Vance Thompson, MD FACS

Curriculum Vitae

Office Address:
Vance Thompson Vision
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Sioux Falls, SD 57108
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Education

1990-1991	**Hunkeler Eye Clinic** Corneal and Refractive Surgery Fellowship	Kansas City, MO
1987-1990	**University of Missouri** Ophthalmology Residency	Columbia, MO
1986-1987	**McKennan Hospital** Rotating Internship	Sioux Falls, SD
1982-1986	**University of South Dakota School of Medicine** Doctor of Medicine	Vermillion, SD
1978-1982	**University of South Dakota** B.S. in Chemistry	Vermillion, SD

Professional Positions

1991-Present	**Vance Thompson Vision** Founder Cataract, Refractive and Corneal Surgeon	Sioux Falls, SD
1991-Present	**Sanford USD School of Medicine** Professor of Ophthalmology	Sioux Falls, SD

Medical Licenses

South Dakota	Active
Iowa	Active
North Dakota	Active
Minnesota	Inactive
Nebraska	Inactive

American Board of Ophthalmology
iFS & Visx Laser Platform
Alcon Allegretto and FS200
Zeiss Visumax
AcuFocus KAMRA
Alcon LenSx

Certifications

Membership
American Medical Association
American Academy of Ophthalmology
American Society of Cataract and Refractive Surgery
International Society of Refractive Surgery
American College of Surgeons
American-European Congress of Ophthalmic Surgery
Refractive Surgery Alliance

Invited Presentations
2017: ASCRS, AECOS, ACES SEE, AAO WAEPES
2016: ASCRS, AECOS, ACES SEE, AAO WAEPES
2015: ASCRS, AECOS, ACES SEE, AAO WAEPES
2014: ASCRS, AECOS, AAO

Publications and Papers

Thompson, V. Streamlined method for anchoring cataract surgery and intraocular lens centration on the patient's visual axis. *Journal of Cataract & Refractive Surgery,* 2018 44(5), 528-533.

Vukich, J., Durrie, D., Pepose, J., **Thompson, V**., van de Pol, C., Lin, L. Evaluation of the small-aperture intracorneal inlay: Three-year results from the cohort of the U.S. Food and Drug Administration clinical trial. *Journal of Cataract & Refractive Surgery,* 2018 44(5), 541-556.

Durrie, D., Wolsey, D., **Thompson, V.,** Assang, C., Mann, B., Wirostko, B. Ability of a new crosslinked polymer ocular bandage gel to accelerate reepithelialization after photorefractive keratectomy. *Journal of Cataract & Refractive Surgery,* 2018 44(3), 369-375.

Waltz, K., **Thompson, V.,** Quesada, G. Precision Pulse capsulotomy: Initial clinical experience in simple and challenging cataract surgery cases. *Journal of Cataract & Refractive Surgery,* 2017 43(5), 606-614.

Thompson, V., Berdahl, J., Solano, J., Chang, D. Comparison of Manual, Femtosecond Laser, and Precision Pulse Capsulotomy Edge Tear Strength in Paired Human Cadaver Eyes. *American Academy of Ophthalmology,* 2016 123(2); 265-274.

Thompson, V. Considering LASIK after Radial Keratotomy. *Review of Ophthalmology*, 2008; 15(11): 46-50.

Stulting, R., John, M., Maloney, R., Assil, K., Arrowsmith, P., **Thompson, V.**, & U.S. Verisyse Study Group. Three-year results of Artisan/Verisyse Phakic Intraocular Lens Implantation. Results of the United States Food and Drug Administration Clinical Trial. *Ophthalmology*, 2008; 115(3): 464-472.

Wilson, S., & **Thompson, V.**, Femtosecond Laser VS. Microkeratome LASIK flaps. *Review of Ophthalmology*, 2005; 12(11): 58-65.

Charters, L., & **Thompson, V.**, Custom Refractive Technology Easily Integrated into Practice. *Ophthalmology Times*, 2003: 28(15): 13.

Thompson, V., Rothchild, E., Hardten, D., Probst, L., Arbor, A., & Taravella, M. Refractive Surgery. *Review of Ophthalmology*, 2002; 9(3): 62.

Charters, L., & **Thompson, V.**, Preoperative exam key to Optimal Refractive Outcome. *Ophthalmology Times*, 2001; 26(8): 48.

Brint, S., Cheetham, J., DeGryse, R., Abel, M., **Thompson, V.**, & Rosenthal, A. Efficacy and Safety of Nonpreserved Ketorolac Ophthalmic Solution in Postoperative Ocular Pain Following Radial Keratotomy. *Journal of Cataract & Refractive Surgery*, 1999; 25(1): 41-9.

Hersh, P., Brint, S., Maloney, R., Durrie, D., Gordon, M., Michelson, M., **Thompson, V**., Berkeley, R., Schein, O., Steinert , R. Photorefractive Keratectomy versus Laser in Situ Keratomileusis for moderate to high myopia. A randomized prospective study. *Ophthalmology*, 1998; 105(8): 1512-22, discussion 1522-3.

Thompson, V. Flap Management during LASIK after Radial Keratotomy. *Journal of Refractive Surgery*, 1997; 13(2): 128.

Thompson, V. Refractive Surgery for Myopic and Hyperopic Astigmatism. *International Ophthalmology Clinics*, 1997; 37(1): 37-49.

Maloney, R., **Thompson, V.**, Ghiselli, G., Durrie, D., Waring III, G., & O'Connell, M. A Prospective multicenter trial of excimer laser phototherapeutic keratectomy for corneal vision loss. The Summit Phototherapeutic Keratectomy Study Group. *American Journal of Ophthalmology*, 1996; 122(2): 149-160.

Thompson, V. Excimer Laser Phototherapeutic Keratectomy: Clinical and Surgical Aspects. *Ophthalmic Surgery and Lasers,* 1994; 26(5): 461-472.

Thompson, V., & Gordon, M. Use of the Excimer Laser in Refractive Surgery. *Seminars in Ophthalmology*, 1994; 9(2): 81-85.

Thompson, V., Durrie, D., & Cavanaugh, T. Philosophy and Technique for Excimer Laser Phototherapeutic Keratectomy. *Refractive and Corneal Surgery,* 1993; 9(2): 91-96.

Thompson, V., Seiler, T., Durrie, D., & Cavanaugh, T. Holmium: YAG Laser Thermokeratoplasty for Hyperopia and Astigmatism: an Overview. *Refractive and Corneal Surgery,* 1993; 9(3): S134-S137.

West, D., Lischwe, T., **Thompson, V.**, & Ide, C. Comparative Efficacy of the Beta-blockers for the Prevention of Increased Intraocular Pressure after Cataract Extraction. *American Journal of Ophthalmology,* 1988; 106: 68-73.

Giangiacomo, J., Khan, J., Levine, C., & **Thompson, V.**, Sequential Cranial Computed Tomography in Infants with Retinal Hemorrhages. *Ophthalmology*, 1988; 95(3): 295-299.

FDA Clinical Trials

1. Phototherapeutic Keratectomy Phase I.
    a. Sponsor: Summit Technology
    b. My Role: Sub Investigator
2. Phototherapeutic Keratectomy Phase II.
    a. Sponsor: Summit Technology
    b. My Role: Sub Investigator
3. Photorefractive Keratectomy Phase II Partially Sighted Eyes.
    a. Sponsor: Summit Technology
    b. My Role: Sub Investigator
1. Photorefractive Keratectomy Phase III Normally Sighted Eyes.
    a. Sponsor: Summit Technology
    b. My Role: Sub Investigator
2. Phototherapeutic Keratectomy Phase III.
    a. Sponsor: Summit Technology
    b. My Role: Medical Monitor and Principle Investigator
3. Therapeutic Refractive Subset PRK- previous Corneal Refractive Surgery.
    a. Sponsor: Summit Technology
    b. My Role: Principal Investigator
4. Myopia/astigmatism PRK. Erodible Mask Phase II A.
    a. Sponsor: Summit Technology
    b. My Role: Principal Investigator
5. Myopia/astigmatism PRK. Erodible Mask Phase II B .
    a. Sponsor: Summit Technology
    b. My Role: Principal Investigator
6. Holmium Astigmatism Phase I.
    a. Sponsor: Summit Technology
    b. My Role: Medical Monitor and Principal Investigator
7. Holmium Astigmatism Phase II.
    a. Sponsor: Summit Technology
    b. My Role: Medical Monitor and Principal Investigator
8. Holmium Hyperopic Phase III.
    a. Sponsor: Summit Technology
    b. My Role: Medical Monitor and Principal Investigator
9. LASIK for High Myopia.
    a. Sponsor: Summit Technology
    b. My Role: Principal Investigator
10. Hyperopic Photorefractive Keratectomy with Emphasis Erodible Mask IDE.
    a. Sponsor: Summit Technology
    b. My Role: Principal Investigator
11. Hyperopia LASIK with Astigmatism.
    a. Sponsor: Summit Technology
    b. My Role: Principal Investigator
12. CRS LASIK for Surgical Treatment of Myopia.
    a. Sponsor: CRS and Summit Technology
    b. My Role: Principal Investigator

13. CRS LASIK for Hyperopia Expansion to Sub-study D.
    a. Sponsor: CRS and Summit Technology (ask Guy)
    b. My Role: Principal Investigator
14. CRS LASIK for Hyperopia Astigmatism Substudy E.
    a. Sponsor: CRS and Summit Technology
    b. My Role: Principal Investigator
15. CRS Study I Myopia Surgical Treatment.
    a. Sponsor: CRS and Summit Technology
    b. My Role: Principal Investigator
16. KETO 102-8344 Ketorlac Tromethamine Ophthalmic Solution (Acular) with Subjects Undergoing Photorefractive Keratectomy with the Exci Med UV200LA Omni Med Excimer Laser.
    a. Sponsor: Allergan and Summit Technology
    b. My Role: Principal Investigator
17. KETO 106-8718 Ketorolec Nonpreserved Ophthalmic Solution in Subjects Undergoing Radial Keratectomy.
    a. Sponsor: Allergan
    b. My Role: Principal Investigator
18. Eye-Fixation Speculum Study 11-94.2.
19. IOL Artisan Myopia Lens for Correction of High Myopia.
    a. Sponsor: AMO
    b. My Role: Principal Investigator and I testified at the FDA Ophthalmic devices panel and helped with approval
20. IOL Artisan Hyperopia Lens for Correction of High Hyperopia.
    a. Sponsor: AMO
    b. My Role: Principal Investigator
21. Diagnostic Use of the LADAR-Based Eye Tracker for Measurement of Tracker Signal in Refractive Surgery Patients.
    a. Sponsor: Summit
    b. My Role: Principal Investigator
22. A Prospective Multi-Center Clinical Trial to Evaluate the Safety and Effectiveness of the AcuFocus Corneal Inlay (ACI) in Presbyopic Subjects.
    a. Sponsor: AcuFocus
    b. My Role: Principal Investigator
23. Phase III Clinical Study of the Alcon Acrysof Angle- Supported Phakic IOL. Protocol C-05-57
24. Clinical Evaluation of a Modified Light Transmission Tecnis Acrylic Intraocular Lens, Phase III. Protocol BBLK-102-PRSM.
    a. Sponsor: AMO
    b. My Role: Principal Investigator
25. Clinical Evaluation of the Safety and Effectiveness of the Veriflex Anterior Chamber Phakic IOL for Correction of Myopia. Protocol VFLX-102-6820.
    a. Sponsor: AMO
    b. My Role: Principal Investigator
26. ForSight Vision 3 Observation Study to Assess Vision and Pain Post PRK and LASIK to establish baseline for subsequent shield to aid in healing and pain study control.
    a. Sponsor: ForSight Labs
    b. My Role: Principal Investigator

27. Laser Vision Correction Use of an Eye Shield for Maintaining Vision and Mitigating Pain. Protocol CS 004
    a. Sponsor: ForSight Labs
    b. My Role: Principal Investigator
28. Clinical Evaluation of Nepafenac Ophthalmic Suspension, 0.3% for Prevention and Treatment of Ocular Inflammation and Pain after Cataract Surgery. Protocol C-09-055
    a. Sponsor: Alcon
    b. My Role: Principal Investigator
29. Clinical Evaluation of Nepafenac Ophthalmic Suspension, 0.3% Compared to Nepafenac (TWO) Ophthalmic Suspension 0.1% and Vehicle for Prevention and Treatment of Ocular Inflammation and Pain Associated with Cataract Surgery. Protocol C-11-003
    a. Sponsor: Alcon
    b. My Role: Principal Investigator
30. Long Term Safety Follow-up for Subjects Previously Implanted with the AcrySof® CACHET® Phakic Lens in Clinical Studies C-02-23, C-02-40, C-03-21 and C-05-57. Protocol C-09-043
    a. Sponsor: Alcon
    b. My Role: Principal Investigator
31. Post Approval Study of the AcrySof® IQ Toric High Cylinder Power IOL Models SN6AT6-SN6AT9. Protocol C-11-020
    a. Sponsor: Alcon
    b. My Role: Principal Investigator
32. Evaluation of the LenSx Laser System for Performing Anterior Capsulotomy, Phacofragmentation, and Corneal Arc Cuts/Incisions in Patients Undergoing Cataract Surgery for Removal of the Crystalline Lens. Protocol CPT-002m
    a. Sponsor: Alcon
    b. My Role: Principal Investigator
33. Evaluation of a Modified Disposable Contact Lens Patient Interface for the LenSx Laser in Cataract and Corneal Surgery. Protocol CPT-006m
    a. Sponsor: Alcon
    b. My Role: Principal Investigator
34. A Prospective Randomized Controlled Multi-Center Clinical Study to Evaluation the Safety and Effectiveness of the Light Adjustable Lens (LAL) in Subjects with Pre Existing Corneal Astigmatism. Protocol CSP-002-03
    a. Sponsor: Calhoun Vision
    b. My Role: Principal Investigator
35. Patient-Reported Outcomes with LASIK 2 -Protocol PROWL-2
    a. Sponsor: United States Food and Drug Administration
    b. My Role: Principal Investigator
36. A Multi-Center, Randomized, Placebo-Controlled Evaluation of the Safety and Efficacy of the KXL System with VibeX (Riboflavin Ophthalmic Solution) for Corneal Collagen Cross-Linking in Eyes with Keratoconus. Protocol KXL-001
    a. Sponsor: Avedro
    b. My Role: Principal Investigator and co-Medical Monitor
37. A Multi-Center, Randomized, Controlled Evaluation of the Safety and Efficacy of the KXL System with VibeX (Riboflavin Ophthalmic Solution) for Corneal Collagen Cross-Linking in Eyes with Keratoconus or Corneal Ectasia After Refractive Surgery. Phase III. Protocol ACOS-KXL-001
    a. Sponsor: Avedro
    b. My Role: Principal Investigator and co-Medical Monitor

38. Evaluation of Visual Outcomes and Contrast Sensitivity After Myopic Wavefront Optimized LASIK with Contralateral NexisVision Shield or Bandage Contact Lens or Standard LASIK Without a Shield or Bandage Contact Lens- Protocol CNVS-VR-002
    a. Sponsor: ForSight Labs
    b. My Role: Principal Investigator
39. Use of the VisuMax Femtosecond Laser Lenticule Removal Procedure for the Correction of Myopia. Phase I Protocol VISUMAX-2012-1
    a. Sponsor: Zeiss
    b. My Role: Principal Investigator
40. A Continuation Study to Monitor the Long Term Safety of the AcuFocus ACI 7000PDT. Patients Completing Protocols ACU-P08-020/020A Protocol ACU-P12-020C
    a. Sponsor: AcuFocus
    b. My Role: Principal Investigator
41. Prospective Safety and Effectiveness Study of PRK for Myopia With or Without Astigmatism Using the ALLEGRETTO WAVE® EYE-Q Excimer Laser System. Protocol C-10-084
    a. Sponsor: Alcon
    b. My Role: Principal Investigator
42. Clinical Study of the Artisan Aphakia Lens of the Correction of Aphakia in Adults
    a. Sponsor: Ophtec USA, Inc.
    b. My Role: Principal Investigator
43. A Non-Randomized, Open-Label Study to Evaluate the Safety and Effectiveness of Nasal Stimulation Therapy for Tear Production with the Oculeve Intranasal Lacrimal TENS Unit. Protocol OCUN-006.
    a. Sponsor: Oculeve
    b. My Role: Principal Investigator
44. Use of the Visumax Femtosecond Laser Lenticule Removal Procedure for the Correction of Myopia With or Without Astigmatism. Protocol VISUMAX -2014-1.
    a. Sponsor: Zeiss
    b. My Role: Principal Investigator
45. A Multi-Center Clinical Assessment of the Lensar Laser System of Fragmentation Pattern Groups and Biometry Analysis, Phase IIII. Protocol 52-00077-PRO.
    a. Sponsor: LensAR
    b. My Role: Principal Investigator
46. Surgeon Evaluation of the Optiwave Refractive Analysis System with VerifEye+ (ORA System with VerifEye+). Protocol WA-14-005.
    a. Sponsor: Wavetec/Alcon
    b. My Role: Principal Investigator
47. A Prospective, Global, Multi-Center Study to Evaluate Longitudinal Flap Accuracy on Subjects Undergoing Myopic Refractive Surgery Using the WaveLight Refractive Suite. Protocol A01354.
    a. Sponsor: Alcon
    b. My Role: Principal Investigator
48. A Non-Randomized, Open-Label Study to Evaluate the Safety and Proof of Concept of Negative Pressure Applied to the Periocular Microenvironment Anterior to the Orbital Rim
    a. Sponsor: Equinox, LLC
    b. My Role: Sub-Investigator

49. A Prospective, Post Approval Study to Evaluate the Trulign Toric Posterior Chamber Intraocular Lens (IOL)
    a. Sponsor: Bausch and Lomb
    b. My Role: Principal Investigator
50. Post-Approval Study of the Tecnis® Toric IOL, Models ZCT300 and ZCT400
    a. Sponsor: Abbott
    b. My Role: Principal Investigator
51. Double-Masked, Randomized, Controlled Study of KPI-121 0.25% Ophthalmic Suspension Compared to Vehicle in Subjects With Dry Eye Disease, Phase III.
    a. Sponsor: Kala Pharmaceuticals, Inc.
    b. My Role: Principal Investigator
52. A Prospective Multi-Center Study of Anterior Lens Capsulotomy Using the Mynosys Zepto System.
    a. Sponsor: Mynosys Cellular Devices, Inc.
    b. My Role: Principal Investigator
53. Post-Approval Study of the Tecnis® Toric IOL, Models ZCT450, ZCT525, ZCT600
    a. Sponsor: Abbott
    b. My Role: Principal Investigator
54. Evaluating Measurement Properties of the Questionnaire for Visual Disturbance (QUVID), and the Intraocular Lens Satisfaction (IOLSAT)
    a. Sponsor: Alcon
    b. My Role: Principal Investigator
55. A Randomized Masked, Prospective Pilot Study of the Safety and Performance of the EyeGate Ocular Bandage Gel, A 0.75% Crosslinked Hyaluronic Acid Applied Topically for Accelerating Re-Epithelization of Corneal Epithelia Defects Resulting From Photorefractive Keratectomy (PRK) Used in Combination With and Without A Bandage Contact Lens
    a. Sponsor: EyeGate Pharma
    b. My Role: Principal Investigator
56. A Randomized Masked, Prospective Pilot Study of the Safety and Performance of the EyeGate Ocular Bandage Gel, A 0.75% Crosslinked Hyaluronic Acid Applied Topically for Accelerating Re-Epithelization of Corneal Epithelia Defects Resulting From Laser-Assisted In Situ Keratomileusis (LASIK) Versus Artificial Tears
    a. Sponsor: EyeGate Pharma
    b. My Role: Principal Investigator
57. A Prospective, Randomized, Controlled, Open-Label Study to Evaluate the Safety and Proof of Concept of Negative Pressure Applied to the Periocular Microenvironment Anterior to the Orbital Rim to Lower Intraocular Pressure (IOP)
    a. Sponsor: Equinox, LLC
    b. My Role: Medical Monitor
58. Assessment of Lid, Pupil and Contact Lens Relationships with Gaze Positions “Position Study”
    a. Sponsor: OneFocus Vision, Inc.
    b. My Role: Principal Investigator
59. A randomized, vehicle-controlled, subject and investigator-masked, proof-of-concept study to evaluate the use of topical ocular SAF312 in the treatment of postoperative ocular pain in patients undergoing photorefractive keratectomy (PRK) surgery
    a. Sponsor: Novartis
    b. My Role: Principal Investigator
60. Clinical Investigation of the TECNIS Next-Generation Intraocular Lenses EDOF-121-NGPC
    a. Sponsor: Abbott Medical Optics Inc./ Johnson & Johnson
    b. My Role: Principal Investigator

61. Early Feasibility Study of the UV-Femtosecond Laser Assisted Lenticular Extraction RFO268-E001
    a. Sponsor: Alcon
    b. My Role: Principal Investigator
62. A Double-Masked, Randomized, Multi-Center Phase 2 Study to Evaluate the Efficacy and Safety of Lacripep in Subjects with Dry Eye Associated with Primary Sjogren's Syndrome
    a. Sponsor: TearSolutions, Inc.
    b. My Role: Principal Investigator
63. A Prospective, Randomized, Controlled, Multi-Center Clinical Study of the ACRYSOF IQ Extended Depth of Focus IOL ILI875-C002
    a. Sponsor: Alcon
    b. My Role: Sub-Investigator
64. Clinical Investigation of AcrySof IQ PanOptix IOL Model TFNT00
    a. Sponsor: Alcon
    b. My Role: Principal Investigator
65. A Multi-Center, Prospective Clinical Trial to Evaluate the Safety And Effectiveness of the CT LUCIA 611P Posterior Chamber Intraocular Lens for Correction of Aphakia Following Cataract Removal
    a. Sponsor: Carl Zeiss Meditec Production LLC
    b. My Role: Principal Investigator
    c.

Patents

1. **Patent 9,044,308: Systems and methods for reshaping an eye feature for crosslinking as a way to change corneal shape for correcting refractive error or zonal treatments**

Co-inventors: David Muller, Vance Thompson

2. **Patent 9,125,724: Intraocular pressure modification.** The assemblies and methods can be used to treat, inhibit, or prevent ocular conditions such as glaucoma, high intraocular pressure, optic disc edema, idiopathic intracranial hypertension, zero-gravity induced papilledema, and other optic pressure related conditions. An assembly can include a goggle including at least one cavity, a pump in fluid communication with the at least one cavity, and a control mechanism.
   Inventors: John Berdahl, Richard Cornelius, Vance Thompson
3. **Patent 9,237,843 - System for measuring visual fixation disparity.**
   There is disclosed herein a system for measuring visual fixation disparity comprising a display apparatus for presenting stereoscopic visual content to a patient. A sensing apparatus tracks eye movement of the patient. A controller controls the display apparatus to stereoscopically display a central image target alternately.

Inventors: Jeffrey P. Krall, Vance Thompson, John Merril Davis, (Eyebrain Medical, Inc.)

4. **Patent 9,298,021- Methods and lenses for alleviating asthenopia**

The invention provides methods and lenses for reducing asthenopia related symptoms associated with proprioceptive disparity. In certain aspects, lenses of the invention include a distance portion and a near portion, and a progressive increase in minus power from the distance portion to the near portion. Additionally, lenses of the invention...

Inventors: Jeffrey P. Krall, Vance Thompson (Eyebrain Medical, Inc.)

5. **Patent 9,044,308- Systems and methods for reshaping an eye feature**

Systems and methods include a cutting instrument that creates incisions in selected areas of the cornea; an eye therapy system that applies reshaping forces to the cornea; and a controller that determines the selected areas of the cornea for the incisions and the reshaping forces from the eye therapy system,...

Inventors: David Muller, Vance Thompson (Avedro, Inc.)

6. **Patent 9,709,822 – Orthokeratology Lens with Displaces Shaping Zone.**
7. **Patent 9,869,883 – Tear Shaping for Refractive Correction**

Inventors: Vance Thompson, Ami Gupta

8. **Patent 9,668,916 – Conjunctival Cover and Methods Therefor**
9. **Patent 9,395,557 – Partial Corneal Conjunctival Contact Lens**
10. **Patent 9,910,295 – Partial Corneal Conjunctival Contact Lens (continuation patent)**