Curriculum Vitae: Maltabe Violetta

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Education:

PhD: 2008-2015: Biology Department, School of Medicine, University of Ioannina and the Biomedical Research Institute of Ioannina (FORTH-BRI), Ioannina, Greece. **PhD Thesis title: "Differentiation of mouse embryonic stem cells to mesodermal lineages"** Supervisor Kouklis Panagiotis, PhD, Assistant Professor in Medical School, University of Ioannina

B.S.: 2002-2007: Diploma in Biological Applications and Technologies. Department of Biological Applications and Technology, University of Ioannina, Greece Diploma Thesis (2006-2007): "*In vitro* differentiation of mouse embryonic stem cells to endothelium"

Current Position:

Postdoctoral researcher at the Biomedical Research Institute of Ioannina (FORTH-BRI) and the University of Ioannina, Biology Department, School of Medicine, Ioannina, Greece

Fellowships/Research Experience:

Postdoctoral Fellowship in the framework of the program KRIPIS II (1/1/2018-present)

Postdoctoral Fellowship: «IKY fellowships of Excellence for Postgraduate Studies in Greece–Siemens Programme» (10/4/2016-31/8/2017)

Postdoctoral Fellowship for the project "SIEMENS-BIOLOGY-BIOPHOTONICS» by GSRT/ IKY/ SIEMENS in particular Task 3.2 "Stem Cell Biology & Cell Therapy Tissue Engineering" (1/12/2015 - 9/4/2016)

PhD fellowship by NOISE PLUS SYNERGASIA 09ΣYN-21-969 for three years

PhD fellowship from the Biomedical Research Institute of Ioannina (FORTH-BRI) for one year (The role of endothelial cells during differentiation of cardiac progenitor cells towards to mature cardiomyocytes)

Honours and Awards:

Young Researcher Travel Award and Poster presentation award at the 2nd International Conference on Stem Cells, 29 September to 2 October 2017, Rhodes, Greece.

Oral presentation award at the 66th congress of Hellenic Society of Biochemistry and Molecular Biology (HSBMB) (2015)

Teaching Activities:

Course Director in the course "Introduction in Stem Cell Biology" (2nd semester 2017) in the frame of "Acquisition Academic Teaching Experience for young PhD scientists" Faculty of Medicine, Health Sciences, University of Ioannina

Lecturer in the course "Stem Cells and Gene Therapy" in the Graduate Program "Basic Biomedical Sciences" Faculty of Medicine, Health Sciences, University of Ioannina (2016, 2017)

Laboratory Assistance in Biology (2008-2015)

Instructor in seminars to undergraduate students during the courses of Biotechnology, Medical School, University of Ioannina, as well as participate in seminars to e-courses of Biotechnology, Medical School, University of Ioannina. (2011-2015). (http://ecourse.uoi.gr/mod/folder/view.php?id=25782)

Demonstrator in student laboratory exercises to undergraduate students, writing of laboratory protocols and correcting assessments, in courses of Biology I at the Biology Department, Medical School, University of Ioannina (2008-2012).

Organization of Conferences, Workshops, Events:

Vice President of Scientific-Organizing Committee for the 4th National Forum of Young Scientists (November 2016) of the Greek Society of Biochemistry and Molecular Biology (HSBMB).

Member of scientific societies

Research member of Cardiovascular Research Institute (Care Institute), Greece (www.careinstitute.gr).

Hellenic Society for Biochemistry and Molecular Biology (*HSBMB*). Panhellenic Union of Bioscientists

Profile:

As postdoctoral researcher, Dr. Maltabe focused on tissue engineering, specifically, on combining cardiovascular progenitor cells and biomaterial scaffolds for further use in acute myocardial infarction rat and mouse models. She has more than ten years' experience in Stem Cell Biology and in differentiation of pluripotent stem cells towards cardiovascular lineages.

Dr. Maltabe's main field of interest is basic research in Regenerative Medicine and Developmental and Cell Biology. Her thesis work focused on monitoring differentiation of embryonic stem cells to cardiovascular system and identifying the nature of cadherin mediated Adherens Junctions between endothelial and cardiac progenitor cells, before their specification into mature phenotypes. A further research topic of her thesis was the isolation, characterization and expansion of endothelial and cardiac progenitor cells for further use in regenerative medicine. Three articles

stemming from this work, the first has been recently published in Stem Cell International, the second is under revision (Transient VE-cadherin expression in early Isl1⁺ cardiovascular progenitor cells) and the third under submission (Cadherin mediated Adherens Junctions and endothelial integrity is required for cardiac progenitor cells pre-specification and/or survival).

In addition, she has a range of other research interests. She has participated in a founded program, "Synergasia", of European Union – European Social Funds and Greek National Sources, in collaboration with other laboratories of BRFAA and Institute Pasteur of Athens, Greece. Main research topics of this work were the formation of Induced Pluripotent Stem Cells, (IPs) and the study of their differentiation potential according to the expression of E-cadherin.

Publications:

- **1. Violetta A. Maltabe**, Eleonora Barka, Marianthi Kontonika, Dimitra Florou, Maria Kouvara-Pritsouli, Maria Roumpi, Simeon Agathopoulos, Theofilos M. Kolettis, and Panos Kouklis. *Isolation of an ES-Derived Cardiovascular Multipotent Cell Population Based on VE-Cadherin Promoter Activity.* **Stem Cells Int, 2016. 2016: p. 8305624.**
- 2. Kotanidou, Violetta Ioanna Nikitopoulou, Stylianos E. Orfanos, Anastasia Manitsopoulos, Panagiotis Karras, Panos Kouklis, Apostolos Maltabe, Nikolaos Armaganidis, Nikolaos A. Maniatis. Vascular endothelial-cadherin downregulation as a feature of endothelial transdifferentiation in monocrotaline-induced pulmonary hypertension. American Journal of **Physiology** Cellular Molecular Lung and Physiology 2016 Vol. 311 no. 2, L352-L363 DOI:10.1152/ajplung.00156.2014
- **3. Violetta A. Maltabe**, Anna Melidoni and Panos D. Kouklis. *Transient VE-cadherin expression in early Isl1*⁺ *cardiovascular progenitor cells*. Journal Cell Science (Submitted & under review)
- **4.** Prodromos Sakaloglou, Leandros Lazaros, Charilaos Kostoulas, Ioanna Bouba, **Violetta Maltabe**, Panos Kouklis, Sofia Markoula, Theodoros Tzavaras, Ioannis Georgiou. *Human preimplantation embryo pluripotency and DNA integrity are affected by LINE-1 retrotransposition*. Human Genetics, HUGE (Submitted & under review)
- **5.** Theofilos M. Kolettis, Eleni Bagli, Eleonora Barka, Marianthi Kontonika, Maria Markou, Dimitrios Kouroupis, Agapi D. Vilaeti, Maria Roumpi, **Violetta A. Maltabe**, Vassilios La Rocca, Simeon Agathopoulos, Theodore Fotsis. *Medium-term electrophysiologic effects of a cellularized-scaffold implanted in rats after myocardial infarction*. Clinical and Experimental Pharmacology and Physiology (Submitted & under review)

Invited presentations:

Cardio Medicine 2016, National Research Foundation, Athens, March 5, 2016 "Stem Cells for cardiac repair"

Conference presentations and announcements:

1. A novel cardiovascular multipotent cell population isolated during ESCs differentiation based on VE-cadherin promoter activity.

Violetta A. Maltabe, Eleonora Barka, Marianthi Kontonika, Simeon Agathopoulos, Theofilos M. Kolettis, and Panos Kouklis. *Poster presentation/* 2nd International Conference on Stem Cells, 29 September to 2 October 2017, Rhodes, Greece.

2. KCNQ1 gene expression in epileptic rats.

Giaka K, **Maltabe V**, Voulgari N, Siarava E, Georgiou I, Markoula S. *Poster presentation*/ 32th International Epilepsy Congress, 2-6 September 2017, Barcelona, Spain

- **3.** Isolation of a novel cardiovascular multipotent cell population during ESCs differentiation. Violetta A. Maltabe, Eleonora Barka, Marianthi Kontonika, Dimitra Florou, Maria Kouvara-Pritsouli, Maria Roumpi, Simeon Agathopoulos, Theofilos M. Kolettis, and Panos Kouklis. *Oral presentation*/67th Congress of the Hellenic Society of Biochemistry and Molecular Biology (HSBMB) Conference, Ioannina, Greece, 24-27/11/2016
- **4. Generation and characterization of partially reprogrammed iPSCs.** Nikos Thomopoulos, **Violetta Maltabe** and Panos Kouklis. *Poster presentation*/67th Congress of the Hellenic Society of Biochemistry and Molecular Biology (HSBMB) Conference, Ioannina, Greece, 24-27/11/2016
- 5. Valpoic acid-induced HERV-K10 retrotransposition and concomitant glioma cell differentiation are mediated through active endogenous reverse transcriptases. Foteini Gkatziou, Georgios Vartholomathos, Dimitrios Noutsopoulos, Stefania Mantziou, Violetta Maltabe, Sofia Markoula, Ioannis Georgiou, Athanasios Kyritsis, Theodore Tzavaras. *Poster presentation*/67th HSBMB Conference, Ioannina, Greece, 24-27/11/2016
- **6.** Adherens Junctions integrity is required for cardiovascular progenitor cells specification. Violetta Maltabe, Anna Melidoni and Panos Kouklis. *Oral presentation*/ 66th Congress of the Hellenic of Society Biochemistry and Molecular Biology (HSBMB), 11th -13th December 2015, Athens, Greece
- 7. Human preimplantation embryo pluripotency and DNA integrity are affected by induced retroelement expression. P. Sakaloglou, L. Lazaros, C. Kitsou, C. Kostoulas, I. Bouba, V. Maltabe, P. Kouklis, K. Zikopoulos, T. Tzavaras, I. Georgiou. *Poster presentation/* 31st Annual Meeting European Society of Human Reproduction and Embryology Lisbon, Portugal 14 th- 17 th June 2015
- 8. Cadherin mediated adherens junctions in early mesodermal progenitors involved in cardiac specification. Maltabe A. Violet, Melidoni Anna, Kouklis Panos. *Poster presentation*/ 65th Congress of the Hellenic of Society Biochemistry and Molecular Biology (HSBMB), 28th -30th November 2014, Thessaloniki, Greece

- 9. IKKα promotes stem cell differentiation to endothelial cells. Violet Maltabe, Elena Bakavou, Georgios Markopoulos, Eugenia Roupakia, Kenneth B. Marcu, Evangelos Kolettas and Panagiotis Kouklis. *Poster presentation*/ 65th Congress of the Hellenic Society of Biochemistry and Molecular Biology (HSBMB), 28th -30th November 2014, Thessaloniki, Greece
- **10. Cadherin-dependent adhesion regulates cardiac progenitor cells differentiation. Maltabe A. Violet**, Melidoni Anna, Kouklis Panos. *Poster presentation*/36th Annual Conference, Hellenic Society for Biological Sciences, May 8-10, Ioannina 2014, Greece
- **11. Endothelium positively regulates cardiac progenitor cells in differentiating ESCs. Maltabe A. Violet**, Melidoni Anna, Kouklis Panos. *Poster presentation/* 64th Congress of the Hellenic Society of Biochemistry and Molecular Biology (HSBMB) 6th-8th December 2013, Athens, Greece
- **12.** Endothelial formation during ES differentiation in two-dimensional cell culture. Violet A. Maltabe, Anna N. Melidoni, Ioannis A. Lazaridis, Spyros D. Georgatos, Panagiotis D. Kouklis. *Poster presentation*/ 5th International Biotechnology Forum 8th-9th May 2009, Athens, Greece