DICOM in Ophthalmology

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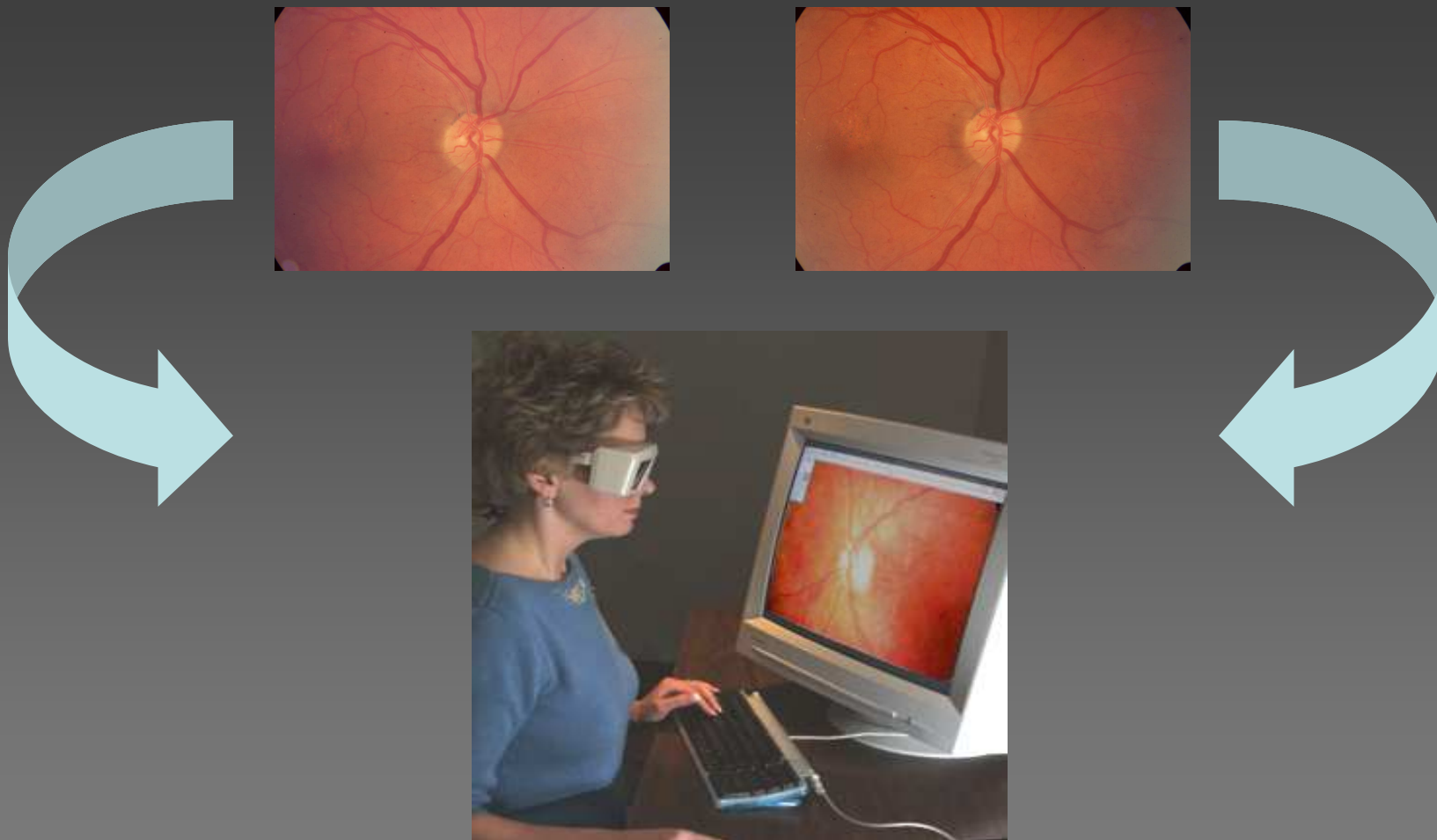OF OPHTHALMOLOGY
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Overview

➢ Ophthalmic imaging needs

➢ Historical Perspective

➢ Organizing the Effort

➢ Priorities

➢ State of DICOM in Eyecare

➢ Current Projects

Ophthalmic imaging

➢ Many devices, many applications

➢ Primary digital acquisition broadly used

➢ Generally no standardized way to exchange digital images

➢ Ophthalmic EMR vendors

Special considerations

➢ Clinic centric

➢ Image acquisition context

➢ Angiography

➢ Stereoscopic views

➢ Bilateral imaging for comparison

➢ Clinical trials

➢ Centralized or distributed services

Stereoscopic Display

Ophthalmic imaging examples

Retinal Imaging
   color photography
   red-free imaging
   angiography
   optical coherence topography

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Retinal imaging examples

QuickTime™ and a
TIFF (Uncompressed) decompressor
are needed to see this picture.
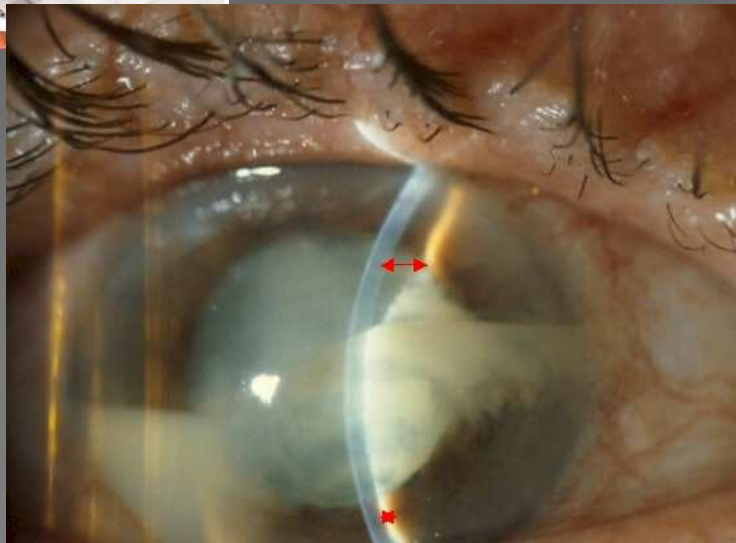
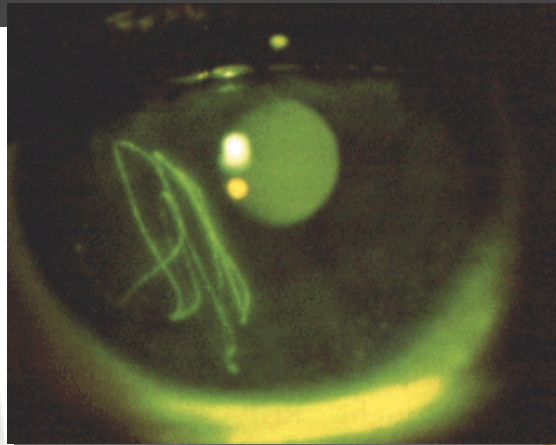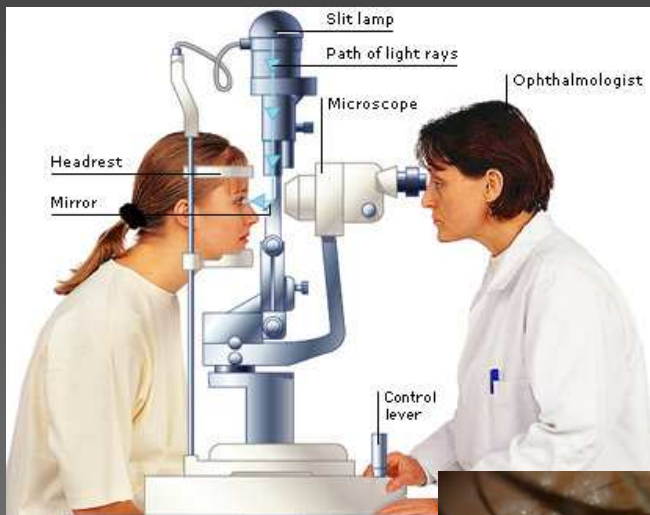# Optical Coherence Tomography

External photography

Slit lamp imaging

Specific Activities

➢ Working Group 9

➢ SNOMED terminology modeling

➢ New IOD work proposals

➢ IHE - multivendor demonstration, profile

IHE at the AAO Annual Meeting

Zeiss	RADinfo Systems	Nidek	Topcon
Zeiss			OTI
OIS	Vist A		PACS Gear
Information	Kowa	Sorna/Etiam	Canon

40'

Pete Kuzmak June 28, 2005

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Participants in IHE Eye Care 2005

AAO Strategic Direction

- enhance existing standards

- membership education

- vendor coordination

- advocacy alignment

State of DICOM 2005

➤ Still in its infancy

➤ Device vendor interest is high

➤ Commitment is still needed

➤ EHR vendor interest is limited

➤ Support is strong at the AAO leadership level

State of DICOM 2005

➢ Secondary capture

➢ Visible light imaging

➢ Ophthalmic photography

➢ Ophthalmic Tomography IOD

➢ Workflow modifications?

➢ Extensions workgroups