# MING WANG, M.D., PH.D

# The film "Sight" (www.drmingwang.com) is based on Dr. Wang's autobiography "From Darkness to Sight", co-starring Greg Kinnear.

CEO, Aier-USA

Co-founder and president, the Common Ground Network (<u>www.commonground.network</u>) Co-founder and president, Tennessee Immigrant and Minority Business Group (<u>www.TIMBG.org</u>) Clinical Professor, Meharry Medical College Director, Wang Vision Institute (<u>www.wangvisioninstitute.com</u>) 1801 West End Ave, Ste 1150, Nashville, TN, 37203, USA, 615-321-8881, 615-321-8874(fax) <u>www.drmingwang.com</u>, <u>drwang@wangvisioninstitute.com</u>

Dr. Ming Wang, Harvard & MIT (MD, *magna cum laude*); Ph.D. (laser physics, University of Maryland), is a philanthropist, community activist and a world-class cataract and LASIK eye surgeon. He is the founding director of the internationally known <u>Wang Vision Institute</u>, Nashville, TN, USA.

As a co-founder of the 501c(3) non-profit organization, <u>the Common Ground Network</u>, Dr. Wang has dedicated his life to helping people find common ground and solutions to problems.

Dr. Wang published a paper in the world-renowned journal "*Nature*", over 120 papers and book chapters, as well as 10 ophthalmic textbooks, 2 biographies and 2 other books:

- Corneal Topography in the Wavefront Era
- Irregular Astigmatism Diagnosis and Treatment
- Corneal Dystrophy and Degeneration a Molecular Genetic Approach
- Keratoconus and Keratoectasia Prevention, Diagnosis and Treatment,
- LASIK Vision Correction
- Corneal Topography in the Wavefront Era 2<sup>nd</sup> edition
- Atlas and Clinical Guide for Corneal Topography
- Refractive Lens Exchange a Surgical Treatment for Presbyopia
- The 5<sup>th</sup> Wave Surgical Treatment for Presbyopia
- Grow Your Eye Care Practice: High-Yield Pearls from the Marketing Experts
- From Darkness to Sight (autobiography) a journey from hardship to healing.
- Dancing with Eyes (autobiography) the story of one of America's foremost laser physicists and eye surgeons.
- Common Ground Bible Study
- Seeing beyond a Bible study guide for the film Sight
- Common Ground Mandate

Dr. Wang specializes in 3D SMILE & 3D LASIK (18+), 3D Implantable Contact Lens (21+), 3D Forever Young Lens (45+), and 3D laser cataract surgery (60+).

A former panel consultant to the U.S. FDA Ophthalmic Device Panel, Dr. Wang holds several U.S. patents for his inventions of new biotechnologies to restore sight, including

- The world's first amniotic membrane contact lens
- Adaptive infrared retinoscopic device for detecting ocular aberrations
- Digital eye bank for virtual clinical trials.

The <u>Wang Foundation for Sight Restoration</u>, a 501c(3) non-profit charity founded by Dr. Wang, has helped patients from over 40 states in the U.S. and 55 countries worldwide, with all sight restoration surgeries performed free-of-charge.

Dr. Wang has received numerous awards including the Honor Award of the American Academy of Ophthalmology, the Lifetime Achievement Award of the Association of Chinese American Physicians, an honorary doctorate degree from Trevecca Nazarene University, NPR's philanthropist of the Year Award, and Kiwanis Nashvillian of the Year Award for his lifetime dedication to helping blind orphan children from around the world.

Growing up during China's Cultural Revolution in the 1960s, Ming had to play the Chinese erhu violin and dance in order to avoid being sent away to labor camps for a life of hard labor and poverty, a devastating fate that fell upon 20 million youth in China. He eventually made his way to America with only \$50, where against all odds he earned a doctorate degree in laser physics and graduated with an MD (*magna cum laude*) and the highest honors from Harvard Medical School and MIT.

Dr. Wang's autobiography, *From Darkness to Sight*, is an inspirational story of how one man turned fear, poverty, persecution, and prejudice into healing and love for others. It demonstrates how focus, determination, humility, and profound faith can inspire a life that, in turn, impacts the lives of countless others.

A major motion picture "*Sight*" is being made which is based on Dr. Wang's autobiography "From Darkness to Sight", co-starring Greg Kinnear.

POSITION:	CEO, Aier-USA Co-founder and president, the Common Ground Network Co-founder and president, Tennessee Immigrant and Minority Business Group CEO, Aier-USA Clinical Professor, Meharry Medical College Director, Wang Vision 3D Cataract and LASIK Center – an Aier-USA eye clinic
DEGREES:	M.D. ( <i>Magna cum laude)</i> Harvard Medical School and Massachusetts Institute of Technology Division of Health Science and Technology Cambridge, MA June, 1991
	Postdoctoral Fellowship MIT/Harvard, 1987-1988
	Ph.D. (laser spectroscopy) University of Maryland at College Park, College Park, MD, 20742 December, 1986
	Honorary doctorate degree Trevecca University, Nashville, TN, May 2015
INVENTIONS AND PATENTS:	LASERACT – phaco-free all-laser cataract surgery U.S. patent filed
	Phacoplasty U.S. patent filed
	Biochemical contact lens for photoablated corneal tissue U.S. Patent Serial No 5,932,205, 1999
	Biochemical contact lens for injured corneal tissue

	U.S. Patent Serial No 6,143,315, 1999
	Adaptive infrared retinoscopic device for detecting ocular aberrations U.S. Utility Patent Application Serial No. 11/642,226 December, 2006
	Digital eye bank for virtual clinical trials, with /YL Chen U.S. Utility Patent Application Serial No. 11/585,522 October 24, 2006
	Pulsed electromagnetic field therapy for non-healing corneal ulcer U.S. patent filed with Vanderbilt University
	A whole-genome method of assaying in vivo DNA-protein interaction and gene- expression regulation U.S. patent filed with Harvard University
EDITORIAL BOARD/ REVIEWER	<u>Editor-in-chief:</u> Refractive Eyecare (China edition), Cataract & Refractive Surgery Today (Chinese cover version);
	Editorial board member: Cataract & Refractive Surgery Today, Refractive Eyecare
	<u>Co-editor:</u> Aier Refractive Surgery Journal
	<u>Reviewer:</u> American Journal of Ophthalmology, Genomics, Investigative Ophthalmology and Visual Sciences, Ophthalmology, Cornea, Journal of Refractive Surgery, Journal of Cataract and Refractive Surgery
PROFESSIONAL ORGANIZATIONS	American Society of Cataract & Refractive Surgery Head Society, American Academy of Ophthalmology Alumni Societies: Harvard, MIT Wills Eye Hospital Alumni Society Bascom Palmer Eye Institute Alumni Society Nashville Academy of Ophthalmology
LICENCE AND BOARD CERTIFICATION	Licensed in medicine in TN, 1997-; American board of ophthalmology certified, 1998-;
POST GRADUATE TRAINING:	Clinical fellowship Cornea/external disease/refractive surgery Bascom Palmer Eye Institute Miami, FL, 33101 1996-1997 Resident in Ophthalmology
	Wills Eye Hospital Philadelphia, PA, 19107 1993-1996
	Medicine (MD, <i>magna cum laude</i> ) Harvard Medical School and MIT Boston, MA 1987-1992
	Postdoctoral Fellow Molecular Biology Department of Genetics Harvard Medical School and MIT Boston, MA, 02115 1987-1991
	Postdoctoral Fellow

Laser Spectroscopy and Collision Dynamics University of Maryland at College Park, MD, 20742 1986-1987

# FACULTY/TEACHING POSITIONS HELD:

CEO, Aier-USA Director, Wang Vision Cataract and LASIK Center Director of Corneal Fellowship Program Wang Vision 3D Cataract and LASIK Center 2002-present

Clinical Professor Meharry Medical College 2017-present

Panel Consultant US FDA Ophthalmic Device Panel 1997-2002

Research Associate Professor of Biomedical Engineering Department of Biomedical Engineering Vanderbilt University 2002-2003

Assistant Professor of Ophthalmology Department of Ophthalmology Vanderbilt University School of Medicine 1997-2002

Assistant Professor of Ophthalmic Research Jefferson Medical College and Wills Eye Hospital Phil, PA, 19107 1992-1996

Co-instructor "Laser Tissue Interaction" Department of Biomedical Engineering Vanderbilt University 2002-present

Lecturer and course director Biol 321: "Human Genetics". Biol 221: "Molecular Genetic Analysis". Department of Biology University of Pennsylvania Philadelphia, PA, 19107 1993-1996

Director, Laboratory of Molecular Oncology Research Division Wills Eye Hospital, Phila, PA, 19107 1992-1993

Advisor for premed undergraduate student Department of Biological Sciences Harvard University, Cambridge, MA 1988

Instructor Mathematics/Biology/Chemistry/Physics Stanley H. Kaplan Education Center Washington D.C., 20008 1986-1993 Tutor Chemistry/Mathematics/Physics/Biochemistry University of Maryland at College Park, MD, 20742 1982-1986

Research Assistant Department of Chemistry University of Maryland at College Park, MD, 20742 1982-1986

Teaching Assistant Department of Chemistry University of Maryland at College Park, MD, 20742 1982-1985

DAR Americanism Medal Daughters of the American Republic 2020

Outstanding Asian American in the U.S. 2019

Nashvillian of the Year Kiwanis Club International 2016

Peace Award Atlantic Institute 2015

Honorary doctorate degree Trevecca University Nashville, TN, 2015

Lifetime Achievement Award Association of Chinese American Physicians New York, June, 2007

Castle Connelly Selection (award given to less than 1% of US physicians) 2002 - present.

Honor Award American Academy of Ophthalmology 2004

Best Paper in Cornea Session "Corneal melt after Intacs" With Dr. Lance Kugler ASCRS 2010, Boston, MA

Best Paper in Cornea Session "Efficacy in treating anterior cornea vs non-anterior corneal astigmatism" ASCRS, 2005

Best Paper in Cornea Session "Posterior changes after LASIK" ASCRS, 2002

1999/2001 Burroughs-Wellcome Fund Finalist for award as

AWARDS:

New Investigator 2000

Fight for Sight Fellow Grant-in-Aid 1999

1998/2000 Burroughs-Wellcome Fund Finalist for award as New Investigator 1999

Vice Chancellor's Faculty Scholar Award Vanderbilt University 1998.

Fight for Sight Fellow Research to Prevent Blindness 1998

Best paper in refractive surgery "Hyperopic shift after PTK" ASCRS, 1998.

Heed Fellow Heed Foundation 1996-1997.

ARVO/Retina Research Foundation Lawrence Fellowship Grant "Equivalent Gene Carrier Model" ARVO, 1995.

James Shipman Award for the "Best Scientific Presentation by a resident at the Annual Conference of Wills Eye Hospital" Philadelphia, PA, 19107 1994

Henry and Corinne Bower Fellow Wills Eye Hospital Philadelphia, PA, 19107 1992-1993

*Magna cum laude* (M.D.) Harvard Medical School Boston, MA, 02115 1991

Harold Lamport Biomedical Research Prize: For "the Best Thesis Reporting Original Research in the Biomedical Sciences" Harvard Medical School Boston, MA, 02115 1991

Robert D. McCallum Retina Research Fellow Wills Eye Hospital Philadelphia, PA, 19107 1991

R.H. Levine Scholar of Health Science and Technology Research Grant, HST/1990 Harvard Medical School Massachusetts Institute of Technology

Boston, MA, 02115 1990 Sellard Fellow: For Excellence in **Research in Social Medicine** Harvard Medical School Boston, MA, 02115 1989 National Science Foundation Postdoctoral Fellowship Laser Collision Dynamics National Science Foundation Washington D.C., 20550 1987 **Gold Medal** Latin 1997 United States USABDA Novice National Championship Newark, DE 1997 World finalist, pro-am world ballroom dance championship in international 10-dance, 2006. **RESEARCH GRANTS:** PhamrVU/Chancellor's fund "Amniotic contact lens" for development based on US patent (6,143,315) 7/1/01-5/03, \$100,000. NIH RO1 (EY-01621), as co-PI (PI: Denis O'Day) "Experimental Fungal Infections of the Eye" 4/1/97 - 3/31/00, \$1,080,345. SDRC grant, Vanderbilt. "Creation of a transgenic mouse model for lattice dystrophies". 5/1/98-4/30/01, \$60,000. Grants-in-Aid, Fight for Sight, **Research to Prevent Blindness** "Transgenic mouse model for corneal dystrophies". 7/1/98-6/30/99, \$11,000. Award as finalist for new investigator in Molecular Pathogenic Mycology **Burroughs Wellcome Fund** 8/9/98 - 8/29/98, course, \$5,000. **URC Vanderbilt Research Award** "A novel treatment of recalcitrant corneal ulcer using pulsed magnetic therapy". 7/1/98 - 6/30/99, \$16,000. Joe C. Davis Foundation Award "Characterization of keratoepithelin gene in corneal wound healing". 1/1/98 - 12/31/99, \$50,000. Pennsylvania Lions Foundation. "Mechanism of tumor suppression: in vivo interaction of retinoblastoma protein with human genes." 7/1/92 - 6/30/93, \$7,000. Harvard Medical School

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"The impact on social economics and child education of the one-family-one-child birth-control policy in China". 6/88 – 9/88, \$3,500.

**BOOKS:** 

<u>Wang MX</u>, editor; Mr. Shareef Mahdavi, Mr. Mike Malley and Dr. Tracy Swartz co-editors Grow Your Eye Care Practice: High-Yield Pearls from the Marketing Experts SLACK, Inc 2020

Wang MX, editor; Tracy Swartz, Nathan Rock, co-editors The 5<sup>th</sup> Wave – Surgical Treatment of Presbyopia SLACK, Inc 2018

<u>Wang MX</u> From Darkness to Sight – a journey from hardship to healing Autobiograph Dunham Publishing 2016

Wang MX, editor; Tracy Swartz, co-editor Refractive Lens Exchange: surgical treatment for presbyopia SLACK, Inc 2015

Wang MX, and Kugler K, co-editors Atlas and Clinical reference guide to corneal topography SLACK, Inc 2014

Wang MX, editor; Tracy Swartz, co-editor Corneal Topography in the Wavefront Era – a Guide for Clinical Application 2<sup>nd</sup> edition SLACK, Inc 2011

<u>Wang MX</u>, editor, Tracy Swartz, co-editor Keratoconus and Keratoectasia – Prevention, Diagnosis and Treatment SLACK, Inc 2009

Wang MX, editor, Tracy Swartz, co-editor Irregular Astigmatism – Diagnosis and Treatment SLACK, Inc 2007

Wang MX. Dancing with Eyes – the story of one of the America's foremost laser physicists and eye surgeons Autobiography 2006

<u>Wang MX</u>, editor, Tracy Swartz, co-editor Corneal Topography in the Wavefront Era – a Guide for Clinical Application SLACK, Inc 2006

<u>Wang MX</u>, editor Corneal Dystrophies and Degenerations – A Molecular Genetics Approach American Academy of Ophthalmology 2003

Wang MX.

LASIK Vision Correction 1998

**CHAPTERS IN BOOKS:** 

Wang MX, Shields JA and Donoso LA: Subclinical metastasis of uveal melanoma. International Ophthalmology Clinics 33, 119-127, 1993

Zhang K, <u>Wang MX</u>, Munier F, Roth D, Mastrangelo D, Chung S, Shields JA and Donoso LA: Molecular Genetics of Retinoblastoma. International Ophthalmology Clinics <u>33</u>, 53-65, 1993

Wang MX, Donoso LA: Gene Research and the Eye. Current Opinion in Ophthalmology <u>4</u>;III, 102-111, 1993

Cha SB, Shields JA, Shields CL and <u>Wang MX.</u> Squamous cell carcinoma of the conjunctiva. International Ophthalmology Clinics <u>33</u>, 19-24, 1993

Wang MX, Jenkins JJ III, Cu-Unjieng AB, Meyer D, and Donoso LA. Eye tumors. In "Pediatric Neoplasia: Morphology and Biology, in Parham DM, Eds, Lippincott-Raven, pp405-422, 1996.

Wang MX, and Donoso LA. Recent Advances in the Molecular Genetics of Retinitis Pigmentosa. Current Opinion in Ophthalmology 1995, <u>6</u>:III:1-7.

<u>Wang MX</u>, and Nelson LB. The diagnosis and management of strabismus presenting after cataract surgery. Year Book in Ophthalmology pp421-426, 1995

Wang MX, Donoso LA and Nelson LB. Molecular genetic basis of ophthalmic diseases. Duane TD, Tasman WS and Jaeger EA Ed. Biomedical Foundation of Ophthalmology Chapter 55, pp1-44, 1996.

<u>Wang MX</u> Excimer - fundamentals and clinical use. J. Ophthal Nu and Tech. 15, 230-231, 1996.

Wang MX, and Nelson LB. Heredity of myopia. Year Book in Ophthalmology pp429-435, 1996.

<u>Wang MX</u>, Karp CL, Selkin RP, and Azar DT. Corneal and Conjunctival surgery, Ophthalmology, Duker and Yanoff Eds. 5.12, 1-18, 1998. Wang MX, Forster RK. Dystrophies, degenerations and congenital Anomalies of the cornea. Bascom Palmer Atlas of Ophthalmology Richard Parrish Eds, 12:91-98, 1999

<u>Wang MX</u>, Carlson A, Liu, J. X-linked ophthalmic diseases Duane's Biochemical Foundation of Ophthalmology Tasman and Jaeger Eds, 57:1-17, 2001.

Wang MX. Surgical correction of refractive errors WEBEBM, 2001.

<u>Wang MX</u>, Flattem, N, Munier F. Molecular genetics of corneal dystrophy In <u>Wang MX</u> Ed, Cornea Dystrophies and Degeneration – A Molecular Genetics Approach American Academy of Ophthalmology, 2003.

Flattem N, <u>Wang MX.</u> Stromal corneal dystrophies In <u>Wang MX</u> Ed, Cornea Dystrophies and Degeneration – A Molecular Genetics Approach American Academy of Ophthalmology, 2003.

Irvine AD, McLean WHL, <u>Wang MX.</u> Epithelial, Basement Membrane and Bowman's Layer Dystrophies In <u>Wang MX</u> Ed, Cornea Dystrophies and Degeneration – A Molecular Genetics Approach American Academy of Ophthalmology, 2003.

Handwerger BA, Rapuano CJ, <u>Wang MX</u>, Laibson PR. Corneal degenerations In <u>Wang MX</u> Ed, Cornea Dystrophies and Degeneration – A Molecular Genetics Approach American Academy of Ophthalmology, 2003.

Tran UL, <u>Wang MX.</u> Excimer laser treatment for corneal dystrophies and Degenerations In <u>Wang MX</u> Ed, Cornea Dystrophies and Degeneration – A Molecular Genetics Approach American Academy of Ophthalmology, 2003.

Wang MX. Physical optics Chapter 1, Monograph on optics and refraction Basic Science Series, American Academy of Ophthalmology 2005

Wang MX. Optical consideration in refractive surgery Chapter 7, Monograph on optics and refraction Basic Science Series, American Academy of Ophthalmology 2005

Wang MX, Swartz T Laser Intacs for keratoconus In Gulani A ed 2005

Panchal L, Swartz T, <u>Wang MX</u>

Femtosecond laser Intacs for keratoconus Ophthalmology Hyperguide 2005

Swartz, T et al, and <u>Wang MX.</u> History of topography In Wang MX ed: Corneal Topography in the Wavefront Era – a Guide for Clinical Application SLACK, Inc, 2006

Yu K, Swartz T, Boerman H, <u>Wang MX</u>. Anatomy of the cornea In Wang MX ed: Corneal Topography in the Wavefront Era – a Guide for Clinical Application SLACK, Inc, 2006

Coward D, Swartz T, <u>Wang MX.</u> The Optics of the Cornea In Wang MX ed: Corneal Topography in the Wavefront Era – a Guide for Clinical Application SLACK, Inc, 2006

Swartz T, Liu Z, Yang X, Zhang M, <u>Wang MX</u>. Topographic Technologies In Wang MX ed: Corneal Topography in the Wavefront Era – a Guide for Clinical Application SLACK, Inc, 2006

Cohen I, Swartz T, <u>Wang MX</u>. Axial, Eelvation and Pachymetric Mapping In Wang MX ed: Corneal Topography in the Wavefront Era – a Guide for Clinical Application SLACK, Inc, 2006

Guillermo A-U, et al and <u>Wang MX</u> Pre-refractive surgery evaluation In Wang MX ed: Corneal Topography in the Wavefront Era – a Guide for Clinical Application SLACK, Inc, 2006

<u>Wang MX, Swartz T.</u> 3-D sterior corneal topographic system: The AstraMax In Wang MX ed: Corneal Topography in the Wavefront Era – a Guide for Clinical Application SLACK, Inc, 2006

Maus M et al and <u>Wang MX</u> Pentacam In Wang MX ed: Corneal Topography in the Wavefront Era – a Guide for Clinical Application SLACK, Inc, 2006

Swartz T, et al, and <u>Wang MX</u> Precisio In Wang MX ed: Corneal Topography in the Wavefront Era – a Guide for Clinical Application SLACK, Inc, 2006

Gulani A, <u>Wang MX.</u> The future of corneal Topography In Wang MX ed: Corneal Topography in the Wavefront Era – a Guide for Clinical Application SLACK, Inc, 2006

Boerman H, Swartz T and Wang MX.

Decentered ablations In Agarwal A ed: Refractive Surgery Nightmares SLACK, Inc. 2007

Swartz T and <u>Wang MX</u>. Topographic and Wavefront aberrometry disasters In Agarwal A ed: Refractive Surgery Nightmares SLACK, Inc. 2007

Kieval J and Wang MX. Nonectatic corneal probles causing irregular astigmatism In Wang MX ed: Irregular Astigmatism – Diagnosis and Treatment SLACK, Inc, 2007.

Swartz T, Wachlar BB <u>Wang MX</u>. Intacs Implantation In Wang MX ed: Irregular Astigmatism – Diagnosis and Treatment SLACK, Inc, 2007.

Liu D and <u>Wang MX</u> et all Irregular astigmatism: LaserSight Ellipsoid Model and Topography-drivern Aspheric Treatment In Wang MX ed: Irregular Astigmatism – Diagnosis and Treatment SLACK, Inc, 2007.

#### Wang MX

Future direction: technological devlepment and treating the problem at its source In Wang MX ed: Irregular Astigmatism – Diagnosis and Treatment SLACK, Inc, 2007.

<u>Wang MX</u> and Swartz T Premium IOL implantation – what to look in topography In Change D eds: Mastering refractive IOLs – the art and science SLACK Inc 2008.

Hill, S, Swartz S, <u>Wang MX</u> Wang's LASIK Complications. *LASIK & LASIK Complications*, Robert Pinelli, Editor. Jaypee Brothers Medical Publishers (P) LTD, New Dehli, 2008.

Swartz M, <u>Wang MX</u> and Gulani A; Corneal topographers and wavefront aberrometers: complementary tools Refractive surgery, 2nd edition, Agarwal A Jaypee, 2008

Klyce S and <u>Wang MX</u> Topographic diagnosis: indices and mapping criteria, corneal thickness progression, In Wang ed Keratoconus and keratoectasia – prevention, diagnosis and treatment SALCK 2009

Sztipanovits D, Swartz S and <u>Wang MX</u> Posterior surface changes in keratoconus In Wang ed Keratoconus and keratoectasia – prevention, diagnosis and treatment SALCK 2009

Chen YL, <u>Wang MX</u> Infra-red screening for keratoconus In Wang ed Keratoconus and keratoectasia – prevention, diagnosis and treatment SALCK 2009

Spadea L, et al, <u>Wang MX</u> Future approaches to treatment of keratoconus In Wang ed Keratoconus and keratoectasia – prevention, diagnosis and treatment SALCK 2009 Marten L, <u>Wang MX</u> et al Corneal surgery. In Yanoff eds. Ophthalmology 2009

Marten L, <u>Wang MX</u> et al Excimer laser treatment of corneal pathology In Yanoff eds. Ophthalmology 2009

Marten L, <u>Wang MX</u> et al Conjunctival surgery In Yanoff eds. Ophthalmology 2009

Kugler L, <u>Wang MX</u> Laser corneal intrastromal surgery Cataract & Refractive Surgery Today,, 2010

Kugler L, <u>Wang MX</u> Laser in Refractive Surgery: past, present and future Optics 2010

Liu D, Chen S, Swartz T, et al and <u>Wang MX</u> Astramax Comprehensive Diagnostic Workstation with Polar Grid Topography, in Wang ed, Corneal Topography in the Wavefront Era, 2<sup>nd</sup> edition, SLACK, 2011. Swartz, T, et al and <u>Wang MX</u> Topography – basic principles In Wang MX eds, Corneal Topography in the Wavefront Era, 2<sup>nd</sup> edition SLACK, 2011.

Kugler, L and <u>Wang MX</u> Corneal topography: what will the upcoming decade bring? Wang ed, Corneal Topography in the Wavefront Era, 2<sup>nd</sup> edition, SLACK, 2011.

Vida R and <u>Wang MX</u> Corneal topography in refractive surgery In Copeland and Afshari ed Cornea 2012

Vida R and <u>Wang MX</u> Topographic complications In Agarwal ed Cornea 2012

Swartz, S, Shahid M and <u>Wang MX</u> Intraoperative wavefront technology for improved refractive targeting for refractive lens exchange – in Wang ed Refracitive lens exchange: a surgical treatment for presbyopia SLACK, 2015.

Moore M and Wang MX Future directions for refractive lens exchange for presbyopia in Wang ed Refracitive lens exchange: a surgical treatment for presbyopia SLACK 2015.

Mahdavi S; Jiang L; <u>Wang MX.</u> Marketing Surgical Treatment for Presbyopia, in Wang ed the 5<sup>th</sup> Wave – Surgical Treatment of Presbyopia SLACK, 2018

Osuna, FL; Sabater, JB, <u>Wang MX</u> and Rausell AL. Abordaje quirurgico de la hipermetropia: del pasado a la actualidad

Osuna et al ed, Cirugia De La Hipermetropia Secoir, 2019 Wang MX and Rock N The Future of Presbyopia Treatment In <u>Wang MX</u> ed the 5<sup>th</sup> Wave - Surgical **Treatment of Presbyopia SLACK, 2018** Swartz T, and Wang MX. Ch 7: Branding Versus Call to Action In Wang MX, editor; Mr. Shareef Mahdavi, Mr. Mike Malley and Dr. Tracy Swartz co-editors Grow Your Eye Care Practice: High-Yield Pearls from the Marketing Experts SLACK, Inc 2020 James Looper J, Swartz T, Wang MX, Marketing laws In Wang MX, editor; Mr. Shareef Mahdavi, Mr. Mike Malley and Dr. Tracy Swartz co-editors Grow Your Eye Care Practice: High-Yield Pearls from the Marketing Experts SLACK, Inc 2020 James Looper J, Swartz T, Wang MX, Ethics and marketing In Wang MX, editor; Mr. Shareef Mahdavi, Mr. Mike Malley and Dr. Tracy Swartz co-editors Grow Your Eye Care Practice: High-Yield Pearls from the Marketing Experts SLACK, Inc 2020 Frenkel J, Swartz T and Wang MX Future Directions of Ophthalmic Marketing In Wang MX, editor; Mr. Shareef Mahdavi, Mr. Mike Malley and Dr. Tracy Swartz co-editors Grow Your Eye Care Practice: High-Yield Pearls from the Marketing Experts SLACK, Inc 2020 Dancing with Eyes - the story of one of America's foremost laser physicists and eye surgeons Bai He. From Darkness to Sight - a journey from hardship to healing Wang MX. **Common Ground Bible Study** Wang MX, Broocks R. Seeing beyond - a Bible study guide for the film Sight Wang MX, Broocks R. ARTICLES PUBLISHED IN THE TENNESSAN: Games will be a boon to trade with China Aug 2008 This downturn should ring alarm Oct 2008 Solving foreign trade imbalance is key to the U.S. economic woes Nashville Business Journal Nov 2008

Am effective measure to lesson our healthcare financial burden Mature Lifestyles Dec 2009

Social media sorely lack the element of dependability Jan 2010

*Treatment approval process drags on Aug 2010* 

China holds lesson for U.S. health care Oct 2010

A nation of immigrants respects other cultures March, 2011

Nonprofit foundation gives poor the gift of sight Dec 2011

Caring for poor has simple solution Dec 2013

A "Year of the Horse" wish Jan 2014

Alternative to Obamacare: Embedded charity care. Dec 2014.

Why Asian Americans excel over others in education Feb 2015

Giving Tennesseans "right to try" is right thing to do March 2015

China's slowdown's effects on U.S. limited Jan 2016

We can make America great again April 2016

We can make America great again April 2016

*Immigrants key to economic success Sept 2016* 

*Look at views, the issues Nov 2016* 

*Tennessee's tax model could save the U.S. economy June 2017* 

How to protect your eyes during historic solar eclipse Aug 2017

*Immigrants create jobs, contribute to society Dec 2017* 

*The true consequences of a tariff increase Feb, 2018.* 

Bill Lee inspires hope in democratic society Aug 2018

Virus bares need for common ground

# April 2020

More testing will allow us to safely reopen nation May 2020

A vision for finding common ground in a polarized world Nashville Christian Family June 2020

5 STEPS for people to find common ground Sept, 2020

Move past 2020 election via our shared humanity Nov, 2020

Speed up vaccinations, slow down new COVIDs May 2021

Look past ourselves in critical race theory debate July 2021

Virus isn't political: Let's listen to doctors October 2021

**Competitive ballroom dancing** 

- Ranked 4<sup>th</sup> in World Pro-AM Ballroom Dance Championship in open international 10-dance, 2007;
- Gold medal in novice international latin, 1997 United States National Ballroom Championship USABDA

Ballet, Piano and music composition, Table tennis, Badminton, Sailing, Tennis Calligraphy, Violin, Er-hu (Two Strings) Writing, Classical literature

HOBBIES:

### Summary of Doctoral Thesis

Ph.D. (Physical Chemistry) Laser spectroscopy and collision dynamics University of Maryland at College Park, MD, 1986

# COLLISION REACTION DYNAMICS OF ASSOCIATIVE IONIZATION REACTIONS BETWEEN RESONANT EXCITED NA(3P) ATOMS

Associative ionization is a fundamentally important collision reaction which has served as a model system for studying quantum mechanics and reaction dynamics. It is an elementary two-body collision process where reactant atoms approach collision center by following quantum mechanically accessible energy surfaces. The complex collision dynamics, the mechanism of chemical bond formation and ejection of electrons, and product energy and angular momentum distributions have long challenged physicists since the collision process can be studied in the laboratory under appropriate conditions. We have carried out a systematic theoretical modeling and experimental study of the associative ionization process.

We devised a high vacuum collision chamber, highly collimated atomic beam sources and a state-of-the-art signal detection and analyzing system. These laboratory apparatuses were coupled with a high resolution laser system which includes solid, liquid and gas lasers. The lasers were used to induce resonant atomic excitation of reactant atoms and to modulate collision velocity and angular momentum.

A mathematical model has been developed to characterize the quantum mechanics, the vibrational and rotational angular momentum distributions, the characteristic collision energy distributions and the product internal state partitions. Direct measurement of the velocity dependence of the associative ionization process revealed peaked collision cross section at energy of 120 meV, a minimum at 180 meV and an uprising cross section above 180 meV. The collision partners favor sigma-sigma orbital orientation, and the reaction probability decreases in the following order: sigma-sigma, pi-pi and sigma-pi. The anisotropy in the spatial orientation of collision orbitals is also velocity dependent, with the reaction cross section increasing with collision velocity above thermal energies. We developed a semiclassical theory in which the collision dynamics are described in terms of transformation from a laboratory fixed coordinate to a molecular axis. A unique locking radius was found (25 A) within which the quantum axis was described within the framework of inter-atomic coordinates. We also probed the internal state distribution of the product Na<sub>2</sub><sup>+</sup>. Through computer simulation of the collision dynamics, we discovered a characteristic internal rotational and vibrational energy distribution which opens a new channel of quantum mechanical calculation and experimental verification of reaction parameters. We developed a battery of experimental techniques which include Doppler detuning and collision velocity selection, single beam subthermal energy collision, collision spatial alignment and toggling, product spatial collimation and photofragmentation techniques. Intensive experimental study and theoretical modeling has led to the discovery of the principle reaction pathway of the fundamentally important collisional ionization reaction between resonantly excited alkali atoms.

# Summary of M.D. Doctoral Thesis

#### M.D. (Magna cum laude) Harvard Medical School

Thesis concentration: Molecular biology Harvard-MIT Division of Health Science and Technology Massachusetts Institute of Technology, 1991

# *IN VIVO* DNA-PROTEIN INTERACTIONS: A WHOLE GENOME APPROACH

Increasingly extensive collections of genomic DNA sequences and cloned modification enzymes open up new ways to view in vivo macromolecular assemblies. We have developed a new technique to study whole genome for protein recognition sites that are protected from in vivo DNA methylation. Assays for such sites exploit the ability of appropriate endonuclease to subsequently cleave purified genomic DNA only at the unmethylated sites. Three assays of these endonuclease sites include end-labeled fragment sizing, clone sequencing and filter hybridization. Application of these methods to the Escherichia coli genome has revealed specific patterns of partially methylated sites for GATC, CCGG, CCGG, GCGC, GANTC and TCGA specific methylases. For the GATC specific dam methylase, the end-labeled protected sites sum to 0.1% of the potential targets. The clone sequencing assay is particularly informative for E. coli since 37% of the genome sequence is available in computer databases. Sequences flanking protected GATCs found to match database entries all fell in non-coding regions of genes. These include the gut, mtl, cdd, flh, and car operons. These matches immediately suggest physiological and mutational tests of methylation protection models through the filter hybridization assay. Some undermethylated GATC sites overlap close matches to the cAMP-CRP consensus sequence. Protection of such a GATC site in the gut upstream region was reduced in a crp strain. The protection of the GATC site upstream of car is sensitive to growth on pyrimidines, fitting well with the role of carAB products in pyrimidine biosynthesis. Further complete genome sequences will increase the utility and accuracy of these and other whole cell analyses by urging immediate identification of each unique observation with a specific computer molecular species.

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Ge Q, Fuchs H, <u>Wang MX.</u> A new triple-drug regimen for systemic immunosuppression for corneal limbal stem cell allograft, ARVO 2002.

Shaver J, Shen J-H, Wang MX. A model of in vivo corneal haze meter using ASL-1000 confocal microscope, ARVO 2002.

Tran U, Yang H-M, Kegan O, <u>Wang MX</u>. Preoperative predictive factors influencing the clinical outcome of post-PKP LASIK. ARVO 2002.

Rathod R, Shen, D and Wang MX. Hyperopic shift after central 6mm PTK. ARVO 2002.

Chan J, Tseng L, Cohen I, Wang MX. Effect of non-corneal astigmatism on LASIK. ASCRS 2002.

Rathod R, Cohen I, Wang MX. Effect of posterior corneal changes after LASIK. ASCRS 2002.

Wang MX. AstroMax corneal topography system. ASCRS 2002.

Wang MX. AstraMax advantage: enhancing ability to identify causes of visual problems after LASIK, AAO, 2002.

Wang MX, Swartz T, Melanson S. Comparative study of AstraMax, Orbscan II and Humphrey Atlas corneal topographic systems, ASCRS, 2003.

Wang MX, Swartz T. A logical and sequential approach to Custom-CAP. ASCRS, 2003.

<u>Wang MX.</u> Intralase flap making for corneas with prior surgeries (PKP, RK, LTK) and corneal scars. ASCRS, 2003.

Wang MX. Clinical significance of posterior corneal changes after LASIK. ASCRS, 2003.

Jansen ED, Brophy SP, Klein S, Norris P, <u>Wang MX</u>. A problem-based, introductory course in biomedical optics in the Freshman year. Proceedings of the 2003 American Society for Engineering Education Annual Conference and Exposition, 2003.

Wang MX. Techniques for lifting intralase flaps after RK. AAO, 2003.

<u>Wang MX</u>, From corneal topography to wavefront. AAO, 2003.

Abdelmalak H, Swartz T, and <u>Wang MX.</u> Femtosecond laser flaps American Academy of Optometry, 2003;

Abdelmalak H, Swartz T, Coward D, and <u>Wang MX.</u> <u>Intralase Intacs for keratoconus</u> <u>American Academy of Optometry, 2004;</u>

Yu KM, Swartz T and <u>Wang MX.</u> Factors influencing myopic induction and high order aberration after conductive keratoplasty ARVO 2004

Wang MX. The first combined case of intralase corneal pocket creation for artificial cornea. ASCRS, 2004.

<u>Wang MX.</u> Treatment of deep stromal corneal opacity with intrastromal PTK after intralase flap ASCRS, 2004.

Wang MX. Corneal topography and wavefront ASCRS, 2004.

Wang MX, Abdelmalak H, and Swartz T. Topographic and keratometric predictor of visual function in decentered refractive treatment and in FFKC. ASCRS, 2004.

Wang MX, Haddad W and Swartz T. Correlation of DLK in OCP patients. ASCRS, 2004.

Haddad W and <u>Wang MX.</u> et al. Corneal crystals with Zymar use. ASCRS, 2004.

Abdelmalak, H, Swartz, T, <u>Wang, MX</u>. Intacs/femtosecond laser surgery: A New Option for Keratoconus American Academy of Optometry in Tampa, FL, December 2004

Abdelmalak, H, Swartz, T, <u>Wang, MX</u>. Laser-Intacs Surgery for GP Intolerant Keratoconus Multimedia Poster presented at SECO International, Atlanta, GA, February 2005

Abdelmalak, H, Swartz, T, Coward D, <u>Wang, MX</u>. Artificial Cornea Implantation: Alternative for Poor Prognosis Penetrating Keratoplasty. Multimedia Poster presented at SECO International, Atlanta, GA, February 2005

Swartz, T, Abdelmalak, H, <u>Wang MX</u>. "Pseudoectasia" in a Post-Refractive Patient Multimedia Poster presented at SECO International, Atlanta, GA, February 2005.

Wang MX, Yu K, Swartz T. Comparison of rate of image capture using WavePrint and Tracey wavefront system. ASCRS 2005.

Yu K, Swartz T, <u>Wang MX</u>. High order aberration attritable anterior corneal surface and intraocular component in myopic, keratoconic and cataractous patients. ARVO, 2005.

<u>Wang MX.</u> Irregular astigmatism. ESCRS, Sept 2005;

Wang MX: Femtosecond laser intacs for keratoconus AAO, 2005;

Wang MX: the impact to comanagement with femtosecond laser intacs for keratoconus AAO, 2005;

Wang MX: Internal optical aberration in normal, keratoconus and cataractous eyes AAO, 2005;

<u>Wang MX</u>: Femtosecond laser artificial cornea implantation AAO, 2005;

Wang MX: Femtosecond laser Intacs rings for post-LASIK ecstatic eyes; AAO, 2005;

Wang MX: Femtosecond laser Intacs rings for keratoonus graft; AAO, 2005;

Hill S, Boerman H, Swartz T, and <u>Wang MX</u>. Relift versus recut American Academy of Optometry, 2005;

Panchal L, Boerman H, Swartz T, and <u>Wang MX</u>. Intralase Intacs for keratoconus American Academy of Optometry, 2005.

Chen YL et al and Wang MX. Appearance of keratoconus eyes: Computation, Journal of Vision, Volume 5, Number 12, Abstract 47, Page 47a, 2005;

<u>Wang MX</u>, et al "Refraction comparison between WavePrint, Tracey, autorefraction and automated refractor" ASCRS 06.

Wang MX. Irregular astigmatism: classification, diagnosis and treatment; ASCRS 06;

<u>Wang MX</u>. A logical and sequential approach to the treatment of irregular astigmatism Nodic Ophthalmology Congress, June 06;

<u>Wang MX</u>: C-CAP treatment for decentered ablation. Nodic Ophthalmology Congress, June 06;

<u>Wang MX</u>. Irregular astigmatism: classification, diagnosis and treatment; Nodic Ophthalmology Congress, June 06; Chen YL, et al, Wang MX. Digital Eye Bank, Invest Ophthalmol Vis Sci 2006;47: E-Abstract 1188, 2006;

Tan B, Chen YL, and <u>Wang MX</u>. Visualization Of Ophthalmic Measurement Using Computer Eye Modeling, Invest Ophthalmol Vis Sci 2006;47: E-Abstract 1169;

Baker K, Chen YL, and Wang MX. Keratoconus Screening Instrumentation Invest Ophthal Vis Sci 2006;47: E-Abstract 4050

Tan B, Chen YL, Lewis JWL, Shi L, <u>Wang MX</u>. Simulations of keratoconus patient vision with optical eye modeling. 74<sup>th</sup> American Physics Society (APS) Annual Meeting of the Southeastern, Nov 2007, Nashville

Shi L, Chen YL, Baker K, Lewis JWL, Tan B and Wang MX. Zernike interpretation in ocular photorefraction images, 75<sup>th</sup> SESAPS Annual Meeting, Nov 2007, Nashvillle

Jim W, Lewis L, Tan B, Chen YL and <u>Wang MX</u>. Ophthalmic simulation for medical training. 2007 American Telemedicine Association Annual Conference.

Jim W, Lewis, Shi L, Chen YL, <u>Wang MX</u>. Development automatic analysis of mobile ocular screening. 2007 American Telemedicine Association Annual Conference.

Agarwal A, et al Wang MX. Flap wars, ESCRS, 2007.

Wang MX, Marten L, Panchal, L, Swartz, T. Intacs for keratoectasia in post-LASIK, post-RK and post-PKP eyes. ASCRS, 2007;

Wang MX, Marten L, Panchal, L, Swartz, T. Single versus double Intacs segment for treating keratoconus. ASCRS, 2007;

Lewis JWL, Chen YL, Baker K, and <u>Wang MX.</u> Detection of high-order aberrations in photorefraction ARVO, May 2007.

Boerman H, Swartz T, Hill S, <u>Wang MX</u>. Intacs/Femtosecond Laser Surgery Combined with Conductive Keratoplasty: An Alternative to Penetrating Keratoplasty for Severe Keratoconus. American Academy of Optometry, Tampa, FL, Oct 2007.

Hill S, Boerman H, Swartz T, <u>Wang MX</u>. Intacs/Femtosecond laser surgery combined with conductive keratoplasty for severe keratoconus. Global Keratoconus Congress, Las Vegas, Jan 2008

Hill S, Boerman H, Swartz T, <u>Wang MX</u>. Corneal Imaging Technologies Involved in Forme Fruste Keratoconus Criteria Global Keratoconus Congress, Las Vegas, Jan 2008

<u>Wang MX</u>. Three-point touch. ASCRS, 2008

<u>Wang MX</u>. Corneal melt of incisions overlying Intacs ASCRS, 2008

<u>Wang MX</u>. Melt of corneal tissue overlying RK incisions. World Ophthalmology Congress, Hong Kong, 2008.

<u>Wang MX</u>. Double Intacs segment is better than single in treating KC. World Ophthalmology Congress, Hong Kong, 2008.

Swartz T, Hill S, Boerman H and <u>Wang MX</u>. Management of angle closure glaucoma following Visian lens implantation. AAO, Anaheim, CA, Oct 2008.

Swartz T, Boerman H, Hills S and <u>Wang MX</u>. Ocular response analysis retuls following unsatisfactory LASIK. AAO, Anaheim, CA, Oct 2008.

Wang MX. Mascuquates of FFKC. ASCRS 2009.

Wang MX. Three-point touch in detecting FFKC. ASCRS 2009.

Kugler L. Boerman H, Swartz S, Sztipanovits L and Wang MX. Corneal melt in incisions overlying Intacs segment. ASCRS 2010.

Wang MX, Kugler L. Boerman H, Swartz S, and Sztipanovits L. Non-lens non-refraction factors contributing to poor performance of premium IOLs – the concept of spatial precision. ASCRS 2010.

Wang MX. FFKC criteria 2010.

Wang MX. Topographic pearls in identifying FFKC. ASCRS 2010.

Chen YL, Tan B, Shi L, Lewis J, Wang MX and Baker K. The shape of aging lens. ARVO 2010.

Chen YL, Lei S, Lewis JWL, <u>Wang MX</u> and Vida R. Customized eye modeling using clinical pentacam and wavescan data. OSA 2011 Life Science.

Lewis JW, Shi L, Hartmann, EE, Naser N, Chen YL and <u>Wang MX.</u> Pilot Study of an Automatic Assessment of Ocular Alignment ARVO 2011

Shi L, Lewis JW, Hartmann, EE, Naser N, Chen YL and <u>Wang MX</u>, Pilot Study of a Dynamic Binocular Photoscreening Device. ARVO 2011

Chen YL, Shi L, Lewis JW, <u>Wang MX</u>, Vida R., Keratoconus Eye Modeling, ARVO 2011

#### Wang MX

Laser refractive and refractive lens surgery – the state of the art Shanghai Aier Eye Hospital Conference, June 2011.

#### Wang MX

Presbyopia correction using spatial spacing procedure Shanghai Aier Eye Hospital Conference, June 2011.

Wang MX

Phaco float – an ideal technique for moderate cataract for premium lens implantation Shanghai Aier Eye Hospital Conference, June 2011.

#### <u>Wang MX</u>

Corneal melt in incisions over Intacs AAO/Addition Technology conference October, 2011

Chen, Ying-Ling; Shi, L; Lewis, J W L; <u>Wang, MX.</u> Normal and diseased personal eye modeling using age-appropriate lens parameters, Optics Express, Vol. 20 Issue 11, pp.12498-12507 (2012)

Ying-Ling Chen, Lei Shi, J W L. Lewis, <u>Wang MX</u>, Simulation of fundus image measurements – one step toward virtual clinical trial, Invest Ophthalmol Vis Sci 2012;53: E-Abstract 5683.

Lei Shi, E E. Hartmann, Naser T. Naser, J W L. Lewis, Ying-Ling Chen, <u>Wang MX</u>. Intraocular Scattering in Double-Pass Retinal Reflex, Invest Ophthalmol Vis Sci 2012;53: E-Abstract 3052.

Ying-Ling Chen, Lei Shi, J W L. Lewis, <u>Wang, MX</u>, and Ryan Vida, Keratoconus Eye Modeling, Invest Ophthalmol Vis Sci 2011;52: E-Abstract 2811.

J W L. Lewis, Lei Shi, E E. Hartmann, Naser T. Naser, Ying-Ling Chen, and <u>Wang MX</u>, Pilot Study of an Automatic Assessment of Ocular Alignment, Invest Ophthalmol Vis Sci 2011;52: E-Abstract 2513.

Lei Shi, E E. Hartmann, Naser T. Naser, J W L. Lewis, Ying-Ling Chen, and <u>Wang MX</u>, Pilot Study of a Dynamic Binocular Photoscreening Device , Invest Ophthalmol Vis Sci 2011;52: E-Abstract 2516.

K. C. Baker, Y.-L. Chen, L. Shi, J. W. L. Lewis, L. Kugler, and <u>Wang MX</u>, Does the Posterior Corneal Elevation Provide the First Indication of Keratoconus, Invest. Ophthalmol. Vis. Sci. 2010 51: E-Abstract 4963.

Y.-L. Chen, B. Tan, L. Shi, J. Lewis, <u>Wang MX</u>, and K. Baker, The Shape of Aging Lens, Invest. Ophthalmol. Vis. Sci. 2010 51: E-Abstract 4593.

Y.-L. Chen, Lei Shi, J W L. Lewis, <u>Wang MX</u>, Predictive ophthalmic simulation and applications, UT Comparative & Experimental Medicine & Public Health Research Symposium 2010

Lei Shi, Y-L Chen, J W L. Lewis, <u>Wang MX</u>, Design of an automatic cover-uncover test for diagnosing strabismus, UT Comparative & Experimental Medicine & Public Health Research Symposium 2010

Y.-L. Chen, L. Shi, B. Tan, J. W. L. Lewis, and <u>Wang MX</u>, Astigmatism in Dynamic Infrared Photorefraction (DIP), Invest. Ophthalmol. Vis. Sci. 2009 50: E-Abstract 1580. , <u>http://abstracts.iovs.org/cgi/content/abstract/50/5/1580</u>

L. Shi, B. Tan, Y.-L. Chen, J. W. L. Lewis, and <u>Wang MX</u>, Tear Film Breakup in Dynamic Infrared Photorefraction (DIP), Invest. Ophthalmol. Vis. Sci. 2009 50: E-Abstract 1581.

B. Tan, L. Shi, Y.-L. Chen, J. W. L. Lewis, and <u>Wang MX</u>, Spherical Aberration in the Enhancement of Presbyopia Vision, Invest. Ophthalmol. Vis. Sci. 2009 50: E-Abstract 1122. , http://abstracts.iovs.org/cgi/content/abstract/50/5/1122

Wang MX Corneal topography and FFKC detection ASCRS, 2012

<u>Wang, MX</u>, Celmer M and Blemker M Two-year results of scleral implantation for treatment of presbyopia ASCRS, 2013

Wang MX, et al Comparison of intraoperative refraction measured by ORA wavefront aberrometer and postoperative refraction after cataract surgery ASCRS, 2013

Celmer, M, <u>Wang MX</u> Comparison of Tecnis multifocal IOL with Crystalens accommodating IOL in patients with prior myopic LASIK ASCRS, 2013

Yang R, <u>Wang MX</u> Comparison of formulas for IOL calculation in eyes with prior myopic LASIK ASCRS, 2013

Shi Lei, <u>Wang MX.</u> Chen YL Clinical testing of a new objective binocular refraction device ARVO, 2013

Chen YL, <u>Wang MX</u> Pilot testing of a multi-functional device for pediatric vision screening application ARVO, 2013

Rahman M, Yeh A, Yang R, Hord N, Brown B, Waymire A and W<u>ang MX.</u> Comparison of postoperative refraction with intraoperative refraction measured by ORA for cataract surgery ARVO, 2013

<u>Wang MX</u>, et al. 2-year result of scleral spacing procedure for the treatment of presbyopia: US. FDA clinical trial, Phase III World Ophthalmology Congress, Tokyo, 2014

<u>Wang MX</u>, et al Comparison of intraoperative refraction measured by ORA and postop refraction. World Ophthalmology Congress, Tokyo, 2014

Wang MX, et al. 2-year result of scleral spacing procedure for the treatment of presbyopia: US. FDA clinical trial, Phase III ASCRS, 2014

Wang MX, et al Comparison of intraoperative refraction measured by ORA and postop refraction. ASCRS, 2014

<u>Wang MX</u>, Rock N and Blemker M. Scleral Spacing procedure for the treatment of presbyopia – US FDA Phase III result 3-year result ASCRS San Diego, 2015 <u>Wang MX</u> et all Spatial precision and tolerance model – semi-quantitative analysis of the etiology of poor performance of presbyopic intraocular lenses ASCRS 2016

<u>Wang MX</u> et all Comparison of accuracy and precision of topographies using standard spheres and cylinders ASCRS 2017

Wang MX, et al A study of the effect of capsular tension ring on the refractive predictability of accommodating intraocular lenses ASCRS, 2018

<u>Wang MX</u>, et all Advances in corneal topography for refractive and refractive lens surgeons IRSS, Shanghai, May 2018

<u>Wang MX</u> at al Corneal topography for refractive cornea and refractive lens surgeons ASCRS 2019

<u>Wang MX</u> at al Corneal topography for refractive cornea and refractive lens surgeons China AAO, 2019

<u>Wang MX</u> at al Advances in surgical treatment of presbyopia China AAO, 2019

<u>Wang MX</u> at al Pearls of building the leading elective anterior segment practices in the U.S.. China AAO, 2019

# AS AN INVITED SPEAKER

Collisional-ionization reactions between homonuclear Na<sup>\*</sup> + Na, Li<sup>\*</sup> + Li and heteronuclear Na<sup>\*</sup> + Li, Li<sup>\*</sup> + Na collisions. Department of Chemistry University of Maryland at College Park College Park, MD, 20742 1983

A Novel Design of Crossed-Beam Atomic Collision Experiment to Study the Velocity Dependence of Associative Ionization Reaction. University of Maryland at College Park College Park, MD, 20742 1984.

Collision Reaction Dynamics of the Associative Ionization Reaction between Resonantly Excited Na(3p) Atoms. Department of Chemistry University of Maryland at College Park College Park, MD, 20742 1987.

Thermodynamic and Kinetic Studies of the Heterogeneous Hybridization Reactions in the Multiplex DNA Sequencing. Department of Genetics Harvard Medical School Boston, MA, 02115 1988.

A Method for Screening Genomes to Identify and Characterize DNA Sequences Involved in Strong DNA-Protein Interactions. Annual Research Forum of Harvard Medical School - M.I.T. Division of Health Science and Technology Massachusetts Institute of Technology Cambridge, MA 1991.

In vivo DNA-protein interaction: A whole-genome approach. Department of Biochemistry and Molecular Biology Thomas Jefferson University, Philadelphia, PA, 19107 1992.

In vivo DNA-protein interaction: A whole-genome approach. Department of ophthalmology Children Hospital of Los Angeles, Los Angeles, CA, 1992.

A whole genome approach to in vivo DNA-protein interaction. Ludwig Institute for Cancer Research San Diego Branch, University of California, San Diego 1992.

In vivo DNA-protein interactions. Department of Biological Sciences Columbia University, New York 1993.

In vivo DNA-protein interaction: A whole genome approach. Department of Bioscience and Biotechnology Drexel University, Philadelphia, PA, 1993.

Genetics of retinoblastoma. Wills Eye Hospital Philadelphia, PA, 1994. Equivalent Gene Carrier - a genetic analysis model. Ophthalmic Genetics Study Club American Academy of Ophthalmology San Francisco, LA, 1994.

Genetics in Ophthalmology Lecture presented at the Annual Wills Eye Conference Adam Mark Hotel, Philadelphia, PA, 1995.

Parental source of the retinoblastoma gene. Ophthalmic Genetics Study Club. American Academy of Ophthalmology., Atlanta, GA, 1995.

Molecular genetic basis of ophthalmic diseases Annual Meeting for the American Academy of Ophthalmology. Chicago, IL, 1996.

Corneal haze is reduced by amniotic membrane matrix in excimer laser photoablation in rabbits. Bascom Palmer Eye Institute, Miami, FL, 1997.

A genomic approach to in vivo DNA-protein interaction. Department of Molecular Biology Vanderbilt University School of Medicine Nashville, TN, 1997.

A panel screen for Betaig-H3 and K3/K12 mutations in Meesmann, anterior basement membrane disease and anterior stromal corneal dystrophies. Ophthalmic Genetics Study Club AAO, New Orleans, 1998.

Molecular biology of hereditary ocular diseases. AAO, New Orleans, 1998.

TUP1 regulated hyphael growth in C. albicans. Department of Microbiology Vanderbilt University School of Medicine Nashville, TN, 1998.

Mutational analysis for Bigh3 gene for corneal dystrophies Skin Disease Research Center Vanderbilt University School of Medicine Nashville, TN, 1999.

"Modern refractive laser systems of the 21st century" Invited speaker, Conference on Refractive Surgery Mayo Clinic, Jacksonville, FL Sept, 1999.

"LASIK complications and management" Invited speaker, Conference on Refractive Surgery Mayo Clinic, Jacksonville, FL Sept, 1999.

The 1<sup>st</sup> Internatinal Conference on Amniotic Membrane Invited speaker, "Amniotic membrane graft for severe chemical burn" Brazil, 2000.

"A new drug regiment for systemic immunosuppression for limbal stem cell graft" International conference on amniotic membrane graft and stem cells Session moderator and invited speaker, Poland, 2000.

"Amniotic membrane contact lens" Vanderbilt Chancellor Fund Vanderbilt University School of Medicine Nashville, TN, March, 2001. "Amniotic membrane graff" Invited speaker, Wake Forest Annual Eye Conference May, 2001.

"New anterior segment reconstructive surgeries: Invited speaker, National Medical Association Annual Conference Opryland, Nashville, Aug, 2001.

"New surgical techniques for anterior segment reconstruction" Invited speaker, University of North Carolina at Chapel Hill October, 2001.

"Amniotic membrane contact lens" Department of Ophthalmology and Visual Sciences Vanderbilt University School of Medicine November, 2001.

"Topographic pitfalls in refractive surgery" Invited speaker, Wake Forest University Annual Eye Meeting, 2001.

"Modern refractive laser systems" Invited speaker, Wake Forest University Annual Eye Meeting, May, 2001.

"Limits of current topographies", ASCRS, April, 2001.

"New reconstructive eye surgeries using amniotic membrane and stem cell grafts" Wake Forest University Annual Eye Meeting, invited speaker, May, 2001.

"New refractive surgical techniques: a critical review", Kentuky Annual Eye Meeting, invited speaker, June, 2001.

"Limits and clinical problems of current topography systems", invited speaker, ISRS, Orlando, July, 2001.

"Cornea 2001 - a vision odyssey", National Medical Association Ophthalmology Annual meeting, invited speaker, Aug, 2001.

"Topographic pitfalls in refractive surgery", National Medical Association Ophthalmology Annual meeting, invited speaker, Aug, 2001.

"New surgical techniques for anterior segment reconstruction" Invited speaker, University of North Carolina at Chapel Hill October, 2001.

"Limitations of current topographers and the AstraMax solution" Catch the Wave 2, International Society of Refractive Surgery Annual meeting, Nov 2001.

"Biological Planck's Constant – fundamental limitations to wavefront treatment technologies", invited speaker, Bascom Palmer Eye Institute 40<sup>th</sup> Anniversary Scientific Meeting, Miami, 2002.

"Clinical significance of posterior corneal changes after LASIK", Ocular Therapeutics Annual Conference, CA, 2002.

"FDA clinical trial status of ICL" Annual Refractive Surgery Conference Department of Ophthalmology and Visual Sciences Vanderbilt University June, 2002.

"Ablation depth analysis of AstraPro custom cornea-based treatment", Annual Conference of Refractive Surgery, The Netherlands, Feb, 2003.

"Amniotic contact lens: a progress report" Invited speaker, University of Michigan Winter Cornea conference January, 2004

"Corneal topography and wavefront: complementary tools" Invited speaker, University of Michigan Winter Cornea conference January, 2004 "Tracey Ray-Tracing: a new generation wavefront system" Invited speaker, Annual meeting of China Academy of Ophthalmology Sept, 2004.

"Corneal topography-drive custom ablation" Invited speaker, Annual meeting of China Academy of Ophthalmology Sept, 2004.

"Wavefront and corneal topography: custom ablation system with combined considerations" Invited speaker, Ai-er Eye Hospital Changsha, PRC, Sept 2004.

"Posterior changes after LASIK" Invited speaker, University of Michigan Winter Cornea Conference January, 2004.

"Update on refractive surgery". Talk presented to University of Tennessee ophthalmology resident, Dec, 2004.

"Current techniques in refractive surgery" University of Tennessee, Department of Ophthalmology, June, 2005;

"Topogrpahy – Recent advances", Aspen Invitational, March 2006;

"Corneal topography - the stat of the art", Hawaii Eye Meeting, Jan 2007;

"Recent advances in corneal topography". NY Refractive Surgery Club, Feb, 2007;

"Amniotic membrane contact lens". Aspen Invitational meeting, March 2007;

"Refractive Surgery in China". Aspen Invitational meeting, March 2007;

"Corneal topography – a comprehensive review", Saudi Arabia annual ophthalmology meeting, May, 2007.

"My nomogram", Subspecialty Day – Refractive Surgery AAO, 2007

"Is there a fundamental limit of efficacy when correcting aberrations arising from one axial point (lens), at another (cornea)", Aspen Invitational Meeting, March 2008.

"Laser vision correction: the state of the art" World Ophthalmology Congress, Hong Kong, 2008.

"The important role of corneal topography is wavefront treatments" World Ophthalmology Congress, Hong Kong, 2008.

"Refractive surgery pearls" Visiting professor, University of Florida, Jan 2010.

Corneal factors responsible for performance of premium IOLs. Invited speaker, Italian Ophthalmological Society Annual Meeting/OSN, Rome, Italy, May 2010.

Pseudo FFKC. Invited speaker, Italian Ophthalmological Society Annual Meeting/OSN, Rome, Italy, May 2010.

When it is not the IOL Invited speaker, APAO, Beijing 2010

Scleral spacing procedure – US FDA clinical trial Phase III result Invited speaker, APAO, Beijing 2010

Asphericity – hype or truth Invited speaker, APAO, Beijing 2010 Topography and corneal imaging – state-of-the-art Invited speaker, APAO, Beijing 2010

Pseudo FFKC Invited speaker, APAO, Beijing 2010

Corneal irregular astigmatism after hyperopia LASIK AAO Subspecialty Day – Refractive Surgery October, 2011

Spatial precision analysis – establishing a clinical guideline for implanting multifocal IOL in post-LASIK patient AAO/AMO conference October, 2011

Phaco-free all-laser cataract surgery using femtosecond laser Italian Ophthalmology meeting, 2012

Spatial precision scale analysis – identifying causes of visual problem in eyes implanted with presbyopia-correcting lenses Italian Ophthalmology meeting, 2012

Scleral spacing procedure to treat presbyopia – U.S. FDA clinical trial phase III 18-month result Italian Ophthalmology meeting, 2012

Identifying etiologies for visual problems after premium IOL implantation Invited speaker Washington Academy of Eye Physicians and Surgeons Seattle, Washington, 2012

Corneal topography – the state-of-the-art Invited speaker Washington Academy of Eye Physicians and Surgeons Seattle, Washington, 2012

Pseudo-FFKC Invited speaker Washington Academy of Eye Physicians and Surgeons Seattle, Washington, 2012

Corneal topography – the state-of-the-art International Ophthalmology Conference Shanghai Aier Eye Hospital Shanghai, China, 2012

Laser cataract surgery Annual Ophthalmology Conference Tianjin Medical University Eye Hospital Tianjin, China, 2012

Corneal topography in the 21<sup>st</sup> century Annual Ophthalmology Conference Tianjin Medical University Eye Hospital Tianjin, China, 2012

Anterior segment imaging techniques Invited talk, World Ophthalmology Congress Tokyo, 2014

Clinical pearls of using Cassini Invited talk, iOptics meeting At American Academy of Ophthalmology Annual meeting Chicago, 2014.

Corneal topography for refractive surgery and for refractive lens surgery Advanced Cornea Conference Ft. Lauderdale, 2015 Comparison of efficacy in treating corneal versus non-anterior cornea astigmatism Advanced Cornea Conference Ft. Lauderdale, 2015

Recurrent pterygium Advanced Cornea Conference Ft. Lauderdale, 2015

Scleral Spacing procedure for the treatment of presbyopia – US FDA Phase III result Advanced Cornea Conference Ft. Lauderdale, 2015

Comparison of Kamra and Raindrop corneal inlays Aier National Conference 2017

Advances in corneal topography for refractive and refractive lens surgeons IRSS, Shanghai, May 2018

Pearls of building a #1 practice in the U.S. 2019 China's national eye meeting Sept 2019

Presbyopia treatment at Aier-USA 2019 China's national eye meeting Sept 2019

## AS THE PRINICIPLE OR CO-INSTRUCTOR FOR COURSES

Refractive Club Principal organizer ASCRS 1997

The 1<sup>st</sup> Annual LASIK Training Course Course organizer and principle instructor Vanderbilt University, June, 1998.

Refractive Club Principal organizer ASCRS 1998

The 2nd Annual LASIK Training Course Course organizer and principle instructor Vanderbilt University, June, 1999.

The 1<sup>st</sup> Annual VISX Excimer Laser Certification Course Principle instructor Vanderbilt University, June, 1999.

The 1<sup>st</sup> LASIK training course Principle instructor Shanghai, 1999.

Refractive Club Principal organizer ASCRS 1999

The 1<sup>st</sup> LASIK Certification Course Taiwan Academy of Ophthalmology Principle instructor Taipei, Taiwan, August, 1999.

Diabetic corneal diseases American Academy of Ophthalmology Annual meeting, Oct, 1999.

The 3<sup>rd</sup> annual refractive training course Course organizer and principle instructor Vanderbilt University, 2000.

The 2<sup>nd</sup> LASIK course Taiwan Academy of Ophthalmology Principle instructor Taipei, Taiwan, 2000.

The 1<sup>st</sup> Advance LASIK course Taiwan Academy of Ophthalmology Principle Instructor Taichung, Taiwan, 2000.

Refractive Club Principal organizer ASCRS 2000

LASIK video grand round Co-instructor American Academy of Ophthalmology Annual meeting, Oct, 2000.

Corneal disorders in diabetic patients Co-instructor American Academy of Ophthalmology Annual meeting, Oct, 2000. Orbscan Co-instructor ASCRS, April, 2001.

The 4<sup>th</sup> Annual Rfractive Conference of Vanderbilt Laser Sight Center Course organizer and principle instructor Vanderbilt University, June, 2001.

Refractive Club Principal organizer ASCRS 2001

LASIK video grand round Co-instructor American Academy of Ophthalmology Annual meeting, Nov, 2001.

Orbscan course Co-instructor American Academy of Ophthalmology Annual meeting, Nov, 2001.

Corneal disorders in diabetic patients Co-instructor American Academy of Ophthalmology Annual meeting, Nov, 2001.

Refractive complications Course director Vanderbilt Laser Sight Center CME course, Dec 2001.

Refractive Eyecare of 21<sup>st</sup> Century The first annual refractive surgery conference of Wang Vision Institute Principal instructor Nov, 2002.

Refractive Club Principal organizer ASCRS 2002

Advanced corneal topography course for refractive surgeons Principal instructor ASCRS 2003.

Intralase corneal surgery Refractive surgery conference of Wang Vision Institute May 2003

Refractive Club Principal organizer ASCRS 2003

Refractive Club Principal organizer ASCRS 2003

Advanced corneal topography course for refractive surgeons Principal instructor AAO 2003.

Intralase flap making in post-RK eyes Intralase AAO 2003

Corneal topography and wavefront: a transition Co-instructor (PI: Arun Gulani) AAO 2003 LASIK complication video grand round Co-instructor (PI: Ralph Chu) ASCRS 2003

Advanced corneal topography course for refractive surgeons Principal instructor AAO 2003.

Intralase flap making in post-RK eyes Intralase AAO 2003

Corneal topography and wavefront: a transition Co-instructor (PI: Arun Gulani) AAO 2003

LASIK complication video grand round Co-instructor (PI: Ralph Chu)

New refractive surgery technologies Hangzhou 1<sup>st</sup> Affiliated Hospital Dec, 2003;

Update on refractive surgery technologies Jianghua, Dec, 2003;

New refractive surgery and corneal surgery technologies Zhongshan Eye Hospital, Guangzhou Dec, 2003;

New refractive surgery technologies Wuhan Ai-good Eye Hospital Dec, 2003;

Custom wavefront technology and amniotic contact lens Shanghai eye, ear, nose and throat hospital Dec, 2003;

Surgical options for presbyopia Nan-ning Eye Hospital Dec, 2003;

From corneal topography and wavefront Co-instructor (PI: Arun Gulani) ASCRS 2004

Refractive Club Principal organizer ASCRS 2004

The first combined case of intralase with alphacor LASIK complication video grand round Co-instructor (PI: Ralph Chu) ASCRS 2004

From corneal topography and wavefront Co-instructor (PI: Arun Gulani) ASCRS 2004

The first combined case of intralase with alphacor LASIK complication video grand round Co-instructor (PI: Ralph Chu) ASCRS 2004

LaserSight custom cornea ablation system

Co-instructor: Alex Stonojavich Annual meeting of China Academy of Ophthalmology Sept, 2004.

Custom wavefront technologies China National Ophthalmological Annual Conference Sept, 2004;

New trend in refractive surgery Changsha Ai-er Eye Hospital Sept, 2004;

Advanced corneal topography course for refractive surgeons Principal instructor AAO 2004.

Intralase-assistedn Intacs for keratoconus Intralase AAO 2004

LASIK complication video grand round Co-instructor (PI: Ralph Chu) AAO, 2004

Femtosecond laser – assisted Intacs intracorneal ring treatment for keratoconus LASIK complication video grand round Co-instructor (PI: Ralph Chu) AAO 2004

Advanced corneal topography course for refractive surgeons Principal instructor ASCRS 2005.

Refractive Club Principal organizer ASCRS 2005

Video grand round ASCRS 2005

China's first symposium on femtosecond laser Course organizer and principle instructor Shanghai Aier Eye Hospital, August, 2005

China's first ICL training course Guangzhou, Sept, 2005;

Femtosecond laser technologies Guangzhou Zhong Hospital August, 2005;

Femtosecond laser Ton-reng Eye Hospital, Beijing August, 2005;

Femtosecond laser technologies Tiangjing Eye Hospital August 2005;

New refractive surgery technologies Guangzhou Zhongshan Eye Hospital Sept, 2005; Femtosecond laser technologies Yangguang Eye Hospitals Shangzhen, China August, 2005;

New refractive technologies Changsha Wangwang Hospital August, 2005;

Femtosecond laser Zhuhai Eye Hospital August, 2005;

LASIK video grant round Co-instructor (PI: Ralph Chu) AAO, 2005

Advance corneal topography course for refractive surgeons Principle instructor AAO, 2005.

<u>Wang MX</u>: Advanced corneal topography for refractive surgeons ASCRS 06

Refractive Club Principal organizer ASCRS 2006

Wang MX, as co-instructor: "Video Grand Round" ASCRS 06

<u>Wang MX</u>, as co-instructor: "Nightmare cases" ASCRS 06

<u>Wang MX</u>, as co-instructor: "Management of irregular astigmatism" ASCRS 06

<u>Wang MX</u>, principal instructor: "New technologies in corneal topography" Shanghai Aier Eye Hospital April 06

Wang MX, principal instructor: "Femtosecond laser – LASIK and beyond" Shanghai Aier Eye Hospital April 06

<u>Wang MX</u>, principal instructor: "New technologies in treating LASIK complications" Shanghai Aier Eye Hospital April 06

<u>Wang MX</u>, principal instructor: "Differentiate or die" Shanghai Aier Eye Hospital April 06

<u>Wang MX</u>, co-instructor: "New technologies in treating complex eyes" Nodic Ophthalmology Congress (Principle instructor: Aleks Stonjavich); June 06

<u>Wang MX</u>, co-instructor: "New refractive surgery technologies" Nodic Ophthalmology Congress (Principle instructor: Aleks Stonjavich); June 06

<u>Wang MX</u>, principal instructor: "Advanced corneal topography for refractive surgeons" ASCRS, April 2007.

**Refractive Club** 

Principal organizer ASCRS 2007

Wang MX, as co-instructor, "Treating post-refractive surgery complex eyes" ASCRS, April 2007.

<u>Wang MX</u>, as co-instructor, "Video grand round" ASCRS, April 2007.

<u>Wang MX</u>, as co-instructor, "Refractive surgery nightmares" ASCRS, April 2007

Wang MX, as session moderator "Refractive surgery – aberrations" ASCRS, April 2007.

Wang MX, principal instructor: "Advanced corneal topography for refractive surgeons" AAO, Nov 2007.

Wang MX, principal instructor: "Treating post-refractive surgery complex eyes" AAO, Nov 2007.

<u>Wang MX</u>, "Three-point touch – identifying FFKC topographically" AAO, Nov 2007.

<u>Wang MX</u>. Principal instructor: "Advanced corneal topography for refractive surgeons" ASCRS 2008

Refractive Club Principal organizer ASCRS 2008

<u>Wang MX</u>, co-instructor (principal instructor: Agarwal) "Melt of corneal incisions overlying Intacs" ASCRS 2008

<u>Wang MX</u>, co-instructor (principal instructor: Aleksandar Stonjavich) "Irregular astigmatism – classification, diagnosis and treatment" ASCRS 2008

Wang MX, as principal instructor - Advanced corneal topography course for refractive surgeons Nordic Ophthalmology Congress Tromoso, Norway, 6/08

Wang MX, co-instructor (principal instructor: Gulani): "Advanced corneal topography – what every surgeon should know in 2008" AAO, 2008.

Wang MX, co-instructor (principal instructor: Agarwal) "Removal of Intacs" AAO 2008

<u>Wang MX</u>, principal instructor Advanced corneal topography course for refractive and refractive lens surgeons. ASCRS 2009

Refractive Club Principal organizer ASCRS 2009

<u>Wang MX</u>, co-instructor (principal instructor: Ston)javich) "Customized treatment for irregular corneal astigmatism" ESCRS 2010.

Refractive Club Principal organizer ASCRS 2010

<u>Wang MX</u>, principal instructor Advanced corneal topography course for premium IOL and refractive surgery ASCRS 2011.

Refractive Club Principal organizer ASCRS 2011

<u>Wang MX</u>, principal instructor Advanced corneal topography course for premium IOL and refractive surgery ASCRS 2012.

Refractive Club Principal organizer ASCRS 2012

<u>Wang MX</u>, principal instructor Advanced corneal topography course for premium IOL and refractive surgery ASCRS 2013.

Refractive Club Principal organizer ASCRS 2013

Wang MX, principal instructor Update of anterior segment surgeries Aier national video conference Dec 2013.

<u>Wang MX</u>, principal instructor Update of anterior segment surgeries Aier national video conference, Dec 2014.

Refractive Club Principal organizer ASCRS 2014

<u>Wang MX</u>, moderator Presbyopic lens surgery ASCRS 2015.

Refractive Club Principal organizer ASCRS 2015

<u>Wang MX</u>, principal instructor "Advanced corneal topography for refractive and refractive lens surgery". ASCRS 2016

Refractive Club Principal organizer ASCRS 2016

Wang MX, principal instructor: "Corneal inlays for presbyopia" Shanghai Aier Eye Hospital, 2017

Refractive Club Principal organizer ASCRS 2017

<u>Wang MX</u>, principal instructor – Update of anterior segment surgeries, Aier national video conference, Dec 2018.

Refractive Club Principal organizer ASCRS 2018 Wang MX, moderator Multifocal IOL ASCRS 2019

Refractive Club Principal organizer ASCRS 2019

Wang MX, moderator Aier-USA presbyopic surgeries China National Eye meeting, 2019

Wang MX. Principal instructor Advanced corneal topography for refractive and refractive lens surgeons ASCRS 2020

Refractive Club Principal organizer ASCRS 2020

Wang MX. Principal instructor Advanced corneal topography for refractive and refractive lens surgeons ASCRS 2021

Refractive Club Principal organizer ASCRS 2021

Wang MX. Principal instructor Advanced corneal topography for refractive and refractive lens surgeons ASCRS 2022

Refractive Club Principal organizer ASCRS 2022

Wang MX. Principal instructor Advanced corneal topography for refractive and refractive lens surgeons ASCRS 2023

Refractive Club Principal organizer ASCRS 2023

Refractive Club Principal organizer ASCRS 2024

Wang MX. Principal instructor Advanced corneal topography for refractive and refractive lens surgeons ASCRS 2024

## REFERENCES

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