

X-Ray Robotics

A Dynamic Radiographic Imaging System

X-Ray Robotics is an early stage company currently being formed that has developed a new medical imaging system that can produce images of the body moving in natural activities like walking, stair-climbing, and lifting. This new technology will significantly advance research and diagnosis in human joint mechanics and orthopedics. Medical professionals frequently use tomography and radiographic imaging methods such as X-ray, fluoroscopy, and computed tomography (CT) scanning to produce images of the human body. However, no commercially available system permits examination of the body while in motion, and none combines tomography and dynamic motion radiographic imaging in a single system.

Technology

This new medical imaging system consists of a motion capture system, a robotic arm with an X-ray source and a separate robotic arm with a flat-panel image detector. The patient, outfitted with motion capture markers, moves freely during the analysis, performing normal dynamic activities like walking, stair-climbing, and lifting.

The motion capture system tracks the moving patient in real-time and passes patient locations and trajectories to the robot controllers. The robot controllers then coordinate the separately-mounted X-ray source and detector to record joint movements and achieve the desired radiographic image capture. By mounting the X-ray source and detector on separate robotic arms, it is possible to track virtually any part of the body during motion. This technology will facilitate research and diagnosis in human joint mechanics and will serve as a test bed for new dynamic image-based diagnostics in all areas of clinical orthopedics.

Market Potential

Thirty-seven million Americans sustain musculoskeletal injuries annually, and thirty-seven million Americans suffer from chronic musculoskeletal impairments. Joints are most commonly affected by these injuries and the related medical costs are estimated to be \$215B annually.

Strategy

In the United States, there are 7,300 computed tomography (CT) facilities that perform 50 million scans a year. X-Ray Robotics plans to eventually replace these scanners with their technology. CT facilities currently replace scanners every 4 years.

Since our company is at the early formation stage, the market research, go to market strategy and the financial plan are still under development.

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Management Team

Dr. Frank Bova - Co-Founder

In 1985, Dr. Bova began a collaborative project that was responsible for establishing the University of Florida's radiosurgery program. Since its inception, this program has treated more than 2,500 radiosurgery patients. In 1990, Bova received the University of Florida College of Medicine's Faculty Research Prize in Clinical Science for his work in the development of the University of Florida's Stereotactic Radiosurgery system. His work has resulted in 8 patents dealing with both mechanical and computer systems associated with radiosurgery and image guided procedures.

Dr. Scott Banks - Co-Founder

Dr. Banks received his Bachelor of Science and Master of Science degrees in Biomedical Engineering at Case Western Reserve University. He received his Ph.D. in Mechanical Engineering at Massachusetts Institute of Technology. He is currently an assistant professor of Mechanical and Aerospace Engineering at the University of Florida.

Kevin Bowles - Interim Chief Executive Officer

Mr. Bowles has 20 years of experience as an entrepreneur, management consultant, venture capitalist and investment banker with proven success in starting and growing emerging and growth companies. He was the CEO and founder of Aklia Digital Media Company, a digital media company providing consumer-based video on demand through web/mobile platforms and a social networking platform. Bowles successfully developed the business plan and built the company after raising \$1.8 MM in 13 months. Additionally, Bowles was interim COO of Janus Development Group, creator of SpeechEasy, a medical device used to mitigate stuttering.

Ron Harman - Interim Chief Technology Officer

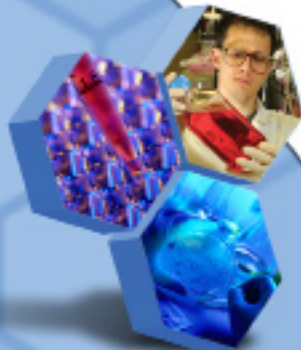
Mr. Harman has spent the past 16 years conceptualizing, developing and delivering technology and software solutions. In a \$30MM venture-backed software company, Harman oversaw all aspects of the technology vision from inception to delivery. Harman lead the company through a sale and was the sole executive retained to integrate and grow the business.

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