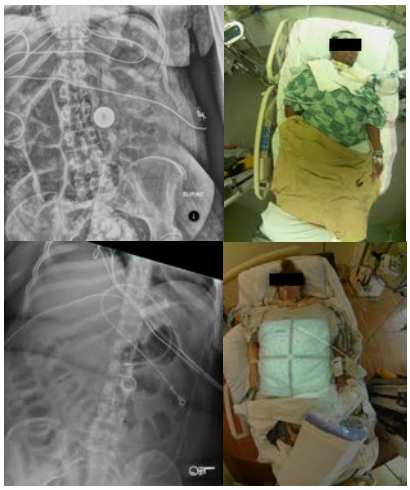
Camerad™ Technologies, LLC

See Your Patients, Not Just Through Them



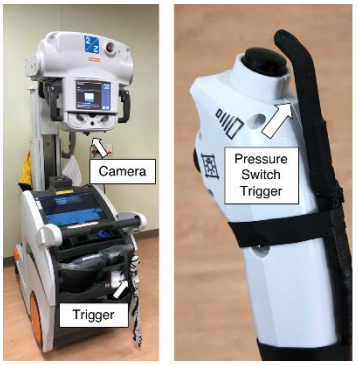
Wrong-patient error not initially noted on serial radiographs. Photos clearly showed the differences. The photos were not only used to detect the error, but also helped identify the correct patient to whom the erroneously filed radiograph belonged.

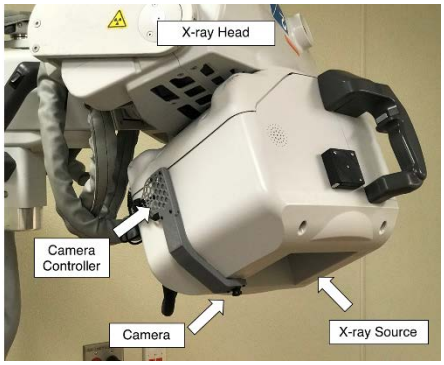
Pitch: Camerad, through its patient camera system (PatCam™), permits automatic, point-of-care acquisition of patient photos along with medical imaging studies. PatCam's **value propositions** are in: 1) detecting wrong-patient errors before they cause serious patient harm and consequent economic damages, 2) increasing interpretation efficiency and confidence by providing image-related clinical context, and 3) reconnecting radiologists with patients to provide patient-centered care.

Pain Point: Despite use of Joint-Commission mandated dual-identifier methods, wrong-patient errors continue to occur in Radiology. In 2009, in the State of Pennsylvania alone 196 wrong-patient errors in Radiology resulted in serious harm to patients.

The Solution: PatCam provides an intrinsic, easily acquired identifier in the form of point-of-care photographs at the time of medical image acquisition. Our prior studies show significantly increased error detection rates with photos. Technology is currently implemented clinically at a major medical center.

How does it work? PatCam can be easily retrofitted to existing radiology equipment. Initial clinical implementation was successful with the most difficult use case, mobile/portable radiography machines. These smart cameras are triggered simultaneously with the x-ray machines, communicate with PACS through an integration server using hospital Wi-Fi to ensure that the photograph is sent by a patented technique to the correct radiography study. NO technologist involvement or workflow changes needed.





The Competition: Existing identification techniques using intrinsic biometric identifiers such as retinal or palm vein scanners, and fingerprint detectors are all intrusive; PatCam works non-intrusively capturing photos from a distance. Other identification techniques such as barcode readers and RFID devices use assigned, extrinsic identifiers, which are not unique to the patient. Additionally, PatCam provides image-related clinical context and can reconnect radiologists with patients increasing physician focus; other techniques cannot do this.

Market Opportunity: Approximately 300K existing medical imaging devices (X-ray, CT, US, MRI) in the US. Total addressable market for retrofitting these: >$450MM. Additionally licensing agreements with equipment vendors will be pursued for incorporating cameras in new imaging devices.

Intellectual Property: Core technology patented through Emory Univ. (US Pat. 9355309). Camerad is negotiating with Emory for exclusive license, which will provide an unfair competitive advantage.

Ownership/Team: Srini Tridandapani, PHD MD MBA, an electrical engineer, practicing radiologist, and entrepreneur, is a co-founder and CMO. Pamela Bhatti, PHD MSc, an electrical engineer, translational researcher, and entrepreneur, is a co-founder and COO. Carson Wick, PHD, an electrical engineer with extensive hardware/software/PACS development experience, is the CTO.

Current/Prior Funding: • NIH/Atlanta Clinical and Translational Sciences Institute ($25K) • Georgia Research Alliance ($50K) • NSF I-Corps ($50K) • Coulter Foundation ($60K) • Emory Univ. ($60K) • NSF SBIR Phase I ($225K) • NIH/NCATS SBIR Phase I ($225K). **Pending Grants:** NSF SBIR Phase II ($750K).

Clinical context, diabetic foot ulcer on 3rd toe shown on point-of-care photo.