

A photograph of a modern, multi-story hospital building with a facade of brown panels and large glass windows. The building is viewed from a low angle, looking up. The sky is blue with some clouds. In the foreground, there is a landscaped area with young trees and low walls.

UPMC MERCY

Ophthalmology

- 2023 Update
- EEF Nov 2023

2023-2024 Ophthalmology Residents and Fellows

First Year Class (2023 - 2026)



Oliver Beale, MD
21660/412-602-41660



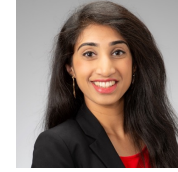
Amani Davis, MD
21573/412-602-1573



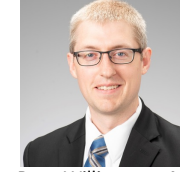
Aidan Dmitriev, MD
21551/412-602-1551



Crystal Lee, MD
21656/412-602-1656



Samyuktha Melachuri, MD
21655/412-602-1655



Ryan Williamson, MD
21842/412-602-1842

Second Year Class (2022 - 2025)



Patricia Campos, MD
81495/412-958-1495



Raven Diacou, MD
83643/412-958-3643



Doowon Huh, MD
83747/412-958-3747



Saloni Kapoor, MD
87574/412-958-7574



Christina Kong, MD
84263/412-958-4263



Gideon Nkrumah, MD
84689/412-958-4689

Third Year Class (2021 - 2024)



Sonny Caplash, MD
5096/412-958-6163



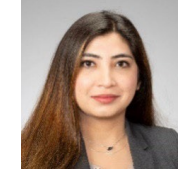
Timothy Chen, MD
5098/412-958-7310



Jonathan Peterson, MD
5108/412-958-3957



Matthew Sommers, MD
5110/412-958-3995



Bushra Usmani, MD
5114/412-958-4158



Jacob Winters, MD
86058/412-958-6058

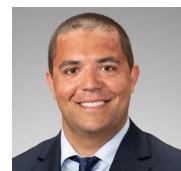
Fellow Class



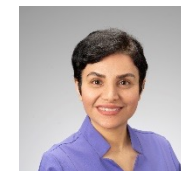
Tatyana Beketova, MD
86410/412-958-6410
Retina



Nathaniel Briggs, OD
87168/412-958-7168
Optometry



Kyle Fallgatter, MD
87912/412-958-7912
Retina



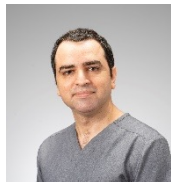
Marjan Fooladi, MD
87168/412-958-7186
Pediatrics



Christopher Hampton, MD
87259/412-958-7259
Cornea



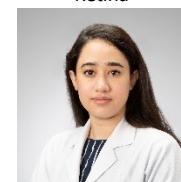
Marissa Heary, OD
87345/412-958-7345
Optometry



Farid Kalantari, MD
87742/412-958-7742
Pediatrics



Zachary Nadler, MD
7354/412-958-8029
Glaucoma



Fatima tun Nissa Raza, MD
86832/412-958-7832
Neuro referral phone: 412-415-6518



Tadhg Schempf, MD
5974/412-958-5553
Glaucoma



Anna Terrarosa, MD
87816/412-958-7816
Oculoplastics



Angeli Yu, MD
87942/412-958-7924
Cornea

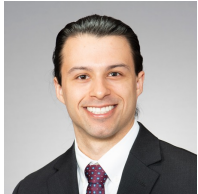
CLINICAL FACULTY NEW HIRES
JANUARY 2023 – DECEMBER 2023



Airaj F. Fasiuddin, MD
Assistant Professor
Nemours Childrens Hospital, Orlando FL
Start date: February 1, 2023



Erick Henderson, OD
Clinical Assistant Professor
McCauley Celin Eyecare Associates, Pittsburgh PA
Start date: May 1, 2023



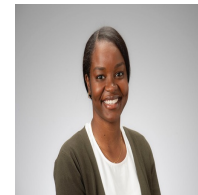
David Mora-Boerllstorff, MD
Clinical Assistant Professor
UPMC Vision Institute, Pittsburgh PA
Start date: July 1, 2023



Chanin Funair-Woods, OD
Clinical Assistant Professor
Eyeglass World, Pittsburgh PA
Start date: November 1, 2023



Kateryna Sanders, OD
Clinical Assistant Professor
UPMC Vision Institute
Start date: July 1, 2023



Fareedah Haroun, OD
Clinical Assistant Professor
Ohio State University Wexner Medical Center, Columbus OH
Start date: August 1, 2023



Jennifer Liu, OD
Clinical Assistant Professor
Veterans Affairs New Jersey Health Care, Lyons NJ
Start date: August 1, 2023



Kirsten Winter, OD
Clinical Assistant Professor
UPMC Vision Institute, Pittsburgh PA
Start date: July 1, 2023

CLINICAL FACULTY NEW HIRES JANUARY 2023 – DECEMBER 2023



Rajesh Sasikumar, MD
Associate Professor
Cleveland Clinic, Abu Dhabi UAE
Start date: October 16, 2023



Richard Hagan, PhD
Clinical Scientist, Director, Electrophysiology
Liverpool University Hospital, Liverpool England
Start date: November 13, 2023



Michael Chang, MD
Clinical Assistant Professor
West Virginia University, Morgantown WV
Start date: October 1, 2023

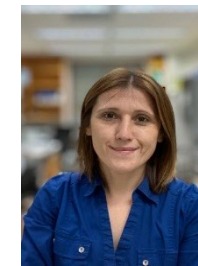
UPMC Vision Institute Research Faculty New Recruitment



Sandeep
Bollepalli, PhD
Start date
12/1/2023



Marie
Potilinski, PhD
Start date
12/1/2023



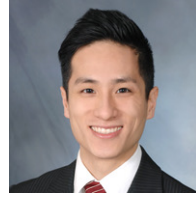
Ekaterina Lobanova,
Ph.D. - NIH-funded
projects in Retina and
AMD. (starting- Feb 1,
2024)

UPMC Eye Center Clinical Faculty

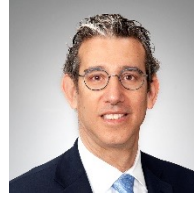
Comprehensive Service



Sohani
Amarasekera, MD



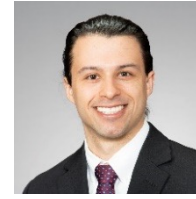
Michael
Chang, MD



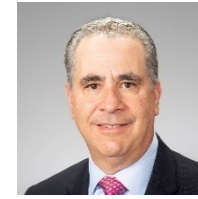
Jerome
Finkelstein, MD



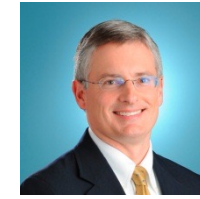
Anna
Gushchin, MD



David
Mora-Boellstorff, MD



Scott
Portnoy, MD



Marshall
Stafford, MD



Jake
Waxman, MD*

Cornea Service



Deepinder
Dhaliwal, MD



Vishal
Jhanji, MD*



Roheena
Kamyar, MD



Alex
Mammen, MD



Gaurav
Prakash, MD



Sabrina
Mukhtar, MD

Acute Care Clinic



Kristen
Winters, OD

Refractive Service



Deepinder
Dhaliwal, MD*



Vishal
Jhanji, MD



Alex
Mammen, MD



Gaurav
Prakash, MD



Sabrina
Mukhtar, MD

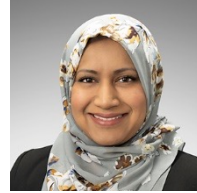
Pediatric Service



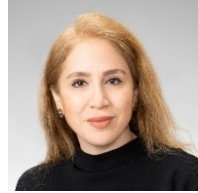
Amgad
Eldib, MD



Roxana
Fu, MD



Airaj
Fasiuddin, MD



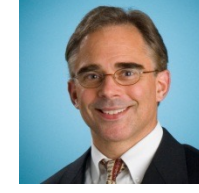
Lama
Khatib, MD



Matthew
Pihlblad, MD



Marie-Helene
Errera, MD



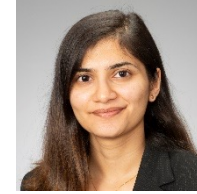
Craig
Luchansky, OD



Ken
Nischal, MD*



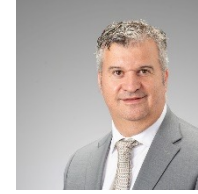
Preeti
Patil, MD



Meghal
Gagrani, MD

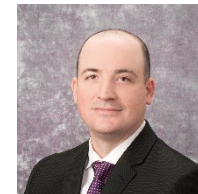


S. Tonya
Stefko, MD



Richard
Hagan, PhD

Adult Motility Service



Matthew
Pihlblad, MD

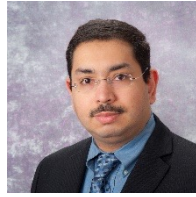


Preeti
Patil, MD

Glaucoma Service



Ian
Conner, MD*



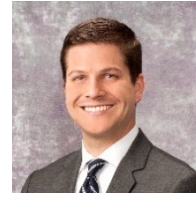
Tarek
Shazly, MD



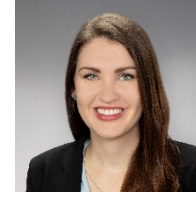
John
Swogger, DO



Lillian
To, MD



Andrew
Williams, MD



Ellen
Butts, OD

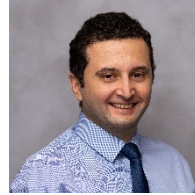


Rajesh
Sasikumar, MD

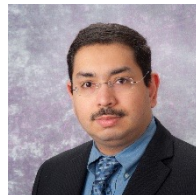
Neuro-Ophthalmology Service



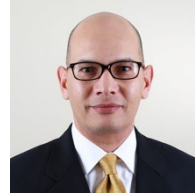
Gabrielle
Bonhomme, MD*



Can
Kocasarac, MD



Tarek
Shazly, MD



Islam
Zaydan, MD



Emily
DePew, OD

Oculoplastics Service



S. Tonya
Stefko, MD*



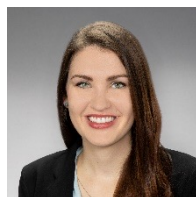
Roxana
Fu, MD

UPMC Eye Center Clinical Faculty

Optometry Service



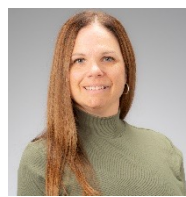
**Robert
Bittner, OD**



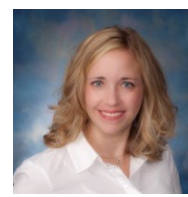
**Ellen
Butts, OD***



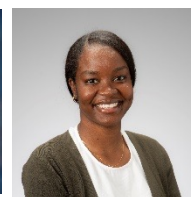
**Emily
DePew, OD**



**Chanin
Funair, OD**



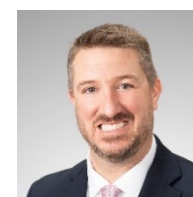
Jessica
Glass, OD



**Freedah
Haroun, OD**



**Erick
Henderson, OD**



**Nathan
Isaacson, OD**

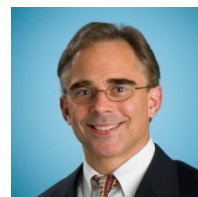
Optometry Service (cont'd)



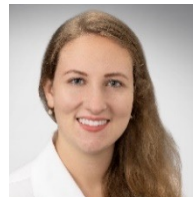
**Ellen
Lebow, OD**



**Jennifer
Liu, OD**



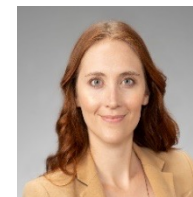
Craig
Luchansky, OD



**Kateryna
Sanders, OD**



Will
Smith, OD



**Kristen
Winters, OD**

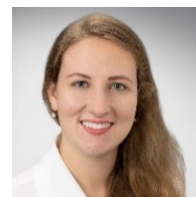
Low Vision Service



Will
Smith, OD*

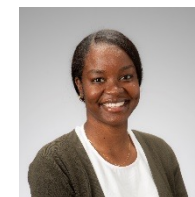


**Jennifer
Liu, OD**



**Kateryna
Sanders, OD**

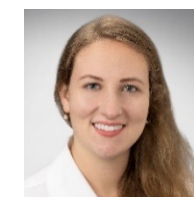
Medically Necessary Contact Lens Service



**Freedah
Haroun, OD**



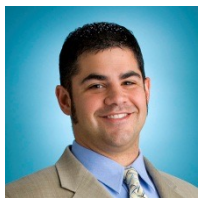
**Erick
Henderson, OD**



**Kateryna
Sanders, OD**

UPMC Eye Center Clinical Faculty

Retina Service



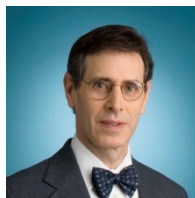
Alex
Anetakis, MD



Jay
Chhablani, MD



Kunal
Dansingani, MD



Andrew
Eller, MD*



Marie-Helene
Errera, MD



Denise
Gallagher, MD



Joseph
Martel, MD



Colin
Prensky, MD



Boris
Rosin, MD

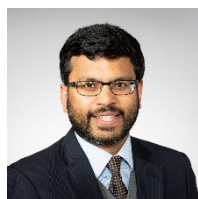


José-Alain
Sahel, MD



Sohani
Amarasekera, MD

VA Hospital



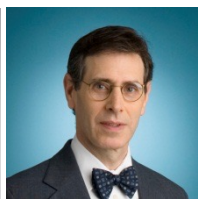
Alex
Mammen, MD



Deepinder
Dhaliwal, MD



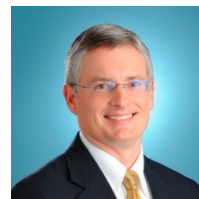
Denise
Gallagher, MD



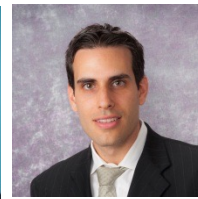
Andrew
Eller, MD



S. Tonya
Stefko, MD



Marshall
Stafford, MD



Joseph
Martel, MD

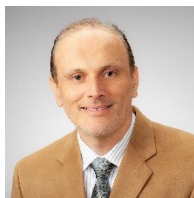


Colin
Prensky, MD



Lillian
To, MD

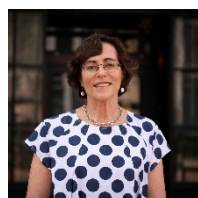
UPMC Vision Institute Research Faculty



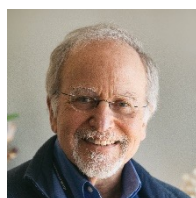
**Issam
Al Diri, PhD**



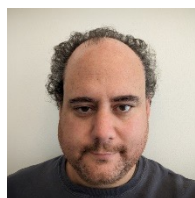
**John
Ash, PhD**



**Marlene
Behrmann, PhD**



**Larry
Benowitz, PhD**



**Miguel
Betegon, PhD**



**Leah
Byrne,
PhD**



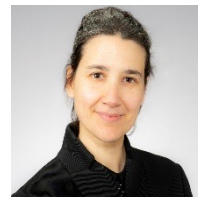
**Kun-Che
Chang,
PhD**



**Xing
Chen, PhD**



**Yuanyuan
Chen, PhD**



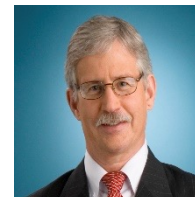
**Susana
da Silva,
PhD**



**Morgan
DiLeo, PhD**



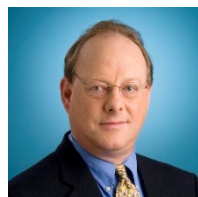
**Frank
Dyka, PhD**



**Thomas
Friberg, MD**



**James
Herman, PhD**



**Paul (Kip)
Kinchington, PhD**



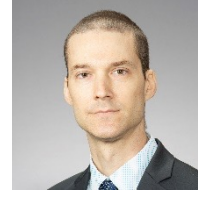
**Takaaki
Kuwajima,
PhD**



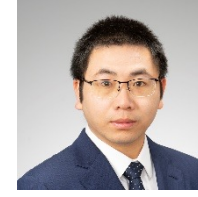
**Kira
Lathrop,
MAMS**



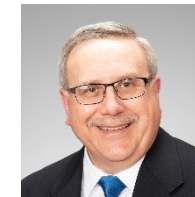
**Jonathan
Mandell, PhD**



**J. Patrick
Mayo, PhD**

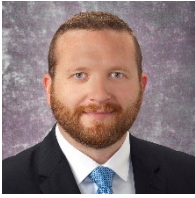


**Shaohua
Pi, PhD**



**Eric
Romanowski, MS**

UPMC Vision Institute Research Faculty



Ethan Rossi, PhD



Robert M. Q. Shanks, PhD



Ian Sigal, PhD



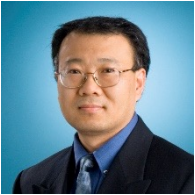
Debasish Sinha, PhD



Anthony St. Leger, PhD



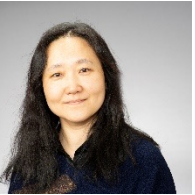
Kiran Vupparaboina, PhD



Xiangyun Wei, PhD



Gary (Hin-Fai) Yam, PhD



Hongmin Yun, PhD

Recruiting Activity

- **Kevin Fuller, Ph.D.** -NIH-funded projects in cornea fungal infectious disease. (on track to start early 2024)
- **Muhammad Rizwan Ph.D.** –NIH-funded projects in biomaterials. (on track to start early to mid 2024)
- **Candidates in AMD genetics and data science** (interviewing two candidates)
- **Clinician Scientist in AMD** (interviewing candidates now)
- **Retina Faculty (2)**
- **Glaucoma Faculty (1)**
- **Plastic (1)**
- **Oncology (1)**

New funding in 2023

Total New Awards: 31

12 NIH grants

\$7,359,470

- 1 R13
- 1 R43
- 1 UH3
- 1 R21
- 1 R44
- 1 U24
- 1 U01
- 1 K99
- 4 R01

2 Other Federal grants

\$85,974

- 2 NSF

14 Foundation grants.

\$2,200,663

3 Industry grants

\$2,039,556

***Grand total:**

\$11,685,663

*new funding to the Ophthalmology dept.

FUNDING PORTFOLIO OF OPHTHALMOLOGY RESEARCH FACULTY

25 Grant Writing Faculty

99 Active Grants*

\$56,000,635 in Total Funding*

FUNDING SOURCE	AMOUNT*
57 FEDERAL GRANTS NIH/DOD/NSF	\$46,523,400
30 FOUNDATION GRANTS	\$6,830,331
12 INDUSTRY CONTRACTS	\$2,646,904

*Ophthalmology faculty participate in many collaborative projects, so the totals are for the whole project. Some funds are routed to other Pitt departments or institutions as sub-contracts.

2023 Publications

- 226 Research and review articles
- Large number in journals with an impact factor of 9 or higher.
- Major progress in:
 - Cortical vision
 - Infectious ocular diseases
 - Optic nerve protection and regeneration
 - Age-related macular degeneration
 - Corneal stem cells



Mercy Move

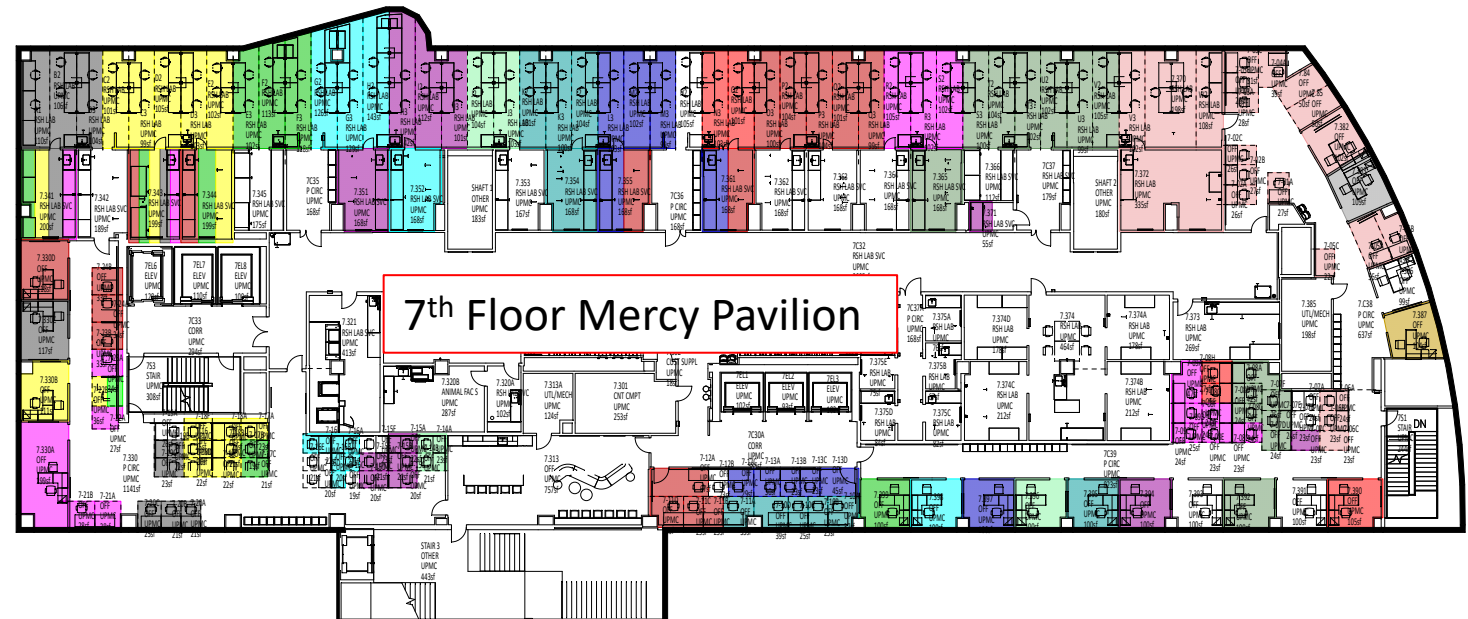
Started May 20th - Completed Nov. 5th

Delays caused by animal facility certification

Now fully functional (part of animal facility)

Most space is committed to funded PIs, (colored areas)

Some space remains for new recruits.



SDOH and Community engagement- 2023

Mission of Mercy: 2021-2022

- We cared for 935 people 2021-2022
- 117 (13%) were referred for follow up at UPMC
 - Appointment scheduled on-site, follow-up care offered at no cost
 - 56 (48%) referred patients attended a clinic visit at UPMC
 - 11 patients underwent vision-saving procedures, including retinal detachment repair, eye injections for macular degeneration, laser treatment for diabetic retinopathy, and cataract surgery
- Health insurance was strongest predictor of follow up
 - For 2023, we increased availability of health insurance enrollment information on-site

Predictors of Clinic Attendance After Community-Based Vision Screening

Lauren M. Wasser^{1,2}, Julie Cassidy¹, Katherine Cecconi¹, Dana McGinnis-Thomas¹, Anfisa Ayalon¹, Haniah A. Zaheer¹, Evan L. Waxman¹, José-Alain Sahel¹, and Andrew M. Williams¹

[translational vision science & technology](#)

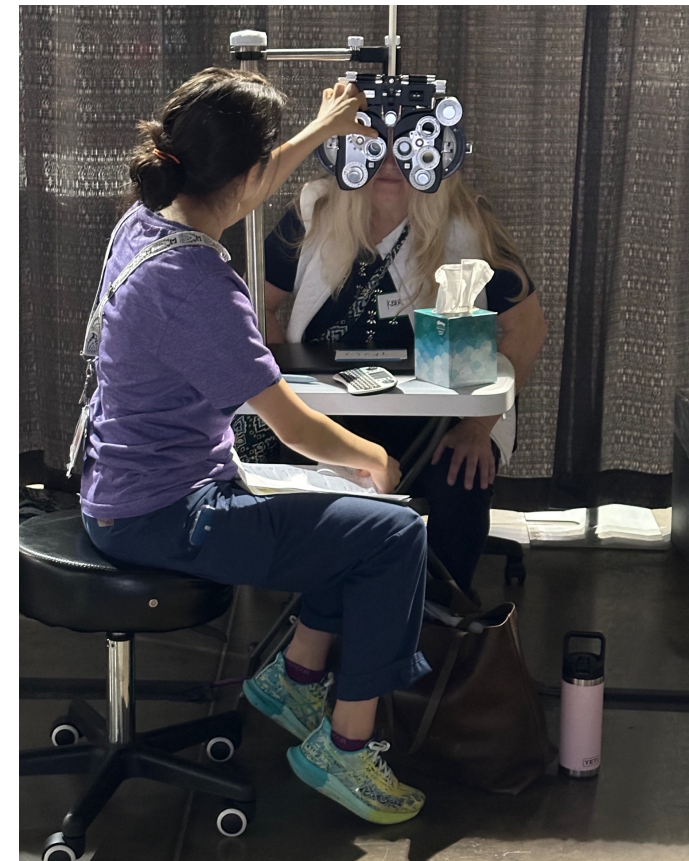
November 2023 | Vol. 12 | No. 11

Table 4. Binary Logistic Regression to Assess Predictors of Follow-Up

Characteristic	Follow-Up Status Adjusted OR	P Value
Age, y	1.009	0.533
Gender		
Female	Ref.	
Male	2.720	0.035
Race		
Black	Ref.	
White	1.666	0.256
Language		
All other	Ref.	
English	1.387	0.724
Employment status		
Not employed	Ref.	
Employed	1.043	0.927
Insurance status		
No insurance	Ref.	
Any insurance	3.075	0.021

Mission of Mercy: 2023

- Cared for 825 people over 2 days
- Provided free glasses to 722 adults and 30 children (Essilor Foundation)
- Over 150 eye care volunteers served in the roles of front desk staff, opticians, people-movers, doctors, and imaging techs
- Referred 83 people for no-charge follow-up appointments
- Screened 129 people for diabetic retinopathy (new addition to MOM)
- On-site assistance provided for financial assistance, insurance enrollment, and transportation



eyeVan & mini-MOM

- March 1 – eyeVan Key Exchange with Brother's Brother Foundation
- March 22 – Street Outreach Mission with AHN & Pittsburgh Mercy
 - Comprehensive exam for 7 patients, 5 eyeglasses
 - Supported a chronically homeless patient with receiving cataract surgery
- June 19 and Aug. 3 – Mini-MOMs with The Center for Hope in Ambridge
 - June 19 – 37 patients, 21 eyeglasses, referred 3 for follow-up
 - August 3 – 41 patients, 28 eyeglasses, referred 8 for follow-up
 - Identified a child with congenital ptosis who had fallen through the cracks of our healthcare system
- Sept. 13 – Partnership with UPMC Health Plan & Fabric Health
 - VA and DR screening for 15 patients
 - Referred 4 for follow-up
- Scheduled: January 13, 2024 – mini-MOM at Ansar of Pittsburgh
- Acquisition of a missing equipment (Maestro) planned




Coming Up: Mobile Ophthalmic Imaging Program for Older Adults

- Recently obtained grant from PA Medical Society for \$100,000
 - Funding will support purchase of Topcon Maestro and hiring of first-of-its-kind Community Service Ophthalmic Technician (position already posted)
- Goals:
 - Use eyeVan to bring care to older adults, eliminate barriers to care, and reduce loss to follow-up
 - Partner with UPMC Health Plan to close diabetic retinopathy care gaps
- First mission anticipated at Weatherwood Manor (Greensburg) end of 2023/early 2024

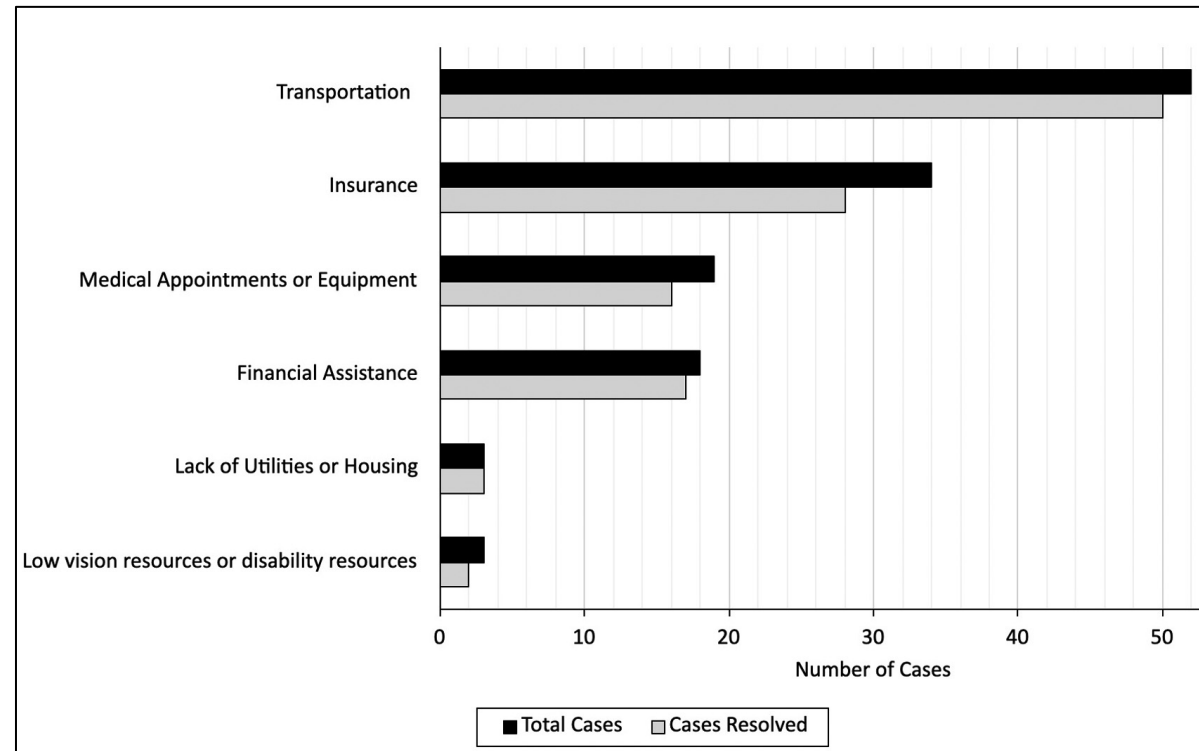
Patient Navigator Program

- Our patient navigator connects patients with resources to facilitate eye care
- We evaluated 130 referrals from the first quarter of 2022
- Results:
 - 127 referred patients (98%) were reachable
 - 117 (90%) had their referred issue resolved
 - In a phone survey, patients rated the program highly at 4.87/5 ($n=39$)

Effect of a Patient Navigator Program to Address Barriers to Eye Care at an Academic Ophthalmology Practice

Arman Zarnegar, BS¹ Julie Cassidy, BS¹ Andre Stone, BS¹ Dana McGinnis-Thomas, MHA¹
Lauren M. Wasser, MD^{1,2} José-Alain Sahel, MD¹ Andrew M. Williams, MD¹ 

J Acad Ophthalmol 2023;15:e106–e111.



Patient Navigator Data: 2023

- **UPMC Vision Institute Referrals**

- Total Referrals: 456
(Age Range: 3-95)
- Companion for Surgery: 10
- Insurance: 74
- Transportation: 131
- **All Other Referrals:**
Acupuncture, Birth Certificate, Community Paramedics, Cost of Care including Prescriptions, Dental Appointments, Home Exterminators for Insects, Eviction/Housing, Hotel Accommodations, Parking Placard, Rental Assistance, Social Security Disability, Utility Assistance

- **Mission of Mercy**

- Total Referrals: 27
- Referrals Included:
 - Cell Phone (Patients without a phone)
 - Companion for Surgery
 - Employment
 - Food Insecurity/Pet Food
 - Housing
 - Neighborhood Legal Services
 - Primary Care Physician
 - Transportation
 - Utility Assistance
 - Vaccines

Screening for social needs in our clinics

- Social needs, such as transportation and food insecurity, affect vision and access to eye care
- Referrals to our patient navigator program could be facilitated by implemented UPMC's standard social needs questionnaire (24 items)
- Questionnaire is available on the online patient portal before an appointment or on a tablet at check in
 - Used in primary care; adopted in our ophthalmology clinics in April 2022



Addressing Social Determinants of Vision Health

Andrew M. Williams  · José-Alain Sahel

Ophthalmol Ther. 2022 Aug;11(4):1371-1382.

Screening for social needs in eye clinics

- Social needs screening questionnaire implemented in eye clinics in April 2022
- 1413 responses from April 2022 – March 2023
- Food insecurity (7.6%) and transportation needs (5.1%) were most common
- Social needs were associated with younger age (OR 3.78), female gender (OR 1.88), and Black race (OR 4.03)
- Visual impairment (worse than 20/40) associated with social need (OR 1.55, 95% CI 1.09-2.19)

Table 1. Health-related social needs screening questions and responses

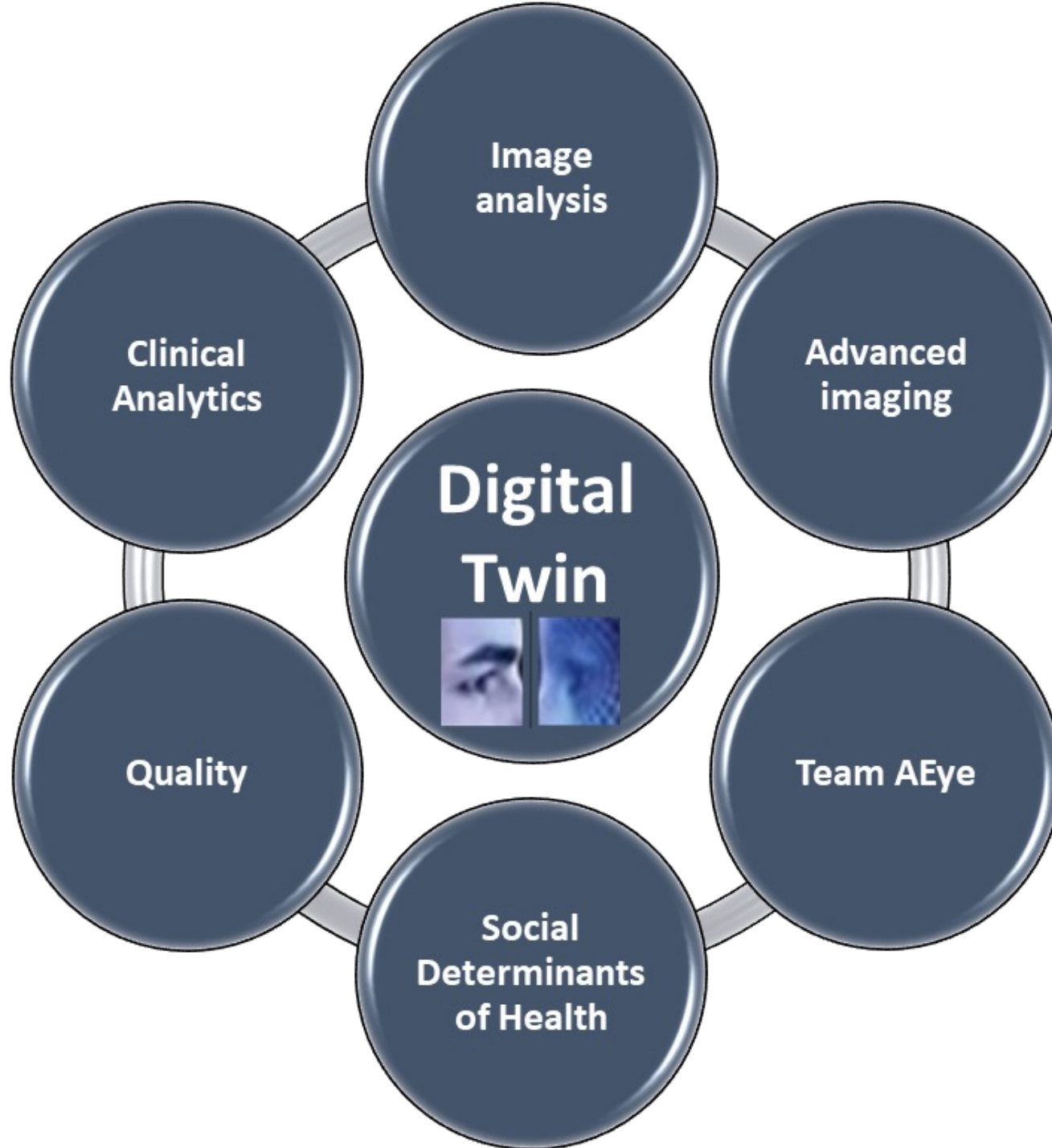
Social need domain	Question	Positive screen (n, %)
Transportation	In the past 12 months, has lack of transportation kept you from medical appointments or from getting medications?	68/1340, 5.1%
Financial insecurity	How hard is it for you to pay for the very basics like food, housing, medical care, and heating?	46/1293, 3.6%
Food insecurity	Within the past 12 months, you worried that your food would run out before you got the money to buy more.	99/1303, 7.6%
Housing insecurity	In the last 12 months, was there a time when you were not able to pay the mortgage or rent on time?	63/1305, 4.8%
Homelessness	In the last 12 months, was there a time when you did not have a steady place to sleep or slept in a shelter (including now)?	10/1330, 0.8%

Modeling diabetic teleretinal screening and treatment



- Funded by the NSF at \$327,988 over 3 years
- Andrew Williams, MD (co-PI, Ophthalmology) and Taewoo Lee, PhD (PI, Pitt Engineering)
- Purpose: To examine optimal follow-up intervals for diabetic retinopathy (DR) based on patient compliance and response to treatment using a national dataset
 - We will first model the patient's perspective, which determines an optimal DR treatment schedule over time for each patient based on clinical and follow-up characteristics.
 - We will then examine how eye clinics can improve patient compliance and access to care
 - Ultimately, we evaluate how patients' and eye clinics' perspectives be harmonized to identify a treatment policy that is implementable by eye clinics while both clinically and behaviorally desirable for individual patients.
 - We aspire to use this work to produce an evidenced-based, patient-specific treatment design to provide critical guidance for tailoring DR treatment.

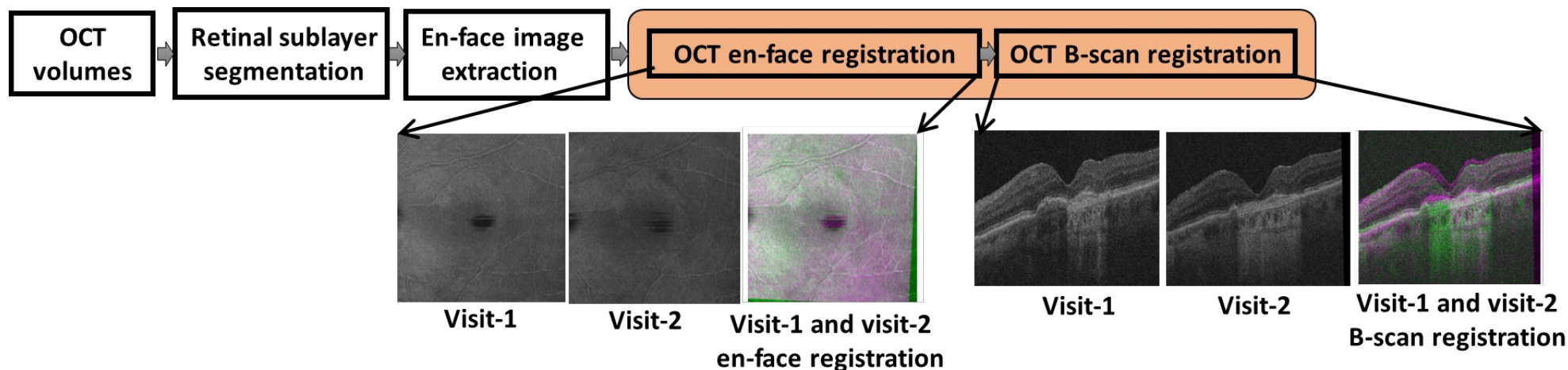
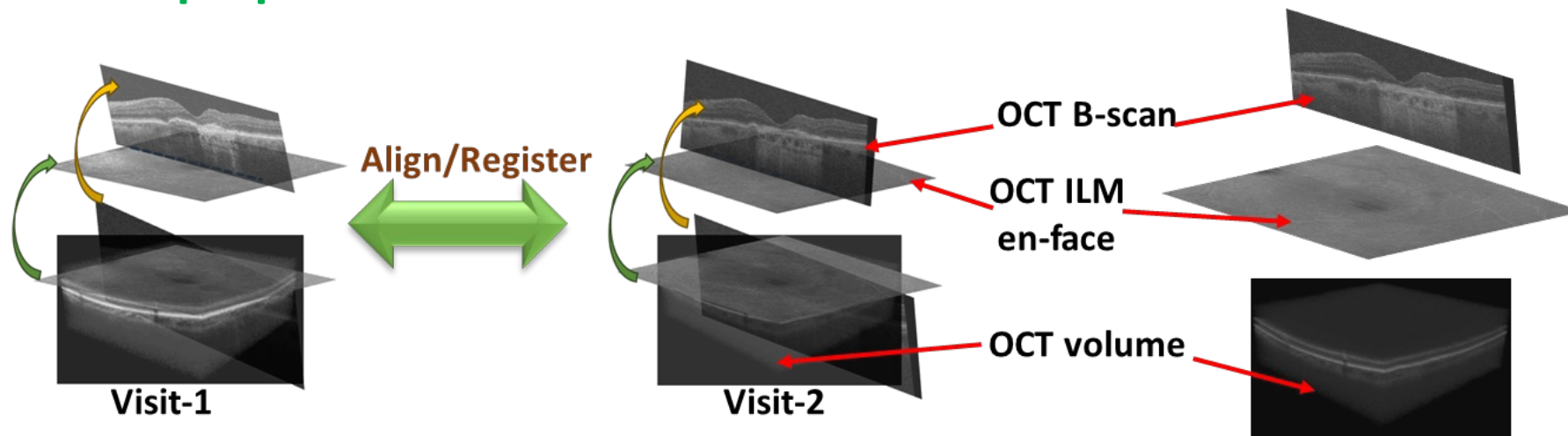




AMD predictive model

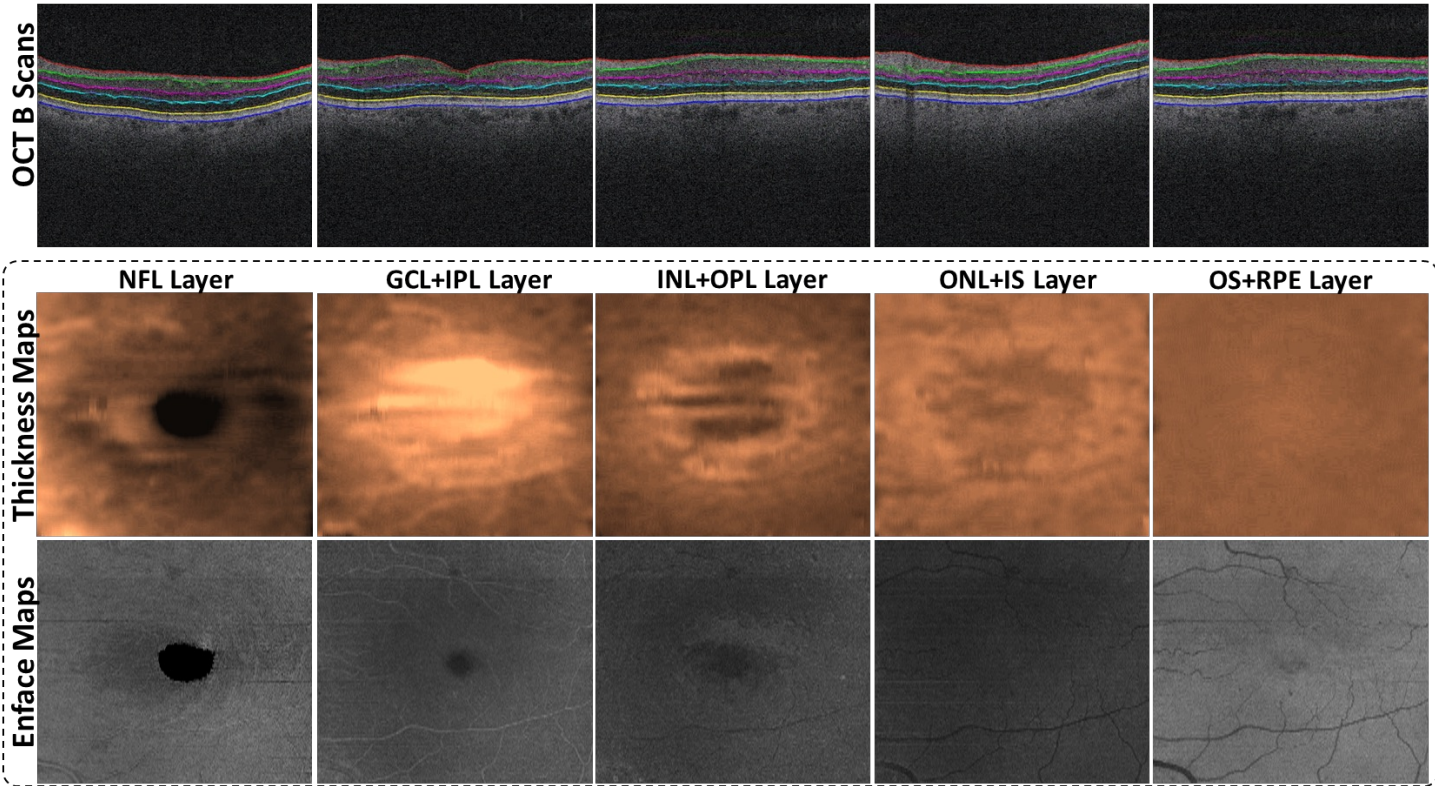
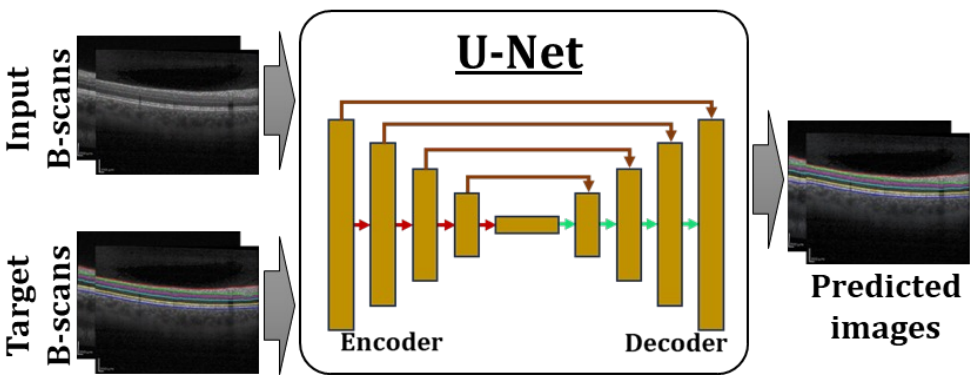
Model-1: Dry-AMD OCT B-scan Synthesis

Step-1: Data preparation



AI-based feature extraction

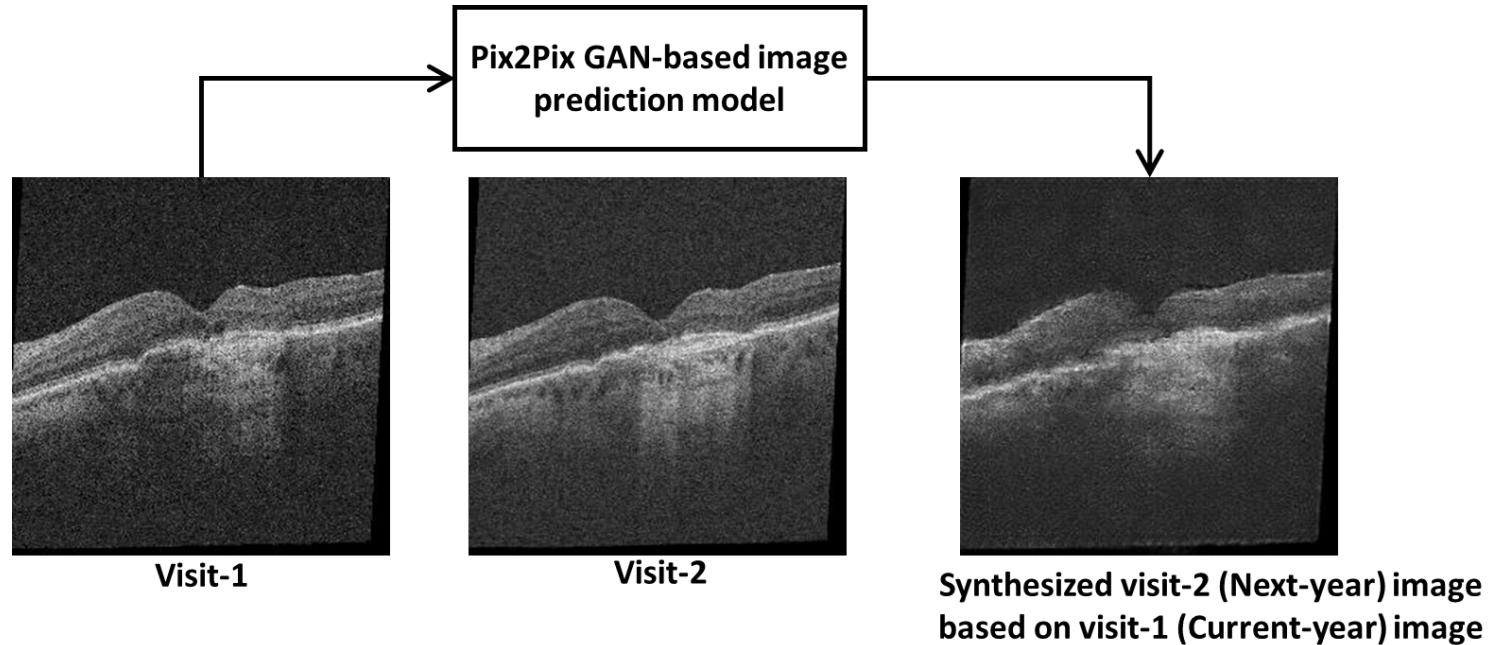
Model-1: Cirrus-OCT-based retinal sublayer biomarker



AMD predictive model

Model-1: Dry-AMD OCT B-scan Synthesis

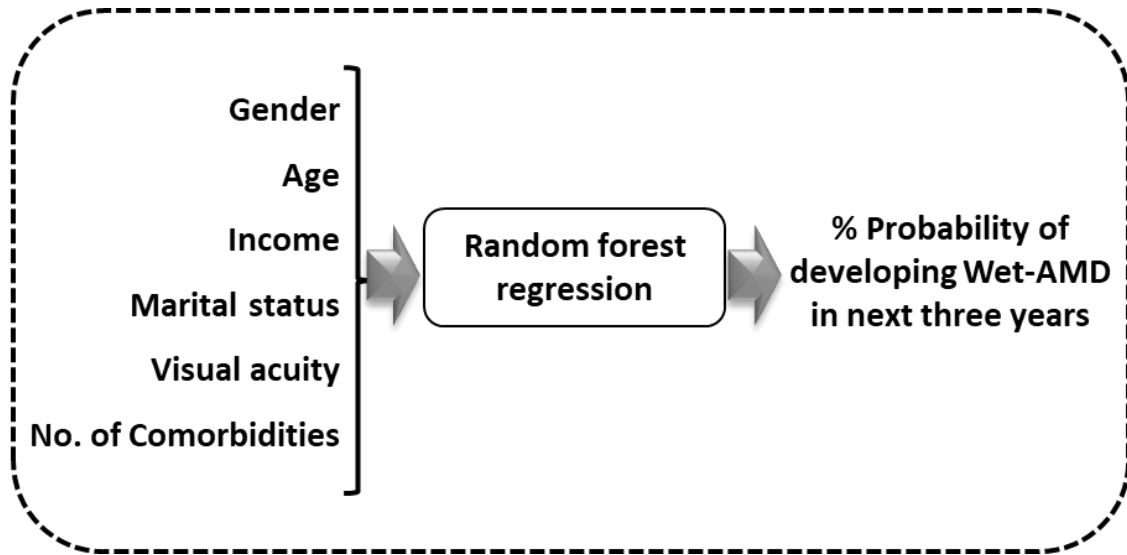
Step-2: Synthesize Year-2 OCT B-scan based on Year-1 OCT B-scan



AMD predictive model

Model-2: Based on structured data

Outcome: Predict probability of developing wet-AMD in next 3 years



Wet-AMD Prediction Tool

Select Patient ID:

Age:	92
Income:	64827
Marital_Status:	Widowed
No Of Comorbidites:	18
Fellow Eye Visual Acuity:	1

Probability of not developing WET-AMD in next 3 Years

AI Model Prediction: 80.15%
Actual Observation: Not Developed

UPMC LIFE CHANGING MEDICINE

Technology transfer

AVISTA (Leah Byrne) : Partnership with Roche. Milestone met : 10M\$

Sparing Vision (raised 150M\$) : First in human in May 2023

Tilak Healthcare : raised 10M€, US expansion

Debasish Sinha : Major foundation grants (Thome Foundation : 500k, Owen Locke, 1,3M), industrial partnerships (UPMCE, Spark)

Cilensee : incubation at LifeX

Pixium Vision : FDA Fast Track designation for PRIMA prosthesis in AMD

A-Eye, in preparation

AWARDS :

José-Alain Sahel : 3 in 2023; two (to be announced) in 2024

Keynote lectures : Ken Nischal, Vishal Jhanji, Deep Dhaliwal, José-Alain Sahel