

**HARVARD MEDICAL SCHOOL  
CURRICULUM VITAE**

**Date Prepared:** 07/18/2018  
**Name:** Mary Elizabeth Aronow, MD

**Education:**

1997	BS ( <i>honors, distinction</i> )	Human Ecology	Cornell University
2000	Postbaccalaureate	Premedical	Bryn Mawr College
2006	MD ( <i>cum laude</i> )	Medicine	Yale University School of Medicine

**Postdoctoral Training:**

07/06-06/07	Internship	Internal Medicine	Brigham and Women's Hospital (BWH)
07/07-06/10	Residency	Ophthalmology	Cleveland Clinic
09/10-08/11	Fellowship #1	Ophthalmic Oncology	Cleveland Clinic
07/13-06/14	Fellowship #2	Medical Retina	National Eye Institute/NIH (NEI/NIH)

**Faculty Academic Appointments:**

11/11-12/12	Clinical Associate	Ophthalmology	Cleveland Clinic
08/14-07/17	Assistant Professor	Ophthalmology	Johns Hopkins
09/17-	Assistant Professor	Ophthalmology	Massachusetts Eye and Ear (MEE)

**Appointments at Hospitals/Affiliated Institutions:**

12/16-07/17	Assistant Professor	Oncology-Joint Appt.	Johns Hopkins
09/17-	Assistant Professor	Ophthalmology	MEE
09/17-	Clinical Associate	Ophthalmology	Massachusetts General Hospital

**Other Professional Positions:**

08/00-08/02	Research Assistant; Thomas Thornhill Lab	BWH
11/16-	Professional Advisory Board	Tuberous Sclerosis Alliance

**Major Administrative Leadership Positions:**

**Local**

2015-2017	Assistant Director, Retina Fellowship Program	Johns Hopkins
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**Committee Service:**

**Local**

2016-2017 Retina Clinical Subcommittee Member Johns Hopkins

### **Institutional**

2008-2009 House Staff Association, Ophthalmology Cleveland Clinic  
2015 Retina Faculty Search Committee Johns Hopkins  
2015-2017 Retina Fellowship Selection Committee Johns Hopkins

### **National**

2015 Panelist (10 members, 4 USA ocular oncologists) Food and Drug Administration (FDA)  
Ocular Toxicity Symposium  
*FDA initiative to develop standard criteria for grading ocular toxicity from cancer drugs*

### **International**

2018 Tuberos Sclerosis Alliance MEE  
Chair, Clinical Consensus Group (Ophthalmology)  
2018 World Ophthalmology Congress MEE  
Abstract Review Committee  
2018 International Society of Ocular Oncology MEE  
International Review Committee

### **Professional Societies:**

2007- American Academy of Ophthalmology (AAO), Member  
01/17-12/17 AAO Retina/Vitreous Knowledge Base Panel  
2007- Association for Research in Vision and Ophthalmology (ARVO), Member  
2011- International Society of Ocular Oncology (ISOO), Member  
2016- Women in Ophthalmology (WIO), Member  
2016- Women in Ocular Oncology (WOO), Member

### **Editorial Activities:**

#### **Ad hoc Reviewer**

*Ophthalmology*  
*The Journal of the American Medical Association (JAMA) Ophthalmology*  
*American Journal of Ophthalmology*  
*British Journal of Ophthalmology*  
*Investigative Ophthalmology and Visual Science*  
*Ocular Oncology and Pathology*  
*Orbit*  
*Ophthalmic Genetics*  
*Ophthalmology Retina*  
*Retina: The Journal of Retinal and Vitreous Diseases*  
*Clinical and Experimental Ophthalmology*  
*Ocular Immunology and Inflammation*  
*Digital Journal of Ophthalmology*  
*BMC Ophthalmology*

*BMC Cancer*  
*Current Eye Research*  
*Faculty of 1000 (Ophthalmic Oncology Section)*

### **Other Editorial Roles**

2016	Section Editor (Ophthalmic Oncology)	<i>Advances in Ophthalmology &amp; Optometry</i>
2016	Section Editor (Uveal Tumors)	<i>Manual of Retinal Diseases</i>
2017-	Editorial Board Member	<i>Ophthalmic Genetics</i>
2017-	Associate Editor	<i>BMC Cancer</i>

### **Honors and Prizes:**

1993	Senator Robert C. Byrd National Merit Scholarship
1995	Kappa Omicron Nu National Honor Society, Cornell University Chapter
1996	Honors Research Program, Cornell University
1996	Outstanding Junior Award, Cornell University
1997	Outstanding Senior Award, Cornell University
2002	Summer Research Grant Recipient, Yale School of Medicine
2003	Intensive Pedagogical Research Program, Yale School of Medicine
2006	Alpha Omega Alpha Honor Medical Society, Yale School of Medicine Chapter
2011	Best Ophthalmology Fellow Paper, Cleveland Clinic
2016	Pooled Professor Fund Grant Recipient (Top-scoring grant proposal), Johns Hopkins

### **Report of Funded and Unfunded Projects**

#### **Past**

#### **(Johns Hopkins Hospital and University School of Medicine)**

2015-2017 Co-investigator	A phase II, multi-center, randomized, active treatment-controlled study of the efficacy and safety of the ranibizumab port delivery system for sustained delivery of ranibizumab in patients with subfoveal neovascular age-related macular degeneration
2015-2017 Co-investigator	A phase III, multi-center, randomized, double-masked, sham-controlled study to assess the efficacy and safety of lampalizumab administered intravitreally to patients with geographic atrophy secondary to age related macular degeneration
2015-2017 Co-investigator	A phase II multi-center, randomized, controlled, double-masked clinical trial designed to evaluate the safety and exploratory efficacy of lumnate (ALG-1001) as compared to avastin in the treatment of diabetic macular edema
2017 Co-investigator	An open-label, phase Ib/II study investigating recommended phase II dose, safety, tolerability and preliminary efficacy of TAK-659 in adult patients with relapsed or refractory acute myelogenous leukemia
2017 Co-investigator	A multi-center, randomized, open-label, 3-arm phase III study of encorafenib + cetuximab plus or minus binimetinib vs. irinotecan/cetuximab or infusional 5-fluorouracil (5-FU)/folinic acid (FA)/irinotecan (FOLFIRI)/cetuximab with a safety lead-in of encorafenib + binimetinib + cetuximab in patients with BRAF V600E mutant metastatic colorectal cancer

2017 Co-investigator	MATCH treatment subprotocol H: phase II study of dabrafenib and trametinib in patients with tumors with BRAF V600E or V600K mutations (excluding melanoma and thyroid cancer)
2017 Co-investigator	A phase I study of ASP2215 in combination with induction and consolidation chemotherapy in patients with newly diagnosed acute myeloid leukemia
2017 Co-investigator	A phase I study evaluating safety, tolerability, pharmacokinetics of escalating doses of AGS62P1 given as monotherapy in subjects with acute myeloid leukemia
2016-2017 PI	The role of circulating plasma tumor DNA in monitoring response to therapy in uveal melanoma Pooled Professors Fund, Wilmer Eye Institute, Johns Hopkins Award: \$50,000 This project seeks to correlate levels of circulating plasma tumor DNA with response to plaque brachytherapy and with development of metastatic disease in patients with uveal melanoma. (Target patient enrollment was met for year 1 and preliminary data were generated. This collaborative work is now being directed by a colleague, Zelia Correa, MD, PhD who is leading the ophthalmic oncology service at Johns Hopkins.)

### **Current**

2017- Sub-investigator	Light activated AU-011 to treat primary choroidal melanoma NCT03052127 Industry sponsored This phase 1B/2 open-label, ascending single and repeat dose clinical trial investigates the use of a first-in-class therapy (a light-activated virus-like nanoparticle conjugate) for the treatment of small choroidal melanoma.
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### **Report of Local Teaching and Training**

#### **Teaching of Students in Courses:**

2015	Ophthalmology Clinical Skills Module Medical students	Johns Hopkins 4-hr session
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#### **Formal Teaching of Residents, Clinical Fellows and Research Fellows (post-docs):**

2015	Uveal Melanoma Update Radiation oncology fellows	Johns Hopkins 1-hr lecture
2016	Retinoblastoma Update Pediatric oncology fellows	Johns Hopkins 1-hr lecture
2015-2016	Echography Workshop Ophthalmology residents and fellows	Johns Hopkins 4-hr session
2017	Retinoblastoma Ophthalmology residents	Johns Hopkins 1-hr lecture

#### **Clinical Supervisory and Training Responsibilities:**

2014-2017	Supervision of retina fellows in the operating room	300 hrs/year, Johns Hopkins
2014-2017	Supervision of retina fellows and ophthalmology residents in clinic	400 hrs/year, Johns Hopkins
2015-2016	Preceptor, international visiting scholars, Wilmer ophthalmic oncology service	150 hrs/year, Johns Hopkins
2017-	Supervision of retina fellows in the operating room	150 hrs/year, MEE
2017-	Supervision of retina fellows and ophthalmology residents in clinic	300 hrs/year, MEE

### **Mentored Trainees and Faculty:**

2015-2017	Tahreem Mir, MD/ Research Fellow, Wilmer Retina Division, Johns Hopkins Career stage: research fellow. Mentoring role: clinical and research advisor. Accomplishments: multiple first-authored scholarship of mentored research.
2015-2017	Alice Zhang, MD. Assistant Professor, University of North Carolina, Department of Ophthalmology (Former Clinical Fellow, Wilmer Retina Division, Johns Hopkins). Career stage: clinical fellow. Mentoring role: research advisor. Accomplishments: multiple first- authored scholarship of mentored research and meeting presentations.

### **Formal Teaching of Peers (e.g., CME and other continuing education courses):**

***No presentations below were sponsored by outside entities***

2013-2016	What's New in Diabetic Retinopathy Johns Hopkins CME	Annual course Baltimore, MD
2013-2016	Current Concepts in Ophthalmology Johns Hopkins CME	Annual course Baltimore, MD
2014	Intraocular Tumors: An Overview Wilmer Eye Institute CME	Single course Bel Air, MD
2015	Advances in Uveal Melanoma Wilmer Eye Institute CME	Single course Bel Air, MD
2015-2017	Melanoma Update Johns Hopkins CME	Annual course Arundel Mills, MD
2016	Topics in Medicine: Intraocular Tumors Johns Hopkins CME	Single course Baltimore, MD

### **Local Invited Presentations:**

***No presentations below were sponsored by outside entities***

2011	FISH-based prognostication for uveal melanoma/Speaker series Cleveland Ophthalmological Society, Cleveland, OH
2017	Retinoblastoma update/Speaker series Johns Hopkins 34 <sup>th</sup> Annual Wilmer Nursing Conference, Baltimore, MD
2018	Ocular complications of immunotherapy MGH Severe Immunotherapy Complications (SIC) Service Rounds
2018	Topics in tuberous sclerosis complex: ophthalmology MGH Annual Tuberous Sclerosis Complex Symposium

### **Report of Regional, National and International Invited Teaching and Presentations**

***No presentations below were sponsored by outside entities***

**Regional**

- 2010 Intraocular tumors  
Sugarbush Eye and Laser Center Educational Seminar  
Ashland, OH
- 2015 Recognizing ocular tumors  
Evidenced Based Care in Optometry Conference  
Ellicott City, MD
- 2017 Grand rounds invited lecturer: The spectrum of intraocular lymphoma  
Department of Ophthalmology, University of Maryland  
Baltimore, MD

**National**

- 2009-2012 Intraocular tumors  
Joint Commission on Allied Health Personnel in Ophthalmology  
San Francisco-2009, Chicago-2010, Orlando-2011, Cleveland-2012
- 2010 Paraneoplastic vitelliform retinopathy  
Wills Oncology Fellows Association Annual Meeting  
Chicago, IL
- 2011 Uveal melanoma: trends in incidence, treatment, and survival (selected oral abstract)  
The American Academy of Ophthalmology  
Orlando, FL
- 2015-2017 Selected cases in ocular oncology  
Wills Intraocular Tumor Symposium  
Philadelphia, PA
- 2015 Ocular assessment methods and technology  
Food and Drug Administration (FDA) Ocular Toxicity Symposium  
Silver Spring, MD
- 2015 Effect of aspirin use on progression of age-related macular degeneration in the age-related eye disease study 2 (AREDS2) participants (selected oral abstract)  
Association for Research in Vision and Ophthalmology  
Orlando, FL
- 2015 Ocular manifestations of HIF2- $\alpha$  mutations (selected oral abstract)  
American Association of Ophthalmic Oncologists and Pathologists  
Las Vegas, NV
- 2016 Top 5 advances in the past decade: uveal melanoma  
American Academy of Ophthalmology, Ocular Oncology and Pathology Subspecialty Day  
Chicago, IL
- 2016 Moderator: Ocular tumors and pathology  
American Academy of Ophthalmology  
Chicago, IL
- 2016 Moderator: Poster tours, retina section  
American Academy of Ophthalmology  
Chicago, IL
- 2016 Intraocular tumors  
American Society of Ophthalmic Registered Nurses  
Chicago, IL

- 2016 Primary vitreoretinal lymphoma  
Intraocular Lymphoma Conference  
Baltimore, MD
- 2016 Using technology in daily practice  
Women in Ophthalmology Annual Meeting  
Williamsburg, VA
- 2017 Bilateral choroidal osteoma in childhood  
Atlantic Coast Retina Conference  
Baltimore, MD
- 2017 Moderator: Tumor time  
Macula Meeting  
Baltimore, MD
- 2017 Basic ocular oncology instruction course: Assessment of an amelanotic choroidal mass  
The American Academy of Ophthalmology  
New Orleans, LA
- 2017 Moderator  
The American Association of Ophthalmic Oncologists and Pathologists Annual Meeting  
New Orleans, LA
- 2018 Grand rounds invited lecturer: The spectrum of ocular lymphoma  
University of South Florida  
Tampa, FL
- 2018 Grand rounds invited lecturer: Update on uveal melanoma  
University of South Florida  
Tampa, FL
- 2018 Relationship of BAP1 tumor predisposition syndrome and uveal melanoma  
Macula Meeting  
Philadelphia, PA
- 2018 One of these things is not like the other  
Atlantic Coast Retina Conference  
Philadelphia, PA
- 2018 Moderator: Tumors and uveitis  
Macula Meeting  
Philadelphia, PA

**International**

- 2011 FISH-based prognostication for uveal melanoma (selected oral abstract)  
International Society of Ocular Oncology  
Buenos Aires, Argentina
- 2011 FISH: making heads or tails of techniques (selected oral abstract)  
International Society of Ocular Oncology  
Buenos Aires, Argentina
- 2011 Paraneoplastic vitelliform retinopathy (selected oral abstract)  
International Society of Ocular Oncology  
Buenos Aires, Argentina
- 2013 Ocular adnexal lymphoma: assessment of a TNM staging system (selected oral abstract)  
International Society of Ocular Oncology  
Cleveland, OH
- 2013 Advances in prognostication for uveal melanoma  
OMICS International Eye Disorders & Treatment Conference  
Baltimore, MD

2015 MALT lymphoma  
Pan American Association of Ophthalmology  
Bogotá, Columbia

2015 Moderator: Oncology subspecialty day: clinico-pathological correlation  
Pan American Association of Ophthalmology  
Bogotá, Columbia

2015 Uveal melanoma: prognostication and treatment  
Pan American Association of Ophthalmology  
Bogota, Columbia

2016 Prognostication for uveal melanoma  
World Ophthalmology Congress  
Guadalajara, Mexico

2016 Uveal melanoma: new frontiers  
World Ophthalmology Congress  
Guadalajara, Mexico

2017 Uveal melanoma: 5-year update on incidence, treatment, and survival (SEER 1973-2013) (selected oral abstract)  
International Society of Ocular Oncology  
Sydney, Australia

2017 Bilateral choroidal osteoma (selected oral abstract)  
International Society of Ocular Oncology  
Sydney, Australia

2017 Primary vitreoretinal lymphoma  
Pan American Association of Ophthalmology  
Lima, Peru

2017 Widefield retinal angiography and imaging  
Pan American Association of Ophthalmology  
Lima, Peru

2017 Moderator: Basic ocular oncology course  
Pan American Association of Ophthalmology  
Lima, Peru

2017 Retinoblastoma research  
One Retinoblastoma World Meeting  
Washington DC,USA

## **Report of Clinical Activities and Innovations**

### **Current Licensure and Certification:**

2010-2013 Ohio Medical License  
2013- Maryland Medical License  
2013- Certification, American Board of Ophthalmology  
2017- Massachusetts Medical License

### **Practice Activities:**

2011-2012	Ambulatory Care	Ophthalmology Cleveland Clinic	4 half-day sessions/week
2014-2017	Ambulatory Care	Ocular Oncology/Medical Retina Johns Hopkins	5 half-day sessions/week
2014-2017	Surgery	Ocular Oncology Johns Hopkins	3 half-day sessions/week
2017-	Ambulatory Care	Ocular Oncology/Medical Retina	4-5 half-day sessions/week



2017-	Surgery	MEE Ocular Oncology MEE	1 day session/week
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**Clinical Innovations:**

Clinical program for intravitreal delivery of chemotherapy for retinoblastoma at Johns Hopkins  2015-2017	Intravitreal chemotherapy, initially developed in abroad, is useful for treating residual vitreous seeding following primary treatment of retinoblastoma. I implemented the first intravitreal chemotherapy program for retinoblastoma at Johns Hopkins. This involved partnering with our chemotherapy pharmacy, pharmaceutical suppliers, medical instrument suppliers, and operating room teams to deliver safe and efficacious care to pediatric patients with retinoblastoma.
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Clinical program for patients with tuberous sclerosis complex (TSC) at MGH  2017-	Individuals and their families travel from across the United States and internationally to receive comprehensive care at the Herscot Center for Tuberous Sclerosis Complex. The ophthalmic features of TSC are important diagnostic criteria for establishing clinical diagnosis. I am working with Dr. Elizabeth Thiele, Director of the TSC program at MGH, to build a program where ocular examination is coordinated with MRI/CT scan. Examination under anesthesia provides an opportunity for thorough assessment of ocular manifestations (astrocytic hamartoma and achromic patch). It also allows findings to be documented to further our understanding of the natural history and response to therapy of fundus lesions, particularly as a subset of astrocytic hamartoma demonstrate aggressive features that threaten vision. Providing efficient scheduling of ocular examinations at the time of systemic imaging (where anesthesia is generally required in the setting of TSC) avoids the need for additional separate exposures to general anesthesia and saves time and hospital resources. I helped to successfully implement similar programs at the Cleveland Clinic and at Johns Hopkins and look forward to continuing to develop this element of the TSC Service at MEE/MGH.
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**Report of Education of Patients and Service to the Community**

***No presentations below were sponsored by outside entities***

**Activities**

2014	Macular News Interview with journalist David Seftel regarding the use of aspirin and its effects on age-related macular degeneration ( <a href="https://macularnews.org/2014/05/06/arvo-2014-dr-beth-arow/">https://macularnews.org/2014/05/06/arvo-2014-dr-beth-arow/</a> )
2014	Medscape Medical News Interview with journalist Marcia Frellick on 3-D printer derived facial prostheses for patients with eye cancer ( <a href="http://www.medscape.com/viewarticle/834475">http://www.medscape.com/viewarticle/834475</a> )
2014-	Expert Opinion/Medical-Legal Consultation (Various Law Firms) Rawls, McNelis & Mitchell, Norfolk, VA (2014) Williamson Law LC, Richmond, VA (2016) Cline, Williams, Wright, Johnson & Oldfather, LLP, Lincoln, NE (2016) The Klein Law Firm, Houston, TX (2016) Hofeld and Schaffner, Chicago, IL (2016)

- 2015 USA Today  
Interview with journalist Liz Szabo on “phantom eye syndrome” that patients may experience following enucleation  
(<https://www.usatoday.com/story/news/2015/05/21/phantom-eye-syndrome/27669949/>)
- 2016 Columbia Wellness Center  
Seminar for local public entitled: Seeing into the future: vision and the aging eye

**Educational Material for Patients and the Lay Community:**  
**No educational materials below were sponsored by outside entities.**

***Books, monographs, articles and presentations in other media (e.g., video and websites, movies, television and radio) that educate the public about medicine, health or biomedical sciences***

- 2015 Diagnosis and treatment of eye tumors: Q&A, Johns Hopkins Clinical Connection (educational patient video)  
(<https://clinicalconnection.hopkinsmedicine.org/videos/diagnosis-and-treatment-of-eye-tumors>)

***Educational material or curricula developed for non-professional students***

- 2015 NIH-Focus on Fellows Career Development Curriculum  
Participated in a full-day retreat for medical and college students with emphasis on careers in academia.

***Patient educational material***

- 2012 Eye Plaque Brachytherapy (patient guide), Cleveland Clinic Taussig Cancer Institute  
2013 Intraocular Melanoma Tests and Procedures (patient handout), NIH  
2014 Plaque brachytherapy (informational guide), Johns Hopkins

### **Report of Scholarship**

**\*Some entries appear by maiden name: Mary Elizabeth Turell**

**Peer-Reviewed Scholarship in print or other media:**

### **Research Investigations**

1. **Turell ME**, Wang A, Bellare A. Quantification of the effect of cross-path motion on the wear rate of ultra-high molecular weight polyethylene. *Wear*. 2003;255:1034-39.
2. **Turell ME**, Bellare A. A study of the nanostructure and tensile properties of ultra-high molecular weight polyethylene. *Biomaterials*. 2004 Aug;25(17):3389-98. PMID: 15020111.
3. **Turell ME**, Friedlaender G, Wang A, Thornhill TS, Bellare A. The effect of counterface roughness on the wear of UHMWPE for rectangular wear paths. *Wear*. 2005;259:984-91.
4. Bistolfi A, **Turell ME**, Lee Y, Bellare A. Tensile and tribological properties of high-crystallinity radiation crosslinked UHMWPE. *J Biomed Mater Res Part B: Appl Biomater*. 2009 Jul;90(1):137-44. doi: 10.1002/jbm.b.31265. PMID: 18985795.
5. **Turell ME**, Morrison SC, Traboulsi EI. Spondylometaphyseal dysplasia with cone-rod dystrophy. *Ophthalmic Genet*. 2010 Mar;31(1):12-7. doi: 10.3109/13816810903397812. PMID: 20141353.

6. Singh AD, **Turell ME**, Topham AK. Uveal melanoma: trends in incidence, treatment, and survival. *Ophthalmology*. 2011 Sep;118(9):1881-5. doi: 10.1016/j.ophtha.2011.01.040. PMID: 21704381.
7. Singh A, **Aronow ME**, Sun Y, Bebek G, Sauntharajah Y, Schoenfield L, Biscotti B, Tubbs R, Triozzi P, Eng C. Chromosome 3 status in uveal melanoma: a comparison of fluorescence in situ hybridization and single-nucleotide polymorphism array. *Invest Ophthalmol Vis Sci*. 2012 Jun 5;53(7):3331-9. doi: 10.1167/iovs.11-9027. PMID: 22511634.
8. **Aronow ME**, Adamus G, Mones A, Wang Y, Chan C, Singh A. Paraneoplastic vitelliform retinopathy: clinicopathologic correlation and review of the literature. *Surv Ophthalmol*. 2012 Nov;57(6):558-64. doi: 10.1016/j.survophthal.2012.02.004. PMID: 22784677.
9. **Aronow ME**, Nakagawa J, Gupta A, Traboulsi E, Singh A. Tuberous sclerosis complex: genotype/phenotype correlation of retinal findings. *Ophthalmology*. 2012 Sep;119(9):1917-23. doi: 10.1016/j.ophtha.2012.03.020. PMID: 22608477.
10. Wang Y, Abu-Asab MS, Li W, **Aronow ME**, Singh AD, Chan CC. Autoantibody against transient receptor potential M1 cation channels of retinal ON bipolar cells in paraneoplastic vitelliform retinopathy. *BMC Ophthalmol*. 2012 Nov 13;12:56. doi: 10.1186/1471-2415-12-56. PMID: 23148706.
11. **Aronow ME**, Sun Y, Sauntharajah Y, Biscotti C, Tubbs R, Triozzi P, Singh A. Monosomy 3 by FISH in uveal melanoma: variability in techniques and results. *Surv Ophthalmol*. 2012 Sep;57(5):463-73. doi: 10.1016/j.survophthal.2011.12.004. PMID: 22658782.
12. **Aronow ME**, Portell CA, Rybicki LA, Sweetenham JW, Singh AD. Ocular Adnexal Lymphoma: Assessment of a Tumor-Node-Metastasis Staging System. *Ophthalmology*. 2013 Sep;120(9):1915-9. doi: 10.1016/j.ophtha.2013.02.003. PMID: 23664470.
13. **Aronow ME**, Portell CA, Sweetenham JW, Singh AD. Uveal lymphoma: clinical features, diagnostic studies, treatment selection, and outcomes. *Ophthalmology*. 2014 Jan;121(1):334-41. doi: 10.1016/j.ophtha.2013.09.004. PMID: 24144449.
14. Portell CA, **Aronow ME**, Rybicki LA, Macklis R, Singh AD, Sweetenham JW. Clinical characteristics of 95 patients with ocular adnexal and uveal lymphoma: treatment outcomes in extranodal marginal zone subtype. *Clin Lymphoma Myeloma Leuk*. 2014 Jun;14(3):203-10. doi: 10.1016/j.clml.2013.10.011. PMID: 24417911.
15. Minca EC, Tubbs RR, Portier BP, Wang Z, Lanigan C, **Aronow ME**, Triozzi PL, Singh A, Cook JR, Sauntharajah Y, Plesec TP, Schoenfield L, Cawich V, Sulpizio S, Schultz RA. Genomic microarray analysis on formalin-fixed paraffin-embedded material for uveal melanoma prognostication. *Cancer Genet*. 2014 Jul-Aug;207(7-8):306-15. doi: 10.1016/j.cancergen.2014.08.005. PMID: 25442074.
16. Pacak K, Chew EY, Pappo AS, Yang C, Lorenzo FR, Wilson MW, **Aronow ME**, Young JA, Popovic V, Zhuang Z. Ocular manifestations of hypoxia-inducible factor-2 $\alpha$  paraganglioma-somatostatinoma-polycythemia syndrome. *Ophthalmology*. 2014 Nov;121(11):2291-3. doi: 10.1016/j.ophtha.2014.06.019. PMID: 25109928.
17. Campochiaro PA, Hafiz G, Mir TA, Scott AW, Zimmer-Galler I, Shah SM, Wenick AS, Brady CJ, Han I, He L, Channa R, Poon D, Meyerle C, **Aronow ME**, Sodhi A, Handa JT, Kherani S, Han Y, Sophie R, Wang G, Qian J. Pro-permeability factors in diabetic macular edema; the diabetic macular edema treated with ozurdex trial. *Am J Ophthalmol*. 2016 Aug;168:13-23. doi:10.1016/j.ajo.2016.04.017. PMID: 27130369.

18. Singh AD, Medina CA, Singh N, **Aronow ME**, Biscotti CV, Triozzi PL. Fine-needle aspiration biopsy of uveal melanoma: outcomes and complications. *Br J Ophthalmol*. 2016 Apr;100(4):456-62. doi: 10.1136/bjophthalmol-2015-306921. PMID: 26231747.
19. Engelhard S, Shah C, **Aronow ME**, Reddy A. Malpractice litigation in ocular oncology. *Ocul Oncol Pathol*. 2018;4:135-40. doi:10.1159/000479559. PMID: 29765942.
20. **Aronow ME**, Topham AK, Singh AD. Uveal melanoma: 5 year update on incidence, treatment, and survival (SEER 1973-2013). *Ocul Oncol Pathol*. 2018 Apr;4(3):145-51. doi: 10.1159/000480640. PMID: 29765944.
21. Shah S, Correa ZM, Scheffler A, **Aronow ME**, et al. Trends in radiation practices for female ocular oncologists in North America: a collaborative study of the international society of ocular oncology. *Ocul Oncol Pathol* (accepted April 2018, in press).

### Other peer-reviewed scholarship

1. **Turell ME**, Char D. Eyelid melanoma with negative sentinel lymph node biopsy and perineural spread. *Arch Ophthalmol*. 2007 Jul;125(7):983-4. PMID: 17620588.
2. **Turell ME**, Hayden BC, McMahon JT, Schoenfield LR, Singh, AD. Uveal schwannoma surgery. *Ophthalmology*. 2009 Jan;116(1):163-163.e6. doi: 10.1016/j.opthta.2008.08.045. PMID: 19118703.
3. **Turell ME**, Singh AD. Vascular tumors of the retina and choroid: diagnosis and treatment. *Middle East Afr J Ophthalmol*. 2010 Jul;17(3):191-200. doi: 10.4103/0974-9233.65486. PMID: 20844673.
4. **Turell ME**, Leonardy NJ, Singh AD. A unique presentation of grouped congenital hypertrophy of the retinal pigment epithelium. *Ophthalmic Genet*. 2011 Sep;32(3):162-4. doi: 10.3109/13816810.2011.562956. PMID: 21425957.
5. Sachdeva R, **Turell ME**, Meadows SR, Emch TM, Singh AD. Congenital intradiploic arachnoid cyst presenting as painless proptosis. *J AAPOS*. 2011 Dec;15(6):601-3. doi: 10.1016/j.jaapos.2011.07.013. PMID: 22153410.
6. Mirchia K, **Turell ME**, Singh AD. Imaging modalities for uveal melanoma. *Eur Ophthalmic Rev*. 2012;6:56-63.
7. **Turell ME**, Tubbs RR, Biscotti CV, Singh AD. Uveal melanoma: prognostication. *Monogr Clin Cytol*. 2012;21:55-60. doi: 10.1159/000331035. available. PMID: 22024584.
8. **Aronow ME**, Singh AD. The use of imaging in the diagnosis and management of intraocular lymphoma. *Int Ophthalmol Clin*. 2012 Fall;52(4):199-208. doi: 10.1097/IIO.0b013e318265d4e3. PMID: 22954942.
9. Singh AD, Pabon S, **Aronow ME**. Management of radiation maculopathy. *Ophthalmic Res*. 2012;48 Suppl 1:26-31. doi: 10.1159/000339844. PMID: 22907147.
10. Chen S, **Aronow ME**, Wang C, Shen D, Chan CC. Classical pathology of sympathetic ophthalmia presented in a unique case. *Open Ophthalmol J*. 2014 Jun 27;8:32-8. doi: 10.2174/1874364101408010032. PMID: 25067979.

11. **Aronow ME**, Chew EY. Age-related eye disease study 2: perspectives, recommendations, and unanswered questions. *Curr Opin Ophthalmol*. 2014 May;25(3):186-90. doi: 10.1097/ICU.0000000000000046. PMID: 24614146.
12. **Aronow ME**. Ocular adnexal lymphoma: evidence-based treatment approach. *Int Ophthalmol Clin*. 2015 Winter;55(1):97-109. doi: 10.1097/IIO.0000000000000049. PMID: 25436496.
13. **Aronow ME**, Shen D, Hochman J, Chan CC. Intraocular lymphoma models. *Ocul Oncol Pathol*. 2015 Apr;1(3):214-22. doi: 10.1159/000370158. PMID: 27171354.
14. **Aronow ME**. Intra-arterial chemotherapy for retinoblastoma: experience matters, but risks remain (Invited Commentary). *Ophthalmology* 2018;125(11):1812. doi: 10.1016/j.ophtha.2018.08.020. PMID: 30318041.

#### **Non-peer reviewed scholarship in print or other media:**

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## **Narrative Report**

### **Overview:**

I am an ophthalmologist with dual fellowship training in ophthalmic oncology and medical retina. My clinical and surgical practice (~80% effort) encompasses the full spectrum of pediatric and adult eye cancer care. My research (~10% effort) focuses on furthering our understanding of eye cancer with the ultimate goal of improving treatments and outcomes for patients. As an educator (~10% effort) my efforts are directed towards training ophthalmology residents, fellows, medical students, and visitors from institutions nationally and internationally.

### **Clinical Expertise and Innovation:**

I was recruited to the Johns Hopkins to be the first dedicated comprehensive ophthalmic oncologist at the Wilmer Eye Institute and tasked with building a full-service eye cancer program. Prior to joining the faculty, I was a full-time faculty member at the Cleveland Clinic Cole Eye Institute. My practice scope has involved some of the most complex diseases in ophthalmology: uveal melanoma, retinoblastoma, intraocular lymphoma, ocular surface neoplasia, orbital tumors, benign tumors (hamartomas and others), phakomatoses (particularly tuberous sclerosis complex and von Hippel Lindau disease), paraneoplastic conditions, and ocular toxicities from cancer therapy (particularly immunotherapy). This involves multidisciplinary coordination of services, including radiation oncology, chemotherapy pharmacies, and pediatric/adult medical and surgical oncology. I work closely with the teams at academic cancer centers, such as the Sidney Kimmel Comprehensive Cancer Center at Johns Hopkins (where I held a joint appointment), and presently with the Dana Farber and the Massachusetts General Hospital (MGH). My major practice contributions have included launching the first intravitreal chemotherapy program for children with retinoblastoma at Johns Hopkins. As a member of the national professional advisory board for the Tuberous Sclerosis Alliance and chair (ophthalmology section) for the Clinical Consensus Group, I have worked closely with tuberous sclerosis centers of excellence such as the Kennedy Krieger Institute in Baltimore, MD and the Herscot Center for Tuberous Sclerosis Complex (TSC) at MGH. As part of both the major and minor diagnostic criteria, the ophthalmic features of TSC are central to establishing diagnosis. I am working with Dr. Elizabeth Thiele, Director of the TSC program at MGH, to build a patient program for ocular screening. Examinations are frequently performed under sedation at the same time as MRI/CT scan. Examination under anesthesia provides an opportunity for thorough assessment of ocular manifestations (astrocytic hamartoma and achromic patch) and allows findings to be documented in order to further our understanding of the natural history and response to therapy of fundus lesions, particularly as a subset of astrocytic hamartoma demonstrate aggressive features that threaten vision.

### **Investigation:**

I am interested in pushing the field of molecular biomarker analytics forward as a new frontier for uveal melanoma. With Hopkins grant support, I investigated the role of plasma tumor DNA (ptDNA) in monitoring response to therapy. Our group was among the first to use droplet digital PCR for detection of ptDNA in this population. Ultimately, the goal is to develop targeted therapies for uveal melanoma, and I believe that ptDNA may serve as a sensitive marker of effective new treatments. Through these efforts and other scholarly pursuits, I have had the privilege of delivering more than 25 invited talks nationally and more than 15 invited presentations internationally since 2009. I have served as an editor for multiple textbooks and am on the editorial board of *Ophthalmic Genetics* and *BMC Cancer*.

### **Teaching and Education:**

As the assistant retina fellowship director at Johns Hopkins, I supervised trainees during their 2-year fellowship program. In addition, I devote over 400 hours of clinical and surgical teaching time per year to medical students, residents, and fellows. At Johns Hopkins, I hosted 4 international visiting scholars on the ophthalmic oncology service. I look forward to hosting visiting scholars at Harvard Medical School. I have also regularly presented lectures for faculty and trainees from our collaborating teams such as radiation oncology and pediatric oncology.

### **Summary:**

I am an ocular oncologist with expertise in the full spectrum of pediatric and adult eye cancer. My focus is to make an impact on patient care and survival outcomes through the development of novel markers of disease response and newer therapies for ocular tumors.