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Nathaniel McCaffrey's experience on Healthcare and Medical Projects

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Highlights

- ✓ expert in complex high speed electronic imaging and communications systems
- ✓ built and fielded disruptive medical products compliant with 13485 and GMP
- ✓ directed multi-disciplinary teams of over 85 engineers spread across the world
- ✓ strategic leader taking medical products from concept through clinical trial and production
- ✓ serial success roadmapping business and technical goals, managing budgets and staff
- ✓ over \$85 million in direct revenue generated from intellectual property licensing and acquisition
- ✓ PhD research in hyperspectral imaging systems
- ✓ awarded 20 US patents (26 additional patents pending)

Overview

Nathaniel McCaffrey has been developing advanced electro-optic systems to extend the quality of healthcare for over 15 years. He has provided increasingly responsible leadership roles on projects in the fields of radiography, endoscopy, microscopy and hyperspectral imaging radiography.

Guided by integrity, the effective and reliable systems he and his teams have developed support physicians in extending the reach of less invasive care through telepresence. His experience in commercial product development and in highly regulated military and automotive applications provide critical advantage and value for next generation medical device products utilizing new crossover technologies.

Program Successes

- Founded and directed the Photonics Imaging Center at Boston Scientific and was responsible for overall image quality and imaging product development corporate wide. He developed image quality standards and validated specifications with clinicians through extensive in-field pre-clinical and clinical environments.
- Was a member of the DICOM working group driving image quality validation and standards for endoscopy across the industry.
- Developed a 360X360 breakthrough CMOS sensor for radiography with Cares Built Medical. The sensor was buttable to provide a 49 million pixel array matched in size to a chest x-ray film plate.
- CEO of business utilizing breakthrough technology to commercialize a non-ionizing method of imaging teeth and gums with multi-spectral visible/SWIR sensing and algorithms.
- Developed thermal imaging cameras and software to enhance the detail in severe burn analysis and radiation placement for Beth Israel Hospital NYC.
- Designed and implemented an early hyperspectral MWIR imaging radiometer for detection of chemicals over a scanning area and for the determination of rapidly changing temperature profiles. This was a pioneering design utilizing tellurium based AOTF filtering.
- Designed experiments at the New Jersey Medical School and Veterans Administration Neuro-Behavioral Unit to study circadian rhythms and PTSD under Dr. Benjamin Natelson MD.
- Led team on electronic development of remote and covert biometric acquisition of the iris.
- Network of many universities, research centers and global design and supply chains to rapidly and effectively bring very advanced technologies to safe and effective products.



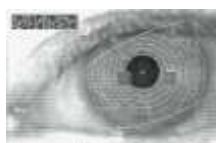
Dental Imaging System.



World's first disposable endoscope medical device



CMOS Medical Imager



References

Michael Glynn- President Boston Scientific Endovations (currently VP Sales at Genzyme)

Al Couvillon- CEO Serpentis and former VP R&D Boston Scientific