# **CURRICULUM VITAE**

#### PERSONAL INFORMATION

First name: Nikolaos

Surname: Karyotakis

Date of birth: 15 - 07 - 1978

Home address: Ethinikis Antistaseos 148B, Heraklion, GREECE

Mobile number: +306977535084

E-Mail: <a href="mailto:nikos.kariotakis@gmail.com">nikos.kariotakis@gmail.com</a>, <a href="mailto:kariotakis@gmail.com">kariotakis@ivo.gr</a>

**EDCATION** 

2010- 2016: PhD at University of Crete, Faculty of Medicine, Institute of Vision

and Optics,

Thesis: "Dynamic analysis of intraocular pressure for the investigation of balance flow of aqueous humor in the human

eye."

2003 – 2005: Master of Science (MSc) in 'Optics & Vision' at University of Crete,

Faculty of Medicine, Institute of Vision and Optics

Thesis: "Transscleral photodynamic cyclodestruction: Effect of

scleral scattering on the distribution of radiation"

1998 – 2003: Bachelor of Science (BS) University of Patras, Faculty of Physics

Grade: Very Good

Research Expirience

2010 - present: PhD, development and improvement of invasive and non -

invasive optical devices for measuring: intraocular pressure, outflow facility coefficient, blood flow, mechanical properties of

the eye.

2008 - present: Lab and clinical experience on optics and optical systems.

Scattering and interface of radiation (laser) with the refractive and non - refractive parts of the eye. Animal handling (rabbits).

Institute of Vision and Optics - University of Crete

2003 – 2005: Postgraduate thesis, run by the department of Medical School of

the University of Crete, on the topic 'Transscleral photodynamic

cyclodestruction: Effect of scleral scattering on the distribution of

radiation'. Supervisor: Miltiadis Tsilimbaris (Professor of

Medicine)

Additional essay 'The effect of light intensity on angular resolution

of the human eye as determined by a two – point discrimination

task'.

• Graduate thesis, run by the department of Physics of the

University of Patra, on the topic: 'Study of z – scan technique with

the computational program GLAD'.

### **Work Expirience**

2012 – present: Work Associate Alcmaeon Co.

2012 - 2016: Tele-Ophthalmological Retinal Pathology Screening Service

based on an Automated Fundus Camera. Institute of Vision and

Optics, Medical School, Alcmaeon Co.

2008 – present: Research Assosiate at University of Crete, Faculty of Medicine,

Institute of Vision and Optics

2005 – 2006: Prefecture of Heraklion at the department of electronic data

processing

### **AWARDS - SCHOLARSHIPS**

2010-2011: Manasaki scholarship from the University of Crete for

outstanding research efforts.

2010: EMMI (European Master in Molecular Imaging) Intensive

Programme "Molecular Imaging, Industrial Context, State of the

Art, Multimodal Imaging"

2003-2005: Scholarship from the Masters program Optics & Vision.

## **Publications - Presentations**

Karyotakis NG, Ginis HS, Dastiridou AI, Tsilimbaris MK, Pallikaris IG.:

Manometric measurement of the outflow facility in the living human eye and its dependence on intraocular pressure. Acta Ophthalmol. 2015 Feb 1. Doi: 10.1111/aos.12652. [Epub ahead of print]

Panagiotoglou T, Tsilimbaris M, Ginis H, **Karyotakis N**, Georgiou V,

Koutentakis P, Pallikaris I.: Ocular rigidity and outflow facility in nonproliferative

diabetic retinopathy. J Diabetes Res. 2015;2015:141598. doi: 10.1155/2015/141598. Epub 2015 Apr 14.

Detorakis ET, Loggaki K, **Karyotakis N**, Ginis H.: Intra-scleral parathalamus implant: efficacy and safety in rabbit eyes.: Acta Medica (Hradec Kralove). 2015;57(4):151-6

Detorakis ET, Drakonaki EE, Ginis H, **Karyotakis N**, Pallikaris IG.: Evaluation of iridociliary and lenticular elasticity using shear-wave elastography in rabbit eyes.: Acta Medica (Hradec Kralove). 2014;57(1):9-14.

Dastiridou A.I., Tsironi E.E., Tsilimbaris M.K., Ginis H., **Karyotakis N**., Cholebas P., Androudi S., Pallikaris I.G.,: Ocular rigidity, outflow facility, ocular pulse amplitude, and pulsatile ocular blood flow in open-angle glaucoma: A manometric study Length IOVS; 54 (7), 4571-4577, (2013)

Anna I. Dastiridou, Harilaos Ginis, Miltiadis Tsilimbaris, **Nikos Karyotakis**, Efstathios Detorakis, Charalambos Siganos, Pierros Cholevas, Evangelia E. Tsironi, And Ioannis G. Pallikaris: Ocular Rigidity, Ocular Pulse Amplitude And Pulsatile Ocular Blood Flow; the effect of Axial Length IOVS; 54 (3), 2087-2092, (2013)

Kontadakis G.A., Ginis H., **Karyotakis N**., Pennos A., Pentari I., Kymionis G.D.,

Pallikaris I.G.: In vitro effect of corneal collagen cross-linking on corneal hydration properties and stiffness Clinical and Experimental Ophthalmology 251 (2), 543-547 (2013)

Poster

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Nikos Karyotakis, Harilaos Ginis, Anna Dastiridou, Chrysoula Douka, Miltiadis
 K. Tsilimbaris, Ioannis G. Pallikaris: Minimally invasive elastometry in the living human eye; ASCRS ID 1539191; was selected as the honorable mention poster in the Cornea Category

Ocular rigidity.

9 Ioannis G Pallikaris, Anna I Dastiridou, Miltiadis K Tsilimbaris, **Nikolaos G Karyotakis**, Harilaos S Ginis. Expert Rev. Ophthalmol. 5(3), 343-351 (2010)

Poster

N.G. Karyotakis, H.S. Ginis, A.I. Dastiridou, M.K. Tsilimbaris, I.G. Pallikaris
 The relationship of pulsatile ocular blood flow and intraocular pressure in living human eyes

ARVO Meeting Abstracts May 10, 2012 6862/D1192, Ft. Lauderdale, Florida USA. 2012

Poster

N.G. Karyotakis, H.S. Ginis, M.K. Tsilimbaris, E.M Siggelaki, I.G. Pallikaris
A novel device for the measurement of intraocular pressure, ocular rigidity
and pulsatile blood flow.

Acta Ophthalmologica, Sept, 2011, Vol.89(s246), p.0(1) [Peer Reviewed Journal] Identifier: ISSN: 1755-375X

Poster

N. Karyotakis, H. Ginis, A. Dastiridou, M. Tsilimbaris, and I. Pallikaris

12 Temporal characteristics of the Ocular Pulse Amplitude and their dependence on average intraocular pressure. ARVO Meeting Abstracts April 11, 2010 51:6407, Ft. Lauderdale, Florida USA. 2010

Poster

N. Karyotakis, H. Ginis, A. Dastiridou, M. Tsilimparis, and I. Pallikaris

13 Pressure-dependent Outflow Facility in the Living Human Eye.

PUBLICATION: Invest. Ophthalmol. Vis. Sci. 50: E-Abstract 808. Ft. Lauderdale, Florida USA. 2009

Poster

N. Karyotakis, H. Ginis, A. Dastiridou, A. Limnopoulou, M. Tsilimparis, and I.

14 Pallikaris

On the dependence of Outflow Facility on Intaocular Pressure in the Living Human Eye. EVER, Port Roze Slovenia, 2009

Invited speaker

N. Karyotakis, H. Ginis, M. Tsilimparis, and I. Pallikaris

Optomechanical sensor for the measurement of the mechanical properties of the eye

9th Summer School in Vision & Optics Heraklion Crete, 2010

Speaker

N. Karyotakis, H. Ginis, A. Dastiridou, M.Tsilimparis, I. Pallikaris

The Pressure – depentend Outflow facility

42° Hellinic Opthalmological Conference Heraklion Crete, 2009

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Pennos A, **Karyotakis N**, Kontadakis G, Pentari Ig, Pallikaris Ig, Ginis Hs Title:

Acute mechanical effect of riboflavin corneal cross-linking. EVER, Heraklion,

2010

Poster (Best three abstracts submitted to EVER 2009 by young researchers in the cornea section. Award from TFOS Society)

Kontadakis G, Ginis HS, **Karyotakis N**, Pennos A, Pentari IG, Kymionis G, Pallikaris IG

The effect of riboflavin mediated corneal crosslinking on corneal hydration.

EVER, Heraklion, 2010

Poster

A. Dastiridou, H. Ginis, D. De Brouwere, **N. Karyotakis**, M. Tsilimbaris, and I. Pallikaris

19 Axial Length, Ocular Rigidity and Pulsatile Ocular Blood Flow.

ARVO annual meeting

Invest. Ophthalmol. Vis. Sci. 50: E-Abstract 414. Ft. Lauderdale, Florida USA, 2009

Invited speaker

#### N. Karyotakis

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Dynamics of aqueous humor outflow

8<sup>th</sup> Summer School in Vision & Optics Heraklion Crete, 2009

Invited speaker

H GINIS, S.PLAINIS, N. KARYOTAKIS, A. PALLIKARS

Resolving two point sources of increasing luminous intensity: A cone response - k of resolution CONGRESS: 3rd European Meeting in Physiological Optics, London

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H.S. Ginis, N.G. Karyotakis, S. Plainis, and A. Pallikaris.

The Effect of Light Intensity on Angular Resolution of the Human Eye as Determined by a Two–Point Discrimination Task.

PUBLICATION: Invest. Ophthalmol. Vis. Sci., May 2006; 47: 1222. Ft. Lauderdale, Florida USA. 2006

Poster

M.K. Tsilimbaris, **N.G. Karyotakis**, I. Attiti, and H.S. Ginis.

23 TITLE: Modelling of 690 nm Laser Light Transmission Through the Sclera.

PUBLICATION: Invest. Ophthalmol. Vis. Sci., May 2005; 46: 277. Ft. Lauderdale, Florida USA. 2005

# **LANGUAGES**

Greek (native)

English (TOEIC Advanced (885 over 995), 1st CERTIFICATE IN ENGLISH, University of Cambridge - British Council, IELTS University of Cambridge - British Council).

## <u>Other Activities – Additional Information</u>

Open sea sailing, racing sailing J 24 class, windsurfing Swimming, football Fulfilled military service References submitted after request