District 9211, District 7570, and the Rotary Club of Moshi, Tanzania are working with the Kilimanjaro Christian Medical Centre (KCMC), to help supply them with much needed medical equipment. This new Global Grant effort will supply the hospital with nearly $600,000 in much-needed medical equipment. This Global Grant will directly benefit the residents of the Kilimanjaro Region of northern Tanzania, located in the foothills of the snow-capped, Mount Kilimanjaro. The KCMC is a referral hospital for over 11 million people in northern Tanzania. This Global Grant is borne on the shoulders of a long-standing relationship between the project partners and the KCMC. It will be a wonderful example of Rotary Serving Humanity.

This is an exciting time to be a Rotarian! Rotary International has launched a new initiative that will allow Rotarians and non-Rotarians to do good in the world through a Rotary Global Grant. This new initiative is called a Vocational Training Team, or VTT. Information and Team Member applications can be found at www.Rotary7570.org/VTT.

District 7570 is planning to launch it’s third VTT in early 2017. For this project, a team of medical professionals will travel to the KCMC in Tanzania, to provide medical care to patients, collaborate, and train with healthcare personnel at the hospital, as well as provide care through several outreach day-clinics. This team will be using equipment that has been delivered through this Global Grant project.
Solution #1 - Supply medical equipment to the KCMC

Areas of Focus:

- Disease Prevention and Treatment
- Maternal and Child Health

Host Club: Rotary Club of Moshi, Tanzania

Needs Statement from KCMC Director of Health Services, Dr. Sarah Urasa:

“Kilimanjaro Christian Medical Centre (KCMC) is a consultant referral and university teaching hospital in the northern Tanzania serving a population of approximately 11 million Tanzanians and neighboring Kenyans.

It was established by the Good Samaritan Foundation (GSF) of the Evangelical Lutheran Church of Tanzania in 1971 and was nationalized shortly thereafter until its return to GSF in 1992. The population served at that time was significantly lower than it is now and without any significant replacement of equipment, many have become worn out, run down and obsolete.

The original 450 bed capacity (with extra beds placed in limited spaces & corridors) is now at 634. Since 1997 it has served as a university teaching hospital where medical, nursing, and paramedical students come to learn their professions. Without adequate (and up-to-date) equipment, many times procedures are taught only in theory.

It is the intention of the leadership of KCMC to refurbish the hospital with equipment, but due to the financial status we are not able to purchase the same. Through the Rotary Club of Moshi and collaborating Rotary Clubs in District 7570 we have requested assistance in this endeavor.”

This Global Grant will directly benefit the residents of the Kilimanjaro Region of northern Tanzania, located in the foothills of the snow-capped, Mount Kilimanjaro. The KCMC is a referral hospital for over 11 million people in northern Tanzania.

Citing a 2016 site visit by IMEC’s Medical Director Dr. Sue Crawford, and a 2016 site visit from District 7570 Rotarian Pidge Morgan, the suites of medical equipment will be procured and shipped, using the American-based partnering organization, IMEC. Our objective will be to provide much-needed surgical and lab-based medical equipment of which the hospital has limited access.

This Global Grant project will build on the relationships formed from prior humanitarian projects by the Rotary Club of Moshi and the
long-standing relationship with the project partner, International Medical Equipment Collaborative (IMEC). The project will increase the capacity of the Tanzanian healthcare system by delivering a large quantity of medical equipment to the KCMC, using “suites” of medical equipment. The respective suites will comprehensively contain all needed medical equipment for the respective discipline or procedure. It will provide all of the equipment and supplies needed to turn an empty room into a fully-functional department of a working hospital. For example, an Exam Suite contains an exam table, light, diagnostic equipment, medical supplies, patient scale, patient chair, linens, medical cart, desk, chair, and waste container - all of the furnishings and materials needed for a complete Exam Room. This system has proven to be an efficient and effective process for greatly improving health care in impoverished hospitals worldwide.

The medical suites follow:

- Advanced Critical Care (ICU)
- Custom Emergency Medicine
- Emergency Room
- Anesthesiology (2)
- Infection Control
- Maternity Exam (3)
- Hospital Delivery (2)
- Newborn Resuscitation (3)
- Critical Care (ICU) Nursery (2)
- Custom Orthopedic Medicine
- General Surgery
- Examination
- Special Care (3)
- Special Procedure
- Stretcher (4)

The hospital doesn’t have access to most of this equipment currently. In situations where there they have current access to equipment, it is either in need of repair or upgrade. When delivered, each of these pieces of equipment will be used multiple times daily. The use of this equipment will have a significant positive impact of the surgical outcomes and the rates of mortality and morbidity in the region.

To address the need for a sustainable project in addition to the incorporation of a Vocational Training Team, we will incorporate biomedical equipment training because we realize that these health care technologies will be assets that directly affect quality of human lives in Tanzania. They will represent considerable investment and will have to be maintained to protect this important investment. It will be important, therefore, to have a trained staff and a well-managed maintenance program to keep the medical equipment at the KCMC operating reliably and safely and available for use when needed for diagnostic procedures, therapy, treatment and monitoring of patients. This effective maintenance program will prolong the useful life of the equipment and minimize the cost of equipment operation.

For maximal local sustainability, this project will incorporate the IMEC Biomedical Training Program, which provides onsite training of a Biomedical Technician for proper use, maintenance and repair of equipment. Medical equipment maintenance is essential to sustainable medical care in both primary and tertiary healthcare and will be of substantial value at KCMC with the volume of medical equipment delivered, and the high patient count. This program uses the “Train the Trainer” model, enabling the Biomedical Technician to become proficient in teaching clinical staff in the proper use of the equipment, a Mentoring Program, linking Biomedical Technicians with experienced Biomedical Engineers in their region, and ongoing support in the form of continuing
relationships with IMEC Biomedical Technology staff via online training and virtual real-time support for problem solving.

By providing a pathway for the sourcing, maintenance and repair of specialized medical equipment, as well as providing the system for an integrated pathway to train, network and support the personnel required (Biomedical Technicians as workers, trainers and resources), equipment that is provided is assured to have the maximal useful life, enabling healthcare personnel at KCMC to continue to provide medical care for their community in the most sustainable way. This type of program also improves sustainability on an environmental level as well, by substantially reducing the landfill load so often present in areas that receive donated or charitable equipment and supplies.
International Sponsor Contacts:

Mike Mefford  
Rotary Club of Johnson City, Tennessee  
District 7570 Global Grants Chair  
District 7570 VTT Chair  
mikemefford@gmail.com

Pidge Morgan  
Rotary Club of Smith Mountain Lake, Virginia  
pidgemorgan@gmail.com

Shelley Brouillette  
Rotary Club of Johnson City, TN  
District 7570 Annual Giving Chair  
docshelley@hotmail.com

James Cook  
Rotary Club of Lexington Sunrise, Virginia  
r.james.cook@gmail.com

Host Contacts:

Sarah Urasa  
Rotary Club of Moshi, Tanzania  
dhs@kcmc.ac.tz

Solution #2 - Vocational Training Team (VTT):

The following information is provided for Rotarians and non-Rotarians who might be interested in joining the 2017 District 7570 VTT. Please direct questions to District 7570 VTT Chair Mike Mefford at mikemefford@gmail.com.

Areas of Focus:

• Disease Prevention and Treatment  
• Maternal and Child Health

Purpose: This project will address community needs through the use of a VTT. This collaborative effort between US and Tanzanian-based health care professionals will ensure sustainable use of the medical equipment while directly affecting the capacity of the hospital staff. The District-level VTT component will involve US-based health care professionals, Tanzanian-based health care professionals, students at the KCMC Medical School, and health care personnel and support staff from the KCMC.

Number of Team Members: One Team Leader and three Team Members

Travel dates: (Tentative) February 6 - 21, 2017

Desired team composition:

• Family Medicine physician
OB/GYN physician
Biomedical Technician
Orthopedic Medicine

Time requirements before and after traveling to Tanzania: There will be a team meeting during the months leading up to the trip to Tanzania. All team members will need to be well-versed in the projects which Rotary has accomplished in the past in the area to be visited. Team members will be asked to attend the District 7570 District Conference in Hot Springs, VA on March 17 – 19, 2017. Team members will not be reimbursed for expenses during this period of pre-travel training.

Expenses: Team Members’ travel and ordinary living expenses in Tanzania will be paid for by the Rotary International Global Grant 1635192 which will fund this Vocational Training Team. Personal items, incidental expenses, and in-country recreation are the responsibility of the team member. Please visit https://www.rotary.org/en/document/446 for more information regarding travel expenses.

Insurance: Insurance coverage for persons traveling as part of this Vocational Training Team is provided by Rotary International. This insurance meets Rotary International’s travel insurance requirements. This insurance will be in effect for the duration of the VTT travel. You may choose to purchase additional coverage, but it is not paid through the global grant. Details and limits of coverage may be found at www.rotary.org/myrotary/en/grants-travel-insurance.

Vaccinations: It will be the responsibility of each Team Member to consult with a medical professional to determine which vaccinations are required or recommended prior to traveling to Tanzania. No one will be permitted to travel as part of this VTT without first providing evidence of having received the required vaccinations. Current information relative to vaccines can be found at http://wwwnc.cdc.gov/travel/destinations/traveler/none/tanzania. The cost of these inoculations will be paid as part of this Global Grant.

Passport and Visa: Team members must possess a valid passport to travel. Visas will be obtained prior to the travel date.

KCMC Information:

Profile: KCMC is a referral hospital which provides the majority of medical care to the northern part of Tanzania. The Kilimanjaro Region of Tanzania is home to nearly 250,000 inhabitants, but the hospital catchment area contains 11 million inhabitants. The 620-bed, multi-building hospital provides facilities for comprehensive medical care. The hospital has approximately 600 in-patients and 1000 visitors daily. The following are basic annual statistics:

- Average daily attendance: 600 patients
- Total admissions: 21,888 patients
• Average daily admissions: 60 patients
• Average length of stay: 8.1 days
• Total births: 3391
• Total deaths: 1709

The most common inpatient diagnoses for children under 12 are pneumonia, malaria, diarrhea, gastrointestinal infections, meningitis, and injuries/fractures.

The most common conditions for all inpatients are delivery (normal and abnormal), maternal care due to delivery complications, infant delivery complications, transport accidents (orthopedics), heart disease, head injuries, and diabetes mellitus.

For female (excluding maternity), the most common were pelvic diseases, malaria, all types of infections, thyroid diseases, psychological illness, and parasitic diseases. The most common male diagnoses were malaria, injury/fractures, pneumonia and other infections, parasitic diseases and other GI complaints, and carcinoma. Most of KCMC’s emergencies are obstetrical in nature. The hospital delivers approximately 300 babies per month with an approximate 40 percent C-section rate. Other emergency situations involve trauma, pelvic bleeding, intestinal obstruction, and peritonitis.

Location: KCMC is located in northern Tanzania and is situated on the lower slopes of Mount Kilimanjaro. The municipality covers about 23 square miles. Moshi hosts several cultural tourism programs operating on the lower slopes of Mount Kilimanjaro and serves as the base for many expeditions up the mountain, with climbers staying in nearby hotels that employ local residents as guides, porters, and cooks.

People: Many people from the Chagga and Pare ethnic groups live in Moshi.

Climate: Moshi has a tropical wet and dry climate. Its weather is dominated year round by monsoonal flow. The northeast monsoon prevails December through March and is accompanied by the highest temperatures of the year. There is light or insignificant rainfall year round except during the transitional periods between the monsoons. Moshi’s altitude keeps the temperature lower than surrounding cities. Nighttime temperatures are relatively consistent throughout the year, averaging from 59 to 63 degrees. During our travel time, the temperature averages a low of 63 degrees and a high of 91 degrees.
**Budget**: Tentative costs for this global grant project are estimated to be approximately 125,000 USD (274,000,000 TZS). This amount will encompass all aspects of the project, from equipment procurement and delivery, Vocational Training Team travel, and the Biomedical Training Program. Fundraising is in-process in Districts 7570, 7780, and 9211. If you would like to make a district-level, club-level, or individual contribution to this project, please discuss with one of the project contacts listed.

*Asante sana!*