

**PERSONAL INFORMATION**

Bellosta Paola PhD  
 SCOPUS ID 6603215781  
 Citizenship: Italian and American  
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**Work:**  
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**EMPLOYMENT**

2017-present **Associate Professor of Genetics**, CiBio, University of Trento, IT.  
 2015-2018 **Cariplo Independent PI Career Award**, Dept Biosciences, University of Milan, IT.  
 2010-2014 **Research Assistant Professor**, Dept of Genetics & Development, Columbia University  
 2006-2010 **Associate Professor**, Department of Biology, City College CUNY, NY, USA.  
 2004-2006 **Associate Professor**, Department of Medicine, University of Novara, Novara, Italy.  
 2000-2004 **Research Assistant Professor**, University of Zurich, Zurich, Switzerland.  
 1995-2000 **Assistant Professor**, Department of Microbiology, NYU Med Center, USA.  
 1991-1994 **Postdoctoral Fellow**, Department of Microbiology New York University

**OTHER AFFILIATIONS and PROFESSIONAL QUALIFICATIONS:**

2013-present **Adjunct Associate Professor** at New York University Langone Medical Center  
 Department of Medicine and Endocrinology New York, NY, USA.  
 2014-2020 **Abilitazione a Professore di II Fascia (Assistant Professor) from the Ministry of Education and Research (MIUR) in:**  
**GENETICA E MICROBIOLOGIA BIO18**  
**BIOLOGIA APPLICATA BIO11**  
**BIOCHIMICA E BIOCHIMICA CLINICA BIO10**  
 2009-2017 **Member of the DERC** (Diabetes and Endocrinology Research Center)  
 "Naomi Berries" at Columbia University, New York, NY, USA.

**EDUCATION:**

1987 **Laurea in Biology** University of Milan, IT from the Department of Biochemistry, University of Milan, under the supervision of Prof. L. Alberghina and Dr. M.I. Colnaghi.

**HONORS/AWARDS**

2015-2018 **CAREER Award (Cariplo Foundation)** at the University of Milan.  
 2004-2008 **CAREER Award (Rientro dei Cervelli)** from MIUR at the Department of Medical Science, University of Novara, Italy (resigned in 2006 when I moved back to USA).  
 2000-2002 **Marie Heim-Vögtlin (MHV) Fellowship**. Dept of Zoology University of Zurich, CH.  
 1991-1994 **Paulette Goddard Scholarship**, to NYU School of Medicine, New York, NY, USA.

**CURRENT FUNDING**

-04/15 - 12/18 **Bellosta Capofila-PI 100% CARIPLO Foundation 2014-0703 Biomedical Research on ageing related diseases**. P. in partnership with F. Taroni at the Neurological Institute "C. Besta" Milan "Elucidating how the Glutamate-Glutamine cycle, in glial or neuronal cells, controls neuronal degeneration" Euro 200,000 x 3 years.

**PAST GRANTS FUNDED only the last 10 years**

-11/15 - 12/17 **Bellosta Capofila-PI 100% EHDN European Huntington Disease's Network n.689** in collaboration with Maria A. Vanoni and Paola Conti University of Milan IT "Functional Studies on Glutamate Signaling, in a Drosophila model for HD, using analogs of Glutamate or Glutamine to Ameliorate the Pathology of the Disease" Euro 49,488  
 -04/09 - 05/14 **Bellosta-PI 100% NIH-NIDDK (R01SC1DK085047)**  
 "Role of Myc in the Growth Regulation Pathways" \$1,817,000 (\$363,400/y x 5 years).  
 -07/11 - 10/12 **Bellosta-PI 100% Stewart Trust at the Columbia Irving Cancer Center** "Myc, a possible link between glutaminolysis and autophagy" \$66,000/y.

-08/09 - 07/12 **Bellosta-PI 50%** Carisbo Carisbo Foundation “Cassa di Risparmio Bo” -IT  
 co-PI: Daniela Grifoni at the University of Bologna, IT  
 “Studies on the role of dMyc in cell competition” Euro 160,000 (40,000/y x 4 years).

### **RESEARCH PROJECTS:**

**1- To identify the signaling molecules responsible for the non-autonomous cross talk between neurons and glial cells that lead to neuronal survival.** At the moment we are focusing our studies on the function of the *glutamate-glutamine cycle*, and how changes in glutamate homeostasis may affect survival of cells expressing the toxic human mutant Huntingtin. This project allowed us to identify a major role for the enzyme glutamine synthetase (GS1) in protecting neuronal death induced by mutant hTTC93. Upregulation of GS1 results in increased motility and in the reduction of the hTTC-93 aggregates in the neurons, which correlate with increased autophagy and reduced TOR activation (manuscript in submission). Similarly we obtained a protective effect when the enzyme glutamate dehydrogenase (GDH), another key enzyme of the *glutamate-glutamine cycle*, was reduced in neurons, suggesting that these two enzymes may have a common pathway in the regulation of autophagy/TOR pathway important for the physiology of neuronal cells in physiological conditions and in some pathologies (Vernizzi et al, in submission). (Funded by Cariplo and the European HD Network).

**2- To understand the mechanisms controlling the recruitment of macrophages to adipose tissue (Adipocyte Tissue Macrophages, ATM or chronic-inflammation) in a model of obesity.** In obese people, immune cells infiltrate the adipose tissue and promote low-grade chronic inflammation. This status has been also linked to altered adipocyte metabolic function and to perturbations in lipid metabolism. To study the mechanisms that control chronic inflammation, we are taking advantage the conserved functional relationship in *Drosophila* between the immune cells, called hemocytes (macrophage like cells) and adipocytes (larval fat body). We are currently submitting a manuscript on the characterization of this new model of obesity that recapitulate increase in TAGs and glucose in the hemolymph (fly’s blood), insulin resistance and activation of cytokines in the fat cells including TNF- $\alpha$ . In addition, using our model we demonstrate that feeding larvae di bio-components like antioxidants (flavonoids and anthiocyanins), we were able to decrease infiltration of hemocytes (fly’s macrophages) and activation of ROS/JNK signaling in the fat body (Valenza et al, BMRI 2018).

**3- Characterization of novel components of Myc-induced cell competition and its relation with tumor growth.** Developing tumors have nutrient limitations, thus cells reprogram their metabolic pathways to allow a better grow. One of the genes that control these mechanisms is *c-myc*. We showed in *Drosophila* epithelial cells, that different levels of Myc induce cell-competition a process described first for ribosomal proteins that occurs when “winner” cells, cells that are metabolically better fit (have higher levels of Myc), kills the near wild-type “loser” cells with lower levels of Myc to expand their domain. We found that in fat or epithelial cells, Myc changes the cellular metabolic milieu to induce cell survival (Dela Cova et al 2004, Parisi et al, 2013, De la Cova et al, 2014, Di Giacomo et al, 2017, Paiardi et al, 2017). Interestingly, during the initial steps of cancerization tumor-promoting genes in precancerous cells give a growth advantaged to the cells that become winners and eliminate non-cancerous cells (losers). Using microarrays in epithelial cells we identified novel potential Myc’s target, which are currently characterized for acting as novel Myc’s target in cell competition (Prev Funded by NIH-NIDDK and Stuart Trust at Columbia University).

### **MAJOR COLLABORATIONS**

- **Franco Taroni, Cinzia Gellera and Caterina Mariotti** at the Neurological Institute “C. Besta” Milan. “Studies on the molecular mechanism of glial and neuronal cells in normal and pathological conditions”
- **Maria A. Vanoni** and **Paola Conti** at the University of Milan. “Enzymology of glutamate/glutamine metabolism”
- **Elena Cattaneo** and **Chiara Zuccato** University of Milan. “Small inhibitors in HD using *Drosophila*”
- **Daniela Grifoni**, at the University of Bologna, Italy. “Myc activity downstream of cell competition”.
- **Laura Johnston** at Columbia University, New York, USA. “Characterization of the Metabolic Changes induced by Myc in relation with p53, during cell growth”
- **Ann Marie Schmidt** at NYU Langone Medical Center New York, NY, USA  
 “The role in lipid signaling and chronic inflammation in Obesity”

- **Esteban Tabak**, at Courant Mathematics Institute, NYU, New York, USA.  
"Mathematical Modeling applied to analyze Size and Number in the growth of *Drosophila ommatidia*".
- **Hugo Stocker**, at ETH-Zurich, Switzerland. "Function of InR and TOR signaling in *Drosophila*".
- **Florenci Serras**, University of Barcelona "Regeneration of tissues in *Drosophila*"

## **PUBLICATIONS**

*In submission 2018:*

Glutamine Synthetase 1 activity regulates autophagy and TOR localization in a *Drosophila* model for Huntington's Disease. Paiardi C, Vernizzi L, Vitali T, Pasini E, Vanoni MA, Gellera C, Taroni F, **Bellosta P**.

Regulation of dFOXO by Glutamine Synthetase1 in fat body controls animal growth. Allocca MT, Vitali T, Primon E, Vanoni MA, **Bellosta P**.

*Drosophila melanogaster* as a model organism to study cancer growth. Allocca MT, Mirzoyan Z, Valenza MA, Sollazzo M, Grifoni D, and **Bellosta P**. Review *Frontiers in Genetics*

## **BOOK CHAPTER AND REVIEWS**

Allocca MT, Zola S, **Bellosta P**, 2018 *The Fruit Fly, Drosophila Melanogaster: Modeling of Human Diseases*  
**BOOK TITLE: Drosophila melanogaster - Model for Recent Advances in Genetics and Therapeutics**  
InTech Open ISBN 978-953-51-5484-6

*Drosophila Myc*: a master regulator of cellular performance. Grifoni D and **Bellosta P**. Review *BBR- Gene Regulatory Mechanisms* 2015 Jul 8. pii: S1874 PMID: 25010747

Myc Function in *Drosophila*. **Bellosta P**, Gallant P. Review *Genes Cancer*. 2010 Jun 1;1(6):542-546.PMID:21072325

## **PUBLICATIONS: (h index=22, from SCOPUS)**

Valenza A, Bonfanti C, Pasini MA, **Bellosta P**., Anthocyanins function as anti-inflammatory agents in a *Drosophila* model for Adipose Tissue Macrophage infiltration. *BMRI* accepted 2018

Human Cancer Cells Signal Their Competitive Fitness Through Myc Activity. Di Giacomo S, Sollazzo M, deBiase D, Ragazzi M, **Bellosta P**, Pession A, Grifoni D. *Sci Rep* 2017 Oct 3; 7 (1) 12568

The Stearoyl-CoA Desaturase-1 (Desat1) in *Drosophila* cooperates with Myc to Induce Autophagy and Growth, a Potential New Link to Tumor Survival. Paiardi C, Mirzoyan Z, Zola S, Parisi F, Vingiani A, Pasini ME, **Bellosta P**. *Genes (Basel)*. 2017 Apr 28;8(5) PMID 28452935

Super-competitor status of *Drosophila Myc* cells requires p53 as a fitness sensor to reprogram metabolism and promote viability. de la Cova C, Senoo-Matsuda N, Ziosi M, Wu C, **Bellosta P** Quinzii CM and Johnston L. *Cell Metabolism* 2014 19(3):470-83. PMID: 24561262

dMyc expression in the fat body affects DILP2 release and increases the expression of the fat desaturase Desat1 resulting in organismal growth. Parisi F, Riccardo S, Zola S, Lora C, Grifoni D, Brown L and **Bellosta P**. *Dev Biol*. 2013 379(1):64-75 PMID23608455. selected for F1000Prime

*Drosophila* insulin and target of rapamycin (TOR) pathways regulate GSK3 beta activity to control Myc stability and determine Myc expression in vivo. Parisi F, Riccardo S, Daniel M, Saqcena M, Kundu N, Pession A, Grifoni D, Stocker H, Tabak E, **Bellosta P**. *BMC Biol*. 2011 Sep 27;9:65.PMID: 21951762

dMyc functions downstream of Yorkie to promote the supercompetitive behavior of hippo pathway mutant cells. Ziosi M, Baena-López LA, Grifoni D, Froidi F, Pession A, Garoia F, Trotta V, **Bellosta P**, Cavicchi S, Pession A. *PLoS Genet*. 2010 Sep 23;6(9). doi:pii: e1001140. PMID:20885789

The lethal giant larvae tumour suppressor mutation requires dMyc oncoprotein to promote clonal malignancy. Froidi F, Ziosi M, Garoia F, Pession A, Grzeschik NA, **Bellosta P**, Strand D, Richardson HE, Pession A, Grifoni D. *BMC Biol.* 2010 Apr 7;8:33. PMID:20374622

Identification of domains responsible for ubiquitin-dependent degradation of dMyc by glycogen synthase kinase 3beta and casein kinase 1 kinases. Galletti M, Riccardo S, Parisi F, Lora C, Saqcena MK, Rivas L, Wong B, Serra A, Serras F, Grifoni D, Pelicci P, Jiang J, **Bellosta P**. *Mol Cell Biol.* 2009 Jun;29(12):3424-34. PMID:19364825 [Cover](#)

Osteoblast proliferation or differentiation is regulated by relative strengths of opposing signaling pathways. Raucci A, **Bellosta P**, Grassi R, Basilico C, Mansukhani A. *J Cell Physiol.* 2008 May;215(2):442-51. PMID:17960591

aPKCzeta cortical loading is associated with Lgl cytoplasmic release and tumor growth in Drosophila and human epithelia. Grifoni D, Garoia F, **Bellosta P**, Parisi F, De Biase D, Collina G, Strand D, Cavicchi S, Pession A. *Oncogene.* 2007 Aug 30;26(40):5960-5. Epub 2007 Mar 19. PMID:17369850

A promiscuous liaison between IL-15 receptor and Axl receptor tyrosine kinase in cell death control. Budagian V, Bulanova E, Orinska Z, Thon L, Mamat U, **Bellosta P**, Basilico C, Adam D, Paus R, Bulfone-Paus S. *EMBO J.* 2005 Dec 21;24(24):4260-70. Retraction in: *EMBO J.* 2011 Feb 2;30(3):627 (retracted)

Myc interacts genetically with Tip48/Reptin and Tip49/Pontin to control growth and proliferation during Drosophila development. **Bellosta P**, Hulf T, Balla Diop S, Usseglio F, Pradel J, Aragnol D, Gallant P. *Proc Natl Acad Sci U S A.* 2005 Aug 16;102(33):11799-804. PMID:16087886

Whole-genome analysis reveals a strong positional bias of conserved dMyc-dependent E-boxes. Hulf T, **Bellosta P**, Furrer M, Steiger D, Svensson D, Barbour A, Gallant P. *Mol Cell Biol.* 2005 May;25(9):3401-10. PMID:15831447

Gas6 induces proliferation in prostate carcinoma cell lines expressing the Axl receptor. Sainaghi PP, Castello L, Bergamasco L, Galletti M, **Bellosta P**, Avanzi GC. *J Cell Physiol.* 2005 Jul;204(1):36-44. PMID:15605394

Drosophila myc regulates organ size by inducing cell competition. de la Cova C, Abril M, **Bellosta P**, Gallant P, Johnston LA. *Cell.* 2004 Apr 2;117(1):107-16. PMID:15066286 [Cover](#)

p21(WAF1/CIP1) acts as a brake in osteoblast differentiation. **Bellosta P**, Masramon L, Mansukhani A, Basilico C. *J Bone Miner Res.* 2003 May;18(5):818-26. PMID:12733720

Identification of receptor and heparin binding sites in fibroblast growth factor 4 by structure-based mutagenesis. **Bellosta P**, Iwahori A, Plotnikov AN, Eliseenkova AV, Basilico C, Mohammadi M. *Mol Cell Biol.* 2001 Sep;21(17):5946-57. PMID:114860335 [Cover](#)

Signaling by fibroblast growth factors (FGF) and fibroblast growth factor receptor 2 (FGFR2)-activating mutations blocks mineralization and induces apoptosis in osteoblasts. (\*co-authorship) Mansukhani A\*, **Bellosta P\***, Sahni M, Basilico C. *J Cell Biol.* 2000 Jun 12;149(6):1297-308. PMID:10851026

Growth arrest-specific gene 6 (Gas6)/adhesion related kinase (Ark) signaling promotes gonadotropin-releasing hormone neuronal survival via extracellular signal-regulated kinase (ERK) and Akt. Allen MP, Zeng C, Schneider K, Xiong X, Meintzer MK, **Bellosta P**, Basilico C, Varnum B, Heidenreich KA, Wierman ME. *Mol Endocrinol.* 1999 Feb;13(2):191-201. PMID:9973250

Signaling through the ARK tyrosine kinase receptor protects from apoptosis in the absence of growth stimulation. **Bellosta P**, Zhang Q, Goff SP, Basilico C. *Oncogene.* 1997 Nov 13;15(20):2387-97. PMID:9395235

FIN13, a novel growth factor-inducible serine-threonine phosphatase, which can inhibit cell cycle progression. Guthridge MA, **Bellosta P**, Tavoloni N, Basilico C. *Mol Cell Biol*. 1997 Sep;17(9):5485-98. PMID:9271424

Sodium salicylate induces apoptosis via p38 mitogen-activated protein kinase but inhibits tumor necrosis factor-induced c-Jun N-terminal kinase/stress-activated protein kinase activation. Schwenger P, **Bellosta P**, Vietor I, Basilico C, Skolnik EY, Vilcek J. *Proc Natl Acad Sci U S A*. 1997 Apr 1;94(7):2869-73. PMID:9096313

Cleavage and release of a soluble form of the receptor tyrosine kinase ARK in vitro and in vivo. Costa M, **Bellosta P**, Basilico C. *J Cell Physiol*. 1996 Sep;168(3):737-44. PMID:8816929

The receptor tyrosine kinase ARK mediates cell aggregation by homophilic binding. **Bellosta P**, Costa M, Lin DA, Basilico C. *Mol Cell Biol*. 1995 Feb;15(2):614-25. PMID:7823930

Heparin increases the affinity of basic fibroblast growth factor for its receptor but is not required for binding. Roghani M, Mansukhani A, Dell'Era P, **Bellosta P**, Basilico C, Rifkin DB, Moscatelli D.(185). *J Biol Chem*. 1994 Feb 11;269(6):3976-84. PMID:8307953

Cleavage of K-FGF produces a truncated molecule with increased biological activity and receptor binding affinity. **Bellosta P**, Talarico D, Rogers D, Basilico C. *J Cell Biol*. 1993 May;121(3):705-13. PMID:8387532

Fibroblast growth factor receptor-4 shows novel features in genomic structure, ligand binding and signal transduction. Vainikka S, Partanen J, **Bellosta P**, Coulier F, Birnbaum D, Basilico C, Jaye M, Alitalo K. *EMBO J*. 1992 Dec;11(12):4273-80. PMID:1385111

Nucleotide sequence of cDNA coding for dianthin 30, a ribosome inactivating protein from *Dianthus caryophyllus*. Legname G, **Bellosta P**, Gromo G, Modena D, Keen JN, Roberts LM, Lord JM. *Biochim Biophys Acta*. 1991 Aug 27;1090(1):119-22. PMID:1840496

### **INVITED SPEAKER at meetings**

- 2018 ICGEB Course "*Drosophila melanogaster* models for neurodegenerative diseases"  
17-20 April 2018, Trieste, Italy
- 2018 UNISTEM-day on Aging, Stem Cells and Rejuvenation, Uni of Trento March 16<sup>th</sup>
- 2015 *Molecular Mechanisms of Neurodegeneration*, Milan, May 28-30  
"Autophagy and Glutamate signaling in the onset of Huntington's Disease"
- 2011 *Drosophila Growth and Regeneration* June 29<sup>th</sup> - July 2<sup>nd</sup> at Begur (Spain)  
"Myc in the fat body, only matter of protein synthesis?"
- 2010 *New York area Drosophila workshop* January 11<sup>th</sup> at the New York Academy of Science, NY  
"Regulation of growth and metabolism by Myc, new insights from the flyroom"  
co-speaker with Federica Parisi (PhD student).
- 2007 *Drosophila Research Conference* March 7<sup>th</sup> -10<sup>th</sup> Philadelphia, PA.  
"In vivo and in vitro regulation of dMyc protein stability by Sgg/dGSK3 and Dco/CK1 kinases"
- 2007 *Cancer Metabolism and Ageing Symposium* May 11<sup>th</sup> at the New York Academy of Science, N  
"dMyc regulation by Insulin and Nutrients Pathways"
- 2006 *Cancer Biology Symposium December 1<sup>st</sup>* at the New York Academy of Medicine, NY  
"dMyc and Growth Control"
- 2004 *Italian Drosophila Meeting* 18<sup>th</sup> - 20<sup>th</sup> October at Napoli, IT  
"Studies on Myc function in *Drosophila*"
- 2002 *Making decision in G1* October 3<sup>rd</sup> - 5<sup>th</sup> at Frascati, IT  
"Control of dMyc activity by the DNA helicases Tip48 and Tip49"
- 1996 *Tyrosine Phosphorylation & Cell Signaling Cold Spring Harbor*, June 6<sup>th</sup>- 8<sup>th</sup> at CSH, NY  
"The ARK tyrosine kinase receptor can be activated through homophilic and heterophilic binding"

**INVITED SEMINARS (only from the last eight years)**

- 2017 University of Zurich, CH  
“Regulation of autophagy in neurons by GS1”
- 2016 University of Barcelona, Barcelona, Spain  
“Glutamine synthetase induces autophagy and neuronal survival in a *Drosophila* model for Huntington’s Disease”
- 2015 CiBio University of Trento, Trento, Italy  
“Glutamate Signaling in the onset of Huntington’s Disease”
- 2014 Columbia University’ Genetics & Development  
“Studies on a possible cross-talk between glia and neurons in human HD using *Drosophila*”
- 2013 University of Milan, Department of Biosciences  
“How Myc regulates growth and metabolism: Novel insights from *Drosophila*”
- 2013 NYU Langone Medical Center, Department of Endocrinology and Diabetes  
“A model to study inflammation in fat from obese, using *Drosophila*”
- 2012 Deutsches Zentrum fur Diabetesforschung (DZD) Dresden (Germany)  
“Studies on Fat Metabolism, from Myc to an Obesity Model using *Drosophila*”
- 2011 Columbia University, DERC, Diabetes & Endocrinology Center  
“dMyc, the *Drosophila* homologue of the human gene”
- 2010 ITT Institute of Cancer Center, Florence Italy  
“Regulation of growth and metabolism by *dmyc*”
- 2010 Inserm-Necker Medical Center- Paris, France  
“Regulation of growth and metabolism by *dmyc*, new insights from the flyroom”

In my career have been a mentor to 5 PhD students, more than 12 MA students, 5 postdocs, and many undergraduate and also to high school students during Summer Vacation. Here I report the names of the members of my lab since I moved back to Italy.

**PRESENT LAB MEMBERS AT THE UNIVERSITY OF TRENTO**

- 2017- present Mariateresa Allocca predoctoral fellow  
2018-19 Nicholas Ferrari, Stefania Santarelli  
2017-18 Edoardo Primon, undergraduate

**LAB MEMBERS AT THE UNIVERSITY OF MILANO 07/2014-04/2018**

- 2015- 2018 **Alice Valenza** PhD Student Environmental Sciences  
2014-2017 **Chiara Paiardi** postdoctoral fellow  
2015-2016 **Zhasmine Myrzoian** postdoctoral fellow  
Master student  
2017-18 **Carola Bonfanti, Vera Manelli, Marco Brambilla, Elisa Rovinelli**  
2015-16 **Alice Marra** and **Bianca Maria Petrignani** (currently PhD students at EPFL Prof B. Lemaitre),  
**Giacomo Viola** (currently technician at the University of Barcelona Prof F Serras). **Giusimaria Licata**  
2014-16 **Luisa Vernizzi** currently PhD Student at the University of Zurich (Prof. C. Lehner)  
2013-14 **Martino Raneli** (from Fall 2014).

**PROFESSIONAL ACTIVITIES**

Member of the Dissertation Committee PhD students:

- 2017 **Manuela Sollazzo** PhD in Cellular and Molecular Biology University of Bologna supervisor Prof Annalisa Pession  
-2015 **Andrea Bernardini**, PhD in Cellular and Molecular Biology University of Milan supervisor Prof Nerina Gnesutta  
-2014-16 **Helen Tauc** PhD in Biochemistry and Molecular Biology, University of Ulm, Germany, supervisors Petra Pandur, University of Ulm; Heinrich Jasper, Novato CA USA

Supervisor of MA student with external Thesis

- 2014-15 **Federico Germani** MA-Thesis in Hugo Stocker’s lab Dept of Molecular Biology ETH, Zurich, currently PhD Student at University of Zurich CH (supervisor Koni Basler).

**Bianca Petrignani** Thesis in Bruno Lemaitre's lab Dept of Immunology EPFL, Lausanne class 2015, currently PhD at EPFL Lausanne CH (supervisor Bruno Lemaitre).

**Albana Kodra** MA-Thesis in Laura Johnston's lab at Columbia University, NY class 2015, currently PhD student of Genetics and Development at Columbia University, NY USA (supervisor Laura Johnston).

Mentor for International Undergraduate students Erasmus Program training for 6 months

2015 **Mariana Silva Figueredo** (University of Oporto, Portugal).

2014 **Evagracia Villacampa**, (University of Seville, Spain)

#### **WORKING WITH HIGH SCHOOL STUDENTS:**

2018 Activity of Orientation to Science in High Schools with the topic:

“Un futuro nella biotech. Come la ricerca con la *Drosophila melanogaster* (il moscerino dell'aceto) aiuta a risolvere problemi in biomedicine”

Liceo Scientifico A. Einstein, Milan, January 13<sup>th</sup>

Istituto Scientifico B. Boscardini Vicenza February 20<sup>th</sup>

Liceo Scientifico Duca degli Abruzzi, Treviso April 13<sup>th</sup>

Istituto Scientifico Remondini, Bassano del Grappa, Vicenza May 9<sup>th</sup>

2017 MUSE Museo delle Scienze *Corea di Huntington e Sclerosi Laterale Amiotrofica: due malattie neurodegenerative studiate con il moscerino della frutta* Trento September 28<sup>th</sup>

Mentor for Summer Courses for High School Students

-July 2018 **Viola Cioffi, Flavia Ferrari** Liceo Scientifico Leonardo da Vinci-Trento.

-June-July 2017 **Matteo Bottazzi, Federica Negri Ciceri, Micol Clot, Giovanni Maria Galbiati, Lorenzo** Liceo Scientifico Einstein Milano.

-June-July 2016 **Marco Patti, Kenneth Paulsen, Elisabetta M. Perego, Matilde Villa**

Liceo Scientifico Einstein Milano, students on their 4<sup>th</sup> year in the lab for 4 weeks. Their data will be presented at the Italian *Drosophila* Meeting 2016 in Bologna, Sept 14-16<sup>th</sup>, and at the European Huntington Disease Network Meeting in Le Hauge, NL in Sept, 15-17<sup>th</sup> 2016.

**Luca Meda** from Liceo Scientifico Leonardo da Vinci Milano a 3rd year student winner from the CUSMIBIO selection of the Program “one week as a scientist” title of the project: Come la ricerca con *Drosophila melanogaster* (il moscerino dell'aceto) aiuta a risolvere problemi in biomedicina.

June-July 2016 Leader of the Course Courses for High School students (24 students enrolled by COSP) “Using *Drosophila* to study Human Diseases”

-February 2016 Stage for High School Students from San Carlo Milan (teacher Patrizia S. Bernardi)

-June-July 2015 **Matteo Cascinelli, Matteo Frattaroli, Valeria Lupi and John Benedict Pollard**

Liceo Scientifico Einstein Milano, students on their 4<sup>th</sup> year in the lab for 8 weeks. Their data has been presented at the 24<sup>th</sup> European *Drosophila* Research Conference in Heidelberg, Sept 9-12<sup>th</sup> 2015.

-November 2015- current for the EU Program *Science Under-18* in collaboration with teachers for two Middle School from Milan teacher Marina Citterio and Antonella Fiammia, “How to approach students to Mendel's laws using *Drosophila*”

#### **Others:**

*Ad hoc* Reviewer for: Cell, Cell Metabolism, Molecular and Cellular Biology, DMM, Oncogene, BBA, OncoNet, Fly, Intl J. of Dev. Neuroscience, Frontiers in Neuroscience and Frontiers in Genetics.

*Ad hoc* Grant-Reviewer for NSF (National Science Foundation-USA), CUNY (City University of NY Grant Program-USA), SNF (Swiss National Funds), MRC (Medical Research Grant-UK).

2018- Member of the Editorial Board of *Genes* (OA Journal)

2018- Member of the Editorial Board of *Genes* (OA Journal)

2012- Member of the Editorial Board of Open Journal for Cell Biology (OJCB)

**TEACHING ACTIVITIES:****At the University of Trento:****2018-19**

Single Gene Diseases 6 credits to MA students (100% responsible of the Course) English  
 Signal Transduction 6 credits to undergraduate students (100% responsible of the Course) Italian  
 Lectures in Biology of Cancer (50% co-responsible) Italian  
 Animal Models to Study Human Diseases (25% co-responsible) English

**2017-18**

Single Gene Diseases 6 credits to MA students (100% responsible of the Course) English  
 Animal Models to Study Human Diseases (25% co-responsible) English

**2014- 17 at the University of Milan:**

Lectures Classes in the Methods of Cytochemistry (responsible Dr. Maria E. Pasini) (Italian)  
 Lectures on *Drosophila* as a model for Human Diseases Summer courses to High School Student (Italian)  
 Lecture at the Experimental Pharmacology Course to PhD student (responsible Dr. A. Panerai)  
 “Metabolism, Diet and Cancer “(English)  
 Lecture at the Developmental Biology Course held by Dr. M. Beltrame (English)  
 Courses for Qualification of a degree in science for teacher of middle school at UNIMI PAS059 (Italian)  
 Lecture Genetics and Science to middle school student “project *Science Under18* “(Italian)

**2010-2014 at Columbia University** Instructor on discussion groups on Developmental Biology and Cell Biology to Undergraduate and PhD students.

**2006-2010 at City College CUNY New York, NY USA Full time Instructor of the Courses:**

BIO100: “The Strategy of Life” undergraduate level  
 BIO483: “Biotechnology”, a practical and theoretical course on Applied Biotechnology, and on the basic techniques used in Biotech labs. Advanced course for undergraduate open also to graduate students  
 BIO229: “Molecular and Cell Biology”, Core Course for undergraduate  
 BIO9100 “Colloquium in Biology” graduated level lectures including invited speakers  
 BIO206: “Recitations in Genetics”

**2004-2006 at the University of Novara, School of Medicine, Novara IT**

“Applied Biotechnology” Foundations in Biotechnology and its Applications to Industry.

**2002-2003 at the University of Zurich, CH**

“Applied Genetics” Lecturer in selected topics including the use of *Drosophila* as an Animal Model for Research and Analysis of Gene Targets using Microarrays Technique.

**1996-2000 at New York University School of Medicine, NY USA**

“Medical Microbiology” Leading the weekly discussion groups on specific topic in Medical Microbiology.

**Private information**

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