

CHIORINO GIOVANNA

Professione : RICERCATORE PRESSO STRUTTURA PRIVATA

Sede lavorativa

FONDAZIONE EDO ED ELVO TEMPIA VALENTE O.N.L.U.S.

E-mail:giovanna.chiorino@fondoedotempia.it

CURRICULUM

PERSONAL INFORMATION

Citizenship: Italian
e-mail: giovanna.chiorino@fondoedotempia.it
Contact: Lab of Cancer Genomics
Fondazione “Edo ed Elvo Tempia”, via Malta 3, 13900 Biella
Phone and fax: +39 015 351830 - +39 015 21116

EDUCATION

1986-91 Attended the Scientific Lyceum in Biella, Italy (Diploma)
1991-96 Attended the Mathematical School, University of Turin, Italy. Graduated with full score (110 cum laude)
1997-00 Attended the Ph.D School in Biomathematics at the Lab of Applied Mathematics, University of Pau (France), with a Fellowship of the “Istituto Nazionale di Alta Matematica” (INDAM) of Rome
Earned the Ph.D in Biomathematics (mention très honorable avec félicitations du jury) on December 8th 2000, with a thesis on “Mathematical modeling and study of the coupling between cell cycle and proliferation” (Prof. O. Arino)

PROFESSIONAL EXPERIENCE

1996-97 Fellow at the “Laboratoire de Modélisation des Systèmes Biologiques”, University of Lyon 1 (France), with a Fellowship of the University of Turin
1998-2000 Collaborated with the Dept of Oncology of the “Mario Negri” Institute for Pharmacological Research in Milan, Italy
2001 Visiting scientist at the Screening Technologies Branch, National Cancer Institute, Frederick MD (US)
May 2001 Group leader, Lab. of Cancer Genomics of Fondazione “Edo ed Elvo Tempia Valenta” per la lotta contro I tumori O.N.L.U.S., Biella

SCIENTIFIC ACTIVITY

1997-2000 Multiparameter flow cytometry, cell cycle kinetics, simulation of cell cycle and growth of tumor cell lines treated with anticancer drugs, molecular networks regulating the G1/S transition of the cell cycle
01-today Global gene expression and microRNA analysis with oligo microarrays (image acquisition and elaboration, gene expression data analysis and management, significance analysis, data mining and storing, sample classification, gene network and functional annotation analysis)
Main topics of interest: prostate cancer, ovarian and breast cancer, melanoma, Notch1 signalling pathway

PUBBLICAZIONI SCIENTIFICHE

1. **Chiorino G.**, Auger P., Charles S. and Chassé J.L., “Behavioural choices based on patch-selection: a model using aggregation methods.”, *Math Biosci.* 157: 189-216 (1999)
2. Auger P., **Chiorino G.** and Poggiale J-C., “Aggregation, emergence and immergence in hierarchically organized systems”, *Int J Gen Syst.*, 27(4):349-71 (1999)
3. **Chiorino G.**, Arino O. and Ubezio P., “Cell cycle regulation and perturbations”, *Eur. Comm Math Theor Biol.*, 1:7-10 (2000)

4. Chiorino G., Metz Tomasoni D. and Ubezio P., "Desynchronization rate in cell populations: mathematical modeling and experimental data", *J Theor Biol.*, 208(2):185-99 (2001)
5. Marchini S, Chiorino G. "Use of the microarrays to study the mechanism of action of new anticancer drugs" *Minerva Biotechnologica*, 13(4):269-80 (2001).
6. Chiorino G. and Lupi M., "Variability in the timing of G1/S transition", *Math Biosci* 177-178: 85-101 (2002)
7. Erba E, Bassano L, Di Liberti G, Muradore I, Chiorino G, Ubezio P, Vignati S, Codegoni A, Desiderio MA, Faircloth G, Jimeno J and D'Incalci M, "Cell cycle phase perturbations and apoptosis in tumour cells induced by aplidine", *Br J Cancer*. May 6; 86(9):1510-7 (2002)
8. Biroccio A, Benassi B, Filomeni G, Amodei S, Marchini S, Chiorino G, Rotilio G, Zupi G, Ciriolo MR, "Glutathione influences c-Myc-induced apoptosis in M14 human melanoma cells", *J Biol Chem*. Nov 15; 277(46):43763-70 (2002)
9. Marchini S., Chiorino G., Faircloth G.T. and D'Incalci M., "Changes in gene expression profile induced by the anticancer agent Aplidine in Molt-4 leukemic cell lines", *J Biol Regul Homeost Agents*, Jul-Sep; 16(3):241-8 (2002)
10. Okuyama R, Nguyen BC, Talora C, Lioumi M, Chiorino G, Tagami H, Woo M and Dotto GP, "High commitment of embryonic keratinocytes to terminal differentiation through a Notch1 - caspase 3 regulatory loop", *Dev Cell*, Apr; 6(4):551-62 (2004)
11. Chiorino G, Acquadro F, Visconti S, Mello Grand M, Segir R and Dotto GP, "Interpretation of expression profiling results obtained from different platforms and tissue sources: an example from prostate cancer data", *Eur J Cancer*, Nov; 40(17):2592-603 (2004)
12. Marchini S, Marrazzo E, Bonomi R, Chiorino G, Zaffaroni M, Weissbach L, Hor nicek FJ, Broggini M, Faircloth GT, D'Incalci M. "Molecular characterisation of two human cancer cell lines selected in vitro for their chemotherapeutic drug resistance to ET-743", *Eur J Cancer*; 41(2):323-33 (2005)
13. Grossi M, Hiou-Feige A, Di Vignano AT, Calautti E, Ostano P, Lee S, Chiorino G, Dotto GP. "Negative control of keratinocyte differentiation by Rho/CRIK signaling coupled with up-regulation of KyoT1/2 (FHL1) expression", *Proc Natl Acad Sci USA*; 102(32):11313-8 (2005)
14. Benassi B, Fanciulli M, Fiorentino F, Porrello A, Chiorino G, Loda M, Zupi G and Biroccio A, "Myc phosphorylation is required for cellular response to oxidative stress", *Mol Cell*; 21(4):509-19 (2006)
15. Nguyen BC, Wang J, Devgan V, Lefort K, Buck C, Antonini D, Kitajewski J, Chiorino G, Missero C and Dotto GP, "Cross-regulation between Notch and p63 in keratinocyte commitment to differentiation", *Genes Dev*;20(8):1028-42 (2006)
16. Lefort K, Mandinova A, Ostano P, Kolev V, Calpini V, Kolfschoten I, Devgan V, Lieb J, Raffoul W, Hohl D, Neel V, Garlick J, Chiorino G, Dotto GP, "Notch1 is a p53 target gene involved in human keratinocyte tumor suppression through negative regulation of ROCK1/2 and MRCKalpha kinases" *Genes Dev*;21(5):562-77 (2007)
17. Deaglio S, Vaisitti T, Aydin S, Bergui L, D'Arena G, Bonello L, Omede' P, Scatolini M, Jaksic O, Chiorino G, Efremov D, Malavasi F, "CD38 and ZAP-70 are functionally linked and mark CLL cells with high migratory potential", *Blood* Dec 1;110(12):4012-21 (2007)
18. Salvati E, Legnetti C, Rizzo A, Scarsella M, Mottolese M, Galati R, Sperduti I, Stevens M, D'Incalci M, Blasco M, Chiorino G, Horard B, Gilson E, Zupi G and Biroccio A, "Telomere Damage promotes antitumoral activity of the G-quadruplex ligand RHPS4", *J Clin Invest* Nov;117(11):3236-47 (2007)
19. Chiorino G, Mello Grand M, Scatolini M, Ostano P, "From single gene to integrative molecular concept maps: pitfalls and potentials of the technology of microarrays", *J Biol Regul Homeost Agents*. 22(1):7-16 (2008)
20. Cangemi R, Mensa A, Alberini V, Mello Grand M, Chiorino G, Catapano CV and Carbone G, "Reduced expression and tumor suppressor function of the ETS transcription factor ESE-3 in prostate cancer", *Oncogene* 27(20):2877-85 (2008)
21. Mandinova A, Lefort K, Tommasi di Vignano A, Stonely W, Ostano P, Chiorino G, Iwaki H, Nakanishi J and Dotto GP, "FoxO3a is a key transcriptional target of canonical Notch signaling in the keratinocyte UVB-response", *EMBO J*. 27(8):1243-54 (2008)
22. Venesio T, Chiorino G, Balsamo A, Zaccagna A, Petti C, Pisacane A, Sarotto I, Scatolini M, Picciotto F and Risio M, "In melanocytic lesions the fraction of BRAF^{V600E} alleles is associated with sun exposure but unrelated to ERK phosphorylation", *Mod Pathol*. 2008 Jun;21(6):716-26.
23. Ghilardi C, Chiorino G, Dossi R, Nagy Z, Giavazzi R and Bani MR, "Identification of new tumor endothelial markers through gene expression profiling" *BMC Genomics* 2008 Apr 30;9:201

24. Brusa D, Garetto S, **Chiorino G**, Scatolini M, Migliore E, Camussi G and Matera L., "Post-apoptotic tumors are more palatable to dendritic cells and enhance their antigen cross-presentation activity", *Vaccine*, 2008 Nov 25;26(50):6422-32
25. Marchini S, Mariani P, **Chiorino G**, MarrazzoE, Bonomi R, Fruscio R, Clivio L, Garbi A, Torri V, Dell'Anna T, Apolone G, Broggini M, and D'Incalci M, "Analysis of gene expression in early-stage ovarian cancer", *Clin Cancer Res*, 2008 Dec 1;14(23):7850-60
26. Bekkal-Brikci F, **Chiorino G** and Boushaba K, "G1/S transition and cell population dynamics", *NHM* 2009 accepted
27. Azzimonti B, Dell'Oste V, Borgogna C, Mondini M, Gugliesi F, De Andrea M, **Chiorino G**, Scatolini M, Ghimenti C, Landolfo S and Gariglio M, "Epithelial-mesenchymal transition induced by keratinocytes growth condition is overcome by E6 and E7 from HPV16 but not HPV8 and HPV38: characterization of their global transcription profile", *Virology*, 2009 Jun 5;388(2):260-9
28. Scatolini M, Mello Grand M, Grosso E, Venesio T, Pisacane A, Balsamo A, Sirovich R, Risio M and **Chiorino G**, "Altered molecular pathways in melanocytic lesions", *Int J Cancer*, 2009 sept 30

Orario di Ricevimento

(quando – dove – modalità)

- Via e-mail, in tutti i giorni feriali
- Presso il Laboratorio di Farmacogenomica dei Tumori della Fondazione Tempia di Biella, su appuntamento