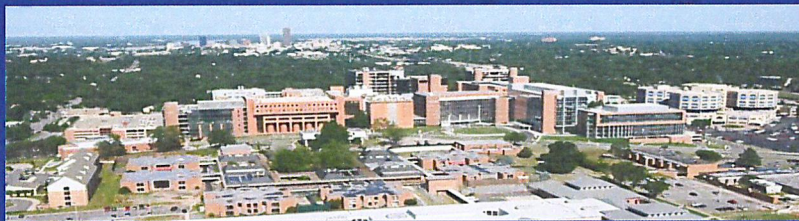


**The Jones Eye Institute
University of Arkansas for Medical Sciences:
World Class Vision Care for
Arkansas and Beyond**

Paul H. Phillips, M.D.
Department Chairman
University of Arkansas for Medical Sciences



1

Ophthalmology Department

Academic Mission

- Clinical
- Teaching
- Research



2

Thanks to a Faculty of Superstars



3

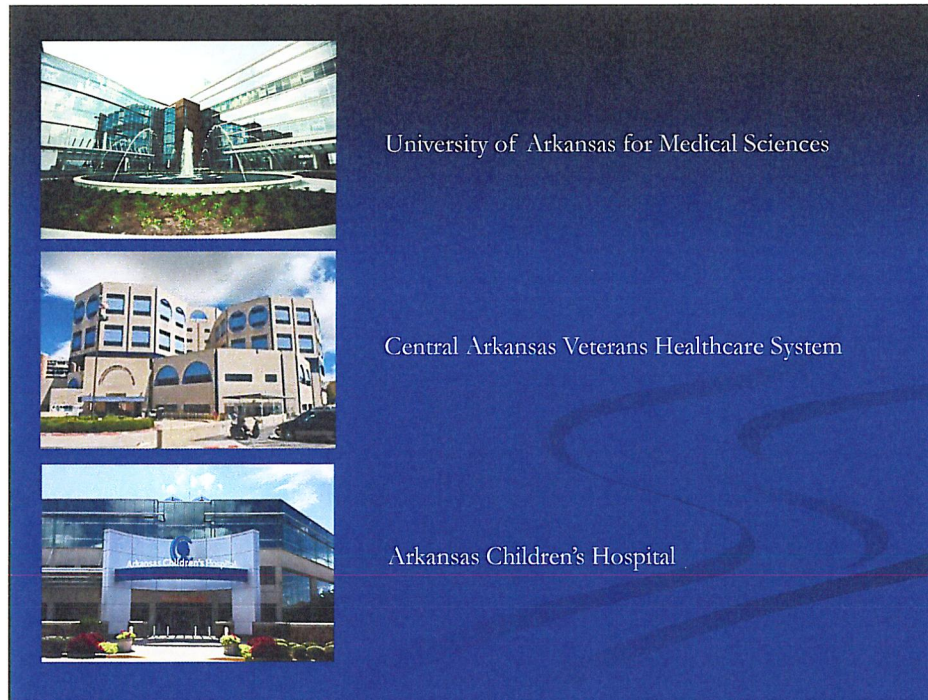
Clinical

Faculty - 26

- Cornea - 2
- Glaucoma - 1
- Neuro-ophthalmology - 3
- Pediatric ophthalmology - 4
- Uveitis - 2
- Retina - 3
- Oculoplastics - 1
- Pathology - 2
- General ophthalmology - 2
- Optometry - 3
- Basic Science - 3



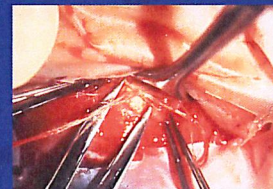
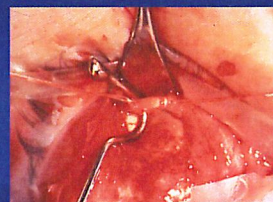
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5

Annual Clinical Volume

- Cataract surgery – 1036
- Oculoplastics – 1040
- Retina - 832
- Strabismus surgery – 305
- Glaucoma – 250
- Cornea - 150
- Clinic visits - >60,000



6

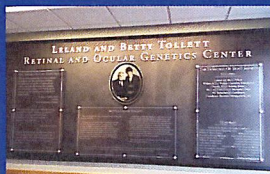
Specialized Services

- Ocular Genetics Clinic
- Outreach Marshallese Gift of Sight
- Outreach Telemedicine for Diabetes
- International Rotation
- Resident Training
- Research

7

The Leland and Betty Tollett Ocular Genetics Center

- Established in 2009
- Concept introduced by Dr. John Shock
- Director – Dr. Sami Uwaydat, M.D.
- Dr. Bradley Schaefer, Director of Medical Genetics, UAMS
- Generous donation from the Tollett family



8

The Leland and Betty Tollett Ocular Genetics Center

- Ophthalmologist
- Geneticist
- Genetics Counselor
- Specialized testing
 - Electroretinography
 - Fluorescein angiography
 - HD OCT



9

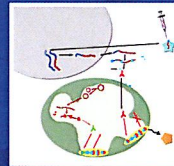
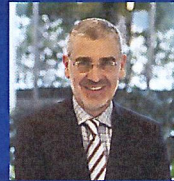
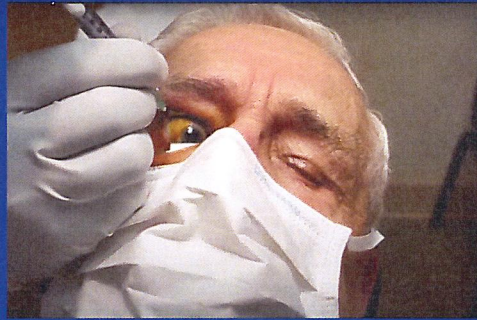
The Leland and Betty Tollett Ocular Genetics Center

Conditions Diagnosed

Leber Hereditary Optic Neuropathy	Marfan Syndrome
Albinism (OCA/OA)	Usher Syndrome
Retinitis Pigmentosa	Neurofibromatosis
Batten Disease	NARP Syndrome
Von Hippel Lindau	Congenital Oculomotor Apraxia
Tuberous Sclerosis	Corneal Granular Dystrophy
Optic Atrophy	Congenital Progressive External Ophthalmoplegia
Leber Congenital Amaurosis	Stickler Syndrome
X-Linked Retinoschisis	Stargardt's Disease
Saunders Syndrome	
Age Related Macular Degeneration	

10

Gene Therapy



11

Clinical Outreach

- Marshallese Gift of Sight
- Telemedicine
 - Diabetic Retinopathy
 - International Rotation

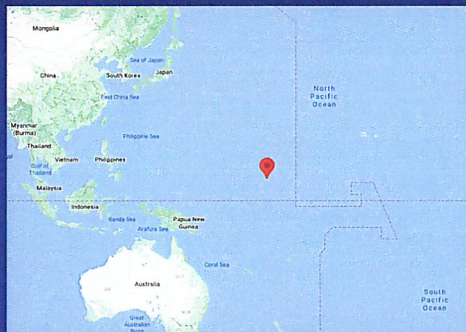
12

Marshallese Gift of Sight Cataractathon



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Marshall Islands



- Pacific Ocean
- Volcanic Islands
- Atolls – ring shaped coral reef
- 70 square miles of land mass

14

Marshallese



- Settled in USA after we detonated >65 nuclear bombs in the 1950s
- Ecosystem damaged
- NWA largest population – 14,000
- Work and live in USA legally
- Limited access to Medicaid and Medicare

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Marshallese



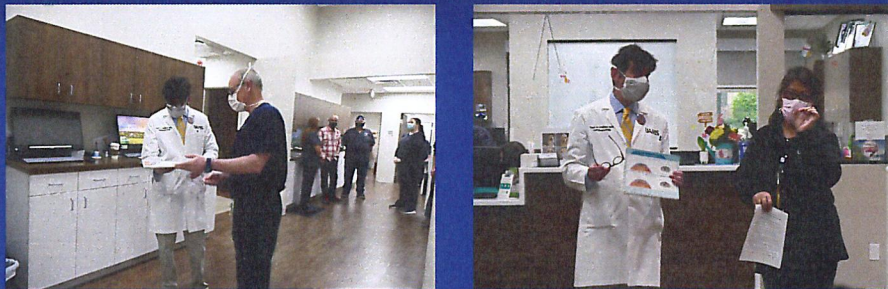
- Unable to afford treatment
- Many have severe cataracts causing blindness rarely seen in USA
- Surgical procedure – ie cataract surgery can restore sight

16

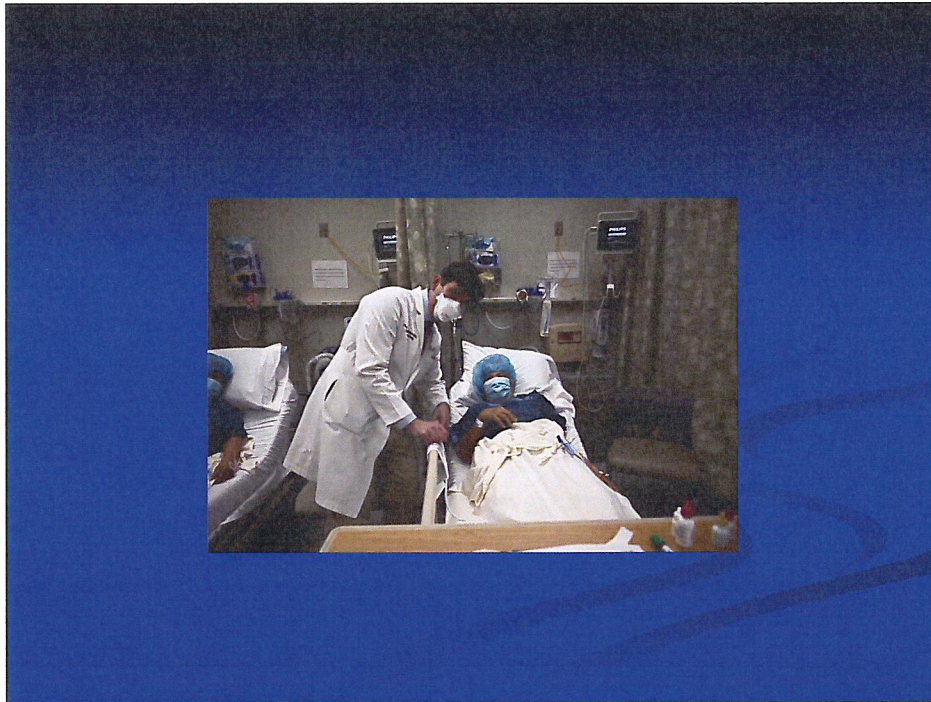
Travel to Jones Eye Institute at UAMS



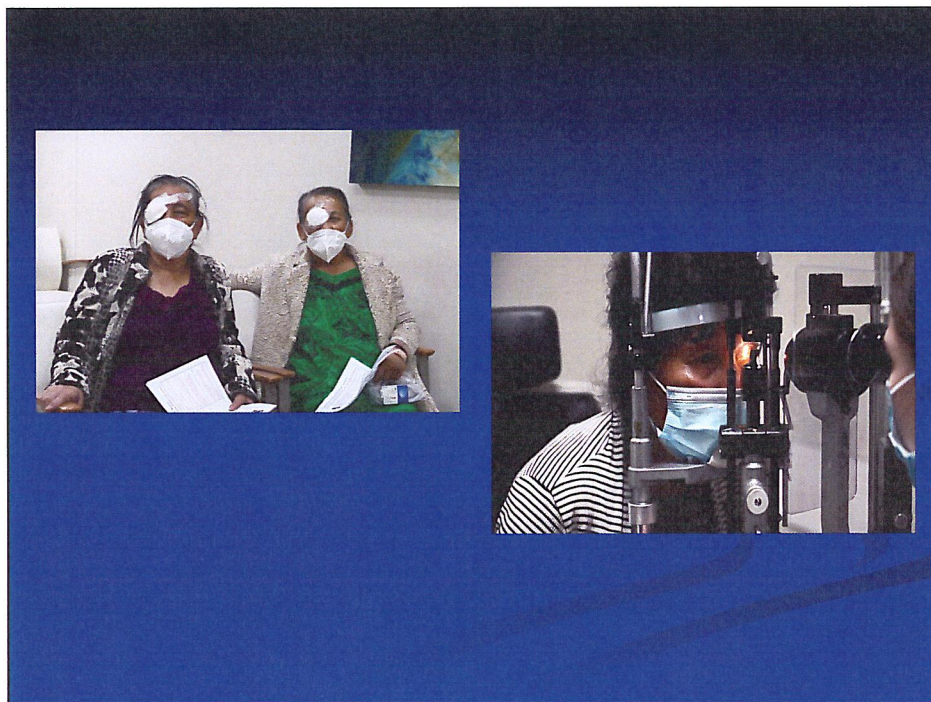
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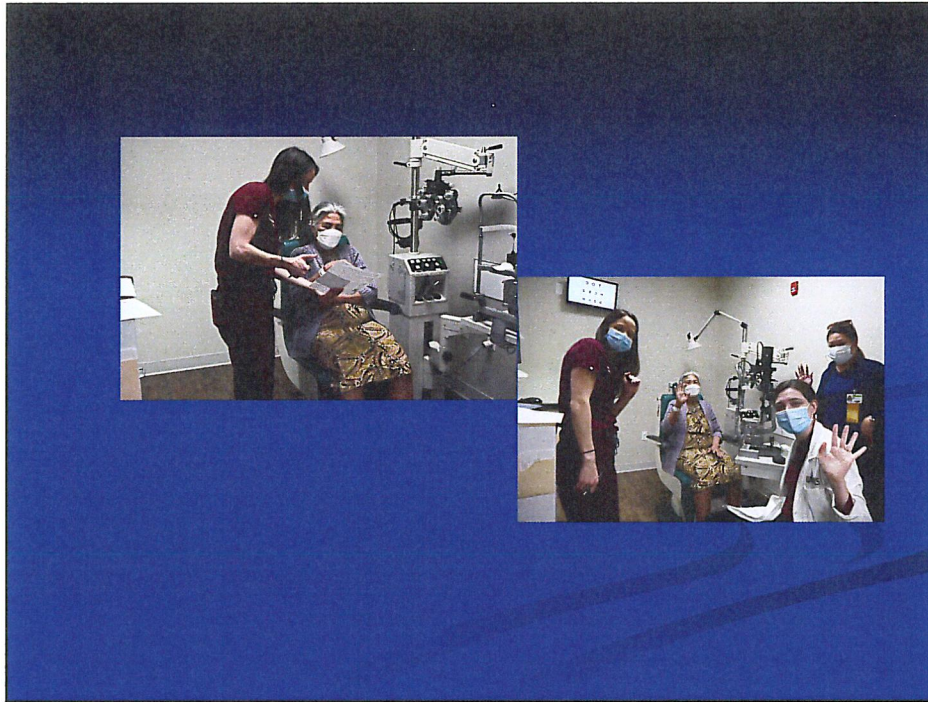
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19



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21



22

Gift of Sight 7.0

> 70 patients treated

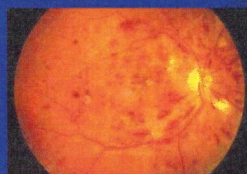


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Clinical - Telemedicine

Diabetic Retinopathy – common cause of blindness adults < 65 yo

- >340,000 Arkansans with diabetes (11% population)
- Treatment best if done early

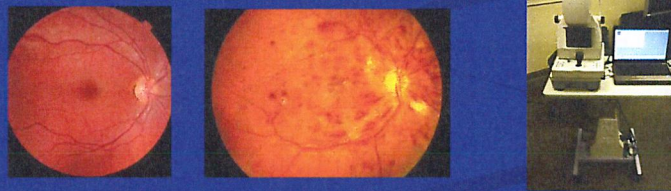


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Clinical - Telemedicine

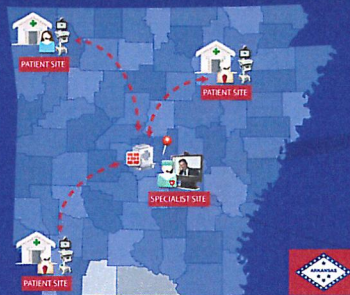
Diabetic Retinopathy – common cause of blindness adults < 65 yo

- 50% of diabetics do not get an eye exam
- Imaging of the retina by PCP will enable many diabetics to will have their retina evaluated



25

Clinical - Telemedicine



26

Telemedicine Diabetic Screening in Arkansas

- February 2019-March 2024
- 1,391 diabetic patients were screened
- 223 (16%) were found to have some level of retinal damage from diabetes
- 389 (28%) were found to have an ocular condition that requires evaluation by an eye care provider
 - Cataract
 - Glaucoma
 - Macular degeneration
 - Retinal scars

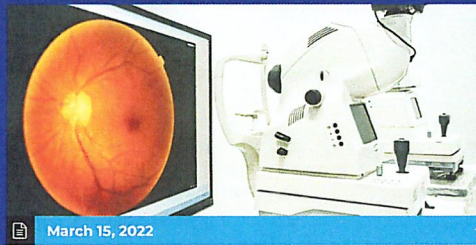
27

Benefits of Telemedicine

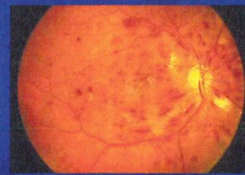
- Improved access to retinal screening for diabetic patients.
- Earlier detection of sight-threatening retinopathy.
- Imager utilizing retinal images to reinforce need for follow-up.
- Opportunity for resident education regarding diabetic retinopathy.
- Reduction in vision loss due to diabetes.

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Artificial Intelligence



AI Analysis of Retinal Photography May Predict Serious Health Issues



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International Rotation

- Guatemala
- Honduras



30

Clinical Education

- Four Resident/Year
- Large variety of patients
- Surgical experience
 - Depth – high volume
 - Breadth – complicated cases
 - Surgical simulation center
 - International rotation
 - Refractive surgery rotation



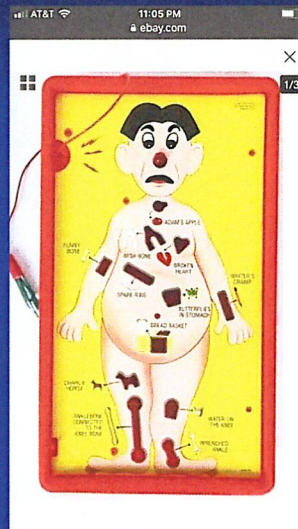
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First Year Resident



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Surgical Simulation Lab



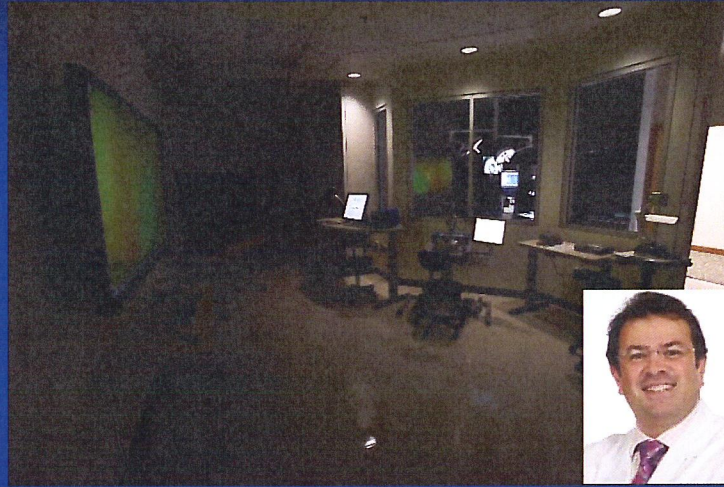
33

Surgical Simulation Lab

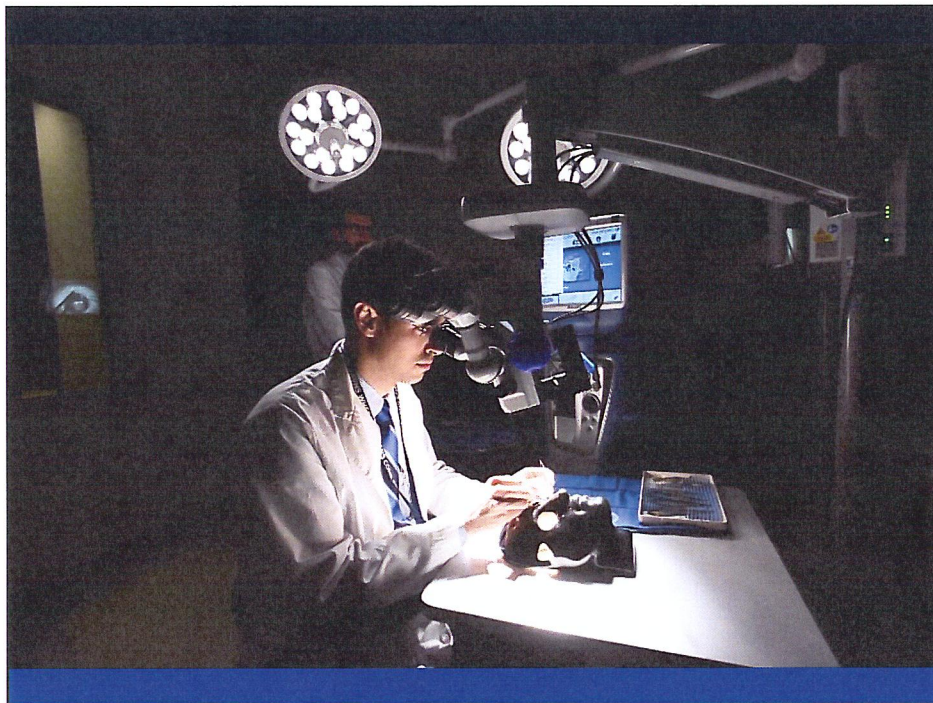


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Surgical Simulation Lab



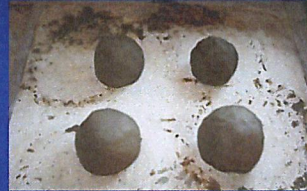
35



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After Residency

- Excellent preparation
 - General ophthalmology
 - Many stay in Arkansas
 - Prestigious Fellowships
 - Duke
 - Bascom Palmer
 - MUSC
 - University of Michigan
 - JEI – Retina, Oculoplastics



37

Clinical Research 2023

- Papers - 62
- Presentations - 42
- Multicentered Clinical Studies - 8
 - Strabismus – adults and children
 - Pseudotumor cerebri
 - HZV
 - Leading enroller - 4
 - Writing Committee - 4



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Research



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Research

Harvey & Bernice Jones Eye Institute
March 6, 2022 · 🌐

Congratulations to our resident Dr Heather Broyles, PGY4, at the University of Arkansas Jones Eye Institute, for being the grand prize winner of the USF + Catar... [See more](#)

CataractCoach Contest Winners

Grand Prize Winner

Dr Heather Broyles
Univ of Arkansas, USA

From the 2022 USF + CataractCoach

CataractCoach 1397: video contest winners: grand prize!
Congratulations to Dr Heather Broyles, an ophthalmology resident at the University o...

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Research

Sort: Research Output	All U.S.	Program	Sort: Research Output	All U.S.	Program	Sort: Research Output	All U.S.	Program
Massachusetts Eye and Ear Infirmary/Harvard Medical School Size: 32 Boston, MA			Washington University/B-JH/SLCH Consortium Size: 10 Saint Louis, MO			University of California (San Diego) Medical Center Size: 12 La Jolla, CA		
Johns Hopkins University Size: 28 Baltimore, MD			UCLA David Geffen School of Medicine/UCLA Medical Center Size: 24 Los Angeles, CA			University of Arkansas for Medical Sciences (UAMS) College of Medicine Size: 10 Little Rock, AR		
University of California (San Francisco) Size: 15 San Francisco, CA			University of Miami/Jackson Health System/Bascom Palmer Eye Institute Size: 21 Miami, FL			UPMC Medical Education Size: 19 Pittsburgh, PA		
University of Pennsylvania Health System/Scheie Eye Institute Size: 10 Philadelphia, PA			Sidney Kimmel Medical College at Thomas Jefferson University/Wills Eye Hospital Size: 24 Philadelphia, PA			University of Iowa Hospitals and Clinics Size: 18 Iowa City, IA		
Oregon Health & Science University Size: 20 Portland, OR			University of Southern California/LAC+USC Medical Center Size: 20 Los Angeles, CA			Duke University Hospital Size: 24 Durham, NC		
University of Michigan Health System Size: 27						Stanford Health Care-Sponsored Stanford University Size: 15		

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Research

Massachusetts Eye and Ear Infirmary/Harvard Medical School Boston Program Size: 36
Johns Hopkins University Baltimore Program Size: 21
University of Michigan Health System Ann Arbor Program Size: 21
University of Pennsylvania Health System/Scheie Eye Institute Philadelphia Program Size: 15
University of California (San Francisco) San Francisco Program Size: 15
UCLA David Geffen School of Medicine/UCLA Medical Center Los Angeles Program Size: 24
University of Miami/Jackson Health System/Bascom Palmer Eye Institute Miami Program Size: 21
University of Southern California/LAC+USC Medical Center Los Angeles Program Size: 20
University of Arkansas for Medical Sciences (UAMS) College of Medicine Little Rock Program Size: 10

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Research



University of Arkansas for Medical Sciences (UAMS) College of Medicine
Little Rock
Program Size: 12



Duke University Hospital
Durham
Program Size: 24



Sidney Kimmel Medical College at Thomas Jefferson University, Wills Eye Hospital
Philadelphia
Program Size: 24



University of Iowa Hospitals and Clinics
Iowa City
Program Size: 18



Washington University (B-JH) SLCH Consortium
Saint Louis
Program Size: 15



Yale-New Haven Medical Center
New Haven
Program Size: 15



UPMC Medical Education
Pittsburgh
Program Size: 18







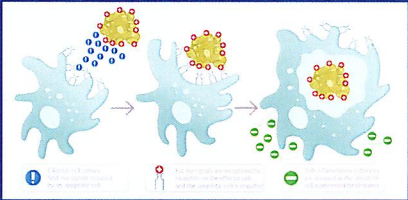

University of California (San Diego) Medical Center
La Jolla
Program Size: 12



University of Illinois College of Medicine at Chicago
Chicago
Program Size: 18

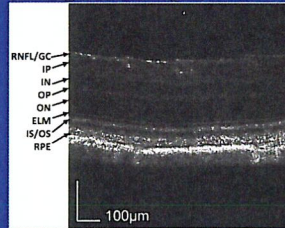
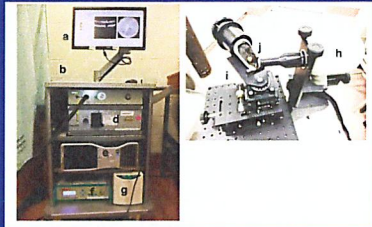
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Basic Science Research

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Research



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Future Goals

- Outreach to NW Arkansas
- Genetics Clinic
- Fellowships
- Basic Science Recruitment
 - Genetics
 - Retina



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