



Luana Ricci married **Paulesu** was born in Siena (Italy) May 23, 1950 and received her degree in Biological Science “cum laude” with honours, in 1973. She has spent her entire academic career at the University of Siena. Her qualifications include: borsista ministeriale from Nov. 1973 to Dec. 1975; contrattista from Jan. 1976 to Oct. 1981; research investigator Nov. 1981 to Aug. 1987; Associate Professor of General Physiology from Sept. 1987 to Sept. 2001; Full Professor from Oct. 2001 up to now.

She has conducted her research activity in foreign universities including the University of Texas, Department of Microbiology, Galveston, Texas, USA; University of Cambridge (UK), Department of Pathology; University of San Paolo (Brazil), Institute of Histology; University of Missouri, Department of Molecular Biology and Biochemistry, Kansas City, Missouri, USA.

She is the Editor of the book “Signal molecules in animal and human gestation” Research Signpost, Trivandrum, Kerala, India.

She has attended numerous congresses, also as an invited speaker.

She is the Director of the Center “Biology of Reproduction” at the University of Siena.

She is member of the following International Scientific Societies:

Society for Biology of Reproduction.

International Federation Placenta Association.

European Group of Placenta.

Society for Immunology of Reproduction.

Invited speaker and/or chairman at scientific meetings including:

- 7° Meeting International Federation of Placenta Associations 2001, Sorrento (NA) 19-23/09/2001.
- Workshop on Inhibins, Activins and Follistatins, Siena, July 3-4, 2003;
- I Symposium on Materno-fetal Interaction-Placenta: Clinical & and Research, Embu das artes, San Paolo, Brasil, Dec. 2-5, 2003;
- Convegno su “La Placenta, Biologia e Clinica”, Roma, Oct. 1-4, 2004;
- I workshop on Materno-Fetal interaction, Universidade Federal de Sao Paulo, Escola Paulista de Medicina, San Paolo, Brasil, Nov. 3-4, 2005;
- Congresso Nazionale Società Italiana di Fisiologia, Palermo, Sept. 2005;
- 81° Congresso SIGO, Ancona, Oct. 1-4, 2005;
- 1st SGI International Summit Preterm Birth, Siena, Nov. 10-12 2005;
- II Simposio Latinoamericano, Interaction Materno-Fetal & Placenta, Santiago, Chile, Nov. 6-9, 2005;

- 82° Congresso SIGO Roma, Oct. 1-4, 2006;
- I Workshop in Biology of Reproduction, Uberlandia, Brasile, Feb. 12-14, 2007;
- III Ciclo di Seminari sull'Interazione Materno-fetale, dalla ricerca di base alla clinica, San Paolo, Brasile, Oct. 29-31, 2007;
- III Latin-American Symposium on Maternal-fetal interaction and placenta: Basic and Clinica Research, Los Cocos, Cordoba, Argentina, Nov. 4-7, 2007;
- 6° World Congress of Herpetology, Manaus, Amazonas, Brasil, Aug. 17-22, 2008;
- IV seminario sull'interazione materno-fetale, Campinas (Brasile) Oct. 27-28, 2009;
- International Symposium on Reproductive Immunology, Rio de Janeiro (BR) Oct. 29-31, 2009
- UE Meetings: Integrate Program ReProTect:
 - Copenhagen, Feb. 2005;
 - Uppsala, May 2005;
 - Orvieto, Jun 2006;
 - Ispra, Sept 2006;
 - Ispra, Dec 2006;
 - Tubingen, Jun 2007;
 - Ispra, Nov 2007;
 - Uppsala, Jun 2008;
 - Copenhagen, Feb 2009.
- World Congress of Endocrinology, Xiamen (China), Jan. 25-27 2011

Reviewer for the following Scientific Journals:

- Biology of Reproduction
- Reproductive Biology and Endocrinology
- Placenta
- Bioessay
- Comparative Biochemistry and Physiology
- Mol. Human Reprod.
- Clinical And Experimental Immunology
- Human Reproduction
- Human Reproduction Update
- Reproduction
- Pediatric Research
- AM J Reprod Immunology
- Thrombosis and Haemostasis

Coordinator/partner of the following Grants:

- PRIN, Cofin, 1996, 1998, 1999, 2000, 2001, 2002, 2003, 2008
- Foundation MPS Siena 2009, 2010
- Responsible of a Research Unit of P.I. LSHB-CT-2004-503257 REPROTECT (VI Framework Programme C.E.), 2007-2009
- Regione Toscana, contributi alle Università - PPRA 2004/2006- Azione D21.
- Research grant (PAR project) (Università di Siena) (2005-2007)
- Research grant (Quota Servizi) (Università di Siena) (2001; 2002; 2003; 2004; 2005; 2006)
- Partner di un Progetto Strategico per la Ricerca Sanitaria (coordinatore prof.ssa T. Todros, Univ. Torino) 2007.

Main research topics:

- Placenta physiology;
- Molecules determining uterine receptivity and embryo acceptance;
- Hormones and cytokines in human and animal gestation: a comparative approach;
- Endogenous and environmental factors influencing reproduction.

Main Publications (2005-2011):

1. Jantra S, **Paulesu** L (corresponding author), Lo Valvo M, Lillo F, Ietta F, Avanzati AM, Romagnoli R, Bechi N, Brizzi R. Cytokine components and mucosal immunity in the oviduct of *Xenopus laevis* (Amphibia, pipidae). Article in press in *General and Comparative Endocrinology*, 2011.
2. de Oliveira Gomes A, de Oliveira Silva DA, Silva NM, de Freitas Barbosa B, Franco PS, Angeloni MB, Fermino ML, Roque-Barreira MC, Bechi N, **Paulesu** LR, Dos Santos MC, Mineo JR, Ferro EA. Effect of Macrophage Migration Inhibitory Factor (MIF) in Human Placental Explants Infected with *Toxoplasma gondii* Depends on Gestational Age. *Am J Pathol*. 2011; 178 (6): 2792-801.
3. Pellegrini A, Bigliardi E, Bechi N, **Paulesu** L (corresponding author), Lehane MJ, Avanzati AM. Fine structure of the female reproductive system in a viviparous insect, *Glossina morsitans morsitans* (Diptera, Glossinidae). *Tissue Cell*. 2010; 43 (1):1-7.
4. **Paulesu** L, Bhattacharjee J, Bechi N, Romagnoli R, Jantra S, Ietta F. Pro-Inflammatory Cytokines in Animal and Human Gestation. *Curr Pharm Des*. 2010;16 (32):3601-15. Review.
5. Marzioni D, Todros T, Cardaropoli S, Rolfo A, Lorenzi T, Ciarmela P, Romagnoli R, **Paulesu** L, Castellucci M. Activating protein-1 family of transcription factors in the human placenta complicated by preeclampsia with and without fetal growth restriction. *Placenta*. 2010; 31(10):919-27.
6. Bhattacharjee J, Ietta F, Bechi N, Romagnoli R, **Paulesu** L. Localisation of ABCA1 in first trimester and term placental tissues--a reply. *Placenta*. 2010; 31(10):941.
7. Faria MR, Hoshida MS, Ferro EA, Ietta F, **Paulesu** L, Bevilacqua E. Spatiotemporal patterns of macrophage migration inhibitory factor (Mif) expression in the mouse placenta. *Reprod Biol Endocrinol*. 2010; 4;8:95.
8. Bhattacharjee J, Ietta F, Giacomello E, Bechi N, Romagnoli R, Fava A, **Paulesu** L. Expression and localization of ATP binding cassette transporter A1 (ABCA1) in first trimester and term human placenta. *Placenta*. 2010; 31(5):423-30.
9. Mørck TJ, Sorda G, Bechi N, Rasmussen BS, Nielsen JB, Ietta F, Rytting E, Mathiesen L, **Paulesu** L, Knudsen LE. Placental transport and in vitro effects of Bisphenol A. *Reprod Toxicol*. 2010; 30(1):131-7.
10. Bechi N, Ietta F, Romagnoli R, Jantra S, Cencini M, Galassi G, Serchi T, Corsi I, Focardi S, **Paulesu** L. Environmental levels of para-nonylphenol are able to affect cytokine secretion in human placenta. *Environ Health Perspect*. 2010;118(3):427-31.
11. Ietta F, Bechi N, Romagnoli R, Bhattacharjee J, Realacci M, Di Vito M, Ferretti C, **Paulesu** L. 17 β -Estradiol modulates the macrophage migration inhibitory factor secretory pathway by regulating ABCA1 expression in human first-trimester placenta. *Am J Physiol Endocrinol Metab*. 2010; 298 (3):E411-8.

12. **Paulesu** L, Jantra S, Ietta F, Brizzi R, Bigliardi E. Interleukin-1 in reproductive strategies. *Evol Dev.* 2008;10(6):778-88. Review.
13. Ferro EA, Mineo JR, Ietta F, Bechi N, Romagnoli R, Silva DA, Sorda G, Bevilacqua E, **Paulesu** LR. Macrophage migration inhibitory factor is up-regulated in human first-trimester placenta stimulated by soluble antigen of *Toxoplasma gondii*, resulting in increased monocyte adhesion on villous explants. *Am J Pathol.* 2008;172(1):50-8.
14. Bremer S, Brittebo E, Dencker L, Knudsen LE, Mathisien L, Olovsson M, Pazos P, Pellizzer C, **Paulesu** LR, Schaefer W, Schwarz M, Staud F, Stavreus-Evers A, Vähänkangas K. In vitro tests for detecting chemicals affecting the embryo implantation process. The report and recommendations of ECVAM workshop 62 – a strategic workshop of the EU ReProTect project. *Altern Lab Anim.* 2007;35(4):421-39.
15. Todros T, Marzioni D, Lorenzi T, Piccoli E, Capparuccia L, Perugini V, Cardaropoli S, Romagnoli R, Gesuita R, Rolfo A, **Paulesu** L, Castellucci M. Evidence for a role of TGF-beta1 in the expression and regulation of alpha-SMA in fetal growth restricted placentae. *Placenta.* 2007;28(11-12):1123-32.
16. Jantra S, Bigliardi E, Brizzi R, Ietta F, Bechi N, **Paulesu** L. Interleukin 1 in oviductal tissues of viviparous, oviparous, and ovuliparous species of amphibians. *Biol Reprod.* 2007;76(6):1009-15.. *Biol Reprod.*
17. Ietta F, Wu Y, Romagnoli R, Soleymanlou N, Orsini B, Zamudio S, **Paulesu** L, Caniggia I. Oxygen regulation of macrophage migration inhibitory factor in human placenta. *Am J Physiol Endocrinol Metab.* 2007 Jan;292(1):E272-80.
18. Bechi N, Ietta F, Romagnoli R, Focardi S, Corsi I, Buffi C, **Paulesu** L. Estrogen-like response to p-nonylphenol in human first trimester placenta and BeWo choriocarcinoma cells. *Toxicol Sci.* 2006;93(1):75-81.
19. Zicari A, Ticconi C, Ietta F, Belmonte A, Bechi N, Realacci M, Di Vito M, Arcuri F, Russo M, Piccione E, **Paulesu** L. Macrophage migration inhibitory factor-nitric oxide interaction in human fetal membranes at term pregnancy. *J Soc Gynecol Investig.* 2006;13(4):263-70.
20. **Paulesu** L, Ietta F, Petraglia F. Feto-maternal biology and ethics of human society. *Reprod Biol Endocrinol.* 2005;3:55.
21. **Paulesu** L, Bigliardi E, Paccagnini E, Ietta F, Cateni C, Guillaume CP, Heulin B. Cytokines in the oviparity/viviparity transition: evidence of the interleukin-1 system in a species with reproductive bimodality, the lizard *Lacerta vivipara*. *Evol Dev.* 2005;7(4):282-8.
22. Todros T, Bontempo S, Piccoli E, Ietta F, Romagnoli R, Biolcati M, Castellucci M, **Paulesu** L. Increased levels of macrophage migration inhibitory factor (MIF) in preeclampsia. *Eur J Obstet Gynecol Reprod Biol.* 2005;123(2):162-6.
23. Aloisi AM, Pari G, Ceccarelli I, Vecchi I, Ietta F, Lodi L, **Paulesu** L. Gender-related effects of chronic non-malignant pain and opioid therapy on plasma levels of macrophage migration inhibitory factor (MIF). *Pain.* 2005;115(1-2):142-51.

24. **Paulesu** L, Romagnoli R, Bigliardi E. Materno-fetal immunotolerance: is Interleukin-1 a fundamental mediator in placental viviparity? *Dev Comp Immunol.* 2005;29(5):409-15. Review.

25. **Paulesu** L, Cateni C, Romagnoli R, Ietta F, Dantzer V. Variation in macrophage-migration-inhibitory-factor immunoreactivity during porcine gestation. *Biol Reprod.* 2005;72(4):949-53.