

ALLEGATO A

UNIVERSITÀ DEGLI STUDI DI MILANO

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Laura Pandolfi CURRICULUM VITAE

INFORMAZIONI PERSONALI (NON INSERIRE INDIRIZZO PRIVATO E TELEFONO FISSO O CELLULARE)

COGNOME	PANDOLFI
NOME	LAURA
DATA DI NASCITA	19/06/1987

INSERIRE IL PROPRIO CURRICULUM

Work experiences

Gen. 2016 – present

Post-Doc in Nanobiotechnology

Prof. Prosperi Davide - NanoBioLab, Department of Biotechnology and Bioscience, Università degli studi di Milano – Bicocca, Piazza della Scienza 3, 20100, Milan (MI), Italy.

Working on different projects studying nanoparticle-based cancer therapies (calcium-phosphate, protein, gold and iron oxide nanoparticles) on different cell cultures (MCF-7, MDA-MB-468, MDA-MB-231, U87MG, T98G, HeLa, SKBR3).

The main project is the re-education of NK cells to kill tumor cells through the use of protein nanoparticles conjugated with antibody.

Gen. 2013 – Gen. 2016

PhD in Biology

Prof. Tortora Paolo / Prof. Prosperi Davide - NanoBioLab, Department of Biotechnology and Bioscience, Università degli studi di Milano – Bicocca, Piazza della Scienza 3, 20100, Milan (MI), Italy.

Investigating the effects of drug-loaded nanoparticles on the cellular behavior of proliferative diseases (breast cancer models: MCF7, MDA-MB-468, MDA-MB-231; primary cell lines derived from bronchoalveolar lavage of patients affected by Bronchiolitis Obliterans Syndrome).

Collaboration with Dr. Meloni Federica of section of pneumology of IRCCS Fondazione Policlinico “San Matteo” – Pavia – Italy.

Assistant in Laboratory teaching of Biochemistry

Feb 2012 – Oct. 2013

Internship Research

Prof. Davide Prosperi and Dr. Corsi Fabio - NanoBioLab, Department of Biotechnology and Bioscience, Università degli studi di Milano – Bicocca, Piazza della Scienza 3, 20100, Milan (MI), Italy.

Study of anticancer effect of curcumin encapsulated inside polymeric nanoparticles against HER-2 positive breast cancer.

Oct. 2010 – Oct. 2011

Master degree in Applied Biology to Biomedicine

Prof. Dario DiFrancesco – Laboratory of Molecular Physiology and Neurobiology, Department of Biomolecular science and Biotechnology, Università degli studi di Milano, Via Celoria 26, Milan (MI), Italy.

Study of the molecular mechanism basing the interaction between caveolin and HCN4 channels.

Technical skills and competences

- Cell culture: 2D and 3D models
- Cell cytotoxicity assays
- Flow cytometry (Cell cycle analysis, cell death analysis, internalization of nanoparticles)
- Confocal Microscopy (live imaging)
- Alpha Technology (quantification of proteins)
- Western blot
- Site-directed mutagenesis using PCR
- Electrophysiology

Publications

- Cova E., Inghilleri S., Pandolfi L., Morosini M., Magni S., Colombo M., Piloni D., Finetti C., Ceccarelli G., Benedetti L., Cusella MG., Agozzino M., Corsi F., Allevi R., Mrakic-Spota S., Moretti S., De Gregori S., Prosperi D., Meloni F. **“Bioengineered Gold Nanoparticles Targeted to Mesenchymal Cells from Patients with Bronchiolitis Obliterans Syndrome Does Not Rise the Inflammatory Response and Can Be Safely Inhaled by Rodents”** *Nanotoxicology*, just accepted.
- Avvakumova S., Galbiati E., Sironi L., Locarno SA., Gambini L., Macchi C., Pandolfi L., Ruscica M., Magni P., Collini M., Colombo M., Corsi F., Chirico G., Romeo S., Prosperi D. **“Theranostic Nanocages for Imaging and Photothermal Therapy of Prostate Cancer Cells by Active Targeting of Neuropeptide-Y Receptor”** *Bioconjug. Chem.* 2016; DOI: 10.1021/acs.bioconjchem.6b00568.

- Avvakumova S., Fezzardi P., Pandolfi L., Colombo M., Sansone F., Casnati A., Prosperi D. **“Gold nanoparticles decorated by clustered multivalent cone-glycocalixarenes actively improve the targeting efficiency toward cancer cells”** *Chem. Commu.*, 2014; DOI: 10.1039/C4CC03159H
- Avvakumova S., Galbiati E., Pandolfi L., Mazzucchelli S., Cassani M., Gori A., Longhi R., Prosperi D., **“Development of U11-Functionalized Gold Nanoparticles for Selective Targeting of Urokinase Plasminogen Activator Receptor-Positive Breast Cancer Cells”** *Bioconj. Chemie*, 2014; DOI: 10.1021/bc500202b
- Pandolfi L., Verderio P., Mazzucchelli S., Marinozzi M.R., Vanna R., Gramatica F., Corsi F., Colombo M., Morasso C., Prosperi D. **“Antiproliferative effect of ASC-J9 delivered by PLGA nanoparticles against estrogen-dependent breast cancer cells”** *Mol. Pharmaceutics*, 2014; DOI: 10.1021/mp500222k
- Verderio P., Bonetti P., Colombo M., Pandolfi L., Prosperi D. **“Intracellular drug release from curcumin-loaded PLGA nanoparticles induces G2/M block in breast cancer cells”** *Biomacromolecules*; 2013; DOI: 10.1021/bm3017324
- Colombo M., Mazzucchelli S., Collico V., Avvakumova S., Pandolfi L., Corsi F., Porta F., Prosperi D. **“Protein-assisted one-pot synthesis and biofunctionalization of spherical gold nanoparticles for selective targeting of cancer cells”** *Angewandte Chemie*; 2012; DOI: 10.1002/anie.201204699

Poster and oral presentations

- Oral presentation:

“Study of RNA interference mediated by lipid-coated calcium phosphate nanoparticle-transfection in high-grade gliomas”.

Pandolfi L., Colombo M., Avvakumova S., Salvioni L., Santini B., Nicolis S.K., Prosperi D.

International Conference on Nanomedicine and Nanobiotechnology (ICONAN2016) – September 2016 – Paris (France).

- Poster presentation:

“Antiproliferative effect of ASC-J9 delivered by PLGA nanoparticles against estrogen-dependent breast cancer cells”

Pandolfi L., Verderio P., Mazzucchelli S., Vanna R., Colombo M., Morasso C., Prosperi D.

Nanotechnology Conference 2014 – Thessaloniki – Greece.

- Poster presentation:

“PLGA nanoparticles at a glance: a model for the intracellular effect and mapping of natural and artificial curcuminoids for breast cancer therapy”

Pandolfi L., Verderio P., Mazzucchelli S., Morasso C., Prosperi D.

3rd Nanotoday conference – A* Star Institute of Bioengineering and Nanotechnology – Singapore – 8 to 11 December 2013

- Congress abstract:

“Molecular characterization of a homogeneous population of pacemaker myocytes derived from mouse embryonic stem cells”

Scavone A., Zoia S., Masetti M., Muletti T., Pandolfi L., Baruscotti M., DiFrancesco D., Barbuti A.

Joint Meeting of Stem Cell Research Italy and International Society For Cellular Therapy Europe – Montesilvano (PE), 10-12 June 2011

Education

- 2015** PhD in Biology at NanoBiolab of Università degli studi – Milano Bicocca
- 2011** Master degree in Biology applied to Biomedical Science at Università degli studi di Milano
Vote: 108/110.
Title Thesis: Study of the molecular mechanism basing the interaction between caveolin and HCN4 channels.
- 2009** Degree in Biological science c/o Università degli studi di Milano.
Vote: 97/110.
Title thesis: Current pacemaker in cardiomyocytes derived from spermatogonial stem cells
- 2006** Scientific degree c/o Istituto Sacro Cuore – Milan.
Vote: 75/100

Data

10/3/2017

Luogo

Milano