



The Vision Science Theme

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Goals of Vision Science Theme

- **Develop Novel Ophthalmic Instruments**
- **Advance Vision Science**
- **Increase Accessibility of AO to Scientists and Clinicians**
- **Demonstrate the Value of Adaptive Optics for Eye Care**
- **Educate**

Develop Novel Ophthalmic Instruments Equipped with AO

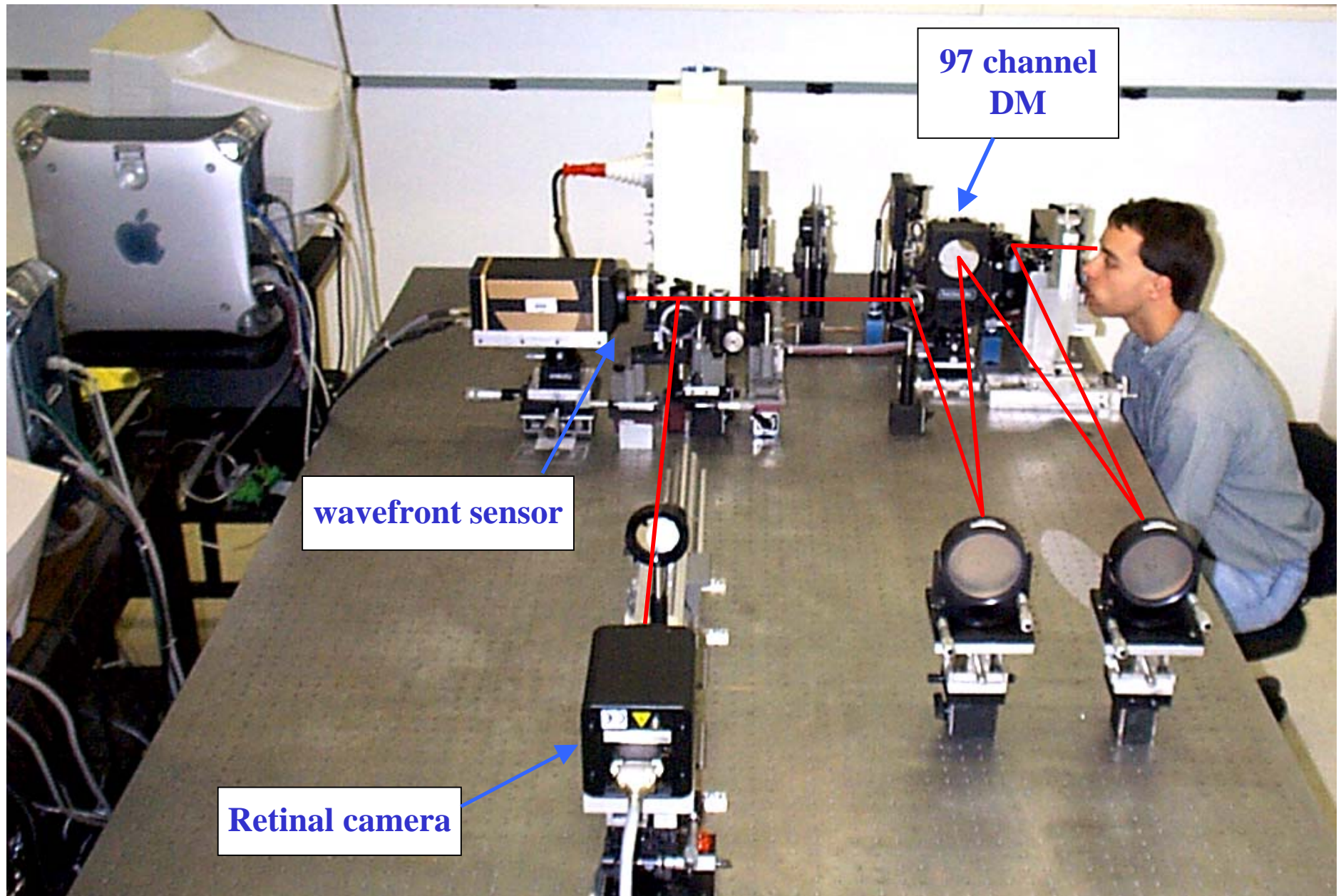
**Adaptive Optics Ophthalmoscope
University of Rochester**

**Adaptive Optics Scanning Laser Ophthalmoscope
University of Houston**

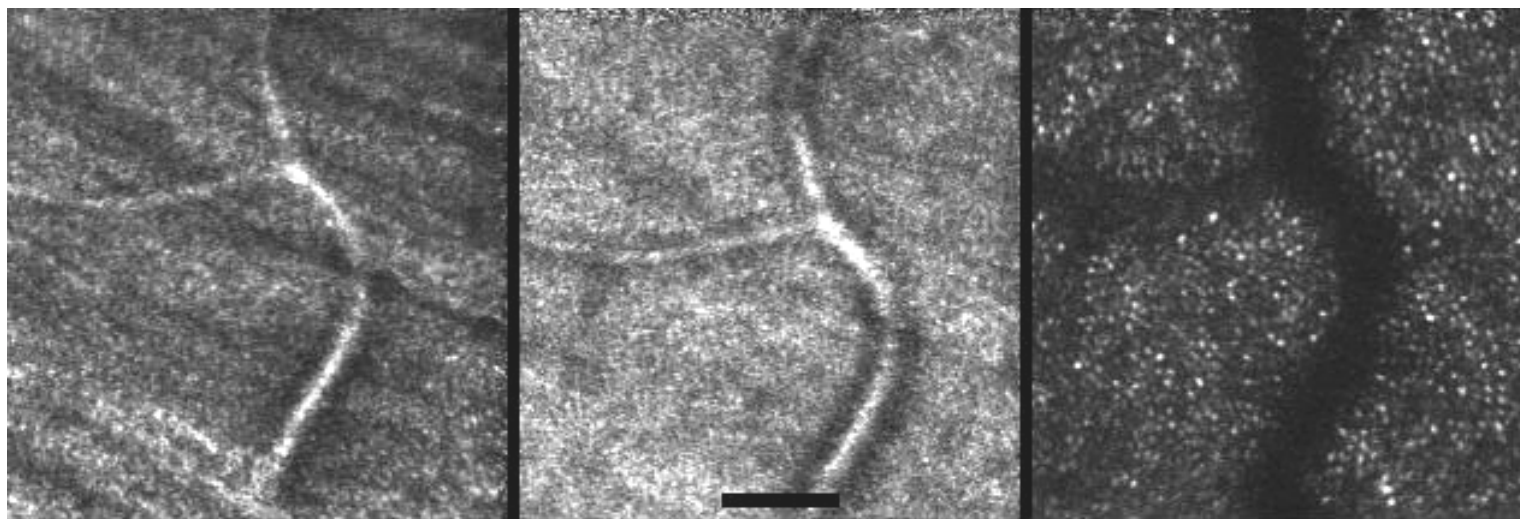
**Coherence Gated Retinal Camera
Indiana University**

**Adaptive Optics Phoropters
Lawrence Livermore National Laboratories**

Rochester 2nd Generation Adaptive Optics System

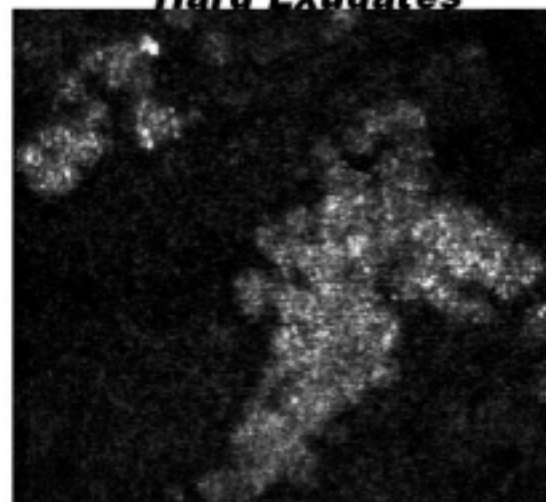
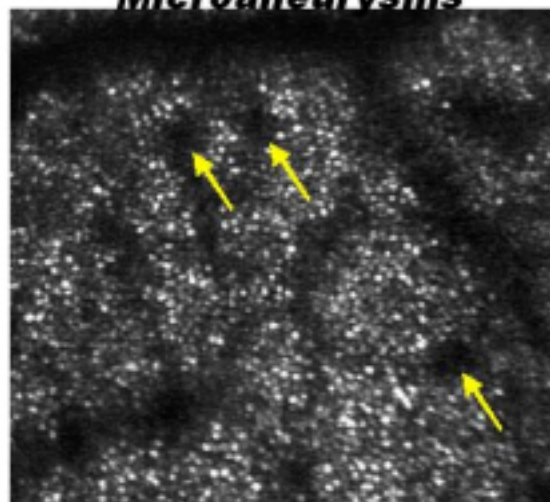


Houston Adaptive Optics Scanning Laser Ophthalmoscope



Microaneurysms

Hard Exudates



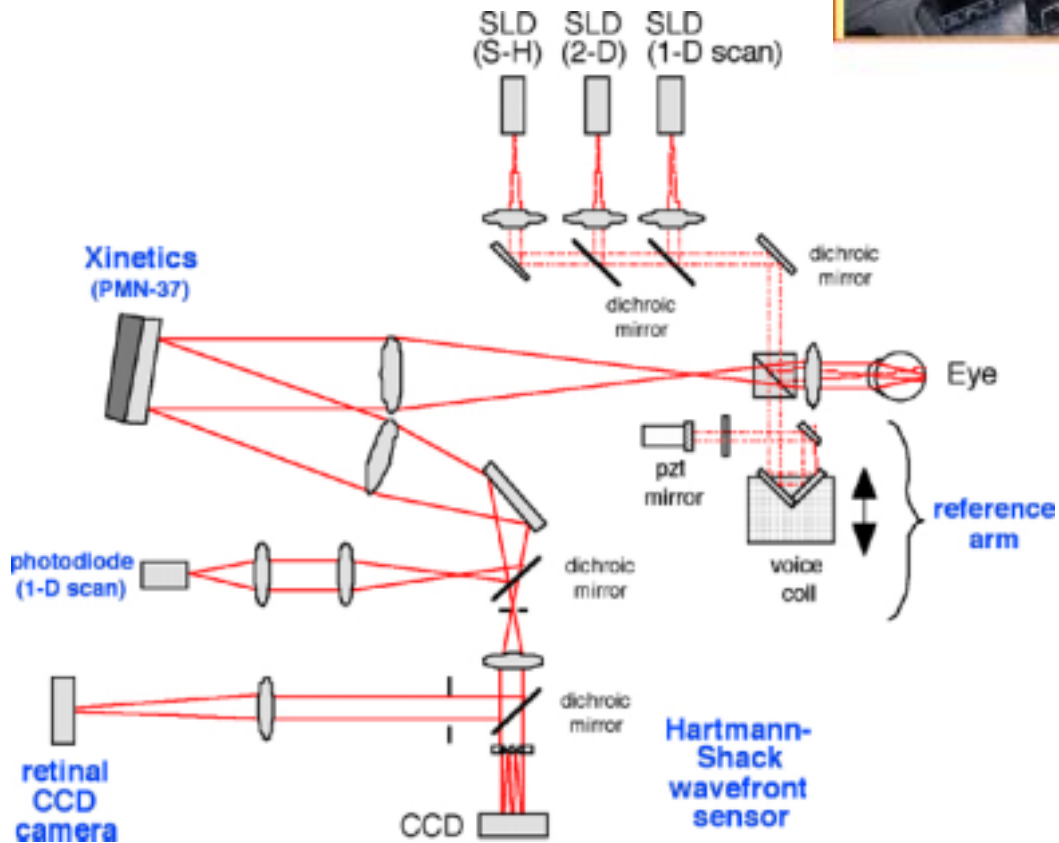
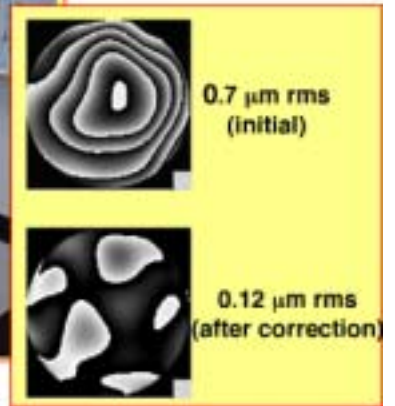
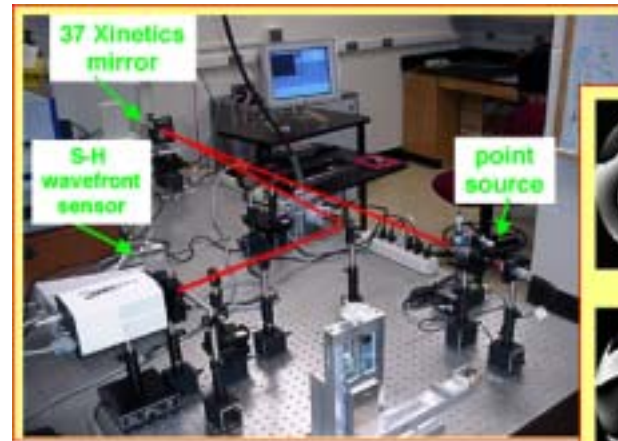
2.5 deg nasal

100 μ m

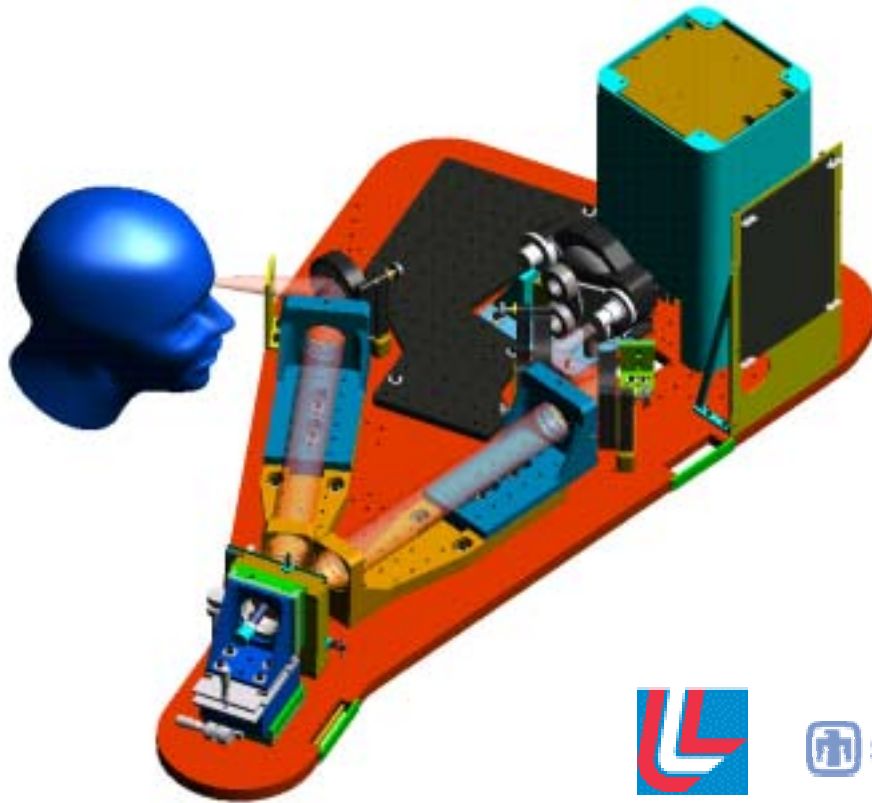
2.5 deg temporal

AO Coherence Gated Camera

Don Miller
Indiana University



MEMS Adaptive Optics Phoropter



 Sandia National Laboratories

UNIVERSITY OF ROCHESTER



Center for Adaptive Optics: MEMS Mirrors for Vision Applications

