Silvia Anna Ciafrè
born in Pesaro, Italy, 28/01/1966
E-mail ciafre@uniroma2.it

Education and training

1989 University of Rome “La Sapienza”, Rome, Italy: PhD equivalent in Molecular Biology

Positions and Employment

1991-2000 University of Rome "Tor Vergata", Rome, Italy: *Research Assistant*
2000-2005 University of Rome "Tor Vergata", Rome, Italy: *Researcher*
2005- to present Dept. of Biomedicine and Prevention, University of Rome "Tor Vergata", Rome, Italy: *Associate Professor of Applied Biology*

Other Professional Experience and Memberships

2000 Prof. M Izquierdo's lab, Universidad Autonoma de Madrid, Madrid, Spain: Invited Scientist
2004 Prof. CM Croce's lab, Kimmel Cancer Center, Thomas Jefferson University, Philadelphia, PA, USA: Invited Scientist
2010 Dr. Jean Bénard’s lab, Département de Biologie et de Pathologie médicales, Service de Pathologie Moléculaire, Institut Gustave Roussy, 94800 – Villejuif, France: Invited Scientist

Member of the Società Italiana di Biofisica e Biologia Molecolare/Federazione Italiana Scienze della Vita (SIBBM/FISV).
Member of the Associazione Italiana Biologia e Genetica Generale e Molecolare (AIBG).
Member of the **“**European Association for Cancer Research” (EACR).

Honors, Fellowships and Grants

1990: Consiglio Nazionale delle Ricerche (National Research Council) (CNR), **fellowship**.
1990: Società Italiana Biofisica e Biologia Molecolare (Italian Society for Biophysics and Molecular Biology) (SIBBM), **thesis award**.
1998: Consiglio Nazionale delle Ricerche (National Research Council) (CNR) **grant** for a project entitled "Inibizione dell'angiogenesi e interferenza con la crescita tumorale: modelli in vitro e in vivo e analisi dei meccanismi molecolari" (Angiogenesis inhibition and impairment of tumor growth: in vitro and in vivo models and study of the molecular mechanisms). Role: **Principal Investigator**.
2000: University of Rome Tor Vergata **grants** for young researchers for a project entitled "Uso di ribozimi contro il VEGF per inibire il potenziale neoangiogenico di linee cellulari di tumori cerebrali e ridurre la crescita tumorale in vivo" (Use of anti-VEGF ribozymes to inhibit the neoangiogenic potential of brain cancer cell lines and to reduce the in vivo tumor growth). Role: **Principal Investigator**.
2000: Consiglio Nazionale delle Ricerche (National Research Council) (CNR) Agenzia 2000 **grant** for a project entitled "Uso di ribozimi contro il VEGF per inibire il potenziale neoangiogenico e ridurre la crescita di tumori cerebrali in modelli animali" (Use of anti-VEGF ribozymes to inhibit the neoangiogenic potential and reduce glioblastoma growth in animal models). Role: **Principal Investigator**.
2002: FIRB-MIUR **grant** for a project entitled "Reelin: meccanismo di azione e funzione nella plasticità sinaptica" (Reelin: working mechanism and functions in synaptic plasticity). Role: **Associated Investigator**.

2006 – 2007: Italian Ministry of University and Scientific Research (MIUR) **grant**. Project entitled “Effetti dell’espressione di reelina sulle proprietà di cellule staminali neurali murine” (Effects of Reelin expression on the properties of murine neural stem cells). Role: **Principal investigator**.

2006 – 2008: Italian Ministry of Health (Ministero della Salute) # 527B/2B/1.2 grant. Project entitled “Caratterizzazione dell’espressione di microRNA in sottopopolazioni cellulari di glioblastoma multiforme” (Characterization of microRNA expression in specific cell types in glioblastoma multiforme). Role**: Co-investigator.**

2008 – 2011: PRIN # 20077YZTL8_002 Italian Ministry of University and Scientific Research (MIUR) grant for a project entitled “Ruolo dei microRNA nel differenziamento neuronale e nello sviluppo dei glioblastomi” (Role of microRNAs in neuronal differentiation and in glioblastoma development). Role: **Co-investigator**.

2008 - 2011: Italian Ministry of University and Scientific Research (MIUR) **grant** for a project entitled “Studio sul ruolo di miR-128 nel neuroblastoma” (Study about the role of miR-128 in neuroblastoma). Role: **Principal investigator**

2012 - 2013: Fondazione Umberto Veronesi **grant** for a project entitled “CLIC1 (Chloride intracellular channel 1) as a possible prognostic indicator and therapeutic target in glioblastoma”. Role: **Associated investigator**.

2017-2021: Fondazione Giovanni Celeghin **grant** for a project entitled “Long-noncoding RNA: biomarcatori e bersagli terapeutici nelle cellule iniziatrici del glioblastoma”. Role: **Principal Investigator**.

2025 - 2027: Fondazione Giovanni Celeghin **grant** for a project entitled “Harnessing MEOX2 modulation and interaction dynamics to increase sensitivity of glioblastoma stem cells to treatment”. Role: **Principal Investigator**.

Special Issue (INVITED EDITOR): "The Plentiful Roles of RNA in Glioblastoma" in International Journal of Molecular Sciences
https://www.mdpi.com/journal/ijms/special_issues/RNA_Glioblastoma

Scientific Interests By Keywords

Glioblastoma
Cancer stem cells
RNA binding proteins
LncRNAs
Tumor Microenvironment
MicroRNAs
Tumor angiogenesis
Neural stem cells

Scientific sketch

S.A. Ciafrè coordinates a group of researchers with background in biochemistry and in molecular and cell biology that has acquired extended expertise and international qualification on the study of different aspects of glioblastoma biology. The major contribution of S.A. Ciafrè in the last years has been devoted to the study of the roles of noncoding RNAs, in particular microRNAs, in glioblastoma. Her work has led to the following major achievements:

- In 2004, S.A Ciafrè started to study microRNA expression in glioblastoma, in collaboration

with Prof. Carlo Croce, at the Jefferson University of Philadelphia, USA. The data obtained were published as the very first example of an extensive study of microRNA differential expression in glioblastoma patients' samples and cell lines, which has collected a very high number of citations (more than 800 in WoS) and is still frequently cited due to its pivotal nature in the field.

- In 2007, S.A. Ciafrè published a paper identifying p27 as the target of a pair of "oncomiRs", miR-221/222, in prostate carcinoma. This paper is classified in WoS as "highly cited paper", because as of September/October 2017, it received enough citations to place it in the top 1% of its academic field based on a highly cited threshold for the field and publication year.
- Successively, SA Ciafrè's group showed the involvement of two oncogenic transcription factors, NF-kB and c-Jun, in the regulation of miR-221/222 in glioblastoma and in prostate carcinoma.
- In 2015, S.A. Ciafrè's group published a work about a deep characterization of total RNA expression in glioblastoma samples, paving the way to novel studies on the different cell components of this heterogeneous and deadly tumor.
- Very recently, in collaboration with Dr. Nasi's group, S.A. Ciafrè's group has elucidated the molecular mechanisms explaining the anti-tumoral function of Omomyc, a polypeptide interfering with, and impairing the action of the oncogenic factor Myc, in glioblastoma stem cells. The results obtained open a novel important perspective on Myc as a master factor in glioblastoma initiation and development, and on the therapeutic chances provided by its inhibition by Omomyc, or by similar approaches targeting Myc.
- In 2018, Ciafrè's group published a work about the involvement of the H19 lncRNA in the epigenetic control in glioblastoma cells via the recruitment of EZH2 onto the promoter of specific genes.
- Due to her experience in glioblastoma and microRNAs, S.A. Ciafrè was invited to write a book chapter and two reviews about these subjects, and acted as Invited Guest Editor of the Special Issue "The Plentiful Roles of RNA in Glioblastoma" in International Journal of Molecular Sciences (https://www.mdpi.com/journal/ijms/special_issues/RNA_Glioblastoma). "MiRNAs in glioblastoma", chapter 16 (pages 348-360) of the book: "MicroRNAs from basic science to disease biology" edited by Krishnarao Appasani for Cambridge University press, Cambridge UK, 2008. Mercatelli N, Galardi S, Ciafrè SA. MicroRNAs as Multifaceted Players in Glioblastoma Multiforme. Int Rev Cell Mol Biol. 2017; 333:269-323. doi: 10.1016/bs.ircmb.2017.03.002. Galardi S, Michienzi A, Ciafrè SA. Insights into the Regulatory Role of m6A Epitranscriptome in Glioblastoma. Int J Mol Sci. 2020 Apr 17;21(8). pii: E2816.

RECENT INTERNATIONAL COLLABORATIONS

Mohamed Elati, Univ. Lille, CNRS, Inserm, CHU Lille, UMR9020-U1277 - CANTHER - Cancer Heterogeneity Plasticity and Resistance to Therapies, Lille, F-59000, France.

Maria Pernemalm, Department of Oncology-Pathology, Karolinska Institute, 171 77 Stockholm, Sweden.

Amanda Linkous, Department of Biochemistry, Vanderbilt University, Nashville, TN, USA.

Marie Lopez, Institut des Biomolécules Max Mousseron (IBMM), UMR 5247, CNRS-Université de Montpellier-ENSCM, 1919 route de Mende, 34296 Montpellier cedex 5, France.

Publications

1. Lucioli, A., Presutti, C., **Ciafrè, S.**, Caffarelli, E., Fragapane, P. and Bozzoni, I. "Gene dosage alteration of L2 ribosomal protein genes in *S. cerevisiae*: effects on ribosome synthesis". **Mol. Cell. Biol.**, 8: 4792-4798, **1988**.
2. Della Seta, F., **Ciafrè, S.-A.,** Marck, C., Santoro, B., Presutti, C., Sentenac, A. and Bozzoni, I. "The ABF1 factor is the transcriptional activator of the L2 ribosomal protein genes in *S. cerevisiae*". **Mol. Cell. Biol.**, 10: 2437-2441, **1990**.
3. Presutti, C., **Ciafrè, S.-A.** and Bozzoni, I. "The ribosomal protein L2 in S. cerevisiae controls the level of accumulation of its own mRNA". **EMBO J.**, 10: 2215-2221, 1991.
4. Liguori A, Napoli C, **Ciafrè SA,** D'Armiento FP, Di Gregorio F, Bruzzese G, Di Ieso N, Di Benedetto A, Colasanti P, Ferrara A, et al. "Role of arterial hypertension in plasma secretion of prostacyclin during renal failure in man". **Riv Eur Sci Med Farmacol**. 14 (5):305-8, **1992**.
5. D'Armiento FP, Di Gregorio F, **Ciafrè SA**, Posca T, Liguori A, Napoli C, Colasanti P, Cali A, Vecchione R. "Histological findings and evidence of lipid conjugated dienes and malonyldialdehyde in human fetal aortas". **Acta Paediatr**. 82 (10):823-8, **1993**.
6. Fazio, V.M., Barrera, G., Muraca, R., Rinaldi, M**., Ciafrè, S.,** Lazzari, M., Dianzani M., and Farace, M.G. "Differentiating agents and cancer therapy. Role of lipid peroxidation and its product 4-hydroxynonenal in the control of cell proliferation and differentiation". **"Combination Therapies, 2"**, Goldstein A.L. and Garaci E, ed. s, New York: Plenum Press, pp. 105-114, **1993**.
7. Fazio, V.M., Rinaldi, M**., Ciafrè, S.,** Barrera, G., Farace, M.G. "Control of neoplastic cell proliferation and differentiation by restoration of 4-hydroxynonenal physiological concentration". **Molec. Aspects Med**. 14: 217-228, **1993**.
8. Fazio, V.M., Fazio, S., Rinaldi, M., Catani, M.V., Zotti, S., **Ciafrè, S.,** Seripa, D., Ricci, G., and Farace, M.G. "Accumulation of human apolipoprotein-E in rat plasma after *in vivo* intramuscular injection of naked DNA". **Biochem. Biophys. Res. Comm.**, 200: 298-305, 1994**.**
9. **Ciafrè, S.A.,** Rinaldi, M., Gasparini, P., Seripa, D., Bisceglia, L., Zelante, L., Farace, M.G. and Fazio, V.M. "Stability and functional effectiveness of phosphorothioate modified duplex DNA and synthetic "mini genes"". **Nucl. Acids Res.**, 23: 4134-4142, 1995.
10. Napoli C, Liguori A, Sorice P, di Benedetto A, **Ciafrè S**, Posca T, di Ieso N, D'Armiento FP. "Relations between vasoactive hormones and diastolic function in hypertensive uraemic patients". **J Intern Med**., 240 (6):389-94, **1996**.
11. Rinaldi, M., **Ciafrè, S.A**., Parrella, P., Farace, M.G., Fazio, V.M. "Naked-gene transfer technology and somatic gene therapy approaches in adult and in utero." **Minerva Biotecnologica**, vol 9, n.4, p. 254-265, **1997**.
12. Napoli C, Di Gregorio F, Sorice P, Di Benedetto A, **Ciafrè S**, Posca T, Ferrara A, Di Paolo E, Bruzzese G, D'Armiento FP, Mansi L, Liguori A. "High prevalence of myocardial ischemia and vasoconstrictive hormonal release in hypertension during chronic renal failure". **Nephron**, 76 (4): 434-44, **1997**.
13. Rinaldi, M., **Ciafrè, S.A**., Parrella, P., Signori, E., Farace, M.G., Saglio, G. and Fazio, V.M. "Strategies to elicit anti-idiotypic immune response in B-lymphoma patients: peptide and genetic immunization." **Adv. Exp. Med. Biol**, 451: 323 - 330, **1998**.
14. **Ciafrè, S.A**., Rinaldi, M., Vespignani, I., Parrella, P., Seripa, D., Signori, E., Ria, F., Farace, M.G., Fazio, V.M. "A plasmid family containing two different expression cassettes suitable for immunomodulation and genetic immunization." **Plasmid,** 40 (1): 84-89, 1998.
15. de Nigris F, Youssef T, **Ciafrè S**, Franconi F, Anania V, Condorelli G, Palinski W, Napoli C. "Evidence for oxidative activation of c-Myc-dependent nuclear signaling in human coronary smooth muscle cells and in early lesions of Watanabe heritable hyperlipidemic rabbits: protective effects of vitamin E". **Circulation**, 102 (17):2111-7, 2000.

16. Rinaldi M., Catapano A.L., Parrella P., **Ciafrè S.A.**, Signori E., Seripa D., Uboldi P., Antonini R., Ricci G., Farace M.G**.** and Fazio V.M. " Treatment of severe hypercholesterolemia in apolipoprotein E-deficient mice by intramuscular injection of plasmid DNA" **Gene Therapy**, 7: 1795 - 1801, **2000**.
17. Rinaldi M., Ria F., Parrella P., Signori E., Serra A., **Ciafrè S.A**., Vespignani I., Lazzari, M., Farace M.G., Saglio G., and Fazio V.M. "Antibodies elicited by naked DNA vaccination against hypervariable VH-CDR3 idiotypic determinants of B-lymphoproliferative disorders specifically react with patients's tumor cells." **Cancer Res.**, 61: 1555-1562, **2001**.
18. Rinaldi M, Barrera G, Spinsanti P, Pizzimenti S, **Ciafrè SA**, Parrella P, Farace MG, Signori E, Dianzani MU, Fazio VM. "Growth inhibition and differentiation induction in murine erythroleukemia cells by 4-hydroxynonenal." **Free Radic Res.,** Jun; 34 (6): 629-37, 2001.
19. Quattrocchi, C.C., Wannenes, F., Persico, A.M., **Ciafrè, S.A**., D'Arcangelo G., Farace, M.G., Keller, F. "Reelin is a serine protease of the extracellular matrix" **Journal of Biological Chemistry**, 277 (1): 303-309, **2002**.
20. **Ciafrè S.A**., Barillari G., Bongiorno Borbone L., Wannenes F., Izquierdo M. and Farace M.G. " A tricistronic retroviral vector expressing natural antiangiogenic factors inhibits angiogenesis *in vitro* but is not able to block tumor progression *in vivo*". **Gene Ther.**, Feb.; 9 (4): 297 - 302, **2002**.
21. Caporossi D, **Ciafrè SA**, Pittaluga M, Savini I, Farace MG. "Cellular responses to H2O2 and bleomycin-induced oxidative stress in L6C5 rat myoblasts", **Free Rad. Biol. Med.**, 35 (11): 1355-1364, **2003**.
22. **Ciafrè SA**, Niola F, Wannenes F, and Farace MG. "An anti-VEGF ribozyme embedded within the adenoviral VA I sequence inhibits glioblastoma cells angiogenic potential *in vitro*", **J. Vasc. Res.**, Apr 7; 41(3): 220 – 228, **2004**.
23. Wannenes F*, **Ciafré SA**.*, Niola F, Frajese G and Farace MG. "Vector-based RNA interference against Vascular Endothelial Growth Factor-A significantly limits vascularization and growth of prostate cancer *in vivo*", **Cancer Gene Ther.**, 12(12):926-934, **2005**. *co-authors
24. **Ciafrè SA***, Galardi S*, Mangiola A, Ferracin M, Liu C-G, Sabatino G, Negrini M, Maira G, Croce CM, Farace MG. "Extensive modulation of a set of microRNAs in primary glioblastoma", **Biochem. Biophys. Res. Comm.**, 334(4):1351-8, **2005**. *co-authors
25. Rinaldi M., Signori E., Rosati P., Cannelli G., Parrella P., Iannace E., Monego G., **Ciafrè SA**., Farace MG., Iurescia S., Fioretti D., Rasi G., and Fazio VM. "Feasibility of *in utero* DNA vaccination following naked gene transfer into pig fetal muscle: transgene expression, immunity and safety", **Vaccine**, 24(21):4586-91, **2006**
26. Niola F., Evangelisti E., Campagnolo L., Massalini S., Buè MC., Mangiola A., Masotti A., Maira G., Farace MG., **Ciafrè SA**. "A plasmid-encoded VEGF siRNA reduces glioblastoma angiogenesis and its combination with interleukin-4 blocks tumor growth in a xenograft mouse model", **Cancer Biology and Therapy**, 5(2):174-179, 2006.
27. **Ciafrè SA**, Niola F, Giorda E, Farace MG, Caporossi D. **"**$CoCl_2$-simulated hypoxia in skeletal muscle cell lines: role of free radicals in gene up-regulation and induction of apoptosis", **Free Radic Res**, 41(4):391-401, **2007**.
28. Galardi S., Mercatelli N., Giorda E., Massalini S., Frajese GV, **Ciafrè SA**, Farace MG. "MiR-221 and miR-222 expression affects the proliferation potential of human prostate carcinoma cell lines by targeting $p27^{Kip1}$", **Journal of Biological Chemistry**, 282(32):23716-24, **2007**.
29. le Sage C, Nagel R, Egan DA, Schrier M, Mesman E, Mangiola A, Anile C, Maira G, Mercatelli N, **Ciafrè SA**, Farace MG, Agami R. "Regulation of the p27(Kip1) tumor suppressor by miR-221 and miR-222 promotes cancer cell proliferation", **EMBO J.**, 26(15):3699-3708, 2007.
30. Mannino S, Molinari A, Sabatino G, Ciafrè SA, Colone M, Maira G, Anile C, Arancia G, Mangiola A. "Intratumoral vs systemic administration of meta-tetrahydroxyphenylchlorin for photodynamic therapy of malignant gliomas: assessment of uptake and spatial distribution in C6 rat glioma model.", **Int J Immunopathol Pharmacol.**, 21(1):227-31, **2008**.

31. Mercatelli N, Coppola V, Bonci D, Miele F, Costantini A, Guadagnoli M, Bonanno E, Muto G, Frajese GV, De Maria R, Spagnoli LG, Farace MG, **Ciafrè SA**. "The inhibition of the highly expressed miR-221 and miR-222 impairs the growth of prostate carcinoma xenografts in mice", **PLoS ONE**, 3(12):e4029, **2008**.
32. Evangelisti C, Florian MC, Massimi I, Dominici C, Giannini G, Galardi S, Buè MC, Massalini S, McDowell HP, Messi E, Gulino A, Farace MG, **Ciafrè SA**. "MiR-128 upregulation inhibits Reelin and DCX expression and reduces neuroblastoma cell motility and invasiveness", **The FASEB J**., 23(12):4276-87, **2009**.
33. Massalini S, Pellegatta S, Pisati F, Finocchiaro G, Farace MG, **Ciafré SA**. "Reelin affects chain-migration and differentiation of neural precursor cells", **Mol. Cell. Neurosci.**, 42: 341-349, **2009**.
34. Mercatelli N, Dimauro I, **Ciafré SA,** Farace MG, Caporossi D. "alphaB-crystallin is involved in oxidative stress-protection determined by VEGF in skeletal myoblasts", **Free Radic Biol Med.** 49: 374-382, **2010**.
35. Galardi S., Mercatelli N., Farace MG., **Ciafrè SA**. "NF-kB and c-Jun induce the expression of the oncogenic miR-221 and miR-222 in prostate carcinoma and glioblastoma cells", **Nucl. Acids Res.**, 39(9):3892-902, **2011**
36. Doria M, Tomaselli S, Neri F, **Ciafrè SA**, Farace MG, Michienzi A, Gallo A. "ADAR2 editing enzyme is a novel human immunodeficiency virus-1 proviral factor." **J Gen Virol. 2011** May;92(Pt 5):1228-32.
37. C-H Gattolliat, L Thomas, **SA Ciafrè**, G Meurice, G Le Teuff, B Job, C Richon, V Combaret, P Dessen, D Valteau-Couanet, E May, P Busson, S Douc-Rasy, and J Bénard. "Expression of miR 487b and miR-410 encoded by 14q32.31 locus is a prognostic marker in neuroblastoma", **Br. J. Cancer**, Oct 25;105(9):1352-61. **2011**.
38. S. Galardi and **S.A. Ciafrè**. "microRNAs and RNA-binding proteins: a complex network of interactions and reciprocal regulations in cancer", RNA Biol. 10(6): 935-42, **2013**
39. Orecchini E, Doria M, Michienzi A, Giuliani E, Vassena L, **Ciafrè SA**, Farace MG, Galardi S. "The HIV-1 Tat protein modulates CD4 expression in human T cells through the induction of miR-222", RNA Biol. 2014 Mar 6;11(4).
40. Fazi B, Sicari D, Galardi D, Farace MG, Maira G, De Bonis P, Anile C, Mangiola A, **Ciafré SA**. "An integrated view of the transcriptome and miRNome of glioblastoma and peritumor tissues", ANTICANCER RESEARCH 34(10): 5865, OCT 2014
41. Cicchini C, de Nonno V, Battistelli C, Cozzolino AM, De Santis Puzzonia M, **Ciafrè SA**, Brocker C, Gonzalez FJ, Amicone L, Tripodi M. "Epigenetic control of EMT/MET dynamics: HNF4α impacts DNMT3s through miRs-29". Biochim Biophys Acta. **2015** Aug;1849(8):919-29.
42. Fazi, B., Felsani, A., Grassi, L., Moles, A., D'Andrea, D., Toschi, N., Sicari, D., De Bonis, P., Anile, C., Giovanna Guerrisi, M., Luca, E., Farace, M.G., Maira, G., **Ciafré, S.A.**, & Mangiola, A. (2015). "The transcriptome and miRNome profiling of glioblastoma tissues and peritumoral regions highlights molecular pathways shared by tumors and surrounding areas and reveals differences between short-term and long-term survivors" Oncotarget. **2015** Sep 8;6(26):22526-52.
43. Luchetti, A.; **Ciafrè, S.A.**; Murdocca, M.; Malgieri, A.; Masotti, A.; Sanchez, M.; Farace, M.G.; Novelli, G.; Sangiuolo, F. A Perturbed MicroRNA Expression Pattern Characterizes Embryonic Neural Stem Cells Derived from a Severe Mouse Model of Spinal Muscular Atrophy (SMA). *Int. J. Mol. Sci.* **2015**, *16*, 18312-18327.
44. Orecchini E, Federico M, Doria M, Arenaccio C, Giuliani E, **Ciafrè SA**, Michienzi A. The ADAR1 editing enzyme is encapsidated into HIV-1 virions. Virology. **2015** Sep 9;485:475-480. doi: 10.1016/j.virol.2015.07.027. [Epub ahead of print]

45. Galardi S, Petretich M, Pinna G, D'Amico S, Loreni F, Michienzi A, Groisman I, **Ciafrè SA.** CPEB1 restrains proliferation of Glioblastoma cells through the regulation of p27(Kip1) mRNA translation. Sci Rep. **2016** May 4;6:25219. doi: 10.1038/srep25219.
46. Murdocca M, **Ciafrè SA**, Spitalieri P, Talarico RV, Sanchez M, Novelli G, Sangiuolo F. SMA Human iPSC-Derived Motor Neurons Show Perturbed Differentiation and Reduced miR-335-5p Expression. *Int. J. Mol. Sci.* **2016**, 17(8). pii: E1231. doi: 10.3390/ijms17081231.
47. Galardi S, Savino M, Scagnoli F, Pellegatta S, Pisati F, Zambelli F, Illi B, Annibali D, Beji S, Orecchini E, Alberelli MA, Apicella C, Fontanella RA, Michienzi A, Finocchiaro G, Farace MG, Pavesi G, **Ciafrè SA**, Nasi S. Resetting cancer stem cell regulatory nodes upon MYC inhibition. *EMBO Rep.* **2016** Dec;17(12):1872-1889.
48. Orecchini E, Doria M, Antonioni A, Galardi S, **Ciafrè SA**, Frassinelli L, Mancone C, Montaldo C, Tripodi M, Michienzi A. ADAR1 restricts LINE-1 retrotransposition. *Nucleic Acids Res.* **2017** Jan 9;45(1):155-168. doi: 10.1093/nar/gkw834.
49. Mercatelli N, Galardi S, **Ciafrè SA**. MicroRNAs as Multifaceted Players in Glioblastoma Multiforme. *Int Rev Cell Mol Biol.* **2017**; 333:269-323. doi: 10.1016/bs.ircmb.2017.03.002.
50. Orecchini E, Frassinelli L, Galardi S, **Ciafrè SA**, Michienzi A. Post-transcriptional regulation of LINE-1 retrotransposition by AID/APOBEC and ADAR deaminases. *Chromosome Res.* **2018** Feb 2. doi: 10.1007/s10577-018-9572-5.
51. Fazi B, Garbo S, Toschi N, Mangiola A, Lombari M, Sicari D, Battistelli C, Galardi S, Michienzi A, Trevisi G, Harari-Steinfeld R, Cicchini C and **Ciafrè SA**. The lncRNA H19 positively affects the tumorigenic properties of glioblastoma cells and contributes to NKD1 repression through the recruitment of EZH2 on its promoter. *Oncotarget*, **2018**; 9:15512-15525. doi: https://doi.org/10.18632/oncotarget.24496
52. Angelucci C, D'Alessio A, Lama G, Binda E, Mangiola A, Vescovi AL, Proietti G, Masuelli L, Bei R, Fazi B, **Ciafrè SA**, Sica G. Cancer stem cells from peritumoral tissue of glioblastoma multiforme: the possible missing link between tumor development and progression. *Oncotarget*. **2018** Jun 15;9(46):28116-28130.
53. Fazi B, Proserpio C, Galardi S, Annesi F, Cola M, Mangiola A, Michienzi A, **Ciafrè SA**. The Expression of the Chemokine CXCL14 Correlates with Several Aggressive Aspects of Glioblastoma and Promotes Key Properties of Glioblastoma Cells. *Int. J. Mol. Sci.* **2019**, 20, 2496; doi:10.3390/ijms20102496
54. Galardi S, Michienzi A, **Ciafrè SA.** Insights into the Regulatory Role of m6A Epitranscriptome in Glioblastoma. *Int J Mol Sci.* **2020** Apr 17;21(8). pii: E2816.
55. Frassinelli L, Galardi S, **Ciafrè SA**, Michienzi A. RNA Editing in Interferonopathies. *Methods Mol Biol*. **2021**; 2181:269-286. doi: 10.1007/978-1-0716-0787-9_16.
56. Frassinelli L, Orecchini E, Al-Wardat S, Tripodi M, Mancone C, Doria M, Galardi S, **Ciafrè SA**, Michienzi A. The RNA editing enzyme ADAR2 restricts L1 mobility. *RNA Biol.* **2021** Jul 5:1-13. doi: 10.1080/15476286.2021.1940020.
57. Proserpio C, Galardi S, Desimio MG, Michienzi A, Doria M, Minutolo A, Matteucci C, **Ciafrè SA**. MEOX2 Regulates the growth and survival of glioblastoma stem cells by modulating genes of the glycolytic pathway and response to hypoxia. *Cancers* **2022**, 14, 2304. https://doi.org/10.3390/cancers14092304 (IF 2021 6,639).
58. Babačić H, Galardi S, Umer HM, Hellström M, Uhrbom L, Maturi N, Cardinali D, Pellegatta S, Michienzi A, Trevisi G, Mangiola A, Lehtiö J, **Ciafrè SA**, Pernemalm M. Glioblastoma stem cells express non-canonical proteins and exclusive mesenchymal-like or non-mesenchymal-like protein signatures. *Mol Oncol*. **2022** Dec 10. doi: 10.1002/1878-0261.13355. Epub ahead of print. PMID: 36495079
59. **Ciafrè, S.A.;** Russo, M.; Michienzi, A.; Galardi, S. Long Noncoding RNAs and Cancer Stem Cells: Dangerous Liaisons Managing Cancer. *Int. J. Mol. Sci.* **2023**, 24, 1828. https://doi.org/10.3390/ijms24031828.

60. Al Wardat S, Frassinelli L, Orecchini E, Rey F, **Ciafrè SA**, Galardi S, Garau J, Gagliardi S, Orcesi S, Tonduti D, Carelli S, Cereda C, Picardi E, Michienzi A. Characterization of the molecular dysfunctions occurring in Aicardi-Goutières syndrome patients with mutations in ADAR1. *Genes Dis.* **2023** Jul 13;11(3):101028. doi: 10.1016/j.gendis.2023.05.020. eCollection 2024 May.
61. Bernhard C, Geles K, Pawlak G, Dhifli W, Dispot A, Dusol J, Kondratova M, Martin S, Messé M, Reita D, Tulasne D, Van Seuningen I, Entz-Werle N, **Ciafrè SA**, Dontenwill M, Elati M. A coregulatory influence map of glioblastoma heterogeneity and plasticity. *NPJ Precis Oncol.* **2025** Apr 15;9(1):110. doi: 10.1038/s41698-025-00890-0. PMID: 40234567.
62. Russo M, Valentini E, Aliperti V, Copparoni F, Linkous A, Montaldo C, Soddu S, Besson JM, Lopez M, Helmer Citterich M, Michienzi A, Tripodi M, **Ciafrè SA**, Galardi S. MEOX2 enhances DNA repair and therapy resistance in Glioblastoma stem-like cells via PARP1 interaction. *Cancer Lett*. **2026** Jan 29;642:218284. doi: 10.1016/j.canlet.2026.218284. Epub ahead of print. PMID: 41620199.

Link SCOPUS profile: https://www.scopus.com/authid/detail.uri?authorId=6701840077#

Author's Impact (Scopus):
Papers: 62
Citations: 4681
h-index: 29

English proficiency level, based on the Common European Framework of Reference for Languages (CEFR): B2 (Upper Intermediate/Vantage).