

CURRICULUM VITAE

Harilaos S. Ginis, PhD

Date of birth: 26/1/1970

Place of Birth : Athens, Greece



Studies

1993: Bachelor's degree, Department of Physics, University of Crete

2003: Doctor of Philosophy degree, Department of Medicine, University of Crete

Scientific experience

A. Presentations in Congresses

1. Is cone mosaic irregularity beneficial to vision? Aegean Retina 2005
2. A new instrument for the measurement of intraocular pressure, ocular rigidity and pulsatile blood flow. Aegean Retina 2005
3. Distribution of critical pupil diameter and DOF in an emmetropic population. EOS Physiological optics group meeting, Granada 2004.
4. Mathematical modelling of epithelial smoothing. Aegean Cornea 2004
5. Ocular Rigidity and its implication on choroidal blood flow measurements. Aegean Retina 2003.
6. Influence of ablation parameters on refractive changes following Phototherapeutic keratectomy. Aegean Cornea 2002.
7. Dynamic assessment of accommodation with a wavefront aberrometer. CREST meeting, Ft Lauderdale 2002.
8. Changes in ocular rigidity upon insertion of an intraocular bubble. Ginis HS, Pallikaris IG, Tsilimbaris M, Kounis GA, Kymionis G ARVO 2002.
9. Scleral rigidity and AMD prevention: The airbag concept. Miltiadis Tsilimbaris, Harilaos Ginis, Spyros Giarmenitis, George Kounis, George Kymionis, Ioannis Pallikaris. 4th

International Symposium on Ocular Pharmacology and Pharmaceutics – ISOPP Seville , Spain February 28th –March 3rd , 2002.

10. Changes in Ocular Rigidity upon insertion of an intraocular bubble. (eye airbag)
 - a. Pallikaris IG, Tsilimbaris MK, Ginis HS, Kounis GA, Kymionis G (Panhellenic
 - b. 2002)
11. Harilaos S. Ginis, I.G. Pallikaris, M.K. Tsilimbaris, G.A. Kounis Effect of intraocular gas on ocular elasticity and possible relation with choroidal blood flow EURETINA Meeting Hamburg 2001.
12. Spectroscopic estimation of the hydration of corneal models under laser irradiation.” I.G Pallikaris, D. Anglos, T.G. Papazoglou, H.S. Ginis, G.A. Kounis, L.P. Naoumidis. Investigative Ophthalm.& Visual Science. ARVO Annual meeting abstracts 1997.
13. 2nd International Conference on New Laser technologies and Applications 1997. “Human cornea Hydration Estimated by Laser induced breakdown spectroscopy” I.G. Pallikaris, H.S. Ginis, D. Anglos, T.G. Papazoglou.
14. 1996 “A novell in-situ-molded hydrogel contact lens for vitrectomy” Tsilimbaris MK, Margaritis AG, Lydataki S, Ghinis HS, Pallikaris IG. ARVO 1996
15. Pallikaris IG, Ginis HS, Katsanevaki HJ. Photoablated lenticular Modulator –Palm technique a report of ten cases. Ophthalmol Vis Sci, 1998
16. Pallikaris IG, Ginis HS, Katsanevaki VJ. Photoablatable Lenticular Modulator – PALM Technique a Preliminary Animal Study. XVIth Congress of the ESCRS, Nice’ 98, September 6-9, 1998.
17. Pallikaris IG, Ginis H, Katsanevaki V. PALM technique for the management of eccentric ablations. ISRS, Miami, Florida, USA, July 15-18, 1999
18. Pallikaris IG, Ginis HS, Katsanevaki VJ. Photoablatable Lenticular Modulator- the PALM Technique. The 1999 Fall World Refractive Surgery Symposium, Orlando, Florida, USA, October 21-23, 1999
19. Pallikaris IG, Ginis HS, Katsanevaki V, Papagopoulou S Photoablatable Lenticular Modulator-PALM technique. Aegean Cornea IV, Santorini, Greece, June 26-28, 1998
20. Ginis HS, Katsanevaki V, Pallikaris IG Principles of PALM. Aegean Cornea IV, Santorini, Greece, June 26-28, 1998

21. Tsilimbaris MK, Kounis G, Ginis H, Pallikaris IG. Scleral elasticity and age-related macular degeneration. 1ο Ιπποκράτειο Συμπόσιο Αμφιβληστροειδή-Ωχράς-Υαλοειδούς, Αθήνα, Σεπτέμβριος 17-18, 1999
22. Pallikaris IG, Ginis H, Katsanevaki V. Palm Technique for the management of eccentric ablations. Athens 2000, 14th Congress of the HSI/OIRS, Φεβρουάριος 17-20, 2000, Αθήνα
23. “In-vivo πειράματα φωτοπηξίας στο ήπαρ κουνελιών με Argon Ion Laser 10ο Εθνικό συνέδριο “Laser και Εφαρμογές” Χ. Γκίνης, Δ. Παλαιοκώστας, Α. Γεωργιάδης.
24. “Μαθηματικό μοντέλο θερμοκρασιακής κατανομής στο ήπαρ κατά τη φωτοπηξία με Nd:YAG Laser” 10ο Εθνικό συνέδριο “Laser και Εφαρμογές” Δ. Παλαιοκώστας, Χ. Γκίνης, Α. Γεωργιάδης.
25. “Επισήμανση Οφθαλμικών Φακών με χρήση Excimer Laser” 10ο Εθνικό συνέδριο “Laser και Εφαρμογές” (Poster) Χ. Γκίνης, Δ. Παλαιοκώστας, Α. Γεωργιάδης
26. Εξέλιξη των Laser στην Ιατρική: Χρήση των Excimer Laser στη διαθλαστική χειρουργική του οφθαλμού.” 3ο Πανελλήνιο Συνέδριο Φοιτητών Ιατρικής. 1993

B. Publications in peer-reviewed journals

1. Pallikaris IG, Ginis HS, Kounis GA, Anglos D, Papazoglou TG, Naoumidis LP. Corneal hydration monitoring by laser-induced breakdown spectroscopy. J Refract Surg, 14(6):655-660, 1998.
2. Pallikaris IG, Katsanevaki V, Ginis H. The PALM Technique as an Alternative to Customized Ablations. Seminars in Ophthalmology, 15(3):160-169, 2000.
3. Tsilimbaris MK, Ghinis H, Kounis G, Kimionis G, Pallikaris IG. Attenuation of ocular wall pulsation in eyes containing a gas bubble after vitrectomy. Curr Eye Res. 2002 Mar;24(3):202-5
4. Katsanevaki VJ, Ginis HS, Naoumidi II, Pallikaris IG. The PALM Technique: histological findings of masked phototherapeutic keratectomy on rabbit corneas. BMC Ophthalmol. 2003 Feb 19;3(1):4.

5. Ginis HS, Katsanevaki VJ, Pallikaris IG, Influence of ablation parameters on refractive changes after phototherapeutic keratectomy. *J Refract Surg* 2003;19:443-448.
6. Ginis HS, Plainis SS, Pallikaris AI, Repeatability of wavefront aberration measurements in small pupil sizes using a clinical Shack-Hartmann aberrometers. *BMC Ophthalmol.* 2004 Feb 11;4(1):1.
7. Pallikaris IG, Kymionis GD, Ginis HS, Kounis GA, Tsilimbaris MK, Ocular rigidity in living human eyes. *Invest Ophthalmol Vis Sci.* 2005 Feb;46(2):409-14.
8. Pallikaris IG, Kalyvianaki MI, Katsanevaki VJ, Ginis HS. Epi-LASIK: preliminary clinical results of an alternative surface ablation procedure. *J Cataract Refract Surg.* 2005 May;31(5):879-85.
9. Plainis, S., Ginis, H. S., & Pallikaris, A. (2005). The effect of ocular aberrations on steady-state errors of accommodative response. *Journal of Vision*, 5(5), 466-477, <http://journalofvision.org/5/5/7/>, doi:10.1167/5.5.7.
10. Ginis HS and Pallikaris IG. Misuse of the Zernike polynomial fitting may lead to over-estimation of spherical aberration following laser refractive surgery. [*J Cataract Refract Surg.*] IN PRESS

C. Chapters in books.

1. The PALM technique for the treatment of Irregular Astigmatism. Pallikaris IG, Katsanevaki VJ, Ginis HS. In: *Treatment of irregular astigmatism.* Alio H et al.
2. Epi-LASIK: A new refractive Technique. Histological Evaluation and Human Study. Pallikaris IG, Naoumidi II, Kalyvianaki MI, Ginis HS. In *Wavefront and emerging technologies.* Pp 181-187 2003 Kugler Publishing.
3. Principles and applications of retinal ray tracing (Tracey) aberrometry. Molebny VV, Pallikaris IG, Molebny SV, Ginis HS.

D. Reviewer's work

1. Reviewer in the *Journal of Cataract and Refractive surgery.*
2. Occasional reviews for the *Journal of Vision*

E. Teaching Experience

MSc Program "Optics and Vision" (www.optics-vision.gr)

Teaching of courses: (In Greek)

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|---|----------------|
| 1. Vision and Physiological Optics | (1st Semester) |
| 2. Physiological Optics and applications I (lab) | (2nd Semester) |
| 3. Physiological Optics and applications II (lab) | (3rd Semester) |
| 4. Image quality and visual signal processing | (3rd Semester) |

Work Experience

A. Patents

1. Photoablatable Lenticular Modulator (Greece, USA, Brasil)
2. Device for shaping of a hydrogel on the surface of the cornea. (Greece, USA, PCT)
3. Device and Method for the Increase of Ocular Elasticity and prevention of macular degeneration (PCT)
4. Device for the separation of the epithelial layer from the surface of a cornea. (PCT)
+about 10 continuation applications worldwide for this patent.

B. Meetings organisation (Secretary General, responsible for Scientific Program)

1. 1st Aegean Summer School in Visual Optics, Halkidiki 1-5 July 2002
2. 2nd Aegean Summer School in Visual Optics, Santorini 5-10 July 2003
3. 3rd Aegean Summer School in Visual Optics West Peloponnesse 27/6-1/7 2004
4. 4th Aegean Summer School in Visual Optics Heraklion, 20 /6 - 1/7 2005

C. Employment

1988-89: Student, FORTH /IESL worked as assistant in a project related to mass spectroscopy.

1990,91: Student, Physics Department, teaching assistant in lab courses "Optics" and "Advanced experimental Physics"

1992-94: ERGO Medical, Department of R&D. Development of a photodynamic diagnosis and therapy system based on an Argon Ion laser. Development of fiber catheters with scattering tips for photocoagulation in cavities.

1993-1995: ΜΕΤΡΩ Ε.Π.Ε, co-founder and partner. Development of optoelectronic applications.

1995- : PhD Student and later Research Fellow in Institute of Vision and Optics, University of Crete.

D. Special Computer skills

- Optical Design – ZEMAX EE. (Registered User.)
- Numerical modeling: MATLAB
- Design: AUTOCAD, Rhinoceros
- General Programming: Visual Basic, Visual C, PASCAL, FORTRAN.

E. Other special experience

- Machining / workshop operations.
- Surgical tools
- Design and implementation of ISO 9001 compliant procedures.