

ALL. B ai fini della pubblicazione

Decreto Rettore Università di Roma “La Sapienza” n 2156/2021 del 02/08/2021

FRANCESCA ROMANA BUTTARELLI
Curriculum Vitae

Place Rome

Date 16/08/2021

Part I – General Information

Full Name	Francesca Romana Buttarelli
Date of Birth	
Place of Birth	
Citizenship	Italian
Permanent Address	
Mobile Phone Number	
E-mail	
Spoken Languages	Italian, English

Part II – Education

Type	Year	Institution	Notes (Degree, Experience,...)
University graduation	1984	Sapienza Universita di Roma	Laurea in Biologia
Licensing	1985	Sapienza Universita di Roma	Abilitazione esercizio professione Biologo
PhD	1991	Sapienza Universita di Roma, sede consorziata Università di Camerino (MC)	Dottorato di Ricerca in Biologia Molecolare

Part III – Appointments

IIIA – Academic Appointments

Start	End	Institution	Position
31/05/2021	31/05/2030	MIUR	ASN professore II fascia SC 06/N1
2001	present	Sapienza Università di Roma	Ricercatore confermato SSD MED/46
1991	2001	Sapienza Università di Roma	Funzionario Tecnico Laureato

IIIB – Other Appointments

Start	End	Institution	Position
2017	present	Az. Policlinico Umberto I	FAS Diagnostica molecolare avanzata in Anatomia Patologica, D.A.I. Oncologia, Ematologia, Anatomia Patologica
1991	present	Az. Policlinico Umberto I	Dirigente Biologo I livello
1989	1990	Institut fur Molekularbiologie und Tumorforschung, Philipps-Universitat,	Visiting Fellow: Sonder-Forschung-Bericht lug.-dic. 1990; "Free Mover"

1987	1988	Marburg (DE).	ERASMUS" lug.1989 - giu. 1990.
		Max Planck Institut fur Molekulare Genetik, Berlino (DE)	Guest Researcher

Part IV – Teaching experience

Year	Institution	Lecture/Course
2020/21	Scuola di Specializzazione in Anatomia Paticologica, Facoltà di Medicina e Chirurgia, "Sapienza" Università di Roma	Lecturer
2013/14- Present	Tecniche Di Laboratorio Biomedico Corso Di Laurea A - Roma Azienda Policlinico Umberto I. Facoltà Medicina E Odontoiatria, "Sapienza"	Tecnologie Avanzate Nella Diagnostica Di Laboratorio [1035176]
2019/- Present	Tecniche Di Laboratorio Biomedico Corso Di Laurea B - Roma Azienda S.Camillo Forlanini, "Sapienza"	Metodologie Diagnostiche Di Anatomia Patologica [1035174]
2016/17- Present	Tecniche Di Laboratorio Biomedico Corso Di Laurea B - Roma Azienda S.Camillo Forlanini, "Sapienza"	Tecniche E Strumentazioni Di Base Nel Laboratorio [1036441]
2012/13- Present	Tecniche Di Laboratorio Biomedico Rieti - Corso Di Laurea F - Asl Rieti, "Sapienza"	Tecniche E Strumentazioni Di Base Nel Laboratorio [1036441]
2012/13- Present	Scienze Delle Professioni Sanitarie Tecniche Diagnostiche- Roma Azienda Policlinico Umberto I, "Sapienza"	Corso Interdisciplinare II – Anatomia Patologica [1036295]
2013/14- 2018/19	Tecniche Di Laboratorio Biomedico Rieti - Corso Di Laurea F - Asl Rieti, "Sapienza"	Tecnologie Avanzate Nella Diagnostica Di Laboratorio [1035176]
2012/13- 2015/16	Tecniche Di Laboratorio Biomedico Rieti - Corso Di Laurea F - Asl Rieti, "Sapienza"	Metodologie Diagnostiche Di Anatomia Patologica
2012/13- 2013/14	Infermieristica – Roma - Policlinico Umberto I - Corso C, "Sapienza"	C16007 Fisiopatologia Generale E Patologia Clinica - Patologia Clinica
2012/13-	Terapia Occupazionale - Roma Azienda Policlinico Umberto I, "Sapienza"	Basi Molecolari Della Vita [1034829]
2012/13-	Tecniche di Laboratorio Biomedico - Sede Di Rieti, "Sapienza"	C18017 Biochimica Clin. E Biologia Molec. Clin.C.I.
1997/98- 2000/01	DU di Infermieristica, "Sapienza" Università Di Roma, Sede di Sezze (Lt)	Biologia Applicata

Part V - Society memberships, Awards and Honors

Year	Title
2020- present	Responsible for 1st Level Molecular Diagnostics Facility ("HUB"), for Low Grade Glioma in Children Core BioClinical International Data Bank
2013- present	National Coordinator for Biology, Biomolecular Testing and Biological Banking in: SIOP "PNET-5 Medulloblastoma, an international prospective study on clinically standard risk medulloblastoma in children older than 5 to 3 years with low risk biological profile or average risk biological profile". European Society for Pediatric Oncology

2007-present	Responsible of Advanced Molecular Diagnostics within the national project "Centralization of Pediatric Brain Neoplasms" AIEOP.
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Part VI - Funding Information [grants as PI-principal investigator or I-investigator]

Year	Title	Program	Grant value
2020	Alternative lengthening of telomeres (ALT) in molecular subgroups of pediatric high-grade gliomas, (RM120172B8E79486)	MIUR Progetti di Ricerca di Ateneo, "Sapienza" Università di Roma (PI)	10.5K
2019	Alternative lengthening of telomeres (ALT) mechanism in pediatric high grade gliomas (RM11916B886E5722)	MIUR Progetti di Ricerca di Ateneo, "Sapienza" Università di Roma (PI)	11K
2018	Characterization of genetic and epigenetic events in primary and recurrent pediatric high grade gliomas (RM118164361BCE9F)	MIUR Progetti di Ricerca di Ateneo, "Sapienza" Università di Roma (I)	10K
2017	Genetic and epigenetic events in primary and recurrent/metastatic pediatric high grade gliomas (RM11715C6E28DAF5)	MIUR Progetti di Ricerca di Ateneo, "Sapienza" Università di Roma (I)	12K
2016	Genetic and epigenetic events in metastatic pediatric high grade gliomas (RM116154C94F6AC4)	MIUR Progetti di Ricerca di Ateneo, "Sapienza" Università di Roma (I)	15K
2015	Clinical-molecular characterization of pediatric high grade gliomas (C26A15ASN7)	MIUR, Ricerche Universitarie, "Sapienza" Università di Roma (I)	5K
2014	Clinical-molecular characterization of pediatric low grade gliomas (C26A14KLE3).	MIUR, Ricerche Universitarie, "Sapienza" Università di Roma (I)	5K
2013	Clinical-molecular characterization of pediatric high grade gliomas (C26A13K8EW)	MIUR, Ricerche Universitarie, "Sapienza" Università di Roma (I)	5K
2012	Clinical-molecular characterization of pediatric gliomas (C26A1285PL).	MIUR, Ricerche Universitarie, "Sapienza" Università di Roma (I)	5K
2011	Analysis of the MAPK pathway in pediatric low grade gliomas, (C26A11Y2XR).	MIUR, Ricerche Universitarie, "Sapienza" Università di Roma (I)	5K
2010	Stratificazione molecolare delle neoplasie gliali ad alto grado dell'età pediatrica, (C26A10WW9T).	MIUR Progetti di Ricerca di Ateneo, "Sapienza" Università di Roma (I)	10K
2008	Stratificazione molecolare delle neoplasie gliali ad alto grado dell'età pediatrica, (C26A08AC59)	MIUR Progetti di Ricerca di Ateneo, "Sapienza" Università di Roma (I)	12K
2008	Marcatori biologici di stress ossidativo in linfociti di sangue periferico nella malattia di Parkinson, (C26F08NZ3M)	MIUR, Progetti Coordinati, "Sapienza" Università di Roma (I)	6K
2007	Studio dei meccanismi molecolari di progressione neoplastica nel medulloblastoma umano ed in modelli murini, (C26A07JSMZ),	MIUR Progetti Ateneo "Sapienza" Università di Roma. (I)	10K
2007	Il trasportatore della dopamina in cellule mononucleate di sangue periferico nell'atrofia multisistemica: comparazione con la malattia di Parkinson, (C26F07YCZ7).	MIUR, Progetti Facoltà, "Sapienza" Università di Roma (I)	5K
2006	Correlazione tra le modificazioni del trasportatore della dopamina striatale e su cellule di sangue periferico nella malattia di Parkinson e nella demenza a corpi di Lewy, (C26F06YJRP)	MIUR, Progetti Facoltà, "Sapienza" Università di Roma (I)	6K
2005	Immunoreattività per il trasportatore della dopamina in linfociti di sangue periferico in pazienti affetti da sclerosi laterale amiotrofica, (C26F055939).	MIUR, Progetti Facoltà, "Sapienza" Università di Roma (I)	5K
2005	Cellule mononucleate di sangue periferico: modello sperimentale per lo studio del	MIUR Progetti Ateneo "Sapienza" Università di Roma (I)	10K

	deterioramento cognitivo nella malattia di Parkinson e correlazioni con le modificazioni di cortisolo salivare e plasmatico, (C26A051512)	
2004	Sensibilizzazione crociata tra cannabinoidi e oppiacei nel ratto, (C26F040028).	MIUR, Progetti Facoltà, "Sapienza" Università di Roma (I) 4K

Part VII – Research Activities

Keywords

Cell senescence escape
Telomer
Medulloblastoma
Pediatric Glioma
Dopamine transporter

Brief Description

- 2009-present **Study of molecular alterations underlying neoplastic transformation, translational analysis of new biomarkers in pediatric and adult brain tumors.**
 "Cell senescence escape" and control mechanisms of telomere elongation in pediatric brain tumors, correlation with outcome.
 Identification and molecular characterization of subgroups of pediatric medulloblastomas and ependymomas, epigenetic modifications, and correlation with biological and clinical parameters of outcome.
 Role of characterization of molecular alterations in the differential diagnosis of pediatric and adult brain neoplasms. Micro-RNA profiling in pediatric high-grade gliomas.
 (publications n°1->20, 22, 23, 24, 25, 26, 27, 28, 31, 34, 35, 36).
 Candidate was responsible for research design and planning, responsible for implementing and standardizing appropriate molecular biology technologies for sample analysis and results analysis, responsible for case selection criteria. Responsible for the translational value of the product. Conceptual and practical oversight of manuscript writing, critical review of reviewers' comments
- 2003-2011 **Peripheral biological markers related to neuronal degeneration in adult neurodegenerative diseases**
 Characterization of peripheral cellular models (PBMCs) for the study of changes in neurotransmitter-receptor systems in degenerative diseases of the central nervous system by quantitative and semiquantitative methods of investigation
 Correlations between central and peripheral changes in dopaminergic system function in parkinsonian syndromes, by combining immunocytochemical and cytofluorimetric analysis methods with functional neuroimaging methods with *in vivo* radioisotopes
 Role of inflammatory mechanisms in degenerative diseases of the central nervous system
 (publications n°29, 30, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47)
 The candidate was responsible for the validation and standardization of immunocytochemistry methods for the semi-quantitative measurement of biological parameters in cellular models (PBMC) of subjects with neurodegenerative disease.
- 1993-2008 **Translational models of human neurological diseases**
 Central axonal regeneration in models of traumatic spinal cord injury in the rodent
 Translational models in lower invertebrates and rodents for the study of dopaminergic, opioid and cannabinoid transmitter interactions under physiological and toxicological conditions

(publications n°48, 50, 51, 52, 53, 55, 56, 58)

The candidate has been responsible for the microscopic analysis of spinal cord lesions in rodents, and for the design and conduct of research projects on a model of invertebrate (planaria) of translational relevance as it represents the first example of centralization and cephalization of the nervous system.

International Scientific collaborations

- 2013-present Institute of Neuropathology DGNN Brain Tumor Reference Center, University of Bonn, DZNE German Center for Neurodegenerative Diseases, Bonn, Germany , Prof. Dr. Torsten Pietsch, MD, PhD
Molecular biomarkers of proliferation and differentiation in pediatric brain neoplasms.
- 2013-present Division of Pediatric Neurooncology, Preclinical Research, German Cancer Research Center (DKFZ) Heidelberg, Germany,
Dr. Hendrik Witt, MD
Epigenetic modifications in molecular subgroups of pediatric ependymomas and medulloblastomas.
- 2012- present Wolfson Childhood Cancer Research Centre, Northern Institute for Cancer Research, Newcastle University, Newcastle upon Tyne, United Kingdom.
Prof. Steven C Clifford, PhD
Biomolecular characterization of pediatric medulloblastomas.
- 2020-present Institut für Neuropathologie, Charité – Universitätsmedizin, Berlin, Germany
Prof. David Capper, Oberarzt, Professor für molekulare Neuropathologie
Correlation studies between genetic and epigenetic biomolecular characteristics and outcome in pediatric Low Grade Gliomas.

Part VIII – Summary of Scientific Achievements

Product type	Number	Data Base	Start	End
Papers [international]	60	Scopus	1989	2021

Total Impact factor	209.313
Average Impact factor	3.488
Total Citations	1422
Average Citations per Product	23.7
Hirsch (H) index	23
Normalized H index*	0.7

With reference to ASN 2018-20

SC 06/N1 parameters

publications in the last 5 years	16
Citations in the last 10 years	722
H-index in the last 10 years	16

*H index divided by the academic seniority.

Part IX– Selected Publications

List of the publications (n=12) selected for the evaluation. For each publication report title, authors, reference data, journal IF (if applicable), citations, press/media release (if any).

1. Gianno F, Antonelli M, Di Dio T, Minasi S, Donofrio V, Buccoliero A, Gardiman M, Pollo B, Diomedi Camassei F, Rossi S, Novello M, Giangaspero F, Arcella A, Gessi M, **Buttarelli FR**. *Correlation Between Immunohistochemistry and Sequencing in H3G34-Mutant Gliomas*, Am J Surg Pathol, **2021** Feb 1;45(2):200-204. doi: 10.1097/PAS.0000000000001571. (IF 6.394) Cit:1
2. Massimino M, Barretta F, Modena P, Witt H, Minasi S, Pfister SM, Pajtler KW, Antonelli M, Gandola L, Garrè ML, Bertin D, Mastronuzzi A, Mascarin M, Quaglietta L, Viscardi E, Sardi I, Ruggiero A, Pollo B, Buccoliero A, Boschetti L, Schiavello E, Chiapparini L, Erbetta A, Morra I, Gessi M, Donofrio V, Patriarca C, Giangaspero F, Johann P, **Buttarelli FR**. *Second series by the Italian Association of Pediatric Hematology and Oncology of children and adolescents with intracranial ependymoma: an integrated molecular and clinical characterization with a long-term follow-up*. Neuro Oncol. Volume 23, Issue 5, Pages 848 – 857, **2021**. doi: 10.1093/neuonc/noaa257. PMID:33135735. (IF: 12.300) Cit: 1
3. Minasi S, Baldi C, Gianno F, Antonelli M, Buccoliero AM, Pietsch T, Massimino M, **Buttarelli FR**. *Alternative lengthening of telomeres in molecular subgroups of paediatric high-grade glioma*. Childs Nerv Syst. **2021** Mar;37(3):809-818.. doi: 10.1007/s00381-020-04933-8.. PMID:3128602, (IF: 1.475) Cit: 1
4. Rahimi Koshkaki H, Minasi S, Ugolini A, Trevisi G, Napoletano C, Zizzari IG, Gessi M, Giangaspero F, Mangiola A, Nuti M, **Buttarelli FR**, Rughetti A. *Immunohistochemical Characterization of Immune Infiltrate in Tumor Microenvironment of Glioblastoma*. J Pers Med. **2020** Sep 3;10(3):112. doi: 10.3390/jpm10030112. PMID: 32899203; PMCID: PMC7564919. (IF: 4.945) Cit: 6.
5. Minasi S, Baldi C, Pietsch T, Donofrio V, Pollo B, Antonelli M, Massimino M, Giangaspero F, **Buttarelli FR**. *Telomere elongation via alternative lengthening of telomeres (ALT) and telomerase activation in primary metastatic medulloblastoma of childhood*. J Neurooncol. **2019**

Mar 4. doi: 10.1007/s11060-019-03127-w. PMID: 30830680. (IF: 3,267).Cit: 7

6. Gessi M, Giagnacovo M, Modena P, Elefante G, Gianno F, **Buttarelli FR**, Arcella A, Donofrio V, Diomedi Camassei F, Nozza P, Morra I, Massimino M, Pollo B, Giangaspero F, Antonelli M. *Role of Immunohistochemistry in the Identification of Supratentorial C11ORF95-RELA Fused Ependymoma in Routine Neuropathology*. Am J Surg Pathol. 2019 Jan;43(1):56-63. doi: 10.1097/PAS.0000000000000979. PMID: 29266023. (IF: 4.958). Cit: 23.
7. Antonelli M, Raso A, Mascelli S, Gessi M, Nozza P, Coli A, Gardiman MP, Arcella A, Massimino M, **Buttarelli FR**, Giangaspero F. *SMARCB1/INI1 Involvement in Pediatric Chordoma: A Mutational and Immunohistochemical Analysis*. Am J Surg Pathol. 2017 Jan;41(1):56-61. PubMed PMID: 27635948. (IF: 5,878) Cit: 33,
8. Ramaswamy V, Hielscher T, Mack SC, Lassaletta A, Lin T, Pajtler KW, Jones DT, Luu B, Cavalli FM, Aldape K, Remke M, Mynarek M, Rutkowski S, Gururangan S, McLendon RE, Lipp ES, Dunham C, Hukin J, Eisenstat DD, Fulton D, van Landeghem FK, Santi M, van Veelen ML, Van Meir EG, Osuka S, Fan X, Muraszko KM, Tirapelli DP, Oba-Shinjo SM, Marie SK, Carlotti CG, Lee JY, Rao AA, Giannini C, Faria CC, Nunes S, Mora J, Hamilton RL, Hauser P, Jabado N, Petrecca K, Jung S, Massimi L, Zollo M, Cinalli G, Bognár L, Klekner A, Hortobágyi T, Leary S, Ermóian RP, Olson JM, Leonard JR, Gardner C, Grajkowska WA, Chambliss LB, Cain J, Eberhart CG, Ahsan S, Massimino M, Giangaspero F, **Buttarelli FR**, Packer RJ, Emery L, Yong WH, Soto H, Liau LM, Everson R, Grossbach A, Shalaby T, Grotzer M, Karajannis MA, Zagzag D, Wheeler H, von Hoff K, Alonso MM, Tuñon T, Schüller U, Zitterbart K, Sterba J, Chan JA, Guzman M, Elbabaa SK, Colman H, Dhall G, Fisher PG, Fouladi M, Gajjar A, Goldman S, Hwang E, Kool M, Ladha H, Vera-Bolanos E, Wani K, Lieberman F, Mikkelsen T, Omuro AM, Pollack IF, Prados M, Robins HI, Sofietti R, Wu J, Metellus P, Tabori U, Bartels U, Bouffet E, Hawkins CE, Rutka JT, Dirks P, Pfister SM, Merchant TE, Gilbert MR, Armstrong TS, Korshunov A, Ellison DW, Taylor MD. *Therapeutic Impact of Cytoreductive Surgery and Irradiation of Posterior Fossa Ependymoma in the Molecular Era: A Retrospective Multicohort Analysis*. J Clin Oncol. 2016 Jul 20;34(21):2468-77. doi: 10.1200/JCO.2015.65.7825. PMID: 27269943. (IF: 24.008).Cit: 95,
9. Gielen GH, Gessi M, **Buttarelli FR**, Baldi C, Hammes J, zur Muehlen A, Doerner E, Denkhaus D, Warmuth-Metz M, Giangaspero F, Lauriola L, von Bueren AO, Kramm CM, Waha A, Pietsch T. *Genetic Analysis of Diffuse High-Grade Astrocytomas in Infancy Defines a Novel Molecular Entity*. Brain Pathol. 2015 Jul;25(4):409-17. doi: 10.1111/bpa.12210. Epub 2014 Dec 19. PMID: 25231549. (IF: 5.256) Cit:25,
10. Miele E, **Buttarelli FR**, Arcella A, Begalli F, Garg N, Silvano M, Po A, Baldi C, Carissimo G, Antonelli M, Spinelli GP, Capalbo C, Donofrio V, Morra I, Nozza P, Gulino A, Giangaspero F, Ferretti E. *High-throughput microRNA profiling of pediatric high-grade gliomas*. Neuro Oncol. 2014 Jan;16(2):228-40. doi: 10.1093/neuonc/not215. Epub 2013 Dec 4. PMID: 24305714. (IF: 6.776) Cit: 22
11. Modena P, **Buttarelli FR**, Miceli R, Piccinin E, Baldi C, Antonelli M, Morra I, Lauriola L, Di Rocco C, Garrè ML, Sardi I, Genitori L, Maestro R, Gandola L, Facchinetti F, Collini P, Sozzi G, Giangaspero F, Massimino M. *Predictors of outcome in an AIEOP series of childhood ependymomas: a multifactorial analysis*. Neuro Oncol. 2012 Nov;14(11):1346-56. doi: 10.1093/neuonc/nos245. PMID: 23076205. (IF: 6,18) Cit:27
12. **Buttarelli FR**, Fanciulli A, Pellicano C, Pontieri FE. *The dopaminergic system in peripheral blood lymphocytes: from physiology to pharmacology and potential applications to neuropsychiatric disorders*. Curr Neuropharmacol 2011; 9: 278-281. PMID:22131937. (IF: 2.847). Cit: 60

Part X - List of Publications

1. Massimino M, Signoroni S, Boschetti L, Chiapparini L, Erbetta A, Biassoni V, Schiavello E, Ferrari A, Spreafico F, Terenziani M, Chiaravalli S, Puma N, Bergamaschi L, Ricci MT, Cattaneo L, Gattuso G, **Buttarelli FR**, Gianno F, Miele E, Poggi G, Vitellaro M. *Medulloblastoma and familial adenomatous polyposis: Good prognosis and good quality of life in the long-term?* Pediatr Blood Cancer. 2021 Apr;68(4):e28912. doi: 10.1002/pbc.28912. Epub 2021 Jan 18. PMID: 33459525. (IF 3.167)
2. Gianno F, Antonelli M, Di Dio T, Minasi S, Donofrio V, Buccoliero A, Gardiman M, Pollo B, Diomedi Camassei F, Rossi S, Novello M, Giangaspero F, Arcella A, Gessi M, **Buttarelli FR**. *Correlation Between Immunohistochemistry and Sequencing in H3G34-Mutant Gliomas*, Am J Surg Pathol, 2021 Feb 1;45(2):200-204. doi: 10.1097/PAS.0000000000001571. (IF 6.394)
3. Massimino M, Barretta F, Modena P, Witt H, Minasi S, Pfister SM, Pajtler KW, Antonelli M, Gandola L, Garrè ML, Bertin D, Mastronuzzi A, Mascarin M, Quaglietta L, Viscardi E, Sardi I, Ruggiero A, Pollo B, Buccoliero A, Boschetti L, Schiavello E, Chiapparini L, Erbetta A, Morra I, Gessi M, Donofrio V, Patriarca C, Giangaspero F, Johann P, **Buttarelli FR**. *Second series by the Italian Association of Pediatric Hematology and Oncology of children and adolescents with intracranial ependymoma: an integrated molecular and clinical characterization with a long-term follow-up*. Neuro Oncol. Volume 23, Issue 5, Pages 848 – 857, 2021. doi: 10.1093/neuonc/noaa257. PMID:33135735. (IF: 12.300)
4. Minasi S, Baldi C, Gianno F, Antonelli M, Buccoliero AM, Pietsch T, Massimino M, **Buttarelli FR**. *Alternative lengthening of telomeres in molecular subgroups of paediatric high-grade glioma*. Childs Nerv Syst. 2021 Mar;37(3):809-818.. doi: 10.1007/s00381-020-04933-8.. PMID:3128602, (IF: 1.475)
5. Azzollini J, Schiavello E, **Buttarelli FR**, Clerici CA, Tizzoni L, Vecchi G, Capra F, Pisati F, Biassoni V, Runza L, Carrabba G, Giangaspero F, Massimino M, Pensotti V, Manoukian S. *Pre- and Post-Zygotic TP53 De Novo Mutations in SHH-Medulloblastoma*. Cancers (Basel). 2020 Sep 3;12(9):2503. doi:10.3390/cancers12092503. PMID: 32899294. (IF: 6.639)
6. Rahimi Koshkaki H, Minasi S, Ugolini A, Trevisi G, Napoletano C, Zizzari IG, Gessi M, Giangaspero F, Mangiola A, Nuti M, **Buttarelli FR**, Rughetti A. *Immunohistochemical Characterization of Immune Infiltrate in Tumor Microenvironment of Glioblastoma*. J Pers Med. 2020 Sep 3;10(3):112. doi: 10.3390/jpm10030112. PMID: 32899203; PMCID: PMC7564919. (IF: 4.945)
7. Massimino M, Sunyach MP, Barretta F, Gandola L, Garegnani A, Pecori E, Spreafico F, Bonneville-Levard A, Meyronet D, Mottolese C, Boschetti L, Biassoni V, Schiavello E, Giussani C, Carrabba G, Diletto B, Pallotti F, Stefini R, Ferrari A, Terenziani M, Casanova M, Luksch R, Meazza C, Podda M, Chiaravalli S, Puma N, Bergamaschi L, Morosi C, Calareso G, Giangaspero F, Antonelli M, **Buttarelli FR**, Frappaz D. *Reduced-dose craniospinal irradiation is feasible for standard-risk adult medulloblastoma patients*. J Neuro-Oncol. 2020 Jul;148(3):619-628. doi: 10.1007/s11060-020-03564-y. Epub 2020 Jun 21. PMID: 32567042. (IF: 4.130)
8. Visani M, Marucci G, Biase D, Giangaspero F, **Buttarelli FR**, Brandes AA, Franceschi E, Acquaviva G, Ciarrocchi A, Rhoden KJ, Tallini G, Pession A. *miR-196B-5P and miR-200B-3P are Differentially Expressed in Medulloblastomas of Adults and Children*. Diagnostics (Basel). 2020 Apr 29;10(5):265. doi: 10.3390/diagnostics10050265. PMID: 32365560. ISSN: 2075-4418 (IF: 3.706)
9. Giagnacovo M, Antonelli M, Biassoni V, Schiavello E, Gandola L, Warmuth-Metz M, **Buttarelli FR**, Modena P, Massimino M. *Retrospective analysis on the consistency of MRI features with histological and molecular markers in diffuse intrinsic pontine glioma (DIPG)*. Child Nerv Syst. 2019, ePub, doi:10.1007/s00381-019-04463-y. PMID:31848724 (IF: 1,298).
10. Minasi S, Baldi C, Pietsch T, Donofrio V, Pollo B, Antonelli M, Massimino M, Giangaspero F, **Buttarelli FR**. *Telomere elongation via alternative lengthening of telomeres (ALT) and telomerase activation in primary metastatic medulloblastoma of childhood*. J Neurooncol. 2019 Mar 4. doi: 10.1007/s11060-019-03127-w. PMID: 30830680. (IF: 3,267).
11. Gessi M, Giagnacovo M, Modena P, Elefante G, Gianno F, **Buttarelli FR**, Arcella A, Donofrio V, Diomedi Camassei F, Nozza P, Morra I, Massimino M, Pollo B, Giangaspero F, Antonelli M. *Role of Immunohistochemistry in the Identification of Supratentorial C11ORF95-RELA Fused Ependymoma in Routine Neuropathology*. Am J Surg Pathol. 2019 Jan;43(1):56-63. doi: 10.1097/PAS.0000000000000979. PMID: 29266023. (IF: 4.958).
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