

Curriculum Vitae - Marta Tiffany Lombardo

Summary

- 2020-2021 Postgraduate Research Fellow at National Research Council - Institute of Neuroscience (IN-CNR)
- 2019-2020 Postgraduate Research Fellow at Diabetes Research Institute (DRI)
- 2019 Master's degree in molecular and Cellular Medical Biotechnologies
- 2017 Bachelor's degree in medical and Pharmaceutical Biotechnologies

Work Experience

National Research Council - Institute of Neuroscience (IN-CNR)

Milan, Italy
October 2020 | September 2021

- Postgraduate Research Fellow involved in the H2020 project "PREMSTEM" whose aim is to validate umbilical cord-derived mesenchymal stem cells as a cell-therapy for premature born infants with neurological disorders.

Diabetes Research Institute (DRI)

Milan, Italy
November 2019 | October 2020

- *Postgraduate Research Fellow involved in projects concerning cellular therapy for diabetes*

Education and Training

Università Vita - Salute San Raffaele

Master Degree – Molecular and Cellular Medical Biotechnologies
107/110 - GPA:3.55

Milan, Italy
October 2017 | October 2019

- *Final Thesis (Diabetes Research Institute | Oct 2018 - Oct 2019): "The contribution of pancreatic mesenchymal stem cells and human islet microvascular endothelial cells to the differentiation of iPSC into pancreatic β cells"*

Università Vita - Salute San Raffaele

Bachelor Degree - Medical and Pharmaceutical Biotechnologies
91/110 - GPA:2.69

Milan, Italy
October 2013 | July 2017

- *Final Thesis: "Iron and glucose metabolism: pathophysiological and cellular analogies between neuronal toxicity and beta cells"*

Skills

IT Skills

- Microsoft Office
- FCS Express
- Prism
- Fiji-ImageJ

Languages

- Italian – Native
- English – Intermediate
- French – Waystage

Laboratory Skills

- **Cellular Biology**
 - Preparation and manipulation of human and mice primary cells
 - Manipulation of human induced pluripotent stem cells (hiPSC)
 - Stem cells differentiation into pancreatic insulin-producing cell
 - Co-culture of human and mice cells in transwell system

- **Molecular Biology**
 - Immunocytochemistry, fluorescence labeling, RNA extraction, retro-transcription, Real-Time PCR using Taqman probe
- **Imaging**
 - Fluorescence and confocal microscopy
- **Proteic assays**
 - ELISA for single dosage of soluble molecules
- **Flow cytometry**
 - Multiparametric immunofluorescence labeling, flow cytometry acquisitions (FACS Canto) and analysis (FCS Express)
- **Animal handling**
 - In vivo experiments (insulin-producing cells preparation and transplantation in animal model)
 - Manual dissection of mice brain pups

Soft Skills

- Predisposition to interpersonal relationships and team working
- Behavioral flexibility, stress management, resiliency
- Organizational ability, multi-tasking

Passions, hobbies and previous works

- Gardening, hiking, trekking, nature lover
- Sporty attitude: tennis, sailing, football, athletics
- PR, event planner and DJ: university parties, private parties, weddings
- Salesgirl, conference hostess

Publications and abstracts

- “Transcriptional dynamics of induced pluripotent stem cell-derived β cell differentiation revealed by single-cell RNA sequencing”. *Cytherapy*, April 2021, DOI: 10.1016/j.jcyt.2020.10.004
S. Pellegrini, R. Chimienti, G.M. Scotti, F. Giannese, D. Lazarevic, F. Manenti, G. Poggi, M.T. Lombardo, A. Cospito, L. Piemonti, V. Sordi.
- “Generation of β cells from iPSC of a MODY8 patient with a novel mutation in the carboxyl ester lipase (CEL) gene”. *JCEM*, April 2021, DOI: 10.1210/clinem/dgaa986
S. Pellegrini, A. Cospito, F. Manenti, G. Poggi, M.T. Lombardo, R. Nano, G.B. Pipitone, M. Ferrari, P. Carrera, V. Sordi, L. Piemonti.

Oral presentations

- 17th World Congress of the International Pancreas and Islet Transplant Association (IPITA), Lyon, Catholic University, July 2-5, 2019
“Generation of β cells from iPSC: the contribution of human pancreatic mesenchymal and human islet microvascular endothelial cells to the differentiation of iPSC into pancreatic β cells”.
M.T. Lombardo, S. Pellegrini, G. Poggi, A. Cospito, F. Manenti, C. Scielzo, L. Piemonti, V. Sordi

Posters

- Division of Immunology, Transplantation and Infectious Diseases (DITID) Retreat, Milano, IRCCS San Raffaele, January 20-21, 2020
“Generation of β cells from iPSC: the contribution of human pancreatic mesenchymal and human islet microvascular endothelial cells to the differentiation of iPSC into pancreatic β cells”.
M.T. Lombardo, S. Pellegrini, G. Poggi, A. Cospito, F. Manenti, C. Scielzo, L. Piemonti, V. Sordi
- European Pancreas and Islet Transplant Association (EPITA), Innsbruck-Igls, January 26-28, 2020
“Generation of β cells from iPSC: the contribution of human pancreatic mesenchymal and human islet microvascular endothelial cells to the differentiation of iPSC into pancreatic β cells”.
M.T. Lombardo, S. Pellegrini, G. Poggi, A. Cospito, F. Manenti, C. Scielzo, L. Piemonti, V. Sordi
- 17 th World Congress of the International Pancreas & Islet Trasplant Association, Lyon, July 2-5, 2019
“iPSC from a patient with monogenic diabetes for autologous β cell replacement”.
A. Cospito, S. Pellegrini, G. Poggi, M.T. Lombardo, F. Manenti, R. Chimienti, L. Piemonti, V. Sordi
- 1st Advanced Therapies Science Meeting, Restore , 25 - 26 November 2019, Berlin
“Induced pluripotent stem cells (iPSC) from a patient with monogenic diabetes for autologous β cell replacement”.
A. Cospito, S. Pellegrini, G. Poggi, M.T. Lombardo, F. Manenti, R. Chimienti, R. Baptista, T. Pritchard-Meaker, L. Piemonti, V. Sordi
- Division of Immunology, Transplantation and Infectious Diseases (DITID) Retreat, San Raffaele Scientific Institute, January 20-21, 2020
“Induced pluripotent stem cells (iPSC) from a patient with monogenic diabetes for autologous β cell replacement”.
A. Cospito, S. Pellegrini, G. Poggi, M.T. Lombardo, F. Manenti, R. Chimienti, L. Piemonti, V. Sordi
- San Raffaele Scientific eRetreat - June 15-19, 2020
“Insulin producing β cells from iPSC of a patient with monogenic diabetes”.
A. Cospito, S. Pellegrini, G. Poggi, M.T. Lombardo, F. Manenti, L. Piemonti, V. Sordi
- 28th National Congress SID, Rimini, December 2-5, 2020
"iPSC-derived beta cells from a patient with MODY8 ".
A. Cospito, S. Pellegrini, G. Poggi, M.T. Lombardo, F. Manenti, L. Piemonti, V. Sordi.