

1 General information

Name: Prof. Dr. Ing. Vasilis Ntziachristos
Date of Birth: *26.02.1970
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Position: Professor

2 Academic education and degrees

Until 1993 Electrical Engineering, Aristotle University, Thessaloniki, Greece
1994 Fellowship, Magnetic Resonance Imaging, University of Copenhagen, Denmark
1996 Scholarship, Near Infrared Spectroscopy, University of Pennsylvania, Philadelphia PA, USA

3 Scientific degrees

1993 Diploma, Electrical Engineering, Aristotle University, Thessaloniki, Greece
1998 M.Sc. Bioengineering, Department of Bioengineering, University of Pennsylvania, Philadelphia PA, USA
2000 Ph.D., Bioengineering, Department of Bioengineering, University of Pennsylvania, Philadelphia PA, USA

4 Academic and research appointments

1994-1995 Research Fellow, NMR Center, The Panum Institute, University of Copenhagen, Denmark
1996-2000 Research Assistant, Department of Biophysics, University of Pennsylvania, PA, USA
2001-2002 Instructor, Harvard University, School of Medicine, Boston, MA, USA
2002-2007 Assistant Professor, Harvard University, School of Medicine, Boston MA, USA
2002- 2007 Assistant in Imaging, Massachusetts General Hospital Boston, MA, USA
2007- Present Professor & Chair of Biological Imaging, Technical University of Munich, Germany
Director, Institute of Biological & Medical Imaging, Helmholtz Zentrum München, Munich, Germany

5 Functions and awards

2003 – 2008 Panel Reviewer, National Institutes of Health (NIH), USA
2004 – 2006 Chair, Biomedical Optical Imaging Technical Group, OSA, USA
2005 – 2010 Associate Editor, International Journal of Biomedical Imaging
2005 – 2014 Associate Editor, IEEE Transactions on Medical Imaging

2006 – 2013 Topical Editor for Optics Letters, Optical Society of America, USA
 2008 – 2011 Council Member, Society for Molecular Imaging
 2008 European Research Council ERC Advanced Investigator Award
 2010 GO-Bio Innovation award, BMBF, Germany
 2011 Advisory Board, Action to Support Photonic Clusters in Europe (ASPICE)
 2011 Erwin Schrödinger Prize, Helmholtz Association, Germany
 2012 Associate Editor, Preclinical Imaging, Eberhard Karls Universität Tübingen
 2012 Founder & Editor in Chief Journal of Photoacoustics (Elsevier)
 2012 – 2013 Guest Editor – Optoacoustic Imaging – Journal of Biophotonics, Germany
 2012 – 2013 Editor – Special Issue on Roger Tsien, JBO SPIE, USA
 2013 Gottfried Wilhelm Leibniz Prize, DFG, Germany
 2014 Michael S. Feld Biophotonics Award Committee, The Optical Society
 2014 Germany's Innovation Prize on MSOT technology
 2014–present Visiting Professor, Memorial Sloan Kettering Cancer Center, New York
 2015 Gold Medal Award of the World Molecular Imaging Society
 2016 European Research Council ERC Advanced Investigator Award
 2017 Fellow SPIE, Society for Optics and Photonics
 2019 Fellow IEEE, Institute of Electrical and Electronic Engineers
 2019 Blaise Pascal International Chair for Excellence, Region Ile-de-France

6 TEACHING EXPERIENCE

2019-	Introduction to Bioengineering	6 ECTS; TUM
2010-2018	Case Studies on Modern Imaging	6 ECTS; TUM
2008-	Biological Imaging Principles	6 ECTS; TUM
2009-	Opto-acoustic imaging course	European master for Molecular Imaging
2008-	Laboratories – Seminars in Imaging	4 ECTS; TUM
2004	Course on Bio-optics	IEEE EMBS Int. School in Biomedical Imaging
2003	Course on Optical Imaging	American College of Radiology, Washington DC
1997-1999	Tutor	Dept of Mathematics, University of Pennsylvania, PA

7 SELECTED INTERNATIONAL CONFERENCE ORGANIZATION

2020 Bioengineering Solutions for Biology and Medicine, Nature Conference, Munich
 Organizing Committee
2020 Clinical Biophotonics Conference at Photonics Europe, Strasbourg
 Organizing Committee
2019 European Conferences on Biomedical Optics, Munich
 Executive Organizing Committee
 Conference Chair “Opto-Acoustic Methods and Applications in Biophotonics”
 Session Chair “Clinical Applications I”
2019 European Molecular Imaging Meeting, European Society for Molecular Imaging, Glasgow
 Chair Plenary Lecture
2019 SPIE Photonics West 2019, San Francisco
 Session Chair “Photons Plus Ultrasound: Imaging and Sensing”
2018 1st International Conference: Engineering Biomedical Breakthroughs, San Servolo, Italy
 Organizing committee
 Chair Keynote Lecture
2017 European Conferences on Biomedical Optics (ECBO) 2017, München, Germany
 Chair “Opto-Acoustic Methods and Applications Conference”

Tutorial "Shedding new light on pathophysiology with multi-spectral optoacoustic tomography"
 Session Chair Optoacoustic Methods & Applications // Towards Clinical Applications
2016 Photonics West 2016 in San Francisco on "Optics and Sound"
 Committee member
2015 European Conferences on Biomedical Optics, Munich Germany
 Chair, Optoacoustic Imaging
2015 European Molecular Imaging Meeting (EMIM) 2015
 Scientific Committee
2015 Photonics West 2015 "Multimodal Biomedical Imaging X", "Photon and Sound"
San Francisco, CA
 Program Committee
2015 TOPIM 2015: Winter Conference on Inflammation Imaging, Les Houches, France
 Scientific committee.
2014 Annual Conference on Lasers and Electro-Optics (CLEO) meeting, San Jose, CA
 Biomedical Committee
2014 GeNeDis: World Congress on Geriatrics and Neurodegenerative Diseases Research, Corfu, Greece
 Program Committee
2013 World Molecular Imaging Congress, Savannah, GA
 "Spotlight" Session: Optoacoustic Imaging
2013 World Molecular Imaging Congress, Savannah, GA
 Category Chair: Photo-Acoustic Imaging
2013 8th European Molecular Imaging Meeting, Torino, Italy
 "Optical and Optoacoustic Imaging in Cancer"
2013 Advances in Optics for Biotechnology, Medicine and Surgery XIII, Lake Tahoe, CA
 Session Chair: "Multimodality imaging (Photoacoustics)"
2013 Annual Conference on Lasers and Electro-Optics (CLEO) meeting, Baltimore, MD
 Biomedical Committee
2013 European Conferences on Biomedical Optics/SPIE, Munich, Germany
 Conference Chair on "Optoacoustic imaging"
2013 SPIE BIOS Conference Photons Plus Ultrasound: Imaging and Sensing
 Program Committee
 Session Chair: "Preclinical Research in Animal Model"
2012 World Molecular Imaging Congress, Dublin, Ireland
 Category Chair
2012 International Symposium on Biomedical Imaging (ISBI), Barcelona, Spain
 Organizing Committee
2012 Annual Conference on Lasers and Electro-Optics (CLEO) meeting, San Jose, CA
 Applications & Technology Committee
2012 4th International Conference "Smart Materials, Structures and Systems" (CIMTEC), Montecatini Terme, Italy
 International Advisory Board of Symposium J - Biomedical Applications of "Smart" Technologies
2011 6th European Molecular Imaging Meeting, Leiden, The Netherlands
 Chair: "Biomedical Applications of Photonics (IOP photonics)"
2011 International Conference on Optical Complex Systems, Marseilles, France
 Scientific Committee
2011 European Conferences on Biomedical Optics/SPIE, Munich, Germany
 Conference Chair on "Molecular imaging"
2011 SPIE BIOS Conference Photo-acoustic Imaging Conference, San Jose, CA
 Program Committee

8 Publications

1. Aguirre, J, Schwarz, M, Garzorz,N, Omar,M, Buehler,A, Eyerich, K, **Ntziachristos,V**, (2017). Precision assessment of label-free psoriasis biomarkers with ultra-broadband optoacoustic mesoscopy. Nature Biomedical Engineering 1, Article number: 0068.
2. Tzoumas S, Nunes A, Olefir I, Stangl S, Symvoulidis P, Glasl S, Bayer C, Multhoff G, **Ntziachristos V** (2017). Eigenspectra optoacoustic tomography achieves quantitative blood oxygenation imaging deep in tissues. Nat Commun 7; 12121.
3. Koch M, de Jong JS, Glatz J, Symvoulidis P, Lamberts LE, Adams A, Kranendonk MEG, Terwisscha van Scheltinga AGT; Aichler M, Jansen L, de Vries J, Lub-de Hooge MN, Schröder CP, Jorritsma-Smit A, Linssen MD, de Boer E, van der Vegt B, Nagengast WB, Elias SG, Oliveira S, Witkamp A, Mali WPTM,

van der Wall E, Garcia-Allende BP, Van Diest PJ, de Vries EG, Walch A, van Dam GM, **Ntziachristos V** (2016). Threshold analysis and biodistribution of fluorescently labeled bevacizumab in human breast cancer. *Cancer Res*, CAN-16-1773.

4. Tarrutis A., and **Ntziachristos V** (2015). Advances in real-time multispectral optoacoustic tomography. *Nature Photonics* 9, 219–227.
5. Ale A, Ermolayev V, Herzog E, Cohrs C, de Angelis MH, **Ntziachristos V** (2012). FMT-XCT: in vivo animal studies with hybrid fluorescence molecular tomography-X-ray computed tomography. *Nat Methods*, 9(6):615-620.
6. Van Dam G, Themelis G, Crane LMA, Harlaar NJ, Pleijhuis RG, Kelder W, Sarantopoulos A, Bart J, Low PS, **Ntziachristos V**, (2011). Intraoperative Tumor-Specific Fluorescent Imaging in Ovarian Cancer by Folate Receptor- α Targeting: First In-Human Results. *Nature Medicine*, 17(10):1315-9.
7. **Ntziachristos V**, (2010). Going deeper than optical microscopy: High resolution photonic molecular imaging for next generation biology. *Nature Methods*, 7(8):603-614.
8. **Ntziachristos V**, Ripoll J, Wang L, Weissleder R. (2005). Looking and listening to light: the revolution of photonic imaging. *Nature Biotechnology* 23(3):313-320.
9. **Ntziachristos V**, Schellenberger EA, Ripoll J, Yessayan D, Graves E, Bogdanov A Jr., Josephson L, Weissleder R, (2004). Visualization of antitumor treatment by means of fluorescence molecular tomography with an annexinV–Cy5.5 conjugate *Proc. Natl. Acad. Sci. USA* 101(33):12294-12299.
10. Weissleder, R and **Ntziachristos V**, (2003). Shedding light onto live molecular targets. *Nat Med.* 9(1):123-8.