

CURRICULUM VITAE

Posizione attuale

Da 03/2022 ad oggi Dirigente Biologo presso IRCSS Ospedale Policlinico San Martino-U.O. Medicina Nucleare

Esperienze lavorative e professionali

07/2020 - 02/2022 Dirigente Biologo presso ASL3 Genovese Laboratorio Pat.Clinica

09/2017-07/2020 Docente di ruolo presso Scuola Primaria (Part-time)

04/2009-12/2019 Laboratorio Malattie Autoinfiammatorie ed Immunodeficienze – IRCCS-Istituto G.Gaslini

2006-2009 Laboratorio Neuroimmunobiologia (DI.N.O.G.- Università di Genova-CBA).

2003-2005 Laboratorio delle “Cellule Natural Killer e dell’Immunità Innata” del Centro d’Immunologia di Luminy-Marsiglia (CIML-Francia)

1998-2002 Laboratorio di Oncologia e di Nefrologia-IRCCS Istituto G.Gaslini;

1997-1998 Tirocinio post-laurea - Laboratorio di Oncologia-Istituto G.Gaslini Genova.

Titoli

2015 Dottorato di ricerca in Scienze e Tecnologie Biomediche-Genetica Indirizzo di Clinica, Genetica e Immunologia delle Malattie dell’Età Evolutiva-Università di Genova

2003 Specializzazione in Biochimica e Chimica Clinica -Università di Pavia

1997 Laurea in Scienze Biologiche-Università di Genova

1989 Diploma di maturità magistrale presso Istituto Magistrale Raffaello Lambruschini - Genova.

Finanziamenti

2014 Telethon, codice GGP14144, IRCCS-Istituto G.Gaslini

2010 Bando giovani ricercatori, codice GR-2010-2309622, responsabile UO2- IRCCS Istituto G.Gaslini

2004 Borsa di studio “Ligue Nationale contre le Cancer”-CIML-Francia.

Attività di ricerca e competenze

In corso: acquisizione delle competenze di cinetica dei traccianti tramite uso di LigandTracer, Micro-PET imaging, analisi metabolica cellulare mediante Agilent Seahorse e ossimetro.

Tipizzazione delle diverse sottopopolazioni linfocitarie mediante uso della citofluorimetria a flusso del sangue periferico di pazienti affetti da tumori ematologici, malattie autoinfiammatorie e immunodeficienze.

Progettazione, generazione e caratterizzazione del modello murino di malattia autoinfiammatoria Knock-in per NLRP3.

PUBBLICAZIONI

- 1) Marini C., Cossu V., Carta S, Greotti E, Gaglio D, Bertola N, **Chiesa S**, Bruno S, Vitale F, Bonanomi M, Porro P, Riondato M, Orengo AM, Bauckneht M, Morbelli S, Ravera S and Sambuceti GM. *Fundamental Role of Pentose Phosphate Pathway within the Endoplasmic Reticulum in Glutamine Addiction of Triple-Negative Breast Cancer Cells*. **Antioxidants** **2023**, 12, 43;
- 2) Marini C, Cossu V, Bauckneht M, Carta S, Lanfranchi F, D'Amico F, Ravera S, Orengo AM, Ghiggi C, Ballerini F, Durando P, **Chiesa S**, Miceli A, Donegani MI, Morbelli S, Bruno S, Sambuceti GM. *Mitochondrial generated redox stress differently affects the endoplasmic reticulum of circulating lymphocytes and monocytes in treatment-naïve Hodgkin's Lymphoma*. **Antioxidants**, **2022**, 11(4): 762;
- 3) Yeo JG, Wasser M, Kumar P, Pan L, Poh SL, Ally F, Arkachaisri T, Lim AJM, Leong JY, Lai L, Yeo KT, Lee ESC, Chua CJH, Larbi A, Nyunt MSZ, Ng TP, **Chiesa S**, Gattorno M, Martini A, Paleja BS, Dutertre CA, Chen J, Nay Yaung K, Tang SP, Ng SK, Yung CF, Tan AYJ, Lee SY, Ginhoux F, Albani S. *The extended polydimensional immunome characterization (EPIC) web-based reference and discovery tool for cytometry data*. **Nature Biotechnol** **2020** Jun;38(6):757;
- 4) Bertoni A, Carta S, Baldovini C, Penco F, Balza E, Borghini S, Di Duca M, Ognio E, Signori A, Nozza P, Schena F, Castellani P, Pastorino C, Perrone C, Obici L, Martini A, Ceccherini I, Gattorno M, Rubartelli A, **Chiesa S**. *A novel knock-in mouse model of cryopurin-associated periodic syndromes with development of amyloidosis: therapeutic efficacy of proton pump inhibitors*. **J Allergy Clin Immunol**. **2020** Jan; 145(1):368;
- 5) Signa S, Campione E, Rusmini M, **Chiesa S**, Grossi A, Omenetti A, Caorsi R, Viglizzo GM, Galluzzo M, Bianchi L, Talamonti M, Orlandi A, Martini A, Ceccherini I, Gattorno M. *Whole exome sequencing approach to childhood onset familial erythrodermic psoriasis unravel a mutation of CARD14 requiring unusual high doses of ustekinumab*. **Pediatric Rheumatol Online J** **2019** Jul 8; 17(1):38;
- 6) Volpi S, Cicalese MP, Tuijnenburg P, Tool ATJ, Cuadrato E, Abu-Halaweh M, Ahanchian H, Alzyoud R, Akdemir ZC, Barzaghi F, Blank A, Boisson B, Bottino C, Brigida I, Caorsi R, Casanova JL, **Chiesa S**, Chinn IK, Dücker G, Enders A, Erichsen HC, Forbes LR, Gambin T, Gattorno M, Karimiani EG, Giliani S, Gold MS, Jacobsen EM, Jansen MH, King JR, Laxer RM, Lupski JR, Mace E, Marcenaro S, Maroofian R, Meijer AB, Niehues T, Notarangelo LD, Orange J, Pannicke U, Pearson C, Picco P, Quinn PJ, Schulz A, Seeborg F, Stray-Pedersen A, Tawamie H, van Leeuwen EMM, Aiuti A, Yeung R, Schwarz K, Kuijpers TW. *A combined immunodeficiency with severe infections, inflammation, and allergy caused by ARPC1B deficiency*. **J Allergy Clin Immunol** **2019** Jun; 143(6):2299;

- 7) Caorsi R, Rusmini M, Volpi S, **Chiesa S**, Pastorino C, Sementa AR, Uva P, Grossi A, Lanino E, Faraci M, Minoia F, Signa S, Picco P, Martini A, Ceccherini I, Gattorno M. *CD70 Deficiency due to a Novel Mutation in a Patient with Severe Chronic EBV Infection Presenting As a Periodic Fever*. **Front Immunol**. 2018 Jan 29; 8:2015;
- 8) Morandi F, Horenstein AL, Chillemi A, Quarona V, **Chiesa S**, Imperatori A, Zanellato S, Mortara L, Gattorno M, Pistoia V, Malavasi F. “*CD56brightCD16- NK Cells produce adenosine through a CD38-mediated pathway and act as regulatory cells inhibiting autologous CD4+ T cell proliferation*” **J Immunol**. 2015 Aug 1;195(3):965-72;
- 9) Holzinger D, Fassl SK, de Jager W, Lohse P, Röhrig UF, Gattorno M, Omenetti A, **Chiesa S**, Schena F, Austermann J, Vogl T, Kuhns DB, Holland SM, Rodríguez-Gallego C, López-Almaraz R, Arostegui JJ, Colino E, Roldan R, Fessatou S, Isidor B, Poignant S, Ito K, Epple HJ, Bernstein JA, Jeng M, Frankovich J, Lionetti G, Church JA, Ong PY, LaPlant M, Abinun M, Skinner R, Bigley V, Sachs UJ, Hinze C, Hoppenreijns E, Ehrchen J, Foell D, Chae JJ, Ombrello A, Aksentijevich I, Sunderkoetter C, Roth J. “*Single amino acid charge switch defines clinically distinct proline-serine-threonine phosphatase-interacting protein 1 (PSTPIP1)-associated inflammatory diseases*” **J Allergy Clin Immunol**. 2015 May 26. pii: S0091-6749(15)00576-X;
- 10) Bachetti T, **Chiesa S**, Castagnola P, Bani D, Di Zanni E, Omenetti A, D’Osualdo A, Fraldi A, Ballabio A, Ravazzolo R, Martini A, Gattorno M, Ceccherini I. “*Autophagy contributes to inflammation in patients with TNFR-associated periodic syndrome (TRAPS)*”. **Ann Rheum Dis**. 2013 Jun;72(6):1044-52;
- 11) Omenetti A, **Chiesa S**, Gattorno M. “*Principles of inflammation for the pediatrician*”. **Pediatr Clin North Am**. 2012 Apr; 59 (2): 225-43.
- 12) **Chiesa S**, Morbelli S, Morando S, Massollo M, Marini C, Bertoni A, Frassoni F, Sambucetti GM, Traggiai E & Uccelli A “*Mesenchymal stem cells impairs bone marrow dendritic cells function in vivo*”. **Proc Natl Acad Sci U S A**. 2011 Oct 18;108(42):17384-9;
- 13) Borghini S, Tassi S, **Chiesa S**, Caroli F, Carta S, Caorsi R, Fiore M, Delfino L, Lasigliè D, Ferrarsi C, Traggiai E, Di Duca M, Santamaria G, D’Osualdo A, Tosca M, Martini A, Ceccherini I, Rubartelli A and Gattorno M. “*Cold-induced autoinflammatory disease associated with NLRP12*”. **Arthritis & Rheumatism** 2011 March; 63 (3): 830-839;
- 14) Lasigliè D, Traggiai E, Federici S, Alessio M, Buoncompagni A, Accogli A, **Chiesa S**, Penco F, Martini A, Gattorno M. “*Role of IL-1 beta in the development of human TH17 cells: lesson from NLRP3 mutated patients*”. **PLoS ONE** 2011; May 6 (5): e20014;

- 15) Uccelli A., GL Mancardi and **Chiesa S.** “*Use of mesenchymal stem cell in Autoimmune Disease*” **Autoimmunity** 2008 Dec; 41(8):592-5;
- 16) Morandi F, **Chiesa S.**, Bocca P, Millo E, Salis E, Solari M, Pistoia V, Prigione I. “*Tumor mRNA-transfected dendritic cells stimulate the generation of CTL that recognize neuroblastoma-associated antigens and kill tumor cellsimmunotherapeutic implications*”. **Neoplasia** 2006 Oct; 8(10):833-42;
- 17) **Chiesa S.**, Mingueneau M, Fuseri N, Malissen B, Raulet DH, Malissen M, Vivier E, Tomasello E. “*Multiplicity and plasticity of natural killer cell signaling pathways*” **Blood** 2006 Mar 15; 107 (6): 2364-72;
- 18) Prigione I¹, **Chiesa S.**¹, Taverna P, Ceccarelli R, Frulio R, Morandi F, Bocca P, Cesbron-Delauw MF, Pistoia V. “*T cell mediated immune responses to Toxoplasma gondii in pregnant women with primary toxoplasmosis*”. **Microbes Infect.** 2006 Feb.; 8 (2): 552-60;
- 19) Gattorno M, Prigione I, Morandi F, Gregorio A, **Chiesa S.**, Ferlito F, Favre A, Uccelli A, Gambini C, Martini A, Pistoia V. “*Phenotypic and functional characterisation of CCR7+ and CCR7- CD4+ memory T cells homing to the joints in juvenile idiopathic arthritis*”. **Arthritis Res Ther.** 2005; 7 (2): R256-67): 2048-54;
- 20) **Chiesa S.**, Tomasello E., Vivier E., Vély F. “*Coordination of activating and inhibitory signals in Natural Killer*”. **Mol. Immunol.** 2005 Feb; 42 (4): 477-84;
- 21) **Chiesa S.**, Prigione I., Morandi F., Buoncompagni A., Picco P., Bocca P., Martini A., Pistoia V. and Gattorno M. “*Cytokine flexibility of early and differentiated memory T helper cells in Juvenile Idiopathic Arthritis*”. **J. Rheumatol.** 2004 Oct; 31 (10):2048-54;
- 22) **Chiesa S.**, Vigo G, Cappa F, Prigione I, Pistoia V, Verrina E, Perfumo F, Barbano G. “*Peritoneal T cell responses can be polarized toward Th1 or Th2 in children on chronic peritoneal dialysis*”. **Artif Organs.** 2004 Aug; 28(8):750-2;
- 23) Gattorno M., Prigione I., Vignola S., Falcini F., **Chiesa S.**, Morandi F., Picco P., Buoncompagni A., Martini A. and Pistoia V. “*Levels of soluble CD27 in sera and synovial fluid and its expression on memory T cells in patients with juvenile idiopathic arthritides*”. **Clin. Exp. Rheumatol.** 2002 Nov-Dec; 20(6): 863-6;

- 24) Cimaz R., Gattorno M., Sormani MP, Falcini F., Zulian F., Lepore L., Bardare M., **Chiesa S.**, Corona F., Dubini A., Lenhardt A., Martini G., Masi L. and Bianchi ML. “*Changes in markers of bone turnover and inflammatory variables during alendronate therapy in pediatric patients with rheumatic diseases*” **J Rheumatol**, 2002 Aug; 29 (8): 1786-92;
- 25) Pezzolo A., Prigione I., **Chiesa S.**, Castellano E., Gimelli G. and Pistoia V. “*A novel case of immunodeficiency, centromeric instability, and facial anomalies (the ICF syndrome): immunologic and cytogenetic studies*”. **Haematologica**, 2002 Mar; 87(3): 329-31;
- 26) Barbano G., Cappa F., Prigione I., Pistoia V., Cohen A., **Chiesa S.**, Gusmano R. and P. Francesco. “*Plasma levels of soluble CD30 are increased in children with renal failure and with primary growth deficiency and decrease during treatment with recombination human growth hormone*”. **Nephrol Dial Transplant**, 2001 Sep ; 16 (9): 1807-13;
- 27) Prigione I., Facchetti, Lecordier L., Deslee D., **Chiesa S.**, Cesbron-Delauw M. F. and Pistoia V. “*T cell clones raised from chronically infected healthy humans by stimulation with Toxoplasma gondii excretory-secretory antigens cross-react with live tachyzoites: characterization of the fine antigenic specificity of the clones and implications for vaccine development*”. **J Immunol.**, 2000 Apr 1, 164(7): 3741-8.

¹ both authors contributed equally to this work