


VALERIA MALACARNE

Curriculum Vitae

Dipartimento di Oncologia Sperimentale
University of Vita-Salute, San Raffaele
Milano, Italy



EDUCATION

- May 2015: PhD in Biotechnology for Human Health at the University of Piemonte Orientale "A. Avogadro", Novara. Supervisor: Prof. Gianluca Baldanzi
- October 2011: Master Degree (Laurea Magistrale) 110/110 in Medical Biotechnologies at the University of Piemonte Orientale "A. Avogadro", Novara. Supervisor: Prof. Andrea Graziani.
- October 2009: Bachelor Degree (Laurea triennale) 105/110 in Biotechnology at the University of Piemonte Orientale "A. Avogadro", Novara. Supervisor: Prof. Andrea Graziani

RESEARCH EXPERIENCE

- September 2016 – March 2017: "Co.co.co." at University Vita-Salute San Raffaele, Milano
- January 2015 – August 2016: Research fellowship at the University of Piemonte Orientale "A. Avogadro", Novara
- November 2011- November 2014: PhD program founded by "Compagnia San Paolo" in Biotechnologies for Human Health at the University of Piemonte Orientale "A. Avogadro", Novara. Title of the project: DGK alpha inhibition in T cells from XLP1 patients restores restimulation induced cell death (RICD). Supervisor: Prof. Gianluca Baldanzi
- March 2014 – October 2014: 8 months in Germany as PhD student in the Center of Molecular Biomedicine (CMB), Lab of Molecular Cell Biology, Hans Knoll Str. 2 07745 Jena, Germany. Supervisor: Prof. Ignacio Rubio
- October 2009 – October 2011: Thesis internship in the laboratory of Biochemistry (for Master degree) at the University of Piemonte Orientale "A. Avogadro", Novara). Title: DGK alpha controls Myosin light chain kinase localization at ruffles. Supervisor: Prof. Andrea Graziani
- November 2008 – September 2009: Thesis internship in the laboratory of Biochemistry (for Bachelor degree) at the University of Piemonte Orientale "A. Avogadro", Novara). Title: Testing different PA probes *in vitro* upon HGF stimulation. Supervisor: Prof. Andrea Graziani

RESEARCH INTEREST AREAS

- 2015 - today: Invasive behavior of primary human glioblastoma (ms in preparation) and colorectal cancer stem cells. Muscle stem cells (satellite cells) biology (work under revision, Cell Report).



- 2011 – 2015: Inhibition of diacylglycerol kinase alpha restores TCR-induced diacylglycerol signaling and restimulation-induced cell death in XLP-1 T lymphocytes. (published, **STM 2016 as first author**). Live cells imaging for analysis and quantification of diacylglycerol polarization at the immunological synapse (**Ms in preparation, Malacarne et al.**)
- 2012 – 2014: Investigation of the role of Diacylglycerol Kinase α / Atypical PKC / β 1 integrin in SDF-1 α mammary carcinoma invasiveness. (published **PLoS ONE 2014**)
- 2011 – 2013: Evaluation of the HGF-induced scatter of epithelial cells upon B7H triggering with ICOS. (published **Jl 2014**)

TEACHING EXPERIENCE

ISTITUTO D'ISTRUZIONE SUPERIORE "OLIVETTI"

- 2013/2014 Professional Course "Tecnico Superiore in Scienze della Vita"
Teaching sub-course entiteled "Fondamenti di Biotecnologie"

Ivrea (To), Italy

UNIVERSITY OF PIEMONTE ORIENTALE "A. AVOGADRO"

- 2011 – 2012/ 2012 – 2013 Tutorship activity for Medical students

Novara, Italy

TECHNICAL SKILLS

- Cell biology: Eucariotic cells cultures (also in 3D systems), immunofluorescence and confocal microscopy (also live imaging). FACS analysis. Recycling assays.
- Molecular biology: Bacterial transformation, Plasmid purification, RT-PCR, qPCR, cloning, viral vector generation.
- Biochemistry: Immunoprecipitation and western blot, radioactive assays.
- Mice handling: training in the animal facility of the University of Piemonte Orientale

AWARDS

- VI edizione **White Coat Ceremony. Miglior lavoro scientifico dell'anno 2015/2016, premio al miglior giovane ricercatore: "Inhibition of diacylglycerol kinase α restores restimulation-induced cell death and reduces immunopathology inXLP-1"**
- **Special prize for outstanding poster presentation** at the international conference "Basic to translational medicine 2016: focus on Cancer", 6th-7th October 2016.

COURSES ATTENDED

- XXXIII Course ALEMBIC (Advanced Light and Electron Microscopy BioImaging Center). San Raffaele Scientific Institute, Milano, Italy
- English course attended in ABESCHOOL (American Buisness English School). Certificate of achievement, scientific english: Level B1.
- Perkin Elmer Course on Spinning Disk Technology - Confocal: "Torino imaging open days". San Luigi Hospital, Orbassano, Italy

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CONGRESSES

- *Basic to translational medicine 2016: focus on Cancer*, 6-7 October, Novara, Italy
- *Signal Transduction and organelle biogenesis*, 26-28 May 2016, Torino, MBC - Oral presentation.
- *XLP-WASP symposium*, 3rd-4th November 2014, London
- *Imaging the Immune system*, 23-24 October 2014, Milan, San Raffaele
- *EMBO Conference, Lymphocytes signaling*, 17-21 May 2014, Bertinoro, Italy
- *FEBS / Biochemical Society, Membrane, Morphology and Function*, 5-8 May 2014, Abruzzo, Italy
- *National Ph.D. Meeting ABCD/SIBB*. October 10-12 2013 Pesaro, Italy
- *57th National meeting SIB*, Ferrara, September 18-20 2013.
- *15th International Congress of Immunology*. August 22-27 2013. Milan, Italy.
- *XVII Convention Scientifica Telethon Palazzo dei Congressi, Riva del Garda (TN) 11-13 Marzo 2013.*
- *Cell Symposia – Hallmarks of Cancer*. October 29-31 2012. San Francisco, CA, USA.
- *Beatson International Cancer Conference, Membrane dynamics in cancer*. Sunday 1 July - Wednesday 4 July 2012 Glasgow, Scotland
- *FEBS JOURNAL*, 36th FEBS Congress of the Biochemistry for Tomorrow's Medicine JUN 25-30, 2011 CL Torino, ITALY

PUBLICATIONS

- Baldanzi G, Bettio V, Malacarne V, Graziani A. Diacylglycerol Kinases: Shaping Diacylglycerol and Phosphatidic Acid Gradients to Control Cell Polarity. *Front Cell Dev Biol*. 2016 Nov 29;4:140. Review. PubMed PMID: 27965956.
- E. Ruffo * Valeria Malacarne *, Larsen SE, Das R, Patrussi L, Wülfing C, Biskup C, Kapnick SM, Verbist K, Tedrick P, Schwartzberg PL, Baldari CT, Rubio I, Nichols KE, Snow AL, Baldanzi G, Graziani A. Inhibition of diacylglycerol kinase α restores restimulation-induced cell death and reduces immunopathology in XLP-1. *Sci Transl Med*. 2016 Jan 13;8(321):321ra7. doi: 10.1126/scitranslmed.aad1565. *These author equally contributed.
- E. Rainero, C. Cianflone, F. Chianale, P.E. Porporato, V. Malacarne, V. Bettio, E. Ruffo, M. Ferrara, F. Benecchia, D. Capello, W. Paster, I. Locatelli, N. Filigheddu, F. Sinigaglia, J.C. Norman, G. Baldanzi, A. Graziani. The Diacylglycerol Kinase α / Atypical PKC / β 1 Integrin Pathway in SDF-1 α Mammary Carcinoma Invasiveness. *PLoS ONE* 9(6): e97144. doi:10.1371/journal.pone.0097144
- C. Dianzani, R. Minelli, C.L. Gigliotti, S. Occhipinti, M. Giovarelli, L. Conti, E. Boggio, Y. Shivakumar, G. Baldanzi, V. Malacarne, E. Orlieri, G. Cappellano, R. Fantozzi, D. Sblattero, J. Yagi, J. M. Rojo, A. Chiocchetti and U. Dianzani. B7h triggering inhibits tumor cell migration. *J Immunol* 2014; 192:4921-4931 doi: 10.4049/jimmunol.1300587

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