Decreto Rettore Università di Roma "La Sapienza" n° 2267/2021 del 09.08.2021

Procedura selettiva di chiamata per n. 1 posto da di Ricercatore a tempo determinato - Tipologia B presso il Dipartimento di Medicina Molecolare, Facoltà di Farmacia e Medicina, Settore Scientifico-disciplinare MED/04, Settore concorsuale 06/A2, codice concorso 2021RTDB022.

Marialaura Petroni
Curriculum Vitae

Place: Rome
Date: 16.09.2021

Part I – General Information

Full Name	Marialaura Petroni
Spoken Languages	Italian; English

Part II – Education

Type	Year	Institution	Notes
PhD	2010	University "La Sapienza", Rome, Italy	PhD in Endocrinology and Molecular Medicine.
Licensure	2007	University of Tuscia, Viterbo, Italy	Licensure in Biology
University graduation	2007	Faculty of mathematical, physical and natural sciences, University "La Sapienza", Rome, Italy	Master Degree Graduation "*summa cum laude*"
University graduation	2004	Faculty of mathematical, physical and natural sciences, University "La Sapienza", Rome, Italy	Bachelor Degree Graduation (108/110)

Part III – Appointments

IIIA – Academic Appointments

Start	End	Institution	Position
November 2010	December 2010	University La Sapienza, Rome, Italy	Research collaborator funded by "Sapienza Innovazione"
April 2011	March 2012	University La Sapienza, Rome, Italy	Post-doctoral fellow funded by "Istituto Pasteur, Cenci Bolognetti"
May 2012	June 2012	University La Sapienza, Rome, Italy	Research collaborator funded by "Sapienza Innovazione"
July 2012	December 2012	University La Sapienza, Rome, Italy	Assegnista di ricerca funded by University La Sapienza
January 2013	December 2015	University La Sapienza, Rome, Italy	Post-doctoral fellow funded by "Fondazione Italiana per la ricerca

			contro il cancro (FIRC)"

IIIB – Other Appointments

Start	End	Institution	Position
January 2016	November 2019	Istituto Italiano di Tecnologia (IIT)	Post-doctoral Research Associate
May 2021	May 2030	National scientific qualification	Abilitazione Scientifica Nazionale II Fascia, SC 06/A2 – MED/04

Part IV – Teaching experience

Year	Institution	Lecture/Course
2020-present	University La Sapienza, Rome, Italy	Member of teaching staff of the PhD School in "Molecular Medicine".
2020-present	University La Sapienza, Rome, Italy	Teacher of "Research Methodology", (module of molecular pathology, MED/04) in the master's course of Health Professions of Technical Sciences (diagnostic).
2020-present	University La Sapienza, Rome, Italy	Teacher of "Research Methodology", (module of health statistics) at the master's course of Health Professions of Technical Sciences (diagnostic).
2021-present	University La Sapienza, Rome, Italy	Teacher of "General Pathology and Medical Terminology" at the course of Pharmacy
2021-present	University La Sapienza, Rome, Italy	Tutor for students internship in DNA damage and Neuroncology, degree course of Medicine and Surgery (CLMF)

Part V – Other Professional Activities

Year	Title
2019-present	Ad hoc reviewer for International Journals
2018	Speaker at the international scientific conference Advances in Neuroblastoma Research (ANR); San Francisco, California, USA.
2018	Speaker at the scientific conference SIC: 60° Congresso nazionale società Italiana di Cancerologia, Milan, Italy.
2018	Speaker at the scientific conference "Key targets and new therapeutic approaches for neuroblastoma: from the bench to the bedside", Chieti, Italy.
2012	Invited Speaker at the "Giornata Scientifica 2012 dell'Istituto Pasteur", University La Sapienza, Rome, Italy
2011	Speaker at the scientific conference "24° Convegno Annuale dell'Associazione Italiana di Colture Cellulari (ONLUS-AICC); Istituto Nazionale Tumori Regina Elena, Rome, Italy.
2010	Speaker at the international scientific conference "Instabilità genica e il riparo del DNA:

	nuovi paradigmi per la ricerca translazionale", Istituto Superiore di Sanità, Rome, Italy

Part VI -Awards

Year	Title
2018	Villa Joep Foundation award for the abstract: "MRE11 inhibition highlights a replication stress-dependent vulnerability of MYCN amplified neuroblastoma". Advance in Neuroblastoma Research (ANR) Congress, San Francisco, USA.

Part VII - Funding Information [grants as PI-principal investigator or I-investigator]

Year	Title	Program	Grant value
2021-2024	I in the project: "Dissecting new functions of the Nijmegen breakage syndrome gene in cerebellar development"	Telethon GGP20135	239.000
2020 - 2024	I in the project: "Dissecting unconventional replication stress responses to unreveal new vulnerabilities of MYCN-driven tumors"	AIRC 2020 IG24329	1.154.000
2018-2020	I in the project: "Harnessing replication stress to understand and tackle MYCN-dependent tumors"	Institute Pasteur Cenci-Bolognetti Foundation	60.000
2017-2020	I in the project: "Repressing or enhancing replication stress: the two sides of the coin to understand and tackle MYC-dependent tumors"	"La Sapienza" University Research funding 2017	34.400
2016-2019	I in the project: "The MRN complex and PARP: targeting the replication stress response in MYCN dependent neuronal tumors"	AIRC-2015 IG 17734	377.000
2015-2017	I in the project: "Functional interactions between the MRN complex and N-Myc in neuronal development and carcinogenesis	Institute Pasteur Cenci-Bolognetti Foundation	60.000
2014-2016	I in the project: "Uncovering the funtional links between MYCN and the MRN complex to understand the phenotypepic overlap between Nijmegen Breakage Syndrome and Feingold Syndrome"	"La Sapienza" University Research funding 2014	53.000
2011-2014	I in the project: "Crosstalk between the DNA Damage Response pathway and MYCN in neuronal	AIRC-2011 IG 12116	240.000

	development and carcinogenesis"		

Part VIII – Research Activities

Keywords	Brief Description
Primary ciliogenesis	Study of non canonical roles of the DNA damage response protein NBS1.
Targeted therapy	Study of the Replication Stress Response as a new target in the treatment of MYCN-driven tumors of the nervous system.
DNA damage response	Study of the dual role of the MRE11/RAD50/NBS1 (MRN) complex in cerebellar development and tumorigenesis.
MYCN	Study of MYCN-induced pathways essential for MYCN-dependent proliferation.
apoptosis	Mechanisms through which MYCN sensitizes Neuroblastoma cells to apoptosis

Main results attained:

1) Study of non canonical roles of the DNA damage response protein NBS1: i) identification of a new role of NBS1 in the control of the primary ciliogenesis and Sonic Hedgehog signaling.

2) Study of the Replication Stress Response as a new target in the treatment of MYCN-dependent tumors: i) MRE11 inhibition is an effective strategy to treat MYCN-amplified and p53 wildtype neuroblastoma; ii) NBS1 KO impairs the growth of Sonic Hedgehog-Medulloblastoma allografts; iii) PARP inhibitors enhance replication stress and cause mitotic catastrophe in MYCN-dependent neuroblastoma; iv) a combination of PARP and CHK1 inhibitors efficiently antagonizes MYCN-driven tumors.

3) Study of the dual role of the MRE11/RAD50/NBS1 (MRN) complex in cerebellar development and tumorigenesis: i) NBS1 biallelic KO abrogates cerebellar development and tumorigenesis in a spontaneous model of SHH-MB; ii) NBS1 monoallelic KO increase tumor penentrancy in a spontaneous model of SHH-MB; iii) both NBS1 biallelic and mono allelic KO induce DDR activation; iv) NBS1 mono allelic KO increases Notch targets.

4) Study of the MYCN-induced pathways essential for the MYCN dependent proliferation: i) MYCN transcriptionally controls the expression of each component of the MRN complex; ii) the functions of the MRN complex are necessary for MYCN-dependent proliferation in cerebellar GCPs; iii) MRN complex counteracts MYCN-induced replicative stress in the context of the nervous system.

5) Mechanisms through which MYCN sensitizes Neuroblastoma cells to apoptosis:
MYCN activates an effective response to DNA damage that leads cells to die by a HIPK2-P53 dependent pathway.

Part IX – Summary of Scientific Achievements

Product type	Number	Data Base	Start	End
Papers [international]	28	PubMed, ISI Web of Science, Scopus	2008	2021
Patents	1	Patent number: 102019000004377	2021	present

Total Impact factor	138,114
Total Citations	371
Average Citations per Product	13,25
Hirsch (H) index	13
Normalized H index*	1

*H index divided by the academic seniority.

Part X– Selected Publications

1) Di Giulio S, Colicchia V, Pastorino F, Pedretti F, Fabretti F, Nicolis di Robilant V, Ramponi V, Scafetta G, Moretti M, Licursi V, Belardinilli F, Peruzzi G, Infante P, Goffredo BM, Coppa A, Canettieri G, Bartolazzi A, Ponzoni M, Giannini G*, **Petroni M***. A combination of PARP and CHK1 inhibitors efficiently antagonizes MYCN-driven tumors. *Oncogene*. 2021 Sep 10. doi: 10.1038/s41388-021-02003-0.
*Co-last authors
Publisher: Springer Nature
IF: 9.867 **Citations**: 0

2) Angrisani A, Di Fiore A, Di Trani CA, Fonte S, **Petroni M**, Lospinoso Severini L, Bordin F, Belloni L, Ferretti E, Canettieri G, Moretti M, De Smaele E. Specific Protein 1 and p53 Interplay Modulates the Expression of the KCTD-Containing Cullin3 Adaptor Suppressor of Hedgehog 2. *Front Cell Dev Biol*. 2021 Apr 8;9:638508. doi: 10.3389/fcell.2021.638508.
Publisher: Frontiers Media S.A.
IF: 6.684 **Citations**: 0

3) Coni S, Serrao SM, Yurtsever ZN, Di Magno L, Bordone R, Bertani C, Licursi V, Ianniello Z, Infante P, Moretti M, **Petroni M**, Guerrieri F, Fatica A, Macone A, De Smaele E, Di Marcotullio L, Giannini G, Maroder M, Agostinelli E, Canettieri G. Blockade of EIF5A hypusination limits colorectal cancer growth by inhibiting MYC elongation. *Cell Death Dis*. 2020 Dec 10;11(12):1045. doi: 10.1038/s41419-020-03174-6.
Publisher: Springer Nature
IF: 8.469 **Citations**: 4

4) Belardinilli F, Capalbo C, Malapelle U, Pisapia P, Raimondo D, Milanetti E, Yasaman M, Liccardi C, Paci P, Sibilio P, Pepe F, Bonfiglio C, Mezi S, Magri V, Coppa A, Nicolussi A, Gradilone A, **Petroni M**, Di Giulio S, Fabretti F, Infante P, Coni S, Canettieri G, Troncone G, Giannini G. Clinical Multigene Panel Sequencing Identifies Distinct Mutational Association Patterns in Metastatic Colorectal Cancer. *Front Oncol*. 2020 May 7;10:560. doi: 10.3389/fonc.2020.00560.
Publisher: Frontiers Media S.A.
IF: 6.244 **Citations**: 4

5) Di Magno L, Manni S, Di Pastena F, Coni S, Macone A, Cairoli S, Sambucci M, Infante P, Moretti M, **Petroni M**, Nicoletti C, Capalbo C, De Smaele E, Di Marcotullio L, Giannini G, Battistini L, Goffredo BM, Iorio E, Agostinelli E, Maroder M, Canettieri G. Phenformin Inhibits Hedgehog-Dependent Tumor Growth through a Complex I-Independent Redox/Corepressor Module. *Cell Rep*. 2020 Feb 11;30(6):1735-1752.e7. doi: 10.1016/j.celrep.2020.01.024.

Publisher: Elsevier
IF: 9.423 **Citations**: 11

6) Bufalieri F, Caimano M, Lospinoso Severini L, Basili I, Paglia F, Sampirisi L, Loricchio E, **Petroni M**, Canettieri G, Santoro A, D'Angelo L, Infante P, Di Marcotullio L. The RNA-Binding Ubiquitin Ligase MEX3A Affects Glioblastoma Tumorigenesis by Inducing Ubiquitylation and Degradation of RIG-I. *Cancers* (Basel). 2020 Jan 30;12(2):321. doi: 10.3390/cancers12020321.
Publisher: Multidisciplinary Digital Publishing Institute (MDPI)
IF: 6.639 **Citations**: 18

7) **Petroni M**, Sahùn Roncero M, Ramponi V, Fabretti F, Nicolis Di Robilant V, Moretti M, Alfano V, Corsi A, De Panfilis S, Giubettini M, Di Giulio S, Capalbo C, Belardinilli F, Coppa A, Sardina F, Colicchia V, Pedretti F, Infante P, Cardinali B, Tessitore A, Canettieri G, De Smaele E, Giannini G. SMO-M2 mutation does not support cell-autonomous Hedgehog activity in cerebellar granule cell precursors. *Sci Rep.* 2019 Dec 23;9(1):19623. doi: 10.1038/s41598-019-56057-y.
Publisher: Springer Nature
IF: 3.998 **Citations**: 1

8) Capalbo C, Belardinilli F, Raimondo D, Milanetti E, Malapelle U, Pisapia P, Magri V, Prete A, Pecorari S, Colella M, Coppa A, Bonfiglio C, Nicolussi A, Valentini V, Tessitore A, Cardinali B, **Petroni M**, Infante P, Santoni M, Filetti M, Colicchia V, Paci P, Mezi S, Longo F, Cortesi E, Marchetti P, Troncone G, Bellavia D, Canettieri G, Giannini G. A Simplified Genomic Profiling Approach Predicts Outcome in Metastatic Colorectal Cancer. *Cancers* (Basel). 2019 Jan 27;11(2):147. doi: 10.3390/cancers11020147.
Publisher: Multidisciplinary Digital Publishing Institute (MDPI)
IF: 6.126 **Citations**: 7

9) **Petroni M**, Sardina F, Infante P, Bartolazzi A, Locatelli E, Fabretti F, Di Giulio S, Capalbo C, Cardinali B, Coppa A, Tessitore A, Colicchia V, Sahùn Roncero M, Belardinilli F, Di Marcotullio L, Soddu S, Comes Franchini M, Petricci E, Gulino A, Giannini G. MRE11 inhibition highlights a replication stress-dependent vulnerability of MYCN-driven tumors. *Cell Death Dis.* 2018 Aug 30;9(9):895. doi: 10.1038/s41419-018-0924-z.
Publisher: Springer Nature
IF: 5.959 **Citations**: 20

10) Infante P, Faedda R, Bernardi F, Bufalieri F, Lospinoso Severini L, Alfonsi R, Mazzà D, Siler M, Coni S, Po A, **Petroni M**, Ferretti E, Mori M, De Smaele E, Canettieri G, Capalbo C, Maroder M, Screpanti I, Kool M, Pfister SM, Guardavaccaro D, Gulino A, Di Marcotullio L. Itch/β-arrestin2-dependent non-proteolytic ubiquitylation of SuFu controls Hedgehog signalling and medulloblastoma tumorigenesis. *Nat Commun.* 2018 Mar 7;9(1):976. doi: 10.1038/s41467-018-03339-0.
Publisher: Springer Nature
IF: 11.878 **Citations**: 27

11) Coppa A, Nicolussi A, D'Inzeo S, Capalbo C, Belardinilli F, Colicchia V, **Petroni M**, Zani M, Ferraro S, Rinaldi C, Buffone A, Bartolazzi A, Screpanti I, Ottini L, Giannini G. Optimizing the identification of risk-relevant mutations by multigene panel testing in selected hereditary breast/ovarian cancer families. *Cancer Med.* 2018 Jan;7(1):46-55. doi: 10.1002/cam4.1251.
Publisher: Wiley-Blackwell

IF: 3.357 **Citations**: 13

12) Coni S, Mancuso AB, Di Magno L, Sdruscia G, Manni S, Serrao SM, Rotili D, Spiombi E, Bufalieri F, **Petroni M**, Kusio-Kobialka M, De Smaele E, Ferretti E, Capalbo C, Mai A, Niewiadomski P, Screpanti I, Di Marcotullio L, Canettieri G. Selective targeting of HDAC1/2 elicits anticancer effects through Gli1 acetylation in preclinical models of SHH Medulloblastoma. *Sci Rep.* 2017 Mar 9;7:44079. doi: 10.1038/srep44079. Erratum in: Sci Rep. 2017
Publisher: Springer Nature
IF: 4.122 **Citations**: 37

13) Colicchia V*, **Petroni M***, Guarguaglini G, Sardina F, Sahún-Roncero M, Carbonari M, Ricci B, Heil C, Capalbo C, Belardinilli F, Coppa A, Peruzzi G, Screpanti I, Lavia P, Gulino A, Giannini G. PARP inhibitors enhance replication stress and cause mitotic catastrophe in MYCN-dependent neuroblastoma. *Oncogene.* 2017 Aug 17;36(33):4682-4691. doi: 10.1038/onc.2017.40.
* Co-first authors
Publisher: Springer Nature
IF: 6.854 **Citations**: 45

14) Petroni M, Sardina F, Heil C, Sahún-Roncero M, Colicchia V, Veschi V, Albini S, Fruci D, Ricci B, Soriani A, Di Marcotullio L, Screpanti I, Gulino A, Giannini G. The MRN complex is transcriptionally regulated by MYCN during neural cell proliferation to control replication stress. *Cell Death Differ.* 2016 Feb;23(2):197-206. doi: 10.1038/cdd.2015.81.
Publisher: Springer Nature
IF: 8.339 **Citations**: 21

15) Coppa A, Buffone A, Capalbo C, Nicolussi A, D'Inzeo S, Belardinilli F, Colicchia V, **Petroni M**, Granato T, Midulla C, Zani M, Ferraro S, Screpanti I, Gulino A, Giannini G. Novel and recurrent BRCA2 mutations in Italian breast/ovarian cancer families widen the ovarian cancer cluster region boundaries to exons 13 and 14. *Breast Cancer Res Treat.* 2014 Dec;148(3):629-35. doi: 10.1007/s10549-014-3196-z.
Publisher: Springer Nature
IF: 3.940 **Citations**: 7

16) Massimi I, Guerrieri F, **Petroni M**, Veschi V, Truffa S, Screpanti I, Frati L, Levrero M, Gulino A, Giannini G. The HMGA1 protoncogene frequently deregulated in cancer is a transcriptional target of E2F1. *Mol Carcinog.* 2013 Jul;52(7):526-34. doi: 10.1002/mc.21887.
Publisher: Wiley-Blackwell
IF: 4.770 **Citations**: 19

17) Veschi V, **Petroni M**, Bartolazzi A, Altavista P, Dominici C, Capalbo C, Boldrini R, Castellano A, McDowell HP, Pizer B, Frati L, Screpanti I, Gulino A, Giannini G. Galectin-3 is a marker of favorable prognosis and a biologically relevant molecule in neuroblastic tumors. *Cell Death Dis.* 2014 Mar 6;5(3):e1100. doi: 10.1038/cddis.2014.68.
Publisher: Springer Nature
IF: 5.014 **Citations**: 15

18) Petroni M, Veschi V, Prodosmo A, Rinaldo C, Massimi I, Carbonari M, Dominici C, McDowell HP, Rinaldi C, Screpanti I, Frati L, Bartolazzi A, Gulino A, Soddu S, Giannini G. MYCN sensitizes

human neuroblastoma to apoptosis by HIPK2 activation through a DNA damage response. *Mol Cancer Res.* 2011 Jan;9(1):67-77. doi: 10.1158/1541-7786.MCR-10-0227.
Publisher: American Association for Cancer Research
IF: 4.288 **Citations**: 27

Part XI– Total Publications

1) Di Giulio S, Colicchia V, Pastorino F, Pedretti F, Fabretti F, Nicolis di Robilant V, Ramponi V, Scafetta G, Moretti M, Licursi V, Belardinilli F, Peruzzi G, Infante P, Goffredo BM, Coppa A, Canettieri G, Bartolazzi A, Ponzoni M, Giannini G*, **Petroni M***. A combination of PARP and CHK1 inhibitors efficiently antagonizes MYCN-driven tumors. *Oncogene.* 2021 Sep 10. doi: 10.1038/s41388-021-02003-0.
*Co-last authors
Publisher: Springer Nature
IF: 9.867 **Citations**: 0

2) Angrisani A, Di Fiore A, Di Trani CA, Fonte S, **Petroni M**, Lospinoso Severini L, Bordin F, Belloni L, Ferretti E, Canettieri G, Moretti M, De Smaele E. Specific Protein 1 and p53 Interplay Modulates the Expression of the KCTD-Containing Cullin3 Adaptor Suppressor of Hedgehog 2. *Front Cell Dev Biol.* 2021 Apr 8;9:638508. doi: 10.3389/fcell.2021.638508.
Publisher: Frontiers Media S.A.
IF: 6.684 **Citations**: 0

3) Coni S, Serrao SM, Yurtsever ZN, Di Magno L, Bordone R, Bertani C, Licursi V, Ianniello Z, Infante P, Moretti M, **Petroni M**, Guerrieri F, Fatica A, Macone A, De Smaele E, Di Marcotullio L, Giannini G, Maroder M, Agostinelli E, Canettieri G. Blockade of EIF5A hypusination limits colorectal cancer growth by inhibiting MYC elongation. *Cell Death Dis.* 2020 Dec 10;11(12):1045. doi: 10.1038/s41419-020-03174-6.
Publisher: Springer Nature
IF: 8.469 **Citations**: 4

4) Nicolussi A, Belardinilli F, Ottini L, **Petroni M**, Capalbo C, Giannini G, Coppa A. A novel BRCA2 splice variant identified in a young woman. *Mol Genet Genomic Med.* 2020 Dec;8(12):e1513. doi: 10.1002/mgg3.1513. Epub 2020 Nov 7.
Publisher: Wiley-Blackwell
IF: 2.183 **Citations**: 0

5) Belardinilli F, Capalbo C, Malapelle U, Pisapia P, Raimondo D, Milanetti E, Yasaman M, Liccardi C, Paci P, Sibilio P, Pepe F, Bonfiglio C, Mezi S, Magri V, Coppa A, Nicolussi A, Gradilone A, **Petroni M**, Di Giulio S, Fabretti F, Infante P, Coni S, Canettieri G, Troncone G, Giannini G. Clinical Multigene Panel Sequencing Identifies Distinct Mutational Association Patterns in Metastatic Colorectal Cancer. *Front Oncol.* 2020 May 7;10:560. doi: 10.3389/fonc.2020.00560.
Publisher: Frontiers Media S.A.
IF: 6.244 **Citations**: 4

6) Di Magno L, Manni S, Di Pastena F, Coni S, Macone A, Cairoli S, Sambucci M, Infante P, Moretti M, **Petroni M**, Nicoletti C, Capalbo C, De Smaele E, Di Marcotullio L, Giannini G, Battistini L, Goffredo BM, Iorio E, Agostinelli E, Maroder M, Canettieri G. Phenformin Inhibits Hedgehog-

Dependent Tumor Growth through a Complex I-Independent Redox/Corepressor Module. *Cell Rep.* 2020 Feb 11;30(6):1735-1752.e7. doi: 10.1016/j.celrep.2020.01.024.
Publisher: Elsevier
IF: 9.423 **Citations**: 11

7) Bufalieri F, Caimano M, Lospinoso Severini L, Basili I, Paglia F, Sampirisi L, Loricchio E, **Petroni M**, Canettieri G, Santoro A, D'Angelo L, Infante P, Di Marcotullio L. The RNA-Binding Ubiquitin Ligase MEX3A Affects Glioblastoma Tumorigenesis by Inducing Ubiquitylation and Degradation of RIG-I. *Cancers* (Basel). 2020 Jan 30;12(2):321. doi: 10.3390/cancers12020321.
Publisher: Multidisciplinary Digital Publishing Institute (MDPI)
IF: 6.639 **Citations**: 18

8) Petroni M, Sahùn Roncero M, Ramponi V, Fabretti F, Nicolis Di Robilant V, Moretti M, Alfano V, Corsi A, De Panfilis S, Giubettini M, Di Giulio S, Capalbo C, Belardinilli F, Coppa A, Sardina F, Colicchia V, Pedretti F, Infante P, Cardinali B, Tessitore A, Canettieri G, De Smaele E, Giannini G. SMO-M2 mutation does not support cell-autonomous Hedgehog activity in cerebellar granule cell precursors. *Sci Rep.* 2019 Dec 23;9(1):19623. doi: 10.1038/s41598-019-56057-y.
Publisher: Springer Nature
IF: 3.998 **Citations**: 1

9) Nicolussi A, Belardinilli F, Silvestri V, Mahdavian Y, Valentini V, D'Inzeo S, **Petroni M**, Zani M, Ferraro S, Di Giulio S, Fabretti F, Fratini B, Gradilone A, Ottini L, Giannini G, Coppa A, Capalbo C. Identification of novel BRCA1 large genomic rearrangements by a computational algorithm of amplicon-based Next-Generation Sequencing data. *PeerJ.* 2019 Nov 15;7:e7972. doi: 10.7717/peerj.7972.
Publisher: PeerJ
IF: 2.379 **Citations**: 1

10) Nicolussi A, Belardinilli F, Mahdavian Y, Colicchia V, D'Inzeo S, **Petroni M**, Zani M, Ferraro S, Valentini V, Ottini L, Giannini G, Capalbo C, Coppa A. Next-generation sequencing of *BRCA1* and *BRCA2* genes for rapid detection of germline mutations in hereditary breast/ovarian cancer. *PeerJ.* 2019 Apr 22;7:e6661. doi: 10.7717/peerj.6661.
Publisher: PeerJ
IF: 2.379 **Citations**: 9

11) Antonucci L, Di Magno L, D'Amico D, Manni S, Serrao SM, Di Pastena F, Bordone R, Yurtsever ZN, Caimano M, **Petroni M**, Giorgi A, Schininà ME, Yates Iii JR, Di Marcotullio L, De Smaele E, Checquolo S, Capalbo C, Agostinelli E, Maroder M, Coni S, Canettieri G. Mitogen-activated kinase kinase kinase 1 inhibits hedgehog signaling and medulloblastoma growth through GLI1 phosphorylation. *Int J Oncol.* 2019 Feb;54(2):505-514. doi: 10.3892/ijo.2018.4638. Epub 2018 Nov 19.
Publisher: Demetrios A. Spandidos Ed. & Pub.
IF: 3.899 **Citations**: 7

12) Capalbo C, Belardinilli F, Raimondo D, Milanetti E, Malapelle U, Pisapia P, Magri V, Prete A, Pecorari S, Colella M, Coppa A, Bonfiglio C, Nicolussi A, Valentini V, Tessitore A, Cardinali B, **Petroni M**, Infante P, Santoni M, Filetti M, Colicchia V, Paci P, Mezi S, Longo F, Cortesi E, Marchetti P, Troncone G, Bellavia D, Canettieri G, Giannini G. A Simplified Genomic Profiling Approach

Predicts Outcome in Metastatic Colorectal Cancer. *Cancers* (Basel). 2019 Jan 27;11(2):147. doi: 10.3390/cancers11020147.
Publisher: Multidisciplinary Digital Publishing Institute (MDPI)
IF: 6.126 **Citations**: 7

13) **Petroni M**, Sardina F, Infante P, Bartolazzi A, Locatelli E, Fabretti F, Di Giulio S, Capalbo C, Cardinali B, Coppa A, Tessitore A, Colicchia V, Sahùn Roncero M, Belardinilli F, Di Marcotullio L, Soddu S, Comes Franchini M, Petricci E, Gulino A, Giannini G. MRE11 inhibition highlights a replication stress-dependent vulnerability of MYCN-driven tumors. *Cell Death Dis*. 2018 Aug 30;9(9):895. doi: 10.1038/s41419-018-0924-z.
Publisher: Springer Nature
IF: 5.959 **Citations**: 20

14) Infante P, Faedda R, Bernardi F, Bufalieri F, Lospinoso Severini L, Alfonsi R, Mazzà D, Siler M, Coni S, Po A, **Petroni M**, Ferretti E, Mori M, De Smaele E, Canettieri G, Capalbo C, Maroder M, Screpanti I, Kool M, Pfister SM, Guardavaccaro D, Gulino A, Di Marcotullio L. Itch/β-arrestin2-dependent non-proteolytic ubiquitylation of SuFu controls Hedgehog signalling and medulloblastoma tumorigenesis. *Nat Commun*. 2018 Mar 7;9(1):976. doi: 10.1038/s41467-018-03339-0.
Publisher: Springer Nature
IF: 11.878 **Citations**: 27

15) Capalbo C, Belardinilli F, Filetti M, Parisi C, Petroni M, Colicchia V, Tessitore A, Santoni M, Coppa A, Giannini G, Marchetti P. Effective treatment of a platinum-resistant cutaneous squamous cell carcinoma case by EGFR pathway inhibition. *Mol Clin Oncol*. 2018 Jul;9(1):30-34. doi: 10.3892/mco.2018.1634.
Publisher: Springer Nature
IF: 0 **Citations**: 0

16) Coppa A, Nicolussi A, D'Inzeo S, Capalbo C, Belardinilli F, Colicchia V, **Petroni M**, Zani M, Ferraro S, Rinaldi C, Buffone A, Bartolazzi A, Screpanti I, Ottini L, Giannini G. Optimizing the identification of risk-relevant mutations by multigene panel testing in selected hereditary breast/ovarian cancer families. *Cancer Med*. 2018 Jan;7(1):46-55. doi: 10.1002/cam4.1251.
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Part XII- Patents:
1- Giuseppe Giannini, Valeria Colicchia, Carlo Capalbo Francesca Fabretti, Stefano Di Giulio, Francesca Belardinilli, **Marialaura Petroni**, Maria Sahùn Roncero. "Sistema stabile di coltura in vitro di cellule precursori granulari cerebellari (GCP), metodo stabile per la coltura in vitro di dette cellule e usi di detto sistema o metodo per la coltura in vitro"(102019000004377)

Roma 16 settembre 2021