

FABRIZIA BONACINA

Ph.D. / post-doc research fellow

Education

- June 2013 **University of Milan**
Official Qualification for Pharmacist profession
- 2006-2012 **University of Milan – Faculty of Pharmacy**
Doctor in Pharmacy
- 2001-2006 **Secondary High School “Enrico Fermi”, Cantù (CO)**

Research and accademic experience

- June 2016 to date **Department of Pharmacological and Biomolecular Science - University of Milan**
Post-doc Fellowship
- November 2015 – May 2016 **Department of Pharmacological and Biomolecular Science – University of Milan**
Scholarship - Grant Telethon GGP13002
- November 2012 – October 2015 **Department of Pharmacological and Biomolecular Science – University of Milan**
Ph.D. Course XXVIII in Pharmacological Sciences
Project title: “Role of the long pentraxin 3 (PTX3) in cardiometabolic disease”
- September 2013 – April 2014 and September – November 2015 **William Harvey Research Institute, Queen Mary University of London (UK)**
Visiting Ph.D. student at the laboratory directed by Professor Federica Marelli-Berg

Major achievements

- Award Giovani Ricercatori at “Congresso SISA Lombardia”, Milan 26-27 October 2012 for Oral Presentation
- Award “Giovani Ricercatori” at the 28th “Congresso SISA Nazionale”; Rome, 23-25 November 2014 for Oral Presentation
- Scholarship “Borse di ricerca della SIF” for the project “Role of apolipoprotein E in the polarization of CD4 T naive cells toward effector subtypes”; September 2015
- Best communication award XIX SIF Seminar for PhD students, Fellows, Post Doc and Specialist Trainees; Rimini 20-22 September 2016, for Oral Presentation
- Young Investigator Fellowship EAS 2016 Innsbruck, May 29- June 01 2016
- Young Investigator Fellowship EAS 2017 Prague, April 23- 26 2017

Project founded

- 2016: Italian Ministry of Health (GR-2013-02355011): Engineered regulatory T cell Adoptive Cell Therapy as a novel tool for the treatment of Cardiovascular diseases

Professional memberships

- Member of European Atherosclerosis Society - EAS (since 2012)
- Member of Società Italiana per lo Studio dell’Aterosclerosi – SISA (since 2012)
- Member of Scandinavian Society Atherosclerosis for Atherosclerosis Research - SSAR (since 2014)

- Member of Società Italiana di Farmacologia – SIF (since 2015)

Collaborations

- 2012 to date:
Collaboration in general population-based clinical studies (The PLIC Study) at the Center for the Study of Atherosclerosis – Bassini Hospital (Cinisello Balsamo, MI). Clinical research focusing on:
-association of circulating and genetic markers with the prognosis of cardiovascular disease;
-postprandial phase studies
-analysis of risk factors for progression of markers of subclinical atherosclerosis
Study of genotypic and phenotypic traits of dyslipidaemias, with special focus to Familial Hypercholesterolemia (FH).
- 2013 to date
Collaboration with Professor Federica Marelli-Berg, William Harvey Research Institute – Queen Mary University London (UK) for project involving the interplay between systemic/cellular metabolism and adaptive immune response.
- 2013 to date
Collaboration with Professor Marinos Kallikourdis, Humanitas Research Institute – Rozzano (Mi) on the project “Engineered regulatory T cell Adoptive Cell Therapy as a novel tool for the treatment of Cardiovascular diseases”
- 2013 to date
Collaboration with Dr. Cecilia Garlanda and Professor Barbara Bottazzi, Humanitas Research Institute – Rozzano (Mi) on a project involving the role of the long pentraxin 3 in cardiometabolic diseases
- 2015 to date
Collaboration with Professor Nico Mitro, Department of Pharmacological and Biomolecular Science – University of Milan on a project studying the role of fatty acid synthesis in immune cell function.
- 2017 to date
Collaboration with Professor Maurizio Crestani, Department of Pharmacological and Biomolecular Science – University of Milan on a project studying the role of histone deacetylase 3 (HDAC3) in cardiometabolic disease.

Most relevant publications (n=5)

1) Regulatory T Cell Migration Is Dependent on Glucokinase-Mediated Glycolysis. *Immunity*. 2017 Nov 21;47(5):875-889.e10. doi: 10.1016/j.immuni.2017.10.017.

Kishore M, Cheung KC1, Fu H, **Bonacina F**, Wang G, Coe D, Ward EJ, Colamattéo A, Jangani M, Baragetti A, Matarese G, Smith DM, Haas R, Mauro C, Wraith DC, Okkenhaug K, Catapano AL, De Rosa V, Norata GD, Marelli-Berg FM

2) “Obesity-Induced Metabolic Stress Leads to Biased Effector Memory CD4+ T Cell Differentiation via PI3K p110 δ -Akt-Mediated Signals.” *Cell Metab*. 2017 Jan 30. pii: S1550-4131(17)30043-8. doi: 10.1016/j.cmet.2017.01.008

Mauro C, Smith J, Cucchi D, Coe D, Fu H, **Bonacina F**, Baragetti A, Cermenati G, Caruso D, Mitro N, Catapano AL, Ammirati E, Longhi MP, Okkenhaug K, Norata GD, Marelli-Berg FM

3) Vascular pentraxin 3 controls arterial thrombosis by targeting collagen and fibrinogen induced platelets aggregation. *Biochim Biophys Acta*. 2016 Jun;1862(6):1182-90. doi: 10.1016/j.bbadis.2016.03.007.

Bonacina F, Barbieri SS, Cutuli L, Amadio P, Doni A, Sironi M, Tartari S, Mantovani A, Bottazzi B, Garlanda C, Tremoli E, Catapano AL, Norata GD.

4) HDL in innate and adaptive immunity. *Cardiovasc Res*. 2014 Aug 1;103(3):372-83. doi: 10.1093/cvr/cvu150.

Catapano AL, Pirillo A, **Bonacina F**, Norata GD.

5) Long pentraxin 3: experimental and clinical relevance in cardiovascular diseases. *Mediators Inflamm.* 2013;2013:725102. doi: 10.1155/2013/725102.

Bonacina F, Baragetti A, Catapano AL, Norata GD.