

*"We rise by
lifting others."*

—Robert Ingersoll

**REIMAGINING TODAY
TO TRANSFORM MORE LIVES
TOMORROW**

2021-2022 IN REVIEW

After surviving the curse of COVID in 2020, LIMBS set some very ambitious goals for 2021. Under the leadership of the Board of Directors and President Oscar Gonzalez, LIMBS planned to accelerate fundraising targets for the next three years, distribute 450 LIMBoxes, continue the testing and manufacturing of the new IM Knee as well as expand our Community-based Rehabilitation (CBR) Training Program into new countries.

Those goals were tragically upended when Oscar was re-diagnosed with cancer early that year. After battling the disease for many months, he passed away suddenly in October, 2021. He valiantly tried to work during his treatments; however, as LIMBS' only full time employee, numerous planned projects had to be canceled or postponed.

Lucas Galey, a Biomedical Engineering student working on his PhD at University of Texas at El Paso (UTEP), was named Executive Director in early 2022. Lucas and the Board (with Eric Minelga as the new Chairman) are rebuilding capacity to better serve current and future patients.

In Memoriam

In 2014, Oscar Gonzalez joined LIMBS to formally establish and grow the CBR training program. Through Oscar's work, this highly successful initiative has turned into an enduring focus on holistic care and improved patient outcomes. In 2017, he was promoted to President. His bilingual skills helped LIMBS expand operations into Mexico and Latin America. Oscar's entire career was dedicated to helping others. His love, compassion and commitment are sorely missed.



NOTABLE EVENTS

In 2021, despite the aforementioned internal issues, we delivered 99 LIMBoxes. In 2022, 162 leg systems were shipped to our partners in Mexico, Indonesia, El Salvador, Liberia, Bolivia, Iraq and Nigeria.

Community-based Rehabilitation (CBR) Training in Mexico



In July 2021, LIMBS held a CBR training seminar at CDMX in Mexico City. Our program provides a holistic approach to patient care that engages local communities and enhances the quality of life for amputees and their families. Volunteers learned about a wide range of rehabilitation techniques and exercise routines, including how patients can care for their prosthetic devices and deal with the emotional challenges of limb loss and recovery.

More seminars are being planned in 2023.

International Clinics Update

Going forward, LIMBS plans to solidify and expand its relationships with clinics around the world. There are always many challenges: local politics, crime, high prosthetist turnover, etc., but we are committed to fitting more amputees and providing rehabilitation.

Exciting News: LIMBS is exploring a partnership with CURE International to develop an adaptable, above-the-knee leg system for pediatric patients. It's a major undertaking with great potential to ultimately help many child amputees around the world.



Photos from the Lembaga Rahmat Kasih ("Institution of Merciful Love") clinic in Indonesia.



LIMBS Executive Director Lucas Galey (left) with local prosthetists, patients and volunteers in Liberia.

Pivotal Trip to Liberia sets stage for future expansion in Africa

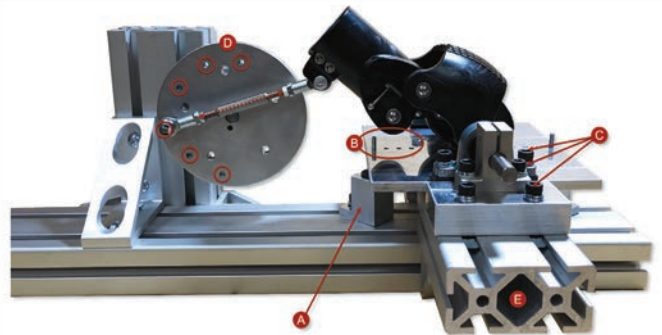
In November 2022, LIMBS traveled to Liberia to deliver 20 leg systems, fit patients and finalize our working relationships with Eternal Love Winning Hospital and the JFK Medical Center. Located on the western coast of Africa, Liberia is a very poor country with many challenges; however, the people are wonderful, grateful and in desperate need of help. (Thanks to LIMBS supporters Don Slager and the Bible Society of Liberia.)

Since 2004, LIMBS has provided leg systems to 14 countries throughout the African continent. Recent new recipients include Nigeria as well as Tunisia, where we hope to fit 9 new patients in 2023.

New Partnership with Premiere Engineering Firm – Andrews Cooper

Over the last two years, LIMBS has made great strides in validating its new IM (Injection Molded) Knee. In addition to patient usability testing for comfort, noise, stability, ease of walking and safety, LIMBS has teamed up with Andrews Cooper, an engineering services firm specializing in complex technology development, to expand our testing regimens.

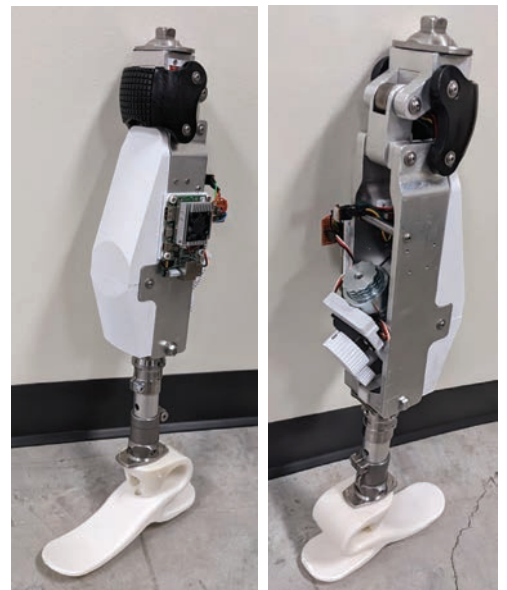
As a result of our collaboration, the first generation LIMBS Knee Cycle Tester was created to improve the consistency of the bend and swing movement of our ultra low-cost prosthetic knee. With over 6 million cycles, the tester measures the stress and friction on the knee joint. LIMBS states, "Our partnership with Andrews Cooper bolsters LIMBS' long term commitment to ensure our product development and testing is thorough and process-driven. Our goal is to achieve improved performance with each new generation of prosthetic devices." (Special thanks to the Andrews Cooper engineers who give their skills and time to help amputees around the world.)



Building a Bionic Knee on a Budget

Since 2014, Executive Director Lucas Galey has been working on an experimental microprocessor controlled knee (MPK). Called the "E-Knee," it combines the basic LIMBS IM Knee with a microprocessor, magnetic sensors, clamping mechanisms, batteries, etc. and can be manufactured for less than \$1,000.

In a peer-reviewed paper published in the medical journal *Prosthesis*, the E-Knee demonstrated comparable stability and user experience to a standard high-end device. This "proof-of-concept" leg system was tested on users of expensive (\$30,000-\$50,000) MPKs during a series of walking tests, which focused on 16 qualitative criteria – including walking speed, gait symmetry, balance, fall exposure, comfort, stability, ease of use, confidence and other metrics. The E-Knee offered a 30 percent improvement over the passive knee and received high marks in comparison to the high-end MPKs... Stay tuned. More details TBA.



The E-Knee continues to evolve. Latest photos above.

FINANCES 2021 & 2022

Over the last two years, LIMBS has faced many challenges in terms of leadership and shifting events overseas. However, with new senior management in place (who have seen the organization evolve from humble beginnings to become a successful, technology-driven nonprofit), LIMBS is reimagining how it can better serve our existing clinics as well as develop new partnerships here and abroad to help more amputees achieve a higher quality of life.

2021: Total Revenue \$133,487* • Total Expenditures \$70,542** * Includes all donations, grants and corporate gifts. ** Includes office, contract services, payroll, travel, CBR seminars, LIMBox distributions, product development, engineering, UTEP rent, patents, etc.
2022: Total Revenue \$133,146* • Total Expenditures \$41,490**

Based upon a projected budget of \$145,296 for 2023, LIMBS has set the following goals: 1. Distribute a minimum of 200 LIMBoxes, 2. Continue to refine the new LIMBS IM Knee, 3. Identify a new manufacturer for the next generation of IM Knees, 4. Hire more staff, 5. Support and grow our international clinics, 6. Continue to work with CURE International to evaluate the feasibility of a pediatric leg system, and 7. Patent the new smart E-Knee.

To keep our overhead costs low so we can help as many amputees as possible, LIMBS seeks relationships with engineering companies and “in-kind” contributions from many different professionals to support our mission.

LIMBS is continuously grateful for all the supporters of our mission and those we serve. We are seeking opportunities to partner with a major donor to realize the full potential of LIMBS through: a larger staff, manufacturing more leg systems and sending more teams of skilled prosthetists to our partner clinics to fit prosthetics and provide rehabilitation services.



A small sampling of the many patients who received LIMBS prosthetics and rehabilitation services in 2021-2022.



TRANSFORMING LIVES ... ONE STEP AT A TIME

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LIMBS, an Independent Nonprofit 501 (c)(3) Organization: US EIN #27-4334121, has earned the highest rating from Candid/GuideStar – the world's largest source of information on nonprofit organizations.

