PERSONAL INFORMATION

Name: Lucia Sfondrini
Place of birth: Milan (Italy)
Date of birth: 08/10/1969
Nationality: Italian
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EDUCATION AND TRAINING

2002 Specialist on Microbiology and Virology (summa cum laude) University of Milan.
2001 PhD in Molecular and Cellular Biology of Cancer, Open University of London.
1995 Degree in Biology (summa cum laude) University of Milan.
1988 Classic Maturity, Liceo Classico "A. Manzoni" Milano

RESEARCH EXPERIENCE

2006-present Research Assistant Professor, Medicine, University of Milan, teaching at Immunology course. She has focused her research on tumor immunology and immunotherapy, developing approaches based on the use of Toll-like receptor 9 and 3 ligands to stimulate an anti-tumor immune response in preclinical models of ovarian and lung cancer. Moreover, she has investigated the involvement of TLRs in the Graft versus host disease and the role of their expression in some not hematopoietic tissues. She has been involved in studies aimed at evaluate the influence of antibiotic treatment and of dietary fatty acids in the development of mammary carcinomas in preclinical models. She is actually also working in projects to evaluate the role of forkhead box P3 transcription factor (FoxP3) expression in breast cancer on metastatic process and, more recently, to assess the significance of the expression of the autoimmune regulator (AIRE) gene in breast cancer subtypes and its role in prognosis.
2004-2006 Italian Government Fellowship for Scientific Research and Training, University of Milan. She has evaluated the use of Toll-like receptor 5 and 9 agonists in mouse models of cancer and role of Toll like receptors expression in Paneth cells.
1995-2004 Fellowship Experimental Oncology Department Istituto Nazionale Tumori Milan, working on various aspects of immunology and experimental oncology. In particular, she has evaluated an anti-tumor approach based on the expression of Mycobacterium tuberculosis antigens in tumor vaccines and the use of anti-doxorubicin monoclonal antibody as antagonist of toxic effects induced by chemotherapeutic treatment.

She is author of 24 papers in international, peer reviewer journals on various aspect of immunology and experimental oncology (Total Impact Factor: 122); 12 congress abstracts published in International journals; 24 poster presentations at International congress on immunology and cancer.

TECHNICAL SKILLS AND COMPETENCE

Experiences in the field of molecular biology, biochemistry, cellular biology, immunology assays, multiparametric flow cytometry and in vivo experiments and manipulations of mice. Seven certified courses on various methodological approaches. First language: Italian - Other languages: English

AWARDS:

2000-2002 recipient of an Federazione Italiana Ricerca sul Cancro (FIRC) three years-fellowship
2003 "Young Researcher Award" Istituto Nazionale Tumori Milano
2004 "Travel bursary" for EACR-18 Meeting. Innsbruck 3-6 July 2004.

SCIENTIFIC PUBLICATIONS

Cece, R.; Cazzaniga, S.; Morelli, D.; **Sfondrini, L.**; Bignotto, M.; Ménard, S.; Colnaghi, M.I. and Balsari, A.: "Apoptosis of Hair Follicle Cells during Doxorubicin-Induced Alopecia in Rats." Laboratory Investigation, 75 (4): 601-609 (1996) **I.F. 4.040**

Sfondrini, L.; Morelli, D.; Ménard, S.; Maier, J. A.; Singh, M.; Melani, C.; Terrazini, N.; Colombo, M.P., Colnaghi, M. I. and Balsari, A.: "Anti-tumor immunity induced by murine melanoma cells transduced with the Mycobacterium tuberculosis gene encoding the 38 kDa antigen". Gene Therapy, 5 (2): 247-252 (1998) **I.F. 5.418**

Morelli, D.; Lazzerini, D.; Cazzaniga S., Squicciarini, P.; Bignami P., Maier J.A.M., **Sfondrini, L.**; Ménard, S., Colnaghi, M.I. and Balsari, A.: "Evaluation of the Balance between Angiogenic and Antiangiogenic Circulating Factors in Patients with Breast and Gastrointestinal Cancers". Clinical Cancer Research, 4: 1221-1225 (1998) **I.F. 2.941**

Caruso A., Licenziati S., Morelli D., Fiorentini S., Ricotta D., Malacarne F., **Sfondrini L.** and Balsari, A.: "Segregation of type 1 cytokine production in human peripheral blood lymphocytes: phenotypic differences between Interferon-γ and Interleukin-2- producing cells in the $CD8^+$ T-cell subset". European Journal of Immunology, 28: 3630-3638 (1998) **I.F. 5.438**

Sfondrini L., Morelli D., Bodini A., Colnaghi, M.I, Ménard, S., and Balsari, A.: "High level antibody response to retrovirus-associated but not to melanocyte lineage-specific antigens in mice protected from B16 melanoma". International Journal of Cancer, 83: 107-112 (1999) **I.F. 3.545**

Sfondrini L., Rodolfo M., Singh M., Colombo M.P., Colnaghi M.I., Ménard S. and Balsari A.: "Cooperative effects of *Mycobacterium tuberculosis* Ag38 gene transduction and IL-12 in vaccination against spontaneous tumor development in proto-neu-transgenic mice". Cancer Research, 60: 3777-3781 (2000) **I.F. 8.460**

Balsari A., Rumio C., Morelli D., **Sfondrini L**., Nardini E., Barajon I and Menard S.: "Topical administration of a doxorubicin-specific monoclonal antibody prevents doxorubicin-induced mouth apoptosis in mice". British Journal of Cancer, 85: 1964-1967 (2001) **I.F. 3.942**

Sfondrini L., Besusso D., Zoia M.T., Rodolfo M., Invernizzi A.M., Taniguchi M., Nakayama T., Colombo M.P., Ménard S. and Balsari A.: "Absence of the CD1 molecule upregulates anti-tumor activity induced by CpG oligodeoxynucleotides in mice". Journal of Immunology, 169: 151-158 (2002) **I.F. 7.014**

Sfondrini L., Besusso D., Rumio C., Rodolfo M., Ménard S. and Balsari A.: "Prevention of spontaneous mammary adenocarcinoma in Her-2/*neu* transgenic mice by CpG-oligodeoxynucleotides". Faseb Journal, 16: 1749-1754 (2002) **I.F. 7.252**

Sfondrini L., Balsari A. and Ménard S.: "Innate immunity in breast carcinoma". (Review) Endocrine Related Cancer, 10: 301-308 (2003) **I.F. 3.688**

Balsari A., Tortoreto M., Besusso D., Petrangolini G., **Sfondrini L**., Maggi R., Menard S. and Pratesi G. "Combination of a CpG-oligodeoxynucleotide and a topoisomerase I inhibitor in therapy of human tumor xenografts". European Journal of Cancer.;40:1275-81 (2004) **I.F. 3.302**

Sfondrini L., Besusso D., Bronte V., Macino B., Rossini A., Colombo M.P., Ménard S., Balsari A.: "CpG-oligodeoxynucleotides Activate Tyrosinase-related Protein 2 Specific T Lymphocytes but does not lead to a protective tumor-specific memory response**.** Cancer Immunology Immunotherapy 53: 697-704 (2004) **I.F. 3.520**

Rumio C., Besusso D., Palazzo M., Selleri S., **Sfondrini L.**, Dubini F., Ménard S. and Balsari A.: **"**Degranulation of Paneth cells via Toll-like receptor 9". American Journal of Pathology 165: 373-81 (2004) **I.F. 6.441**

Battaini F., Besusso D., **Sfondrini L**., Rossini A., Morelli D., Tagliabue E., Menard S., Balsari A.: "Antibody response after vaccination with antigen-pulsed dendritic cells". The International Journal of Biological Markers 19:213-220 (2004). **I.F. 1.208**

Sfondrini L., Rossigni A., Besusso D., Mènard S. and Balsari A. "Anti-tumor activity of the Toll-like receptor-5 ligand flagellin in mouse models of cancer". J. of Immunology, 176: 6624-30 (2006) **I.F. 6.293**

Rossini A., Rumio C., **Sfondrini L**., Tagliabue E., Morelli D., Miceli R., Mariani L., Palazzo M., Ménard S. and Balsari A. "Influence of antibiotic treatment on breast carcinoma development in proto-neu transgenic mice" Cancer Research**,** 66:6219-24 (2006) **I.F. 7.656**

Gariboldi S, Palazzo M, Zanobbio L, Selleri S, Sommariva M, **Sfondrini L.,** Cavicchini S, Balsari A, Rumio C. "Low molecular weight hyaluronic acid increases the self-defense of skin epithelium by induction of beta-defensin 2 via TLR2 and TLR4". J Immunol. 181:2103-10 (2008). **I.F. 6.068**

Sfondrini L.*, Calcaterra C. *, Rossini A., Sommariva M., Rumio C., Menard S., Balsari A. "Critical Role of TLR9 in Acute Graft-versus-Host Disease". * *Contributed equally to this work.* J.Immunol. 181: 6132-9 (2008) **I.F. 6.068**

Sfondrini L. *, De Cesare M. *, Campiglio M., Sommariva M., Bianchi F., Perego P., Van Rooijen N, Supino R., Rumio C., Zunino F., Pratesi G., Tagliabue E. and Balsari A. "Ascite regresion and Survival increase in mice bearing advanced-stage human ovarian carcinomas ans repeatedly treated intraperitoneally with CpG-ODN". * *Contributed equally to this work.* J. Immunother. 33:8-15 (2010). **I.F. 4.837**

Rossini A., Zanobbio L., Palazzo M., **Sfondrini L**., Tagliabue E., Balsari A. and Rumio C. "Influence of lignans depletion on murine mammary gland morphology" Nutrition and Cancer. 62:237-42 (2010). **I.F. 2.361**

Sommariva M, De Cecco L, De Cesare M, **Sfondrini L**, Ménard S, Melani C, Delia D, Zaffaroni N, Pratesi G, Uva V, Tagliabue E, Balsari A "TLR9 agonists oppositely modulate DNA repair genes in tumor versus immune cells and enhance chemotherapy effects." Cancer Res. 71:6382-90. Epub 2011 Aug 30 (2011) **I.F. 7.856**

Rumio C., Gariboldi S., Palazzo M., Morelli D., Sommariva M., **Sfondrini L**., Viganò L., Tagliabue E. and Balsari A. "Induction of Paneth cell degranulation by orally administered Toll-like receptor ligands". J Cell Physiol. 227:1107-13 (2012). **I.F. 3.874**

Rossini A., Zanobbio L., **Sfondrini L**., Cavalleri A., Secreto G., Morelli D., Palazzo M,, Tagliabue E. Rumio C., Ménard S. and Balsari A. "Influence of fatty acid-free diet on mammary tumor development and growth rate in HER-2/neu transgenic mice". J Cell Physiol. ". J Cell Physiol. 228: 242-249 (2013). **I.F. 4.218**

Sfondrini L., Sommariva M., Tortoreto M., Meini A., Piconese S., Calvaruso M., Van Rojen N., Bonecchi R., Zaffaroni N., Colombo M.P., Tagliabue E. and Balsari A**. "**Aerosol-delivered CpG-ODN to eliminate lung metastases". Int J Cancer. 133: 383-93 (2013) **I.F: 6.198**