

AMDE SELASSIE SHIFERA, MD, PHD

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Pittsford, NY 14534
USA

CHRONOLOGICAL SUMMARY (HIGHLIGHTS)

- Associate Professor of Ophthalmology and Chief of Uveitis Service, Flaum Eye Institute, University of Rochester School of Medicine & Dentistry, Rochester, NY, USA (2021 to Present)
- Assistant Professor of Ophthalmology, Wilmer Eye Institute, Johns Hopkins University School of Medicine, Baltimore, MD, USA (2015-2020)
- Clinical Fellowship in Uveitis and Ocular Inflammation, Casey Eye Institute, Oregon Health & Science University, Portland, OR, USA (2014-2015)
- Residency in Ophthalmology, University of Florida, Gainesville, FL, USA (2011-2014)
- Postdoctoral Research Fellowship, Albert Einstein College of Medicine, Bronx, NY, USA and University of California San Francisco, San Francisco, CA, USA (2007-2010)
- Graduate Program in Microbiology & Immunology (PhD), Albert Einstein College of Medicine, Bronx, NY, USA (2001-2007)
- Graduate Program in Clinical Chemistry (MS), West Chester University, West Chester, PA, USA (1999-2001)
- General Medical Practitioner, Woldia, Ethiopia and Wonji, Ethiopia (1989-1999)
- Medical School (MD), Addis Ababa University, Addis Ababa, Ethiopia (1982-1989)

CHRONOLOGICAL SUMMARY (FULL)

- **Associate Professor of Ophthalmology and Chief of Uveitis Service**, Flaum Eye Institute, University of Rochester School of Medicine & Dentistry, Rochester, NY, USA (2021 to Present)
- **Locum Tenens Ophthalmologist**, The Glaucoma Center, Bowie, MD, USA (2021 to 2021)
- **Associate Ophthalmologist**, Stuart J Kaufman MD and Associates PA, Zephyrhills, FL, USA (2020 to 2021)
- **Assistant Professor of Ophthalmology**, Wilmer Eye Institute, Johns Hopkins University School of Medicine, Baltimore, MD, USA (2015-2020)
- **Clinical Fellowship in Uveitis and Ocular Inflammation**, Casey Eye Institute, Oregon Health & Science University, Portland, OR, USA (2014-2015); also worked as part-time ophthalmologist, Portland Veterans Affairs Medical Center, Portland, OR, USA (2014-2015)
- **Residency in Ophthalmology**, University of Florida, Gainesville, FL, USA (2011-2014)
- **Internship in Surgery**, University of Colorado Denver, Aurora, CO, USA (2010-2011)
- **Postdoctoral Research Fellowship**, University of California San Francisco, San Francisco, CA, USA (2009-2010)

- **Postdoctoral Research Fellowship**, Albert Einstein College of Medicine, Bronx, NY, USA (2007-2009)
- **Graduate Program in Microbiology & Immunology (MS, PhD)**, Albert Einstein College of Medicine, Bronx, NY, USA (2001-2007)
- **Research Assistant**, West Chester University of Pennsylvania, West Chester, PA, USA (2001-2001)
- **Graduate Program in Clinical Chemistry (MS)**, West Chester University of Pennsylvania, West Chester, PA, USA (1999-2001)
- **General Medical Practitioner**, Wonji Hospital, Wonji, Ethiopia (1990-1999); also served as a Medical Director, Wonji Hospital, Wonji, Ethiopia (1997-1999)
- **General Medical Practitioner**, Woldia Hospital, Woldia, Ethiopia (1989-1989)
- **Medical School (MD)**, Addis Ababa University, Addis Ababa, Ethiopia (1982-1989)

EMPLOYMENT

- **Associate Professor of Ophthalmology and Chief of Uveitis Service** (September 2021 to Present): Flaum Eye Institute, University of Rochester School of Medicine & Dentistry, Rochester, NY, USA
- **Locum Tenens Ophthalmologist** (April 2021 to May 2021): The Glaucoma Center, Bowie, MD, USA
- **Associate Ophthalmologist** (September 2020 to February 2021): Stuart J Kaufman MD and Associates PA, Zephyrhills, FL, USA
- **Assistant Professor of Ophthalmology** (September 2015 to August 2020): Wilmer Eye Institute, Johns Hopkins University School of Medicine, Baltimore, MD, USA
- **Part-time Ophthalmologist** (August 2014 to July 2015): Portland Veterans Affairs Medical Center, Portland, OR, USA
- **Research Assistant** (May 2001 to August 2001): Department of Chemistry, West Chester University of Pennsylvania, West Chester, PA, USA
- **General Medical Practitioner** (January 1990 to July 1999) and **Medical Director** (December 1997 to July 1999): Wonji Hospital, Wonji, Ethiopia
- **General Medical Practitioner** (January 1989 to December 1989): Woldia Hospital, Woldia, Ethiopia

TRAINING

- **Clinical Fellowship in Uveitis & Ocular Inflammation** (July 2014 to July 2015): Casey Eye Institute, Oregon Health & Science University, Portland, OR, USA
- **Residency in Ophthalmology** (July 2011 to June 2014): University of Florida, Gainesville, FL, USA
- **Internship in Surgery** (June 2010 to June 2011): University of Colorado Denver, Aurora, CO, USA
- **Postdoctoral Research Fellowship** (May 2009 to June 2010): University of California San Francisco, San Francisco, CA, USA
- **Postdoctoral Research Fellowship** (May 2007 to April 2009): Albert Einstein College of Medicine, Bronx, NY, USA

EDUCATION

- **Doctor of Philosophy** (June 2007) and **Master of Science** (June 2004): Albert Einstein College of Medicine, Bronx, NY, USA. Major: Microbiology & Immunology. Dates of attendance: August 2001 to June 2007
- **Master of Science** (May 2001): West Chester University of Pennsylvania, West Chester, PA, USA. Major: Clinical Chemistry. Dates of attendance: August 1999 to May 2001
- **Doctor of Medicine** (February 1989): Faculty of Medicine, Addis Ababa University, Addis Ababa, Ethiopia. Included a one-year pre-medical program and a one-year internship. Dates of attendance: October 1982 to January 1989

CLINICAL EXPERIENCE

- **Uveitis Subspecialist and Comprehensive Ophthalmologist** (September 2021 to Present): Flaum Eye Institute, University of Rochester Medical Center, Rochester, NY, USA
- **Locum Tenens Ophthalmologist** (April 2021 to May 2021): The Glaucoma Center, Bowie, MD, USA. Involved in the medical care of glaucoma patients
- **Comprehensive Ophthalmologist and Uveitis Subspecialist** (September 2020 to February 2021): Stuart J Kaufman MD and Associates PA, Zephyrhills, FL, USA. Involved in the practice of uveitis and comprehensive ophthalmology
- **Uveitis Subspecialist and Comprehensive Ophthalmologist** (September 2015 to August 2020): Wilmer Eye Institute, Johns Hopkins Medicine, Baltimore, MD, USA. Involved in the practice of uveitis and comprehensive ophthalmology
- **Comprehensive Ophthalmologist** (August 2014 to July 2015): Portland Veterans Affairs Medical Center, Portland, OR, USA. As a part-time employee, provided care to medical retina patients
- **General Medical Practitioner** (January 1990 to July 1999): Wonji Hospital, Wonji, Ethiopia. Worked as a generalist physician responsible for outpatient and inpatient care covering internal medicine, surgery, obstetrics, gynecology, pediatrics, orthopaedics, ophthalmology, dermatology and psychiatry
- **General Medical Practitioner** (January 1989 to December 1989): Woldia Hospital, Woldia, Ethiopia. Involved in the medical and surgical care of military casualties in addition to providing generalist medical care to civilian patients

LEADERSHIP EXPERIENCE

- **Chief of Uveitis Service** (September 2021 to Present): Flaum Eye Institute, University of Rochester School of Medicine & Dentistry, Rochester, NY, USA
- **Medical Director** (December 1997 to July 1999): Wonji Hospital, Wonji, Ethiopia. Served as the head of a 175-bed hospital owned by a sugar factory that provided care for the workers of the factory and their families

TEACHING EXPERIENCE

- **Flaum Eye Institute**, University of Rochester School of Medicine & Dentistry, Rochester, NY, USA (September 2021 to Present): Associate Professor of Ophthalmology

- **Wilmer Eye Institute**, Johns Hopkins University School of Medicine, Baltimore, MD, USA (September 2015 to August 2020): Assistant Professor of Ophthalmology
- **Casey Eye Institute**, Oregon Health & Science University, Portland, OR, USA (July 2014 to July 2015): As a fellow, gave lectures to ophthalmology residents
- **University of Florida**, Gainesville, FL, USA (July 2011 to June 2014): As a resident, taught medical students during ophthalmology rotations
- **West Chester University of Pennsylvania**, West Chester, PA, USA (August 1999 to May 2001): As a graduate assistant, assisted in chemistry laboratory teaching

RESEARCH EXPERIENCE

- **University of Rochester School of Medicine & Dentistry**, Rochester, NY, USA (January 2023 to Present): co-investigator in the ELLIPSS: ELucidating the Landscape of Immunoendotypes in Psoriatic Skin and Synovium Study
- **Johns Hopkins University School of Medicine**, Baltimore, MD, USA (September 2015 to August 2020).
 - i. The molecular genetics and epigenetics of HLA-A29: searching for the link between the HLA-A29 allele and birdshot chorioretinitis (PI)
 - ii. Exploratory metagenomic and PCR studies on archival tissue specimens of ocular sarcoidosis (PI)
 - iii. Molecular search for viruses, bacteria and fungi in Vogt-Koyanagi-Harada (VKH) syndrome (Co-I)
 - iv. Molecular analysis of bacterial and fungal DNA in conjunctival sarcoid granulomas (PI)
- **Oregon Health & Science University**, Portland, OR, USA (July 2014 to July 2015): As a co-investigator, participated in clinical trials involving the use of tocilizumab, abatacept, adalimumab, methotrexate, mycophenolate and fluocinolone acetonide intravitreal insert in patients with uveitis
- **University of California San Francisco**, San Francisco, CA, USA (May 2009 to June 2010): As a postdoctoral research fellow, investigated the roles of cytokines, monocytes and cell signaling pathways in the homeostasis of intraocular pressure and in the pathogenesis of glaucoma
- **Albert Einstein College of Medicine**, Bronx, NY, USA (May 2007 to April 2009): As a postdoctoral research fellow, investigated the effects of vitamin D on the activities of cellular signaling pathways in immune cells and the role of vitamin D deficiency in the pathogenesis of systemic lupus erythematosus. Demonstrated that the tumor promoter PMA acting in a cooperative manner with the adenoviral oncogene Ad E1A induces expression from the herpes simplex virus type 1 thymidine kinase promoter
- **Albert Einstein College of Medicine**, Bronx, NY, USA (August 2001 to June 2007): As a graduate student, examined the effects of mutations in IKK γ (NEMO) protein associated with hypohidrotic ectodermal dysplasia-immune deficiency and demonstrated that the mutations block the activation of T cells
- **West Chester University of Pennsylvania**, West Chester, PA, USA (August 1999 to August 2001): As a graduate assistant and as a research assistant, developed a method for the analysis of urine proteins by capillary electrophoresis

- **Ethiopian-Norwegian Fluoride Project**, Wonji, Ethiopia (June 1997 to July 1999): As a co-investigator, participated in epidemiological studies on dental fluorosis and skeletal fluorosis

RESEARCH FUNDING

- Wilmer Eye Institute Pooled Professors Fund (principal investigator): 2018
- Wilmer Eye Institute-King Khaled Specialist Eye Hospital Joint Collaboration Award (co-investigator); 2016-2019
- Wilmer Eye Institute Pooled Professors Fund (principal investigator): 2017
- Mallinckrodt Foundation Research Fellowship Award (principal investigator): 2015-2016

PUBLICATIONS

Book chapters

1. Kopplin LJ, Shifera, AS. Biologics targeting tumor necrosis factor. In: Lin P, Suhler EB (eds). *Treatment of Non-infectious Uveitis*. Cham, Switzerland: Springer 2019: 67-84
2. Shifera AS, Kopplin L, Lin P, Suhler EB. Drug-induced uveitis. *Int Ophthalmol Clin* 2015; 55:47-65
3. Kopplin LJ, Shifera AS, Suhler EB, Lin P. Biological response modifiers in the treatment of noninfectious uveitis. *Int Ophthalmol Clin* 2015; 55:19-36

Journal Articles (peer-reviewed)

1. Shan K, Montalvo-Toledo LA, Shifera AS, Santiago EA. A Severe and Prolonged Case of Ocular Monkeypox Without Systemic Manifestations. *Cornea* 2024; 43: 1176
2. Shifera AS, Sun K, Eberhart C, Thorne JE. Corneal sarcoidosis: diffuse stromal granulomatous inflammation in a patient with sarcoidosis. *Cornea* 2022; 41:644
3. Viruni N, Shifera AS, Arevalo JF. Unilateral frosted branch angiitis in patient with immunosuppression. *JAMA Ophthalmology* 2021; 139:484
4. Berkenstock MK, Mir TA, Khan IR, Burkholder BM, Chaon BC, Shifera AS, Thorne JE. Effectiveness of the dexamethasone implant in lieu of oral corticosteroids in intermediate and posterior uveitis requiring immunosuppression. *Ocul Immunol Inflamm* 2022; 30:741
5. Shifera AS, Pockrandt C, Rincon N, Ge Y, Lu J, Varabyou A, Jedlicka AE, Sun K, Scott AL, Eberhart C, Thorne JE, Salzberg SL. Identification of microbial agents in tissue specimens of ocular and periocular sarcoidosis using a metagenomics approach. *F1000Res*. 2021 Aug 17; 10:820.
6. Shifera AS, Hong GH, Khan IR, Okeagu C, Thorne JE. Disease relapse after drug-free remission in ocular mucous membrane pemphigoid. *Am J Ophthalmol* 2021; 223:21
7. Liberman P, Shifera AS, Berkenstock M. Dupilumab-associated conjunctivitis in patients with atopic dermatitis. *Cornea* 2020; 39:784
8. Shifera AS, Eberhart C, Kuo IC. Role of anterior segment imaging in the diagnosis of atypical pterygium. *Can J Ophthalmol* 2020; 55:e115
9. Shifera AS. Bilateral anterior and intermediate uveitis associated with omeprazole. *Ann Pharmacother* 2020; 54:397
10. Shifera AS, Singh M. Multimodal imaging in didanosine retinopathy. *Retin Cases Brief Rep* 2021; 15:234

11. Hong GH, Khan IR, Shifera AS, Okeagu C, Thorne JE. Incidence and clinical characteristics of ocular involvement in mucous membrane pemphigoid. *Ocul Immunol Inflamm* 2018; 19:1-5
12. Mir TA, Reddy AK, Burkholder BM, Walsh J, Shifera AS, Khan IR, Thorne JE. Clinical features and incidence rates of ocular complications in patients with retinal vasculitis. *Am J Ophthalmol* 2017; 179:171-178
13. Shifera AS, Pennesi ME, Yang P, Lin P. Ultra-wide-field fundus autofluorescence findings in patients with acute zonal occult outer retinopathy. *Retina* 2017; 37:1104-1119
14. Choi CS, Zhang L, Abramoff MD, Sonka M, Shifera AS, Kay CN. Evaluating efficacy of aflibercept in refractory exudative age-related macular degeneration with OCT segmentation volumetric analysis. *Ophthalmic Surg Lasers Imaging Retina* 2016; 47:245-251
15. Alvarado JA, Chau P, Wu J, Juster R, Shifera AS, Geske M. Profiling of cytokines secreted by conventional aqueous outflow pathway endothelial cells activated in vitro and ex vivo with laser irradiation. *Invest Ophthalmol Vis Sci* 2015; 56:7100-7108
16. Shifera AS, Kay CN. Early-onset X-linked retinitis pigmentosa in a heterozygous female harboring an intronic donor splice site mutation in the retinitis pigmentosa GTPase regulator gene. *Ophthalmic Genet* 2015; 36:251-256
17. Shifera AS, Leoncavallo A, Sherwood M. Probable association of an attack of bilateral acute angle-closure glaucoma with duloxetine. *Ann Pharmacother* 2014; 48:936-939
18. Alvarado JA, Iguchi R, Martinez J, Trivedi S, Shifera AS. Similar effects of selective laser trabeculoplasty and prostaglandin analogs on the permeability of cultured Schlemm canal cells. *Am J Ophthalmol* 2010; 150:254-264
19. Alvarado JA, Katz LJ, Trivedi S, Shifera AS. Monocyte modulation of aqueous outflow and recruitment to the trabecular meshwork following selective laser trabeculoplasty. *Archives Ophthalmol* 2010; 128:731-737
20. Shifera AS. Proteins that bind to IKK γ (NEMO) and down-regulate the activation of NF- κ B. *Biochem Biophys Res Commun* 2010; 396:585-589
21. Shifera AS, Trivedi S, Chau P, Bonnemaision LH, Iguchi R, Alvarado JA. Constitutive secretion of chemokines by cultured human trabecular meshwork cells. *Exp Eye Res* 2010; 91:42-47
22. Shifera AS, Leong D, Hardin JA. Vitamin D does not modulate NF- κ B activity in Jurkat T cells. *Immunol Lett* 2010; 131:151-158
23. Shifera AS. The zinc finger domain of IKK γ (NEMO) protein in health and disease. *J Cell Mol Med* 2010; 14:2404-2414
24. Shifera AS. Protein-protein interactions involving IKK γ (NEMO) that promote the activation of NF- κ B. *J Cell Physiol* 2010; 223:558-561
25. Shifera AS, Hardin JA. Factors modulating expression of Renilla luciferase from control plasmids used in luciferase reporter gene assays. *Anal Biochem* 2010; 396: 167-172
26. Shifera AS, Hardin JA. PMA induces expression from the herpes simplex virus thymidine kinase promoter via the activation of JNK and ERK in the presence of adenoviral E1A proteins. *Arch Biochem Biophys* 2009; 490:145-157
27. Shifera AS, Horwitz MS. Mutations in the zinc finger domain of IKK γ block the activation of NF- κ B and the induction of IL-2 in stimulated T lymphocytes. *Mol Immunol* 2008; 45:1633-1645

28. Shifera AS, Friedman JM, Horwitz MS. IKK γ (NEMO) is involved in the coordination of the AP-1 and NF- κ B pathways. *Mol Cell Biochem* 2008; 310:181-190
29. Assefa G, Shifera G, Melaku Z, Haimanot RT. Clinical and radiological prevalence of skeletal fluorosis among retired employees of Wonji-Shoa sugar estate in Ethiopia. *East Afr Med J* 2004; 81:638-40

Journal Articles (non-peer-reviewed)

1. Shifera AS, Sun K, Eberhart C, Thorne JE. Reply. *Cornea*. 2022 Jul 1;41(7):e16
2. Shifera, AS. A potential clue to the pathogenesis of varicella-zoster virus stromal keratitis. *Cornea* 2017; 36:e27-e28
3. Alvarado JA, Iguchi R, Juster R, Chen JA, Shifera AS. From the bedside to the bench and back again: predicting and improving the outcomes of SLT glaucoma therapy. *Trans Am Ophthalmol Soc* 2009; 107:167-183
4. Shifera AS. The effects of IKK γ zinc finger mutations on NF- κ B signaling in T cells. PhD dissertation, Albert Einstein College of Medicine, Yeshiva University, 2007

Journal Articles (editorials)

1. Alvarado JA, Shifera AS. Progress toward understanding the functioning of the trabecular meshwork based on lessons from studies on laser trabeculoplasty. *Br J Ophthalmol* 2010; 94:1417-1418

Conference Abstracts

1. Shifera AS, Hong GH, Khan I, Okeagu C, Thorne JE. Disease relapse after drug-free remission in mucous membrane pemphigoid. *Invest Ophthalmol Vis Sci* 2019; 60: 6707
2. Hong GH, Khan I, Shifera AS, Okeagu C, Thorne JE. Ocular Involvement in Mucous Membrane Pemphigoid. *Invest Ophthalmol Vis Sci* 2017; 58:561
3. Shifera AS, Pennesi M, Yang P, Lin P. Wide-field fundus autofluorescence and electroretinographic abnormalities in patients with acute zonal occult outer retinopathy. *Invest Ophthalmol Vis Sci* 2015; 56:6183
4. Suhler EB, Giles TR, Lin P, Shifera AS, Rosenbaum JT. An open-label trial to assess the efficacy and safety of tocilizumab in the management of juvenile idiopathic arthritis-associated uveitis: preliminary results. *Invest Ophthalmol Vis Sci* 2015; 56:860
5. Choi C, Zhang L, Abramoff MD, Sonka M, Shifera AS, Kay CN. Efficacy of aflibercept in refractory wet age-related macular degeneration. *Invest Ophthalmol Vis Sci* 2014; 55:3936
6. Shifera G, Caffo AL. Method development for urinary proteins by capillary electrophoresis. *Clin Chem* 2001; 47:A38.

PRESENTATIONS AND INVITED LECTURES

Invited Lectures

1. Shifera AS. The diagnostic process in ocular inflammation. Rochester Optometric Society Meeting; March 9, 2022; Fairport, NY, USA
2. Shifera AS. Prevention and management of post-surgical uveitis. Visiting Professor Lecture. Flaum Eye Institute, University of Rochester School of Medicine & Dentistry; November 19, 2021; Rochester, NY, USA

Oral Presentations

3. *Shifera AS*. Diagnosis and management of post-streptococcal ocular inflammation. The Wilmer Eye Institute's Current Concepts in Ophthalmology 32nd Annual Baltimore Meeting; December 5, 2019; Baltimore, MD, USA
4. *Shifera AS*. Case presentation. The Wilmer Eye Institute's Current Concepts in Ophthalmology 31st Annual Baltimore Meeting; November 29, 2018; Baltimore, MD, USA
5. *Shifera AS*. Case presentation in panuveitis: Seeing spots. Uveitis Subspecialty Day; AAO 2018; Oct. 27, 2018; Chicago, IL, USA
6. *Shifera AS*. Cytomegalovirus retinitis in the absence of immune deficiency. The Wilmer Eye Institute's Current Concepts in Ophthalmology 30th Annual Baltimore Meeting; November 30, 2017; Baltimore, MD, USA

Poster Presentations

1. *Shifera AS*, Hong GH, Khan I, Okeagu C, Thorne JE. Disease relapse after drug-free remission in mucous membrane pemphigoid. ARVO 2019; May 2, 2019; Vancouver, Canada
2. *Shifera AS*, Pennesi M, Yang P, Lin P. Wide-field fundus autofluorescence and electroretinographic abnormalities in patients with acute zonal occult outer retinopathy. ARVO 2015; May 7, 2015; Denver, CO, USA

HONORS AND AWARDS

- Mallinckrodt Research Fellowship, Mallinckrodt Foundation, St Louis, MO, USA (2015-2016)
- Full Graduate Assistantship, West Chester University of Pennsylvania, West Chester, PA, USA (1999-2001)
- Addis Ababa University Medal (first in graduating class) Addis Ababa University, Addis Ababa, Ethiopia (1988)
- Outstanding Student of the Year, Addis Ababa University, Addis Ababa, Ethiopia (1984)
- Honor List, Pre-Medical Program, Addis Ababa University, Addis Ababa, Ethiopia (1983)

PROFESSIONAL AFFILIATIONS

- American Uveitis Society (2018)
- American Academy of Ophthalmology, Active Fellow (2019)
- American Academy of Ophthalmology, Active Member (2015)
- American Academy of Ophthalmology, Member-in-Training (2011)
- Association for Research in Vision and Ophthalmology (2010)
- American Medical Association (2005)

LICENSURE

- Medicine and Surgery License, Commonwealth of Virginia
- Medicine and Surgery License, State of New York
- Medical Physician and Surgeon License, Commonwealth of Pennsylvania

CERTIFICATION

- Diplomate of the American Board of Ophthalmology (2019)

LANGUAGES

- English
- Amharic (native language)
- Oromeffa

VOLUNTEER AND COMMUNITY SERVICE

- Ethiopian-Netherlands AIDS Research Project, Ethiopia (1995 to 1999): Participated in the planning and launching of a large-scale cohort study conducted by a joint research program between research institutions of Ethiopia and the Netherlands and that investigated the natural history of HIV infection

PERSONAL INTERESTS AND ACTIVITIES

- Watching soccer games
- Watching movies
- Reading novels
- Reading on history
- Sightseeing