#### **Curriculum Vitae**

Dr. Christakis Constantinides

PERSONAL INFORMATION

Date of Birth: December 4, 1968 Place of Birth: Paphos, Cyprus

Nationality: Cypriot

Mailing Address: Ypsoupolis, Limassol 4194, Cyprus Christakis.Constantinides@gmail.com Email:

Website: http://lbi-cy.com

**EDUCATION** 

Johns Hopkins University, Ph.D. (Biomedical Engineering) Thesis title: "Sodium MRI 1994-2000

Techniques and Applications to Acute Reperfused Myocardial Infarction"

1992-1994 Johns Hopkins University, M.S.E. (Biomedical Engineering) Thesis title: "Design of a

Specialized Cardiac Phased Array Receiver for High-Resolution Magnetic Resonance

Imaaina"

1992 Imperial College of Science, Technology and Medicine, University of London, B.Eng(Hons),

Electrical and Electronic Engineering (First Class Honors-in top 10% of the class)

**CURRENT AND PRIOR POSITION(S)** 

2023-present Edanz Editor (Division of Medicine) [recruitment completed, pending onset of appointment]

2023-present Freelancer Editor (Divisions of Engineering and Medicine), Wordvice Inc.

Freelancer Editor (Division of Medicine), Enago Inc. 2020-2024

2015-2017 Marie-Curie Fellow, Intra-European Fellowship (EU Commission), BMRU, Department of

Cardiovascular Medicine, U. Oxford, UK (July 2015-June 2017)

Co-Director, Consultant and Shareholder, Chi Biomedical Limited, Nicosia, Cyprus (March 2005-present

2005-present)

Visitor Faculty, Physiology lectures (second-year medical students), European University 2015-2015

Medical School, Nicosia, Cyprus (February-May 2015)

Freelancer Editor (Physical Sciences Division; Medicine from 2021), Cactus Communications 2014-present 2013-2014

Training appointment at the Education and Culture Directorate-General (DG-EAC) of the European Institutions (October 2013-February 2014)

Assistant Professor, Department of Mechanical and Manufacturing Engineering, University 2005-2013

of Cyprus, Nicosia, Cyprus (September 2005-2013)

Technical Writer, Card Tech Services Limited (CTL), Nicosia, Cyprus (August 2004-2004-2005

September 2005)

Consultant, CNC Medical Physics Services, Nicosia, Cyprus (Jan 2004-November 2005) 2004-2005 2003-2004 Biomedical Engineer, Ayios Therissos Medical Diagnostic Center, Nicosia, Cyprus

(November 2003-June 2004)

2001-2003 Visiting Research Fellow, National Institutes of Health, Bethesda MD (Jun 2001-June 2003) 2000-2001 Visiting Assistant Professor of Radiology, University of Pittsburgh Medical Center,

Pittsburgh PA (August 2000– January 2001)

# **TEACHING AND RESEARCH EXPERIENCE**

## **TEACHING ACTIVITIES**

[1] Course organizer and instructor of undergraduate and graduate courses at the University of Cyprus (2006-2013):

Physiological Foundation for Engineers MMK538 [Graduate] Introduction to Magnetic Resonance MMK536 [Graduate]

Introduction to Medical Diagnostic Modalities MMK432 [Undergraduate and Graduate]

Physiology and Bioengineering MMK332 [Undergraduate]

Laboratory of Physiology and Bioengineering MMK332 [Undergraduate]

Mechatronics MMK261 [Undergraduate]

Laboratory of Mechatronics and Automated Systems MMK261 [Undergraduate]

[2] Attended the Teaching Focus Group Seminar offered at Johns Hopkins University (January 1997)

[3] Teaching assistant (during Doctorate) for the senior undergraduate/graduate courses at the Johns Hopkins U.:

a. MRI in Medicine. Spring semester. 1996

b. Topics in Medical Imaging, Fall semester, 1996

[4] Student Consultant Program (SCAP) at the Homewood campus of Johns Hopkins University. Advised undergraduate students in a variety of engineering and basic science courses (1993-1997)

[5] Student teaching assistant for the Control Systems course at the Department of Electrical and Electronic Engineering, Imperial College, London (1990)

## SUPERVISION OF GRADUATE STUDENTS, POSTDOCTORAL FELLOWS, RESEARCH ASSOCIATES AND VISITING **SCIENTISTS (2008-2012)**

[1] Mr. Christos Panayiotou, Master's student, January 2012-June 2012 (incomplete)

[2] Dr. F. Kossivas, Postdoctoral fellow, June 2011-November 2012

[3] Dr. D. Kafouris, Postdoctoral fellow, March 2011-May 2012 (in collaboration with Dr. C.

Patrickios, Dept. of Chemistry, U. Cyprus)

[4] Dr. L. Cao. Postdoctoral fellow in Professor G. Truskey's lab at the Department of Biomedical

Engineering at Duke University, March 2011-March 2012

[5] Mr. Stelios Angeli, Doctorate student, July 2010-June 2013 (incomplete)

[6] Mr. Nikolas Aristokleous, 'Static and Dynamic Cardiac Modelling and Quantification of Global Mechanical Function using MRI', MS Thesis, University of Cyprus, Mechanical Engineering, February 2010

- [7] Advised Mr. Loucas Kalli, Mr. Stavros Gkagkarelis, Mr. M. Douglas final year undergraduate projects between 2008-9, and 2009-10
- [8] Undergraduate student D. Bolar final year student project during my doctorate work, Johns Hopkins [1999-2000]
- [9] Mr. A. Christoforou, Consultant Programmer, 2009-2010
- [10] Dr. C. Petevinos, Veterinarian, Research Associate, 2007-8
- [11] Mr. H. Kumar, Undergraduate visitor student, IIT India, Summer 2008
- [12] Dr. D. Perperidis, Visiting Lecturer, Imaging and Computer Scientist, 2008-2010
- [13] Dr. K. Sofocleous, Mechanical Engineer, 2008-2010
- [14] Mr. R. Mean, Animal Biologist, 2008-2010
- [15] Dr. G. Georghiou, Cardiovascular surgeon, 2008
- [16] Mr. A. Sancheti, Undergraduate visitor student, IIT, India, Summer 2009
- [17] Mr. P. Ktorides, Consultant Mechanical Engineer, Fall 2009
- [18] Mr. S. Angeli, Consultant Programmer, Fall 2009
- [19] Dr. M. Michaelides, Animal Biologist, March 2011-present
- [20] Ms. R. Demou, Biophysicist, Research Associate, October 2012-December 2012

## PERSONNEL TRAINING PROGRAMS

- [1] Microsurgical Training Program at the Center for In Vivo Microscopy, Duke University Medical Center. Organizers: C. Constantinides, L. Hedlund, G. A. Johnson
- [2] Microsurgical Training Program Participation at the Jackson Laboratories, Maine, USA. Co-sponsored by the Laboratory of Physiology and the Kykkou Monastery.
- [3] Wake Forest School of Medicine Training Course on Microsurgical Techniques in Rodents, North Carolina. Participation sponsored by the Laboratory of Physiology and Biomedical Imaging.

# **RESEARCH ACTIVITIES**

## JOURNAL PUBLICATIONS [Google Scholar > 1840 Total Citations; h-index=17; i10-index=20]

#### In Preparation/Press

- Charalambous N, Angeli S, Rahbari R, Pilakoutas K, Michaelides K, Michaelides E, Psimolofitis E, Tsagkarakis V,
- **Constantinides C.** Stress and Strain Characterization of a Dynamically Controlled Cardiac Phantom using Computational Fluid and Structural Dynamics (in preparation).
- <u>Published</u>
  [1] Constantinides C. Is There Preclinical and Clinical Value for <sup>19</sup>F MRI in Stem Cell Cardiac Regeneration? Cell Transplantation (commentary, accepted), August 2020. [IF=4.14]
- [2] Constantinides C, McNeill E, Carnicer R, Al Haj Zen A, Sainz-Urruela R, Shaw A, Patel J, Swider E, Alonaizan R, Potamiti L, Hadjisavvas A, Padilla-Parra S, Kyriacou K, Srinivas M, Carr CA. Improved Cellular Uptake of Perfluorocarbon Nanoparticles for In Vivo Murine Cardiac 19F MRS/MRI and Temporal Tracking of Progenitor Cells. Nanomedicine. 2019 pii: S1549-9634(18)30552-5. doi: 10.1016/j.nano.2018.10.014. [IF=6.5]
- [3] Constantinides C, Basnett P, Lukasiewicz B, Carnicer R, Swider E, Majid Q, Srinivas M, Carr CA, Roy I. In Vivo Tracking and 1H/19F MRI of Biodegradable Polyhydroxyalkanoate/Polycaprolactone Blend Scaffolds Seeded with Labeled Cardiac Stem Cells. ACS AMI (published), July 2018 [restricted access-e-copies available upon request]. [IF=10.4]
- [4] Constantinides C, Mahon M, McNeill E, Carnicer R, Swider E, Srinivas M, Carr C, Schneider J. Fast, Quantitative, Murine Cardiac 19F MRI/MRS of PFCE-labeled Progenitor Stem Cells and Macrophages at 9.4T. Plos One, Jan 2018. [IF=3.75]
- [5] Oliveira RS, Rocha BM, Burgarelli D, Meira M, Constantinides C, dos Santos RW. A performance evaluation of GPU parallelization, space-time adaptive algorithms and their combination for simulating cardiac electrophysiology. Int J Num Methods in Biomed Eng (published), June 2017. [IF=2.75]
- [6] Constantinides C, Maguire M, Stork L, Swider E, Srinivas M, Carr AC, Schneider JE. Temporal accumulation and localization of isoflurane in the C57BL/6 mouse and assessment of its potential contamination in <sup>19</sup>F MRI with perfluorocrown ether-labeled cardiac progenitor cells at 9.4 T. JMRI, December 2016. DOI: 10.1002/jmri.25564 [IF=4.8]
- [7] Constantinides C, Murphy K. Molecular and integrative physiological effects of isoflurane anesthesia: the paradigm of cardiovascular studies in rodents using Magnetic Resonance Imaging. Frontiers of Cardiovascular Physiology June 2016. [IF=5.7]
- [8] Michaelides M, Georgiadou S, Constantinides C. In-Vivo Epicardial Force and Strain Characterization in Normal and MLP-Knockout Murine Hearts. Physiological Measurement IOP Science 1573-1590, 2015. [IF=3.07]
- [9] Angeli S, Panayiotou C, Psimolofitis E, Nicolaou M, Constantinides C. Stress-Strain Characteristics of Elastomeric Membranes under Uniaxial Testing: Theoretical Formulation, Experimental Tests, and Computational Validation. Mechanics of Advanced Materials and Structures 22(12):996-1006, 2015. [IF=4.03]
- [10] **Constantinides C**, Carr C, Schneider J. Recent Advances in Image-Based Stem-Cell Labeling and Tracking, and Scaffold-Based Organ Development in Cardiovascular Disease. Recent Patents in Medical Imaging 4(2):110-126, 2014 (Invited mini-review).
- [11] Angeli S, Befera N, Calabrese E, Johnson GA, Constantinides C. A High Resolution Cardiovascular Magnetic Resonance Imaging Diffusion Tensor Map from Ex-Vivo C57BL/6 Murine Hearts. JCMR 16:77, 2014. [IF=7.25]
- [12] Constantinou Č, Grondoudes A, Christoforou A, Lanitis A, **Constantinides C**. A Semi-Automated Quality Assurance Toolbox for Diagnostic Imaging. IJBET 14(2):159-180, 2014.
- [13] Kossivas F, Cao L, Michaelides M, Kyprianou A, Constantinides C. Epicardial Elasticity Measurements of the Ex-Vivo Murine Heart using Atomic Force Microscopy. INJNT 10(12):1064, 2013. [IF=1.02]
- [14] Constantinides C, Kossivas F, Epameinoda P, Michaelides M, Rebholz C. A Prototype Device for 3D Passive Epicardial Elasticity Mapping of the Murine Myocardium using AFM. Experimental Techniques 2013. Doi:10.1111/ext.12034/1-6. [IF=1.17]
- [15] **C. Constantinides**, X. Zhong, V. Tzangarakis, G. Cofer, R. Gravett. Emulation of Human and Rodent Cardiac Motion with a Computer-Controlled Cardiac Phantom using DENSE MRI. Concepts in Magnetic Resonance Part A 42(3):59-71,

May 2013. [IF=0.48]

- [16] D. Kafouris, F. Kossivas, C. Constantinides, C. Patrickios. Biosourced Amphiphilic Degradable Elastomers of Poly(glycerol sebacate): Synthesis and Network and Oligomer Characterization. Macromolecules 46(3):622-630, 2013. [IF=6.06]
- [17] C. Constantinides, S. Angeli. Elimination of Mutual Inductance in NMR Phased Arrays: The Paddle End-Ring Design Revisited. Journal of Magnetic Resonance 222:59-67, 2012. [IF=2.91]
- [18] F. Kossivas, S. Angeli, D. Kafouris, C. Patrickios, C. Constantinides. MRI Based Morphological Modeling, Synthesis, and Characterization of Cardiac Tissue Mimicking Materials. IOP Biomedical Materials 7(3), 2012. [IF=3.72]
- [19] C. Constantinides, S. Angeli, F. Kossivas, P. Ktorides. Underestimation of Murine Cardiac Hemodynamics using Invasive Catheters: Errors, Limitations, and Remedies. Journal of Cardiovascular Engineering and Technology (CVET), DOI:10.1007/s13239-012-0084-8, March 2012. [IF=2.49]
- [20] C. Constantinides, S. Angeli. Murine Cardiac Catheterizations and Hemodynamics: On the Issue of Parallel Conductance A Quantitative Study. IEEE-TBME 58(11):3260-8, 2011. [IF=4.54]
- [21] C. Constantinides, S. Angeli, R. Mean. Changes in Murine Cardiac Inotropy and Hemodynamics following Manganese administration under isoflurane anesthesia. Annals in Biomedical Engineering, 39(11):2706-2720, 2011; DOI: 10.1007/s10439-011-0367-5 (August 5, 2011). [IF=3.93]
- [22] D. Perperidis, E. Bucholz, G. A. Johnson, C. Constantinides. Morphological Studies of the Murine Heart Based on Probabilistic and Statistical Atlases. J. Computerized Graphics, doi 10.1016/j.compmedimag 2011.07.001, August 2011. [IF=4.8]
- [23] C. Constantinides, R. Mean, B. A. Janssen. Effects of Isoflurane Anesthesia on Murine Cardiovascular Function. ILAR 52:e21-31, 2011. [IF=2.25]
- [24] C. Constantinides, S. Angeli, S. Gkagarelis, G. Cofer. Intercomparison of performance of RF Coil Geometries for High Field Mouse Cardiac MRI. Concepts of Magnetic Resonance Part A 38A(5):236-252, 2011. doi:10.1002/cmr.a.20225(4 August 2011). [IF=0.48]
- [25] Pomper MG, Constantinides CD, Barker PB, Bizzi A., et. al. Quantitative spectroscopic imaging of brain lesions in patients with AIDS: Correlations with Thallium-201 SPECT and [11C-Methyl]thymidine PET. Academic Radiology, 9(4):398-409, 2002. [IF=5.48]
- [26] Constantinides CD, Rogers J, Herzka D, Bolar D, Boada FE, Kraitchman DL, et. al. Supramagnetic Iron Oxide MION as a potential contrast agent for 23Na MRI in myocardial infarction. Magnetic Resonance in Medicine, 46(6):1164-1168, 2001. [IF=4.67]
- [27] Constantinides CD, Kraitchman DL, O'Brien K, Boada FE, Gillen J, et. al. Noninvasive Quantification of Total Sodium Concentration in Acute Reperfused Myocardial Infarction. Magnetic Resonance in Medicine, 46(6):1144-1151, 2001. IIF=4.671
- [28] Constantinides CD, Gillen JS, Boada FE, Pomper MG, et. al. Sodium Imaging and Quantification in Human Skeletal Muscle: Potential Applications in Exercise and Disease. Radiology 216:559-568, 2000. [IF=29.15]
- [29] Lee RF, Giaquinto R, Constantinides CD, Souza S. et. al. A Broadband Phased-Array System for Phosphorus and Sodium Metabolic MRI in a clinical scanner. Magnetic Resonance in Medicine, 43:269-277, 2000. [IF=4.67]
- [30] Bottomley PA, Lee RF, Constantinides CD, Ouwerkerk R, Weiss RG. Quantification and imaging of myocardial sodium and creatine kinase metabolites. MAGMA 11(1-2):39-41, 2000. [IF=2.5]
- [31] Constantinides CD, Weiss RG, Lee R, Bolar D, et. al. Restoration of Low-Resolution Sodium Metabolic MRI using A Priori Anatomic Information. Magnetic Resonance Imaging, 18:461-471, 2000. [IF=2.55]
- [32] Constantinides CD, Atalar E, McVeigh ER, Signal-to-Noise Measurements in Magnitude Images from NMR Phased Arrays. Magnetic Resonance in Medicine, 38:852-857, 1997. Erratum in Magnetic Resonance in Medicine, 52:219, 2004. [IF=4.67]
- [33] Constantinides CD, Westgate CR, O'Dell W, Zerhouni EA, McVeigh ER, A Phased Array Coil for Human Cardiac Imaging. Magnetic Resonance in Medicine, 34:92-97, 1995. [IF=4.67]

## CONFERENCE PAPERS AND ABSTRACT PUBLICATIONS

#### Published

- [1] Christakis Constantinides, Louisa Potamiti, Petros Patsali, Carolyn A. Carr, Mangala Srinivas, Andreas Hadjisavvas, Kyriacos Kyriacou. Intracellular Uptake, Localization, and Excretion Kinetics of PCFE Nanoparticles used for Cardiac Stem Cell Labeling. ESMI, Thessaloniki, Greece, March 2020 (virtual conference, August 2020).
- [2] Christakis Constantinides, Pooja Basnett, Barbara Lukasiewicz, Ricardo Carnicer Hijazo, Mangala Srinivas, Carolyn Carr, and Ipsita Roy. Tracking of PLGA-PFCE-labeled Cardiac Stem Cells Seeded on Novel Biodegradable Poly(3-hydroxyoctanoate) Scaffolds Implanted on the Murine Myocardium using 1H and 19F MRI/MRS. ISMRM 2018, Paris, France June 2018.
- [3] Christakis Constantinides, Ricardo Carnicer Hijazo, Andrew Shaw, Jyoti Patel, Edyta Swider, Mangala Srinivas, and Carolyn Carr. In Vivo Murine Cardiac 19F MRI and Tracking of PFCE- and FuGENE-labeled Progenitor Stem Cells in the C57BL/6 Mouse. ISMRM 2018, Paris, France, June 2018.
- [4] Christakis Constantinides, Akhilesh Rai, Mangala Srinivas, Lino Ferreira, and Carolyn Carr. Comparison of Labeling Capacity for Protamine-sulphate-conjugated and FuGENE-labeled Progenitor Cardiac Stem Cells using Perfluorocarbon Nanoparticle Labels for In Vivo Murine Cardiac 19F MRI/MRS. ISMRM 2018, Paris, France, June 2018.
- [5] **Christakis Constantinides,** Ricardo Carnicer, Ayman Zen, Maguire L. Mahon, Eileen McNeil, Edyta Swider, Mangala Srinivas, Carolyn A. Carr, Jurgen E. Schneider. Post-mortem Cardiac and Skeletal Muscle <sup>19</sup>F MRI of PFCE-labeled and FuGENE-transfected Cardiac Progenitor Stem Cells in the C57BL/6 Mouse. ISMRM, Hawaii, February 2017.
- [6] Christakis Constantinides, Ayman Haj Al Zen, Eileen McNeill, Mangala Srinivas, Carolyn A. Carr, Jurgen E.Schneider. Temporal Assessment of In Vitro Survival, Uptake Efficiency, and Fluorescence of Cardiac Stem Cells Labelled with PLGA-PFCE Nanoparticles and Transfected with FuGENE. ESMI, Cologne, Germany, April 2017.
- [7] **Christakis Constantinides**, Mahon L. Maguire, Leeanne Stork, Mangala Srinivas, Edyta Swider, Carolyn A. Carr, Jurgen E. Schneider. Effects of Inhalational Isoflurane Anaesthesia on <sup>19</sup>F MRS/MRI of the In Vivo Mouse at 9.4T. ISMRM Workshop on Molecular & Cellular MRI: Focus on Integration: Amsterdam, Netherlands, June 2016.

- [8] **Christakis Constantinides**, Eileen McNeill, Matt Benson, Raquel Sainz Urruela, Sergi Padilla, Sophia Malandraki-Miller, Mahon L. Maguire, Edyta Swider, Sahar Ghaffari, Carolyn A. Carr, Mangala Srinivas, Jurgen E. Schneider. Improvements in the Cellular Uptake of Perfluorocarbon Nanoparticles and <sup>19</sup>F MRS/MRI Detectability using the Transfection Agent FuGENE. ISMRM Workshop on Molecular & Cellular MRI: Focus on Integration: Amsterdam, Netherlands, June 2016.
- [9] **Christakis Constantinides**, Mahon L. Maguire, Sophia Malandraki-Miller, Edyta Swider, Mangala Srinivas, Carolyn A. Carr, Jurgen E. Schneider. Fast, Quantitative <sup>19</sup>F MRI: Optimized Imaging Strategies. ESMRM 2016, October 2016, Vienna, Austria.
- [10] Angeli S, Michaelides M, **Constantinides C**. Residual Strain in the Left Ventricular C57BL/6 Myocardium. Experimental Biology 2015, Boston, USA.
- [11] Kossivas F, Michaelides M, Hadjisavvas A, Kyprianou A, Kyriacou K, **Constantinides C**. Elasticity Measurements from Murine Left Ventricular HL-1 Cardiomyocytes using Atomic Force Microscopy. Exp Biology 2015, Boston, USA.
- [12] Michaelides M, Georgiadou S, Constantinides C. Myocardial Force and Strain Comparisons in Control and MLP Deficient Mice. Experimental Biology 2014, San Diego, USA.
- [13] Angeli S, Befera N, Peyrat JM, Calabrese E, Johnson GA, **Constantinides C**. A High-Resolution Cardiomyofiber Atlas of the Murine Heart. ISMRM 2014, Milan, Italy.
- [14] **Constantinides C.** NMR Phased Arrays: Past, Present, and Future Practical Implications from Mutual Inductance Elimination using the Paddle End-Ring Design. BIT's 3<sup>rd</sup> Annual Conference Expo AnalytiX, 25-28 April 2014, Dalian China (invited lecture presentation, accepted).
- [15] Angeli S, Psimolofitis E, Nicolaou M, **Constantinides C**. Computational, Image-based, and Experimental Stress-Strain Comparisons of Elastomers. ESB 2013, Patras, Greece.
- [16] Angeli S, Befera N, Cofer G, Johnson GA, **Constantinides C**. Construction of a Fiber Atlas of the Murine Heart, ISMRM 2013, Utah, USA.
- [17] Charalambous N, Michaelides K, Psimolofitis E, Tzagarakis V, Michaelides D, Angeli S, **Constantinides C.** Stress and Strain Characterization of a Dynamically Controlled Cardiac Phantom using Computational Fluid and Structural Dynamics, ISMRM 2013, Utah, USA.
- [18] Michaelides M, Georgiadou S, **Constantinides C**. Direct Epicardial Force and Strain Measurements from the in vivo Murine Heart, Experimental Biology 2013, Boston, USA.
- [19] Patrickios CS, Kepola EJ, Karouris D, Constantinides C. Functional Polymer Networks: Ampliphilicity, Ampholyticity and Degradability, PNG 2012.
- [20] **Constantinides C**, Kossivas F, Epameinoda P, Sofocleous K, Keravnou C, Zachariou S, Socratous C, Hatzijorzis M, Rebholz C. A Prototype Device for 3D Passive Elasticity Mapping of the Murine Myocardium using AFM. Biomedical Engineering Society (BMES), Atlanta, Georgia, October 2012, USA.
- [21] Kossivas F, Michaelides M, Cao L, Kyprianou A, Truskey G, **Constantinides C**. Epicardial Elasticity Measurements of the Ex-Vivo Murine Heart using Atomic Force Microscopy. Biomedical Engineering Society (BMES), Atlanta, Georgia, October 2012, USA.
- [22] Angeli S, Kossivas F, Kafouris D, Patrickios CS, Tzagarakis V, **Constantinides C**. Cardiac Tissue Regeneration: MRI Based Morphological Modeling, Synthesis, and Characterization of Tissue Mimicking Materials. Biomedical Engineering Society (BMES), Atlanta, Georgia, October 2012, USA.
- [23] Kafouris D, Kossivas F, **Constantinides C**, Nguyen NQ, Wesdemiotis C, Patrickios CS. Poly(glycerol sebacate) Degradable Bioelastomers: Synthesis, and Oligomer Precursor and Polymer Network Characterization. Macro 2012, 44<sup>th</sup> IUPAC World Polymer Congress, Macromoleculars in Biotechnology and Medicine Symposium, Blacksburg, Virginia, USA, June 2012.
- [24] **Constantinides C**, Angeli S. Minimizing Mutual Inductance in NMR Phased Arrays: The Paddle End-Ring Design Revisited. Proc. the International Society of Magnetic Resonance in Medicine (ISMRM), Melbourne, Australia 2012.
- [25] **Constantinides C**, Angeli S, Kossivas F, Ktorides P. Understimation of Murine Cardiac Hemodynamics using Invasive Catheters. Experimental Biology 2012, San Diego, USA.
- [26] Kafouris D, Kossivas F, Nguyen NW, Wesdemiotis C, **Constantinides C**. Patrickios C. Synthesis and Properties of Poly(Glycerol Sebacate) Elastomers: Effect of Composition. American Chemical Society, USA, 2012.
- [27] D. Kafouris, F. Kossivas, **C. Constantinides**, Nguyen NQ, Wesdemiotis C, C. Patrickios. Synthesis and Characterization of Poly(glycerol sebacate)s: Amphiphilic Degradable Elastomers. Cyprus Greece Binational Conference, Limassol, Cyprus, October 2011.
- [28] S. Angeli, R. Mean, **C. Constantinides**. Computational and Experimental Validation of Electric Field Propagation in Miniature Catheter for Parallel Conductance Estimation. Proceedings of the American Heart Association and Circulation Research, New Orleans, July 2011.
- [29] **C. Constantinides**, D. Nearchou, C. Constantinou, P. Ktorides, R. Gravett, V. Tzagarakis. A Novel Cardiac Phantom to Study Murine and Human Cardiac Motion and Function Using MRI. Proceedings of the International Society of Magnetic Resonance in Medicine, Montreal 2011.
- [30] **C. Constantinides**, D. Rueckert, D. Perperidis. Comparison of Regional Myocardial Function in the Human and the Mouse. Proceedings of the International Society of Magnetic Resonance in Medicine, Montreal 2011.
- [31] **C. Constantinides**, S. Angeli, R. Mean. Quantification of Hemodynamics in Murine Myocardium following Manganese Infusion. Proceedings of the Experimental Biology, Washington DC, April 2011.
- [32] **C. Constantinides**, S. Gkagarelis, S. Angeli, G. Cofer. A Novel Spiral Radiofrequency Coil for High Field Mouse Cardiac Imaging (accepted). 32<sup>nd</sup> Annual International Conference of the IEEE Engineering in Medicine and Biology Society (IEEE-EMBS) 'Merging Medical Humanism and Technology', August 2010, Argentina, Argentina, Sept 2010.
- [33] **C. Constantinides**, R. Mean, B. A. Janssen. Heart rate and blood pressure variability effects as a result of oxygen and nitrous oxide administration in the anesthetized Mouse (accepted). 32<sup>nd</sup> Annual International Conference of the IEEE Engineering in Medicine and Biology Society (IEEE-EMBS) 'Merging Medical Humanism and Technology', August 2010, Argentina, Argentina, September 2010.
- [34] C. Constantinides, R. Mean, N. Aristocleous, D. Perperidis. Four-Dimensional Mouse Cardiac Imaging and

- Quantification of Mechanical Function using MRI. RAHMS 2<sup>nd</sup> International Conference "Recent Advances in Health and Medical Sciences", July 2010, Paphos, Cyprus.
- [35] **C. Constantinides**, N. Aristocleous, G. A. Johnson, D. Perperidis. Static and Dynamic Cardiac Modelling: Initial Strides and Results towards a Quantitatively Accurate Mechanical Heart Model. Proceedings of the IEEE Society in Biomedical Imaging, Rotterdam, April 2010.
- [36] **C. Constantinides**, R. Mean, L. Hedlund. An Optimal Physiologic Model for Study of Murine Cardiac Function under Inhalational Anesthesia, International Society for Magnetic Resonance in Medicine, Proceedings of the ISMRM, Stockholm, May 2010.
- [37] C. Constantinides, N. Aristokleous, K. Fokianos, J. Brandenburg, D. Perperidis. Interstrain Comparisons of Murine Global Cardiac Function using MRI. Proceedings of the ISMRM, Stockholm, May 2010.
- [38] C. Constantinides, R. Mean, B. Janssen, L. Hedlund. Effects of Isoflurane Anesthesia on Murine Glucose Metabolism. Proceedings of Experimental Biology, Anaheim, California, April 2010.
- [39] D. Perperidis, E. Bucholz, G. A. Johnson, **C. Constantinides**. Morphological Studies of the Murine Heart Based on Probabilistic and Statistical Atlases. Proc. International Society for Magnetic Resonance in Medicine, Hawaii, May 2009.
- [40] D. Perperidis, E. Bucholz, G. A. Johnson, **C. Constantinides**. Morphological and Functional Motion Studies of the Murine Heart based on Probabilistic and Statistical Atlases. Radiological Society of North America, November 2008.
- [41] Constantinou C, Christoforou A, Grondoudis A, **Constantinides CD**, Lanitis A. A Semi-Automated Quality Assurance Toolbox for Diagnostic Radiological Imaging, International Conference on Enterprise Information Systems (ICEIS), Paphos, Cyprus, May 2006.
- [42] **Constantinides CD**, Herzka D, Bolar D, Boada FE, Kraitchman DL, et. al. Supramagnetic Iron Oxide MION: A Contrast Agent for 23Na Cardiac MRI in Myocardial Infarction. Proceedings of the International Society of Magnetic Resonance in Medicine (ISMRM), p. 2043, Denver, Colorado, April 2000.
- [43] Constantinides CD, Kraitchman DL, O'Brien K, Boada FE, Gillen JS, et. al. Noninvasive Quantification of Total Sodium Concentration in Myocardial Infarction using 23Na MRI. Proc. of ISMRM, p. 130, Denver, Colorado, April 2000.
- [44] Constantinides CD, Boada FE, Bolar D, Gillen JS, Pomper MG. Sodium MRI in Cancer at 1.5T. Proceedings of ISMRM, p. 387, Denver, Colorado, April 2000.
- [45] Bottomley PA, Lee RF, **Constantinides CD**, Ouwerkerk R, Weiss RG. Quantification and Imaging of myocardial sodium and creatine kinase metabolism. Proceedings of the 5<sup>th</sup> Symposium in Cardiovascular Research, Marseille, France, October 2000
- [46] **Constantinides CD**, Bolar D, Pomper MG. Sodium Imaging in Skeletal Muscle: Initial Experience in Volunteers during Exercise and Myotonic Dystrophy. Radiological Society of North America (RSNA), 85<sup>th</sup> Annual Meeting, Chicago, November 1999.
- [47] **Constantinides CD**. Boada FE, Gillen JS, Kraitchman DL, et. al. Fast, High-Resolution 23Na MRI with Twisted Projections: Imaging Myocardial Infarction in 3D. Proceedings of the International Society of Magnetic Resonance in Medicine, p. 221, Philadelphia, May 1999.
- [48] **Constantinides CD**, Gillen JS, Boada FE, et. al. Sodium Imaging and Quantification of Skeletal Muscle at 1.5T. Proceedings of ISMRM, p. 311, Philadelphia, May 1999.
- [49] **Constantinides CD**, Bottomley PA, Lee RF, Bolar D, Weiss RG. Restoration of Metabolic Images Using A Priori Anatomic Information. Proceedings of the International Society of Magnetic Resonance in Medicine, p.2116, Philadelphia, May 1999.
- [50] **Constantinides CD**, Gillen JS, Boada FE, Pomper MG. 23Na Metabolic Imaging of the Human Brain: Technique Development and Validation. Proceedings of the International Society of Neuro-Radiology (ASNR), San Diego, May 1999.
- [51] Lee RF, Giaquinto R, **Constantinides CD**, Souza S, et. al. Phased-Array Metabolic Imaging of nuclei-other-than-hydrogen. Proceedings of the International Conference of Magnetic Resonance in Medicine, p. 1415, Philadelphia, May 1999
- [52] Pomper MG, Sactor NC, Horska A, Wang PY, **Constantinides CD**, McArthur JC, Barker PB. Evaluation of Selegeline Treatment Response in HIV Associated Cognitive Impairment Using Proton MR Spectroscopic Imaging. Proceedings of the American Society of Magnetic Resonance in Medicine, p. 1415, Philadelphia, May 1999.
- [53] **Constantinides CD**, Bizzi A, Barker PB, McArthur JC, Dogan AS, Yokoi F, Wong DF, Pomper MG. MR Spectroscopic Imaging of Brain Lesions in Patients with AIDS: Correlation with Thallium-201 SPECT and [11C- Methyl]thymidine PET, Proceedings of the American Society of Neuro-Radiology (ASNR), Philadelphia, May 1998.
- [54] Bottomley PA, Lee RF, **Constantinides CD**, Weiss RG. Direct MRI of high-energy Phosphate Metabolites at 1.5 Tesla. Proceedings of the International Society of Magnetic Resonance in Medicine, Sydney, Australia, April 1998.
- [55] Bottomley PA, Lee RF, Constantinides CD, Weiss RG. Sodium MRI of acute myocardial infarction at 1.5 Tesla. Proceedings of the Society of Magnetic Resonance in Medicine, Sydney, Australia, 1998.
- [56] Bottomley PA, Lee RF, **Constantinides CD**, Weiss RG. Sodium Magnetic Resonance Imaging of acute myocardial infarction at 1.5 Tesla. Proceedings of the First Annual Meeting of the Society for Cardiovascular Magnetic Resonance, January 1998.
- [57] **Constantinides CD**, Atalar E, McVeigh ER. Signal-to-Noise Measurements in Magnitude Images from NMR Phased Arrays. Proceedings of IEEE-Engineering in Medicine and Biology Society, Chicago, October 1997.
- [58] **Constantinides CD**, McVeigh ER. Use of MRI Spin Tagging for Position Tracking and Deformation Calculation in a Stretching Phantom. Proceedings of the 13<sup>th</sup> International Conference on Digital Signal Processing, Santorini, Greece, July 1997.

## BOOKS

- [1] Protocols and Methodologies in Preclinical and Clinical Cardiac Magnetic Resonance Imaging (completed). **C. Constantinides (Editor)**. Springer-Verlag Publications, October 2017.
- [2] Assessment of Cellular and Organ Physiology and Pathology using Direct and Derived-MRI Approaches (<a href="http://www.intechopen.com/books/assessment-of-cellular-and-organ-function-and-dysfunction-using-direct-and-derived-mri-methodologies">http://www.intechopen.com/books/assessment-of-cellular-and-organ-function-and-dysfunction-using-direct-and-derived-mri-methodologies</a>). C. Constantinides (Editor). InTech Publications, October 2016.
- [3] Latest Advances in Cardiovascular MRI (2013). C. Constantinides (Editor). Bentham Science Books: Amsterdam, The

Netherlands (published – available from <a href="http://www.benthamscience.com/ebooks/9781608058068/index.htm">http://www.benthamscience.com/ebooks/9781608058068/index.htm</a> and <a href="http://www.eurekaselect.com/119385/volume/1">http://www.benthamscience.com/ebooks/9781608058068/index.htm</a> and <a href="http://www.eurekaselect.com/119385/volume/1">http://www.benthamscience.com/ebooks/9781608058068/index.htm</a> and <a href="http://www.eurekaselect.com/119385/volume/1">http://www.benthamscience.com/ebooks/9781608058068/index.htm</a> and <a href="http://www.eurekaselect.com/119385/volume/1">http://www.eurekaselect.com/119385/volume/1</a>).

[4] Introduction to Magnetic Resonance Imaging (MRI): The Basics (2014). **C. Constantinides**. CRC Press (Taylor and Francis): Florida – available from <a href="http://www.crcpress.com/product/isbn/9781482217315">http://www.crcpress.com/product/isbn/9781482217315</a>.

# **BOOK CHAPTERS**

- [1] **C. Constantinides** (2016). Cardiac Multinuclear MRI. Constantinides C (Editor), Protocols and Methodologies in Preclinical and Clinical Cardiac Magnetic Resonance Imaging (published, October 2017), Springer-Verlag Publications.
  [2] S. Angeli, **C. Constantinides**. Regional Cardiac Function: Across Mammalian Species Comparison The Paradigm of the Mouse for MR Image-Based Phenotyping (2013). Constantinides C (Editor), Latest Advances in Cardiovascular MRI. Amsterdam:

  Bentham Science Books (published available from <a href="http://www.benthamscience.com/ebooks/9781608058068/index.htm">http://www.benthamscience.com/ebooks/9781608058068/index.htm</a> and <a href="http://www.eurekaselect.com/119385/volume/1">http://www.eurekaselect.com/119385/volume/1</a>).
- [3] **C. Constantinides.** Murine Cardiac Hemodynamics: The Development and Use of Invasive Catheters, and the Emergence of New Methodologies, Herzaki (Ed), Hemodynamics: Monitoring, Theory and Applications, New York: NOVA Publications (published, Chapter 3, pp. 25-48).
- [4] **C. Constantinides.** Study of the Murine Cardiac Mechanical Function using Magnetic Resonance Imaging: The Current Status, Challenges, and Future Perspectives. Practical Applications in Biomedical Engineering, Adriano O. Andrade, Adriano Alves Pereira, Eduardo L. M. Naves and Alcimar B. Soares (Ed.), ISBN: 978-953-51-0924-2, InTech Open Science Publications, Available from: http://www.intechopen.com/books/practical-applications-in-biomedical-engineering/study-of-the-murine-cardiac-mechanical-function-using-magnetic-resonance-imaging-the-current-status-and-future-perspectives.

## **BOOK TRANSLATIONS**

- [1] Translation and publication of the MRI Book «Introduction to MRI: The Basics», in the Greek language. **C. Constantinides, In pre-publication stage, publisher identification**.
- [2] C. Constantinides. Physiology and Bioengineering: A Teaching Primer. U. Cyprus, **Fall 2006** [158 pages]. Part of the Primer includes translation of the Book «Physiology of the Heart», by A. Katz, after the author's permission.

## **OTHER PUBLICATIONS**

[1] C. Constantinides (2016). Cardiac Image-Based Phenotyping: A Scientific Fairytale or an Emerging Reality? Oxford University Biophysical Society (OUBS) Phenotype Maganize, p.18, June 2016 (https://issuu.com/phenotypejournal/docs/tt16mainweb).

#### **GRANT FUNDING**

- [1] Supplementary funding to Marie Curie Fellowship at U. Oxford, Metochemie Ltd., Cyprus, February 2017, 500 Euro.
- [2] Micro-Grant from the Marie Sklodowska Curie Association for travel and attendance to the European Society of Molecular Imaging (December 2016), Cologne, Germany, April 2017, 400 Euro.
- (3) "Assessment of Global and Regional Cardiac Functional Improvements in Murine Model of Myocardial Infarction following Stem Cell Treatments", European Union, Marie-Curie Intra-European Fellowship, University of Oxford, July 2015-2017, 183,454 Euro.
- [4] "Mechanical Tissue Characterization and Stress and Strain Imaging of the Murine Heart", Research Promotion Foundation, Access to Research Infrastructure [jointly with Duke University Biomedical Engineering, the Duke University Center for In Vivo Microscopy and Hydrus Inc.], Primary Investigator, University of Cyprus, January 2011-13, **140,000 Euro**.
- [5] <u>"ISO9001 Certification for Laboratory of Physiology and Biomedical Imaging «HIPPOCRATES» Senate Loan-Grant"</u>, Primary Investigator, Senate Council, U. Cyprus, June 2009-2013, **8,900 Euro**.
- [6] "Multimodality Heart Phantom Motion Validation Studies and Myocardial Motion and Strain Characterization of the Murine Heart using DENSE MRI", Research Promotion Foundation, Access to Research Infrastructure [Duke University, USA], Primary Investigator, University of Cyprus, December 2008-Dec. 2008, 40,000 Euro.
- [7] "Study of Physiological Mechanisms of Myocardial Force Generation in the Murine Heart under Anesthesia", Research Promotion Foundation, International Cooperation [Duke University, USA], Primary Investigator, University of Cyprus, December 2008-December 2010, **80,000 Euro**.
- [8] "Cardiac Mechanics and Non-invasive Imaging in the Mouse Heart using Magnetic Resonance Imaging", Primary Investigator, Funding from the Hellenic Bank, 2007-2010, 41,040 Euro.
- [9] "Microsurgical Training Course Funding", Kykkou Monastery, Spring 2008, **1500 Euro**.
- [10] "Cardiac Mechanics in the Mouse Heart and Non-invasive Imaging using Magnetic Resonance Imaging", Startup Funding, Primary Investigator, University of Cyprus, November 2005-May 2006, **85,500 Euro**.
- [11] "Development of Research Infrastructure, Quality Assurance Protocols, and Analysis Techniques for Diagnostic Radiological Equipment", Foundation for Research Promotion, Scientific Director (Consultant with CNC Medical Physics), November 2005-6, **119,515 Euro**.

## **MAJOR COLLABORATIONS**

**08/15-08/17** Initiation of collaborative efforts with Professor Mangala Srinivas at Radboud University, Netherlands, based on a formulated Material Transfer Agreement (formulated and executed through Oxford Research Services) **10/13-present** Professor K. Pilakoutas, Dr. A. Narracott. Collaborative effort with the U. Sheffield (Departments of Mechanical Engineering and Cardiovascular Science)

**06/13** Professor H. Rockman, Department of Medicine, Duke University, USA. Material Transfer Agreement between the Laboratory of Physiology (U. Cyprus) and Duke for transportation and experimentation of transgenic mice.

03/12 Professor F. Epstein, Department of Biomedical Engineering, U. Virginia, USA. Research collaboration on DENSE-MRI in mice

2011-2013 Collaborative research effort with SME Hydrus Ltd, Limassol, Cyprus on computational fluid dynamics.

2011-2013 Collaborative research effort with SME CNE Ltd, Nicosia, Cyprus on uniaxial material testing and constitutive property characterization.

2008-present Dr. S. Georgiadou. Collaborative Agreement between the Histopathological Laboratory of the Veterinary

Services of the Ministry of Agriculture and Nature Resources and the Laboratory of Physiology and Biomedical Imaging «Hippocrates», 2008.

**09/08** Rector's Office, IIT, India. Initiated a joint collaborative agreement effort with the Indian Institute of Technology and worked jointly with the U. Cyprus International Relations Office towards its formulation and signature.

**09/06** Rector's Office, Professor G. Allan Johnson, Center for In Vivo Microscopy (CIVM), Duke University, USA. Organizer for Duke-University of Cyprus International Collaborative Agreement. Worked jointly with the U. Cyprus International Relations Office and the Dean's Office at Duke toward its formulation and signature.

**09/06** Professors G. A. Johnson, L. Hedlund, CIVM, Duke. Organizer for Duke and the University of Cyprus research and training exchange program.

## FELLOWSHIPS, AWARDS, RECOGNITION, PRESS ARTICLES

- [1] Certificate of recognition and appreciation by ACS publications for valuable contributions as a peer reviewer, 2023.
- [2] National press feature article on Semi-autonomous Energy Strategies in Cyprus (Fileleptheros Newspaper article entitled "Ενεργική Ημιστογομία: Φωνή Βοώνιος"), 24 March 2024 (https://www.philenews.com/oikonomia/kypros/article/1451632/energiaki-imiaftonomia-foni-voontos/).
- [3] Recognized with the Journal of Cardiovascular Magnetic Resonance (JCMR) Gold Star Reviewer Award as a reviewer in the top 20% among >500 reviewers, February 2019.
- [4] Member of the In Tech Editorial Advisory Board (Medical Diagnostics, Engineering, and Telemedicine), 9 May 2015 (upon invitation), 2016-2017.
- [5] Member of the Junior Common Room, Wolfson College, Oxford–February 2016-June 2017.
- [6] Use of Cardiac Stem Cells for the Therapy of Myocardial Infarction. C. Constantinides. Simerini Newspaper, Nicosia, Cyprus (http://lbi-cy.com/?page\_id=1040).
- [7] Fellowship recipient, British Heart Foundation (BHF) Experimental MRI Unit, Wellcome Trust of Human Genetics, Division of Cardiovascular Medicine, Oxford University. "Development of non-invasive cell tracking using Magnetic Resonance Imaging to aid functional and quantitative regeneration of the injured myocardium" (PI: Dr. J. Schneider, Dr. C. Carr), June 16-July 10, 2014.
- [8] Research manuscript 'Signal-to-Noise Measurements in Magnitude Images from NMR Phased Arrays' was selected as one of the top 300 most-cited articles in the official journal of the International Society of Magnetic Resonance (ISMRM) Magnetic Resonance in Medicine by the selection committee for '30 Magnetic Resonance Papers that Shaped the Field', chaired by Professor Gary Glover, September 2013.
- [9] Marguis 'Who is Who in the World', 30<sup>th</sup> Edition 2013.
- [10] Remcom's web-case study on the Laboratory of Physiology and Biomedical Imaging RF coil design and development appears in the RF Globalnet Newsletter (Spring 2011).
- [11] National press feature article [featured in 7 newspapers and national magazines] on project work by an undergraduate team (course in Technology and Society MMK 101) on the use and feasibility of novel railway systems in Cyprus (Summer 2011)
- [12] Feature article (C. Constantinides) on Magnetic Resonance Imaging, entitled: 'Magnetic Resonance Imaging: The invisible eye into the darkness of human anatomy', UCY Rector's web-page (May 2011) [http://www.ucy.ac.cy/goto/pure/el-GR/20112.aspx].
- [13] Web case study on RF surface work using XFdtd at LBI by Remcom (November 2010)

  [http://www.remcom.com/articles-and-papers/case-study-mri-coil-improvement-for-cardiac-imaging-in-mice.html]
- [14] Website feature on spiral RF coil for mouse cardiac MRI on October Newsletter of Remcom Inc, PA, USA (October 2010) [http://www.remcom.com/articles-and-papers/a-novel-spiral-radiofrequency-coil-for-high-field-mouse-card.html]
- [15] National press feature on innovative project work written by undergraduate advisee M. Koutsoukos (course in Technology and Society MMK101) on the development of novel, environmentally friendly new hybrid car engine technologies (October 2010)
- [16] National press feature article on innovative project work by an undergraduate team (course in Technology and Society MMK101) on the use of the car as a transportation vehicle in Cyprus, entitled: 'The car as a transportation vehicle, the Cypriot Mentality, and the Environment' (June 2010)
- [17] National press release on funding from the Hellenic Bank (October 2008)
- [18] Featured by National Broadcasting Television Stations (ANT1, M1, MEGA) and press release in the National press for pioneering research laboratory work in Cyprus with anesthetized mice for the study of the cardiovascular system, October 2007.
- [19] Featured by the National Broadcasting Radio Station CyBC for Organization of the International one-day Symposium "The Role of Medical Imaging in Modern Medical Diagnosis, Treatments, and Basic Science Research", November 2007.
- [20] Featured by the National Broadcasting Radio Station CyBC (Εκπιμπτή Πρωνό Δραμθάρι) on the pioneering work in mice.
- [21] Participated in the GyroTools Research Tools and Data Handling Course, GyroTools Ltd., Institute of Biomedical Engineering, University of Zurich and Swiss Federal Institute of Technology (ETH), October 25-29 2004, Zurich, Switzerland.
- [22] Initiated member of the Order of the American Hellenic Educational and Progressive Association (AHEPA) Washington Chapter 21, June 11, 2002.
- [23] Award from the International Society of Magnetic Resonance in Medicine to attend to the Eighth Annual Meeting, Denver, Colorado, April 1-7, 2000.
- [24] Graduate Student Association Travel Award, Johns Hopkins University School of Medicine to attend to the Eighty Fifth Annual Assembly and Meeting of the Radiological Society of North America (RSNA), Chicago, November 1999.
- [25] Award from the International Society of Magnetic Resonance in Medicine to attend to the Seventh Annual

- Meeting, Philadelphia, May 22-28, 1999.
- [26] Initiated member of the TBP Engineering Honor Society, Johns Hopkins University, Maryland Delta Chapter (Dec.
- [27] Whitaker Foundation Biomedical Engineering Doctorate Scholarship (June 1994-2000).
- United States Information Agency Scholarship (Cyprus America Exchange Program) for Master's Degree in [28] Biomedical Engineering at Johns Hopkins University, awarded by the Cyprus Fulbright Commission (1992-1994).
- Holbein Travel Scholarship from the City and Guilds Association of Imperial College as a summer exchange [29] student at MIT (1991).
- Electrical Engineering Honor (top 10% of class) for undergraduate results at Imperial College (1989-92). [30]
- [31] Loan/Scholarship for undergraduate studies at Imperial College London from the Bank of Cyprus (1989-92).
- Qualified/selected member of the Greek Cypriot team (National competition) for the XXII Physics Olympiad [32] (1989)

## TRAINING/SEMINAR/COURSE PARTICIPATION

- Research group leadership: leading a productive research group (June 21, 2017) [1]
- [2] Oxford Learning Institute
  - Introduction to Oxford (Online)
  - Induction to the Working Environment (Online)
  - Managing People: Key Processes (Online)
  - Undergraduate Admissions Interviewing (Tutored, 28 Sept 2015)
  - Essentials of Project Management (Tutored)
  - Examining PhD Students (21 Mar 2016)
- [3] Advanced Light Microscopy (Division of Medical Sciences, U. Oxford, 14-17 Mar 2016)
- [4] [5] An Introduction to Research Ethics (Division of Medical Sciences, U. Oxford, 19 Feb 2016)
- Grant Writing Workshop (P. Dukes-MRC, Department of Cardiovascular Medicine, U. Oxford, 29 June 2016)
- [6] Single Cell Workshop (Parts I and II, St. Catherine's College, Oxford - 6 May 2016)
- Applying for Fellowships (Prof. H. Watkins, CVMD, WTHG, Oxford, 20 April 2016) [7]
- [8] Introduction to the Searching Resources of the Bodleian Library (Oxford, Nov. 2015)
- MSCA Intellectual Property and Patents Workshop (EPO, Munich, Germany Nov. 2015) [9]
- Animal Training Course (Biomedical Sciences, U. Oxford, Licensed, October 2015) [10]
- [11] Participated at the "Food for Thought! Exploring Intellectual Property and Technology Transfer Conference" organized by the Intellectual Property and Technology Transfer Unit of the Joint Research Centre, European Commission, 13 January 2014, Brussels, Belgium.
- Participated in the GyroTools MR Spectroscopy Application Course, GyroTools Ltd., Institute of Biomedical [12] Engineering, University of Zurich and Swiss Federal Institute of Technology (ETH), October 2003, Zurich, Switzerland.
- Funding by the Human Resource Development Authority of Cyprus to attend the Eighty Ninth Annual Assembly [13] and Meeting of Radiological Society of North America (RSNA), Chicago, November 2003.
- Attended the first workshop on mediation techniques offered by the Resolution Conflict Group of Harvard Law [14] School, after the invitation of the organizing committee of the Cyprus Fulbright Commission (Boston, June 1993).

## **INVITED LECTURES/SEMINARS**

- Departmental Seminar, Department of Cardiovascular Medicine, U. Oxford, 2 June 2016. [1]
- BIT's 3rd Annual Conference Expo of AnalytiX in Gateway 401: Emerging NMR Technologies High Resolution, [2] Sensitivity and Diffusion NMR, 25-28 April 2014, Dalian, China.
- [3] Annual Cyprus Biophysics Symposium, 2 February 2013, Nicosia, Cyprus.
- RAHMS 2<sup>nd</sup> International Conference "Recent Advances in Health and Medical Sciences", July 2010, Paphos, [4]
- [5] One-day Medical Imaging Symposium at the University of Cyprus, November 9, 2006.
- [6] Center for In Vivo Microscopy, Duke University Medical Center, September 20, 2006.
- Department of Electrical and Computer Engineering, University of Cyprus, November 14, 2003.

## ORGANIZATION OF SCIENTIFIC MEETINGS/WORKSHOPS

- Advanced MRI Techniques, offered at Polykliniki Ygeia, Limassol, Organizer and Instructor (Dr. C. [1] Constantinides), 29 April 2018.
- Member of the local organizing committee of the Second International Conference RAHMS "Recent Advances in Health and Medical Sciences," Paphos, Cyprus, 8-12 July 2010. [2]
- Organizer and Chair of the two-day International Symposium at the University of Cyprus, entitled: "Physiology, [3] Imaging, and Animal Models of Cardiopulmonary Pathology", September 2009, Nicosia, Cyprus.
- Organizer of the one-day International Symposium at the University of Cyprus entitled: "The Role of Medical [4] Imaging in Modern Medical Diagnosis, Treatment, and Basic Science Research", November 2007, Nicosia, Cyprus.
- [5] Chair of the MRI Session of the Medical Imaging One Day Symposium at the University of Cyprus, entitled: "Medical Imaging Technology", November 9, 2006, Nicosia, Cyprus.
- Co-chair of the Biomimetics, Biomaterials, and Bio-devices Session of the 3rd International Symposium on [6] Nanomanufacturing, November 3-5 2005, Limassol, Cyprus.

## COMMISSIONS OF TRUST

- Reviewer Member [1]
  - Frontiers in Cardiovascular Medicine (invited 01/23) [IF: 5.68]
  - Journal Reviews in Cardiovascular Medicine (10/22) [IF: 4.43]
- [2] External Grant Reviewer - New Frontiers in Research Fund - Government of Canada (upon invitation) -

January 2021.

- Reviewer for the International Society of Magnetic Resonance in Medicine (ISMRM), 2014, 2015, 2018-present.
- Reviewer for the IEEE Society of Biomedical Engineering (ISBI), November 2014-present.
- Reviewer for the Engineering in Medicine and Biology (EMBS) Society Conferences, August 2013-present.
- Trans-domain Proposal (TDP) COST-Action grant reviewer, European Union, January 2014-2021.
- [3] [4] [5] [6] [7] Reviewer for leading journals such as the ACS-AMI (2023), Scientific Reports (02/2023), Frontiers in Cardiovascular Medicine (2023), Journal Reviews in Cardiovascular Medicine (2022), Physiology Advances (2020), International Journal of Nanomedicine (2020), MAGMA (2018), Journal of Cardiovascular Magnetic Resonance (10/16), European Radiology (2016), Plos One (09/13), Modern Applied Science (08/13), Journal of Magnetic Resonance Imaging (JMRI) (07/13), Molecular Imaging and Biology (06/13), Progress in Nanotechnology and Nanomaterials (PNN – 03/13), Revista Mexican de Fisica (03/13), Journal of Applied Physiology (08/12), IEEE Transactions in Instrumentation and Measurement (07/12), NMR in Biomedicine (09/11), Journal of Magnetic Resonance, (02/07), Magnetic Resonance in Medicine (04/05).
- Member of a review committee for the evaluation of a research proposal for the Research Incubators in Cyprus [8] (invitation from the General Director of the Incubator Center 'Hermes' at Cyprus College), January 22, 2004.

#### **INSTITUTIONAL RESPONSIBILITIES**

- Department of Mechanical and Manufacturing Engineering Library Representative, September 2011-June 2013. [1]
- Member of the Senate Committee, University and Society, Spring 2009-Fall 2010.
- Member of the Accreditation and Certification Committees on Health and Health Regulations (Cyprus [3] Certification and Accreditation Organization), March 2007-present.
- Member of the Graduate and Postgraduate Study Committee of the Department of Mechanical and [4] Manufacturing Engineering, Fall 2005-Fall 2011.
- Organizer of the internal Graduate Seminar Series at the Department of Mechanical Engineering at the [5] University of Cyprus, 09/06-5/07.
- Member and Representative of the Engineering School at the KEPEAA Committee for Educational [6] Complementation and Certification, University of Cyprus, Spring 2006.
- Member of the COST Action Group-21 (European Community): Physiological Modeling of MR Image Formation, [7] October 2004.

## ORGANIZATIONAL AND MANAGEMENT LEADERSHIP

06/09-05/10 ISO9001 Laboratory of Physiology and Biomedical Imaging «HIPPOCRATES» Certification. The laboratory was inspected and certified on 9 June 2010.

01/03/07-28/02/10 Laboratory licensing from the Ministry of Agriculture and Natural Resources as a Laboratory site for the conduct of experimental work in small animals, and for the conduct of scientific work. Licensing was secured after inspection and evaluation of the premises in accordance with Cyprus Legislation.

09/06 Organizer (jointly with Dr. P. Kaplanis, Medical Physicist, Nicosia General Hospital) of undergraduate and graduate student tours of the Nicosia General Hospital Radiology Department (as part of the undergraduate course Introduction to Medical Diagnostic Modalities), Lefkothea and Evresis Medical Diagnostic Centers (as part of the undergraduate course Introduction to Magnetic Resonance), Cyprus Athletic Association (as part of the undergraduate course Physiology and Bioengineering), Muskita Aluminium Industries and British Airways (as part of the Graduate Seminar Series).

01/93-04/93 Publicity officer and member of the Graduate Representative Organization (G.R.O) Committee responsible for the two-day 1993 Annual Spring Symposium under the title: "Europe in Debate: Community or Conflict?" at Johns Hopkins University (~15 hrs/wk).

10/90-06/92 Undergraduate Safety Committee Representative in the Department of Electrical Engineering, Imperial College (~3 hrs/wk).

## **INFORMATION ON PUBLIC ENGAGEMENT**

#### **MSCA Ambassador**

- [1] Imperial College Alumni Association: Preliminary Proposal Submitted to IC Alumni Office on January 2016
- [2] Lanition Lyceum Cyprus (Introduction to Stem Cell Therapy and Oxford Admissions), 16 January 2017

# Volunteer at Imperial College Alumni Festival

- [1] Tour Guide at IC Alumni Festival May 7, 2016
- [2] Tour Guide at IC Alumni Festival May 6, 2017

# Science Fairs/Museums

[1] Oxford Science Fair Participation (June 2017)

# **CLINICAL AND VOLUNTEERING EXPERIENCES**

- [1] Imperial Virtual Alumni Student Recruitment Ambassador (07/21-today)
- [2] Volunteer tour guide, Imperial College Alumni Festival, 7 April 2016
- [3] Volunteer training as a tour guide at the Kennedy Center for the Performing Arts, WashingtonDC, USA (5 weeks training not completed, Spring 2003, 3 hrs/wk)
- [4] Volunteer in the Dept. of surgery-cardiology (Intermediate Care Unit) at Johns Hopkins Hospital under the guidance of chief nurse Mrs. Cindy Thornton (October 1995 - May 1996, 5 hrs/wk)
- [5] Clinical rounds in cardiology at Johns Hopkins Hospital under the guidance of Dr. J. Lima. Attended the clinical conferences with cardiology residents (August 1-15, 1995, 30 hrs/wk)
- [6] Clinical rounds in the Departments of Medicine and Cardiology of the Limassol General Hospital, Cyprus, under the guidance of senior cardiologist Dr. Hatzipetrou (August 1-15, 1994, 25 hrs/wk)