

CURRICULUM VITAE

Dr. Marianna Prokopi-Demetriades

B.Sc., M.Sc. by Research, M.Sc., Ph.D.

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EDUCATION

- Ph.D. Cardiovascular & Stem Cell Research, 2011**
Department of Medicine, Cardiovascular Division, King's College Hospital, King's College London, University of London, London, UK
Research Advisor: Prof Manuel Mayr & Prof Qingbo Xu
Thesis Title: "Redefining endothelial progenitors using a proteomics approach"
- M.Sc. Medical Microbiology, 2007**
London School of Hygiene and Tropical Medicine, University of London, London, UK
Research Advisor: Dr Graham Clarck
Thesis Title: "Development of a microsatellite-based genotyping method for *Trichomonas vaginalis*"
- M.Sc. Biochemistry by Research, 2006**
University of Kent, Canterbury, UK
Research Advisor: Dr. Mick Tuite
Thesis Title: "Analysis of yeast sal3 (sup35) mutants defective in translation termination"
- B.Sc. Molecular and Cellular Biology, 2005**
University of Kent, Canterbury, UK
- Apolytirion Arsakeio-Tositseio School, 1999**
Filekpaideytiki Etairia, Private School, Ekali, Athens, Greece

PROFESSIONAL APPOINTMENTS

Head of Research & Innovation

German Oncology Center,

Department of Research and Innovation, Limassol, Cyprus

12/2018-present

Senior Research Scientist**10/2018-present**

Biomechanics and Living Systems Analysis (BioLISYS) Laboratory, Dept. of Mechanical Engineering and Materials Science and Engineering, Research advisor: Prof. Andreas Anayiotos
Cyprus University of Technology, Limassol, Cyprus,

Co-founder-Director**10/2018-present**

RSL Revolutionary Labs Ltd, Limassol, Cyprus

New venture specialized in cancer wound healing applications, cosmetics and pharmaceuticals.

Post-doctoral fellow**07/2016-09/2018**

BIOLISYS Laboratory, Dept. of Mechanical Engineering and Materials Science and Engineering,
 Research advisor: Prof Andreas Anayiotos

Cyprus University of Technology, Limassol, Cyprus

Director**10/2017**

Promed Bioscience Ltd, Limassol, Cyprus.

A biotech company developing collagen-based biomaterials for a wide range of research, clinical and cosmetic applications.

Co-founder-Director**11/2016**

Theramir Ltd, Limassol, Cyprus.

New venture with expertise in discovering; developing; and commercializing novel targeted therapeutics.

Visiting fellow**12/2013-06/2016**

Cyprus University of Technology, Limassol, Cyprus, BIOLISYS Laboratory,
 Dept. of Mechanical Engineering and Materials Science and Engineering

Research advisor: Prof Andreas Anayiotos

Research Objective: "Pre-clinical drug development of TR4 for the treatment of human carcinomas".

Grant awarded by Eureka's Eurostars Program in collaboration with Trojantec Ltd (Cyprus/UK), Photobiotics Ltd (UK) and Cyprus University of Technology (Cyprus).

Senior Scientist**09/2014-06/2016**

Trojantec Ltd, Bank of Cyprus Oncology Center, Nicosia, Cyprus

Research Objective: "Pre-clinical drug development of TR4 for the treatment of human carcinomas".

Post-doctoral Research Fellow**03/2012-08/2014**

Trojantec Ltd, Bank of Cyprus Oncology Center, Nicosia, Cyprus

Research Objective: "Development of anti-cancer therapeutics using mesenchymal stem cell microparticles loaded with miRNAs"

Analyst/Quality Control**04/2011-01/2012**Microbiology Department,
Remedica Pharmaceuticals Ltd, Limassol, Cyprus**Teaching Experience**

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| “Professional Traineeship IV” Clinical Training XII (ER, Toxicology, Oncology and Palliative Care), Course Section: Oncology and Palliative Care School of Medicine, European University of Cyprus | 01/2019-05/2019 |
| “Biology/Biochemistry I” , Cyprus University of Technology Department of Nursing, 1 st Undergraduate | 12/2012-05/2014 |
| “Basic Biological Principles”, “Biochemistry” , King’s College London Scientific Demonstrator, Cardiovascular Division | Summer 2008-9 |

Honors and Awards

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| “PhD Studentship” , King’s College London JRC King’s College/NHS Trust King’s College Hospital, London, UK, (£74,000) | 2007-2010 |
| “Peter Baker Award” , King’s College London Award-Travel Fellowship for adapting in new technologies, Dept. of Physiology, King’s College London, London, UK and Hannover Medical School, Hannover, Germany, (£1,500) | 10/2009 |
| “Graduate of the Year” , King’s College London Student Prize, Graduate Showcase Event, (£1,000) | 07/2009 |
| “Poster Award” , 22nd London Vascular Biology Forum, London, UK | 12/2008 |
| “Poster Award” , 4th Summer School of EVGN, Krakow, Poland | 09/2008 |

Patents

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| “MicroRNA-based therapy targeted against LCP-1 positive cancers” Pub. No. EP18020374.7 Inventor: Prokopi M. | 08/2018-pending |
| “Delivery of miRNA using mesenchymal stem cell microparticles” Pub. No. WO/2016/166600, International Patent Application No.: PCT/IB2016/000563 Inventors: Epenetos A.A and Prokopi M. | 10/2016-pending |

Funding Sources/Grants Awarded

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| <p>Cyprus Research Promotion Foundation (DIDAKTOR) Cyprus University of Technology (Cyprus), TheramiR Ltd (Cyprus), NTUA (Greece)</p> | <p>Starting 03/2019</p> |
| <p>Cyprus Research Promotion Foundation (INFRASTRUCTURE) University of Cyprus (Cyprus), Cyprus University of Technology (Cyprus), European University (Cyprus), TheramiR Ltd (Cyprus),</p> | <p>Started 12/2018</p> |
| <p>Cyprus Research Promotion Foundation (ΕΡΕΥΝΑ ΣΤΙΣ ΕΠΙΧΕΙΡΗΣΕΙΣ) Meydan Ltd, Cyprus University of Technology (Cyprus)</p> | <p>Started 12/2018</p> |
| <p>Eureka/ Eurostars Program (E! 11089 AVVALACT) Cyprus University of Technology (Cyprus), AVVA Pharmaceuticals Ltd (Cyprus) and ProtATOnce Ltd (Greece)</p> | <p>06/2017-05/2020</p> |
| <p>Eureka/ Eurostars Program (E! 8520-TROJANDRUG) Trojantec Ltd (Cyprus/UK), Photobiotics Ltd (UK) and Cyprus University of Technology (Cyprus)</p> | <p>12/2013-02/2016</p> |
| <p>Cyprus Research Promotion Foundation (ΕΠΙΧ/ΠΡΟΙΟΝ/0311/28) Trojantec Ltd (Cyprus/UK) and Bank of Cyprus Oncology Center</p> | <p>08/2012-07-2014</p> |
| <p>PhD Scholarship, JRC King's College London / NHS Trust King's College Hospital London, UK</p> | <p>10/2007-09/2010</p> |

Publications

1. **Prokopi M**, Pitsillides C, Deonarain M, Stylianou S, Kapnisis K, Filipovic A, Colucci S, Kousparos G, Constantinou T, Chen C, Kostoglou K, Anayiotos A, Kousparou C, Epenetos A. Nuclear inhibition of the NOTCH transcription factor complex by a novel hybrid protein leads to effective in vivo tumour therapy. *In preparation*
2. Koutsoulidou A, Photiades M, Kyriakides TC, Georgiou K, **Prokopi M**, Kapnisis K, Lusakowska A, Nearchou M, Christou Y, Papadimas GK, Anayiotos A, Kyriakou K, Kararizou E, Zamba Papanicolaou E, Phylactou LA. Identification of exosomal muscle-specific miRNAs in serum of myotonic dystrophy patients relating to muscle disease progress. *Hum Mol Genet.* 1;26(17):3285-3302. 2017 Sep.
3. Epenetos A., **Prokopi M.**, Pitsillides C., Kousparou C., Filipovic A., Anayiotos A., Kapnisis K., Deonarain M. In vivo monitoring of the TR4 anti-Notch fusion protein: an imaging approach. *Journal of Clinical Oncology* Vol 34 (No 15): suppl e23186 · May 2016, (*Supplement*)
4. **Prokopi M.**, Filipovic A., Pitsillides C., Kapnisis K., Anayiotos A., Kousparou C., Epenetos A. A. MiRNA-loaded exosome-like microparticles as targeted cancer therapy. *Journal of Clinical Oncology* Vol 34 (No 15): suppl e14069 · May 2016, (*Supplement*)
5. Kapnisis KK, Pitsillides CM, **Prokopi MS**, Lapathitis G, Karaiskos C, Eleftheriou PC, Brott BC,

- Anderson PG, Lemons JE, Anayiotos AS. In vivo monitoring of the inflammatory response in a stented mouse aorta model. *J Biomed Mater Res Part A*: 104A: 225–236, 2016.
6. **Prokopi M.**, Kousparou C. A., and Epenetos A. A. The secret role of microRNAs in cancer stem cell development and potential therapy: a Notch-pathway approach. *Frontiers Oncology*, 2015.
 7. **Prokopi M.**, Epenetos A, Anayiotos A, Pitsillides C, Kapnisis K, Kousparou C. Therapeutic miRNAs targeted selectively to tumors by mesenchymal stem cell derived microparticles AACR; *Cancer Res* 2014;74(19 Suppl), (*Supplement*)
 8. Willeit P., Zampetaki A., Dudek K., Kaudewitz D., King A., Kirkby N.S., Crosby-Nwaobi R., **Prokopi M.**, Drozdov I., Langley S.R., Sivaprasad S., Markus H.S., Mitchell J.A., Warner T.D., Kiechl S., Mayr M. Circulating microRNAs as novel biomarkers for platelet activation. *Circulation Research*, 2013.
 9. Zampetaki A., Willeit P., Tilling L., Drozdov I., **Prokopi M.**, Renard J.M., Mayr A., Weger S., Schett G., Shah A., Boulanger C.M., Willeit J., Chowienczyk P.J., Kiechl S., Mayr M. Prospective study on circulating MicroRNAs and risk of myocardial infarction. *Journal of the American College of Cardiology*, 2012.
 10. **Prokopi M.**, Chatzitheodorou T., Ackers J.P., Clark C.G. A preliminary investigation of microsatellite - based genotyping in *Trichomonas vaginalis*. *Transactions of the Royal Society of Tropical Medicine and Hygiene*, 2011.
 11. **Prokopi M.** and Mayr M. Proteomics - A Reality Check for Putative Stem Cells. *Circulation Research*, 2011.
 12. Urbich C., De Souza A., Rossig L., Yin X., Xing C., **Prokopi M.**, Xu Q., Dimmeler S., Mayr M. Proteomic characterization of human early -proangiogenic cells. *Journal of Molecular and Cellular Cardiology*, 2010.
 13. Zampetaki A., Kiechl S., Drozdov I., Willeit P., Mayr U., **Prokopi M.**, Mayr A., Weger S., Oberhollenzer F., Bonora E., Shah A., Willeit J., Mayr M. Plasma MicroRNA Profiling Reveals Loss of Endothelial MiR-126 and Other MicroRNAs in Type II Diabetes. *Circulation Research*, 2010.
 14. Simper D., Mayr U., Urbich C., Zampetaki A., **Prokopi M.**, Didangelos A., Saje A., Mueller M., Benbow U., Newby A.C., Apweiler R., Rahman S., Dimmeler S., Xu Q., Mayr M. Comparative proteomics profiling reveals role of smooth muscle progenitors in extracellular matrix production. *Arteriosclerosis Thrombosis and Vascular Biology*, 2010.
 15. **Prokopi M.**, Pula G., Mayr U., Devue C., Gallagher J., Xiao Q., Boulanger C.M., Westwood N., Urbich C., Willeit J., Steiner M., Breuss J., Xu Q., Kiechl S., Mayr M. Proteomic analysis reveals presence of platelet microparticles in endothelial progenitor cell cultures. *Blood*, 2009.
 16. Yoder M.C. Platelet MPs obscure some EPC definitions (Comment on: *Blood*. 2009), *Blood*, 2009.
 17. Pula G., Mayr U., Evans C., **Prokopi M.**, Vara D.S., Yin X., Astroulakis Z., Xiao Q., Hill J., Xu Q., Mayr M. Proteomics identifies thymidine phosphorylase as a key regulator of the angiogenic potential of colony-forming units and endothelial progenitor cell cultures. *Circulation Research*, 2009.
 18. Pula G., Perera S., Sidibe A., **Prokopi M.**, Mayr M. Proteomic analysis of secretory proteins and vesicles in vascular research. *Proteomics Clinical Applications*, 2008.

Conference Papers

1. **Marianna Prokopi**, Costas Pitsillides, Mahendra Deonarain, Konstantinos Kapnisis, Spyros Stylianou, George Kousparos, Christina Kousparou, Andreas Anayiotos, Agamemnon Epenetos. Monitoring Tumor Response to Therapeutic TR4 Fusion Protein via In Vivo Imaging. SB3C2016,

- Summer Biomechanics, Bioengineering and Biotransport Conference**, June 29 –July 2, 2016, National Harbor, MD, USA.
2. **Marianna Prokopi**, Aleksandra Filipovic, Costas Pitsillides, Konstantinos Kapnisis, Andreas Anayiotos, Christina Kousparou and Agamemnon A. Epenetos. miRNA-loaded exosome-like microparticles as targeted cancer therapy. **ASCO Annual Meeting**. June 3-7, 2016, Chicago, IL, USA.
 3. Agamemnon A. Epenetos, **Marianna Prokopi**, Costas Pitsillides, Christina Kousparou, Aleksandra Filipovic, Andreas Anayiotos, Konstantinos Kapnisis, Mahendra Deonarain. In vivo monitoring of the TR4 anti-Notch fusion protein: an imaging approach. **ASCO Annual Meeting**. June 3-7, 2016, Chicago, IL, USA.
 4. K. Kapnisis, C. Pitsillides, **M. Prokopi**, G. Constantinides, Daniel Cristea, Daniel Munteanu, B. Brott, P. Anderson, J. Lemons and A. Anayiotos. Metallic Stents: Biomechanical Analysis and In Vivo Investigation of the Vessel Inflammatory Response. **XIV Mediterranean Conference on Medical and Biological Engineering and Computing**, Paphos, Cyprus, 31/3-2/4/2016. Volume 57 of the series IFMBE Proceedings pp 1075-1078.
 5. **Marianna Prokopi**, Christina A. Kousparou, Konstantinos K. Kapnisis, Andreas S. Anayiotos, Costas Pitsillides, Agamemnon A. Epenetos. Therapeutic miRNAs delivered systemically using normal stem cell derived microparticles. **ASCO Annual Meeting** May 29- June 2, 2015 Chicago, Illinois, USA.
 6. **Marianna Prokopi**, Costas Pitsillides, Konstantinos K. Kapnisis, Andreas S. Anayiotos, Christina A. Kousparou and Agamemnon A. Epenetos. Creation of miRNA-loaded, mesenchymal stem cell derived microparticles as targeted cancer therapy. **Keystone Symposia, Transcriptional and Epigenetic Influences on Stem Cell States**. March 23-28, 2015, Steamboat Springs, Colorado USA.
 7. K. Kapnisis, C. Pitsillides, **M. Prokopi**, G. Constantinides, D. Cristea, D. Munteanu, A. Anayiotos. Coronary Stents Crack and Corrode in vivo: A Structural Integrity and Tissue Inflammation Analysis. **9th International Conference on Materials Science & Engineering – BRAMAT**. Brasov, Romania, March 5-7, 2015.
 8. K. K. Kapnisis, C. M. Pitsillides, **M. S. Prokopi**, D. Kokkinidou, B. C. Brott, P. G. Anderson, J. E. Lemons and A. S. Anayiotos. Monitoring the Inflammatory Response in Stented Mice Aortas Using Novel Fluorescence-Based in vivo Imaging Techniques. **7th World Congress of Biomechanics**, Boston, MA, July 6-11, 2014.
 9. **Marianna Prokopi**, Costas Pitsillides, Konstantinos K. Kapnisis, Andreas S. Anayiotos, Agamemnon A. Epenetos and Christina A. Kousparou. Cancer Stem Cells, MicroRNAs & Therapeutic strategies including Stem Cell Microparticles. The **31st International Conference on the Advances in the Applications of Monoclonal Antibodies in Clinical Oncology and Symposium on Cancer Stem Cells**, Mykonos, Greece, June 23-25 2014.
 10. **Marianna Prokopi**, Costas Pitsillides, Konstantinos K. Kapnisis, Andreas S. Anayiotos, Agamemnon A. Epenetos and Christina A. Kousparou. Therapeutic miRNAs targeted selectively to tumors by mesenchymal stem cell derived microparticles. **AACR Annual Meeting**, San Diego, CA, April 5-9 2014.
 11. Costas Pitsillides, Konstantinos Kapnisis, Andreas Anayiotos, **Marianna Prokopi** and Christina Kousparou. Monitoring circulating cancer cells by multichannel in vivo flow cytometry. **IEEE 12th International Conference on BiInformatics & BioEngineering**. Larnaca, Cyprus, Nov. 11-13, 2012.

Press Releases

1. British Heart Foundation: Better Stem Cell Preparations Needed Before Clinical Trials
<http://www.bhf.org.uk/default.aspx?page=10232>
2. Just A Theory: Impostors Masquerading As Stem Cells
<http://justathetheory.co.uk/2009/07/18/impostors-masquerading-as-stem-cells/>
3. Study Results from M. Prokopi et al. in the Area of Stem Cell Research
<http://www.newsrx.com/newsletters/Stem-Cell-Week/2009-08-31>
4. Medical News Today: New Blood Markers For Diabetes May Help To Identify Patients At Risk
<http://www.medicalnewstoday.com/articles/201560.php>
5. 10 Years Earlier Predicted The New Blood Tests For Diabetes
<http://www.2n2u.com/2010/09/10-years-earlier-predicted-the-new-blood-tests-for-diabetes/>