Curriculum Vitae et Studiorum
Luisa Campagnolo, PhD

1) Compendium: H-Index: 27; Times cited: 2416

2)Qualifications:

1995: B.Sc. (Biology) – University of Rome "La Sapienza"**;** 1999: Ph.D. (Medical Embryology), University of Rome "Tor Vergata"

3)Current Positions:

2021-: University of Rome "Tor Vergata", Rome, IT Research Scientist, Associate Professor of Histology and Embryology, Department of Biomedicine and Prevention, School of Medicine.

4) Past Positions:

2002-: University of Rome "Tor Vergata", Rome, IT Research Scientist, Assistant Professor of Histology and Embryology, School of Medicine.

2000-02: Research Fellow in the Dept. of Vascular Biology; 2002-03: Research Fellow in the Dept. of Cell Biology. The Scripps Research Institute, La Jolla, CA, USA

1995-1999: PhD Student in Medical Embryology. University of Rome "Tor Vergata", Rome, ITALY

5) Honors/Achievements:

2001: "Servier New Investigator Award" Second Conference on Arteriosclerosis, Thrombosis and Vascular Biology (Washington DC)

2007-: Weill Cornell Medical College, New York, USA Visiting Assistant Professor, Department of Cell and Developmental Biology

2016-2019: University of Pretoria, Research Associate, Department of Chemical Engineering

2017: National Scientific Qualification for the position of Associate Professor

2018: National Scientific Qualification for the position of Full Professor

6) Editorial Activity:

Member of the International Advisory Board of the Journals: Particle and Fibre Toxicology (Associate Editor); International Journal of Stem Cell Research and Transplantation; Life (Associate Editor). Reviewer activity for: Exp Cell Res; Reprod Toxicol; Hum Reprod Update; Mol Hum Reprod; Hum Reprod; Placenta; Nanotoxicology; Nanoscale. Faseb J; Reprod Sci; Cell Death Dis.

7) Personal statement: Dr. Campagnolo has a broad background in histology, reproductive and developmental biology and in vascular and stem cell biology. Research in her lab has been supported by grants from the European Community (three projects on engineered nanoparticles), the Italian Ministry of Health, the March of Dimes and the Grant for Fertility Innovation 2017.

Studies in Prof. Campagnolo's lab are focused on the identification of molecular pathways regulating implantation and placental development in physiological and pathological conditions.

Over the last 10 years Prof. Campagnolo has also developed a strong research focus on toxicological aspects of engineered nanomaterials (ENM) and mammalian organ susceptibility, including the placenta and foetus. Dr Campagnolo has established strong collaborations with national and international research groups and has published several studies in collaboration with international partners.

Four main research lines are currently followed in the laboratory: 1. Examine the role of Egfl7 during implantation and placental development. This project is partly performed in collaboration with Dr Stuhlmann at the Weill Cornell Medical College in New York. 2. Investigate the role of thyroid hormone in mammalian embryo implantation. 3. Study the effect of maternal exposure to ENM on placental and foetal development, and on the second generation, and develop in vitro tests to evaluate transplacental passage of ENM. 4. Investigate the role of EGFL7 in endometrial-blastocyst crosstalk.

Selected Publications (11 out of 69):

1: Lacconi V, Massimiani M, Paglione L, Messina A, Battistini B, De Filippis P, Magrini A, Pietroiusti A, Campagnolo L. An improved in vitro model simulating the feto-maternal interface to study developmental effects of potentially toxic compounds: The example of titanium dioxide nanoparticles. Toxicol Appl Pharmacol. 2022 Jul 1;446:116056. doi: 10.1016/j.taap.2022.116056. Epub 2022 May 9. PMID: 35537546.

2: Massimiani M, Lacko LA, Burke Swanson CS, Salvi S, Argueta LB, Moresi S, Ferrazzani S, Gelber SE, Baergen RN, Toschi N, Campagnolo L, Stuhlmann H. Increased circulating levels of Epidermal Growth Factor-like Domain 7 in pregnant women affected by preeclampsia. Transl Res. 2019 May;207:19-29. doi: 10.1016/j.trsl.2018.12.004. Epub 2018 Dec 25. PMID: 30620888; PMCID: PMC6486846.

3: Pietroiusti A, Vecchione L, Malvindi MA, Aru C, Massimiani M, Camaioni A, Magrini A, Bernardini R, Sabella S, Pompa PP, Campagnolo L. Relevance to investigate different stages of pregnancy to highlight toxic effects of nanoparticles: The example of silica. Toxicol Appl Pharmacol. 2018 Mar 1;342:60-68. doi: 10.1016/j.taap.2018.01.026. Epub 2018 Jan 31. PMID: 29407774.

4: Piccirilli D, Baldini E, Massimiani M, Camaioni A, Salustri A, Bernardini R, Centanni M, Ulisse S, Moretti C, Campagnolo L. Thyroid hormone regulates protease expression and activation of Notch signaling in implantation and embryo development. J Endocrinol. 2018 Jan;236(1):1-12. doi: 10.1530/JOE-17-0436. Epub 2017 Oct 9. PMID: 28993437.

5: Campagnolo L, Massimiani M, Vecchione L, Piccirilli D, Toschi N, Magrini A, Bonanno E, Scimeca M, Castagnozzi L, Buonanno G, Stabile L, Cubadda F, Aureli F, Fokkens PH, Kreyling WG, Cassee FR, Pietroiusti A. Silver nanoparticles inhaled during pregnancy reach and affect the placenta and the foetus. Nanotoxicology. 2017 Jun;11(5):687-698. doi: 10.1080/17435390.2017.1343875. Epub 2017 Jul 7. PMID: 28618895.

6: Hougaard KS, Campagnolo L, Chavatte-Palmer P, Tarrade A, Rousseau-Ralliard D, Valentino S, Park MV, de Jong WH, Wolterink G, Piersma AH, Ross BL, Hutchison GR, Hansen JS, Vogel U, Jackson P, Slama R, Pietroiusti A, Cassee FR. A perspective on the developmental toxicity of inhaled nanoparticles. Reprod Toxicol. 2015 Aug 15;56:118-40. doi: 10.1016/j.reprotox.2015.05.015. Epub 2015 Jun 4. PMID: 26050605.

7: Colicchia M, Campagnolo L, Baldini E, Ulisse S, Valensise H, Moretti C. Molecular basis of thyrotropin and thyroid hormone action during implantation and early development. Hum Reprod Update. 2014 Nov-Dec;20(6):884-904. doi: 10.1093/humupd/dmu028. Epub 2014 Jun 18. PMID: 24943836.

8: Lacko LA, Massimiani M, Sones JL, Hurtado R, Salvi S, Ferrazzani S, Davisson RL, Campagnolo L, Stuhlmann H. Novel expression of EGFL7 in placental trophoblast and endothelial cells and its implication in preeclampsia. Mech Dev. 2014 Aug;133:163-76. doi: 10.1016/j.mod.2014.04.001. Epub 2014 Apr 19. PMID: 24751645; PMCID: PMC4177412.

9: Campagnolo L, Massimiani M, Palmieri G, Bernardini R, Sacchetti C, Bergamaschi A, Vecchione L, Magrini A, Bottini M, Pietroiusti A. Biodistribution and toxicity of pegylated single wall carbon nanotubes in pregnant mice. Part Fibre Toxicol. 2013 Jun 6;10:21. doi: 10.1186/1743-8977-10-21. PMID: 23742083; PMCID: PMC3679973.

10: Pietroiusti A, Campagnolo L, Fadeel B. Interactions of engineered nanoparticles with organs protected by internal biological barriers. Small. 2013 May 27;9(9-10):1557-72. doi: 10.1002/smll.201201463. Epub 2012 Oct 23. PMID: 23097249.

11: Pietroiusti A, Massimiani M, Fenoglio I, Colonna M, Valentini F, Palleschi G, Camaioni A, Magrini A, Siracusa G, Bergamaschi A, Sgambato A, Campagnolo L. Low doses of pristine and oxidized single-wall carbon nanotubes affect mammalian embryonic development. ACS Nano. 2011 Jun 28;5(6):4624-33. doi: 10.1021/nn200372g. Epub 2011 Jun 3. PMID: 21615177.