their areas of interest. Our agreements in Ghana and Ecuador also include opportunities for students and residents from the University of Louisville to spend periods of elective time working with our partners’ faculty and in their facilities. A more detailed description of our resident elective program will follow.

The Division has been very fortunate to have strong and consistent support from both the Medical School and Department of Pediatrics. Faculty members are encouraged to participate and travel and time away is considered teaching time, not personal time. As a result, over the 21 years of the program, a very large number of faculty have been involved, many with multiple trips abroad to teach. We have also used faculty from other medical schools, including several from outside the United States. We make a significant effort to match faculty to the specific needs of the host institution. It is our belief that these out-of-country experiences for our faculty broaden their perspective of medicine and make them better teachers at home.

SUSTAINABILITY

In addition to teaching teams, the program has also organized and sponsored other specific programs in our host countries. For a decade we put on a yearly pediatric symposium in Romania—the only one in the country during the early years. This symposium brought together about 200 pediatricians from all eleven medical schools in the country for three days of meetings, including plenary sessions by visiting faculty, and research papers presented by Romanian participants. The latter were submitted, peer reviewed, and selected using the same methods used for large meetings in the US. A similar newborn symposium was established in Poland. We also sponsored small grants for research projects, again competitively selected. Individual faculty members from Louisville have participated in the establishment of several professional journals in Romania and Poland.

Another area we have provided assistance with among our partners abroad has been
the development of Pediatric Advanced Life Support (PALS) Centers in Romania, Moldova, Ghana, and Ecuador. PALS instructors certified by the AHA traveled to the host country and taught the PALS provider course to hundreds of health care providers. At each site, we also identified competent PALS instructors, who received the PALS instructor training. Using all of the PALS equipment and manuals we donated to their centers, they are perpetuating the course to new generations of providers in their countries. Over the last two years we have established four PALS teaching centers, three in Ecuador and one in Ghana. We have also provided numerous local PALS courses. These are the first and only places to provide such advanced life support training in these countries (Figure 3).

The PALS courses were established as part of our initiative to help accelerate the accomplishment of the WHO Millennium Development Goals (MDG) 4 and 5, meant to decrease infant and maternal mortality, and under-five mortality by 67% by 2015. In Ghana, we are currently working with several local partners and groups to help the Northern Region of the country achieve their MDG 4 and 5. This will be a major focus area in Tamale over the next few years, and one

where we are looking for new partners. These are but a few of many examples where we are fortunate to have the resources to go beyond our primary mission of teaching.

While the primary mission of the program is an educational model, our teaching teams and residents on electives do provide some patient care. However, it is our focus on education and not on patient care which distinguishes our program from many which are patient care focused, with perhaps incidental teaching. We also are not a primary source of physical resources for our partner institutions, although we do make efforts to provide them with some small equipment and also educational resources, such as books, journals, and Internet access where needed. One of our partners in Louisville is the Kentucky chapter of Healing The Children. They have been very helpful, working with Supplies Over Seas (SOS), in arranging for large shipments of equipment and suppliers to both Ghana and Ecuador. We also partner with Sister Cities of Louisville, which has been very helpful in assisting with logistics within our sister-cities: Perm, Russia; Quito, Ecuador; and Tamale, Ghana. This assists us with local transportation, translation where necessary, and good
connections with local groups and government (Figure 4).

We have found in our work in developing countries that it is often not only the physician community that needs help, but also the nursing community. Working with another of our Louisville partners, Kosair Childrens Hospital, we sponsored, for over a decade, a program in pediatric nursing in Romania. This program included an exchange of nurses between Kosair Childrens Hospital and many hospitals in Romania. In parallel with our physician symposium we held for many years a pediatric nursing symposium—the only one in the country at the time. The Louisville nurses who dedicated their time to this program created major and permanent changes in the nursing system in Romania. This year we will be starting, for the first time, a program in nursing in Tamale, Ghana.

INNOVATION

One of the newest developments, resulting from collaborative efforts on behalf of the Division of International Pediatrics, The Office of Medical Education, and our partner institutions in Ghana and Ecuador, is the new International Pediatrics Elective, available for pediatrics and combined internal medicine and pediatrics residents from the University of Louisville School of Medicine Residency Program. This rotation was created in an effort to provide well rounded, global health education to our residents by exposing them to the practice of medicine in low-resource settings, with less sophisticated diagnostic techniques available, and in a very different cultural context. Our residents gain new knowledge by exposure to diseases that are less prevalent, or present differently in an advanced medical system like the one we have in the US (such as vaccine-preventable diseases, or tropical diseases). They also learn how to use their resources more effectively by working in a system where resources are not readily available. Many times they find themselves improvising in order to provide better care (Figure 5).

Our traveling residents gain the cultural humility necessary for providing culturally sensitive care to those in need upon their return to the US (ie, populations who are “new to US,” immigrants, refugees, international adoptees). They also learn how to provide competent travel advice to their patients traveling to different areas of the world, including pre-travel preparations, immunizations, and tropical disease prophylaxis. One of the long-term goals of this innovation in education here at the University of Louisville is to increase the willingness of our graduating medical students to serve in underserved areas of the world.

**Figure 5.** Spacer for delivery of a breathing treatment improvised from a plastic water bottle at Tamale Teaching Hospital, Ghana, in February of 2011.

**Figure 6.** Dr Crystal Johnson, 4th year combined internal medicine and pediatrics resident at the University of Louisville School of Medicine, accompanied on her International Pediatrics Elective by the Chairman of the Department of Pediatrics, Dr Gerard Rabalais, and warmly received by Dr Anthony Ampompong, consultant pediatrician at Tamale Teaching Hospital, and Dr Kenneth Sagoe, CEO of Tamale Teaching Hospital in July of 2011.
residents to accept positions in underserved communities in our country after graduating from residency. A significant correlation was found in recent studies between participation in an international elective during medical school or residency training and commitment to working with underserved populations after graduation.²

The International Pediatrics Elective is a four-week “away” rotation, during which our residents travel to either Ecuador or Ghana, and spend time providing patient care under the supervision of host country faculty (Figure 6). The goals, objectives, and curriculum for the rotation were developed in accordance with the ACGME 6 core competencies, and following the American Academy of Pediatrics guidelines. At the end of the rotation our residents are evaluated by the host country faculty, and upon their return home, they reflect on their experience abroad during a post-travel debriefing session with their US faculty mentor. They also develop small academic projects related to their international experience, such as Chairman’s Presentations, reflective pieces, or other presentations for their peer residents preparing to embark on a similar experience.

The residents traveling to Ecuador have a chance to work in several sites connected to the Universidad Technologica Equinoccial: Hospital Enrique Garcés in Quito, which serves a large impoverished community in southern Quito, Hospital Del Niños Baca Ortiz, which is the most developed Tertiary Care Children’s Hospital in the country, the Zumbahua Hospital, a small hospital in an idyllic area of the Andes, or in the very hot Nuevo Rocafuerte Hospital in the Amazon. In the latter they are exposed to the wealth of knowledge, wisdom, and clinical experience

Figure 7. Dr. Amuñarriz, of Nuevo Rocafuerte Hospital in the Amazon, holding a specimen of a monkey embryo, in April of 2010.

Figure 8. Dr. Thomas Stephen of the Department of Pediatrics, University of Louisville School of Medicine, preparing for an endoscopy in the Endoscopy Suite at Tamale Teaching Hospital in Tamale, Ghana, February of 2011.

Figure 9. Dr. Kristy Haggett, then a 3rd year pediatric resident, doing rounds on the pediatric ward during her International Pediatrics Elective in Tamale, Ghana, in July of 2010 (currently pediatric faculty within the Department of Pediatrics at University of Louisville School of Medicine).
of Padre Amuñarriz, a priest who received his medical degree in Spain many decades ago and has dedicated his life to the poor and the sick (Figure 7).

The residents travelling to Ghana spend their month away providing patient care in the Tamale Teaching Hospital, which serves the better part of the population in Northern Ghana, the poorest area of the country (Figure 11). Here they have a chance to work on the pediatric wards (Figures 8, 9, and 10), the newborn nursery (Figure 11), the Emergency Department, in the outpatient clinic (Figure 12), or in the tuberculosis clinic.

The International Pediatrics Elective rotation is also meant to benefit the medical system in our partner institutions. Our well-trained residents help teaching the medical students from our partner medical schools in Quito and Tamale. They also share the American Academy of Pediatrics current guidelines and protocols for different diseases encountered in the practice of pediatrics. The first group of pediatric residents spending their international rotation in Ghana worked together with the Ghanaian pediatricians at Tamale Teaching Hospital at creating local guidelines and protocols, which were adapted to their patients’ specific needs and their financial means.

Since April of 2010, three residents from our program completed the International Pediatrics Elective in Ecuador, and another seven residents have traveled to Ghana, with many more to go. The travelling residents are unanimously reporting a unique, life-changing learning experience that has permanently touched their lives in many ways.
FUTURE DIRECTIONS

The Office of Medical Education, led by our Residency Program Director, Dr Kim Boland, has been very supportive and accommodating of our efforts to integrate global health education into the residency training core curriculum. Our next step will be the development of a Global Health Track for our residency training, including specific lectures, web-modules, journal clubs, and case presentations, along with the International Pediatrics Elective, and a new local global health elective, focusing on residents’ exposure to underserved populations around Louisville (ie, immigrants, refugees, uninsured, rural areas with poor access to health care) and the Department of Pediatrics International Adoption Clinic. This is a resident-driven initiative, and a few of the residents who participated on the International Pediatrics Elective are now actively helping in the development of the global health track curriculum.

The medical students are not lagging behind. A group of enthusiastic and mature 1st, 2nd and 3rd year medical students from the University of Louisville School of Medicine has started an ad hoc Global Health Track, including a curriculum, journal club, and case conference. They are looking for enthusiastic faculty members willing to guide their steps as mentors for global, health-related academic projects. The Division of International Pediatrics is working with these students to help them achieve their goals and to provide opportunities for them within our program.

ACKNOWLEDGEMENTS

The efforts described above, transpiring over a more than 20-year period, have involved the ideas, commitment, and work of many hundreds of participants in this project. Many have made extraordinary contributions in terms of time, resources and brain power. It is impossible to thank everyone who has made this project the success it has been. Clearly we owe an inestimable gift of gratitude to Mr and Mrs David Jones, who have contributed not only financial resources, but equally importantly encouragement and direction. Mrs Virginia Judd, Director of the Humana Foundation, was a key mover and supporter during the first 16 years of this project. We have been fortunate to have two extraordinary Chairmen of the Department of Pediatrics during the last two decades, Drs Larry Cook and Gerard Rabalais. Both of them have been active participants in the program and also its staunch supporters. Without this support it would have been impossible to have mobilized the human resources that have made the program successful.

REFERENCES:

Recent changes in the American health care system have been a cause of significant concern among health care providers. Doctors cite increasing workload, declining reimbursement, and administrative burdens as the primary sources of job dissatisfaction. Many of us question the reasons for entering the medical profession in the first place. In such an environment, it is easy to wonder, "What am I doing this for?"

In this issue of the *Journal of the Kentucky Medical Association*, we explore the experience of physicians finding the answer to this question through overseas medical volunteerism. While the venues are diverse and vary widely, there are several factors that these stories share in common. Universally, doctors report being moved by the extent of suffering that is experienced outside the industrialized world. They are inspired by the gratitude that is expressed toward physician volunteers just for making the effort to provide even a modest amount of care. Such experiences provide a different perspective on the nature of our profession and renew the enthusiasm for patient care.

I was not prepared for the intensity of the experience. As we stepped off the plane in Ho Chi Minh City, Vietnam, I was blasted by the heat and humidity of Southeast Asia in the summer. We suffered bureaucratic obstacles as we tried to get our boxes of donated medical equipment through customs. We wasted no time and boarded a van to the hospital that would be our home for the next week.

Cho Ray Hospital is one of the largest hospitals in all of Vietnam and serves a catchment area of tens of millions of patients. It provides tertiary referral level care for hospitals in the entire southern half of the country, but also serves as the hospital of last resort for much of the local population.

The first thing that we noticed was the incredible mass of humanity in, around, and about the hospital. Patients and their families travelled up to two days just to come for an outpatient appointment. There was not enough space for the tens of thousands of visitors each day, so most people brought a bamboo mat and laid on the floor. Elevators were troublesome to use in this ten-story hospital due to crowding, but the stairs were no better. It was not unusual for patients to suffer cardiac arrest in the CCU and not have physicians available to respond because they

I have had the great fortune to have travelled internationally to teach physicians and perform cardiac procedures. In 2010 I joined my friend in volunteering for a medical charity called *Hearts Around the World*. It was my first experience travelling overseas specifically for charity work. I thought it would be a good opportunity to bond with my friends and colleagues and do some good in the process.
could not arrive in time. Doctors in the outpatient cardiac clinic typically saw up around 150 patients a day. Patients laid two and three to a bed while families slept on the floor in the open wards. Patient beds were crammed into every available space, even in open air hallways exposed to the rain and humidity. And yet, despite the overwhelming number of people, we were all impressed by the general hygiene and overall order in the institution.

One of the largest factors in our experience was the powerful influence of economics. Although the government of Vietnam provides socialized medicine at low cost, the insurance only guaranteed admission to the hospital. At the public institution, one might have to share a bed with two or three other people, while those that could afford private rooms experienced care similar to that in the industrialized world. A heart attack patient in the emergency ward would first be asked how much they could afford to pay. After a frenzied discussion with the patient and his family, money would change hands, and the treatment plan would be based on the amount paid. If the patient could not afford much, they were essentially left in a crowded hospital ward to let nature take its course. For one month’s wages, the patient could undergo a diagnostic cardiac catheterization, but treatment with balloons and stents would cost extra. Physicians were obligated to restrict care to what was affordable as they would be held personally liable for any costs incurred that the patient did not pay. Another recurring theme was the inefficient use of resources. The hospital received numerous donations including several advanced ventilators that were donated by visiting groups. However, this equipment was not used effectively as there was no one around to maintain and repair it. There was not enough of the inexpensive plastic tubing used to connect the ventilator to the endotracheal tube. Functionally, these expensive pieces of equipment were useless. Even more tragic was that the money that the government provided the hospital was often spent on projects that brought reputation and accolades rather than affecting the most number of patients. It was shocking to see that many patients in the ICU requiring ventilation were being bagged by their family members because of a lack of ventilators while a $3 million CT/PET scanner sat virtually unused on the next floor.

Another recurring theme was the inefficient use of resources.

My experience with Vietnam has inspired me to start my own charitable organization, World Health Initiative. Our mission is to...
improve the quality of health care overseas by fostering relationships between American and foreign physicians. We provide education, deliver medical supplies, and perform medical procedures. In return we ask that the local hospitals partner with us to try to improve the overall level of care in the institution. While

Many rediscover the answer to the question “Why did I go into medicine?”

we wish to change the lives of the patients we encounter on our travels, we also understand that they represent only a small fraction of those we can reach by training the local physicians and administrators in good, cost-effective medical practices.

Our physicians return from medical missions with a profound sense of accomplishment and a camaraderie that is sometimes lacking in medicine. Their experiences provide them a new perspective that often makes them more compassionate to the plight of their patients. They see how medicine can be effectively practiced in an extremely poor environment and adverse conditions. Many rediscover the answer to the question “Why did I go into medicine?” I hope this story and the others in this month’s issue will inspire other physicians to embark on similar journeys.

Thomas Tu, MD

The views expressed in this editorial are those of the individual editor and do not necessarily reflect the opinion of the full Editorial Board or the KMA Board of Trustees. The Journal of the Kentucky Medical Association wishes to foster the free exchange of ideas and opinions regarding articles that appear in these pages. If you wish to submit a Letter to the Editor, it should be written in clear, concise language, and the length should not exceed approximately two typed, double-spaced pages. Letters will be published in part, or in their entirety, at the discretion of the Editorial Board.
To the Editor:

Why wait until 50? It’s time to update our communication strategy for colon cancer prevention and early detection.

While national colon cancer rates are declining, there’s been a noticeable rise for decades now in the number of people under age 50 who have colorectal cancer. In fact, the rate of rectal cancer diagnoses in people under 50 rose 3.8% per year from 1984 to 2005.

For years, we’ve advised people to start being checked at age 50, and often they don’t hear that message until they turn 50—or in many cases, years later. Our communication strategy needs to be updated. It’s time to reformulate and reevaluate how and when we talk about colon cancer and end this out-dated tradition of starting the communication at age 50. When it comes to colon cancer, 40 is the new 50.

Why? Because this will allow people to have time to identify the risk factors and warm up to the idea of screening. Nearly 145,000 people are being diagnosed with colon cancer each year in the US, and it’s estimated that around 25,000 of those cases are in people aged 50 or younger. Even more, most of those cases are late stages of cancer.

We are missing out on an opportunity to save lives.

By focusing on 50-year-olds, we inadvertently delay getting the message out to people with the highest risk who need it the most. Due to personal or family history of cancers or pre-cancerous polyps, many people are considered high risk and should begin screenings sometime in their 40s or earlier.

If we begin marketing this message to people under age 50, they will have more time to consider their personal and family history, seek risk-appropriate screening, and even engage other family members in a discussion about the need for screening. Also, talking about this sooner will help us identify and address risks like obesity, smoking, and vitamin D deficiency.

The following considerations also suggest a benefit to reaching younger populations:

The American College of Gastroenterology recommends that African Americans begin screening at age 45 because African American populations carry a higher burden of the disease and have a higher percentage of late stage cancer diagnoses.

Between 1992 and 2005, incidence of colorectal cancer for every 100,000 people under 50 rose 1.5% per year in men and 1.6% per year in women, according to a study by the American Cancer Society.

The study found that in that same time frame, incidence rose the most in people ages 20 to 29, with a 5.2% increase per year in men and a 5.6% rise each year in women.

Some studies have suggested a similar rate of colon polyp formation in the fourth decade of life as in the fifth decade.

Mayo Clinic researchers have found that around 25,000 people aged 50 or younger are diagnosed with colon cancer each year, accounting for up to 17% of all cases. They found that colon cancer is one of the top 10 cancers that affect people age 20 to 49.

A recent study sparks questions of whether men have a higher rate of advanced tumors, and draws into question whether they should be screened at a younger age than 50.

Smoking and obesity are now accepted risk factors that increase rates of polyps and colon cancer by up to 20% each. These individuals may need to be considered for screenings before they reach age 50.

Given this data, what makes age 50 the prime time to start this discussion of prevention and early detection?

It’s time for a change.

The average age of people getting their first colonoscopy is 57. Inherently, people will delay undergoing almost any non-emergency medical procedure. Even when we saturate them with messages about screening, many people put it off because they fear knowing the results, don’t want to make the time, or don’t have the proper insurance coverage.

Marketing experts point to the “rule of seven,” which refers to the fact that people need to hear a message seven times before they take action. The earlier they start hearing our message of screening, the more time they have to warm up to the idea.
Many symptoms of colon cancer can be disguised as other issues. Rectal bleeding, change in bowel habits, abdominal pain, and unexplained anemia are often blamed on hemorrhoids, irritable bowel syndrome, diet, or stress. These symptoms need to be taken seriously. Earlier communication will educate and motivate people under 50 to not ignore symptoms that may be signs of colon cancer.

The fact that so many people under 50 are diagnosed with a late stage of colon cancer clearly shows there needs to be a more prompt use of diagnostic testing. Starting this dialogue earlier will increase the effectiveness of colon cancer screening and, as a result, will accelerate improvements in incidence and mortality rates from advanced colon cancer.

It’s time to aim the message of colon cancer symptoms and prevention to people starting at age 40. This is everyone’s responsibility.

Early education can and will save lives. This is our chance to make a change.

**Whitney F. Jones, MD**  
*Founder*  
Colon Cancer Prevention Project  
[www.ColonCancerPreventionProject.org](http://www.ColonCancerPreventionProject.org)

**Andrea Uhde Shepherd**  
*Executive Director*  
Colon Cancer Prevention Project

---

**To the Editor:**

I am writing a biography of Kentucky physicians Joseph and Arthur McCormack. These two men led the movement of medicine and public health in Kentucky from the pre-bacteriological era into modern times. Joseph McCormack served as President of the KMA in 1884 and was the executive officer of the Kentucky State Board of Health from 1883 to 1913. His son, Arthur, succeeded him in this role, serving from 1913 to 1943. Arthur McCormack was also secretary of the KMA and editor of its journal for almost forty years.

It is important to document the history of medicine and public health in Kentucky during these formative years between 1875 and 1945. I welcome the participation of Kentucky physicians and citizens who would like to contribute to this project. Although I have completed much of the research for state-level activities, I am unable to research historical activities on the county level because I no longer live in Kentucky. I would very much appreciate hearing from those who have information about, or would like to research, medical and public health activities for this time period.

**Valerie Summers, PhD**  
drvalsummers@gmail.com  
217 Aldersgate Circle  
Asheville NC 28803  
828-329-5878
<table>
<thead>
<tr>
<th>Risk</th>
<th>Average</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Definition or Diagnosis</strong></td>
<td>No risk factors other than ≥ age 50 and ≥ age 45 for African Americans</td>
<td>HNPPC: Hereditary Nonpolyposis Colorectal Cancer or Family or personal history of early (&lt; age 50) ovarian, endometrial or colorectal cancers</td>
</tr>
<tr>
<td><strong>Begin Screening</strong></td>
<td>Age 50 or age 45 for African Americans</td>
<td>By age 20-25</td>
</tr>
<tr>
<td><strong>Preferred Screening Strategy</strong></td>
<td>Colonoscopy every 10 years</td>
<td>Colonoscopy every 2 years, genetic testing and referral to a specialist</td>
</tr>
<tr>
<td><strong>Alternative Screening Strategies from the American Cancer Society</strong></td>
<td>• Flexible sigmoidoscopy every 5 years  • Double contrast barium enema every 5 years  • CT colonography (virtual colonoscopy) every 5 years  • Fecal occult blood test annually  • Fecal immunochemical test annually  • Stool DNA test (sDNA), interval uncertain</td>
<td></td>
</tr>
</tbody>
</table>

Note: Kentucky and Indiana mandate coverage of colorectal cancer screening tests recognized by the American Cancer Society.

**Recommendations for Individuals with Family History of CRC or Adenomatous Polyp**

<table>
<thead>
<tr>
<th>Relationship</th>
<th>Screening Recommendations</th>
<th>Surveillance</th>
</tr>
</thead>
<tbody>
<tr>
<td>First-degree relative[s] with colorectal cancer diagnosed at age &lt; 60 years</td>
<td>Colonoscopy at age 40 or 10 years younger than affected relative, whichever is younger</td>
<td>If normal, repeat every 3-5 years</td>
</tr>
<tr>
<td>First-degree relative[s] with colorectal cancer diagnosed at ≥ 60 years</td>
<td>Colonoscopy at age 40</td>
<td>If normal, repeat every 10 years</td>
</tr>
<tr>
<td>First-degree relative[s] with adenomatous polyp &lt; 60 years</td>
<td>Colonoscopy at age 40 or 10 years younger than affected relative, whichever is younger</td>
<td>If normal, repeat every 5 years</td>
</tr>
<tr>
<td>First-degree relative[s] with adenomatous polyp &gt; 60 years</td>
<td>Colonoscopy for screening age individualized</td>
<td>If normal, same as average risk</td>
</tr>
<tr>
<td>Second or third-degree relative with cancer or polyps</td>
<td>Colonoscopy as average risk individuals</td>
<td>If normal, same as average risk</td>
</tr>
</tbody>
</table>
What is childhood obesity? Childhood obesity occurs when a child or teen is well above the normal weight for his or her age and height. Most of the time, this condition is caused by the child eating too much or exercising too little. Less common are genetic diseases and hormonal disorders. According to the Kentucky Performance Report of 2010, Kentucky has an obesity rate of more than 30% and is third in childhood obesity behind Mississippi and Georgia.

Barbara Rolls, Guthrie Chair in the Department of Nutritional Sciences at the Pennsylvania State University, found that “toddlers below the age of three self-regulate their food intake and stop eating when full, regardless of how much they are served. As children get older, they adapt to environmental cues urging them to ‘clean their plate.’ Eventually, Roll’s research shows, “portion size becomes a major determinant of food consumption.”

Certain factors can increase a child’s risk of becoming overweight. One factor is a diet of high calorie food, such as fast foods, bakery goods, soft drinks, candy, and desserts which are high in sugar, fat, and calories.

Lack of exercise, the second factor, causes weight gain because obese children do not burn calories through physical exercise. Watching television and playing video games add to the problem. Results of a 2005 study at the University of Illinois at Urbana-Champaign revealed “that about 44% of television ads aimed at six- to eleven-year-olds are for foods with high sugar content, like soda and candy. Another 34% are for snacks and fast-food products.”

The third factor is family history of overweight people. Children are more likely to gain weight in an environment where high calorie food is always available and exercise is not encouraged.

The fourth factor is psychological. A child may overeat because he or she is bored, feels stressed, and eats to cope with problems.

The fifth factor is environmental. The neighborhood in which a family lives can determine the availability of fresh fruits and fresh vegetables.

Obesity can have complications for the physical, social, and emotional well-being of the child.

Obesity can have complications for the physical, social, and emotional well-being of the child. Obese children face a number of health and psychological problems, such as, diabetes, sleep apnea, heart disease, high cholesterol, high blood pressure, and depression. Obese children are more likely to become obese adults.

The following are strategies for parents to follow to help prevent and control childhood obesity: increase fruit and vegetable consumption, increase physical activity, reduce time with television and electronics, limit the amounts of sweets consumed, sit down together for family meals, limit take out and eating out, take the child for a yearly physical checkup, and set a good example for the child by eating healthy foods and exercising regularly.

This year, my focus has been “Prescription for Healthier Living.” Health Promotion Chair, Aroona Dave, located and made available two health and nutrition brochures that our county
alliances can obtain and use in their coun-
ties to address childhood obesity. Mr Patrick
House, Season 10’s Biggest Loser, will be our
keynote speaker at the KMA Alliance Spring
Leadership Conference. Patrick will

Alliance members and spouses
are invited to join us for the
KMA Alliance Spring
Leadership Conference.

talk to members about his new program he is
promoting in Mississippi, which helps children
in school learn about nutrition. At the confer-
ence, there also will be a style show provided
by Catherine’s Legacy. Alliance members and
friends will model the latest fashions.

Alliance members and spouses are invited
to join us for the KMA Alliance Spring Leader-
ship Conference. There will be a reception on
April 1, in the home of Dr George and Karin
Sonnier from 7:00 pm until 9:00 pm. On April
2, we will hold a short board meeting first
and then have lunch. This will be held at the
Alumni Club at the University of Louisville
on Brandeis Street. There will be more com-
plete details in the Bluegrass News, the KMAA
E-Connection, and on the KMAA website
(www.kmaalliance), or you can call the KMA
office at 502-426-6200 for more information.

Millicent Evans
KMAA President 2011-2012
Kentucky Medical Association Alliance
Spring Leadership Conference
April 1-2, 2012
The University Club, U of L Campus
200 East Brandeis, Louisville, KY
Telephone: 502-852-6996

Patrick House Biggest Loser Season 10

The University Club

You are cordially invited to attend the KMA Alliance Spring Leadership Conference

On Sunday, April 1, from 7:00-9:00 pm, EDT, there will be a Cocktail Reception at the home of Dr and Mrs George (Karin) Sonnier. Attire is dressy casual. Please RSVP below. Hospitality Suite will be open to registered KMAA members and hotel guests at the Crowne Plaza at 3:00 pm and after the reception.

Monday, April 2, 2012
(All times EDT)

8:15 - 9:00 am Breakfast in Hospitality Suite, Crowne Plaza
(Open to all KMAA members and guests)

9:00 - 9:30 am Check out and depart for the University of Louisville Alumni Club.
Plenty of free parking is available.

9:30 - 10:00 am Registration - University of Louisville Alumni Club

10:00 -11:15 am KMAA Board Meeting (all KMAA members are welcome)

11:30 - 2:00 pm Luncheon & Program
Fashion Show by Catherine's Legacy
Speaker: Patrick House

Hotel Information

President Millicent Evans, along with Spring Meeting Chair Don Swikert, MD, will be hosting the events. Dr and Mrs George (Karin) Sonnier have graciously offered to host the reception Sunday evening. Rooms are available April 1 at the Crowne Plaza Louisville Airport (1-888-233-9527). There will be a complimentary shuttle to and from the meeting, as available. These rooms are being held with a special group rate of $99.00 for the KMA Alliance, and they will be released March 26.

Registration Form – Please keep above meeting details and return this portion. Look for further details in the Bluegrass News and on e-Connection.

I plan to attend (please indicate number of attendees):

Wine and Cocktail Reception on Sunday, April 1, @ no charge ______
KMAA Board Meeting (all welcome) April 2, 10:00-11:15 am @ no charge ______
Program/Lunch, University Club, Monday, April 2, from 11:30 am-2:00 pm @ $25.00/per person ______

Total enclosed $________ Or Credit Card #_______________________ Visa, MasterCard & Discover
Expiry Date: _______ Name & address on Card if different than below ________________________

Name ____________________________________________________________________________________
Address ______________________________________________City ______________________ZIP _________

If bringing guests, please list:
Names:______________________________________________________________________________
Phone ____________________E-mail _____________________________

Please make check payable to KMAA. Send the registration form and check to: Meredith Dreher at the KMA, 4965 US Highway 42, Suite 2000, Louisville, KY 40222, by March 26. If you have questions regarding the Spring Meeting, please contact KMAA President Millicent Evans, 502-896-0111, mumsie0342@aol.com or Spring Leadership Conference Chair Don Swikert, MD, 859-586-5534, djswikert@aol.com.
Diane Lundbom was named Director of Member Services on January 1, 2012. She is involved in all areas of membership administration, recruitment, and retention. In addition, she oversees the Corporate Affiliate Program, the Information Systems area, and staffs several committees within the KMA structure.

Diane first joined the KMA staff in 1988 and served in the Membership area for seven years. She transferred to the Accounting Department in 1996, and has served as Manager of Accounting Services since November 1, 2007.

A Louisville native, Ms Lundbom is a graduate of Presentation Academy and earned an Associate Degree in Accounting from Spencerian College. She is married, has two daughters, a granddaughter and a grandson.
Beginning on American Diabetes Association Alert Day™ on March 22, through April 22, we are rallying one million people to "Join the Million Challenge" by taking the Diabetes Risk Test to find out if they are at risk for developing type 2 diabetes.

The Diabetes Risk Test asks users to answer simple questions about weight, age, family history and other potential risks for prediabetes or type 2 diabetes. The Diabetes Risk Test shows users whether they are at low, moderate, or high risk for type 2 diabetes. If they are at high risk, they are encouraged to talk with their health care provider.

You can be part of the movement to Stop Diabetes® and get your free Diabetes Risk Test (English or Spanish) by visiting the Association on Facebook, stopdiabetes.com, or by calling 1-800-DIABETES (1-800-342-2383). Although Alert Day is a one-day event, the Diabetes Risk Test is available year-round.
2012 MEMBER-GET-A-MEMBER CAMPAIGN

Make the most of YOUR membership!

Join your colleagues in recruiting Non-Members!
You can earn Awards for New Active KMA Members Recruited by March 1, 2012.

1-3 members Gift Certificate
4-6 members Kindle 3G Wireless Reader
7-9 members iPad 2
10+ members Notebook Computer ($1000 value)
New Members

Members of the Kentucky Medical Association and their respective county medical societies join in welcoming the following new members of these organizations.

NKMS - BOONE COUNTY

Joshua D. Justice

BOYD COUNTY

Phillip Lackey MD
American University of Beirut, 6/1/1999

Frank Rivas MD
Edward Via Virginia College of Osteopathic Medicine, 6/1/2007

CALLOWAY COUNTY

Susan Heffley MD
Ross University, School of Medicine, 6/1/2004

CARTER COUNTY

Melinda Elkins-Smith MD
University of Kentucky College of Medicine, Lexington, 6/1/1998

DAVIESS COUNTY

Charles Mills MD
George Washington University School of Medicine, 6/1/2003

FAYETTE COUNTY

Frederick De Beer MD
University of Pretoria, 6/1/1971

Angela Drake MD
University of Pretoria, 6/1/1971

JEFFERSON COUNTY

Rita Coram MD
Vanderbilt University School of Medicine, Nashville, 6/1/2007

Erick Matthew Dunkl-Jacobs

Mary Fowkes MD
Indiana University School of Medicine, Indianapolis, 6/1/2004

Jennifer Hammer MD
Univ of Alabama Sch of Medicine, Birmingham, 6/1/1999

Scott Plantz MD
Courtney Schadt MD
University of Pennsylvania School of Medicine, Philadelphia, 6/1/1984

Brad Steven Sutton

KENTON COUNTY

Kristin Coppage MD
University of Louisville School of Medicine, 6/1/2003

ROWAN COUNTY

Steven Koenig MD
University of Kentucky College of Medicine, Lexington, 6/1/2004

JEFFERSON COUNTY—IN-TRAINING

Jeffrey David Partin MD

Obituaries

McHenry Brewer, MD
Louisville, KY
1922-2012

McHenry Brewer, MD, a retired surgeon, died February 19, 2012. A 1946 graduate from the University of Louisville School of Medicine, Dr Brewer served as the president of the Jefferson County Medical Society (GLMS) in 1972-1973. He was a Life member of KMA.

Harold Funke, MD
Peewee Valley, KY
1921-2012

Harold Funke, MD, a retired family medicine physician, died February 6, 2012. Dr Funke graduated from the University of Louisville School of Medicine in 1946, and he was a Life member of KMA.

Theodore Lynch, MD
Houston, TX
1932-2012

Theodore Lynch, MD, a retired endocrinologist, died February 19, 2012. Dr Lynch graduated from the University of Louisville School of Medicine in 1958, and he was a Life member of KMA.
Newsmakers

Toni M. Ganzel, MD, named interim dean of UofL School of Medicine

Toni M. Ganzel, MD, has been named interim dean of the University of Louisville School of Medicine. She will temporarily fill in for Dr Edward Halperin, who is leaving as dean to become chief executive officer and chancellor for health affairs at the New York Medical College. Dr Ganzel has been serving as the UofL School of Medicine's senior associate dean for student and academic affairs. Her appointment begins March 20.

UofL honors longtime chair with renaming of Department of Surgery

The University of Louisville has announced it will rename the Department of Surgery after its former long-time chairman Hiram C. Polk, MD. The new name is the Hiram C. Polk Jr, MD, Department of Surgery.

Dr Polk served as the Ben A. Reid Sr, Professor and Chairman of Surgery at the University of Louisville from 1971 to 2005, when he was named the Ben A. Reid Sr, MD, Emeritus Professor of Surgery. He became not only the longest serving chair of a surgery department in the country, but also one of the world’s best-known and respected surgeons.

During his 34-year tenure, the department saw the development of a prominent trauma center as well as advances in control of surgical infection and was the site of the first self-contained mechanical heart and hand transplants. The department’s resident physicians, fellows, and former faculty hold major positions of organizational and institutional leadership on five continents. Dr Polk has been honored by presidencies or chairmanships of more than a dozen national and international surgical organizations. One of his most significant contributions to medicine was his research into the use of perioperative antibiotics. Additionally, he helped develop some protocols for malignant melanoma treatment that are currently in use worldwide.
Save the Date!

Thanks to our advertisers!

<table>
<thead>
<tr>
<th>Advertiser</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ky Health Information Exchange</td>
<td>85</td>
</tr>
<tr>
<td>Kindred Healthcare</td>
<td>78</td>
</tr>
<tr>
<td>Medical Protective</td>
<td>84</td>
</tr>
<tr>
<td>PNC</td>
<td>70</td>
</tr>
<tr>
<td>ProAssurance Companies</td>
<td>71</td>
</tr>
<tr>
<td>Stop Diabetes</td>
<td>118</td>
</tr>
<tr>
<td>University of Ky - Academic Hospitalist</td>
<td>79</td>
</tr>
<tr>
<td>University of Ky - Academic Internist</td>
<td>91</td>
</tr>
</tbody>
</table>