



Sara Busnelli

WORK EXPERIENCES

2013-now



Post-Doc researcher

European Institute of Oncology (IEO) Department of experimental oncology

I am the leader of a study on mitosis modulation focused on functional connections between key regulators of mitotic progression and chromosome segregation.

For my project I won a fellowship from Fondazione AIRC per la Ricerca sul Cancro: 2016 FIRC triennial fellowship

Core responsibilities:

- perform comprehensive literature searches to develop and maintain in-depth knowledge and understanding of current scientific literature and state of the art to support project development
- writing scientific reports and papers
- design and perform scientific experiments
- planning and monitoring time schedule of the project
- manage the planning, spending and tracking of the budget for the project
- training and coordinate work of students and technician
- work cooperatively with colleagues
- interface with the scientific community by workshops and congresses

2009-2013 **Lecturer for laboratory trainings**

University of Milano-Bicocca Department of biotechnology and biosciences

I organized training laboratories in biochemistry for classes of 25/30 students. I was in charge of teaching the techniques, follow the practical experiences and correct the exams.

2009-2013 **phD training**

University of Milano-Bicocca Department of biotechnology and biosciences

I was involved in a project focusing on the link between cellular metabolism and cell cycle progression. Results of this project were published in international peer-reviewed journals. During this period I have also trained two undergraduate students as second supervisor for their master degree.

EDUCATION AND TRAINING

2019-2020

Master in Pharma Medical Affairs

Alma Laboris Business School

Main themes: Medical affairs: roles, responsibilities and skills, pre-clinical and clinical research, How evidence is designed and carried out, Methodology and statistics elements, Pharmacology (market access), Pharmaceutical Marketing, Pharmacovigilance, Regulatory Affairs, Publication of research results, the value of communication, scientific communication in public.

- 2009-2013 **phD in Industrial Biotechnology**
University of Milano-Bicocca Department of biotechnology and biosciences
- 2007-2009 **Master's degree in Industrial Biotechnology**
University of Milano-Bicocca Department of biotechnology and biosciences
110 magna cum laude/110
- 2004-2007 **Bachelor's degree in Industrial Biotechnology**
University of Milano-Bicocca Department of biotechnology and biosciences
107/110

SKILLS

- Technical skills**
- best practice of yeast cultures and bacteria cultures
 - basic knowledge of mammalian cells cultures and cytotoxicity essays (mtt test)
 - classical genetics skills such as growth and survival curves, transformation, mating, sporulation, tetrads analysis, spontaneous and induced mutants characterization;
 - best knowledge of molecular biology techniques such as plasmid vectors construction, heterologous genes cloning and expression, genomic and plasmid DNA extraction, RNA extraction, PCR, Real-time PCR and Chromatin Immunoprecipitation;
 - best knowledge of biochemical techniques such as gel electrophoresis 1d and 2d, western blot, immunoprecipitation, proteins purification and *in vitro* essays on enzymes activity (such as phosphorylation and ubiquitination essays).
 - good knowledge of microscopy techniques on fixed ad living cells.
- Computer skills**
- Good knowledge of Windows environment and Microsoft Office Suite (Word, Excel, Powerpoint). Good user of some imaging programs, like Adobe Photoshop and Illustrator.
- Soft skills**
- Analytical and critical thinking
 - Problem solving and troubleshooting
 - Communication especially in scientific environment
 - Target driven
 - Ability to work under pressure
 - Perseverance and persistence
 - Multitasking, good project organization
 - Desire to learn
 - Team work

LANGUAGES

- Italian** Mother tongue
- English** Fluent
- French** Beginner

PUBBLICATIONS

Busnelli S., Visintin C., Visintin R. (in preparation)

A Cdc5-mediated phosphorylation of Clb2 generates a signal that drives APC-Cdc20 dependent degradation

Busnelli S., Visintin C., Visintin R. (in preparation)

A Cdc5-Clb2-Cdc14-APC circuit is at the core of the FEAR network

Iacovella M.G, Golfieri C., Massari L.F., **Busnelli S.**, Pagliuca C., Dal Maschio M., Infantino V., Visintin R., Mechtler K., Ferreira-Cerca S., De Wulf P.

Rio1 promotes rDNA stability and downregulates RNA polymerase I to ensure rDNA segregation
Nature Communication 2015 6:6643. Impact Factor 11.878

Busnelli S., Tripodi F, Nicastro R, Cirulli C, Tedeschi G, Pagliarin R, Alberghina L, Coccetti P.

Snf1/AMPK promotes SBF and MBF-dependent transcription in budding yeast.

Biochim Biophys Acta - Molecular and cell research 2013 1833(12):3254-64. Impact Factor: 4.739

Tripodi F, Nicastro R, **Busnelli S**, Cirulli C, Maffioli E, Tedeschi G, Alberghina L, Coccetti P.

Protein kinase CK2 holoenzyme promotes start-specific transcription in Saccharomyces cerevisiae.
Eukaryot Cell. 2013 12(9):1271-80 Impact Factor : 2.992

Pessina S., Tsiarentsyeva V., **Busnelli S.**, Vanoni M., Alberghina L., Coccetti P.

Snf1/AMPK promotes S-phase entrance by controlling CLB5 transcription in budding yeast
Cell Cycle 2010 9(11) Impact Factor : 3.304

INTERNATIONAL CONGRESS PARTECIPATION AND AWARDS

EMBO workshop - Chromosome segregation and aneuploidy - Galway (Ireland) June 27-30 2016

"Polo-like kinase Cdc5 phosphorylates Clb2 cyclin thereby promoting its degradation via APC-Cdc20 complex" Poster e presentazione - **Busnelli S., Visintin R.** POSTER

My poster was awarded with a special prize

Gordon Research Conferences - Chromosome Dynamics - Waterville Valley NH (United States) June 28- July 7 2015

"A protein network determines Cdc14 release from the nucleolus" Poster

Busnelli S., Visintin C., Montani F., Visintin R. . POSTER

EMBO congress – Gene transcription in yeast: from mechanisms to gene regulatory network - Girona (Spain) , June 16-21, 2012

"A new role for protein kinase Snf1/AMPK as regulator of SBF/MBF dependent genes" Poster

Busnelli S., Cirulli C., Tripodi F., Tedeschi G., Alberghina L. and Coccetti P. . POSTER

14th International Biotechnology Symposium and Exhibition - Rimini (Italy) September 14-18, 2010

"Towards a yeast cell cycle Sysbio model: Snf1/AMPK promotes S-phase entrance" Poster

S. Pessina, S. **Busnelli**, M. Vanoni, L. Alberghina, P. Coccetti . POSTER

OTHER INFORMATION

Driving license cat. B

PERSONAL INTERESTS

Reading crime books, travelling and playing padel tennis. Volunteer work with the association AVIS (Associazione Volontari Italiani del Sangue).

Esprimo il consenso al trattamento dei dati personali secondo il Dlgs 196 del 30 giugno 2003 e dell'art. 13 GDPR (Regolamento UE 2016/679)

23/5/2020

3/5/20