

Diploma course in Manufacturing of Human Cell Based Products for Clinical Applications

*Organized by: **The international campus of Tehran University of Medical Sciences***

*Conducted by: **Brain and spinal injury research center affiliated to TUMS***

Invited Speaker

Dr Ornella Parolini

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Dr. Ornella Parolini is the Director of Centro di Ricerca E. Menni, located in Brescia, Italy.

She obtained her Degree in Biological Sciences in 1988, and went on to complete her PhD in 1994 in Cellular and Molecular Biotechnologies Applied to the Biomedical Area. Dr Parolini's career began in the field of primary immunodeficiencies when she worked as a researcher at the University of Brescia (1988-1990), followed by St. Jude Children's Research Hospital in Memphis, Tennessee, USA (1991-1994), where she quickly gained recognition for being part of the team that identified the gene responsible for X-linked agammaglobulinemia. From 1995 to 2002, Dr. Parolini worked at the University of Vienna, initially assuming a position as a visiting scientist, before being promoted to the position of Head of the Molecular Immunology Laboratory in 1998. After gaining 10 years of research experience internationally, Dr Parolini returned to Italy in 2002 to assume the role of Director at Centro di Ricerca E. Menni, Fondazione Poliambulanza-Istituto Ospedaliero. Here, she has conducted pioneeristic research into placenta-derived stem cells, a field which remains the focus of her research activities, and for which her laboratory is internationally recognized for its expertise. Dr Parolini has delivered **over 30 invited lectures**, is listed as an author in **over 80 peer-reviewed publications** and **several book chapters**, and has **3 patents** pending from her current research field. She is also a member of **10 Scientific Societies**, and the **first President of the International Placenta Stem Cell Society**.

Her publications in summary;

1. Silini, A., et al., Soluble factors of amnion-derived cells in treatment of inflammatory and fibrotic pathologies. *Curr Stem Cell Res Ther*, 2013. **8**(1): p. 6-14.
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3. Tsukada, S., et al., Deficient expression of a B cell cytoplasmic tyrosine kinase in human X-linked agammaglobulinemia. 1993. *J Immunol*, 2012. **188**(7): p. 2936-47.
4. Rossi, D., et al., Characterization of the conditioned medium from amniotic membrane cells: prostaglandins as key effectors of its immunomodulatory activity. *PLoS One*, 2012. **7**(10): p. e46956.
5. Ricci, E., et al., Anti-fibrotic effects of fresh and cryopreserved human amniotic membrane in a rat liver fibrosis model. *Cell Tissue Bank*, 2012.
6. Ressel, L., et al., Simultaneous histochemical and immunohistochemical staining as a simple tool to identify mast cells within CD117-positive cell populations. *Histopathology*, 2012. **60**(4): p. 655-7.
7. Magatti, M., et al., Amniotic membrane-derived cells inhibit proliferation of cancer cell lines by inducing cell cycle arrest. *J Cell Mol Med*, 2012. **16**(9): p. 2208-18.
8. Lehner, M., et al., Redirecting T cells to Ewing's sarcoma family of tumors by a chimeric NKG2D receptor expressed by lentiviral transduction or mRNA transfection. *PLoS One*, 2012. **7**(2): p. e31210.
9. Lange-Consiglio, A., et al., Characterization and potential applications of progenitor-like cells isolated from horse amniotic membrane. *J Tissue Eng Regen Med*, 2012. **6**(8): p. 622-35.
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14. Ackerman, W.E.t., et al., IFPA Meeting 2011 workshop report III: Placental immunology; epigenetic and microRNA-dependent gene regulation; comparative placentation; trophoblast differentiation; stem cells. *Placenta*, 2012. **33 Suppl**: p. S15-22.
15. Sant'Anna, L.B., et al., Amniotic membrane application reduces liver fibrosis in a bile duct ligation rat model. *Cell Transplant*, 2011. **20**(3): p. 441-53.
16. Parolini, O. and M. Caruso, Review: Preclinical studies on placenta-derived cells and amniotic membrane: an update. *Placenta*, 2011. **32 Suppl 2**: p. S186-95.
17. Parolini, O., et al., Meeting report of the first conference of the International Placenta Stem Cell Society (IPLASS). *Placenta*, 2011. **32 Suppl 4**: p. S285-90.
18. Parolini, O., In utero hematopoietic stem-cell transplantation--a match for mom. *N Engl J Med*, 2011. **364**(12): p. 1174-5.

19. Parolini, O., From fetal development and beyond: a continued role for placenta in sustaining life? *Placenta*, 2011. **32 Suppl 4**: p. S283-4.
20. Manuelpillai, U., et al., Amniotic membrane and amniotic cells: potential therapeutic tools to combat tissue inflammation and fibrosis? *Placenta*, 2011. **32 Suppl 4**: p. S320-5.
21. Kaneko, Y., et al., Human amniotic epithelial cells express melatonin receptor MT1, but not melatonin receptor MT2: a new perspective to neuroprotection. *J Pineal Res*, 2011. **50(3)**: p. 272-80.
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