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U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
 National Institutes of Health



National Institutes of Health Commercialization Assistance Program
 (NIH-CAP)

Company Profile

Industry Sector: Bio-Medical Imaging

Company Overview: Micron Optics, Inc. (MOI) is a vertically integrated company that conducts applied research, development, manufacturing, marketing, and sales in fiber-optic technology. With over 17 years of dedication, Micron Optics has generated best-in-class tunable technologies to enable a suite of innovative products including tunable filter and fiber grating sensor components, swept laser and optical sensing modules and instruments for use in fiber-optic sensing systems, optical networks, and bio-medical diagnostics.

Target Market(s): Diagnostic imaging for Healthcare, Industrial Manufacturing, and Defense & Security.

Imaging	Resolution	Depth	In Vivo	Imaging Speed	Source of Contrast	Cost
Ultrasound	500µm	10-20cm	Yes	10-20 frame/sec	Acoustic Scattering	\$\$
OCT	2 - 50µm	2 - 5mm	Yes	5-32 frames/sec	Optical Scattering	\$\$
MOI OCT	Superior	Superior	Yes	Parity	Optical Scattering	\$

Key Value Drivers

Technology: MOI's innovative laser system forms the core platform in swept source optical coherence tomography (OCT) which offers 100 times better resolution than ultrasound technique, and can enable various pre-clinical and clinical applications including in-vivo diagnosis of pathological diseases and early cancer formation in human tissue, 3-dimensional mapping, realtime intrasurgical guidance, drug discovery, and genomics.

Competitive Advantage: MOI provides the highest performance swept laser technology with wellprotected IPs, the key ingredient in the OCT imaging system. In addition to the capability to provide high-resolution and deep imaging, the laser's inherent fiber-optic platform is ideal for compact embodiment and robust field deployment.

Plan & Strategy: Market entry and validation in ophthalmic, cardiovascular, and gastrointestinal imaging by offering laser modules and systems, while developing OEM opportunities and joint ventures with system integrators.

*Technology funded by the NCEI and being commercialized under the NIH-CAP.

Management

Leadership:

Jeff Miller, President and CEO, 18 years experience in Fiber-Optics industry as a program manager and company executive.
 Andrei Csipkes, COO and Executive VP, 17 years experience in Fiber-Optics industry as an operations manager and company executive.
 Kevin Hsu, Ph.D, VP Research & Advanced Technologies, 23 years experience in Fiber-Optics & Laser industry as a technology & market developer.
 Tom Graver, Director of Sales Marketing, 16 years experience in technology sales
 Todd Haber, Director of Product Development, 11 years experience in Fiber-Optics & Laser industry as a product developer.

Product Pipeline

	2008	2009	2010
Swept Laser Module	Prototype Stage	Market Ready	
Swept Laser System	Prototype Stage	Market Ready	
OCT Engine	R&D Stage	Prototype Stage	Market Ready

