### CURRICULUM VITAE MIRIAM COLOMBO

#### • Position

-From 1<sup>st</sup>October 2019 up to now: Associate professor in Clinical Biochemistry, University of Milano-Bicocca, Department of Biotechnology and Bioscience.

#### • Education and formation

- 9<sup>th</sup> October 2008, degree in Medicinal Chemistry and Technology (University of Milan), with experimental thesis in Nanobiotechnology. Thesis title: "Superparamagnetic nanopartricles: synthesis, functionalization and biomedical applications".

- 23<sup>th</sup> April 2012, PhD in Biology (University of Milano-Bicocca). Thesis title: "Synthesis and biofunctionalization of nanoparticles for breast cancer diagnosis and treatment."

### • Education and other institution

- 2nd European Summer School in Nanomedicine 2009 LISBON

- 3rd European Science Foundation Summer School "Nanomedicine 2011" LEUCOREA

### • Employment

- January 2009, awarded of a 12+24 months fellowship for a collaboration to research in the field of Medical Sciences, University of Milan.

- July-December 2010, abroad fellowship in the lab of prof. Wolfgang Parak, AG Biophotonik, Philipps University of Marburg, Renthof 6, D-35032 Marburg, Germany.

- February 2012, awarded of a 24 months fellowship for development of nanoparticles for Biomedical application, University of Milan.

- 1 September 2013 up to now, fixed time Researcher in Clinical Biochemistry (RTD BIO/12), University of Milano-Bicocca, Department of Biotechnology and Bioscience.

### • Competitive research grants

- 03/2020, project of Cariplo, head of research unit. Title: "Study of the role of SP-D protein in SARS-CoV-2 coronavirus infection for the development of a therapeutic treatment (SPeeD)" (€ 55.000).

- 03/2020, project of Fare insieme Foundation. Title: "An innovative therapy based on nanoconjugates of the human pulmonary surfactant protein in SARS-CoV-2 coronavirus infection." (€ 20.000).

- 02/2020, Regional grant for the establishment of an infrastructure "Nanotechnology for precision medicine and personalized beauty and Healthcare" (NanoCosPha) ( $\notin$  2.000.000); PI unit for nanoformulation and cosmetic:  $\notin$  642.574.

- 1/1/2013-31/12/2013, integrated project of Fondazione Regionale per la Ricerca Biomedica (FRRB), head of research unit. Title: "Nanodrugs" (€ 191.000).

- 2014-2016, Scientific Research in Biomedicine, Cariplo grant 2013-0943. Project title "Development of an innovative targeted therapy with functionalized nanoparticles for the management of fibrotic lung diseases due to uncontrolled mesenchymal cell proliferation" ( $\notin$  45.000). - 2015-2017, My First AIRC grant as PI of the project: "Magnetic nanoparticle based delivery of the saporin toxin for the treatment of breast cancer" ( $\notin$  222.000).

- 2016, Academic Funding Unimib 2016 (€ 25.000)

- 2016-2018, PI of the project Fondazione Cariplo-Regione Lombardia 2016-0886. Project title: "Multitasking peptide-loaded amphiphilic nanoparticles for treatment of acute and chronic inflammatory diseases and neurodegenerative disorders (MUNDIS)" (€ 100.000).

- 2018, Monovalent vs. multivalent targeted nanoconjugates: in vitro and in vivo molecular investigation of the interaction with breast cancer cells. Academic Funding Unimib 2018 (€ 25.000)

## • Conferences

# - Oral Communications

-2019, Invited speaker: Ricerca e Nanomedicina 18 June 2019, Pavia, Italy.

- 2019, member of the scientific board and organizing committee of the international conference Nanoinnovation 2019 and chair of the section: "New nanoscale drug delivery systems: recent advances in nanotheranostic". 11-14 June, Rome, Italy.

- 2019, Invited keynote speaker: 2<sup>nd</sup> International Conference on Nanomaterials and Nanotechnology and 22<sup>nd</sup> International Conference on Advanced Nanoscience and Nanotechnology "Biofunctionalized colloidal nanoparticles for therapeutic applications". 16-17 May 2019, Prague, Czech Republic.

2019, member of the scientific board and organizing committee of the international workshop Nanomedicine 2019 and speaker: "Colloidal nanoparticles: master key for biomedical theranostics".
2-3 May 2019, Milano, Italy.

- 2018, member of the scientific board and organizing committee of an international workshop in Nanoimmunology "Interaction between nanomaterials and the immune system: medical exploitations and safety issues". 9-10 July 2018, Milan, Italy.

- 2018, Invited keynote speaker: NanoMed 2018 international conference, October 23-25 Venice, Italy.

-2018, Invited speaker: III International Symposium on Nanoparticles/Nanomaterials and Applications 22–25 January 2018, Caparica, Portugal ISN2A 2018

- 2017, Invited speaker: Nanoinnovation; Session title: new trends in nanomedicine. 26-29 November 2017, Rome.

-2017, Invited speaker: Medical Nanotechnology 2017, October 18-19, Osaka, Japan.

- 2016, Invited speaker: ACS Meeting 2016, 13-17 March 2016, San Diego, Ca.

- 2016, Invited speaker: SPIE 2016 Photonics West Exhibition, 16-18 February 2016, San Francisco, Ca.

- 2014, Oral communication: 7th Annual Thematic Workshop of CRS Italy Chapter Nanomedicine: pharmacokinetic challenges, targeting and clinical outcomes, November 6th-8th, 2014, Florence (Italy).

- 2014, Invited speaker: 11th International Conference on Nanosciences & Nanotechnologies (NN14), 8-11 July 2014, Thessaloniki, Greece.

- 2013, Invited speaker: Zing Nanomaterials Conference 2013, 13-17 November 2013, Mexico.

- 2013, Invited speaker (chair): 10th International Conference on Nanosciences & Nanotechnologies (NN13), 9-12 July 2013, Thessaloniki, Greece.

- 2012, Oral communication: Nanomedicine Conference, 1-3 October 2012, Rome.

- 2012, Oral communication: Zing Nanoscience Conference, 14-17 February 2012, Lanzarote.

- 2011, Oral communication: Nanotoday Conference 2011, 11-15 Dicembre 2011, Hawaii.

- 2009, Oral communication: Zing Nanobio-Nanomedicine Conference, 21-25 January 2009, Antigua.

#### • Awards and Honors

- Best poster award at the Biotechnology and Bioscience Department-day, University of Milano-Bicocca, 2009.

- Winner of the fellow for the attendance of the 3rd European Science Foundation Summer School Nanomedicine 2011, for the scientific curriculum selection.

- Winner of the prize: Young researcher at the Nanotoday Conference 2011, for the scientific contribute selection.

- Winner of first prize "Young talent award competition 2019" of the Licei National Academy.

#### • Patent

M. Colombo, F. Corsi, F. Granucci, D. Prosperi, I. Zanoni. "Nanoconstructs with Pharmacological activity". *Italian patent number RM2012A000350, 19/7/2012; PCT/IB2013/055943*.

-Author of 80 papers in peer-reviewed journals, 13 as first author and 12 as corresponding author. Official H-Index (Google Scholar): 28

Milano, 17<sup>th</sup> April 2020

Mirion Colombo