



# SHORT CURRICULUM VITAE

## PERSONAL DATA

NAME	Nickolas K. Papanikolaou
DATE OF BIRTH	August 30 , 1969
ADDRESS	Rua Joseph Bleck 40 3B, 1495-724, Dafundo, Oeiras, Lisbon, Portugal
	Phone 00351 969323757
	E - mail : nickolas.papanikolaou@research.fchampalimaud.org
CITIZENSHIP	Greek
MARRITAL STATUS	Married, Two children

## EDUCATION

2 <sup>nd</sup> High School of Ptolemaida	:1984 - 1986
Technological Educational Institute of Athens,	
School of Biomedical Engineering	:1987 - 1991
University of Crete, School of Medicine	:2001 - 2005

## DEGREES AND QUALIFICATIONS

B.Sc. Degree ,	Technological Educational Institute of Athens	1992
M.Sc. Degree,	University of Crete, Medical School	2002
Ph.d. Degree,	University of Crete, Medical School	2005

*(Technical development and clinical evaluation of novel imaging techniques  
of the gastrointestinal tract with magnetic resonance imaging")*

## PROFESSIONAL APPOINTMENTS

Sept.1991 - Sept.1998	Apps Specialist, Philips Greece Medical Systems
Jan 1993 - Sept 1998	Clinical Scientist, Philips Greece Medical Systems
Sept 2000 – Sept 2009	Research Associate, Department of Radiology, MRI Unit, University of Crete
Mar 2002 – Feb 2009	Apps Consultant, Siemens Medical Solutions
Feb 2009 – May 2017	CEO “N. Papanikolaou & Associates”
Mar 2014- today	Affiliated Researcher, Karolinska Institute, Sweden
Nov 2016 – today	Owner of MRIcons LTD
Jan 2016 – today	Principal Investigator in Oncologic Imaging Head of Computational Clinical Imaging Group Centre for the Unknown, Champalimaud Foundation, Lisbon

## POST-GRADUATE TRAINING

Jan.1992 - Aug.1992	Philips Medical Systems, Research and Development Labs in MRI, Eindhoven, The Netherlands
June 2002 – Sept 2002	Research Fellowship, University of Essen, Germany

## PUBLICATION CHAPTERS in BOOKS:

18 contributions in books (chapters).

- 1) **SMALL BOWEL NEOPLASMS AND POLYPOSIS**, Gourtsoyianni S. and Papanikolaou N In ABDOMINAL IMAGING, Edited by B. Hamm and P. Ros, Springer 2012
- 2) **CROHNS DISEASE: MR ENTEROCLYSIS**, Papanikolaou N, Gourtsoyianni S. In ABDOMINAL IMAGING, Edited by B. Hamm and P. Ros, Springer 2012

- 3) MRI OF THE SMALL BOWEL: ENTEROCLYSIS** Papanikolaou N, Sofia Gourtsoyianni. In MRI of the Gastrointestinal Tract, Edited by J. Stoker, Springer, 2010
- 4) TECHNICAL CONSIDERATIONS AND PROTOCOL OPTIMIZATION**  
Papanikolaou N. In CLINICAL MRI OF THE ABDOMEN, Edited by N. Gourtsoyiannis, Springer, 2011
- 5) SMALL BOWEL** Gourtsoyianni S, Gourtsoyiannis N, Papanikolaou N. In CLINICAL MRI OF THE ABDOMEN, Edited by N. Gourtsoyiannis, Springer, 2011
- 6) PERLS AND PITFALLS OF IMAGING OF THE SMALL BOWEL AND RECTUM**  
Beets-Tan R, Papanikolaou N, Gourtsoyiannis N. In CLINICAL MRI OF THE ABDOMEN, Edited by N. Gourtsoyiannis, Springer, 2011
- 7) IMAGING MODALITIES IN BRAIN TUMORS** Drevelegas A, Papanikolaou N. In IMAGING OF BRAIN TUMORS WITH HISTOLOGICAL CORRELATIONS, Edited by A. Drevelegas, Springer Verlagh, 2011, pp 13-33
- 8) MALIGNANT ASTROCYTOMAS** Drevelegas A, Chourmouzi D, Papanikolaou N  
In HANDBOOK OF NEURO-ONCOLOGY NEUROIMAGING Edited by HerbertB. Newton and Ferenc A. Jolesz, Elsevier 2008
- 9) 3D MRI ACQUISITION: TECHNIQUE** Papanikolaou N, Karampekios S In: MEDICAL RADIOLOGY - Diagnostic Imaging Volume *Image Processing in Radiology Current Applications* Edited by E. Neri, D. Caramella, and C. Bartolozzi, Springer Verlagh 2008
- 10) THE SMALL INTESTINE, INCLUDING THE DUODENUM** Gourtsoyiannis N, Daskalogiannaki M, Papanikolaou N, In: Diagnostic Radiology, 5th Edition, Grainger & Allison (Eds), Churchill Livingstone, 2008
- 11) MR COLONOGRAPHY** Gourtsoyiannis N, Lauenstein T, Papanikolaou N. In: Textbook of Gastrointestinal Radiology, 3<sup>rd</sup> Edition Gore & Levine(Eds), Elsevier NY, 2008
- 12) MR ENTEROCLYSIS OF THE SMALL BOWEL** Gourtsoyiannis N, Papanikolaou N. In: Textbook of Gastrointestinal Radiology, 3<sup>rd</sup> Edition Gore & Levine (Eds), Elsevier NY, 2008
- 13) TRATTO GASTROINTESTINALE** Gourtsoyiannis N, Papanikolaou N, Karantanas A. In: Risonanza Magnetica dell' addome, Bartolozzi & Lencioni (Eds), UTET, Milano 2006.

**14)MR IMAGING OF THE SMALL INTESTINE** Gourtsoyiannis N, **Papanikolaou**

**N In :** New technics in GI imaging , S. Halligan, H. Fenlon (eds), Marcel-Dekker NY, 2003.

**15)EVALUATION OF THE SMALL INTESTINE BY MAGNETIC RESONANCE**

**IMAGING** N.C. Gourtsoyiannis, **N. Papanikolaou**, A.Rieber, H.J. Brambs. In: Radiological imaging of the small intestine N. Gourtsoyiannis (ed), Springer-Verlag, Berlin,2002.

**16) DIFFUSION WEIGHTED IMAGING: TECHNIQUES AND CLINICAL**

**APPLICATIONS IN THE GENITOURINARY TRACT** T. Metens, C. Mpougias, **N. Papanikolaou**. In: Diffusion weighted imaging in the genitourinary tract. D. Akata, N. Papanikolaou (eds), Springer-Verlag, Berlin,2018.

**17) DIFFUSION WEIGHTED IMAGING: TECHNIQUES AND CLINICAL**

**APPLICATIONS IN THE HEPATOBILLIARY SYSTEM** T. Metens, **N. Papanikolaou**. In: Diffusion weighted imaging in the Hepatobiliary System. C. Matos, N. Papanikolaou (eds), Springer-Verlag, Berlin,2018.

**18) DIFFUSION WEIGHTED IMAGING: TECHNIQUES AND CLINICAL**

**APPLICATIONS IN THE GASTROINTESTINAL TRACT** T. Metens, **N. Papanikolaou**. In: Diffusion weighted imaging in the gastrointestinal tract. S. Gourtsoyianni, N. Papanikolaou (eds), Springer-Verlag, Berlin,2018.

## **INVITED LECTURES**

### **(85, last 15 shown):**

1. Advanced Abdominal MR Imaging protocols for the oncologic patient. **ESOR Multidisciplinary Course, Oct 2015, Geneva**
2. Body diffusion weighted imaging: from ADC to kurtosis. **ESOR Advanced Oncologic Course, Oct 2015, Lisbon**
3. Multidisciplinary Course in Cancer Imaging **ESOR ESTRO, Oct 2015, Brussels**

4. Diffusion-weighted imaging (DWI) in oncology: how I do it. DWI: how to optimize protocols, **Refresher Course at ECR 2016, Vienna**
5. Modern Imaging in Colorectal Cancer, Multiparametric assessment of treatment response, **E<sup>3</sup> - ECR Academies at ECR 2016, Vienna**
6. Diffusion-weighted imaging for the abdominal radiologists: an update, **State-of-the-Art Symposium at ECR 2016, Vienna**
7. Diffusion-weighted imaging (DWI) in oncology: how I do it. DWI: how to optimize protocols, **Refresher Course at ECR 2017, Vienna**
8. Diffusion Metrics in Oncology, **ESOR Course in Hepatobiliary Imaging Biomarkers, Valencia Dec 2017**
9. MR technical advances in the field of oncologic imaging, **ESOR Course in Advances in MRI, Recife, Brazil Aug 2018**
10. From Imaging Biomarkers to Radiomics: Technical Aspects and Clinical Applications in the Abdomen, **ESMRMB School of MRI, Abdominal Course, Coimbra Sept 2018**
11. MR technical advances in oncologic imaging of the abdomen, **ESOR Galen Course, Advanced Oncologic Imaging, Athens Sept 2018**
12. Basic Physics of MRI, **ESOR/ESTRO Course, Multidisciplinary Approach to Cancer Imaging, Rome Nov 2018**
13. From Imaging Biomarkers to Radiomics: Technical Aspects and Clinical Applications in the Abdomen, **ESOR/ESTRO Course, Multidisciplinary Approach to Cancer Imaging, Rome Nov 2018**
14. Artificial Intelligence in Breast Imaging. **4<sup>th</sup> Scientific Congress on Today and Tomorrow in Breast Imaging, Athens May 2019**
15. AI and Machine Learning techniques for smaller datasets. **The Wizardry of Artificial Intelligence: AI and ML in Cancer Imaging, Lisbon May 2019**

## SCIENTIFIC PAPERS IN INTERNATIONAL JOURNALS (64, last 10 shown)

1. Lambregts DM, Martens MH, Quah RC, Nikiforaki K, Heijnen LA, Dejong CH, Beets GL, Marias K, **Papanikolaou N**, Beets-Tan RG. Whole-liver diffusion-weighted MRI histogram analysis: effect of the presence of colorectal hepatic metastases on the remaining liver parenchyma. *Eur J Gastroenterol Hepatol*. 2015 Apr;27(4):399-404.
2. Miriam M. van Heeswijk, Doenja M.J. Lambregts, Stanley Oei, et al. Automated and semi-automated segmentation of rectal tumor volumes on diffusion-weighted MRI: can it replace manual volumetry? *Int J Radiat Oncol Biol Phys*. 2016
3. Sofia Gourtsoyianni, Nickolas Papanikolaou. Role of MR imaging in primary rectal Cancer - standard protocol and Beyond Publication stage: In Press Accepted Manuscript Seminars in Ultrasound, CT and MRI Published online: February 15 2016
4. Drevelegas K, Nikiforaki K, Constantinides M, **Papanikolaou N**, Papalavrentios L, Stoikou I, Zarogoulidis P, Pitsiou G, Pataka A, Organtzis J, Papadaki E, Porpodis K, Kougioumtzi I, Kioumis I, Kouskouras C, Akriviadis E, Drevelegas A Apparent Diffusion Coefficient Quantification in Determining the Histological Diagnosis of Malignant Liver Lesions.. *J Cancer*. 2016 Mar 29;7(6):730-5. doi: 10.7150/jca.14197. eCollection 2016.
5. Kartalis N, Manikis G, Loizou L, Albin N, Zollner FG, Del Chiaro M, Marias K, Papanikolaou N. Diffusion-weighted MR imaging of pancreatic cancer: A comparison of mono-exponential, bi-exponential and non-Gaussian kurtosis models *European Journal of Radiology Open*, Volume 3 , 79 – 85
6. Christidi, F., Karavasilis, E., Samiotis, K., Bisdas, S. and **Papanikolaou, N.**, 2016. Fiber tracking: A qualitative and quantitative comparison between four different software tools on the reconstruction of major white matter tracts. *European Journal of Radiology Open*, 3, pp.153-161.
7. Dijkhoff RA, Maas M, Martens MH, **Papanikolaou N**, Lambregts DM, Beets GL, Beets-Tan RG. Correlation between quantitative and semiquantitative parameters in DCE-MRI with a blood pool agent in rectal cancer: can semiquantitative

- parameters be used as a surrogate for quantitative parameters? *Abdom Radiol (NY)*. 2017 Jan 3. doi: 10.1007/s00261-016-1024-0. [Epub ahead of print]
8. Kokkinos V, Kallifatidis A, Kapsalaki EZ, **Papanikolaou N**, Garganis K. Thin isotropic FLAIR MR images at 1.5 T increase the yield of focal cortical dysplasia transmantle sign detection in frontal lobe epilepsy. *Epilepsy Research*. 2017 Mar 2.
  9. Manikis GC, Marias K, Lambregts DMJ, Nikiforaki K, van Heeswijk MM, Bakers FCH, Beets-Tan RGH, Papanikolaou N. Diffusion weighted imaging in patients with rectal cancer: Comparison between Gaussian and non-Gaussian models. *PLoS One*. 2017 Sep 1;12(9):e0184197.
  10. Functional and molecular MRI of the bone marrow in multiple myeloma. Koutoulidis V, **Papanikolaou N**, Moulopoulos LA. *Br J Radiol*. 2018 Jul;91(1088):20170389.

## PROFESSIONAL ACTIVITIES

**ESGAR Fellow 2013**

**Honorary Member of the Spanish Society of Abdominal Radiology- SEDIA 2007**

Full member of ESMRMB society

Member of ICIS

Section Editor on Radiomics, Machine Learning and AI, Cancer Imaging

Member of the Editorial Board of "EUROPEAN RADIOLOGY" till end of 2007

Member of GI Tract subcommittee of ECR 2007-2010

Reviewer for:

European Radiology, JMRI, Investigative Radiology, Neuroradiology, Plos 1, European Journal of Radiology, Abdominal Imaging, Oncotarget, Cancer Imaging

## Areas of Expertise

Radiomics, Oncologic MRI, Imaging Biomarkers in Neuro and Oncology, fMRI, DTI