

## Riccardo Lorenzo Rossi – curriculum vitae

Born in Milan, Italy; Italian nationality.

Spoken languages: Italian (mother tongue) and English (fluent, spoken and written).

### **Profession**

**Sept 2012 – to date.** Coordinator of the Computational Biology and Data Analysis group at Fondazione INGM, Milano Italy (Fondazione Istituto Nazionale Genetica Molecolare).

**July 2008 – to date.** Research Scientist at Fondazione INGM, Milano Italy (Istituto Nazionale Genetica Molecolare) in the Integrative Biology Program. Genomics and Systems Biology of the Human Immune System, High throughput screenings, statistical analyses and medical informatics.

**Dec 2007 – June 2008.** Founder of project *Mappacervelli.org* (MaRE, Maps of Italian researchers abroad) and promoter for *ISSNAF* (Italian Scientists and Scholars in North America Foundation). Geographic based analysis of Italian researchers social networks in the USA.

**Oct 2005 – Nov 2007.** Senior fellow at the Department of Biochemistry, University of Washington, Seattle WA, USA. Transcriptional regulation of glucose repressed genes in budding yeast.

**Jan 2003 – Sept 2005.** Fellow at the Department of Biotechnology and Biosciences, University of Milano-Bicocca. Nutrient dependent molecular mechanisms of G1-S transition in budding yeast.

**Jan 2000 - Dec 2002.** Graduate student fellowship on cell cycle regulation in yeast and cytofluorimetric analyses of cell cycle mutants. Department of Biotechnology and Biosciences, University of Milano-Bicocca.

### **Education**

**2010.** Master in Direzione e Strategia d'Impresa (MBA), Business School IISole24Ore, Milano, Italy.

**2002.** PhD in Industrial Biotechnology. Department of Biotechnology and Biosciences, Università di Milano-Bicocca, Milano, Italy.

**1999.** MS in Biological Sciences. Department of Biochemistry and General Physiology, Università degli Studi di Milano, Milano, Italy.

### *Under graduate experiences*

**Sept 1997 - Dec 1999.** Experimental internship for MS in Biological Sciences at the Department of Biochemistry and General Physiology, University of Milan, Italy.

**Summer 1994.** Research stage on insect cells' infection mechanisms by baculoviruses. Department of Microbiology, Manning Lab, University of California, Davis CA.

### **Other experiences**

Member of the Scientific Committee in Genessere Srl, a medical informatics startup company (2011 – to date).

Member of the organizing committee for the MilanMeetsImmunology meetings (MMI), the bi-annual Forum in Immunology of the Scientific Institutes in the Milan area (2010 – to date).

Documentarist for the MaREProject – mappacervelli.org (2007-2008).

Free lance web designer and website management. (Jan 1997 – Dec 2001).

Tutoring for Industrial Biotechnology students at University of Milano-Bicocca on “Comparative analysis of software tools for annotation, visualization and simulation of genetic and biochemical networks” (BS, Nov 2004 – Oct 2005) and on “G1-S transition regulation in budding yeast by the Sic1 inhibitor” (MS, Jan 2003 – Jul 2004).

Organization and didactics of laboratory classes in Biochemistry (Sept 2003; Nov – Dec 2004) and Biomolecular Technologies (April 2000; May 2001) at University of Milano-Bicocca.

## Skills and interests

Statistics and data analyses with R-Bioconductor, T-MeV and other gene expression software frameworks; SBW and CellDesigner for simulations of biological ODE models, Cytoscape, Pajek (network analysis).

Familiarity with genetic samples handling and experimental pipelines for genomics high throughput analyses with microarrays (Illumina), Low Density RTqPCR arrays and OpenArrays (Applied Biosystems - LifeTech) and all common molecular biology techniques.

Cell signaling, information fluxes through signal transduction pathways and networks, quantitative methods for biology. Knowledge driven analyses (GSEA, GO, pathways enrichment). Information management and medical Informatics.

Interested in GIS (geographic information systems) and geospatial data management, complexity and small worlds issues, social network analysis, epidemiology and geography. Passionate for dissemination of science, web based systems for content management and remote collaboration for scientific communication.

## Peer-reviewed Scientific production

M. Pagani, G. Rossetti, I. Panzeri, P. de Candia, R.J.P. Bonnal, **R.L. Rossi**, J. Geginat, S. Abrignani. Role of microRNAs and Long-non-coding RNAs in CD4+ T cell differentiation. *Immunological Reviews*. (2013), *In press*.

F. Caprioli, F. Bosè, **R.L. Rossi**, L. Petti, C. Viganò, C. Ciafardini, L. Raeli, G. Basilisco, S. Ferrero, M. Pagani, D. Conte, G. Altomare, G. Monteleone, S. Abrignani, E. Reali. Reduction of CD68+ macrophages and decreased IL-17 expression in intestinal mucosa of patients with Inflammatory Bowel Disease strongly correlate with endoscopic response and mucosal healing following infliximab therapy. *Inflammatory Bowel Diseases*. (2013), *In press*.

L. Novellino, **R.L. Rossi**, F. Bonino, D. Cavallone, S. Abrignani, M. Pagani, M.R. Brunetto. (2012) Circulating hepatitis B surface antigen particles carry hepatocellular microRNAs. *PLoS One*. 2012;7(3):e31952.

**R.L. Rossi**, G. Rossetti, L. Wenandy, M. Moro, R. Sciarretta Birolo, R.J.P. Bonnal, S. Curti, S. Maglie, P. Gruarin, F. Marabita, D. Mascheroni, A. Ripamonti, M. Comelli, E. Trabucchi, R. De Francesco, J. Geginat, S. Abrignani and M. Pagani. (2011) Distinct microRNA signatures in human lymphocyte subsets and enforcement of the naïve state in CD4<sup>+</sup> T cells by the microRNA miR-125b. *Nature Immunology*. **12**(8):796-803.

B. Celona, A. Weiner, F. Di Felice, F. M. Mancuso, E. Cesarini, **R.L. Rossi**, L. Gregory, D. Baban, G. Rossetti, P. Grianti, M. Pagani, T. Bonaldi, J. Ragoussis, N. Friedman, G. Camilloni, M.E. Bianchi and A. Agresti (2011). Substantial Histone Reduction Modulates Genomewide Nucleosomal Occupancy and Global Transcriptional Output. *PLoS Biology*. **9**(6):e1001086.

**R.L. Rossi**, V. Zinzalla, A. Mastriani, M. Vanoni, and L. Alberghina (2005). Subcellular localization of the cyclin dependent kinase inhibitor Sic1 is modulated by the carbon source in budding yeast. *Cell Cycle*. **4** (12) : 1798-1807.

L. Alberghina, **R.L. Rossi**, D. Porro, M. Vanoni (2005). A modular systems biology analysis of cell cycle entrance into S phase. In "Systems Biology" *Topics in Current Genetics*. Springer-Verlag GmbH. **13**: 325-347.

M. Vanoni, **R.L. Rossi**, L. Querin, L. Zinzalla, and L. Alberghina (2005). Glucose modulation of cell size in yeast. *Biochemical Society Transactions*. **33**: 294-296.

L. Alberghina, **R.L. Rossi**, L. Querin, V. Wanke, and M. Vanoni (2004). A cell sizer network involving Cln3 and Far1 controls entrance into S-phase in the mitotic cycle of budding yeast. *The Journal of Cell Biology*. **167** (3): 433-443.

P. Coccetti\*, **R.L. Rossi**\*, F. Sternieri, D. Porro, G.L. Russo, A. Difonzo, F. Magni, M. Vanoni and L. Alberghina (2004). Mutations of the CK2 phosphorylation site of Sic1 affect cell size and S-Cdk kinase activity in *Saccharomyces cerevisiae*. *Molecular Microbiology*. **51** (2): 447-460. (\* equal contribution)

L. Alberghina, **R.L. Rossi**, V. Wanke, L. Querin, M. Vanoni (2003). Checking cell size in yeast: a systems biology approach. *Ital. J. Biochem*. **52** (1): 55-57.

## Patents

M Pagani, R De Francesco, G Rossetti, S Abrignani, **RL Rossi**. MICRORNA EXPRESSION SIGNATURE IN PERIPHERAL BLOOD OF PATIENTS AFFECTED BY HEPATOCARCINOMA OR HEPATIC CIRRHOSIS AND USES THEREOF. *US Patent 20,120,238,617* (2012); *EP Patent 2,475,785* (2012); *WO Patent WO/2011/027,332* (2011).