Search for Chief Executive Officer  
*Engineering World Health*

The Search

Engineering World Health (EWH) is a 501(c)(3) organization that inspires, educates, and empowers students, engineers, scientists, and medical professionals to become better practitioners and better global citizens while using their engineering skills to improve global health. EWH offers college students and young professionals from the more developed parts of the world an eye-opening, life-changing experience that encourages life-long engagement with global health. Participants in EWH programs contribute to the improvement of healthcare services in resource poor countries by repairing medical equipment and training local technicians, in addition to gaining critical first-hand experience living and working in the developing world. EWH is looking for a new CEO.

The EWH office is located in Chapel Hill, NC but the location of this position is open to discussion.

Founded in 2001, EWH uses education as the primary mechanism to achieve its mission – education of future leaders in engineering, science, technology, and medicine as well as education of in-country personnel who provide key technical services in hospitals. EWH is committed to advancing cultural and technical exchange among individuals who live and work in more advanced economic environments, and those who live and work in low-resource countries. In addition to its staff and Board, the organization has assembled an extraordinary group of engineers, scientists, and academicians who donate their time and talents to help it achieve its goals.

EWH’s chief program are the Summer and January Institutes in which there are now 170+ participants each year. Most are immersive, in-country volunteer experiences of nine weeks. During the first month in-country, volunteers (mostly engineering students and young professionals) receive four hours a day of language training and four hours a day of technical training from a university professor and a lab instructor employed by EWH. During the training period, they also visit a local hospital to get some first-hand experience under the guidance of their instructors. For the following five weeks they are placed, in groups of two or three, into hospitals and go to work repairing and putting into service a wide range of medical equipment in very low-resource hospitals.
These hospitals typically have few if any trained biomedical engineering technicians, which makes the work of the participants so critical. The students spend their time working in these hospitals to repair a wide range of equipment. In repairing equipment, they work closely with the hospitals’ technicians when they are present, and independently when they are not. They find and translate manuals; write and post quick start guides; and instruct nurses and doctors in the proper use of equipment that, donated, may have arrived without instructions. They make additional contributions to hospital infrastructure – recently building alarm systems, water distilleries, call systems for nurses, privacy curtains in ICUs, and other projects.

In 2014, in order to open opportunities to students who had less time and fewer financial resources, EWH initiated shorter-term, three-week, programs in partnerships with universities whose engineering departments, guided by EWH curricula, conduct the technical training on campus. Students then spend three weeks in-country working in hospitals.

EWH has created a variety of partnerships with universities in both the US and abroad to serve their students. Partners in the US include Duke University, Texas A&M, Rochester Institute of Technology, George Mason University, Catholic University of America, the University of Portland, and the Rose-Hulman Institute of Technology. There are partnerships, also, with the University of New South Wales, the Technical University of Denmark and the Nordic Five Tech Alliance, Makerere University in Uganda, and Integrated Polytechnic Regional College in Rwanda.

EWH engages students, too, through its program of university chapters, which exist in both the United States and abroad. Chapters offer a variety of activities including building kits, conducting STEM education locally, fostering design projects, and working with local non-profits to repair hospital equipment. The EWH annual Design Competition is unique among engineering competition for its focus on design for low-resource environments.

The search for a new CEO provides an opportunity to bring new energy, vision and creativity to an organization that is poised to expand its reach and impact by replication of its proven and successful programs. This position calls for a leader with outstanding strategic, fundraising and management skills, along with an enterprising spirit and a commitment to the EWH’s mission.

The CEO reports to a 12-member Board of Trustees and oversees a staff of 6 year-round employees and some 25-30 contractors who staff the Summer and January Institutes. Its budget is approximately $1.2 million a year. Raising the profile of the organization, increasing its revenues, diversifying the sources of that revenue, continuing to strengthen its management and its program offerings, and engaging in strategic partnerships with other global health organizations, hospitals, and universities are key priorities for the incoming CEO.

**Background and Current Situation**

Engineering World Health was established in response to a need that its founders Dr. Robert Malkin and Dr. Mohammad Kiani, then Biomedical Engineering Professors at the University of Memphis, saw in emerging countries. While hospitals in poorer countries are often awash in donations of medical equipment from wealthy countries, only 30 to 60 percent of this equipment
is fully functional, according to the World Health Organization. Much of it is missing crucial parts that are not readily available or lacks translated operating manuals or is useless without a reliable source of electricity. Many organizations of doctors and surgeons have received recognition and support for their efforts to perform sophisticated surgery in poor communities around the world. However, a little-known story is that those efforts have often been hampered or made impossible because of the lack of proper equipment or the disrepair of that equipment.

In response to this challenge Engineering World Health was established and inaugurated its Summer Institute, which remains its cornerstone program. The Institute is a self-sustaining program, which provides the opportunity for university students with strong backgrounds in engineering, math, and science to work in hospitals in Africa, Asia, and Central America. Depending on the country, EWH signs MOUs with local Ministries to engage in this work.

Students go through one month of training followed by a month of service in a local hospital during which they install and repair medical equipment, train the staff, take inventory, solve problems and perform other engineering duties.

As part of its student chapter program, in August of 2009, EWH launched an annual design competition that is unique in being directed at the needs of developing country health care. Each year it awards cash prizes for winning teams. Participating teams are invited to create a multi-disciplinary Innovation Team that connects engineering students from the EWH chapter and industry engineers with experts in industrial design, social entrepreneurism, business planning, etc. The teams can choose to work with any organization from the global health community to help them identify one or more challenges in providing health care in developing countries that appear suited to a technological solution.

**Governance, Organization and Finance**

Engineering World Health is a 501(c)(3) organization governed by a 12-member Board of Trustees. Members of the Board are elected to one-year terms. The Board meets formally four times a year, with active finance, governance, and development committees.

The organization’s staff is a group of skilled and dedicated professionals. The full-time employees are the Director of Student Programs, Manager of Summer Institutes, Operations Manager for Student Programs, and Manager of Communications and Development. The Director of Finance and Administration serves half time. In preparation for the Institutes, each year there are approximately 25 short-term hires of instructors, lab assistants, and on-the-ground coordinators. EWH also partners with local in-country language schools and organizations that supply logistical support for volunteers.

EWH’s operating budget for the current fiscal year is approximately $1.2 million with approximately 30% raised from foundations, corporations, and individuals and 70% from fees from student programs. There is a reserve fund of about $500,000.
The Role of the Chief Executive Officer

The new CEO of Engineering World Health will inherit a highly regarded, sophisticated organization on the brink of making a substantial leap in its size and impact. They will be expected to work closely with the Board and staff to provide the animating force to take the organization to its next level. Because of the organization’s small size and the range of activities, the CEO will be called upon to exercise a variety of skills with a sophisticated and mature perspective, temperament and intelligence.

The new CEO will be replacing Leslie Calman, Ph.D., who has ably served in that position since 2013 and will retire in 2020. Under Leslie’s leadership, EWH has achieved a level of professionalism and stability that has brought it to a point where it can now pursue a robust but realistic plan for expansion.

The incoming CEO will be expected to accomplish the following objectives during the first 18 to 24 months of their tenure.

Provide strategic and visionary leadership.

With the Board, engage in a strategic planning process that will sharpen, refine and clarify a plan for the organization’s growth. That plan will include deciding on the ideal size of the organization, increasing the number of universities associated with the programs and relying less on tuition for revenues. It will articulate the concrete, specific steps necessary to achieve those strategic goals for growth and rigorously track the organization’s progress in doing so.

Raise the profile and visibility of the organization.

Aggressively promote the expertise and mission of the organization through a clearly defined message. Ensure that it reaches out to targeted audiences through traditional and new media, heightening the awareness of the importance of its mission. Serve personally as a spokesperson for the organization and its vision and mission, while encouraging others in the organization to do the same.

Substantially increase the resources of the organization.

Lead a coordinated agenda to increase revenues and diversify the sources of revenues through personal efforts, increased Board engagement, and involvement of permanent staff and development consultants where appropriate and necessary. Make every effort to reduce the organization’s dependence on tuition and reach out to the program’s alumni as one source of potential support.

Manage the growth of the organization, ensuring that quality does not suffer with expansion.

Maintain and improve the excellence of EWH’s programs and the sophistication with which they are conducted in areas of the world often neglected. Ensure that the organization remains able to adapt to new circumstances, trends and unexpected challenges and opportunities.
Ensure that the systems, policies and procedures of EWH are up-to-date and organized.

Continue to put into place structured operating policies and systems that are appropriate for the organization’s size and mission. Pay special attention to the safety and security of the participants in its programs and the excellence of its staff.

Manage the resources of the organization efficiently and effectively.

Establish a complete understanding and tight management of the organization’s finances and its liability mitigation efforts.

Strengthen and initiate partnerships and strategic alliances.

Expand the number of relationships with NGO’s and universities in the United States and abroad.

Continue work to strengthen the board.

In conjunction with the chair and other members of the Board, work to expand the board and strengthen its functioning.

Serve as a staff leader.

Attract, lead and retain the strongest possible staff, delegating where appropriate and establishing clearly defined high standards. Sustain a supportive, collaborative atmosphere that promotes unity of purpose from a widely dispersed staff, creativity, excellence, fairness and transparency. Ensure up-to-date Human Resources policies and create staff development programs where possible.

Qualifications and Experience

For this pivotal role, EWH seeks a creative leader and spokesperson who is deeply and demonstrably committed to its mission and willing to take on the responsibility for all aspects, both internal and external, of the operation of the organization. Balancing the myriad demands required in this position involves broad cultural competence, a keen antenna for political shifts in often unstable environments and an understanding of how natural disasters and climate change can impact the work of the organization. While no one candidate will embody every quality, the successful candidate will bring many of the following professional qualifications and personal attributes.

- An informed and deep commitment to the vision and mission of the organization.
- A sophisticated understanding of the programs of the organization or the ability and willingness to master them quickly.
- An understanding of and appreciation for the technical implications and oversight required for engineering-related education and programming, and ability to pull in technical resources as needed (through the staff, board, or advisors) for program shaping, governance, and risk mitigation.
• An aptitude and appetite for fundraising. Demonstrated experience raising significant funds from a variety of sources and a willingness to be intimately involved in development.
• Public presence and media savvy. Outstanding written and oral communication skills.
• A track record of senior leadership in a nonprofit, governmental or nonprofit organization, including higher education. Skills in team building with a record of setting realistic priorities, meeting or surpassing goals and running a fiscally sound operation.
• A track record of operating successfully in a multicultural global environment.
• High integrity, good judgment and ability to work well with team members.
• An ability to translate a large strategic vision with big ideas and ideals into a strategy and action steps.
• A network of contacts with funders, global health organizations and demonstrated experience building successful partnerships.
• Familiarity with the protocols and needs of academic institutions.
• Self-awareness with an ability to recognize his or her strengths and weaknesses and seek support from staff or Board when necessary. Entrepreneurial spirit and drive with an eye for creating and seizing opportunities along with a commitment to accountability and results.
• A keen appreciation for the risks and rewards and challenges of operating programs in parts of the world that can be unstable.
• An even-handed temperament that responds to unexpected situations with a calm, rational and common-sense solution.
• A demonstrated commitment to diversity in all areas of the organization.
• U.S. citizenship or eligibility to work in the U.S.

For More Information Or To Apply:

Mary E. King of Mary E. King Executive Search is assisting Engineering World Health in this search. All inquiries, nominations, and applications may be directed in confidence to: maryeking@comcast.net. Additional information can be found at www.ewh.org.

Engineering World Health has a commitment to diversity in its leadership, staff, and partners. It is actively seeking a diverse pool of candidates in this search, including but not limited to age, race, ethnicity, class, national origin, sexual orientation, gender identity, disability, and religion.