

Global Laparoscopy Solutions

One-Sentence Summary of What You Do: Global Laparoscopy Solutions creates a portfolio of low-cost, portable laparoscopy devices for minimally invasive surgeries.

Affiliated Institution: University of Nebraska Medical Center

Have you formed a company yet? Yes

Funding/Financing: Other

Please describe your company and the problem you are trying to solve: Problem: Open exploratory laparotomy is the prevailing standard of surgical care in low-resource settings. Open surgery has distinct disadvantages of increased blood loss, higher infection rates, and longer recovery times when compared to minimally invasive surgery. Conventional laparoscopy currently requires expensive surgical equipment, peripheral towers of technology, skilled personnel, reliable infrastructure, and modern hospital facilities thus making these procedures unavailable in many austere environments across the globe.

Solution: GLS resolves this problem by offering a portfolio of affordable portable laparoscopy devices for use in minimally invasive surgery. We hold exclusive worldwide licensing rights to two patented technologies. GLScope and Intuitool. These instruments have the size and price point that facilitate their adoption by physically and financially constrained domestic healthcare facilities and those in Low to-Middle Income countries (LMICs).

Traction: Our team has successfully created prototypes of both devices. The diagnostic laparoscope has been used in live animal experiments to perform liver & spleen biopsy and bowel resection. The company is being evaluated for inclusion in the BioGenerator's Center for Defense Medicine given the tools potential use to triage injured soldiers and support combat fighting forces. The laparoscopy devices' reasonable price point also appeals to an unmet need in the veterinary medical market.

Value Proposition: Cost-effective laparoscopy devices will accelerate the adoption of minimally invasive surgery to the five billion people who do not have access to safe, affordable surgical care in under-served populations.

What is/was your go-to-market strategy? Our Go-To-Market strategy is to first engage the vet med market. This pathway does not require FDA regulatory approval and provides an opportunity to generate early revenue. We will align with the training programs in Veterinary Medical Schools and have already initiated discussion with channel partners that have existing relationships with US veterinarians. This market presents a \$345M available market & is expanding rapidly at 9% CAGR.



The larger market will target laparoscopy surgeons in LMICs. We anticipate NIH grant funding to initiate first-in-human trails with an oncology practice in India within two years. Since 60% of the surgical practices in India are financed by central and state governments, GLS will promote its lower cost laparoscopy equipment to the hospital purchasing groups of these facilities. Additionally, with the emergence of private clinics, GLS will direct market to diplomates of the India National Board of Surgery who are encouraged to practice in more rural areas and underserved small hospitals. This effort will be facilitated by partnering with an organization that already has a robust international medical supply distribution network.

The most lucrative market will be adoption by and integration into the military medical services. The portability of our device presents a unique characteristic that will allow non-governmental organizations (NGOs) to stockpile and rapidly transport the medical device to areas of critical need during national disasters or global pandemics.

How will/do you generate revenue? Our economic unit cost modeling suggests a retail sales prices of the GLScope at \$1000. The Intuitool will market at \$2500 and have the advantage of a disposable functional shaft insert that will generate recurring revenue of approximate \$500 per unit. Our estimated cost of goods for the disposable laparoscopy device is less than \$100/unit. The fabrication and assembly of the therapeutic hardware will incur additional costs at approximately \$200-\$250/unit. Out engineers are working to maintain lean production methods to make the products affordable for LMICs yet produce a sustainable profit margin for the company.

How will this showcase benefit your company or technology? The Destination Startup showcase will provide a wider platform of exposure to potential investors and strategic partners who might help accelerate development of our technology and commercialization of the products. We are seeking \$1M of seed funding from angels or VC groups to accelerate design and engineering of second-generation devices, complete animal trials, and initiate early sales into the veterinary market.

Who are the members of your team and why is this the right team to get the job done? We are a multidimensional team with seasoned experience and expertise in medicine, global health, veterinary medicine, engineering, medical device development, technology innovation, finance & accounting, fund-raising, and new start-up ventures. Together, we have the knowledge and discipline to build a business and the sustained commitment to overcome obstacles and propel a product toward commercialization.