

CURRICULUM VITAE

Edward M. Barnett MD, PhD

Professor

Department of Ophthalmology and Visual Sciences

OFFICE ADDRESS:

Eye Institute
925 N 87 St
Milwaukee, WI 53226

EDUCATION:

08/1983 - 05/1988 B.S. with Honors, Psychology University of Wisconsin, Madison, WI
08/1988 - 05/1995 M.D. University of Iowa College of Medicine, Iowa City, IA
08/1988 - 05/1995 Ph.D., Neuroscience University of Iowa, Iowa City, IA

POSTGRADUATE TRAINING AND FELLOWSHIP APPOINTMENTS:

07/1995 - 06/1996 Transitional Year Internship, St. Lukes Medical Center, Milwaukee, WI
07/1996 - 06/1999 Resident, Department of Ophthalmology & Visual Sciences, University of Iowa Hospitals and Clinics, Iowa City, IA
07/1999 - 06/2000 Fellowship, Department of Ophthalmology & Visual Sciences, Glaucoma, Washington University in St. Louis/Barnes Jewish Hospital, St. Louis, MO

FACULTY APPOINTMENTS:

07/2000 - 07/2001 Assistant Professor, The Eye and Ear Institute, University of Pittsburgh, Pittsburgh, PA
08/2001 - 05/2006 Assistant Professor, Department of Ophthalmology & Visual Sciences, Washington University in St. Louis, St. Louis, MO
06/2006 - 05/2012 Associate Professor, Department of Ophthalmology & Visual Sciences, Washington University in St. Louis, St. Louis, MO
08/2010 - 07/2011 Adjunct Assistant Professor, College of Optometry, University of Missouri-St. Louis, St. Louis, MO
06/2012 - 06/2013 Professor, Department of Ophthalmology & Visual Sciences, Washington University in St. Louis, St. Louis, MO
06/2015 - Present Professor, Department of Ophthalmology, Medical College of Wisconsin, Milwaukee, WI

EDUCATIONAL ADMINISTRATIVE APPOINTMENTS:

08/2001 - 06/2008 Coordinator, Resident Lecture Series - Glaucoma, Department of Ophthalmology & Visual Sciences, Washington University in St. Louis, St. Louis, MO
08/2001 - 06/2013 Co-director, Glaucoma Fellowship, Department of Ophthalmology & Visual Sciences, Washington University in St. Louis/Barnes Jewish Hospital, St. Louis, MO

HOSPITAL AND CLINICAL ADMINISTRATIVE APPOINTMENTS:

07/2000 - 07/2001 Director, Glaucoma Service, The Eye and Ear Institute, University of Pittsburgh, Pittsburgh, PA
06/2006 - 06/2013 Clinical Director, Department of Ophthalmology & Visual Sciences, Washington University in St. Louis, St. Louis, MO
05/01/2018 - Present Director, Department of Ophthalmology and Visual Science, Glaucoma Service

HOSPITAL STAFF PRIVILEGES:

06/25/13 - 05/31/15 Massachusetts Eye and Ear Infirmary, 243 Charles St. Boston, MA 02114
07/17/13 - 05/31/15 Tufts Medical Center, 800 Washington St., Box 836 Boston, MA 02111-1552

11/21/13 - 05/31/15 Massachusetts General Hospital, 55 Fruit St. Boston, MA 02114
 06/01/15 - Present Children's Hospital of Wisconsin, 8915 W. Connell Ct. Milwaukee, WI 53226
 06/11/15 - Present Froedtert Hospital, 9200 W. Wisconsin Ave. Milwaukee, WI 53226-3596
 07/01/1999 - 06/30/2000 Barnes Jewish Hospital, 1 Barnes Jewish Plaza St. Louis, MO 63110
 07/12/1999 - 06/30/2000 John Cochran Veterans Administration Medical Center, 915 North Grand Ave. St. Louis, MO 63106
 07/01/2000 - 07/31/2001 University of Pittsburgh Medical Center Presbyterian, 200 Lothrop St. Pittsburgh, PA 05213
 09/26/2000 - 07/31/2001 University of Pittsburgh Medical Center St. Margaret, 815 Freeport Rd Pittsburgh, PA 15215
 09/28/2000 - 07/31/2001 Stars and Stripes Healthcare Network, University Drive, Pittsburgh, PA 15402
 08/10/2001 - 06/30/2013 Barnes Jewish Hospital, 1 Barnes Jewish Plaza, St. Louis, MO 63110
 11/16/2001 - 09/04/2004 John Cochran Veterans Administration Medical Center, 915 N. Grand Ave. St. Louis, MO 63106
 12/29/2010 - 02/27/2012 Barnes Jewish West County Hospital, 12634 Olive Blvd St. Louis, MO 63141
 07/26/2015 - Present Staff Physician, Surgical Services - Ophthalmology, Clement J Zablocki VA Medical Center, 5000 West National Ave., Milwaukee, WI 53295

SPECIALTY BOARDS AND CERTIFICATION:

<u>Board Certified</u>	<u>Issue Date</u>	<u>Expiration</u>
American Board of Ophthalmology	05/2001	12/2031
American Board of Ophthalmology (MOC)	01/2012	12/2021

<u>Certificates</u>	<u>Issued By</u>	<u>Issue Date</u>	<u>Expiration</u>
Ex-Press Mini Glaucoma Shunt	Ciba Vision	05/2002	None
Endoscopic Cyclophotocoagulation	Endo Optiks	03/2007	None
Trabectome Level Two	Neomedix	2007	None
Trabectome Level One	Neomedix	2007	None
Trabectome Trainer	Neomedix	2008	None
iStent	Glaukos	2014	None
Physician Builder	EPIC	01/16/2016	None
BLS for Healthcare Providers	American Heart Association	03/2016	03/31/2024

<u>Licensure</u>	<u>Number</u>	<u>Issue Date</u>	<u>Expiration</u>
State of Missouri	MD118287	04/1999	01/2014
Commonwealth of Pennsylvania	MD-070738-L	04/2000	12/2002
Commonwealth of Massachusetts	254422	03/2013	06/2015
State of Wisconsin	63463-20	01/2015	10/2015

AWARDS AND HONORS:

1983 - 1988 College of Letters & Sciences Honors Program
 1984 - Present Phi Eta Sigma Freshman Honor Society
 1985 - Present Sophomore Honors, Honors Program
 1986 - Present Golden Key National Honor Society
 1986 - Present Honor Society of Phi Kappa Phi
 1986 - Present Psi Chi national Honor Society in Psychology
 1986 - Present Knapp-Brittingham Summer Honors Undergraduate Research Grant

1987 - Present Florence Waste Pulver Scholarship
1987 - Present Phi Beta Kappa
1991 - Present Alpha Omega Alpha Honor Medical Society
1993 - Present I. H. Borts Medical Student Research Award
1993 - Present American Federation for Clinical Research Medical Student Award
1994 - Present Edward Heath Medical Student Research Award
2006 - 2013 America's Top Ophthalmologists - Consumer's Research Council of America
2011 - 2014 Best Doctors in America
01/01/2016 - 12/31/2016 America's Top Ophthalmologists, SLD Industries, Inc.
2018 - 2019 Clinical Faculty of the Year Award, Medical College of Wisconsin Department of Ophthalmology and Visual Science

MEMBERSHIPS IN HONORARY AND PROFESSIONAL SOCIETIES:

2001 - Present American Academy of Ophthalmology
2002 - Present American Glaucoma Society
2007 - 2013 Association for Research in Vision and Ophthalmology
2015 - Present Wisconsin Academy of Ophthalmology
2016 - Present Milwaukee Ophthalmological Society

EDITORSHIPS/EDITORIAL BOARDS/JOURNAL REVIEWS:

Editorial Board
2005 - 2011 Current Eye Research
Journal Review
2002 - Present 3, 2006-10, 2015 Ophthalmology
2003 - 8 American Journal of Ophthalmology
2003 - Present Archives of Ophthalmology
2004 - 2009 British Journal of Ophthalmology
2005 - 2008 9, 2012 Investigative Ophthalmology and Visual Sciences
2008 - Present Survey of Ophthalmology
2009 - Present Vision Research

NATIONAL ELECTED/APPOINTED LEADERSHIP AND COMMITTEE POSITIONS:

2009 RC2 GO Grant Review Committee, NIH, NIA Special Emphasis Panel
2015 - 2017 Patient Care Committee, Document Review Subcommittee, American Glaucoma Society
01/2018 - Present Glaucoma Subspecialty Day Planning Group, American Academy of Ophthalmology
2018 - 2020 Website Subcommittee, American Glaucoma Society

RESEARCH GRANTS/AWARDS/CONTRACTS/PROJECTS:

Active

Peer Review

Title:	Membrane Permeant Peptides for Imaging Cell Function
Source:	NIH R01 EY019587
Role:	Collaborator/Co-Investigator
Dates:	09/30/2013 - 09/29/2017
Direct Funds:	\$1,600,000

Prior

Peer Review

Title:	The CNS Pathogenesis of a Murine Coronavirus
Source:	NIMH MH10384
Role:	Pre-Doctoral Fellow
Dates:	10/01/1992 - 05/31/1995
Direct Funds:	\$60,288

Title: Novartis Ophthalmics Research
 Fellowship in Glaucoma
 Source: American Glaucoma Society
 Role: Principal Investigator
 Dates: 06/01/2002 - 05/31/2003
 Direct Funds: \$32,000

Title: In Vivo Imaging of Retinal Apoptosis
 Using Activatable Permeation Peptides
 Source: NIH R21 EY017636
 Role: Principal Investigator
 Dates: 08/01/2006 - 07/31/2008
 Direct Funds: \$275,000

Title: American Glaucoma Society Mid-Career
 Physician Scientist Award
 Source: American Glaucoma Society
 Role: Principal Investigator
 Dates: 07/01/2009 - 06/30/2010
 Direct Funds: \$40,000

Title: Membrane Permeant Peptides for
 Imaging Cell Function
 Source: NIH R01 EY019587
 Role: Co-Investigator
 Dates: 2009 - 2013

Title: The Ocular Hypertension Treatment
 Study
 Source: NIH U10 EY10438
 Role: Principal Site Investigator Washington
 University in St. Louis
 07/01/2002-06/30/2008

Non-Peer Review

Title: Medical Scientist Training Program
 Source: NIH through University of Iowa T32
 GM07337
 Role: Trainee
 Dates: 07/01/1988 - 09/30/1992

Title: Xalatan vs. Alphagan
 Source: Pharmacia & Upjohn
 Role: Sub-Investigator
 Dates: 07/01/1999 - 06/30/2000

Title: Horncrest Physician Scientist Award
 Source: Horncrest Foundation, Inc.
 Role: Principal Investigator
 Dates: 08/01/2001 - 07/31/2003
 Direct Funds: \$160,000

Title: Oral Tazarotene for Psoriasis
 Source: Allergan
 Role: Sub-Investigator
 Dates: 2001 - 2003

Title: Research to Prevent Blindness, Career Development Award
Source: Research to Prevent Blindness
Role: Principal Investigator
Dates: 01/01/2002 - 12/31/2005
Direct Funds: \$200,000

Title: Pharmacia Glaucoma Fellows Research Grant
Source: Pharmacia
Role: Principal Investigator
Dates: 05/01/2002 - 04/30/2004
Direct Funds: \$40,000

Title: Biomarker Study in Ocular Disease Utilizing Precision Profile Gene Expression Analysis of Whole Blood Sample RNA
Source: Alcon Research, Ltd.
Role: Principal Investigator
Dates: 05/13/2005 - 05/12/2007
Direct Funds: \$3,662

Title: Grace Nelson Lacy Glaucoma Research Fund Award
Source: Washington University in St. Louis
Role: Principal Investigator
Dates: 07/01/2011 - 06/30/2013
Direct Funds: \$40,000

INVITED LECTURES/WORKSHOPS/PRESENTATIONS:

Local

Meeting Moderator: Satellite CME Broadcast- Progress in Treatment Modalities for Glaucoma, 3rd International Glaucoma Symposium, Pittsburgh, PA, 03/23/2001

The Ocular Hypertension Treatment Study: Translating Evidence into Practice, Nashville, TN, 10/29/2002

The Ocular Hypertension Treatment Study: Translating Evidence into Practice, Tulsa, OK, 11/13/2002

Current Topics in Glaucoma Management., St. Louis Optometric Society, St. Louis, MO, 09/09/2003

Current Topics in the Management of Glaucoma, Northwestern Ophthalmology Society, Chicago, IL, 06/01/2004

Glaucoma Perimetry and Imaging Update, Des Moines Ophthalmology Society, Des Moines, IA, 10/14/2004

Impact of Central Corneal Measures on Intraocular Pressure, Northwest Ophthalmology Society, Chicago, IL, 03/05/2005

Visiting Professor: Gonioscopy, University of Missouri-Kansas City, Kansas City, MO, 03/31/2006

Clinical Considerations and Molecular Imaging in Glaucoma, San Antonio Ophthalmologic Society, San Antonio, TX, 11/17/2011

Glaucoma: What is it? What should I know?, Glaucoma Awareness Month Presentation, Massachusetts General Hospital. Boston, MA, 01/29/2014

Glaucoma Imaging: Current Pitfalls and Future Potential, Grand Rounds- University of Wisconsin, Madison, WI, 05/16/2014

Glaucoma Imaging: Current Pitfalls, Future Potential, Milwaukee Ophthalmologic Society, Milwaukee, WI, 10/20/2015

Assessing Progression by Perimetry and OCT in Glaucoma, Medical College of Wisconsin Eye Institute 40th Anniversary Scientific Symposium, Milwaukee, WI, 10/01/2016 - Present

Update on Glaucoma Surgery - Expanding Options, Ascension/Affinity Medical Group Continuing Optometric Education, Neenah, WI, 10/26/2017 - Present

Barnett, Edward, Glaucoma Filtering Implants, Medical College of Wisconsin Department of Ophthalmology Grand Rounds, Milwaukee, WI, 08/04/2021
Trends in Glaucoma, Brown University Ophthalmology Grand Rounds, Providence, RI

Regional

Bleb Complications and Blebitis, 24th Annual Midwest Glaucoma Society Meeting & Washington University in St. Louis Department of Ophthalmology & Visual Sciences Fall Update, St. Louis, MO, 10/06/2001
HRT Imaging in Glaucoma, Washington University in St. Louis Department of Ophthalmology & Visual Sciences Fall Update, St. Louis, MO, 08/04/2002
Imaging Technologies in Glaucoma: HRT, GDx, and OCT, Missouri Society of Eye Physicians & Surgeons Annual Meeting, Lake of the Ozarks, MO, 05/31/2003
Critical Analysis of Clinical Drug Studies and Product Claims, Michigan Ophthalmological Society, Detroit, MI, 09/17/2003
The Ocular Hypertension Treatment Study: Translating Evidence into Practice, Nebraska Optometric Association, Omaha, NE, 10/28/2003
Current Topics in the Management of Glaucoma, Nebraska Optometric Association, Omaha, NE, 05/07/2004
Glaucoma Perimetry and Imaging Update, Washington University in St. Louis Department of Ophthalmology and Visual Sciences Fall Update, St. Louis, MO, 09/11/2004
Detecting Glaucoma Progression: Perimetry, Imaging, and Beyond, Washington University Department of Ophthalmology & Visual Sciences Fall Update, St. Louis, MO, 09/16/2006
Assessing Retinal Ganglion Cells: Beyond Perimetry and Imaging, Iowa Eye Association Annual Meeting, Iowa City, IA, 06/14/2007
Endocyclophotocoagulation- Update on Minimally Invasive Glaucoma Surgery, New England Ophthalmological Society- 749th Meeting, Boston, MA, 04/11/2014
Glaucoma Management: From Meds to MIGS, Massachusetts Society of Eye Physicians and Surgeons, Waltham, MA, 09/30/2014
Challenges in Glaucoma Imaging with OCT, Eye Institute Annual Symposium, Wauwatosa, WI, 09/19/2015
Glaucoma Imaging with OCT: Challenges and Artifacts, Wisconsin Academy of Ophthalmology 2016 Symposium Clinical Program, Green Bay, WI, 02/27/2016
Perimetry in the Diagnosis and Management of Glaucoma, Wisconsin Academy of Ophthalmology 2016 Symposium Technician Program, Green Bay, WI, 02/27/2016
Minimally Invasive Glaucoma Surgery, Multiphasic Phaco Course, Madison, WI, 08/18/2017 - Present
Midwest Regional Phaco Course Wetlab Instructor, Multiphasic Phaco Course, Madison, WI, 08/19/2017 - Present
Molecular Imaging of Retinal Ganglion Cells for Apoptosis, 41st Annual Midwest Glaucoma Symposium, Milwaukee, WI, 09/28/2018 - Present
Minimally Invasive Glaucoma Surgery, Multiphasic Phaco Course, Madison, WI, 08/16/2019 - Present
Barnett, Edward, Glaucoma Filtering Implants, Wisconsin Academy of Ophthalmology, Milwaukee, WI, 03/18/2022
Barnett, Edward, Cataract Surgery Considerations for MIGS, Resident Phaco Course 2022, University of Wisconsin-Madison, 08/18/2022
The Ocular Hypertension Treatment Study, New Mexico State Ophthalmologic Society Annual Meeting, Albuquerque, NM

National

The Prostaglandin Analogs: Pharmacology & Efficacy-Glaucoma Update, 2003 Royal Hawaiian Eye Meeting, Maui, HI, 01/19/2003
Prostaglandins: Development and Comparison, 2003 Royal Hawaiian Eye Meeting, Maui, HI, 01/22/2003
Ocular Hypertension Treatment Study: Implications for Assessment and Management, JCAHPO 31st Annual Meeting, Anaheim, CA, 11/16/2003
Medical Management of Glaucoma, Storm Eye Institute/American Society for Cataract & Refractive Surgery 2003 Clinical Update, Kiawah Island, SC, 2003
Moderator: Experimental Optic Nerve Session, Association for Research in Vision and Ophthalmology 2004 Annual Meeting, Fort Lauderdale, FL, 04/23/2004
Should I Use Prostaglandins after Routine Uncomplicated Cataract Surgery?, Glaucoma Subspecialty Day- American Academy of Ophthalmology Annual Meeting, New Orleans, LA, 10/23/2004
Making the Transition to Running Your Own Clinic, CPE Glaucoma Fellows Program, Fort Worth, TX,

11/13/2004
 Novel Medical Therapeutic Approaches for Glaucoma Patients: New Considerations in the Management of Ocular Hypertension and Glaucoma, 2005 Royal Hawaiian Eye Meeting, Hawaii, 01/16/2005
 OHTS Update, 2005 Royal Hawaiian Eye Meeting, Hawaii, 01/19/2005
 Making the Transition to Running Your Own Clinic, CPE Glaucoma Fellows Program, Fort Worth, TX, 11/04/2005
 Glaucoma Drainage Implants, Washington University Department of Ophthalmology & Visual Sciences Ophthalmic Update 2006 for Nurses & Technicians, St. Louis, MO, 01/28/2006
 Secondary Glaucomas, Washington University Department of Ophthalmology & Visual Sciences Ophthalmic Update 2007 for Nurses & Technicians, St. Louis, MO, 01/27/2007
 Instructor: Angle/Schlemm Canal Surgery for Adult Open-Angle Glaucoma: Ab Interno Approach, American Academy of Ophthalmology 2008 Annual Meeting, Atlanta, 11/09/2008
 Glaucoma Imaging, Washington University Department of Ophthalmology & Visual Sciences Ophthalmic Update 2009 for Nurses & Technicians, St. Louis, MO, 03/29/2010
 Imaging Retinal Ganglion Cell Apoptosis Using Cell-penetrating Activatable Peptide Probes, Nanodiagnostics in Ophthalmology: A New Frontier Association for Research in Vision and Ophthalmology 2010 Meeting, Fort Lauderdale, FL, 05/04/2010
 Instructor: Angle/Schlemm Canal Surgery for Adult Open-Angle Glaucoma: Ab Interno Approach, American Academy of Ophthalmology 2010 Annual Meeting, Chicago, IL, 10/17/2010
 Case Studies in the Clinical Use of Glaucoma Imaging Devices, Washington University's Ophthalmic Personnel Update VII, St. Louis, MO, 02/26/2011
 Trabecular Meshwork Ablation, Innovations in Glaucoma Surgery, St. Louis, MO, 04/14/2012
 Instructor: Angle/Schlemm Canal Surgery for Adult Open-Angle Glaucoma: Ab Interno Approach, American Academy of Ophthalmology 2012 Annual Meeting, Chicago, IL, 11/13/2012
 Imaging and Diagnostics: In Vivo Molecular Imaging of the Retina, American Ophthalmological Society 2012 Knapp Symposium - Nanotechnology in Ophthalmology, Charleston, SC, 2012
 High Resolution Imaging of Retinal Ganglion Cell Apoptosis In Vivo using an Activatable Cell-Penetrating Peptide Probe, Basic/Clinical Science Lecture ARVO 2013 Meeting, Seattle, WA, 05/05/2013
 Endoscopic Diode Cyclophotocoagulation, Innovations in Glaucoma Surgery, St. Louis, MO, 08/24/2013
 Interpreting OCT Imaging in Glaucoma: Challenges and Artifact, American Academy of Ophthalmology 2015 Annual Meeting - Breakfast with the Experts sponsored by American Glaucoma Society, Las Vegas, NV, 11/15/2015
 Shunt Assisted Trabeculectomy and Antifibrotics, 3rd Annual Innovations in Glaucoma Surgery, St. Louis, MO, 04/09/2016
 Moderator: Open-Angle Glaucoma with Low Pressures, American Academy of Ophthalmology Glaucoma Subspecialty Day, San Francisco, CA, 08/08/2019
 Moderator: Diagnostics/Visual Fields, American Academy of Ophthalmology Glaucoma Subspecialty Day, online, 11/13/2020
 Approach to the Normal Pressure Glaucoma Patient, Ophthalmology Update: From Front to Back, Fajardo, Puerto Rico
 The Ex-Press Glaucoma Mini Shunt, Ophthalmology Update: From Front to Back, Fajardo, Puerto Rico
 Efficacy and Tolerability of Topical Prostaglandins, Latin America Expert Meeting, San Juan, Puerto Rico

International

Neuroprotection/Blood Flow: What We Know Today, Xalatan First-Line Symposium, Stockholm, Sweden, 06/29/2002
 Prostaglandins: Development and Comparison; Neuroprotection in Glaucoma: Here Today? Here Tomorrow?, The 4th Japan Glaucoma Council, Tokyo, Japan, 12/07/2002
 Clinical Update on Low Tension Glaucoma Treatment Overseas, Xalatan Symposium, Tokyo, Japan, 08/23/2003

PEER REVIEWED WORKSHOPS/PRESENTATIONS:

National

Qui X, Johnson JR, Piwnica-Worms D, Barnett EM. In vivo imaging of retinal ganglion cell apoptosis using caspase-activatable cell-penetrating probes in the rat: Optimizing signal-to-noise and assessing potential toxicity. Association

- Barnett EM, Cassell M, Perlman S. Tracing olfactory pathways in the mouse with a coronavirus. *Society for Neuroscience Abstracts* 1991; 17:1511.
- Barnett EM, Perlman, S. Mouse hepatitis virus and herpes simplex virus move along different CNS pathways after intranasal inoculation. 1992 International Symposium on Coronaviruses.
- Barnett EM, Perlman S. MHV-JHM and HSV-1: Neural pathways of infection in the mouse. *American Society for Virology 1992 Annual Meeting.*
- Barnett EM
- Barnett EM, Evans GD, Cassell MD, Perlman S. Anterograde transneuronal spread of herpes simplex virus from the murine tooth pulp to two cortical areas associated with jaw movement. *Society for Neuroscience Abstracts* 1993; 19:1210.
- Evans GD, Barnett EM, Jacobsen GL, Cassell M, Perlman SM. Trigeminal herpes infection via murine pulp models human herpetic encephalitis. *Journal of Dental Research* 1994; 73:299.
- Battiola RJ, Barnett EM. Who's fooling who? A survey of attending and resident physician attitudes regarding a ward medicine teaching service. Presented at Council of Transitional Year Program Directors 1996 AHM
- Barnett EM, Luo X, Brasher A, Hicks D, Romano C. Culture and Immunocytochemical characterization of retinal neurons from adult human eyes. *Association for Research in Vision and Ophthalmology 2002 Annual Meeting.*
- Camras CB, Sjoquist B, Toris CB, Thorngren J-O, Hassan F, Patel N, Hejkal TW, Hellman C, Milleson M, Barnett EM, Wax MB, Stjernschantz J. The hydrolysis of bimatoprost to its free acid in human eyes in vivo. *American Academy of Ophthalmology 2003 Annual Meeting.*
- Camras CB, Sjoquist B, Toris CB, Thorngren J-O, Hassan F, Patel N, Hejkal TW, Hellman C, Milleson M, Barnett EM, Wax MB, Stjernschantz J. The hydrolysis of bimatoprost to its free acid in human eyes in vivo. *American Glaucoma Society 2004 Annual Meeting.*
- Barnett EM, Bullok KE, Elangovan B, Romano C, Piwnica-Worms DR. Cellular uptake of modified HIV-1 Tat permeation peptide constructs conjugated to alexa fluor-594 in the rodent posterior segment in an ex-vivo model. *Association for Research in V*
- Barnett EM, Elangovan B, Bullok KE, Piwnica-Worms D. Selective uptake of modified HIV-1 Tat permeation peptides in the rat retina following intraocular injection. *Molecular Imaging* 2004; 3:289.
- Barnett EM, Elangovan B, Bullok K, Piwnica-Worms D. Selective uptake of permeation peptides in rodent retina following intraocular injection: in vivo imaging and RGC axonal transport. *Association for Research in Vision and Ophthalmol*
- Barnett EM, Elangovan B, Chang Q, Bullok K, Piwnica-Worms D. Visualization of effector caspase activity in rat models of retinal ganglion cell apoptosis using an activatable fluorescent permeation peptide. *Mol Imaging* 2006; 5:432-3.
- Barnett EM, Chang Q, Zhang X, Elangovan B, Piwnica-Worms D. Visualization of effector caspase activity in rat models of retinal ganglion cell apoptosis using an activatable fluorescent permeation peptide. *Association for Research in Vision an*
- Maxwell D J, Chang Q, Barnett EM, Piwnica-Worms D. Development of a second generation near-infrared fluorescent peptide for apoptosis imaging. *Society for Molecular Imaging 2007 Annual Meeting.*
- Zhang X, Maxwell D, Piwnica-Worms D, Barnett EM. Validation of an effector-caspase specific activatable fluorescent peptide probe in rodent models of RGC degeneration. *Association for Research in Vision and Ophthalmology 2008 Annual Mee*
- Barnett EM, Fantin A, Wilson BS, Kass MA, Gordon MO, Ocular Hypertension Treatment Study Group. Retinal vein occlusions in the Ocular Hypertension Treatment Study. *Association for Research in Vision and Ophthalmology 2008 Annual Meeting.*
- Barnett EM, Zhang X, Chang Q, Maxwell D, Johnson J, Piwnica-Worms D. A second generation activatable cell-penetrating peptide probe for imaging effector caspase activity in an in vivo model of RGC degeneration. *Association for Research in Vision and Ophthalmology 2009 Annual Meeting.* Chang ST, Xu J, Trinkaus KM, Song S-K, Barnett EM. 3-T Diffusion Tensor Imaging of Optic Nerve Changes in Glaucoma. *Association for Research in Vision and Ophthalmology 2010 Annual Meeting.*
- Johnson JR, Kocher B, Chang Q, Barnett EM, Piwnica-Worms D. Caspase-activated cell-penetrating probes for in vivo optical imaging of retinal neurodegeneration. 2010 *In Vitro Biology Meeting.*
- Barnett EM, Qiu X, Johnson JR, Piwnica-Worms D. In vivo imaging of RGC uptake of activatable cell-penetrating probes for imaging apoptosis. *American Glaucoma Society 2011 Meeting.*
- Qiu X, Johnson JR, Piwnica-Worms D, Barnett EM. In vivo confocal scanning laser ophthalmoscopy imaging of retinal ganglion cell apoptosis using caspase-activatable probes in a rat glaucoma model.

Association for Research in Vision and

International

Jacobsen GL, Perlman SM, Evans GD, Barnett EM, Walton RE. Herpes spread from pulp to CNS via inferior alveolar nerve. 1992 General Session and Exhibition of the International Association for Dental Research.

Jacobsen GL, Perlman SM, Evans GD, Barnett EM, Walton RE. Herpes spread from pulp to CNS via inferior alveolar nerve. 1992 General Session and Exhibition of the International Association for Dental Research.

Jacobsen G, Barnett EM, Evans G, Walton R, Perlman S. Herpes spread from pulp into CNS extensions of trigeminal nerve. 1993 International & American Associations for Dental Research General Session and Exhibition.

Johnson JR, Kocher B, Maxwell DJ, Chang Q, Barnett EM, Piwnica-Worms D. Caspasase-activated cell-penetrating probes for in vivo optical imaging of retinal neurodegeneration. 2009 World Molecular Imaging Congress.

Barnett EM, Perlman, S. Mouse hepatitis virus and herpes simplex virus move along different CNS pathways after intranasal inoculation. 1992 International Symposium on Coronaviruses.

COMMITTEE SERVICE:

Medical College of Wisconsin

09/06/2015 - 06/01/2018 Departmental Representative, Faculty Council, Ophthalmology, Medical College of Wisconsin

07/01/2016 - Present Resident Steering Committee, Ophthalmology and Visual Science

Resident Interview/Selection Committee. Department of Ophthalmology & Visual Sciences. Washington University School of Medicine. St. Louis, Missouri. 2005-2012.

Translational Research Strategy & Oversight Committee. Eye Institute. Department of Ophthalmology. Medical College of Wisconsin. Milwaukee, Wisconsin. 2015

Meaningful Use Committee. Washington University School of Medicine. St. Louis, Missouri. 2010-2013.

Promotions Committee. Department of Ophthalmology & Visual Sciences. Washington University School of Medicine. St. Louis, Missouri. 2009.

Hospital

Kaleidoscope Steering Committee, Ophthalmology and Visual Sciences, Froedtert

Medical Staff Performance Committee. Barnes Jewish Hospital. St. Louis, Missouri. 2008-2013.

EXTRAMURAL TEACHING:

Medical Student Education

2000 - 2001 University of Pittsburgh School of Medicine, Facilitator, Integrated Case Studies Course

Graduate Student Education

2007 - 2011 Washington University in St. Louis, Lecturer, The Biology and Pathology of the Visual System (BIO5501)

EXTRAMURAL STUDENTS, FACULTY, RESIDENTS, AND CLINICAL/RESEARCH FELLOWS MENTORED:

Medical Students

Washington University in St. Louis, School of Medicine, 2002 - 2005 MSTP Clinical Mentoring Program

Washington University in St. Louis School of Medicine, 2009 Mentor, Medical Student Ophthalmology Interest Group

Clinical/Research Fellows

Regina Smolyak, M.D., Washington University in St. Louis Department of Ophthalmology and Visual Sciences, 2001 - 2002 Glaucoma Fellowship

Farid Hasan, M.D., Washington University in St. Louis Department of Ophthalmology and Visual

Sciences, 2002 - 2003
Lydia Dworkin, M.D., Washington University in St. Louis Department of Ophthalmology and Visual Sciences, 2003 - 2004 Glaucoma Fellowship
Michael Levitt, M.D., Washington University in St. Louis Department of Ophthalmology and Visual Sciences, 2004 - 2005 Glaucoma Fellowship
Prajay Dhir, M.D., Washington University in St. Louis Department of Ophthalmology and Visual Sciences, 2005 - 2006 Glaucoma Fellowship
Thad Labbe, M.D., Washington University in St. Louis Department of Ophthalmology and Visual Sciences, 2006 - 2007 Glaucoma Fellowship
Melike Pekmezci, M.D., Washington University in St. Louis Department of Ophthalmology and Visual Sciences, 2007 - 2008 Research Fellowship
Shayna Mangers, M.D., Washington University in St. Louis Department of Ophthalmology and Visual Sciences, 2007 - 2008 Glaucoma Fellowship
Suzanne Falkenberry, M.D., Washington University in St. Louis Department of Ophthalmology and Visual Sciences, 2007 - 2008 Glaucoma Fellowship
Sidney Chang, M.D., Washington University in St. Louis Department of Ophthalmology and Visual Sciences, 2008 - 2009 Research Fellowship
Sidney Chang, M.D., Washington University in St. Louis Department of Ophthalmology and Visual Sciences, 2009 - 2010 Glaucoma Fellowship
Moya Brooks, M.D., Washington University in St. Louis Department of Ophthalmology and Visual Sciences, 2011 - 2012 Glaucoma Fellowship
Nancy Buchser, M.D., Washington University in St. Louis Department of Ophthalmology and Visual Sciences, 2012 - 2013 Glaucoma Fellowship
Alan Lowinger, M.D., Ophthalmic Consultants of Boston/New England Eye Center, 2013 - 2014 Glaucoma Fellowship
Shlomit Sandler, M.D., Ophthalmic Consultants of Boston/New England Eye Center, 2013 - 2014 Glaucoma Fellowship
Claudia Bartolini, M.D., Ophthalmic Consultants of Boston/New England Eye Center, 2014 - 2015 Glaucoma Fellowship
Avneet Sodhi, M.D., Ophthalmic Consultants of Boston/New England Eye Center, 2014 - 2015 Glaucoma Fellowship

COURSE DIRECTOR:

04/14/2012 - Present Innovations in Glaucoma Surgery St. Louis, MO
08/24/2013 - Present Innovations in Glaucoma Surgery St. Louis, MO
04/09/2016 - Present Innovations in Glaucoma Surgery St. Louis, MO

MEETING ORGANIZER:

10/01/2016 - Present Medical College of Wisconsin Eye Institute 40th Anniversary Scientific Symposium

PLANNING GROUP:

2018 - 2020 American Academy of Ophthalmology Glaucoma Subspecialty Day Program

PROGRAM DIRECTOR:

09/28/2018 - 09/29/2018 41st Annual Midwest Glaucoma Symposium, Medical College of Wisconsin Eye Institute Annual Symposium

BIBLIOGRAPHY

Refereed Journal Publications/Original Papers

1. Miller MB, Chapman LJ, Chapman JP, Barnett EM. Schizophrenic deficit in span of apprehension. *J Abnorm Psychol.* 1990 Aug;99(3):313-6.
2. Perlman S, Barnett E, Jacobsen G. Mouse hepatitis virus and herpes simplex virus move along different CNS pathways. *Adv Exp Med Biol.* 1993;342:313-8.
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