

Universita' del Piemonte Orientale
"A. AVOGADRO"
Dipartimento di Scienze della Salute

**ATTIVITA' SVOLTA NELL'AMBITO DEL DOTTORATO DI
RICERCA IN MEDICINA MOLECOLARE (XXV CICLO)**

2009-2012

PhD student: **Donata Federici Canova**

LABORATORIES

- I- II years of PhD (Nov 2009- Dec 2011):
Immuno-Pharmacology Laboratory- Dep. Medical Science, University of Eastern Piedmont, **Novara**
- III year of PhD (Jan 2012- Oct 2012) :
Centre for Biomedical Pharmacology, William Harvey Research Institute, Barts and The London School of Medicine, Queen Mary University, **London**

PUBLICATIONS

1. Amoruso A, Bardelli C, Fresu LG, Poletti E, Palma A, **Federici Canova D**, Zeng HW, Ongini E, Brunelleschi S. The nitric oxide-donating pravastatin, NCX 6550, inhibits cytokine release and NF-kappaB activation while enhancing PPARgamma expression in human monocyte/macrophages. *Pharmacol Res* 62: 391-399 (2010).
2. Bardelli C, Amoruso A, **Federici Canova D**, Fresu LG, Balbo P, Neri T, Celi A, Brunelleschi S. Autocrine activation of human monocyte/macrophages by monocyte-derived microparticles and modulation by PPARγ ligands. *Br J Pharmacol* 165: 716-728 (2012).

CONGRESS PARTECIPATIONS

- IRCAD Congress "*Malattie autoimmuni, dal laboratorio al paziente*" **Novara** (Feb, 26th 2010)
- "3th *European Workshop on Lipid Mediators*" - Pasteur Institute – **Paris** (Jun, 3-4, 2010) (**INTERNATIONAL CONGRESS**).
- Regional Congress of "Italian Society for the study of Atherosclerosis - SISA" (Section "Lombardia") - **Milan** (Apr, 15-16, 2011).
- 35th National Congress of "Italian Society of Pharmacology- SIF" - **Bologna** (Sep 14-17, 2011).
- William Harvey Day-St. Bartholomew's Hospital, **London** (Oct, 16th 2012).
- British Pharmacological Society Winter Meeting 2012 - **London** (Dec, 18- 20, 2012).

ABSTRACTS

- *Monocyte-derived microparticles (MP) affect monocyte/macrophage responsiveness.*

Bardelli C, **Federici Canova D**, Amoruso A, Fresu LG, Palma A, Brunelleschi S.

“3th European Workshop on Lipid Mediators” - Pasteur Institute – **Paris** (Jun, 3-4, 2010)

- *Anti-inflammatory Effects of the CINOD NCX 429 in Human Monocytes and Macrophages.*

D Federici Canova, A Amoruso, LG Fresu, J Padron, M Bolla, S Brunelleschi. 35th

National Congress of “Italian Society of Pharmacology- SIF”- **Bologna** (Sep 14-17, 2011).

- *A possible involvement of Monocyte-derived Microparticles in alveolar macrophages inflammatory response.*

A Amoruso, P Balbo, C Bardelli, **D Federici Canova**, LG Fresu, S Brunelleschi.

35th National Congress of “Italian Society of Pharmacology- SIF”- **Bologna** (Sep 14-17, 2011).

- *Novel enriched microcapsules to deliver inflammation-modulating protein: the exemplar of α 2-macroglobulin.*

Federici Canova D, Norling LV, Pavlov A, Sukhorukov GB, Perretti M

William Harvey Day- **London** (Oct, 16th 2012).

- *Microcapsules As A Delivery Strategy For Inflammation-Modulating Protein.*

Federici Canova D, Norling LV, Pavlov A, Sukhorukov GB, Perretti M

British Pharmacological Society Winter Meeting 2012- **London** (Dec, 18- 20, 2012).

SEMINARS

I YEAR

- *ALK e tumori genesi* Prof. G. Inghirami (17/11/09)

- *Use of MAR epigenetic regulators for therapeutic expression* Prof. N. Mermoud (30/11/09)

- *Controllo funzionale dei linfociti T da parte di adenosina trifosfato (ATP) extracellulare* Prof. F. Grassi (14/12/09)

- *LSD1, Lysine Specific Demethylase1: insight into a new epigenetic regulator involved in neuronal gene regulation* Dr. E. Battaglioli (20/01/10)
- *Dal difetto genetico all'infiammazione* Prof. L. Maiuri (28/01/10)
- *R & D of magnetic-nanoparticles and carriers for drugs* Dr. G. Baldi (9/02/10)
- *Prediction of RNA-RNA interaction* Prof. H. Tafer (26/05/10)
- *Combating Bioterrorism: New Antidotes for an Old Poison* Dr. S.R. Ellis (10/06/10)
- *Fenotipo e cellule staminali tumorali nei glomi* Prof. D. Schiffer (14/06/10)
- *MicroRna nella terapia tumorale* Prof.ssa C. Ponzetto (15/06/10)
- *Identificazione di antigeni per la diagnosi e la terapia del carcinoma pancreatico mediante l'analisi sierologica del proteoma* Prof. F. Novelli (30/06/10)
- *Role of membrane lipids in neuronal synapses organization* Prof.ssa P. Camoletto (5/07/10)
- *Ruolo delle microvescicole nella comunicazione tra cellule* Prof. G. Camusi (6/09/10)
- *Prevention and cure of autochthonous mammary carcinomas in her2 transgenic mice?* Prof.ssa F. Cavallo (17/09/10)
- *Le cellule staminali tumorali: dalla biologia alla clinica* Prof. R. De Maria (22/09/10)
- *Preventing Persisters: Targeting Epigenetic Changes in Cancer Chemotherapy* Dr. S.R. Ellis (23/09/10)

II YEAR

- *Le cellule NK: dalla biologia alla terapia di leucemie ad alto rischio* Prof. L. Moretta (November, 29th 2010)
- *Targeting Lactate- Fueled respiration in cancer: a new therapeutic opportunity?* Prof. P. Sonveaux (December, 1st, 2010)
- *Bone and DDS: development of bioactive artificial bone with drug delivery ability* Dr. M. Otsuka (January, 27th, 2011)

- *DNA-complex releasing system by apatitic cement for gene therapy* Dr. T. Ito (January, 28th, 2011)
- *Ferritins: ancient proteins with novel unexpected features* Dr S. Levi (April, 12th, 2011)
- *Metabolic syndrome: the gastroenterologist point of view* Dr E. Bugianesi (April, 13th, 2011)
- *Nanotecnologie applicate alla medicina: le nuove frontiere della nano medicina* Prof. G. Peluso (April, 14th, 2011)
- *Reverse vaccination in autoimmune diseases?* Prof.G. Filaci (May, 3rd, 2011)
- *Innate Immunity and the pathogenicity of inhaled microbial particles.* Prof. H. Wolff (May, 9th, 2011)
- *Farmacologia dell'aterosclerosi* Prof. A. Corsini (May, 13th, 2011)
- *Mechanisms and Models of TDP-43 Proteinopathies* Prof. L. Petruccioli (May, 19th, 2011)
- *Iron Management in the Hepcidin Era* Prof. SR. Ellis (May, 25th, 2011)
- *Molecular pathogenesis and biomarkers of Parkinson's disease* Prof. M. Fasano (June, 17th, 2011)
- *Importance of pathobiology in rheumatoid arthritis pathogenesis, disease evolution and response to treatment (The PEAC Project)* Prof. C. Pitzalis (June, 24th, 2011)
- *Management of high risk chronic lymphocytic leukemia* Prof. T. Zenz (June, 30th, 2011)
- *Hypoxia, angiogenesis and liver fibrogenesis* Prof. M. Parola (July, 1st, 2011)

III YEAR

Dept. MEDICAL SCIENCE (Novara, Italy)

- *"New trends in allergy and immunology"* Dr.J.A. Bellanti (October, 10th 2011)
- *"Alpha-MSH and the melanocortin system in inflammation"* Prof. M. Perretti (December, 19th 2011)
- *"Galectins-carbohydrate binding protein: sweet or sour?"* Prof. M. Perretti (December, 20th 2011)

WILLIAM HARVEY RESEARCH INSTITUTE (London, UK)

- *"Endothelium specific insulin resistance leads to accelerated atherosclerosis: a role for reactive oxygen species"* Dr. Matthew C. Gage (February, 24th 2012)
- *"Macrophage migration in 3-dimensional environments: role of podosomes"* Prof I. Maridonneau-Parini (February, 27th 2012)
- *"Regulation of T cell immunity by CD31"* Prof F. Marelli-Berg (March, 12th 2012)
- *"Mesenchymal and haemopoietic stroma: a crucial liaison"* Prof. F. Dazzi (March, 15th 2012)
- *"Regulation of autoantibody production by auto-immune complexes on follicular dendritic cells"* Dr Mohey Eldin El Shikh (April, 23rd 2012)
- *"Novel mediators of progression and regression in diabetic kidney disease"* Prof.C. Godson (May, 25th 2012)
- *"Alarmins and the control of skin inflammation of psoriasis"* Dr R. Wolf (May, 28th 2012)
- *"Immunogenesis and pathogenesis of ANCA mediated vasculitis"* Prof P. Heeringa (June, 9th 2012)

OTHER ACTIVITIES

- Frontal lessons: (Prof. Albano) (Novara)
- Frontal lessons: "Degenerative diseases" (Prof. Albano, Prof. Corrado, Prof. Comi) (Novara)
- COREP seminars (Novara)
- Journal Club (Dept. Medical Sciences) (Novara)
- Royal Society Summer Science Exhibition 2012 - 3rd – 8th July 2012 (London)
- William Harvey Research Institute Annual Research Review - 11th July 2012 (London)
- Participation at Research In Progress (RIP) seminars – every 2 weeks (London)