

Near Infrared Imaging

www.nearinfraredimaging.com

www.vein-eye.com

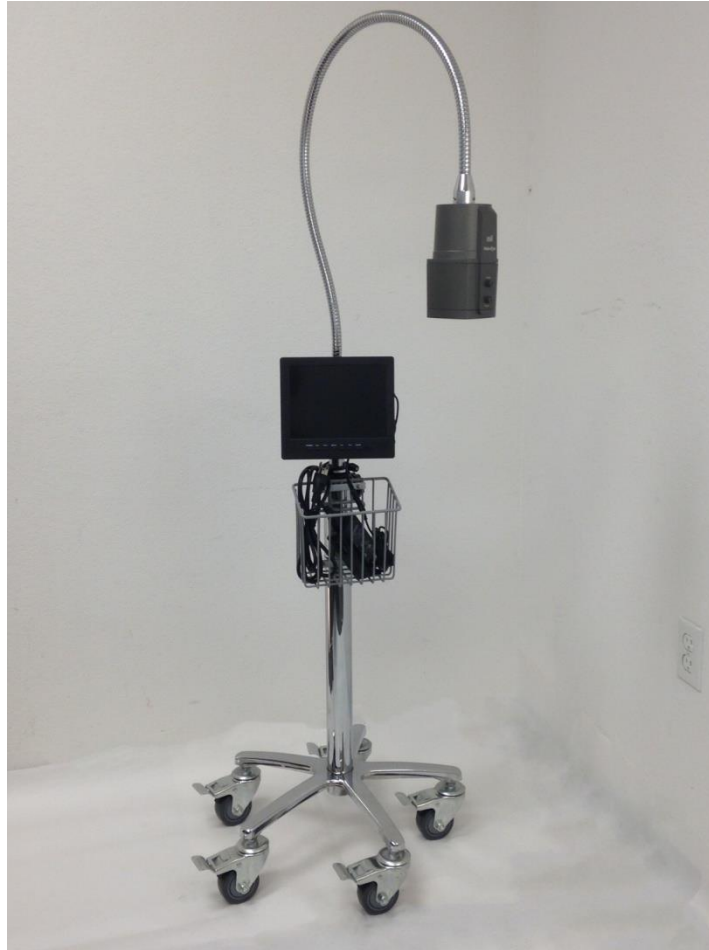
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Vein-Eye® – Hospital Cart

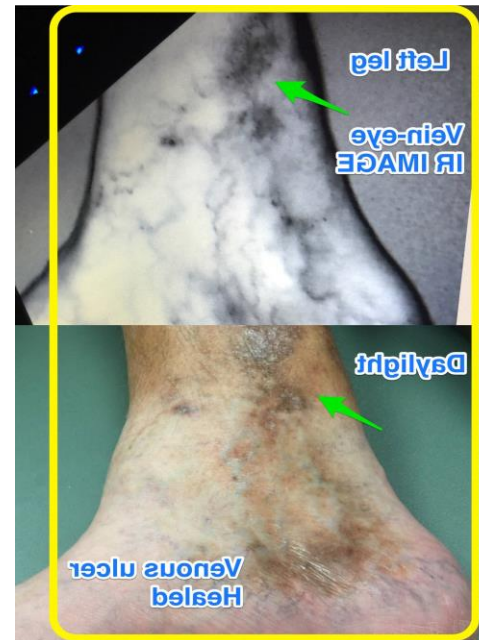


Background

- ▶ Near Infrared Imaging (NII) incorporated in September, 2013, and is a “Corporation In Good Standing” with both the Commonwealth of Massachusetts and the State of Delaware.
- ▶ Near Infrared Imaging, Inc., is owned in part by:
 - ▶ The Regents of the University of California (UC) - <http://www.ucla.edu/>
 - ▶ The City University of New York (CUNY) - <http://www2.cuny.edu/>
 - ▶ Lawrence Livermore National Laboratory (LLNL) - <https://www.llnl.gov/>
- ▶ NII’s Vein-Eye® was released in 2014 for sales and is presently in over 40 countries with great success, installing systems in over 40 countries within six (6) months.
- ▶ The Vein-Eye® is FDA registered, has the CE Marking, has been certified by Intertek for the IEC 60601 3rd edition.
- ▶ The Vein-Eye has had only two (2) technical support requests in two (2) years.

Images of varicose veins with, and without, the Vein-Eye.

- ▶ Below is a video of the Vein-Eye, during sclerotherapy, performed by a Cardiologist, Dr. Srivatsa.
- ▶ <https://www.youtube.com/watch?v=AZGf-QsanB8&feature=youtu.be>



Vein-Eye CARRY

- ▶ The future for vein illumination lies with NII and the new **Vein-Eye® CARRY**.
- ▶ Below is an Asian patient using the new Vein-Eye CARRY camera.
https://www.dropbox.com/s/yd7i5dd7f7fnb6u/James_Video_20170411.avi?dl=0
- ▶ The new Vein-Eye CARRY only weighs 3-4 lbs. and is able to be carried into the home or throughout a hospital or clinic.
- ▶ Below are the Vein-Eye CARRY prototypes attached to a chair with a very strong clip, standing on a fixed stand on a table, and connected by means of a suction cup.



Demand for the Vein-Eye CARRY

- ▶ There are 30,000,000 – 40,000,000 vein punctures everyday worldwide.
- ▶ And, there are an additional 500,000 IV placements annually by EMS in the USA.
- ▶ Care delays occur in approximately 25 percent of all patients, regardless of care setting due to the inability to establish IV access.
- ▶ One in three attempts result in failure in adults, and one in two attempts fail in pediatrics.
That translates to 50% failure in pediatrics.
- ▶ The failure rate of vein punctures ranges from 10% to 40% with critically ill patients, where time is of the essence and vein punctures are challenging.
- ▶ Drawing blood or placing an IV can be dangerous to both the patient and healthcare practitioner if the patient has Ebola, AIDS, SARS, Measles, Chicken Pox or Tuberculosis.
- ▶ **Industry forecasts are that “image guidance systems” will increase the success rate of IV placements in difficult patients by 50%-80%.**

Demand for the Vein-Eye CARRY

- ▶ Image guided systems for vein punctures save the average USA hospital \$400,000 annually.
- ▶ Below are a pediatric unit and a chemotherapy ward, where hospital carts are ineffective.
- ▶ There are 2.7M vein punctures every day in the USA.



- ▶ In addition, there are 500,000 vein puncture attempts performed by EMS annually in the USA – with first attempt miss rate of 30%.
- ▶ Nine of ten patients admitted in hospitals receive infusion therapy during the course of their stay for therapeutic or diagnostic purposes. Improper infusion practices may lead to complications and an increase in the duration of the hospital stay.

Home Infusion Therapy – need for the portable Vein-Eye CARRY

- ▶ The home healthcare market is ready to explode. And, the Vein-Eye CARRY will be the only portable and lightweight solution
- ▶ http://www.philly.com/philly/health/topics/HealthDay706238_20151224_Patients_Can_Self-Administer_IV_Antibiotics_at_Home_Study.html
- ▶ THURSDAY, Dec. 24, 2015 (HealthDay News) -- Patients can be taught to safely self-administer long-term intravenous antibiotics at home, without the help of a health care worker, a new study suggests. Some infections require treatment with IV antibiotics for six weeks or more.
- ▶ The patients who self-administered had a 47 percent (47%) lower rate of hospital readmission over 30 days.
- ▶ <https://www.medgadget.com/2017/08/home-infusion-therapy-services-market-to-witness-exponential-growth-by-2025.html>
- ▶ **Home Infusion Therapy Services Market to Witness Exponential Growth by 2025.** Home infusion therapy services address the growing demand of infusion devices in the homecare market and the increase in the elderly population using the infusion devices for long term.

Vein-Eye CARRY – Lou Gehrig's Syndrome and the prevention of infiltration and extravasation

- A new FDA-approved drug, Radicava, demonstrated conclusively in testing that the medicine reduced the rate of decline in physical ability in **patients with ALS** by 33%.
- *“Once available, Radicava will be administered through an IV, which patients can receive at an outpatient center, at their own homes, or at a healthcare provider's office.”*

The #1 cause for medical malpractice lawsuits, when a patient is receiving medicine from an IV, is due to the inadvertent leakage of medicine from the intended vein into the surrounding tissue.

- Infiltration and Extravasation can cause a mild skin reaction, severe necrosis, infection, complex regional pain syndrome and acute limb compartment syndrome (ALCS).
- The Vein-Eye CARRY will monitor the infusion, display an image continuously on an HD monitor or a Tablet, and allow the healthcare practitioner to prevent leakage.
- The Vein-Eye CARRY Tablet can be attached to a chemotherapy chair in the hospital, to a table or a desk in the home, or to a bed in the home or in the hospital.

Competitive advantages of the Vein-Eye CARRY

- ▶ The MSRP of the leading selling vein illumination devices range from \$4,000 to \$9,000.
- ▶ The MSRP for the new Vein-Eye CARRY will be in the \$1,599 - \$1,999 range.
- ▶ The Vein-Eye CARRY will perform significantly better than the competition when the patient has hair on the hand or arm, dark skin, or collapsed veins.
- ▶ The Vein-Eye CARRY is able to be easily carried to the home, to the nursing home, or placed in an ambulance. It weighs a total of 4 lbs and can attach to any chair, bed or table.
- ▶ The Vein-Eye CARRY will obsolete the competition due to our platform and our ability to implement Artificial Intelligence (AI) and Deep Learning (DL).
- ▶ The Tablet allows us to offer software “upgrades and improvements” and to implement Artificial (AI) and Deep Learning (DL). This has already led to some breakthroughs in [medical imaging](#).
- ▶ Deep Learning allows the Tablet to learn everything vein illumination and to teach itself how to complete the task better and better.

The road to profits and Exit Strategy – Vein–Eye CARRY

Year	Unit Sales	Total Revenue	NII 's Profits	EPS
1	5,000	\$6M	\$2M	\$.40
2	10,000	\$12M	\$5	\$.80
3	30,000	\$36M	\$15M	\$2.40
4	100,000	\$109M	\$20M	\$4.00
5	200,000	\$180M	\$50M	\$10.00

- ▶ **“According to a survey by FIND/SVP Inc’s Advanced Analytics division, the home testing kit market is worth \$4.5 billion, even though over 8 million new blood pressure-monitoring devices are sold every year.”**
- ▶ **Shares are being offered at \$1.00/share.** The shares have no restrictions. There are no Preferred shares or Warrants. NII has 4M Authorized shares with about 3M Outstanding shares. Investors are Mom and Pop investors – no VCs or Angels.
- ▶ **Exit Strategy:** NII continually communicates with strategic partners. Our goal is to complete a merger, acquisition or an IPO in the next 24 – 36 months. Our goal is that the investors will realize a generous ROI, in excess of industry standards, in a short period of time.

Portfolio of future products to be developed with the profits from the Vein-Eye CARRY

2018 – 2019 Optical Ultrasound Tomography™ (OUT)

- ▶ Optical Ultrasound Tomography™ will detect real-time bleeding in the skull at the scene of the injury. The technology is non-contact photoacoustic imaging. The technology was developed at Lawrence Livermore National Laboratory
- ▶ OUT will send the images of bleeding in the brain to a waiting neurosurgeon from the battlefield, sports venue, automobile accident or home.

2018 – 2019 NII BIO

- ▶ The NII-BIO is non-contact vein-recognition biometrics using multiple modalities (fingers, palm, geometry of hand, finger and palm veins) for secure identification and authentication.
- ▶ The technology was developed at Lawrence Livermore National Laboratory, the patent application has been filed, and NII has exclusive rights
- ▶ NII has received rave reviews from the Dept. of Defense and the Combatant Technology scouts for its ability to image veins and its plan to develop the NII-BIO.

The Team

Michael Feeney, President, M.S., Northeastern University, Boston, MA, has twenty (20) years sales and sales management experience with optics in medicine and optical networking.

Mikhail Fridberg, MSEE, has experience in all phases of optical hardware projects including requirements definition, system design, specification, component design and Implementation and algorithm development.

Dr. Madan, Medical Consultant, Neuroradiologist and Assistant Professor, Tufts University School of Medicine, Boston, MA, specializes in pediatrics and advises on healthcare.

[http://www.tuftsmedicalcenter.org/OurServices/Radiology/Neel Madan](http://www.tuftsmedicalcenter.org/OurServices/Radiology/Neel_Madan)

Ross Goldman, Financial Consultant, MBA, Babson College, Wellesley, MA, assists in the preparation of business plans, projections, tax returns and risk management.

Mitchell Cohen, Queens College, NY, Financial Consultant, has served as both CEO and CFO of companies and has been part of the closing bell ceremonies on both the NASDAQ and NYSE. www.linkedin.com/in/mitchm

Ralph George, PhD, Political Science, George Washington University, is a consultant for the military and government sectors.