

# **Prof Noel Alpins AM**

## **Digest of Personal and Professional biography**

**Work Address: 7 Chesterville Road Cheltenham 3192**

Prof Noel Alpins AM has been specialising in Cataract and Refractive Surgery since founding NewVision Clinics in Melbourne in 1996. He speaks widely on these topics at national and international meetings and has been a keynote speaker and chair on many occasions. He has taught in astigmatism courses both in USA and Europe for more than 20 years. Prof Alpins presented the RANZCO Council Lecture, in Adelaide in 2010. In November 2012 he was awarded the International Society Refractive Surgery (ISRS) Lans Distinguished Award at the Annual Meeting in Chicago for his innovative contributions to the field of refractive surgery especially in the correction of astigmatism. He was honoured in August 2012 with the Gold Medal at Eye Advance in Mumbai for Outstanding Contribution to Ophthalmology. He is also a recipient of the 2013 American Academy Ophthalmology (AAO) Achievement Award and the ISRS Lifetime Achievement Award in 2014 for his internationally recognised contributions to the advancement of refractive surgery over his career. In May 2015 he was awarded the Certificate of Outstanding Contribution in Reviewing for Elsevier in recognition of his contributions made to the quality of the journal. In 2017, Prof Alpins was awarded with his Member of General Division of Order of Australia AM Honour for his significant service to ophthalmology, particularly to the development of innovative refractive surgery techniques, and to professional associations. He delivered the Gregg Lecture in 2017 at RANZCO, Perth and he published and released his book titled "Practical Astigmatism-Planning and Analysis" by Slack incorporated. He was the recipient of the 2019 ISRS Jose I. Barraquer Lecture & Award ISRS at AAO in San Francisco.

He pioneered small incision cataract surgery in Victoria in 1987 and is a Foundation since 1991 and current Director of the Excimer Laser & Research Group. Prof Alpins was also appointed Honorary Clinical Professor at the University of Melbourne where he completed his Diploma of Ophthalmology in 1977 prior to commencing practice in general ophthalmology.

From 2005 – 2017, Prof Alpins served on the RANZCO program committee and for 2008 as chairman of Subcommittee for invited speakers. He is on the editorial board of several ophthalmic information magazines and peer reviewed journals including Journal of Refractive Surgery (JRS), Journal of Cataract and Refractive Surgery (JCRS), EuroTimes, Ocular Surgery News, Cataract and Refractive Surgery Today (CRST) and Indian Intraocular Implant & Refractive Society and has published widely with more than 100 published articles in these and has contributed more than 20 book chapters. He is on the international advisory board for Refractive Surgery in China and is also an International Council Member of International Society of Refractive Surgery of the American Academy of Ophthalmology. He has developed new techniques for analysing astigmatism known as Alpins Method and has been acknowledged by several Journals as the standard for reporting astigmatism surgery outcomes. These have also been adopted as the standard for evaluating laser treatments in the peer reviewed literature and regulatory authorities as the ANSI standard. Prof Alpins developed the *ASSORT* Surgical Management Systems computer program for vector planning of treatment and outcomes analysis of cataract and refractive surgery used by colleagues in Australia and overseas the iAssort program is now interfaced with more than 10 different topographers and tomographers which provide the CorT Total parameter that he developed for quantifying corneal astigmatism. Prof Alpins has also made available several free website applications calculators for colleagues use on the *International Society of Refractive Surgery*, *American Academy of Ophthalmology* and *ASSORT* website.

When Prof Alpins is not practicing ophthalmology, he enjoys playing golf, skiing, going to live entertainment and spending time with Sylvia and their family.

**Practice:** Private group practice Medical Director of Cheltenham Eye Centre and NewVision Clinics, Melbourne, Australia

**Focus:** Cataract/IOL and Refractive Surgery

**Education:** Medical degree (M.B., B.S.), University of Melbourne, 1970; Diploma of

Ophthalmology, University of Melbourne, 1977.

**Residency:** Alfred Hospital, Australia, 1971-72

**Fellowships and Certifications:** Ophthalmology Registrar, Royal Victoria Eye & Ear Hospital, Australia, 1974-77; Fellow, Royal Australian & New Zealand College of Ophthalmologists, 1978; Fellow, Royal Australian College of Surgeons, 1978; Fellow, American College of Surgeons, 1985; and Fellow, Royal College of Ophthalmologists (UK), 1989; Fellow, American Board of Eye Surgery, 2005.

**Memberships:** International Intra-ocular Implant Club IIIC; American Society of Cataract and Refractive Surgeons; European Society of Cataract & Refractive Surgeons;

International Society of Refractive Surgery; American Academy of Ophthalmology; Australian Medical Association.

**Accomplishments:** Developed the Alpains Method of astigmatism analysis in 1993; founded ASSORT Pty. Ltd. in 1992 to market the *ASSORT* planning and outcome analysis computer program for cataract and refractive surgery. Is a recognized world authority on astigmatism analysis and treatment; speaks and chairs symposia at major meetings; serves as reviewer for peer-reviewed journals and writes regularly for ophthalmic information magazines. Performed first phacoemulsification procedure in Victoria in May 1987. Was first surgeon in Australia to employ computerized outcomes and astigmatism analysis. Won the 1993 Borland Paradox Challenge for the *ASSORT* program. Patented his method for treating and analyzing astigmatism (U.S. and other countries). Developed a new multizone, multipass algorithm for excimer laser myopia treatment adopted by the Melbourne Excimer Laser Group for patient treatment. Was nominated for inaugural Trokel Award for excellence in laser refractive surgery, 1994- 95. Eye Advance Mumbai 2006 – Recipient of a Gold Medal for Distinguished Contribution to Ophthalmology. Invited speaker for Council Lecture, RANZCO, Adelaide 2010. International Society Refractive Surgery (ISRS) Lans Distinguished Award 2012. Gold Medal recipient at Eye Advance in Mumbai 2012. American Academy

Ophthalmology (AAO) Achievement Award 2013. Australia Day ambassador ongoing since 2011. He was awarded the Lifetime Achievement Award by the ISRS of the AAO in October 2014 for his significant and internationally recognised contributions to the advancement of refractive surgery over his career. Certificate of Outstanding contribution in reviewing for Elsevier in 2015 in recognition of the contributions made to the quality of the journal. Served on RANZCO program committee 2005 – 2017 chairing subcommittee for inviting overseas and named lectures from 2018. In 2017, Prof Alpins published & released his book titled “Practical Astigmatism–Planning and Analysis” by Slack incorporated. He was awarded with his Member of General Division of Order of Australia AM Honour for his significant service to ophthalmology, particularly to the development of innovative refractive surgery techniques, and to professional associations. In 2018, Prof Alpins was appointed by the University of Melbourne as Honorary Clinical Professor. Prof Alpins was the recipient of the 2019 Jose I. Barraquer Lecture & Award for International Society of Refractive Surgery at AAO in San Francisco.

**Publications:** Has written numerous articles in newsmagazines and peer reviewed journals. Has served on editorial board, *Eyecare Technology* and *EyeWorld* magazine; and online consultation panel in areas of cataract surgery and refractive surgery for *Ocular Surgery News* and *EyeWorld* magazine and *Cataract and Refractive Surgery Today*. *Practical Astigmatism, Planning and Analysis* released September 2017 by Slack Incorporated.

**Professional Activities:** Founding Member, Excimer Laser & Research Group, University of Melbourne 1991; Member, Protocol & Ethics Committee of the Excimer Laser & Research Group, University of Melbourne 1991; Past chairman of the Como Private Hospital Theatre and Infection Committee, 1985-92; Investigator and Global Advisor for VisX Inc. USA 1998-1999, 2005; Scientific Program Committee of Royal Australian and New Zealand College Ophthalmologists since 2005; Associate Fellow, University of Melbourne, Department of Ophthalmology 2006, Honorary Senior Fellow, University of Melbourne 2013. Clinical Professor,

University of Melbourne 2017.

**Personal Characteristics:** Willing to question authority and mainstream thinking in the pursuit of new methods and better patient care. Possesses keen analytical mind for problem-solving. Appreciates innovation born of the practical necessities of clinical practice as opposed to esoteric research typical of academic settings. Aggressively pursues continuing medical education to keep up with new developments.

**Personal:** Enjoys golf and skiing and travel with his wife Sylvia and three daughters. Fiona, Vanessa and Martine.

### **Prof Noel Alpins Curriculum Vitae**

M.B., B.S	University of Melbourne	1970
D.O.	Diploma of Ophthalmology University of Melbourne	1977
F.R.A.N.Z C.O.	Fellow Royal Australian and New Zealand College of Ophthalmologists	1978
F.R.A.C.S.	Fellow Royal Australian College of Surgeons	1978
F.A.C.S.	Fellow American College of Surgeons	1985
F.R.C.Ophth	Fellow Royal College Ophthalmologists (UK)	1989
AM	Member of General Division of Order of Australia AM Honour	2017

#### **Memberships and Fellowships:**

	Foundation member of the Excimer Laser & Research Group, University of Melbourne	1991
	Foundation member of the Protocol & Ethics Committee Of the Excimer Laser & Research Group, University of Melbourne	1991
IIIC	Member of the International Intra-ocular Implant Club	1998
GMC	Appointed Member of the	1998

General Medical Council, UK

ABES	Member of the American Board of Eye Surgery	2005
CERA	Associate Fellow- Melbourne University Department of Ophthalmology	2006
CERA	Honorary Senior Fellow - Melbourne University Department of Ophthalmology	2013
CERA	Honorary Appointment as Clinical Professor Melbourne University Department of Ophthalmology	2017
AAO	Fellow American Academy of Ophthalmology	
ASCRS	Member American Society of Cataract and Refractive Surgeons	
ESCRS	Member European Society of Cataract and Refractive Surgeons	
ISRS	International Council Member of International Society Refractive Surgery	
AMA	Member Australian Medical Association	

**Editorial Board Member:**

EyeCare Technology Magazine, USA	Appointed 1994
Ocular Surgery News, USA – Domestic Edition: Refractive Surgery section	Appointed 1998
Ocular Surgery News – International Edition	Appointed 1998
Journal of Cataract & Refractive Surgery	Appointed 1999
EyeWorld	1999 – 2005
Eurotimes	Appointed 2007
Intraocular Implant & Refractive Society, India	Appointed 2007
Highlights of Ophthalmology	Appointed 2007
Refractive Surgery in China	Appointed 2008

ISRN Surgery	Appointed 2011
Scientifica	Appointed 2012
Journal of Ophthalmology and Visual Sciences	Appointed 2015
The Journal of Computer Science and Software Development	Appointed 2015
Journal of Refractive Surgery	Appointed 2016

**Consultation Panel:**

Ocular Surgery News, USA and Domestic editions	Appointed 1995
Retained Consultant to Alcon Laboratories, Texas	Appointed 1996

Royal College of Ophthalmologists (RCO) and Ulster University:  
Contributor to the PgDip Cataract and Refractive Surgery online course by providing lecture material on addressing aspects of analysis of surgical astigmatism

CRST – Section Editor Astigmatism	Appointed 2018
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**Editorial Citations:**

Journal Cataract & Refractive Surgery <i>(see published articles and papers)</i>	December 1997; March 1998; December 1998; Jan 2001; December 2006; August 2008; September 2008; June 2012; October 2014; JRS April 2017 JRS&JCRS August 2019 JRS
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**Keynote Speaker:**

<b>Date:</b>	<b>Conference:</b>	<b>Title:</b>
February 2001	Third Biennial IIC Meeting, Cape Town, South Africa	'Advances in Laser Technology'
September 2001	ESCRS, Symposium of Astigmatism,	'How to improve Management of

	Amsterdam 2001	visual performance by LASIK and PRK'
July 2003	Fortieth Anniversary Meeting, Melbourne University Ophthalmology Department	'Cataract Surgery- what we know and what we need to know'
November 2005	MaSIS – Malaysian Small Incision Surgery Society	Guest Speaker – six 40 minute presentations
February 2006	ESCRS, Winter Refractive Surgery, Monaco, Monte- Carlo Topography or Wavefront Based Ablation	'Combined Wave- font and topography data for excimer laser surgery
September 2006	ESCRS, London XXIV Congress of the ESCRS Assessing Outcomes in Refractive Surgery	'Which outcomes to measure'
October 2006	Eye Advance, The VIth International Congress on Advances in Ophthalmology <i>Invited Presentation, Gold Medal Recipient</i>	'New horizons in the diagnosis and treatment of Astigmatism in Refractive Laser surgery
April 2008	NYU Hospital teaching program, Bellevue Hospital	'Understanding astigmatism analysis and treatment in cataract and refractive surgery
March 2009	Moran Eye Centre, University of Utah, Lake City- Great Rounds- <i>Visiting Professor</i>	'New horizons in the treatment and analysis of astigmatism
September 2010	ESCRS, Paris	Astigmatism Symposium
November 2010	RANZCO, Adelaide 42 <sup>nd</sup> Annual Scientific Congress	Council Lecture



October 2013	ESCRS Amsterdam, Netherlands <i>Invited Speaker, JCRS Symposium</i>	Is Excimer laser treatment of suspected Keratoconic eyes justified
September 2016	EuCornea Copenhagen, Denmark <i>Invited Speaker, Cornea Day</i>	Surgically Induced Astigmatism and Flattening Effect for cataract surgery
November 2017	RANZCO, Perth 49 <sup>th</sup> Annual Scientific Congress	Invited Gregg Lecture
October 2019 and Lecture	ISRS/AAO San Francisco AAO	Jose Barraquer Award

**Nominations and Awards:**

Awarded	Borland International (Australia & NZ) Paradox programming award 1993	1993
Nominated	Inaugural Trokel Award for excellence in laser Refractive surgery (see page 49 50 for attached citation)	1994-1995
Awarded	Best presentation of Session at ISRS “Refractive Cataract Surgery Planning”	Nov 1995
Awarded	Best Paper of session ASCRS, San Diego “Achieving LASIK Super Vision by Minimizing and Regularizing Topographic and Wavefront Refraction Astigmatism”	April 2001
Awarded	Eye Advance Gold medal for distinguished Contribution to Ophthalmology	1996
Awarded	Elselvier Certificate of Reviewing American Journal of Ophthalmology	April 2004
Awarded	Elselvier Certificate of Reviewing Ophthalmology	Sept 2011
Awarded	Gold medal at Eye Advance Mumbai For outstanding contribution to Ophthalmology	Aug 2012
Awarded	ISRS Lans distinguished award	Nov 2012

Awarded	AAO Achievement award	Nov 2013
Awarded	ISRS Lifetime achievement award	Nov 2013
Awarded	Elselvier certificate of outstanding Contribution in reviewing	May 2015
Awarded	Elselvier Certificate of Reviewing Canadian Journal of Ophthalmology	March 2016
Awarded	Elselvier Certificate of Reviewing Journal of Optometry	June 2016
Awarded	Gold medal of recognition at IIRSI Chennai, India	July 2016
Awarded	Member of General Division of Order of Australia AM Honour	January 2017
Awarded	Elselvier Certificate of Outstanding Contribution in Reviewing Journal of Cataract & Refractive Surgery	May 2017
Awarded	Recognised as a Silver Reviewer by the Journal Of Refractive Surgery	2018
Awarded	José I. Barraquer Lecture and Award by the International Society of Refractive Surgery	Oct 2019

**Developer and Inventor of:**

*Inventor:* New method of treating and analysing astigmatism  
 Holds multiple patents in USA, Australia, New Zealand, South Korea, Europe, Japan, China, and Canada.

ASSORT – Computer software program for surgical management (**Alpins Statistical System for Ophthalmic Refractive-surgery Techniques**) -*Winner Borland International (Australia & NZ) Paradox programming award 1993*

*Developer:* Multizone Multipass algorithm for excimer laser myopia treatment adopted by Melbourne Excimer Laser Group for patient treatments (see published articles and papers).

**Corporate Advisory Position:**

Past Chairman of the Como Private Hospital Theatre and Infection Committee 1985-1992

Investigator and Global Advisor for VisX Inc. USA.	1998-1999
Investigator Bausch & Lomb – Laser Aberrometry treatment	2004-2005
Investigator AMO VisX – Laser Aberrometry treatment	2005
Royal Australian & New Zealand College of Ophthalmologist <i>Program Committee Member</i>	2005
Biosyntrix International Scientific Advisory Board	2005
Alcon Board of Advisors	2007
RANZCO Program Committee – Chairing subcommittee for inviting overseas and named lectures	2015-2017

**Published peer reviewed papers:**

**First Author:**

Alpins NA. A new method of analyzing vectors for changes in astigmatism. J Cataract Refract Surg 1993; 19:524-533

Alpins NA. New method of targeting vectors to treat astigmatism. J Cataract Refract Surg 1997; 23:65-75

Alpins NA. Vector analysis of astigmatism changes by flattening, steepening and torque. J Cataract Refract Surg 1997; 23:1503-1514

Alpins NA, Taylor HR, Kent DG, Lu Y, Liew M, Couper T, McGough V. Three multizone photorefractive keratectomy algorithms for myopia. Melbourne Excimer Laser Group. J Refract Surg 1997; 13:535-544

Alpins NA. Treatment of irregular astigmatism. J Cataract Refract Surg 1998; 24:634-646

Alpins NA, Tabin GC, Adams L, Aldred GF, Kent DG, Taylor HR. Refractive versus corneal changes after photorefractive keratectomy for astigmatism. J Refract Surg 1998; 14:386-396

Alpins NA. Astigmatism Analysis by the Alpins method. J Cataract Refract Surg 2001; 27:31-49

Alpins NA. Wavefront Technology: A New Advance That Fails to Answer Old Questions on Corneal vs. Refractive Astigmatism Correction. J Refract Surg 2002; 18:737-739

Alpins NA, Goggin M. Practical Astigmatism Analysis for Refractive Outcomes in

Cataract and Refractive Surgery. *Surv of Ophthalmol* 2004; 49:109-122

Alpins NA, Stamatelatos G. Customized photoastigmatic refractive keratectomy using combined topographic and refractive data for myopia and astigmatism in eyes with forme fruste and mild keratoconus. *J Cataract Refract Surg* 2007; 33:591-602

Alpins NA, Stamatelatos G, Walsh G. Advances in planning refractive laser and cataract surgery. *Intraocular Implant & Refractive Society, India* 2007; Vol 3 No 2:31-34

Alpins NA, Stamatelatos G. Clinical outcomes of laser in situ keratomileusis using combined topography and refractive wavefront treatments for myopic astigmatism. *J Cataract Refract Surg* 2008; 34:1250-1259

Alpins NA, Stamatelatos G. New method of quantifying corneal topographic astigmatism that corresponds with manifest refractive cylinder. *J Cataract Refract Surg* 2012; 38: 1978- 1988

Alpins NA, Stamatelatos G, Ong J. Refractive surprise after toric intraocular lens implantation: Graph analysis. *J Cataract Refract Surg* 2014; 40: 283-294

Alpins NA, Ong J, Stamatelatos G. Corneal coupling of astigmatism applied to incisional and ablative surgery. *J Refract Surg* 2014; 40: 1813-1827

Alpins NA, Ong J, Stamatelatos G. Corneal topographic (CorT) to quantify total corneal astigmatism. *J Refract Surg* 2015; 182-187

Alpins NA, Ong J, Stamatelatos G. Asymmetric Corneal Flattening Effect After Small Incision Cataract Surgery. *J Refract Surg* 2016; Vol. 32, No. 9; 598-603

Alpins NA, Ong J, Stamatelatos G. Planning for coupling effects in bitoric mixed astigmatism ablative treatments. *J Cataract Refract Surg* 2017; Vol. 33, No.8; 545-552

Alpins NA, Ong J, Stamatelatos G. The role of Hemidivisional Corneal Topographic Astigmatism (CorTs) in the Regularisation and Reduction of Irregular Astigmatism. *Cornea* Volume 37, Number 3, March 2018

Alpins NA, James KY Ong, Randleman B, Neyvas-Wallace A, Stamatelatos G. Corneal topographic astigmatism based on total corneal power data (CorT Total): a benchmark for total corneal astigmatism. *Cornea* 2019

***Joint Author:***

Taylor HR, Guest CS, Kelly P, Alpins NA. Comparison of excimer laser treatment of astigmatism and myopia. Excimer Laser and Research Group. *Arch Ophthalmol* 1993; 111:1621-1626

Taylor HR, Kelly P, Alpins NA. Excimer laser correction of myopic astigmatism. *J*

Cataract Refract Surg 1994; 20(suppl):243-251

Tabin GC, Alpins NA, Aldred GF, Carson CA, Taylor HR. Astigmatic change one year after treatment of myopia and myopic astigmatism with the excimer laser. Melbourne Excimer Laser Group. J Cataract Refract Surg 1996; 22:924-930

Brodovsky S, Couper T, Alpins NA, McCarty CA, Taylor HR for the Melbourne Excimer Laser Group. Excimer laser correction of astigmatism with Multipass/Multizone treatment. J Cataract Refract Surg 1998; 24:627-633

Goggin M, Alpins N, Schmid L. Current Opinion in Ophthalmology. "The management of irregular astigmatism". Current Opinion in Ophthalmology. Lippincott, Williams & Wilkins USA, April 2000; Vol.11, no.4:260-266

Arbelaez MC, Alpins N, Verma S, Stamatelatos G, Arbelaez JG, Arba-Mosquera S. Clinical outcomes of laser in situ keratomileusis with an aberration-neutral profile centred on the corneal vertex comparing vector planning with manifest refraction planning for the treatment of myopic astigmatism. J Cataract Refract Surg Dec 2017

Tognetto D, Alpins N, Perrotta AA, Bauci F, Rinaldi S, Antonuccio M, Pellegrino FA, Fenu G, Stamatelatos G. Quality of images with toric intraocular lenses. J Cataract Refract Surg March 2018

**Books (single Author):**

Alpins NA "Practical Astigmatism- Planning and Analysis" Slack inc, 2017

**Book chapters:**

**First Author:**

Alpins NA, Tabin GC, Taylor HR, "Photoastigmatic refractive keratectomy" in *Excimer Lasers in Ophthalmology; Principles and Practice*. McGhee CNJ, Taylor HR, Gartry DS, Trokel SL, eds. Martin Dunitz Ltd., Publishers, London (UK) May 1997; 243-259.

Alpins NA. "Effective Optical Zone and Visual Function" in *Custom LASIK: Surgical Techniques and Complications*. Buratto L, Brint S. Slack Inc, NJ 2003; Sect 2, Ch11.2, 432.

Alpins NA, Terry C. "Vector Planning for Customized LASIK Treatment Incorporating Corneal and Optical Astigmatism Parameters" in *Custom LASIK: Surgical Techniques and Complications*. Buratto L, Brint S. Slack Inc, NJ 2003; Sect 2, Ch27.1, 680-684.

Alpins NA, Walsh G. "Aberrometry and Topography in the Vector Analysis of Refractive Laser Surgery" in *Wavefront Analysis, Aberrometers and Corneal Topography*. Boyd BF, Agarwal AA. Highlights of Ophthalmology, Panama 2003; Ch19, 313-322.

Alpins NA, Stamatelatos G. "Vector Analysis Applications to Photorefractive Surgery"

in *International Ophthalmology Clinics – Surgical Correction of Astigmatism, Vol 43*. Sanchez-Thorin JC, Rocha G. Lippincott Williams & Wilkins, Pennsylvania 2003; 1-27.

Alpins NA, Schmid L. “Combining Vector Planning with Wavefront analysis to Optimize Laser In-Situ Keratomileusis Outcomes” in *Wavefront Customized Visual Correction – The Quest for Super Vision II*. Krueger RR, Applegate RA, MacRae SM. Slack Inc, USA 2004; Ch38, 317-328.

Alpins NA, Terry CM. “Astigmatism: LASIK, LASEK and PRK” in *Master Techniques in Cataract and Refractive Surgery*. Roy FH, Arzabe CW. Slack Inc, NJ 2004; Sect 2, Ch1, 151-160.

Alpins NA, Stamatelatos G. “Combined Wavefront and Topography Approach to Refractive Surgery Treatments” in *Corneal Topography in the Wavefront Era – A Guide for Clinical Application*. Wang M. Slack Inc, NJ 2006; Sect 3, Ch13, 139-143.

Alpins NA, Stamatelatos G. “Corneal Haze” in *Refractive Surgery Nightmares – Conquering Refractive Surgery Catastrophes*. Agarwal A. Slack Inc, NJ 2007; Sect 2, Ch 6, 43-54.

Alpins NA, Walsh G. “Accurate Biometry and Intraocular Lens Power Calculations” in *Refractive Surgery Nightmares – Conquering Refractive Surgery Catastrophes*. Agarwal A. Slack Inc, NJ 2007; Sect 4, Ch 24, 237-244.

Alpins NA, Stamatelatos G. “Optimizing Astigmatic Parameters in Lasik Treatments using Vector Planning” in *Mastering the Techniques of Customized LASIK*. Garg A, Lin JT, Alpins N, Bovet JJ, Pinelli R, Pajic B, Mehta CK. Jaypee Brothers Medical Publishers, New Delhi 2007; Sect 2, Ch13, 141-147

Alpins NA, “The Basics of Astigmatism and how to deal with it” in *Tips & Tricks LASIK surgery*. Kapoor S, Pallikaris IG, Rao SK. Jaypee Brothers Medical Publishers, New Delhi 2007; Ch 10, 141-152

Alpins NA, Stamatelatos G. “New Horizons of Optimizing Astigmatic Parameters in LASIK Treatments using Vector Planning” in *Mastering the Techniques of LASER Applications in Ophthalmology*. Garg A, Lin JT, Alio JL, Azad R, Bovet JJ, Pajic B, Mehta CK. Jaypee Brothers Medical Publishers, New Delhi 2008; Ch 54, 397-402

Alpins NA, Stamatelatos G. “Treating Stable Corneas: Combined Consideration of Wavefront and Topography-Guided Treatment” in *Irregular Astigmatism Diagnosis and Treatment*. Wang M. Slack Inc, NJ 2008; Ch 19, 177-183

Alpins NA, Stamatelatos G. “Asymmetrical Surgical Treatment Using Vector Planning” in *Irregular Astigmatism Diagnosis and Treatment*. Wang M. Slack Inc, NJ 2008; Ch 29, 263-268

Alpins NA, Walsh G. “Cylinder” in *Management of Complications in Refractive Surgery*. Alio J, Azar D. Springer-Verlag, Berlin Heidelberg 2008; Ch 6, 106-112

Alpins NA, Stamatelatos G. "Measuring Astigmatism" in *Mastering Refractive IOLs – the Art and Science* Chang D. Slack Inc, NJ 2008; Sect 10, Ch 159, 581-585

Alpins NA, "LRI's with 2.2mm Incision and Surgery fore Dense Cataract using Vision Blue" in *Jaypee's Video Atlas of Ophthalmic Surgery*. Garg A. Fine IH, Pallikaris IG et al. Jaypee Brothers Medical Publishers, New Delhi 2008; Sect 1, Video XXXVI

Alpins NA, "Lasik with Amadeus Microkeratome for High Myopia and Astigmatism (Astigmatic Lasik)" in *Jaypee's Video Atlas of Ophthalmic Surgery*. Garg A. Fine IH, Pallikaris IG et al. Jaypee Brothers Medical Publishers, New Delhi 2008; Sect 2, Video XV

Alpins NA, "PRK with Mitomycin C for High Myopia" in *Jaypee's Video Atlas of Ophthalmic Surgery*. Garg A. Fine IH, Pallikaris IG et al. Jaypee Brothers Medical Publishers, New Delhi 2008; Sect 2, Video XVI

Alpins NA, Walsh G. "Aberrometry and Topography in the Vector Analysis of Refractive Laser Surgery" in *Refractive Surgery – 2<sup>nd</sup> Edition*. Agarwal A, Agarwal A, Jacob S. Jaypee Brothers Medical Publisher, New Delhi 2009; Sect 1, Ch 8, 79-87

Gulani AC, Nordan Lee, Alpins NA, Stamatelatos G. "Excimer Laser Photorefractive Keratectomy for Keratoconus" in *Keratoconus & Keratoectasia. Prevention, Diagnosis, and Treatment*. Wang M. Slack Inc, NJ 2010; Ch 14, 145-151

Alpins NA, Walsh G. "Aberrometry and Topography in the Vector Analysis of Refractive Laser Surgery" in *Dr Agarwal's Textbook on Corneal Topography Including Pentacam and Anterior Segment OCT – 2<sup>nd</sup> Edition*. Agarwal A, Agarwal A, Jacob S. Jaypee Brothers Medical Publisher, New Delhi 2010; Sect 4, Ch 12, 175- 184

Alpins NA, Stamatelatos G. "Treatment and Analysis of Astigmatism During the Laser Era" in *Modern Ophthalmology: The Highlights – Volume II*. Boyd B. Jaypee – Highlights Medical Publishers, Panama 2010; Ch 24, Part X, 381-410

Alpins NA, Stamatelatos G. Planning Keratorefractive Treatments Using Wavefront and Corneal Topography Data in Wang M, ed. *Corneal Topography: A Guide for Clinical Application in the Wavefront Era*. Thorofare, NJ: SLACK Incorporated 2012: 253-258

Alpins NA, Stamatelatos G. "Measuring Astigmatism Planning Surgery and Tracking Results in Nichamin LD. *Limbal Relaxing Incisions: A Practical Guide.*" SLACK Incorporated 2014

Alpins NA. "Refractive Lens Exchange for High Hyperopic Astigmatism Followed by LASIK." - Difficult and Complicated Cases in Refractive Surgery (Ch 7, pp. 31/36)

Alpins NA. Come si calcola la IOL "guista" – Oculista Italiano 10

Alpins NA, Stamatelatos G. "Astigmatism Surprise After Refractive Surgery"

## **Consultation Section:**

How would you advise a patient who had RK two years ago and now complains of binocular imbalance, fluctuating vision and night-time glare? J Cataract Refract Surg, April 1996; 22:285-286

What would you advise for re-treatment of an RK problem? J Cataract Refract Surg, Dec 1997; 23:1442-44

Centration of corneal procedures and identification of the steep astigmatic meridian. J Cataract Refract Surg, July 1998; 24:876-881

Induced Astigmatism following LASIK for Myopia with a Free Cap. J Refract Surg 2000; 16:375-378

A LASIK treatment of complication of incomplete flap. J Cataract Refract Surg 2000; 26:1109-1110

Refractive Surgical Problem, J Cataract Refract Surg 2002; 28:395-396

Refractive Surgical Problem – 27 year old male with risk of diplopia, J Cataract Refract Surg Nov 2004 Issue; 30:11:2245-2454

Refractive Surgical Problem – A 62 year old man had bilateral refractive lens exchange for 20/25 with +8.00 -2.75 x 5 in the right eye and 20/20 with +7.50 -3.25 x 175 in the left eye 1.5 year ago. The outcome is -0.50 -1.50 x 125 in the dominant left eye, and the patient is unsatisfied, J Cataract Refract Surg, Sep 2005 Issue, 31:9:1690

Refractive Surgical Problem – A 44-year-old man has overcorrection after PRK for hyperopia. After CLAPIKS in both eyes and epithelial removal with alcohol in the left eye, visual acuity cannot be improved, especially in the left eye, J Cataract Refract Surg, Nov 2005 Issue, 31:11:2048-2049

Refractive Surgical Problem – 32 year old male who had bilateral LASIK and developed a progressive and relatively quick loss of subjective UCVA, mainly in the left eye, J Cataract Refract Surg, March 2006 Issue, 32:3:382-383

Refractive Surgical Problem – A 55 year old healthy male patient had bilateral radial keratometry (RK) in 1975. Now the patient presents because of a decrease in visual acuity with bilateral cataract and is requesting lens surgery, J Cataract Refract Surg, Jan 2007 Issue, 33:1:8-9

### **Section Editor for Cataract and Refractive Surgery Today**

Practical Approaches to the Many Headed Beast of Astigmatism. Cataract Refract. Surg. Today, June 2018

How Mathematics Can Help Perfect Surgical Technique. Cataract Refract. Surg. Today, Aug 2018



**Editorial citations:**

From the Editor: Excimer Laser Technology: New options coming to fruition. J Cataract Refract Surg 1997; 23:1429-1430

From the Editors: Format for reporting refractive surgical data. J Cataract Refract Surg 1998; 24:285-287

From the Editor: Reporting astigmatism data. J Cataract Refract Surg 1998; 24:1545

From the Editor: How should we analyse astigmatic data? J Cataract Refract Surg 2001; 27:1-3

From the Editor: Astigmatism analysis: The spectrum of approaches. J Cataract Refract Surg 2006; 32:1977-1978

From the Editor: Reshaping the cornea: Which laser profiles should we use. J Cataract Refract Surg 2008; 34:1225

From the Editor: Impact of citation practices: Beyond journal impact factors. J Cataract Refract Surg 2008; 34:1419-1421

From the Editor: Keratoconus. J Cataract Refract Surg 2012; 38: 927-92

**Letter to Editors:**

Letter to Editor: Evaluating Astigmatic Results. J Cataract Refract Surg. Nov 1993, 19:6:812

Letter to Editor: Surgically induced astigmatism. Aust/NZ J Ophthal. 1994; 22:217

Reply to Letter to Editor: Vector Analysis. J Cataract Refract Surg. 1994; 20:3:366-367

Letter to Editor: Excimer Laser Keratectomy for Astigmatism after PK. Ophthalmology. Alpins NA. 1996; 12:1985-1986.

Letter to Editor: A re-analysis of astigmatism correction. British J of Ophthal. 2002; 86:832

Letter to Editor: Analyzing refractive data. J Cataract Refract Surg. Feb 2004; 30:291-292

Letter to Editor: Combining wave-front and topography data for excimer laser surgery: The future of customized ablation? J Cataract Refract Surg. Nov 2004; 30:285-286

Letter to Editor: Combining wave-front and topography data. J Cataract Refract Surg. April 2005; 31:646-647

Letter to Editor: Terms Used for the Analysis of Astigmatism. J Refract Surg. June 2006; 22:6:528

Letter to the Editor: Special Articles and Peer Review. J Refract Surg. Feb 2007; 23:2:115

Letter: Vector Analysis with the femtosecond laser. J Cataract Refract Surg. July 2014; 40:1246-1247

Letters to the Editor: Excimer laser correction of Astigmatism: Consistent terminology for better outcomes. J refract Surg. May 2014

Letters: Vector analysis with the femtosecond laser. J Refract Surg. July 2014

Letters: Astigmatism terminology and source references. J Cataract Refract Surg. April 2016

Letters: Topography-modified refraction: adjustment of treated cylinder amount and axis to the topography versus standard clinical refraction in myopic topography-guided LASIK. Dovepress June 2017

Letters: Refractive, corneal, and ocular residual astigmatism: distribution in a German population and age-dependency: the Gutenberg health study. October 2017

### **Critique of Paper:**

Article Critique of Holladay paper (J Cat Ref Surg). 'Analysis of aggregate surgically induced refractive change, prediction error, and intraocular astigmatism'. J Refract Surg. Nov-Dec 2001; 17(6):705-707

### **Published Articles:**

#### ***OSN (Domestic USA):***

01 Oct 1992	Page 62	(ASSORT) Program can measure surgical
15 Dec 1992	Page 80	Small incision triple procedure for cataract and Glaucoma
01 Jan 1993	Page 41	Single-stitch surgery can increase ATR astigmatism
01 Aug 1993	Page 33	TIA – Know what you are aiming for in astigmatism surgery
15 Aug 1993	Page 43	A new method of Astigmatism analysis
1 Nov 1993	Page 1	PRK Cuts deep into RK Down Under
	Page 126	ISRK Panel: Managing high myopia
15 Jan 1994	Page 44	Target Emmetropia feature: What tupe of cataract surgeon are you?

15 Sep 1994	Page 15	Alpins ASSORT Affords High-tech outcomes Analysis
1 Nov 1994	Page 164	Surgical maneuvers- an excimer laser PRK Technique
1 Dec 1994	Page 43	Adjusting Astigmatism Magnitude to Improve Excimer laser results
1 March 1995	Page 35	Astigmatism Round Table- Managing Astigmatism during cataract surgery
1 July 1995	Page 38	Cataract outcome program proliferate along with managed care
1 Aug 1995	Page 48	Target Emmetropia: incorporating refractive principles for better cataract Surgery results
15 April 1996	Page 42	Software links excimer laser to topography
15 Aug 1996	Page 60	New Multizone- Multipass Technique for PRK
15 Oct 1997		Software computes accurate astigmatic correction nomograms for LASIK, PRK
15 March 1998	Page 17	Corneal topography data enhance astigmatic outcomes
15 May 1999	Page 14	Vector analysis of astigmatism correction: The Alpins Method ( <i>1<sup>st</sup> in series of 5 Articles</i> )
1 June 1999	Page 19	Flattening, Steepening, Torque are crucial Points in astigmatism surgery ( <i>2<sup>nd</sup> in series Of 5 articles</i> )
15 June 1999	Page 44	Corneal versus refractive astigmatism: Integrated analysis ( <i>3<sup>rd</sup> in series of 5 Articles</i> )
1 July 1999	Page 6	The treatment of Irregular astigmatism ( <i>4<sup>th</sup> in series of 5 articles</i> )
15 July 1999	Page 8	Topographic disparity: a useful new measure of irregular astigmatism ( <i>5<sup>th</sup> in series of 5 articles</i> )
1 Aug 2000	Page 1	Is the future of refractive surgery based on Corneal topography or wave-front?
1 Sep 2000	Page 41	Wave-front is showing signs of success, but can it do it alone
15 Oct 2000	Page 48	Supplement Issue 2000 World Almanac: Australian health system copes amid Diverse landscape
15 Jan 2002	Page 1 & Page 63	Presbyopia strategies proliferating Presbyopia technologies include IOL and Scleral approaches
Jan 2002		Refractive surgery: correcting Astigmatism
15 Feb 2002	Page 21	Editorial comment: Consider the vertex distance in refractive surgical procedures
June 2002		Limitations of wave-front are becoming apparent, some say
1 Aug 2002	Page 1	Editorial comment: wave-front gains supporters, skeptics
	Page 31	Some foresee limitations in wave-front technology
1 Oct 2002	Page 38	Software aims to reduce astigmatism

		after LASIK
1 June 2003	Page 1+5	Barriers to super-vision still remain
1 June 2003	Page 1+ 26	IOL's - tools for micro incision surgery wanted
1 Sep 2003	Page 14	As SARS threat dwindles, lessons linger for medical community
15 Oct 2003	Page 25	Mixing vector, wave-front values improves outcomes
1 Nov 2004	Page 14+15	ESCRS Paris highlights: topography-based PRK in keratoconus
1 Dec 2004	Page 24-26	Resultant astigmatism can be minimized with Inclusion of topography data, surgeon says – 'Vector planning can help surgeons find the Optimal balance between corneal and refractive Measurements'
Feb 2005		Innovation spotlight- 'angles or using combined Vector analysis to treat refractive patients
15 April 2006	Page 40+42	Personalized nomograms 'essential' surgeons say- A personalized nomogram allows greater accuracy In refractive surgery, incorporating many variables That can affect outcomes
1 May 2007	Page 46	Wave-front mixed with topography offers 'ideal Laser treatment'
1 June 2007	Page 11	ASCRS Highlights- refractive keratectomy with Vector planning for keratoconus maintains Outcomes at 10 years
15 June 2007	Page 1	Laser Calculation benefits keratoconus patients
15 June 2007	Page 31	PARK with vector planning for keratoconus maintains 10 year outcomes.
10 Oct 2015	Page 36	CorT an accurate, consistent measure of corneal Astigmatism
10 Nov 2018		Vector Planning: An Overdue Paradigm Shift
25 May 2019		LASIK Surprises and how to avoid them

**Ocular Surgery News:  
International Edition:**

July 1992	Page 34	Improving surgery by analysis (ASSORT)
Sep 1992	Page 36	Single-stitch surgery can increase ATR astigmatism
Sep 1992	Page 42	Triple procedure for cataract and glaucoma
Oct 1993	Page 40	A new method of astigmatism analysis
Nov 1993	Page 1	Patient demand for excimer surpasses RK
Dec 1993	Page 22	TIA- A method for planning and assessing surgery
Oct 1994	Page 25	Paris 94 supplement: Excimer laser surgery Planning Practical Astigmatism analysis for the PRK and AK Surgeon
Sep 1995	Page 40	Surgical maneuvers- incorporating refractive Principles to achieve better cataract surgery results

Dec 1997	Page 10	Software computes accurate astigmatic correction Nomograms for LASIK, PRK
July 1998	Page 17	Corneal topography data enhance astigmatic Outcomes
Aug 1999	Page 13	Vector analysis of astigmatism correction: The Alpins Method
Sep 1999	Page 22	Flattening, steepening and Torque are crucial Points in astigmatism surgery.
	Page 16	Como utilizar el Analisis vectorial para la correccion del Astigmatismo ( <i>Spanish edition</i> )
Oct 1999	Page 30	Corneal versus refractive astigmatism: integrated Analysis
May 2000	Page 27	Treating naturally occurring irregular astigmatism
June 2000	Page 22	Topographic disparity is a useful new measure of Irregular astigmatism
Sep 2000	Page 41	Wavefront showing signs of success, but can it do Alone?
Jan 2002		Presbyopia strategies proliferating
Feb 2002	Page 1 & 24	Editorial comment: Consider the vertex distance in Refractive surgical procedures. Presbyopia Technologies include IOL and scleral approaches
June 2002		Limitations of wavefront becoming apparent, Some say
Aug 2002		How wavefront works-a primer
Dec 2002	Page 10	Software aims to reduce astigmatism after LASIK
June 2003	Page 1 & 17	Barriers to super-vision still remain
July 2003	Page 1 & 16	Surgeons await IOLs, tools for microincision Surgery
Sep 2003	Page 8	As SARS threat dwindles, lessons linger for medical Community
Oct 2003		AUSCRS meeting on presentation
Nov 2004	Page 8 & 10	ESCRS Highlights: topography based PRK in Keratoconus
June 2007	Page 6	ASCRS highlights- refractive keratectomy with Vector planning for keratoconus maintains Outcomes at 10 years
Sep 2007	Page 20 & 21	PARK with vector planning for keratoconus results Stable at 10 year follow up
April 2009	Page 1 & 8	Study finds that combined refractive treatment Reduces astigmatism more than wavefront alone
June 2009	Page 17	Ocular residual astigmatism measurement could Salvage 5% of dissatisfied LASIK patients
Jan 2010	Page 1,4 & 5	Australian ophthalmologists oppose cuts in Medicare rebate for cataract surgery
July 2011	Page 16	Perspective- Preoperative OCT a significant step
Feb 2012	Page 18	Perspective- Study: Corneal sensation reduced in LRI's

## Ocular Surgery News:

**At issue:**

June 2000		At issue: Preferred regimen for curing haze for PRK
Aug 2000	Page 30	At issue: is there a place in the future of refractive Surgery for both PRK and LASIK?
Aug 2000	Page 44	At issue: reasons for use of one microkeratome Over any other
Sep 2000	Page 64	At issue: computer related vision problems
Nov 2000		At issue: Preventing infections
Mar 2001		At issue: The effect of discount LASIK
July 2001	Page 52	At issue: Are the doctors seeing a rise in antibiotic Resistance?
Sep 2001	Page 43	At issue: Have custom corneal ablations improved LASIK results?
Nov 2001	Page 80	At issue: Under what circumstances, if any, should Person under age 18 have LASIK
Feb 2002	Page 12	At issue: What do you prefer for LASIK Enhancements, lifting the flap or recutting and Why?
Oct 2002	Page 50	At issue: With the current economic climate in Your country, is it feasible to expand your Practice? If yes, how? If no, why not?
Dec 2002	Page 14	At Issue: What will be the dominant refractive Procedure in 2010
June 2003		At issue: What role do you think wavefront Technology will play in surface ablation Procedures such as PRK and LASEK? ( <i>International edition</i> )
Mar 2004	Page 24	At issue: How important is fluidics today for Performing modern phacoemulsification, Including microincision cataract surgery?
April 2004		At issue: For what refractive errors would you Consider refractive lens surgery over excimer Laser procedures such as LASIK, LASEK or PRK
Aug 2004	Page 16	At issue: How important is fluidics today for Performing modern phacoemulsification, including Microincision cataract surgery ( <i>international edition</i> )
Feb 2005	Page 19-21	At issue: What is your preferred prophylactic Regimen for cataract surgery? ( <i>international edition</i> )
June 2005	Page 25	At issue: For what refractive errors would you consider lens- based surgery over laser- based Procedures?
Aug 2005		At issue: what is maximum age you recommend a Patient to receive PRK?
Dec 2005	Page 7	At issue: What do you think was the biggest news In refractive surgery in 2005 and why?
April 2006	Page 65	At issue: For patients with myopia greater than 7D who desire refractive surgery, what treatment

		Do you prefer and why? At issue: How long after initial LASIK surgery do You lift the flap and why?
Sep 2006	Page 16	At issue: For patients with myopia greater than 7D Who desire refractive surgery, what treatment do You prefer and why? ( <i>International edition</i> )
Sept 2006		At issue: How beneficial is intraoperative Pachymetry and why?
Oct 2006	Page 60	At issue: What is your highest limit for hyperopic Correction in laser refractive surgery and why?
April 2007	Page 20	At issue: Do you recommend the use of omega Fatty acids to treat dry eye? Why or why not?

### **Ophthalmology Times**

Nov 1993	Page 124	Program analyzes refines refractive surgery Technique
March 1994	Page 60	Vector analysis can improve predictability of Astigmatism
Aug 1997		Astigmatic treatment uses refractive, Topographic Data
Nov 1997	Page 14	Refraction optimized by adjusting laser
March 1999	Page 14	PRK more accurate when astigmatism isn't also a Factor
Oct 1999	Page 13	Combining data can yield best astigmatism results
March 2004	Page 42	Integration of vector planning enhances customized ablation outcomes
April 2014	Page 2	Toric IOL refractive Surprises

### **Biomedical Technology**

May 1998		Ophthalmology develops surgery outcomes Software
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### **Borland Connection**

Winter 1993	Page 9-11	Top paradox programmer wins trip to US Conference
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### **Cataract and Refractive Surgery Today**

2006	78-80	Refractive Procedures for the Keratoconic Patient: An examination of LASIK and PRK, with an emphasis on PARK.
Feb 2014	Page 44-49	What's the big idea
May 2014	Page 42-44	Toric IOLs and Refractive Surprises
Feb 2015	Page 1-5	Outcome analysis in a clinical setting
May 2015	Page 1-6	Innovative Toric IOL Calculators and how to use Them

### **Cataract and Refractive Surgery Today (Europe):**

Sep 2010		iAssort Provides Astigmatic Analyses using
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## Topography

### **Eurotimes**

Nov 1998	Page 29	An Australian approach to modulating corneal healing in PRK
April 2007	Page 22	Topography and wavefront linkage improves Visual outcomes
April 2007	Page 26	XXIV Congress of the ESCRS, London 2006, Assessing outcomes in refractive surgery
June 2008	Page 50	Practice Management- Doctor, how good are your Results with patients like me?
Sep 2008	Page 14	Maximising astigmatism correction in cataract Surgery
Sep 2010		Refractive and corneal parameters should be used
Oct 2010	Page 8	Utilizing topographers, software tracks Astigmatism changes to improve nomograms
June 2013		Corneal astigmatism- new method gives more Accurate measurement of astigmatism of the Whole cornea
Nov 2015		Astigmatism Measure- novel parameter Quantifying total corneal astigmatism offers best Match with refractive cylinder
7 Dec 2018		Astigmatism: The Final Frontier – Evolving Solutions to Reduce Astigmatism in Cataract Surgery

### **Eyecare technology**

June 1994	Page 48	ASSORT- The Statistical Team for your Surgical Practice
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### **Eyeworld**

Sep 1997	Page 42	LASIK- Refractive Surgery thought leaders
Dec 1998	Page 17	Symmetry in motion- A look at the Alpíns' method For treating irregular astigmatism
Aug 1999	Page 37	Lasers address corneal irregularities
Sep 1999	Page 37	EW Dialogue: Placido v non placido disk video Keratography
March 2000	Page 38	EW Dialogue: Challenging cylinders: Optimizing Astigmatism assessment and treatment
	Page 42	EW Cover Story: The astigmatic armamentarium
	Page 46	EW Cover Story: Optimizing approaches to Astigmatism assesement
May 2000	Page 64	The future of wavefront refraction as a diagnostic Tool
May 2000	Page 70	Perceptions on wavefront technology from refractive leaders
Aug 2001	Page 48	Improving outcomes with personalized LASIK Nomograms
Jan 2002		Refractive corneal irregularity and dry eye?
Feb 2005	Page 56 & 57	Innovation spotlight- angles on using customized vector analysis to treat refractive patients (Maxine



Oct 2007	Page 40 & 47	Lipner The View from Ausstralia
July 2008	Page 11	In the journal- LASIK for myopic astigmatism
March 2014		EW Cover Story: Femtosecond Phaco techniques Operating on the Lasers Edge
<b>Franja Ocular</b>		
Sep 1999	Page 35	Correccion quirurguca del astigmatismo: el Metodo de Alpins
<b>Highlights of Ophthalmology</b>		
Issue No 2:	Page 14	Personal Experience in the management of Irregular astigmatism
Issue No 2:	Page 11	Corneal Topographic Astigmatism Measurement
<b>Highlights of Ophthalmology- Spanish Edition</b>		
Numero 2 2007	Page 14	Experiencia personal en el manejo del Astigmatismo irregular
Numero 2 2014	Page 11	determinacion del astigmatismo topographico corneal
<b>Insight</b>		
Aug 1998	Page 23	Ophthalmologist develops new method of Analyzing astigmatism
Nov 2007	Page 6	US FDA adopts Aust-developed laser technique as Improving treatment of astigmatism
Sep 2008	Page 37	Melbourne surgeons technique recognized as improving treatment of astigmatism
July 2009	Page 16	Integrated eye care: how it works in a Metropolitan setting in Victoria
<b>Journal of refractive surgery</b>		
Nov 1998	Page 672	ASSORT: Laser capabilities expanded for Astigmatism treatment analysis
<b>Medical Electronics</b>		
Sep 1998		The Alpins method: a breakthrough in Astigmatism analysis
<b>Medical Laser report</b>		
July 1998		Software program refines astigmatic outcomes
<b>Mivision</b>		
Dec 2008	Page 5	Aussie World first: New astigmatism treatment Technique

Feb 2009            Page 16-19    The new frontier for clear vision

### **Touch Ophthalmology**

*European Ophthalmic Review*

Nov 2017            Page 25-27    How to get accuracy in intraocular lens calculation in normal extreme cases.

### **Quotations:**

Sep 1999            Page 32        Eyeworld: Excimer treatment options for Hyperopic astigmatism

### **Conferences, podium presentations and participation**

July 1989            Foundation member of 500 Club (Iolab Aust.)

Aug 1990            Royal Victorian Eye and Ear Hospital Faculty Member  
Phacoemulsification course

March 1991         Advanced anterior segment symposium, Aspen, Colorado  
Faculty member

Nov 1991            Melbourne Excimer Laser & Research Group  
*Panelist:* Initial VisX Excimer laser course

Dec 1991            Rock Castle Private Hospital, Sydney  
Faculty member: Phacoemulsification course (Alcon)

May 1992            Como Private Hospital, Melbourne  
*Course Director & Surgeon*  
"A day of Xcimer Isification surgery" course (Alcon)

July 1992            Melbourne Ophthalmic Alumni meeting  
*Presenting author:*  
"Has laser beam 193 RK?"

Nov 1992            RANZCO, annual scientific meeting  
*Speaker:*  
"Combined Cataract, IOL and trabeculectomy"  
"Single stitch small incision cataract surgery"  
"Transverse astigmatic keratotomy and small incision Cataract and implant surgery" &  
"Vector analysis formulae for astigmatism"

Feb 1993            Royal Victorian Eye and Ear Hospital  
*Instructor:*  
Basic Microsurgical course for new registrars

- May 1993 ASCRS Meeting, Seattle, USA  
*Speaker*  
 "A new method of analysing vectors for changes in astigmatism"  
 "Keratometry versus refraction: How to resolve the conflict in astigmatism surgery"  
  
*Faculty member:*  
 Keratorefractive Debates  
 Surgical management of astigmatism
- June 1993 Melbourne Ophthalmic Alumni Meeting  
*Presenting author:*  
 'Surgical treatment of astigmatism: RK v Excimer'
- June 1993 Canadian Rockies Symposium, Banff, Canada  
*Faculty Member*
- July 1993 ISRK meeting, Minneapolis, USA  
*Speaker:*  
 "Practical astigmatism analysis"  
 "Planning Excimer laser surgery"
- Aug 1993 Australian Registrars Cataract Surgery Symposium (Alcon)  
*Faculty member*
- Nov 1993 ISRK pre-A.A.O. Meeting, Chicago  
*Speaker:*  
 Astigmatism correction with the Excimer laser  
 Surgically Induced Astigmatism with the Excimer laser
- AAO, New York  
*Invited Speaker:*  
 "Keratorefractive Debates: RK v PRK"  
  
*Instructor:*  
 "Astigmatism Wet Lab"  
 "Advanced Phacoemulsification Technique Course"
- April 1994 ASCRS Meeting, Boston, USA  
*Speaker:*  
 "Adjustment of Astigmatism Magnitude Excimer Laser Surgery"  
 "Planning Refractive Cataract Surgery"  
 "Keratorefractive Debates"  
 "VisX Protocol Course"

- May 1994      Joint Meeting French Implant Society and Ocular Surgery News Int,  
Edn. Paris, France  
*Faculty member and invited speaker:*  
“Excimer Laser Surgery Planning”  
“Practical Astigmatism Analysis for the AK & PRK  
Surgeon”
- June 1994      International Congress Ophthalmology, Toronto, Canada  
*Invited faculty member*  
Discussion: for Dr Lindstrom’s paper on:  
Astigmatism in Cataract Surgery  
  
*Speaker:*  
“Excimer Laser Surgery”  
  
Canadian Rockies Symposium, Banff, Canada  
*Invited faculty member*  
  
*Moderator:*  
PRK Session  
  
*Speaker:*  
“Results of Excimer Laser Surgery”  
“Planning of Refractive Cataract Surgery”
- July 1994      Melbourne Ophthalmic Alumni Club Meeting  
*Presenting Author with Prof Hugh Taylor*  
“Astigmatism Correction with the Excimer Laser”
- Nov 1994      A.A.O. & ASCRS Joint Symposium, San Francisco, USA  
*Invited Speaker:*  
“Surgical Correction of Astigmatism”  
  
*Invited faculty member:*  
Refractive Keratoplasty Debates  
The Excimer Laser 1995 – Evolution or a Revolution  
for Ophthalmology?  
  
*Invited Instructor:*  
Advanced Phacoemulsification Course
- April 1995      ASCRS & AAO Joint Symposium, San Diego, USA  
*Presenter:*  
“Astigmatism Correction with the Excimer Laser”  
“Vector Analysis Formulas for Cataract Surgery”  
  
*Moderator of Scientific Session:*  
Incisional Techniques – Cataract Surgery

- June 1995      Melbourne Ophthalmic Alumni Meeting  
*Presenter:*  
 “Planning and Analysis of Refractive Cataract Surgery”
- Aug 1995      Current Concepts in Ophthalmology, Hayman Island, Queensland  
*Invited faculty speaker:*  
 “Astigmatism surgery and analysis”
- Nov 1995      ISRS pre-AAO Meeting, Atlanta, USA  
*Presenter:*  
 “Refractive Cataract Surgery Planning”
- AAO Meeting, Atlanta, USA  
*Invited Speaker:*  
 “Keratorefractive Debates: PRK – The International Experience”
- Invited Speaker:*  
 “The Lasers of Refractive Surgery – Evolution, Science and Economics”
- Presenter/Wet Lab Instructor:*  
 Surgical Correction of Astigmatism
- June 1996      ASCRS Meeting, Seattle, USA  
*Presenter:*  
 “Refraction versus Optimisation for Treatment of Astigmatism by Excimer Laser”  
 “New Method of Targeting Vectors for the Optimal Treatment of Astigmatism”
- July 1996      Melbourne Ophthalmic Alumni Meeting  
*Presenter:*  
 “Multizone Photorefractive Keratectomy”
- Oct 1996      ISRS pre-AAO Meeting, Chicago USA  
*Presenter:*  
 “Optimization versus Refraction combined with New Method of Targeting Vectors for the Optimal Treatment of Astigmatism”  
 “Vector Analysis Formulae for Cataract Surgery”  
 “PRK Multipass-Multizone for Treatment of

Astigmatism”

- AAO Meeting, Chicago USA  
*Presenter:*  
“Complications of Laser Refractive Surgery management and prevention”  
  
Refractive Keratoplasty Debates  
  
Skills Transfer Program and Wet Lab  
  
Mastel Symposium  
*Presenter:*  
“Incision Placement for Refractive Cataract Surgery”  
“Optimizing Excimer Laser Surgery for all Lasers”
- Nov 1996 ICIMRK Meeting, Perth, Australia  
*Session Moderator & Presenter:*  
“Multizone Photorefractive Keratectomy”  
“Optimisation versus Refraction”  
“Vector Analysis Formulae for Cataract Surgery”
- April 1997 ASCRS Meeting, Boston USA  
*Session Moderator & Presenter:*  
“Optimization versus Refraction to Treat Astigmatism by using The Excimer Laser”  
  
*Presenter:*  
“Treatment with the NIDEK EC5000 using ASSORT software”
- July 1997 Melbourne Ophthalmic Alumni Meeting  
*Presenter:*  
“Treatment with the NIDEK EC5000 using modified Algorithms And multizone technique”
- Aug 1997 Melbourne Meeting of Optometrists  
Royal Victorian Eye & Ear Hospital -Refractive Surgery Correction  
*Presenter:*  
Incisional Refractive Surgery – RK/Astigmatic Keratotomy
- Nov 1997 Royal Australian College of Ophthalmologists  
Annual Scientific Meeting, Sydney  
*Presenter:*  
Multizone photorefractive keratectomy
- April 1998 ASCRS Meeting, San Diego, USA  
*Session Moderator:*  
Excimer Laser – PARK & LASIK Surgery  
  
*Presenter:*  
“Treatment of Irregular Astigmatism”

“Vector Analysis of Astigmatism by Flattening,  
Steepening & Torque”

Sep 1998

ESCRS Meeting, Nice, France

*Presenter:*

Multizone Photorefractive Keratectomy

*Chairperson of Scientific Session & Presenter:*

“Vector Analysis of Astigmatism by Flattening,  
Steepening & Torque”

*Member & Presenter:*

Inaugural Meeting – VisX Global Advisors Forum

Nov 2008

AAO/ISRS Meeting, New Orleans, USA

*Moderator & Presenter: Astigmatism Management*

“Balancing Refractive and Corneal Values in LASIK and  
PRK Surgery Planning”

*Presenter:*

“Refractive versus Corneal Changes after PRK for  
Astigmatism”

April 1999

ASCRS Meeting, Seattle, USA

*Session Moderator & Presenter:*

“Treatment of Mixed Astigmatism by LASIK with the  
VisX STAR”

*Presenter:*

“Improving Best Spectacle Corrected Acuity without  
Changing Spectacles”

“Which Numbers are Missing from your  
Topographer?”

*Course presentation:*

“The optimization of astigmatism treatment when  
performing LASIK and PRK”

*Course Moderator:*

“Astigmatism Treatment and Analysis for the  
Cataract and Refractive Surgeon”

Sep 1999

ESCRS Meeting, Vienna

*Course Moderator:*

Astigmatic Analysis for the Cataract & Refractive  
Surgeon

*Presenter:*

“Surgery to regularize the irregular cornea and

improve visual performance by LASIK or PRK technique”  
“Which numbers are missing from your topographer?”  
“Second Annual Meeting of VisX Global Advisors Forum”

Nov 1999      Royal Australian College of Ophthalmologists  
Annual Scientific Meeting, Melbourne  
*Presenter:*  
Refractive versus Corneal Changes after PRK for Astigmatism  
  
Faculty: Cataract Surgery Course  
Astigmatism: Control/Modification  
  
Course Faculty: LASIK Complications Regression and Re-Treatment

May 2000      ASCRS Meeting, Boston, USA  
Course Faculty – 2<sup>nd</sup> International Symposium on the Surgical Correction of Astigmatism.  
“An effective combined topographic and refractive link to LASIK Surgery”  
  
*Course Faculty & Co-Presenter:*  
“Astigmatism treatment and analysis for the cataract and Refractive surgeon”  
  
*Presenter:*  
“Vector planning for LASIK surgery: Integrating topography and wavefront analysis treatment modalities”  
  
Highlights of the ASCRS 2000 Annual Meeting  
Program: Wavefront Analysis/Tomography – Vector Planning for LASIK Surgery  
“Integrating topography and wavefront analysis treatment modalities”  
  
Boston: Ophthalmology Interactive; 2000 (CD-ROM)

Nov 2000      RANZCO: Scientific Meeting, Sydney  
*Chairman & Presenter:*  
Session: Refractive Surgery II  
“Vector Planning for LASIK Surgery: Integrating topography and wavefront analysis treatment modalities”



*Co-Presenter:*

Symposium: The Changing Face of Cataract Surgery  
“Minimising Induced Astigmatism following Cataract Surgery”

Feb 2001

Third Biennial IIC Meeting, Cape Town, South Africa

*Keynote Speaker:*

“Advances in laser Technology”

*Presenter:*

“LASIK 1 – Refractive diagnostics and surgical planning

*Course Participant:*

Biometry and advanced IOL calculations

April 2001

ASCRS Meeting, San Diego, USA

*Session Co-Moderator:*

Myopia/Hyperopia/Astigmatism

*Presenter:*

“LASIK Astigmatism Analysis by the Alpins method”  
“Achieving LASIK Super Vision by Minimizing and Regularizing Topographic and Wavefront Refraction Astigmatism”

*Course Presenter:*

Vector Planning, Practical Astigmatism Analysis and LASIK Nomogram Development for the Cataract and Refractive Surgeon

Course Faculty – 3<sup>rd</sup> International Symposium on the Surgical Correction of Astigmatism Incisional, Photoablative and Toric Pseudophakic and Phakic Intraocular Lenses.

*Presenter:*

“An effective combined topographic and refractive link to LASIK surgery”

Sep 2001

ESCRS Meeting, Amsterdam, Holland

*Course Presentation:*

LASIK Astigmatism Analysis by the Alpins Method  
“Achieving LASIK Supervision by minimising and regularizing topographic and wavefront refraction astigmatism”

*Invited Symposium:*

Management of Astigmatism

How to improve visual performance by LASIK and PRK

Faculty Symposium

- Nov 2001      Royal Australian College of Ophthalmologists  
*Presenter:*  
Wavefront analysis and vector planning  
“How should we be using these modalities?”
- April 2002      ICO, Sydney  
Aberrometry Wavefront Measurement  
*Presenter:*  
Wavefront analysis, vector planning – how we should be using these
- Refractive Aspects of Cataract Surgery  
*Moderator & Presenter:*  
A comparison of incision induced astigmatism between forceps and injector insertion of foldable implants
- ASCRS, Philadelphia  
*Presenter- Paper:*  
Efficacy of LASIK Myopic Astigmatism Correction with VISX Star Laser
- Course presenter:*  
Vector Planning, Practical Astigmatism Analysis, and LASIK Nomogram Development for the Cataract and Refractive Surgeon
- Sep 2002      ESCRS Meeting, Nice, France  
*Presenter:*  
Session IV – Refractive Surgery New Techniques II  
“Efficacy of LASIK hyperopic astigmatic correction with VisX STAR Laser”
- Session I – Keratorefractive Surgery or myopia IV  
Co-Moderator with Dr Thomas Kohnen  
“Wavefront analysis, vector planning – How should they be used together?”
- Course Presenter:*  
Vector Planning, practical astigmatism analysis and LASIK nomogram development for the cataract and

refractive surgeon

- Nov 2002      AUSCRS Meeting, Canberra  
*Session Moderator and Presenter:*  
Wavefront analysis, vector planning- How we should be using these modalities.
- AMO Meeting, Noosa  
*Presenter:*  
“LASIK and Dry Eye New Approaches to Patient Management” “Technical aspect of flap creation with the Amadeus Microkeratome”
- April 2003      ASCRS Meeting, San Francisco, USA  
*Presenter – Paper:*  
“Wavefront Analysis and Vector Planning: How to Use Them Together”
- Course Presenter:*  
“Vector Planning, Practical Astigmatism and LASIK nomogram development for the cataract refractive surgeon”  
“Making the most of wavefront and vector planning LASIK. Practical and theoretical aspects of irregular astigmatism management”
- July 2003      AUSCRS, Port Douglas  
*Presenter, Paper:*  
Treatment of astigmatism in keratoconus using ASSORT Vector Planning
- 40<sup>th</sup> anniversary meeting, Melbourne University  
Department of Ophthalmology
- Invited Speaker*  
Cataract Surgery- What we know and what we need to know
- Aug 2003      Alcon Meeting, Punta Mita, Mexico  
*Invited sponsored registrant*
- Feb 2004      AMO Meeting, Noosa  
Technical aspects of flap creation with the Amadeus microkeratome
- Sept 2004      ESCRS Congress, Paris France  
*Course Presenter:*  
Vector planning, practical astigmatism analysis and LASIK Nomogram Development for cataract and refractive surgeon

*Presenter- Paper:*  
Customized PARK treatment of keratoconus using  
combined Topographic and refractive data

*Session moderator:*  
"Keratorefractive surgery outcomes- Myopia 1"

*61 Ocular surgery news supersite 29 September  
Paper listed as "Top Stories" of ESCRS Meeting"*

- Nov 2004 RANZCO, Melbourne Australia  
*Presenter- Paper:*  
PARK treatment of Keratoconus using corneal and  
refractive Astigmatism measurements
- Mar 2005 ALCON Seminar: Optimizing Cataract Surgery Outcomes (OCSO)  
Sydney and Brisbane, Australia  
*Invited Speaker:*  
Infinity™ Vision system: Advantages and Techniques
- Sept 2005 ESCRS Meeting: Lisbon, Portugal  
*Course Presenter:*  
"Making the most of wavefront and vector planning,  
LASIK, Practical and theoretical aspects of irregular  
astigmatism management"  
"Vector planning, practical astigmatism analysis and  
LASIK Nomogram development for the cataract and  
refractive surgeon"
- Nov 2005 ALCON MaSIS Meeting, Malaysia  
*Invited speaker:*  
"How to do a good biometry for every patient-  
Planning and analysis of astigmatism management or  
refractive Cataract"  
"IOL Selection for post refractive laser patients-  
advantage of refractive IOLs"  
"Refining Phaco techniques for refractive cataract  
surgery"  
"Understanding vector planning analysis practical  
astigmatism analysis"
- Feb 2006 ESCRS Winter Refractive surgery, Monaco Monte Carlo  
*Invited Speaker:*  
"Combining wavefront and topography data for  
optimizing laser surgery"  
  
*Presenter- Invited case presentation:*

Customized PARK treatment of mild keratoconus using combined topographic and refractive data

World Ophthalmology Congress, Sao Paulo Brazil

*Invited speaker:*

“When cataract surgery is indicated where good visual acuity prevails”

“Upgrading wavefront technology by combining topography parameters”

“Incisions placement and astigmatism management in cataract surgery”

*Chair Person:*

Cataract Surgery and IOL Implantation in complex situations

Mar 2006

ASCRS Meeting, San Francisco USA

*Course Presenter:*

Managing regular and irregular astigmatism with conventional and wavefront techniques in cataract and refractive surgery

Sep 2006

ESCRS Meeting, London UK

*Course Presenter:*

Managing regular and irregular astigmatism with conventional and wavefront techniques in cataract and refractive surgery

*Session Moderator:*

Keratorefractive surgery outcomes- Myopia

*Presenter- paper:*

Clinical outcomes study of LASIK using combined wavefront and topography value myopia and astigmatism

*Symposium presenter:*

Assessing outcomes in refractive surgery. “Which outcomes to measure”

Oct 2006

Eye Advance, Mumbai India

*Recipient of the distinguished service in Gold Medal in Ophthalmology*

*Invited presenter & guest lecture:*

Refracting outcomes in refractive surgery Advantages or refractive IOLs

- Nov 2006 RANZCO, Sydney Australia  
*Chair Person:*  
 Contemporary cataract surgery: six steps of evidence and experience- based decision making
- Presenter:*  
 "PARK treatment of mild keratoconus"
- Presenter- Speaker Corner:*  
 "Using Alcon infinite for small incision ultrasleeve for coaxial small Incision surgery"
- Symposium presenter:*  
 Critical considerations in cotemporary cataract surgery and refractive surgery- The ABC of accurate biometry and current formulae
- Mar 2007 ASCRS, San Diego USA  
*Course Presenter:*  
 Managing regular and irregular astigmatism with conventional and wavefront techniques in cataract surgery in refractive surgery
- Presenter- Paper:*  
 Customized PARK treatment of myopia and astigmatism in Form Fruste and mild keratoconus using combined topographic and refractive data.
- Panellist:*  
 Keratorefractive: New Devices
- Sep 2007 ESCRS, Stockholm Sweden  
*Course Presenter:*  
 Managing regular and irregular astigmatism with conventional and wavefront techniques in cataract and refractive surgery
- Presenter- Paper:*  
 "Clinical outcomes of LASIK using wavefront alone versus wavefront plus vector planning treatment for myopia and astigmatism"  
 "Customized PARK treatment of myopia nas astigmatism in Forme Fruste and keratoconus using combined topographic and refractive data"
- Nov 2007 RANZCO, Perth Australia  
*Course Presenter*

Critical considerations in contemporary cataract surgery – dealing with poor wound construction and floppy iris

*Presenter- Paper*

Wavefront versus wavefront and vector planning in treatment of myopia and astigmatism

*Symposium presenter:*

Contemporary issues in refractive surgery- combines wavefront- topography ablations and the optimal ablation profile

Feb 2008

ESCRS, Barcelona Spain

*Session moderator:*

Laser refractive surgery

*Presenter-Paper:*

“What does true integration of topographic and refractive wavefront parameters in LASIK involve”  
“Selection criteria for patients’ eligibility for PARK vector planning treatment of myopia and astigmatism forme fruste and mild keratoconus

*Invited Symposium Speaker:*

Focus session- Controversies in how to correct astigmatism in cataract surgery

*Presenter:*

Calculation of astigmatism at the corneal plane is now more reliable.

April 2008

ASCRS, Chicago USA

*Course presenter:*

Managing astigmatism with LRIs in cataract and refractive surgery

*Presenter – Paper:*

“Selection Criteria for Patient Eligibility for PARK Vector Planning Treatment of Myopia and Astigmatism in Forme Fruste and Mild Keratoconus”

*Session Moderator:*

Cornea Keratoplasty; New Techniques

*Presenter – Paper:*

Considerations for Effective Integration of Topographic and Refractive Wavefront Parameters in

LASIK

- April 2008      Bellvue Hopsital, New York USA  
*Presenter:*  
Combining topography and refractive data for the treatment of keratoconus and wavefront guided patients  
  
Understanding astigmatism analysis and treatment in cataract and refractive surgery
- June 2008      World Ophthalmology Congress, Hong Kong  
*Invited Speaker:*  
“Astigmatism Management in RCS- LRI’s and their Refinement”  
“Does Vector Planning render PARK safe in Keratoconus?”  
“Combining Preoperative Topography and Refractive Data with Vector Planning”  
“On Axis Incisions and Opposite (single) LRIs for Astigmatism Reduction”  
  
*Session Chair:*  
“Astigmatism management in cataract surgery Wavefront VS optimized aspheric VS topo-refractive combined, which to choose?”
- Nov 2008      RANZCO, Melbourne Australia  
*Course Convener:*  
Critical Considerations in Contemporary Cataract Surgery – Evidence or Experience-Based Practice  
  
*Presenter:*  
“Dealing with poor wound construction and induced astigmatism”  
“Integration of Topographic and Refractive Wavefront Parameters”  
“Astigmatism Management in Refractive Cataract Surgery”
- March 2009      Salt Lake City, Moran University  
*Invited Speaker:*  
New horizons in the treatment and analysis of astigmatism
- April 2009      ASCRS, San Francisco USA  
*Course Presenter:*  
Managing Astigmatism with Toric IOL's and LRI's in



Cataract and Refractive Surgery

*Presenter - Paper:*

Managing Patients with Mismatched Corneal and Refractive Parameters when Treating Astigmatism

*Session Moderator:*

Intocular Surgery, Toric IOLs

Sep 2009

ESCRS, Barcelona Spain

*Invited Speaker:*

Astigmatism Analysis

*Course presenter:*

Managing Astigmatism with Toric Implants and LRI's in Cataract and Refractive Surgery

*Presenter:*

What does a true integration of topographic and refractive wavefront parameters in excimer laser surgery involve

Nov 2009

RANZCO, Brisbane Australia

*Presenter- Paper:*

"Managing Patients with Mismatched Corneal and Refractive Parameters when Treating Astigmatism"

"Toric IOL techniques and what to do when too much cylinder is left over"

"Techniques for calculating IOL power in cases of prior myopic excimer laser"

April 2010

ASCRS, Boston USA

*Course presenter:*

Managing Astigmatism with Toric Implants and LRI's in Cataract and Refractive Surgery

*Presenter- Paper:*

Vectorial analysis of astigmatism utilizing Corneal Topography parameters and a newly integrated software module

Sep 2010

ESCRS, Paris

*Invited Speaker:*

Astigmatism Symposium

*Course presenter:*

Managing Astigmatism with Toric Implants and LRI's

in Cataract and Refractive Surgery

*Presenter- Paper:*

Vectorial analysis of astigmatism utilizing Corneal Topography parameters and a newly integrated software module

*Session Moderator:*

Laser Surgery

Nov 2010

RANZCO, Adelaide Australia

*Invited Speaker Council Lecture*

March 2011

ASCRS, San Diego USA

*Course Presentation:*

Managing Astigmatism with Toric IOLs and LRIs in Cataract and Refractive Surgery

*Paper Presentation:*

Assessment of topographic semi-meridian parameters to determine corneal astigmatism & irregularity

*Session Moderator:* Intraocular Surgery Astigmatism Management

Sep 2011

ESCRS Vienna, Austria

*Course Presentation:*

Managing & Analysing corneal astigmatism, LRIs & Toric implants in Cataract & Refractive surgery

*Paper Presentation:*

Parameters for overall corneal astigmatism and irregularity using topographic semi-meridian value

Nov 2011

RANZCO, Canberra Australia

*Paper Presentation:*

Evaluating the ocular residual astigmatism (ORA) of patients when treating astigmatism

*Chair:*

Cataract/Refractive surgery session

Jan 2012

Hawaiian Eye, Maui

*Presenter:*

“The Essentials of Toric and LRI Planning in Refractive Cataract Surgery”

“Ocular Residual Astigmatism (ORA)- An important Preoperative Parameter for Excimer Laser Surgery”

April 2012

ASCRS, Chicago USA

*Course Presentation:*

“Managing Astigmatism with & Toric Implants and LRI’s in Cataract Refractive Surgery”

*Presenter-Paper:*

“Method of Determining Topographic corneal Astigmatism using Multiple Diameter Rings CorT

*Panel Moderator:*

“Intraocular Surgery Toric IOLs”

Sep 2012

ESCRS Milan, Italy

*Course Presentation:*

Managing and analysing corneal astigmatism, LRI's and toric implants in cataract and refractive surgery.

*Paper Presentation:*

Corneal topographic astigmatism (corT) - a measure that correlates with manifest refractive cylinder

Oct 2012

NVC Optometrist Information Seminar, Geelong

*Speaker:*

“Laser & Cataract Surgery – an update”

Nov 2012

OIS Chicago, USA

Ophthalmology innovation Summit

AAO Chicago, USA

*Paper presentation:*

"A measure of corneal astigmatism that corresponds to manifest refractive cylinder corneal topographic astigmatism (CorT)"

Moderator:

"Innovations in Refractive Surgery

RANZCO Melbourne, Australia

*Rapid Fire Oral Presentation:*

"An alternative measure of corneal astigmatism that corresponds to manifest refractive cylinder – corneal

topographic astigmatism (CorT)"

*Chair:*

Cataract/Refractive Surgery Rapid Fire session

Melbourne University Optometry Student Dinner  
*"Co-managing the laser and cataract refractive patient"*

- Feb 2013      Aspen Corneal Society, Aspen, Colorado  
Aspen Corneal Society Invited faculty  
*Presenter:*  
"A new parameter to quantify corneal astigmatism corT"  
"Understanding refractive surprises after toric IOL implant"
- Aspen ACOS Dulaney meeting  
*Invited speaker & faculty member:* "Astigmatism Correction: Better on the Cornea or Implant?"
- Panel Participation:*  
IOL Power selection and calculations for cataract surgery
- March 2013      NSW RANZCO , Sydney Australia  
*Invited speaker*
- Course presentation:  
"Perfecting techniques in cataract surgery"
- July 2013      RVEEH registrar lecture on astigmatism and refractive surgery
- Oct 2013      ESCRS, Amsterdam, Netherlands  
*Course presentation:*  
"Toric IOLs and LRIs: Planning, Nomograms, and Enhancements".
- Paper presentation:*  
'Corneal Topographic Astigmatism: New Topography Measure'  
"Understanding and correcting for Toric IOL refractive surprises"

*Chairperson:*  
Assessment of Astigmatism

NewVision Clinics Optometrist Information Seminar, Geelong

*Speaker:*  
"Corneal Cross Linking"

Nov 2013

RANZCO Hobart, Tasmania

*Accepted as an oral presentation in the 'Best Paper Presentations'-*

"Corneal topographic astigmatism (CorT) a better measure of corneal astigmatism that corresponds to manifest refractive cylinder"

*Paper Presentation:*

"Selecting the most accurate toric IOL and correcting for refractive surprises"

*Chairperson - Rapid Fire:*

Cataract & Refractive Surgery

AAO & ISRS New Orleans, USA

*ISRS session moderator - Breakfast With the Experts:*

"Pearls of correction of astigmatism during cataract surgery!"

*Paper Presentation:*

"Corneal topographic astigmatism (CorT) a better measure of corneal astigmatism that corresponds to manifest refractive cylinder"

"Selecting the most accurate toric IOL and correcting for refractive surprises"

*Moderator:*

ISRS Breakfast with the experts.

Melbourne University Optometry Student Dinner

*"Co-managing the laser and cataract refractive patient"*

Feb 2014

NewVision Clinics Optometrist Information Seminar,  
Warrnambool & Tasmania

*Speaker:*

"Co-managing the Laser Refractive Patient: The Latest"

"The surgical Correction of Astigmatism- The last frontier

to optimising visual outcomes.”

April 2014

Novartis Information Seminar  
NewVision Clinics, Windsor

*Speaker:*

“The Surgical Correction of Astigmatism”

ASCRS Boston, USA

*Presenter- Paper:*

“Corneal coupling: Importance in incisional and ablative procedures”

*Moderator Paper session:*

“Intraocular Surgery Toric IOL”

*Course Presentation:*

“Toric IOLs and LRI’s” Planning, Nomograms and enhancements”

Sep 2014

ESCRS London, UK

*Chairperson:*

“Challenges of Astigmatism Correction”

*Course Presentation:*

“Toric IOLs and LRIs: planning, nomograms and correcting refractive surprises”

*Paper Presentation:*

“Corneal topographic astigmatism (CorT) and total corneal power

University of Melbourne, inaugural Doctor of Optometry Student Conference

*Invited speaker:*

"LASIK Surgery: Anterior Eye Requirements"

Oct 2014

OIS Chicago, USA  
Technology lecture

ISRS, Chicago, USA Subspecialty day:

*Paper presentation:*

“Corneal Coupling: It’s Importance in Incisional and Ablative Procedures”

AAO Chicago, USA

*Paper presentation:*

“Corneal Coupling: It’s Importance in Incisional and Ablative Procedures”

RANZCO Brisbane, Australia

*Rapid Fire Presentation:*

“Corneal Coupling - its importance in incisional and ablative procedures

“Corneal topographic astigmatism (CorT) and total corneal power”

*Chairperson Rapid Fire Presentation:*

Cataract

*Course presentation:*

Intraoperative IOL misalignment and postoperative surprises– potential toricity torment.

Nov 2014

Novartis Optometrist Seminar  
NewVision Clinics, East Melbourne

*Speaker:*

“The Surgical Correction of Astigmatism”

Melbourne University Optometry Student Dinner

*“Co-managing the laser and cataract refractive patient”*

March 2015

NewVision Clinics Optometrist Information Seminar, Geelong

*Speaker:*

“Refractive Outcomes of Laser Surgery”

April 2015

ASCRS San Diego, USA

*Paper presentation:*

“Corneal Coupling—Importance in Incisional and Ablative Procedures”

“Corneal Topographic Astigmatism and Total Corneal Power”

*Course Presentation:*

“Toric IOLs, LRIs, and Corneal Coupling: Planning, Nomograms, and Correcting Refractive Surprises”

*Panellist Paper session:*

Cataract Toric IOL’

July 2015

Novartis Optometrist Seminar  
NewVision Clinics, East Melbourne

*Speaker:*

“Precision, Speed and 7D Tracking. What does it mean for Refractive Laser Patients?”

Aug 2015

NewVision Clinics Optometrist Information Seminar, Geelong

Speaker:

“Precision, Speed and 7D Tracking. What does it mean for Refractive Laser Patients?”

ESCRS Barcelona, Spain

*Paper Presentation:*

‘Corneal topographic astigmatism (CorT) and total corneal power’

*Chairperson:*

“Corneal Astigmatism Assessment Surgery Equipment”

*Course Presentation:*

“The surgical correction of astigmatism using toric IOLs, femto-LRIs and excimer lasers with corneal topographic astigmatism (CorT)”

Oct 2015

NewVision Clinics Optometrist Information Seminar, Traralgon

*Speaker:*

“Co-Managing the Refractive Laser Patient”

Nov 2015

RANZCO Wellington, New Zealand

*Rapid Fire Session: Cataract*

Cataract Surprises after Toric IOL implantation

*Rapid Fire- Refractive*

Mixed Astigmatism in Refractive Surgery

Intraoperative Alignment

Melbourne University Optometry Student Dinner

“Co-managing the laser and cataract refractive patient”

Feb 2016

NewVision Clinics Optometrist Information Seminar, Warrnambool

*Speaker:*

“Outcomes using the Schwind1050RS”

AECOS, Aspen

Grand Rounds III: Premium IOL Challenges

*Panellist*

April 2016

ESASO Milan, Italy



*Presenter:*

“Using corneal topographic astigmatism (CorT) in toric IOL and LRI procedures”

“Treating corneal astigmatism by optimally combining corneal and refractive parameters”

The basic principles of a vectorial outcome analysis- for corneal and refractive results

Chair:

Session: Astigmatism: Correction on the Cornea

May 2016

ASCRS New Orleans, USA

*Paper session:*

Mixed Astigmatism and Corneal Coupling in Refractive Laser Surgery Presenting Author

*Instructor-Course:*

Toric IOLs and Femtosecond Laser LRIs; Planning, Using the Corneal Topographic Astigmatism Parameter, and What to Do with Refractive Surprises

*Paper Session:*

Corneal Topographic Astigmatism and Its Importance in Toric IOL Calculators Presenting Author

Como Private Hospital GP information Night, Melbourne

*Invited Speaker:*

“Laser and Lens- Correction of refractory problems”

June 2016

Novartis Optometrist Seminar  
NewVision Clinics, Cheltenham

*Speaker:*

“Updates in the Latest Technology in Laser Vision Correction”

July 2016

IIRSI Chennai India

*Invited Speaker:*

“The Tools we have for understanding and correcting for Toric IOL surprises”

“Toric and LRI Pearls for correction of astigmatism during cataract surgery”

“Corneal coupling for incisional and ablative procedures”

NewVision Clinics Optometrist Information Seminar, Geelong

*Speaker:*

“Astigmatism – The last Frontier”

- Sep 2016      EuCornea Copenhagen, Denmark  
*Invited Speaker:*  
 Surgically Induced Astigmatism and Flattening Effect for cataract surgery
- ESCRS Copenhagen, Denmark  
*Invited Chair:*  
 Pseudophakic IOLs: Toric
- Presenter-paper:*  
 Corneal topographic astigmatism (CorT) and its importance in toric IOL planning
- Course presenter:*  
 Toric IOL's and femto-LRI's: Planning Process and what to do with Refractive Surprises
- Nov 2016      RANZCO Melbourne, Australia  
*Presenter:*  
 "Corneal topographic astigmatism (CorT)- an accurate measure of corneal astigmatism for toric IOLs and refractive treatments"  
 "Optimising mixed astigmatism refractive treatments using corneal coupling"
- Course Presenter:*  
 Keep your cool - dealing with common cataract surgery problems without anxiety
- Course Instructor:*  
 What I do different in refractive laser surgery than manifest refractive spherocylinder treatment
- Mar 2017      IIIC Argentina, South America  
*Speaker:*  
 Intraocular Lenses Session  
 "Toric implant calculators and their features. How to incorporate measured Total corneal power"
- Speaker:*  
 My Special Secret to Making a Good Procedure Even Better  
 "Improve visual results in Laser Vision correction- Vector Planning"
- May 2017      ASCRS Los Angeles, USA  
*Presenting Author*  
 LASIK Outcomes Comparing Vector Planning to Manifest Refraction for the Treatment of Myopic Astigmatism

*Presenting Author*

Session, Measured Total Corneal Power for Toric IOL Calculations Using the 3 Different Systems

*Moderator*

3D Multifocal IOLs, EDOF IOLs

*Instructor*

Toric IOL's and Femtosecond Laser LRI's: Planning, Using The Corneal Topographic Astigmatism Parameter, and What to Do with Refractive Surprises

Nov 2017

RANZCO Perth, Australia

*Invited Speaker*

Gregg Lecture

April 2018

ASCRS Washington DC, USA

*Presenting Author*

Surgical Planning/SMILE

Mixed Astigmatism and Corneal Coupling in Refractive Laser Surgery

*Panelist*

Astigmatism/Toric IOLs

*Moderator*

Refractive Outcomes:Lasik/PRK/SMILE

*Instructor*

Astigmatism Planning and Analysis for Toric IOLs and Refractive Laser Surgery.

*Presenting Author*

Power Calculations/Astigmatism Measurements

Accuracy of Total Corneal Topographic Astigmatism Compared with Total Corneal Power Measured Using 3 Tomographers

Sept 2018

ESCRS Vienna, Austria

*Course*

Improving Astigmatic Outcomes Using Toric IOLs, LRIs and Refractive Laser Surgery.

*Session/Presenter*

Refractive Surgery New

Techniques/Instrumentation/Devices

“LASIK Outcomes Comparing Vector Planning to Manifest Refraction for the Treatment of Myopic Astigmatism.”

*Session/Presenter*

Vision & Accommodation Assessment

“Accuracy of Total Corneal Topographic Astigmatism (CorT total) Compared to the total Corneal Power Measured Using 3 Different Tomographers.”

*ISRS Sub-Session /Speaker*

Best Clinical Pearls

“Analyzing and planning for astigmatism surgery.”

Nov 2018

RANZCO Adelaide, Australia

*RAPID-FIRE Oral Presentation*

Accuracy of total corneal topographic astigmatism (CorT Total) compared to the total corneal power measured using 3 different tomographers.

*Poster Presentation*

The role of hemidivisional CorTs in the regularization and reduction of irregular astigmatism

Nov 2018

The F1000 Prime

Faculty member

Feb 2019

AECOS Aspen, USA

*Presentation*

Game Changers

“IOL/Astigmatism Calculation Case”

*Presentation*

Refractive Surgery Challenges

“Lasik Surprises”

May 2019

ASCRS San Diego, USA

*Session Moderator*

Femtosecond Laser-Assisted LASIK

*Session/Presenter*

Refractive Comparison

“LASIK Outcomes Comparing Vector Planning to Manifest Refraction for the Treatment of Myopic Astigmatism”

*Course Instructor*

Correction of Astigmatism using Toric IOLs, LRIs,  
and Refractive Laser Surgery

*Session/Presenter*

Astigmatism Management

“Accuracy of Total Corneal Topographic Astigmatism  
(CorT total) Compared to the Total Corneal Power  
Measured Using 3 Different Tomographers”

Sept 2019

ESCRS Paris, France

*Presenter*

Correction of astigmatism using Toric IOLs, LRIs and  
refractive laser surgery

*Presenter*

Poster Presentation: Managing astigmatism to avoid  
LASIK surprises

*Presenter*

Free Paper: Lasik & PRK I  
Assessing standard astigmatism outcomes after  
refractive laser surgery

Oct 2019

Australian College of Optometry, Melbourne Australia

*Speaker*

From ASSORT to vector planning: everything that you  
wanted to know about astigmatism and are now  
welcome to ask!

*Debate Panelist*

Debate: Can Omega-3s play a significant part in dry  
eye

AAO San Francisco, USA

Recipient of the 2019 *José I. Barraquer* Lecture &  
Award

*Presenter*

Subspecialty Session: Synthesizing Data to Optimize  
Astigmatism Correction in Lens Surgery

*Presenter*

Session: The Complete Guide to the Management of  
Astigmatism at the Time of Cataract Surgery  
Presenting: Astigmatism — Where It Is and How to  
Measure It

*Invited speaker*

Barraquer Lecture: Innovations in Refractive Surgery

*Presenting:* Vector Planning Method: Residual  
Astigmatism Minimised – LASIK Surprises Avoided

Nov 2019      RANZCO Sydney, Australia

*Presenter*

Rapid fire session: Cataract/Ocular Oncology

Accuracy of total corneal topographic astigmatism  
(CorT Total) compared to Total Keratometry (TK)

## **TROKEL AWARD NOMINATION 1994**

Noel Alpins practices in suburban Melbourne principally in cataract and refractive surgery in private group practice. He commenced refractive surgery when he started performing radial keratotomy in 1984 and made his first presentation on astigmatism at the Australian College Meeting in Melbourne in 1986.

Since 1991, Noel has been a leading member of the Melbourne Excimer Laser and Research Group at Melbourne University, and had an active involvement in establishing the protocol for treatment with the VisX 20/20 laser in Melbourne, prior to the commencement of Excimer laser surgery in November 1991.

In June 1992 when multizone elliptical treatment surgery was introduced, Noel was instrumental in developing the treatment paradigms for the multizone distribution of spherical refractive error, as well as the astigmatism zonal distribution employed by our Group.

Noel has developed an outcomes analysis software program, a comprehensive eye surgery analysis called the Alpins Statistical System for Ophthalmic Refractive-Surgery Techniques (ASSORT). This program won the 1993 Borland Paradox Application Language programming contest. A very favourable, independent evaluation of the usefulness and content of the software program has been published in the ophthalmic press.

Noel has developed a new method of treating and analysing astigmatism that developed the concept of Target Induced Astigmatism (TIA) which incorporates Topography and Refraction into the surgical plan and analysis of Excimer laser surgery. Using this vector analysis method to analyse the results from the Melbourne group in February 1993 he was the first to quantify the trend of under-correction of magnitude of astigmatism, which enabled the adjustment factor of 1.2 to be utilised in Melbourne from April 1993. Other centres followed Melbourne's lead that resulted from Noel's analysis. He presented the results of this adjustment at the ASCRS Symposium in Boston in 1994.

Noel quantified the surgically induced astigmatism with PRK (spherical) by topography and refraction, and presented this with Melbourne's PARK results at the ISRK Symposium prior to the AAO in Chicago in 1993 and also in Minneapolis in July 1993.

The analysis which he presented demonstrated that the failure to achieve the axis of the applied treatment (the angle between the SIA and TIA) is a major factor in our failure to achieve total success in the treatment of astigmatism.

Noel, using his method, demonstrated differences in the effectiveness between the elliptical and sequential techniques when utilising the VisX 20/20 laser in Melbourne, and presented the results at the International Congress of Ophthalmology in Toronto as an invited faculty member at the Canadian Rockies Symposium in Banff, and acted as co-moderator of the session on photorefractive keratectomy.

Noel is currently co-author on a paper for publication encompassing all the above aspects of non-incisional refractive surgery. He has already had published scientific papers in the Journal of Cataract and Refractive Surgery and Archives of Ophthalmology. He has written extensively for the ophthalmic information journals (Ocular Surgery News, Ophthalmology Times and EyeCare Technology) and was recently appointed a member of the Medical Editorial Board of the latter publication.

Noel was invited to speak as a faculty member in Paris (May 1994) at the French Implant Society and Ocular Surgery News Symposium and presented his and the Group's experiences with astigmatism surgery in addition to his own developed concepts. Noel was also an invited faculty member at the ASCRS Symposium prior to the AAO meeting in San Francisco, and gave two presentations on understanding astigmatism and a third on its practical application to Excimer laser surgery. He has been a course faculty member on Kerato-Refractive debates at both ASCRS and AAO these past two years, and participates as an instructor at both Astigmatic Keratotomy and Phacoemulsification courses.

Noel felt very honoured and privileged to have his work on astigmatism acknowledged by the invitation he received to participate as a speaker at the ASCRS/AAO Symposium on Non-incisional Refractive Surgery at the recent Academy meeting in San Francisco.

Noel's innovative work has made an outstanding contribution to Excimer Laser Surgery by the determination of the optimal treatment of astigmatism addressing both pre-operative values of astigmatism - topographic and refractive. The measured introduction of topography into the surgical plan enables the targeting of reduced corneal astigmatism and optimising the astigmatic result for each individual eye.

Noel has had a commitment to the achievement of excellence in refractive outcomes. This goal has been demonstrated by the considerable commitment of his own time in determining the astigmatic outcomes of our Group, and the expenditure of his own resources in financially supporting the collection, evaluation and analysis of the Group's data.



COUNTRY	APPLICATION NO.	PATENT NO.	FILING DATE	ISSUE DATE	TITLE
PCT	PCT/AU93/00090		04/03/93		METHOD OF ANALYSING ASTIGMATISM AND APPARATUS FOR PERFORMING CORNEAL SURGERY
Australia	36231/93	663930	04/03/93	13/02/1996	METHOD OF ANALYSING ASTIGMATISM AND APPARATUS FOR PERFORMING CORNEAL SURGERY
Canada	2138388		04/03/93		METHOD OF ANALYSING ASTIGMATISM AND APPARATUS FOR PERFORMING CORNEAL SURGERY
Europe (Ratified in Germany, Spain, France, Great Britain, Greece, Ireland, Italy)	93905106.6	653929	04/03/93	07/11/2001	METHOD OF ANALYSING ASTIGMATISM AND APPARATUS FOR PERFORMING CORNEAL SURGERY
Japan	504815/94		04/03/93		METHOD OF ANALYSING ASTIGMATISM AND APPARATUS FOR PERFORMING CORNEAL SURGERY
Korea	95-700482	0262847	04/03/93	07/11/2001	METHOD OF ANALYSING ASTIGMATISM AND APPARATUS FOR PERFORMING CORNEAL SURGERY
New Zealand	249444	249444	04/03/93	04/11/1996	METHOD OF ANALYSING ASTIGMATISM AND APPARATUS FOR PERFORMING CORNEAL SURGERY
USA	927616		10/08/92		METHOD OF ANALYSING ASTIGMATISM AND APPARATUS FOR PERFORMING CORNEAL SURGERY
USA	313056	5514124	30/09/94	07/05/1996	METHOD OF ANALYSING ASTIGMATISM AND APPARATUS FOR PERFORMING CORNEAL SURGERY

USA	08/618535	5749867	19/03/96	12/05/1998	METHOD FOR ANALYSING ASTIGMATISM AND APPARATUS FOR PERFORMING CORNEAL
USA	09/075675	6086579	11/05/98	11/07/2000	METHOD FOR ANALYSING ASTIGMATISM AND APPARATUS FOR PERFORMING CORNEAL

