

PERSONAL INFORMATION

Claudio Sorio MD, PhD



Department of Medicine, General Pathology Division

+390458027688 +393478785569

claudio.sorio@univr.it

<http://www.dm.univr.it/?ent=persona&id=1181&lang=en> , ResearcherID: F-2764-2018
Orcid: 0000-0003-2739-4014, Scopus ID: 6603774132

Skype address: sorioclaudio

Sex Male | Date of birth 21/09/1962 | Nationality Italian

AUG 27TH, 2024

WORK EXPERIENCE

Dr. Claudio Sorio is currently Associate Professor of General Pathology. He obtained the National Academic Qualification (2016) as Full Professor for sectors 06A2 (General pathology and clinical pathology) and 06N1 (Sciences of health professions and of applied medical technologies). He is the founder and serves as the coordinator of the Departmental Laboratory of Translational Research in Cystic Fibrosis within the Department of Medicine at the University of Verona. He has been leading and actively participating to multiple research projects in pancreatic cancer, leukaemia and Cystic Fibrosis. Main results include the discovery (in collaboration with Aldo Scarpa) of the tumor suppressor role of FHIT in pancreatic cancer, and his laboratory discovered that Protein Tyrosine Phosphatase Gamma (PTPRG) is a dendritic cell biomarker and a tumor suppressor gene in chronic myeloid leukaemia. In the field of cystic fibrosis, since 2009, he has 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 biomarkers. He founded the cystic fibrosis translational research laboratory "D. Lissandrini". Among many studies in this field, it is worth mentioning the discovery of a monocyte-selective adhesion defect in CF, which enabled us to propose CF as a new type of leukocyte adhesion deficiency, now internationally accepted as LAD IV (in collaboration with Paola Melotti and Carlo Laudanna). He is now developing intestinal organoids technology for patient therotyping. He has authored 126 original publications in international journals to date and is the single major contributor in the field of PTPRG characterization. He has served as an editorial board member of various reputable journals. He is a member of many scientific societies and has participated in relevant national and international research projects.

2019 Appointed Visiting Professor at the Department of Gastroenterology and Hepatology, Erasmus MC, Rotterdam (NL)

2016 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)

2014 Appointed Faculty Member (Visiting Professor) at the Department of Biochemistry and Cell Biology, University of Minnesota (U.S.A.)

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>)

1998 Visiting scholar Ulm University (Prof. Thomas Gress lab.)

1991 Visiting scholar EMBL, Heidelberg (Dr. Sara Courtneidge lab.)

POSITIONS

- 2018-present:** Associate professor of General Pathology and Immunology
- 1998-2018:** Assistant Professor of Pathology and Immunology
- 1992-1995:** Post-Doctoral Fellow, Kimmel Cancer Center, Thomas Jefferson University, Philadelphia, PA, U.S.A.
- 1989-1990:** Chief of the sanitary Service of the Military Presidium in Verona

Business or sector Medicine

EDUCATION AND TRAINING

1994-1998 Specialization in Surgical Pathology, University of Verona
 1990-1994 PhD University of Verona
 1982-1988 MD University of Verona

PERSONAL SKILLS

Mother tongue(s) Italian

Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C1	C1	B2

Replace with name of language certificate. Enter level if known.

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user
[Common European Framework of Reference for Languages](#)

Organisational / managerial skills ▪ leadership (currently responsible for a team of 12 people)

Job-related skills ▪ good command of biomedical research processes (currently responsible of a university research laboratory)

ADDITIONAL INFORMATION

Publications	Author of 122 publications indexed in Pubmed.
Citations	Total citations: 3713, h-index 28 (Scopus), as of Sept. 2026. Over 95% are in Q1–Q2 ranked journals.
Projects	P.I. of 17 grants for a total value of over 1.5 M€, Partner of 10 grants for a total awarded over 415.000 €, External services (Chiesi farmaceutici, PTT therapeutics, USA Cystic Fibrosis Foundation Therapeutics , USA), total awarded over 500.000 €
Editorial activity	Editorial Board Member: World Journal of Gastrointestinal Oncology (WJGO), American Journal of Cancer Research, Science Letters , Biomolecules (MDPI), Cancers. Deputy Editor-in-Chief: World Journal of Hematology. Co-Editor in chief: Advances in Redox Research (Elsevier) Review Editor for Frontiers Pharmacology (Experimental Pharmacology and Drug Discovery) and Frontiers in Oncology (Hematologic Malignancies). Reviewer for many indexed Journals (over 35)
Memberships	Member of the following scientific societies: SIP, SIICA, SIC, EACR, ASH, EHA, ECFS, SIFC

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)
I: Reviewer of national and international research programs for:

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

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

Teaching:

- Supply professor (pathology and oncology) at the faculty of science of the University of Verona (2006)
- Teaching course of "molecular pathology of cancer " for the residency in medical oncology 1999-2013; 2019
- 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.
- 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
- School of Medicine and Surgery: Combined Bachelor's + Master's degree in Medicine and Surgery: General and Clinical Pathophysiology (3,5 credits) since 2018
- 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) (2019)
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 (2014-2021)
11. General Pathology teaching course for the Combined Bachelor's + Master's degree in Medicine and Surgery since 2018
12. General Pathology teaching course for the Combined Bachelor's + Master's degree in Pharmacy since 2025
13. Teaching at the Medical postgraduate specialization program

Contributions to Science

Development of cellular models of disease : I have developed several disease models and studied their features and applications in the field of cancer and cystic fibrosis

1. The first models of PTPRG transfected embryonic stem, breast cancer and CML cells (PMID: 9207437.16, doi: 10.1038/sj.onc.1207235; 10.1158/0008-5472.CAN-10-0258)
2. Successful Xenografting of cryopreserved primary pancreatic cancers (doi: 10.1007/s004280000343)
3. New cell line models of rare (in one case unique) pancreatic cancer histotypes (refs, 10.1007/s00428-004-1167-1, 10.1007/s00428-003-0936-6)
4. Use of leukocytes as a novel source of primary cells with clinical application in Cystic Fibrosis (CF): ref 10.1371/journal.pone.0022212
5. Lymphoblastoid cells to study the molecular mechanisms in Shwachman-Diamond Syndrome (refs doi: 10.1038/srep33165, 10.1002/ajh.25025, 10.3390/cancers12030597)
6. Setup of Organoid technology and development of personalized medicine applications in CF: doi: 10.1186/1471-2466-14-44, 10.3390/jpm12040632, 10.1126/scitranslmed.abl6328, doi.org/10.3390/ijms24065199, doi.org/10.3390/ijms241210358, doi.org/10.1016/j.isci.2023.108180, doi:10.1016/j.resinv.2024.03.003

Discovery of a tumor suppressor role for FHIT gene in pancreatic cancer: This study was the first report that describe the occurrence of FHIT rearrangements on pancreatic cancer (PMID: 10096564)

Discovery of a tumor suppressor role for PTPRG in CML : I have discovered a tumor suppressor role of the tyrosine phosphatase PTPRG in chronic myeloid leukemia and developed a series of additional studies and collaborations. doi: 10.1158/0008-5472.CAN-10-0258, (follow-up papers 10.1186/s13045-017-0494-z, 10.18632/oncotarget.24253, 10.3390/ijms21072298, 10.1002/mgg3.1319, 10.1038/s41598-021-86875-y, 10.1177/10732748211038429, 10.1016/j.gene.2021.146101, 10.3390/ijms23179899 and as **new identifier** for myeloid dendritic cells and specialized macrophages representing the first study that correlates this gene to dendritic cell differentiation (PMID: 16896153).

Discovery of a downregulation of BCR::ABL activity in chronic phase CML: in this recent study we have found that, despite common belief, the enzymatic activity of the oncogene BCR::ABL is functionally inhibited in the chronic phase of the disease and is upregulated in the blastic phase (doi: 10.3389/fonc.2022.904510)

Discovery of a new type of Leukocyte Adhesion Deficiency (LAD IV): In this seminal study we have defined cystic fibrosis as a new type of LAD (CF was an accepted cause of LAD by the International Union of Immunological Societies (IUIS) in 2017): doi: 10.1164/rccm.201510-1922OC,

First report describing the protective role of CFTR defect in SarsCov2 infection (In collaboration with D. Gibellini): in this study we have discovered that CF cells are less prone to support Sars Cov2 replication contributing to explain a less severe disease course in persons with CF. doi: 10.3390/cells11081347 (follow-up: 10.3390/ijms23179724, <https://doi.org/10.3390/cells12050776>)