

BIOGRAPHICAL SKETCH

NAME	POSITION TITLE		
Claudio Sorio, M.D., Ph.D., Path.	Associate Professor		
Born in Verona (Italy) on September 21 st , 1962. Nationality: Italian			
EDUCATION/TRAINING			
INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
University of Padova and Univ. of Verona	M.D.	1982-1988	Medicine
University of Verona	Ph.D.	1990-1994	Pathology
University of Verona	Specialization	1994-1998	Anatomic Pathology

Employment and international activity

1989-1990:	Chief of the sanitary Service of the Military Presidium in Verona
1992-1995:	Post-Doctoral Fellow, Kimmel Cancer Center, Thomas Jefferson University, Philadelphia, PA, U.S.A.
1991-1998:	Visiting scholar (2 months) at the EMBL, Heidelberg (Dr. Sara Courtneidge lab, 1991) and Ulm University (Prof. Thomas Gress, 16-07-2008 until 26-08-2008)
1998	Assistant/aggregate Professor of Pathology, various research and teaching stages at the Diamond Light Source (Didcot, UK), National Center for Cancer Care & Research (NCCCR) Doha, Qatar, University of Minnesota, (USA).
2012-present	Founder and Coordinator of the Cystic Fibrosis Translational Research (C.F.T.R.) departmental laboratory, at the Department of Pathology and Diagnostics-now Department of Medicine (http://www.cfcverona.it/LabRicTras.html)
2014	Appointed Faculty Member (Visiting Professor) at the Department of Biochemistry and Cell Biology, University of Minnesota (U.S.A.)
2016	National Academic Qualification as Full Professor for sectors 06/A2 (General pathology and clinical pathology) and 06/N1 (Sciences of health professions and of applied medical technologies)
2018	Appointed Associate professor of General Pathology and Immunology
2019	Appointed Visiting Professor at the Department of Gastroenterology and Hepatology, Erasmus MC, Rotterdam (NL)

SUMMARY

Dr. Claudio Sorio is currently Associate Professor of General Pathology in the GSD 06/MEDS-02 – General Pathology and clinical pathology, SSD MEDS-02/A - Patologia generale He obtained the National Academic Qualification as Full Professor for sectors 06A2 (General pathology and clinical pathology) and 06N1 (Sciences of health professions and of applied medical technologies) in 2017. He is the founder and serves as coordinator of the Departmental Laboratory of Translational Research In Cystic Fibrosis of the Department of Medicine of the University of Verona. Study of Biomarkers for Cancer and Cystic Fibrosis are the main field of interests, with a specific focus on the role of Protein Tyrosine Phosphatase Gamma (PTPRG) in health and disease that his group discovered as new dendritic cell biomarker and new tumor suppressor gene in chronic myeloid leukemia. In the field of cystic fibrosis, since 2009 he promoted the study of the role of leukocytes, especially monocytes, in the disease and as a tool to better understand its pathogenesis and their application as disease biomarker. He has been leading and actively participating to multiple research projects in leukemia and Cystic Fibrosis. He authored 110 original publications in international journals and is the single major contributor in the field of PTPRG characterization. He has been serving as an editorial board member of various reputed journals. He is member of many scientific societies and has participated in relevant national and international research projects.

Field of activity and scientific contributions

Work on the role of tyrosine kinases in myeloid cells (1990-1993) the role of PTPRG in health and disease (since 1992), cancer models/biomarkers (since 1998) and cystic fibrosis (since 2008). Focused on translational medicine, specifically in the field of **BIOMARKER DISCOVERY AND VALIDATION**, establishing approaches that utilize primary, patient-derived samples. Main fields of investigation include:

KINASE/PHOSPHATASE SIGNALLING and EXPERIMENTAL Oncology

SRC family kinase:

Started his scientific career under the supervision of Prof. Giorgio Berton working mainly on SRC kinase signalling (references 1-11)

Moved to Jefferson Cancer Center (Thomas Jefferson University, Philadelphia, U.S.A.) and worked with Proff. Kay Huebner and Carlo Croce on experimental oncology (ref. 12-17) and then established his independent laboratory in Verona (1995) focusing on the study on experimental oncology/biomarkers.

Back to Verona worked on

PANCREATIC CANCER: Various contributions in the field of pancreatic cancer in collaboration with Aldo Scarpa. Among others the identification of **FHIT as a tumor suppressor** gene in pancreatic cancer (19), the setup of the **cryopreservation** protocol for primary pancreatic cancer tissue and demonstration that take rate in xenograft was equivalent to fresh tissue implant (22), he established one of the few **Ampulla Vateri** adenocarcinoma cell lines available (28, 67) and of the first, and still unique, model of a **mucinous cystic** pancreatic adenocarcinoma (29), contributed to the identification of CAIX as pancreatic cancer stem cell regulator (62) and applied innovative strategies for the identification of cancer biomarkers (30, 31, 41, 48, 51).

PTPRG as a myeloid cell biomarker and tumor suppressor gene in CHRONIC MYELOID LEUKEMIA:

1) He has pioneered the study and is the **single major contributor** in the field of PTPRG characterization having published 21 of the 158 (36%) of the research papers dealing with PTPRG (excluding reviews) present in the international literature since the time of discovery, in 1994 (source: PubMed, as of Nov 15th, 2022).

2) Major contributions in this field include the biochemical characterization of PTPRG with the development of the first specific antibody (12), the identification of PTPRG as a critical gene controlling normal hematopoiesis (16, 32, 34), its role as a dendritic cell marker (32), as tumor suppressor gene in **chronic myeloid leukemia**, breast and lung cancer (27, 42, 57, 77, 82, 83, 86, 91, 93, 94, 101), its expression and regulation in the CNS (53), its role as a regulator of integrin activation in monocytes (59) and as a potential biomarker of liver disease (60).

3) His group developed the **first antibody** capable to detect PTPRG by flow cytometry (36), immunofluorescence/immunohistochemistry (12, 35) and subsequently developed and characterized the first **monoclonal antibody** with the same features (71). Several research groups (from Max Planck Institute, Jena University Hospital, University of California San Diego, University of Geneva, Aarhus University, The Norwegian Radium Hospital to name the most recent ones) have requested collaboration and our antibodies for their research projects.

INFRARED SPECTROSCOPY:

Contributed to set approaches for the application of infrared microspectroscopy (**FT-IR**) in the study of kinase/phosphatase signaling, particularly in **chronic myeloid leukemia**, in collaboration with Giuseppe Bellisola and Gianfelice Cinque (41, 48, 51, 61)

NEW MATHEMATICAL MODELLING OF CANCER DEVELOPMENT:

Evolution of existing **two-steps models of Chronic Myeloid Leukemia** development, supporting the role of a secondary key event in the development of this disease based on advanced mathematical modeling, in collaboration with Paola Lecca (69)

CYSTIC FIBROSIS (CF):

The Cystic Fibrosis Laboratory "D. Lissandrini" he founded focus on translational research. The laboratory applies and in some cases develop methods to evaluate CFTR function both in vivo and ex vivo. Along this line the laboratory pioneered the use of **leukocyte as a novel** source of primary cells with clinical application in CF. The studies permitted the **first demonstration** of the use of these cells in CF clinical diagnostic applications, in collaboration with Paola Melotti, Cystic Fibrosis Center, Verona (46, 52, 54, 55, 56, 87). Other fields of investigation developed include **pro-inflammatory mechanisms of P. Aeruginosa** in cystic fibrosis in collaboration with P.M. and Fabio Stellari (50, 63, 67, 70), contribution to the application to CF research of innovative animal models in collaboration with M.LLeo, P.M. and F.Stellari (6, 68, 73). Of relevance the discovery of a monocyte-selective **adhesion defect** in CF (that permitted to propose CF as **new type of leukocyte adhesion deficiency**, named type IV) in collaboration with P.M. and Carlo Laudanna (64). In his laboratory culture of **human colorectal organoids** from control and CF donors has been recently developed in collaboration with P.M. and Hugo De Jonge (Erasmus Medical Center, The Netherlands), references 80, 95, 96, 103, 105, 107. Recently an innovative method to study CFTR function in **individual sweat glands in vivo** has been validated within an international effort (76, 85).

Shwachman-Bodian-Diamond Syndrome (SDS):

A new collaboration with regional SDS center (lead by dr. M. Cipolli) permitted to identify a specific molecular alteration in primary cells from SDS patients and propose a new pharmacological approach (68, 75).

Brief summary of the main original contributions

Development of cellular model of disease

Along the years I have contributed, often as principal investigator, to the development of several cellular models of disease that include:

- 1) The first models of PTPRG transfected embryonic stem, breast cancer and CML cells (**refs 16, 27, 42**)
- 2) Xenografting of cryopreserved primary pancreatic cancers (**ref 22**)
- 3) New cell line models of rare (in one case unique) pancreatic cancer histotypes (**refs 21, 28, 30, 67**)
- 4) Use of leukocytes as a novel source of primary cells with clinical application in Cystic Fibrosis: **ref 46**
- 5) Cell model of Shwachman-Diamond Syndrome (**refs 69, 78, 82**)
- 6) In the last 5 years we began to develop human primary intestinal organoid models (stomach, duodenum, colon-rectum, over 100 individual samples developed): **ref 80, 95, 96, 103, 105, 107** and other manuscripts under submission to peer reviewed journals

Discovery of a tumor suppressor role **for FHIT gene** in pancreatic cancer: **ref 19**

Discovery of the role **of PTPRG** as new identifier for myeloid dendritic cells and specialized macrophages: **ref 32**

Discovery of natural soluble form **of PTPRG** in plasma: **ref 60**

Discovery of a **tumor suppressor role for PTPRG in CML** : **ref 42**, (follow-up papers 61, 69, 71, 73, 77, 82, 83, 86, 88, 90, 93, 94, 98, 101)

Discovery of a **downregulation of BCR::ABL** activity in chronic phase CML: **ref 98**

Discovery of a **new type of Leukocyte Adhesion Deficiency** (CF was an accepted cause of LAD by the International Union of Immunological Societies (IUIS) in 2017): **ref 65**

Setup of **Organoid technology** and **personalized medicine** applications in CF: **Refs. 80, 95, 96, 103, 105, 107**

Contributed to the first report describing the protective role of **CFTR defect in SarsCov2** infection: **ref 97** (follow-up: 100, 104, 106)

Publications, Original and peer-reviewed

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Author of 114 publications indexed in Pubmed. Total impact factor (yearly referenced): 567 mean IF: 5,2. Total impact factor (ref. 2021): 814 mean IF: 7,4. Total citations: 3210, h-index 27 (Scopus), Total citations: 4597 h-index 33 (google scholar)

1: Berton G, Sorio C, Laudanna C, Menegazzi M, Carcereri De Prati A, Suzuki H. Activation of human monocyte-derived macrophages by interferon gamma is accompanied by increase of poly(ADP-ribose) polymerase activity. *Biochim Biophys Acta*. 1991 Jan 10;1091(1):101-9. doi: 10.1016/0167-4889(91)90228-p. PMID:1899803.

IF 2002: 3,016

2: Poli G, Sorio C, Berton G. Protein myristoylation in human mononuclear phagocytes: modulation by interferon-gamma and tumor necrosis factor-alpha. *J. Cell Sci.* 1991 Dec;100 (Pt 4):833-40. doi: 10.1242/jcs.100.4.833. PMID:1726103.

IF 2002: 6,954

3: Berton G, Laudanna C, Sorio C, Rossi F. Generation of signals activating neutrophil functions by leukocyte integrins: LFA-1 and gp150/95, but not CR3, are able to stimulate the respiratory burst of human neutrophils. *J Cell Biol.* 1992 Feb;116(4):1007-17. doi: 10.1083/jcb.116.4.1007. PMID: 1346398; PMCID:PMC2289342.

IF 2002: 12,522

4: Amezcaga MA, Bazzoni F, Sorio C, Rossi F, Cassatella MA. Evidence for the involvement of distinct signal transduction pathways in the regulation of constitutive and interferon gamma-dependent gene expression of NADPH oxidase components (gp91-phox, p47-phox, and p22-phox) and high-affinity receptor for IgG (Fc gamma R-1) in human polymorphonuclear leukocytes. *Blood*. 1992 Feb 1;79(3):735-44. PMID: 1531037.

IF 2002: 9,631

5: Cassatella MA, Trinchieri G, Hassan NF, Hartman L, Sorio C, Berton G. Induction of differentiation of the human myeloid cell line, ML3, by tumour necrosis factor and interferon-gamma is accompanied by enhanced expression of the CD4 protein and messenger RNA. *Immunology*. 1992 May;76(1):55-9. PMID:1628901; PMCID: PMC1421760.

IF 2002: 2,729

6: Botto M, Lissandrini D, Sorio C, Walport MJ. Biosynthesis and secretion of complement component (C3) by activated human polymorphonuclear leukocytes. *J Immunol*. 1992 Aug 15;149(4):1348-55. PMID: 1500721.

IF 2002: 7,014

7: Vinante F, Pizzolo G, Rigo A, Vincenzi C, Sorio C, Cassatella M, Berton G. The CD4 molecule belongs to the phenotypic repertoire of most cases of acute myeloid leukemia. *Leukemia*. 1992 Dec;6(12):1257-62. PMID: 1453771.

IF 2002: 4,693

8: Saggioro D, Sorio C, Calderazzo F, Callegaro L, Panozzo M, Berton G, Chieco-Bianchi L. Mechanism of action of the monosialoganglioside GM1 as a modulator of CD4 expression. Evidence that GM1-CD4 interaction triggers dissociation of p56lck from CD4, and CD4 internalization and degradation. *J Biol Chem*. 1993 Jan 15;268(2):1368-75. Erratum in: *J Biol Chem* 1993 Mar 15;268(8):6064. PMID:7678256.

IF 2002: 6,696

9: Sorio C, Saggioro D, Chieco-Bianchi L, Berton G. The monosialoganglioside GM1 induces internalisation and degradation of the CD4 antigen in U937 cells: evidence for a novel mechanism of CD4 down-modulation in a p56lck-negative cell line, which is independent of protein kinase C activation. *Biochem Biophys Res Commun*. 1993 Mar 31;191(3):1105-10. doi: 10.1006/bbrc.1993.1330. PMID: 8466487.

IF 2002: 2,935

10: Sorio C, Melotti P, Dusi S, Berton G. Interferon-gamma and tumor necrosis factor-alpha enhance p60src expression in human macrophages and myelomonocytic cell lines. *FEBS Lett*. 1993 Aug 2;327(3):315-20. doi: 10.1016/0014-5793(93)81012-o. PMID: 7688696.

IF 2002: 3,912

- 11: Berton G, Fumagalli L, Laudanna C, Sorio C. Beta 2 integrin-dependent protein tyrosine phosphorylation and activation of the FGR protein tyrosine kinase in human neutrophils. *J Cell Biol.* 1994 Aug;126(4):1111-21. doi:10.1083/jcb.126.4.1111. PMID: 7519620; PMCID: PMC2120114.
IF 2002: 12,522

- 12: Sorio C, Mendrola J, Lou Z, LaForgia S, Croce CM, Huebner K. Characterization of the receptor protein tyrosine phosphatase gene product PTPgamma: binding and activation by triphosphorylated nucleosides. *Cancer Res.* 1995 Nov 1;55(21):4855-64. PMID: 7585520.
IF 2002: 8,318

- 13: Prasad R, Yano T, Sorio C, Nakamura T, Rallapalli R, Gu Y, Leshkowitz D, Croce CM, Canaani E. Domains with transcriptional regulatory activity within the ALL1 and AF4 proteins involved in acute leukemia. *Proc Natl Acad Sci U S A.* 1995 Dec 19;92(26):12160-4. doi: 10.1073/pnas.92.26.12160. PMID: 8618864; PMCID: PMC40316.
IF 2002: 10,7

- 14: Chilosi M, Facchetti F, Dei Tos AP, Lestani M, Morassi ML, Martignoni G, Sorio C, Benedetti A, Morelli L, Doglioni C, Barberis M, Menestrina F, Viale G. bcl-2 expression in pleural and extrapleural solitary fibrous tumours. *J Pathol.* 1997 Apr;181(4):362-7. doi: 10.1002/(SICI)1096-9896(199704)181:4 PMID: 9196431.
IF 2002: 6,75

- 15: Ennas MG, Sorio C, Greim R, Nieddu M, Scarpa A, Orlandini S, Croce CM, Fey GH, Marschalek R. The human ALL-1/MLL/HRX antigen is predominantly localized in the nucleus of resting and proliferating peripheral blood mononuclear cells. *Cancer Res.* 1997 May 15;57(10):2035-41. PMID: 9158002.
IF 2002: 8,318

- 16: Sorio C, Melotti P, D'Arcangelo D, Mendrola J, Calabretta B, Croce CM, Huebner K. Receptor protein tyrosine phosphatase gamma, Ptp gamma, regulates hematopoietic differentiation. *Blood.* 1997 Jul 1;90(1):49-57. PMID: 9207437.
IF 2002: 9,631

- 17: Yano T, Nakamura T, Blechman J, Sorio C, Dang CV, Geiger B, Canaani E. Nuclear punctate distribution of ALL-1 is conferred by distinct elements at the N terminus of the protein. *Proc Natl Acad Sci U S A.* 1997 Jul 8;94(14):7286-91. doi: 10.1073/pnas.94.14.7286. PMID: 9207083; PMCID: PMC23813.
IF 2002: 10,7

- 18: Chilosi M, Doglioni C, Yan Z, Lestani M, Menestrina F, Sorio C, Benedetti A, Vinante F, Pizzolo G, Inghirami G. Differential expression of cyclin-dependent kinase 6 in cortical thymocytes and T-cell lymphoblastic lymphoma/leukemia. *Am J Pathol.* 1998 Jan;152(1):209-17. PMID: 9422538; PMCID: PMC1858129.
IF 2002: 6,75

- 19: Sorio C, Baron A, Orlandini S, Zamboni G, Pederzoli P, Huebner K, Scarpa A. The FHIT gene is expressed in pancreatic ductular cells and is altered in pancreatic cancers. *Cancer Res.* 1999 Mar 15;59(6):1308-14. PMID: 10096564.
IF 2002: 8,318

- 20: Wallrapp C, Hoshnel S, Boeck W, Soder A, Mincheva A, Lichter P, Leder G, Gansauge F, Sorio C, Scarpa A, Gress TM. Loss of the Y chromosome is a frequent chromosomal imbalance in pancreatic cancer and allows differentiation to chronic pancreatitis. *Int. J. Cancer* 2001 Feb 1;91(3):340-4. doi: 10.1002/1097-0215(200002)9999:9999<::aid-ijc1014>3.0.co;2-u. PMID: 11169957.
IF 2002: 4,056

- 21: Cattaneo M, Sorio C, Malferrari G, Rogozin IB, Bernard L, Scarpa A, Zollo M, Biunno I. Cloning and functional analysis of SEL1L promoter region, a pancreas- specific gene. *DNA Cell Biol.* 2001 Jan;20(1):1-9. doi: 10.1089/10445490150504648. PMID: 11242538.
IF 2002: 1,771

- 22: Sorio C, Bonora A, Orlandini S, Moore PS, Capelli P, Cristofori P, Dal Negro G, Marchiori P, Gaviraghi G, Falconi M, Pederzoli P, Zamboni G, Scarpa A. Successful xenografting of cryopreserved primary pancreatic cancers. *Virchows Arch.* 2001 Feb;438(2):154-8. doi: 10.1007/s004280000343. PMID: 11253117.
IF 2002: 2,045

- 23: Moore PS, Sipos B, Orlandini S, Sorio C, Real FX, Lemoine NR, Gress T, Bassi C, Klöppel G, Kalthoff H, Ungefroren H, Löhr M, Scarpa A. Genetic profile of 22 pancreatic carcinoma cell lines. Analysis of K-ras, p53, p16 and DPC4/Smad4. *Virchows Arch.* 2001 Dec;439(6):798-802. doi: 10.1007/s004280100474. PMID: 11787853. IF 2002: 2,045
- 24: Marcucci S, Bonora A, Falconi M, Sorio C, Orlandini S, Beghelli S, Cristofori P, Dal Negro G, Marchiori PN, Bassi C, Scarpa A, Pederzoli P. Progetto integrato per la ricerca traslazionale nel carcinoma duttale del pancreas [Integrated project for the translational research on pancreatic ductal carcinoma]. *Chir Ital.* 2002 Nov-Dec;54(6):845-54. Italian. PMID: 12613334.
- 25: Laudanna C, Sorio C, Tecchio C, Butcher EC, Bonora A, Bassi C, Scarpa A. Motility analysis of pancreatic adenocarcinoma cells reveals a role for the atypical zeta isoform of protein kinase C in cancer cell movement. *Lab Invest.* 2003 Aug;83(8):1155-63. doi: 10.1097/01.lab.0000081390.92179.f3. PMID: 12920244. IF: 4,418
- 26: Cattaneo M, Orlandini S, Beghelli S, Moore PS, Sorio C, Bonora A, Bassi C, Talamini G, Zamboni G, Orlandi R, Monard S, Bernardi LR, Biunno I, Scarpa A. SEL1L expression in pancreatic adenocarcinoma parallels SMAD4 expression and delays tumor growth in vitro and in vivo. *Oncogene.* 2003 Sep 25;22(41):6359-68. doi: 10.1038/sj.onc.1206665. PMID: 14508516. IF: 6,495
- 27: Liu S, Sugimoto Y, Sorio C, Tecchio C, Lin YC. Function analysis of estrogenically regulated protein tyrosine phosphatase gamma (PTPgamma) in human breast cancer cell line MCF-7. *Oncogene.* 2004 Feb 12;23(6):1256-62. doi: 10.1038/sj.onc.1207235. PMID: 14676845. IF: 6,318
- 28: Sorio C, Moore PS, Ennas MG, Tecchio C, Bonora A, Sartoris S, Balzarini P, Grigolato P, Scarpa A. A novel cell line and xenograft model of ampulla of Vater adenocarcinoma. *Virchows Arch.* 2004 Mar;444(3):269-77. doi: 10.1007/s00428-003-0936-6. Epub 2003 Dec 16. PMID: 14677066. IF: 2,227
- 29: Sorio C, Capelli P, Lissandrini D, Moore PS, Balzarini P, Falconi M, Zamboni G, Scarpa A. Mucinous cystic carcinoma of the pancreas: a unique cell line and xenograft model of a preinvasive lesion. *Virchows Arch.* 2005 Mar;446(3):239-45. doi: 10.1007/s00428-004-1167-1. Epub 2005 Feb 2. PMID: 15688169. IF: 2,224
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- 31: Sorio C, Mauri P, Pederzoli P, Scarpa A. Non-invasive cancer detection: strategies for the identification of novel cancer markers. *IUBMB Life.* 2006 Apr;58(4):193-8. doi: 10.1080/15216540600719598. PMID: 16754296. IF: 2,316
- 32: Lissandrini D, Vermi W, Vezzalini M, Sozzani S, Facchetti F, Bellone G, Mafficini A, Gentili F, Ennas MG, Tecchio C, Sorio C. Receptor-type protein tyrosine phosphatase gamma (PTPgamma), a new identifier for myeloid dendritic cells and specialized macrophages. *Blood.* 2006 Dec 15;108(13):4223-31. doi: 10.1182/blood-2006-05-024257. Epub 2006 Aug 8. PMID: 16896153. IF: 10,37
- 33: Bellone G, Carbone A, Smirne C, Scirelli T, Buffolino A, Novarino A, Stacchini A, Bertetto O, Palestro G, Sorio C, Scarpa A, Emanuelli G, Rodeck U. Cooperative induction of a tolerogenic dendritic cell phenotype by cytokines secreted by pancreatic carcinoma cells. *J Immunol.* 2006 Sep 1;177(5):3448-60. doi: 10.4049/jimmunol.177.5.3448. PMID: 16920987. IF: 6,293
- 34: Mafficini A, Vezzalini M, Zamai L, Galeotti L, Bergamini G, Della Peruta M, Melotti P, Sorio C. Protein Tyrosine Phosphatase Gamma (PTPgamma) is a Novel Leukocyte Marker Highly Expressed by CD34 Precursors. *Biomark Insights.* 2007 May 31;2:218-25. PMID: 19662205; PMCID: PMC2717823. IF 2013: 2,42

- 35: Vezzalini M, Mombello A, Menestrina F, Mafficini A, Della Peruta M, van Niekerk C, Barbareschi M, Scarpa A, Sorio C. Expression of transmembrane protein tyrosine phosphatase gamma (PTPgamma) in normal and neoplastic human tissues. *Histopathology*. 2007 Apr;50(5):615-28. doi: 10.1111/j.1365-2559.2007.02661.x. PMID: 17394498.
IF: 3,791
- 36: Saraga G, Mafficini A, Ghaneh P, Sorio C, Costello E. Both HIV- and EIAV- based lentiviral vectors mediate gene delivery to pancreatic cancer cells and human pancreatic primary patient xenografts. *Cancer Gene Ther*. 2007 Sep;14(9):781-90. doi: 10.1038/sj.cgt.7701066. Epub 2007 Jun 15. PMID: 17571071.
IF: 3,889
- 37: Bergamini G, Cigana C, Sorio C, Della Peruta M, Pompella A, Corti A, Huaux FA, Leal T, Assael BM, Melotti P. Effects of azithromycin on glutathione S-transferases in cystic fibrosis airway cells. *Am J Respir Cell Mol Biol*. 2009 Aug;41(2):199-206. doi: 10.1165/rcmb.2008-0013OC. Epub 2008 Dec 18. PMID: 19097986.
IF: 4,319
- 38: Sorio C, Melotti P. Editorial: The role of macrophages and their scavenger receptors in cystic fibrosis. *J Leukoc Biol*. 2009 Sep;86(3):465-8. doi: 10.1189/jlb.0309120. PMID: 19720614.
IF: 4.403
- 39: Monsurrò V, Beghelli S, Wang R, Barbi S, Coin S, Di Pasquale G, Bersani S, Castellucci M, Sorio C, Eleuteri S, Worschech A, Chiorini JA, Pederzoli P, Alter H, Marincola FM, Scarpa A. Anti-viral state segregates two molecular phenotypes of pancreatic adenocarcinoma: potential relevance for adenoviral gene therapy. *J Transl Med*. 2010 Jan 29;8:10. doi: 10.1186/1479-5876-8-10. PMID: 20113473; PMCID: PMC2845551.
IF: 3,508
- 40: Della Peruta M, Giagulli C, Laudanna C, Scarpa A, Sorio C. RHOA and PRKCZ control different aspects of cell motility in pancreatic cancer metastatic clones. *Mol Cancer*. 2010 Mar 17;9:61. doi: 10.1186/1476-4598-9-61. PMID: 20236512; PMCID: PMC2846889.
IF: 3,779
- 41: Bellisola G, Della Peruta M, Vezzalini M, Moratti E, Vaccari L, Birarda G, Piccinini M, Cinque G, Sorio C. Tracking infrared signatures of drugs in cancer cells by Fourier transform microspectroscopy. *Analyst*. 2010 Dec;135(12):3077-86. doi: 10.1039/c0an00509f. Epub 2010 Oct 7. PMID: 20931110.
IF: 3,913
- 42: Della Peruta M, Martinelli G, Moratti E, Pintani D, Vezzalini M, Mafficini A, Grafone T, Iacobucci I, Soverini S, Murineddu M, Vinante F, Tecchio C, Piras G, Gabbas A, Monne M, Sorio C. Protein tyrosine phosphatase receptor type {gamma} is a functional tumor suppressor gene specifically downregulated in chronic myeloid leukemia. *Cancer Res*. 2010 Nov 1;70(21):8896-906. doi: 10.1158/0008-5472.CAN-10-0258. Epub 2010 Oct 19. PMID: 20959494.
IF: 8,234
- 43: Vezzalini M, Aletta JM, Beghelli S, Moratti E, Della Peruta M, Mafficini A, Mojica WD, Mombello A, Scarpa A, Sorio C. Immunohistochemical detection of arginine methylated proteins (MeRP) in archival tissues. *Histopathology*. 2010 Nov;57(5):725-33. doi: 10.1111/j.1365-2559.2010.03684.x. PMID: 21083602.
IF: 3,569
- 44: Mafficini A, Ortombina M, Sermet-Gaudelius I, Lebecque P, Leal T, Iansa P, Reyhler G, Dahan K, Pepermans X, Lenoir G, Leonard A, Sorio C, Assael B, Melotti P. Impact of polymorphism of Multidrug Resistance-associated Protein 1 (ABCC1) gene on the severity of cystic fibrosis. *J Cyst Fibros*. 2011 Jul;10(4):228-33. doi: 10.1016/j.jcf.2010.10.007. Epub 2011 Mar 24. PMID: 21435954.
IF: 3,19
- 45: Chatterjee I, Humtsoe JO, Kohler EE, Sorio C, Wary KK. Lipid phosphate phosphatase-3 regulates tumor growth via beta-catenin and CYCLIN-D1 signaling. *Mol Cancer*. 2011 May 11;10:51. doi: 10.1186/1476-4598-10-51. PMID: 21569306; PMCID: PMC3112429.
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2. Further Insights into the Hematological Disorders Observed in Shwachman-Diamond Syndrome: mTOR and STAT3 Hyper-Phosphorylation in CD4+and CD8+T Cells and Efficacy of Rapamycin Treatment
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40. ePS4. 01 Open randomised study on docosahexaenoic acid, 5-methyltetrahydrofolate and vitamin B12 supplementation in cystic fibrosis paediatric patients: focus on fatty acids, inflammation and blood cell membranes S Cordioli, G Tridello, S Volpi, M Passiu, I Meneghelli, C Sorio, G Bergamini, E Calcaterra, M Boraso, M Salmona, L Diomede, P Risè, BM Assael, C D'Orazio, P Melotti - *Journal of Cystic Fibrosis*, vol 18, S47 2019
41. P258 F Pauro, F Rescigno, A Farinazzo, V Esposito, K Kleinfelder, C Castellani, M Bertini, E Pintani, G Tridello, L Rodella, A Cerofolini, F Catalano, F Tomba, P Iansa, H de Jonge, P Melotti, C Sorio CFTR modulator theratyping and functional impact of the rare CFTR genotype W57G/A234D in a cystic fibrosis patient Vol 18, S130 *Journal of Cystic Fibrosis*, 2019
42. P183 P Melotti, G Tridello, R Rizzo, S Volpi, M Passiu, I Meneghelli, S Cordioli, C Sorio, G Bergamini, E Calcaterra, M Boraso, M Salmona, L Diomede, P Rise, M Cipolli, BM Assael, C D'Orazio Increase of HLA-G in plasma of cystic fibrosis paediatric patients treated with Docosahexaenoic acid (DHA) *Journal of Cystic Fibrosis* 19, S108, 2020
43. WS21. 5 Response to ivacaftor of the rare CFTR variants W57G and A234D in intestinal organoids and Fisher Rat Thyroid (FRT) cells V Lotti, K Kleinfelder, A Farinazzo, M Bertini, F Pauro, D Treggiari, J Conti, S Preato, F Quiri, E Pintani, L Rodella, A Cerofolini, F Catalano, F Tomba, M Cipolli, H DeJonge, C Sorio, P Melotti *Journal of Cystic Fibrosis* 19, S34, 2020 doi.org/10.1016/S1569-1993(20)30273-3
44. P007 J Conti, K Kleinfelder, V Lotti, S Preato, A Farinazzo, F Quiri, E Pintani, D Treggiari, L Rodella, A Cerofolini, F Catalano, F Tomba, H DeJonge, M Cipolli, C Sorio, P Melotti Functional characterisation of c. 1584+ 18672bpA> G/2183AA> G CFTR variant in rectal organoids *Journal of Cystic Fibrosis* 19, S56-S57, 2020 doi.org/10.1016/S1569-1993(20)30344-1
45. C Boni, M Vezzalini, L Scaffidi, D Paladin, D Boscarino, M Krampera, M Bonifacio, C Sorio A New Conservative and Non-Denaturing Lysis Buffer to Maintain BCR-ABL1 Integrity in CML Leukocytes *JOURNAL OF MOLECULAR DIAGNOSTICS*, Vol.22, 5, S32-S33 2020

46. C Sorio, V Lotti, K Kleinfelder, A Farinazzo, S Preato, F Quiri, J Conti, M Bertini, E Pintani, G Tridello, L Rodella, F Tomba, M Cipolli, P Melotti Characterization of a Rare/Varying Clinical Consequence of CFTR Variants W57G/A234D CFTR Genotype and Theratyping Using Rectal Organoids JOURNAL OF MOLECULAR DIAGNOSTICS Vol 22, 5 S1-S2 2020
47. Computing organoids' volume in medical images: the case study of cystic fibrosis has been accepted for IEEE CIBCB 2020. DOI: 10.1109/CIBCB48159.2020.9277721

Patents

NOVEL BIOMARKERS FOR DIAGNOSIS AND/OR PROGNOSIS OF NEOPLASIAS IN ANIMALS

Application number: 20090130693 Issued: May 21, 2009

Inventors: Claudio Bassi, Pierluigi Mauri, Aldo Scarpa, Claudio Sorio

ANTIBODY AND METHOD FOR IDENTIFICATION OF DENDRITIC CELLS

20090131346 Issued: May 21, 2009

Assignee: CONSORZIO PER GLI STUDI UNIVERSITARI IN VERONA

Inventor: Claudio Sorio

DIAGNOSIS, PROGNOSIS AND/OR TREATMENT OF MYELOPROLIFERATIVE DISORDERS

Application number: WO2007085958 (A2), EP1987157 (A2)

Assignee: CONSORZIO PER GLI STUDI UNIVERSITARI IN VERONA

Inventors: Claudio Sorio

MONOCLONAL ANTIBODY FOR DIAGNOSING CHRONIC MYELOID LEUKEMIA

Provisional US patent application number: 62373322 filed on 10 August 2016

Assignee: Qatar Foundation

Inventors: Claudio Sorio: 40%; Dr. Nader Al-Dewik: 20%, Dr. Abdel Daem Mohamed Yassin: 20%, Dr. Marzia Vezzalini: 10%, Dr. Andrea Mafficini: 10%

Tampone di lisi per cellule e suoi usi in saggi per la rilevazione di una proteina cellulare o dell'attività di una proteina cellulare.

Lysis buffer for cells and uses for analysis of cell proteins or protein activity

Provisional ITALIAN patent application number: 102017000003916 filed on January, 16th 2017

Inventors: Claudio Sorio, Marzia Vezzalini

USE OF 1-PHENYL-2-PYRIDINYL ALKYL ALCOHOL DERIVATIVES FOR TREATING CYSTIC FIBROSIS

PCT/EP2018/085965 filed on December 19, 2018

C. Research Support

P.I. of 18 competitive grants for a total value of over 1.5 M€, Partner of 10 grants for a total awarded over 850.000 €, External services (Chiesi farmaceutici; PTC therapeutics, USA), total awarded over 500.000 €

Competitive grants

Title of funded proposal: Ruolo della tirosin fosfatasi recettoriale gamma (PTPRG) sulla differenziazione emopoietica ed in cellule leucemiche, cellule staminali emopoietiche e fattori di crescita

Funding Agency: AIRC Seed grant

Performance Period: 1997-1999

Amount: 30000 €

Role: P.I.

Title of funded proposal: La tirosin fosfatasi recettoriale gamma nel sistema emopoietico normale e nelle neoplasie emolinfopoietiche

Funding Agency: Fondazione Cariverona

Performance Period: 2004-2006

Amount: 52624 €

Role: P.I.

Title of funded proposal: PTPRG as a novel tumor suppressor gene in chronic myeloid leukemia and its clinical implications

Funding Agency: AIRC-IG 4667

Performance Period: 2008-2011

Amount: 150.000 €

Role: P.I.

Title of funded proposal: Effects of azithromycin (AZM) on Pseudomonas-induced chronic lung inflammation in cystic fibrosis

Funding Agency: Italian Cystic Fibrosis Research Foundation (FFC#15/2008)

Performance Period: 2008-2010

Amount: 55000 €

Role: Partner

Title of funded proposal: Functional evaluation of CFTR in blood leukocytes in human subjects as a new tool for diagnostic and clinical research applications

Funding Agency: Italian Cystic Fibrosis Research Foundation (FFC #5/2009)

Performance Period: 2009-2011

Amount: 45000 €

Role: P.I.

Title of funded proposal: Novel biomarkers for evaluation of efficacy of new therapies in cystic fibrosis

Funding Agency: Italian Cystic Fibrosis Research Foundation (FFC #6/2010)

Performance Period: 2010-2012

Amount: 55000 €

Role: Partner

Title of funded proposal: CFTR activity and expression in monocytes of CF patients: possible tools for diagnosis and drug development

Funding Agency: Mucoviscidose : ABCF (France)

Performance Period: 2011

Amount: 30.000 €

Role: Partner

Title of funded proposal: Development of new antibodies for diagnostic application in chronic myeloid leukemia

Funding Agency: University of Verona-Joint Project

Performance Period: 2009-2011
Amount: 45000 €
Role: P.I.

Title of funded proposal: Testing human monocytes as a new tool for clinical and preclinical research in CF
Funding Agency: Italian Cystic Fibrosis Research Foundation (FFC #26-2011)
Performance Period: 2011-2013
Amount: 70000 €
Role: P.I.

Title of funded proposal: PTPRG in health and disease
Funding Agency: MIUR-F.U.R.
Performance Period: 2010-2011
Amount: 17000 €
Role: P.I.

Title of funded proposal: Role of Protein Tyrosine Phosphatase Gamma (PTPRG) in the pathogenesis of chronic myeloid leukemia (CML) and its evaluation as a new biomarker of disease
Funding Agency: Qatar National Research Fund: NPRP 4-157-3-052
Performance Period: 2013-2016
Amount: 1.004.915,00 USD
Role: P.I.

Title of funded proposal: Establishment of a semi-automated evaluation of CFTR function in blood cells for clinical applications
Funding Agency: Italian Cystic Fibrosis Research Foundation (FFC #06-2013)
Performance Period: 2013-2014
Amount: 40000 €
Role: P.I.

Title of funded proposal: Testing CFTR repair in cystic fibrosis patients carrying nonsense and channel gating mutations
Funding Agency: Italian Cystic Fibrosis Research Foundation (FFC #29-2015)
Performance Period: 2015-2017
Amount: 50000 €
Role: P.I.

Title of funded proposal: Monitoring tyrosine kinase inhibitors efficacy in chronic myeloid leukemia
Funding Agency: University of Verona-Joint Project
Performance Period: 2016-2018
Amount: 46000 €
Role: P.I.

Title of funded proposal: LeukoPredict
Funding Agency: EU proposal 711286 –SME instrument-phase 1
Performance Period: 2016-2017
Amount: 50000 €
Role: Partner-project proponent

Title of funded proposal: Testing intestinal organoids for the prediction of response to CFTR potentiators and correctors used in clinic
Funding Agency: Italian Cystic Fibrosis Research Foundation (FFC #13/2018)
Performance Period: 2018-2020
Amount: 36000 €
Role: P.I.

Title of funded proposal: Theratyping of Cystic Fibrosis
Funding Agency: Italian Ministry of Research (MIUR): 2022FRSS2H
Performance Period: 2023-2025
Amount: 294866 €
Role: P.I. of local unit

Research Support: Access to Research Infrastructures (competitive)

EU FP7 Transnational Access to Research Infrastructures (TARI)
European Light Sources Activities (ELISA) EC contract N. 226716
Elettra Synchrotron Trieste 2009 - 2010
Experiment 2008232. Detection of drug-induced signatures in normal and in tumor cells by Fourier Transform InfraRed Microspectroscopy (FTIRM).
Experiment 20095114. Fourier Transform InfraRed microscopic analysis of single leukaemic cell.
Role: Partner.

EU FP7 Transnational Access to Research Infrastructures (TARI)
European Light Sources Activities (ELISA) EC contract N. 226716
DLS Diamond Light Source UK 2010 - 2011
Experiment SM 4333-1. Detecting drug effects by Fourier Transform InfraRed microspectroscopy (microFT-IR) on single cells.
Experiment SM6675-1. Testing drug resistance/sensitivity in cancer cell lines by Fourier Transform InfraRed microspectroscopy (microFTIR) and unsupervised pattern recognition.
Role: partner

Period: 06/07/2013 to 31/12/2013
Proposal 20130055 - Type: Standard
SMIS beamline, SOLEIL Synchrotron, Paris, France
Title: Signatures of protein tyrosine phosphatase activity in individual K562 leukocytes analyzed with SR microFTIR and Raman spectroscopy.
Role: partner

EU FP7 Transnational Access to Research Infrastructures (TARI)
European Light Sources Activities (ELISA)
DLS Diamond Light Source UK Beamline: B22: 2012-2013
Experiment SM8087. MicroFTIR analysis of leukemic blast cell models with variable resistance to tyrosine kinase inhibitors.
Role: P.I.

EU FP7 Transnational Access to Research Infrastructures (TARI)
CALIPSO (Coordinated Access to Lightsources to Promote Standards and Optimization)
DLS Diamond Light Source UK Beamline: B22: 2013-2014
Proposal Ref: SM9055
Title: Studying colo-rectal cancer microenvironment by SR infrared spectromicroscopy.
Role: P.I.

EU FP7 Transnational Access to Research Infrastructures (TARI)
CALIPSO (Coordinated Access to Lightsources to Promote Standards and Optimization)
DLS Diamond Light Source UK Beamline: B22: 2013-2014
Proposal Ref: SM9056
Title: Revealing drugs targeting basic defects in cystic fibrosis by SR FTIR microspectroscopy.
Role: partner

EU FP7 Transnational Access to Research Infrastructures (TARI)
CALIPSO (Coordinated Access to Lightsources to Promote Standards and Optimization)
DLS Diamond Light Source UK Beamline: B22: 2013-2014
Proposal Ref: SM9461
Title: Testing CFTR corrector drugs in cystic fibrosis blood monocytes by SR microFTIR.
Role: partner

EU FP7 Transnational Access to Research Infrastructures (TARI)
CALIPSO (Coordinated Access to Lightsources to Promote Standards and Optimization)
DLS Diamond Light Source UK Beamline: B22: 2013-2014
Proposal Ref: SM9460
Title: Molecular characterization of tumour stroma in human colorectal cancer by IR microprobe.

Role: P.I.

Research Support (Peer-reviewed, non competitive)

Title of funded proposal: Identificazione dei meccanismi molecolari che regolano la differenziazione di cellule leucemiche da parte di agenti chemioterapici e PTPRG tramite l'analisi del proteoma

Funding Agency: Consorzio Studi Universitari-1815/3

Performance Period: 2001-2002

Amount: 7750 €

Role: P.I.

Title of funded proposal: Identificazione dei meccanismi molecolari che regolano la differenziazione di cellule leucemiche da parte di agenti chemioterapici e PTPRG tramite l'analisi del proteoma

Funding Agency: Consorzio Studi Universitari-277/3

Performance Period: 2002-2003

Amount: 18075 €

Role: P.I.

Title of funded proposal: Support for clinical trials in cystic fibrosis

Funding Agency: Clinical Research Center-Verona

Performance period: 2015-2016

Amount: 120000 €

Role: P.I.

Title of funded proposal: Effects of PDE4 inhibitors on CFTR expression and function in in vitro models of cystic fibrosis and COPD

Funding Agency: Chiesi farmaceutici (ODA 45000 63815)

Performance period: 2015-2017

Amount: 80703 €

Role: P.I.

Title of funded proposal: PARTICIPATION IN THE CLINICAL TRIAL NETWORK (ASSAEL08A0)

Funding Agency: Cystic Fibrosis Foundation Therapeutics, Inc. (USA)

Performance period: 2012-2022

Amount: 600000 USD

Role: Partner

Title of funded proposal: Evaluation of the effect of PTC-124 on human intestinal organoids and monocytes

Funding Agency: PTC therapeutics-USA

Performance Period: 2016-2018

Amount: 128000 €

Role: P.I.

Title of funded proposal: Effects of PDE4 inhibitors on CFTR expression and function in in vitro models of cystic fibrosis

Funding Agency: Chiesi farmaceutici (RDA 10188791)

Performance period: 2018-2020

Amount: 99308 €

Role: P.I.

Title of funded proposal: "Applicazione di sistemi Nano-Electrode Ensemble (NEA) al monitoraggio dell'attività della chinasi chimerica ABL e dell'inibizione operata dai farmaci inibitori della tirosina chinasi nel trattamento della Leucemia Mieloide Cronica (CML). Studio e sperimentazione di sistemi basati su biosensore per la rilevazione in siero di biomarcatori

Funding Agency: AB Analitica

Performance period: 2018-2019

Amount: 30000 €

Role: P.I.

Title of funded proposal: Effects of PDE4 inhibitors on CFTR expression and function in in vitro models of cystic fibrosis

Funding Agency: Chiesi farmaceutici

Performance period: 2023-2024

Amount: 50754 €
Role: P.I

Sorio, Claudio

D.

Editorial Board Member: World Journal of Gastrointestinal Oncology (WJGO), American Journal of Cancer Research, Science Letters, Biomolecules (MDPI), Cancers (MDPI).
Section Editor: Biomolecules (Cellular biochemistry)
Deputy Editor-in-Chief: World Journal of Hematology.
Co-Editor in chief: Advances in Redox Research (Elsevier)
Review Editor for Frontiers Pharmacology

E. Invited speaker/conference duties:

- 1) Invited speaker satellite meetings: Biomarkers to personalize treatment of the basic defect and to monitor early response: XIII CONVENTION OF FFC INVESTIGATORS IN CYSTIC FIBROSIS: in sessions “Biomarkers to personalize treatment of the basic defect and to monitor early response” and “Biomarkers as potential predictors of treatment effectiveness before therapy in individual patients”: Poiano Hotel Resort Garda-Verona 26-28 november 2015
- 2) Invited speaker: “The host’s and pathogen’s sides in cystic fibrosis: some views in a open field” 2016 ECFS Basic Science Conference, Pisa, Italy (March 30 - April 2, 2016).
- 3) Chairman: Italian Society of Cancerology, 58th national congress, 2016, Verona, Italy: Cancer genetics, epigenetics and control of gene expression session
- 4) Chairman: XIV CONVENTION OF FFC INVESTIGATORS IN CYSTIC FIBROSIS: Poiano Hotel Resort Garda-Verona 24-26 november 2016
- 5) Invited speaker: HUMAN ANTIBODIES & HYBRIDOMAS - HAH 2016 9-11 November 2016, Hilton Hotel, Belfast, Northern Ireland, UK
- 6) Invited speaker: SIGO 2017 (Shanghai International Gastrointestinal Oncology Symposium)
- 7) Member of the organizing committee of the 13th International Conference on Laboratory Medicine & Pathology March 05-07, 2018 Berlin, Germany
- 8) Invited speaker: 17th Scientific Meeting: Organoids as models of disease and treatment in CF. September 21th+22nd 2017, Schloss Waldhausen, Mainz-Germany
- 9) Chairman XV CONVENTION OF FFC INVESTIGATORS IN CYSTIC FIBROSIS: 26-28 October 2017 Camera di Commercio Verona, Congress Center Corso Porta Nuova, 96
- 10) Organizer: AICC International WORKSHOP ON ORGANOID CULTURES, Verona, March 8, 2018
- 11) Invited speaker, XIV MEETING NAZIONALE DELLA SOCIETA’ ITALIANA PER LO STUDIO DELLA FIBROSI CISTICA, May 4-5, 2018 Roma, Italy
- 12) Invited speaker, XV MEETING NAZIONALE DELLA SOCIETA’ ITALIANA PER LO STUDIO DELLA FIBROSI CISTICA, May 4-5, 2019 Rimini, Italy
- 13) Invited speaker, XLIII MEETING NAZIONALE DELLA SOCIETA’ ITALIANA PER LO STUDIO DEL PANCREAS, September 19-21, 2019 Verona, Italy
- 14) Invited speaker, XXVII CONGRESSO ITALIANO DELLA FIBROSI CISTICA, XVII Congresso Nazionale della Società Italiana per lo studio della Fibrosi Cistica October 20-23, 2021 Napoli, Italy
- 15) Invited speaker, XVII MEETING NAZIONALE DELLA SOCIETA’ ITALIANA PER LO STUDIO DELLA FIBROSI CISTICA, May 6-7, 2022 Parma, Italy
- 16) Invited speaker, 21th Scientific Meeting Innovative Therapies in CF, 29th-30th September 2022 Schloss Montabaur, Montabaur (Germany)
- 17) Invited speaker, North America Cystic Fibrosis Conference (NACFC 2022), 2nd-5th November 2022, Philadelphia (USA)
- 18) Invited speaker 20th Annual Meeting, Montpellier, France 9-11 February 2023 European Cystic Fibrosis Society Diagnostic Network Working Group

F. Awards:

Young investigator award for the study: A “Shotgun” Proteomic Approach Identify Versican and MAC25/Angiomodulin as Novel Molecules Released by Pancreatic Cancer Cells: A Preliminary Characterization Mafficini A., Scarpa A., Mauri P., Bassi C., Mina M., Bonora A., Pederzoli P., Sorio C. AISP - 28th National Congress. Verona (Italy). October 28-30, 2004. Published in JOP. Journal of the Pancreas – <http://www.joplink.net> – Vol. 5, No. 5 Supplement – September 2004. [ISSN 1590-8577]

Investigator award for the study: “Protein tyrosine phosphatase receptor type gamma (PTPRG) is a functional tumor suppressor gene specifically down-regulated in chronic myeloid leukemia (CML)” by Moratti E.; Della Peruta M.; Vezzadini M.; Pintani D.; Mafficini A.; Tecchio C.; Monne M.; Sorio C. XXX international congress (SIP-ASIP), University of Salerno & the Grand Hotel Salerno October 14-17, 2010 published in Am J Pathol. 2010 Oct;177 Suppl:S1-35.

Best poster award for the study: STUDIO DI MECCANISMI ANTI-INFIAMMATORI DELL’ AZITROMICINA: DALL’ EPITELIO BRONCHIALE UMANO CON FIBROSI CISTICA ALL’ IMAGING DELL’ATTIVAZIONE DI NF-KB IN VIVO. F. Stellari, C. Cigana, G. Bergamini, C. Sorio, F. Ruscitti, G. Villetti, B. Assael and P. Melotti. XIX Congresso Italiano

della Fibrosi Cistica IX Congresso Nazionale della Società Italiana per lo Studio della Fibrosi Cistica (SIFC), Palermo 13-16 November 2013, Hotel Città del Mare, Terrasini (PA)

“Azithromycin effect on lung inflammation induced by pseudomonas aeruginosa released proteases as shown by in vivo imaging in il-8 transiently transgenized mice” Gabriella Bergamini, Fabio Stellari, Angela Sandri, Francesca Ruscitti, Gino Villetti, Claudio Sorio, Paola Melotti, Baroukh Maurice Assael, Maria M Lleo

Selected among “best 10 posters” at the North American Cystic Fibrosis Conference, Atlanta, USA 9-11 October 2014.

Luisa Tomasello, Marzia Vezzalini, Ilaria Pergher, Elisa Gardiman, Massimiliano Bonifacio, Mauro Krampera, Mohamed Yassin, Nader Al-Dewik and Claudio Sorio

Regulative Loop between β -Catenin and Protein Tyrosine Phosphatase Receptor Type γ (PTPRG) in Chronic Myeloid Leukemia

18th Annual John Goldman Conference on Chronic Myeloid Leukemia: Biology and Therapy, September 15 - September 18, 2016 – Houston, TX ORAL PRESENTATION- TRAVEL GRANT . 18th Annual John Goldman Conference on Chronic Myeloid Leukemia: Biology and Therapy September 15-18, 2016 – Houston, TX, USA

Luisa Tomasello, Marzia Vezzalini, Ilaria Pergher, Elisa Gardiman, Massimiliano Bonifacio, Mauro Krampera, Mohamed Yassin, Nader Al-Dewik and Claudio Sorio

Regulative Loop between β -Catenin and Protein Tyrosine Phosphatase Receptor Type γ (PTPRG) in Chronic Myeloid Leukemia

XIV Congresso Nazionale SIES 2016 Rimini, October 19-21 2016 ORAL PRESENTATION- TRAVEL GRANT

G.

Deputy Editor-in-Chief: World Journal of Hematology.

Co-Editor in chief: Advances in Redox Research (Elsevier)

Associate editor for Frontiers in Oncology (Hematologic Malignancies).

Associate editor for Frontiers in Molecular Biosciences (Molecular Diagnostics and Therapeutics).

Review Editor for Frontiers Pharmacology (Experimental Pharmacology and Drug Discovery)

Editorial Board Member: World Journal of Gastrointestinal Oncology (WJGO), American Journal of Cancer Research, Science Letters , Biomolecules (MDPI), Cancers (MDPI), Kinase and Phosphatases (MDPI).

Reviewer for: Cancer Research, Clinical Endocrinology, Journal of Leukocyte Biology, Proteomics, Journal of Translational Medicine, Journal of Pathology, Clinical Biochemistry, Molecular Cancer, BMC Cancer, Critical Reviews in analytical chemistry, Current Signal Transduction, European Journal of Pediatrics, International Journal of Biochemistry Research & Review, PlosOne, World Journal of Gastrointestinal Oncology, Oncotarget, BioMed Research International, Frontiers Pharmacology, Journal of Clinical Investigation, Thorax, Pediatric Research, iScience, JBS, Blood

H. International and National bodies:

Advisor: Pancreatic Cancer UK agency (www.pancreaticcancer.org.uk), Prostate Action UK (www.prostateaction.org.uk); King Badouin Foundation, Belgium,

Member: European Cystic Fibrosis Society (ECFS) Cystic Fibrosis Molecular & Cell Biology and Physiology Basic Science Working Group (ECFS Basic Science WG), Member Diagnostic Network Working Group-DNWG (ECFS)

Member: RESEARCH and GENETICISTS commission, Italian cystic fibrosis society (SIFC)

I: Reviewer of national and international research programs for:

- 1) Italy (SIR: Scientific Independence of Young Researchers),
- 2) Fundamental Research Projects (FARB)
- 3) University of Bologna (Italy),
- 4) France Ministry of University, France
- 5) Polish National Science Centre (Narodowe Centrum Nauki - NCN; <http://www.ncn.gov.pl>)
- 6) External Reviewer for Cystic Fibrosis Canada (www.cysticfibrosis.ca)
- 7) Pancreatic Cancer UK (PCUK)
- 8) Cancer Research UK
- 9) Cystic Fibrosis Trust UK

L. TEACHING and CONSULTANT activity

Participation in Collegiate Bodies:

Council of PhD course in "inflammation, Immunity and Cancer"
Council of PhD course in "Molecular and cellular biology and pathology "
Council of Specialization course in "Medical Oncology" (1999-2013)
Council for the Bachelor's degree in Physiotherapy - Medicine and Surgery
Council for the Bachelor's degree in Nursing - Medicine and Surgery
Council for the Combined Bachelor's + Master's degree in Medicine and Surgery
Council of the Department of Medicine

Activities:

1. Supply professor (pathology and oncology) at the faculty of science of the University of Verona (2006)
2. Teaching course of "molecular pathology of cancer " for the residency in medical oncology 1999-2013; 2019
3. Coordinator (since academic year 2010/11) of the magistral course "Physiopathology applied to nursing science" for the bachelor degrees in Nursing (9 credits) Profession Sciences schools held in Verona and Vicenza: teaching activity started in 1999.
4. Coordinator (since academic year 2007/08) of the magistral courses "Pathology" in Health and Rehabilitation (4 credits) Profession Sciences schools held in Verona and Vicenza, teaching activity started in 1999
5. School of Medicine and Surgery: Combined Bachelor's + Master's degree in Medicine and Surgery: General and Clinical Pathophysiology (3,5 credits) since 2018
6. School of Medicine and Surgery: TANDEM project (16 hours teaching/academic year): <http://www.univr.it/main?ent=servizioaol&idDest=3&sServ=72&serv=71&lang=en>
7. Appointed Visiting Professor at the University of Minnesota, Department of Biochemistry Molecular Biology and Biophysics (2014)
8. Appointed Visiting Professor at the Department of Gastroenterology and Hepatology, Erasmus MC, Rotterdam (NL)
9. Consultant at National Center for Cancer Care & Research Center (NCCCRC), Hamad Medical Center (Doha, Qatar)
10. Pathology teaching courses at the international University "LUISS Guido Carli", Rome, Italy (2014-2019)
11. Combined Bachelor's + Master's degree in Medicine and Surgery: Sciences introduction to the medical profession (1 credit) since 2018
12. Teaching at the Medical postgraduate specialization program
13. Member, assessment committee of the PhD dissertation titled : **HER2 modifies acid-base regulation and sensing to facilitate breast cancer development** (The Graduate School, Health, Aarhus University, DK). March 3, 2023
14. President, assessment committee of the PhD dissertation of the 39th PhD cycle "Immunity , infection and cancer" October 6th, 2023
15. Member of the international commission of the Faculty of Pharmacy, University of Verona
16. Coordinator of the teaching college Faculty of Pharmacy, University of Verona

M: Mentor and tutor: he supervised the thesis for Bachelor Degree in Biomedical Laboratory techniques (4), Master degree (6), Specialization in pathology (1), MD degree (1) and PhD (13). 10 contract researchers (Assegno di Ricerca) and seven post-doctoral fellows that were engaged in his laboratory (currently employing 1 PhD student, 2 post doctoral fellows and 1 technician).

N: Member of the following scientific societies: SIP, SIICA, SIC, EACR, ASH, EHA, ECFS, SIFC

M: English level: advanced

Institutional site: <http://www.dpd.univr.it/?ent=persona&id=1181&lang=en>

Verona, April 4th, 2024

Claudio Sorio