

Decreto Rettore Università di Roma “La Sapienza” n. 1266/2020 del 12-05-2020

“Procedura selettiva per la copertura di n. 1 posto di Professore Universitario di seconda fascia per il Settore concorsuale 06/A2 – Settore scientifico disciplinare MED/04 presso il Dipartimento di Medicina Molecolare – Facoltà di Farmacia e Medicina – codice concorso 2020PAE005”

## Paola Infante

### Curriculum Vitae

Place, Rome

Date, 16<sup>th</sup> June 2020

#### Part I – General Information

Full Name	Paola Infante
Spoken Languages	Italian; English

#### Part II – Education

Type	Year	Institution	Notes
PhD	2012	University “La Sapienza”, Rome, Italy	PhD in Molecular Medicine
Licensure	2010	University of Tuscia, Viterbo, Italy	Licensure in Biology
Pre-doctorate training	2008	Dept. of Experimental Medicine, University “La Sapienza”, Rome, Italy	Study of ubiquitylation processes
University graduation	2008	Faculty of Medicine and Surgery, Degree course in Medical, Molecular And Cellular Biotechnology, University “La Sapienza”, Rome, Italy	Master Degree Graduation “ <i>summa cum laude</i> ”
University graduation	2005	Faculty of Medicine and Surgery Degree course in Biotechnology, University of Catanzaro “Magna Graecia”, Italy	Bachelor Degree Graduation “ <i>summa cum laude</i> ”

#### Part III – Appointments

##### IIIA – Academic Appointments

Start	End	Institution	Position
July 2020	September 2020	Columbia University, Dept. of Pathology and Cell Biology, New York City, NY (USA)	Guest scientist
May 2010	June 2010	Hubrecht Institute-KNAW and University Medical Center Utrecht, Utrecht (NL)	Guest scientist

### IIIB – Other Appointments

Start	End	Institution	Position
2020	present	Istituto Italiano di Tecnologia	Researcher
2019	2028	National scientific qualification (“Bando 2018 – DD2175/2018”)	Abilitazione Scientifica Nazionale II Fascia SC 06/A2 – MED/04
2017	2020	Istituto Italiano di Tecnologia	Researcher
2015	2017	Istituto Italiano di Tecnologia	Post-doctoral Research Associate
2012	2015	Istituto Italiano di Tecnologia	Post-doctoral Research Associate

### Part IV – Other Professional Activities

Year	Title
2015 - present	Ad hoc reviewer for International Journals
2019	Speaker at the scientific conference: “Brayn- Second Brainstorming research assembly for young neuroscientists (Milan – Italy)
2019	Invited speaker at the scientific conference “First National Meeting S.I.R.T.E.P.S – Translational Medicine and Clinical Research in Health Care Management (Rome – Italy)
2017	Speaker at the international scientific conference at New York University- School of Medicine (New York City- USA)
2015	Invited speaker at the international scientific conference “e-COST Meeting - Targeting Hedgehog Signaling in Cancer Stem Cells” (Barcelona - Spain)
2014	Speaker at the international scientific conference “EMBO Workshop – Cancers stem cells 20 years later: Achievements, controversies, emerging concepts and technologies” (Catanzaro – Italy)

### Part V - Society memberships, Awards and Honors

Year	Title
2017	Best poster presentation “Serum miRNAs as novel biomarkers in spinal muscular atrophy”. Scientific Conference “SipMeT - Young Scientist Meeting” 2017 (Milan – Italy)
2016	Best Poster “Itch/βarrestin2-dependent non-proteolytic ubiquitylation of SuFu controls Hedgehog and medulloblastoma tumourigenesis.” 29 <sup>th</sup> Annual Conference of Italian Association of Cell Culture (L’Aquila – Italy)
2014	First place award “Hausmann & C. srl 2014, per giovani Dottori di ricerca per il sostegno della ricerca oncologica” (Rome- Italy)

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

Year	Title	Program	Grant Value
2019-present	I in the project: “Oncogenic role of the MHC class I aminopeptidase ERAP1 in Hedgehog-dependent cancer”	“Anna Tramontano” Institute Pasteur Cenci-Bolognetti Foundation Bando 2019	40.000,00 €
2019-present	I in the project: “Targeting Hedgehog pathway: Virtual screening identification and sustainable synthesis of novel Smo and Gli inhibitors and their pharmacological drug delivery strategies for improved therapeutic effects	Ministry of University and Research, PRIN	700.825,00 €

	tumors”		
2018-present	I in the project: “New multi-targeting approaches in Hedgehog-dependent cancers”	AIRC 2017 (N. 20801)	801.000,00 €
2015-2017	I in the project: “Identification of novel Hedgehog/Gli pathway antagonists in brain tumors treatment”	Research Project- Institute Pasteur Cenci-Bolognetti Foundation	60.000,00 €
2014-2017	I in the project: “Targeting Hedgehog pathway to control brain cancer stem cells”	AIRC 2013 (N.14723)	600.000,00 €
2011-2013	I in the project: “Basi molecolari e strutturali del Medulloblastoma: ruolo delle E3 ubiquitin ligasi, REN ed Itch, nel signalling di Hedgehog”	Ministry of University and Research, PRIN	187.274,00 €
2011-2012	I in the project: “Hedgehog signaling regulatory networks in brain cancer stem cells”	“La Sapienza” University Research funding	100.000,00 €
2010-2013	I in the project: “Hedgehog/Gli pathway regulatory networks in medulloblastoma and cancer stem cells”	AIRC 2010 (N. 10610)	668.900,00 €
2010-2011	I in the project: “Hedgehog signaling regulatory networks in brain cancer stem cells”	“La Sapienza” University Research funding	100.000,00 €

## Part VII – Research Activities

### Keywords

### Brief Description

Brain Tumors	Study of molecular and cellular mechanisms involved in brain tumors, with a particular focus on medulloblastoma and glioblastoma development and progression.
Hedgehog signaling	Identification and characterization of the molecular events involved in Hedgehog signaling regulation.
Ubiquitylation	Study of signal transduction and post-translational regulation: Role of ubiquitylation-proteolysis processes in cerebellar development and tumorigenesis.
Targeted-therapy	Identification and design of novel biomolecules for the treatment of Hedgehog-dependent tumors.
miRNAs	Identification of miRNAs as biomarkers in spinal muscular atrophy and study of their pathogenic role.

Main results attained:

1. Identification and characterization of ubiquitylation events involved in Hedgehog (HH) signaling regulation and medulloblastoma (MB) tumorigenesis: i) identification of a previously unknown oncogenic role of the aminopeptidase ERAP1 in HH-dependent tumorigenesis. ii) Identification of a new mechanism of regulation of SuFu mediated by the  $\beta$ -arrestin2 and the E3 ubiquitin ligase Itch complex and involved in MB oncogenesis. iii) Identification of a novel E3 ubiquitin ligase of GLI1, PCAF, able to repress HH signaling in response to DNA damage. iv) Characterization of REN<sup>KCTD11</sup> function as a novel Cul3 ubiquitin E3 ligase adaptor for HDAC1 and suppressor of HH signaling.
2. Molecular mechanisms in glioblastoma tumorigenesis: identification of a novel molecular mechanism involved in glioblastoma (GB) development, mediated by the RNA-binding ubiquitin ligase MEX3A ubiquitylation and degradation of the tumor-suppressor RIG-I.
3. Study and development of new biomolecules for the treatment of HH-driven tumors. i) Identification of Glabrescione B as direct GLI1 inhibitor, able to inhibit GLI1/DNA interaction and HH-dependent tumor cell growth. ii) Design and development of the multi-targeted agent, compound 22, able to inhibit HH signaling and HH-dependent tumor growth through antagonism of both SMO and GLI1.
4. Three miRNAs have been identified as biomarkers over-expressed in the serum of patients with Spinal Muscular Atrophy (SMA).

## Part VIII – Summary of Scientific Achievements

Product type	Number	Data Base	Start	End
Papers [international]	38	PubMed, ISI Web of Science, Scopus	2010	2020
Books [scientific]	1 (Chapter)	PubMed, Scopus		
Patents	3	- Patent number: US10093642B2	2018	present
		- Patent number: 102018000004359 and international extension	2018	present
		- Patent number: 102018000002402 and international extension	2018	present

Total Impact factor	256,335
Total Citations	954
Average Citations per Product	24,46
Hirsch (H) index	16
Normalized H index*	1,33

\*H index divided by the academic seniority.

## Part IX– Selected Publications

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

Notes:

Journal Impact Factors of the year of publication are indicated.

Scopus or ISI Web of Science was used to calculate citations.

**1-** 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). pii: E321. doi: 10.3390/cancers12020321.

**\*Co-corresponding authors**

Publisher: MDPI, ST ALBAN-ANLAGE 66, CH-4052 BASEL, SWITZERLAND

**IF: 6.162 Citations: 0**

**2-** 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 B.V. Radarweg 29, 1043 NX Amsterdam, The Netherlands

**IF: 7.815 Citations: 1**

**3-** Lospinoso Severini L, Quaglio D, Basili I, Ghirga F, Bufalieri F, Caimano M, Balducci S, Moretti M, Romeo I, Loricchio E, Maroder M, Botta B, Mori M, **Infante P\***, Di Marcotullio L.\* A Smo/Gli multitarget Hedgehog pathway inhibitor impairs tumor growth. *Cancers (Basel)*. 2019 Oct 9;11(10). pii: E1518. doi: 10.3390/cancers11101518.

**\*Co-corresponding authors**

Publisher: MDPI, ST ALBAN-ANLAGE 66, CH-4052 BASEL, SWITZERLAND

**IF: 6.162 Citations: 2**

**4-** Bufalieri F\*, **Infante P\***, Bernardi F, Caimano M, Romania P, Moretti M, Lospinoso Severini L, Talbot J, Melaiu O, Tanori M, Di Magno L, Bellavia D, Capalbo C, Puget S, De Smaele E, Canettieri G, Guardavaccaro D, Busino L, Peschiaroli A, Pazzaglia S, Giannini G, Melino G, Locatelli F, Gulino A, Ayrault O, Fruci D, Di Marcotullio L.

ERAP1 promotes Hedgehog-dependent tumorigenesis by controlling USP47-mediated degradation of  $\beta$ TrCP. *Nat Commun*. 2019 Jul 24;10(1):3304. doi: 10.1038/s41467-019-11093-0.

**\*Co-first authors**

Publisher: NATURE PUBLISHING GROUP, MACMILLAN BUILDING, 4 CRINAN ST, LONDON N1 9XW, ENGLAND

**IF: 11.878 Citations: 4**

**5- 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/ $\beta$ -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: NATURE PUBLISHING GROUP, MACMILLAN BUILDING, 4 CRINAN ST, LONDON N1 9XW, ENGLAND

**IF: 11.878 Citations: 14**

**6- Infante P**, Alfonsi R, Ingallina C, Quaglio D, Ghirga F, D'Acquarica I, Bernardi F, Di Magno L, Canettieri G, Screpanti I, Gulino A, Botta B, Mori M, Di Marcotullio L.

Inhibition of Hedgehog-dependent tumors and cancer stem cells by a newly identified naturally occurring chemotype. *Cell Death Dis* 2016, 7:e2376. doi: 10.1038/cddis.2016.195

Publisher: NATURE PUBLISHING GROUP, MACMILLAN BUILDING, 4 CRINAN ST, LONDON N1 9XW, ENGLAND

**IF: 5.965 Citations: 30**

**7-** Raducu M, Fung E, Serres S, **Infante P**, Barberis A, Fischer R, Bristow C, Thézénas ML, Finta C, Christianson JC, Buffa FM, Kessler BM, Sibson NR, Di Marcotullio L, Toftgård R, D'Angiolella V.

SCF (Fbx17) ubiquitylation of Sufu regulates Hedgehog signaling and medulloblastoma development. *EMBO J*. 2016, 35:1400-1416. doi: 10.15252/embj.201593374.

Publisher: WILEY-BLACKWELL, 111 RIVER ST, HOBOKEN 07030-5774, NJ USA

**IF: 9.792 Citations: 18**

**8- Infante P**, Alfonsi R, Botta B, Mori M, Di Marcotullio L.

Targeting GLI factors to inhibit the Hedgehog pathway. *Trends Pharmacol Sci*. 2015 Aug;36(8):547-58. doi: 10.1016/j.tips.2015.05.006.

Publisher: ELSEVIER SCIENCE LONDON, 84 THEOBALDS RD, LONDON WC1X 8RR, ENGLAND

**IF: 11.840 Citations: 54**

**9- Infante P**, Mori M, Alfonsi R, Ghirga F, Aiello F, Toscano S, Ingallina C, Siler M, Cucchi D, Po A, Miele E, D'Amico D, Canettieri G, De Smaele E, Ferretti E, Screpanti I, Uccello Barretta G, Botta M, Botta B, Gulino A, Di Marcotullio L.

Gli1/DNA intercation is a druggable target for Hedgehog-dependent tumors. *EMBO J.* 2015 Jan 13;34(2):200-17. doi:10.15252/embj.201489213.

Publisher: WILEY-BLACKWELL, 111 RIVER ST, HOBOKEN 07030-5774, NJ USA

**IF: 9.643 Citations: 87**

**10- Mazzà D\***, **Infante P\***, Colicchia V, Greco A, Alfonsi R, Siler M, Antonucci L, Po A, De Smaele E, Ferretti E, Capalbo C, Bellavia D, Canettieri G, Giannini G, Screpanti I, Gulino A, Di Marcotullio L.

PCAF ubiquitin ligase activity inhibits Hedgehog/Gli1 signaling in p53-dependent response to genotoxic stress. *Cell Death Diff* 2013, vol 20:1688-1697. doi: 10.1038/cdd.2013.120.

**\*Co-first authors**

Publisher: NATURE PUBLISHING GROUP, MACMILLAN BUILDING, 4 CRINAN ST, LONDON N1 9XW, ENGLAND

**IF: 8.218 Citations: 50**

**11-** Di Marcotullio L, Greco A, Mazzà D, Canettieri G, Pietrosanti L, **Infante P**, Coni S, Moretti M, De Smaele E, Ferretti E, Screpanti I, Gulino A.

Numb activates the E3 ligase Itch to control Gli1 function through a novel degradation signal. *Oncogene.* 2011 Jan 6;30(1):65-76. doi: 10.1038/onc.2010.394.

Publisher: NATURE PUBLISHING GROUP, MACMILLAN BUILDING, 4 CRINAN ST, LONDON N1 9XW, ENGLAND

**IF: 6.373 Citations: 69**

**12-** Canettieri G, Di Marcotullio L, Greco A, Coni S, Antonucci L, **Infante P**, Pietrosanti L, De Smaele E, Ferretti E, Miele E, Pelloni M, De Simone G, Pedone EM, Gallinari P, Giorgi A, Steinkühler C, Vitagliano L, Pedone C, Schininà ME, Screpanti I, Gulino A.

Histone deacetylase and Cullin3-REN(KCTD11) ubiquitin ligase interplay regulates Hedgehog signalling through Gli acetylation. *Nat Cell Biol.* 2010 Feb;12(2):132-42. doi: 10.1038/ncb2013

Publisher: NATURE PUBLISHING GROUP, MACMILLAN BUILDING, 4 CRINAN ST, LONDON N1 9XW, ENGLAND

**IF: 19.407 Citations: 208**

## **Part X– Papers Under Revision**

**1-** Lospinoso Severini L, Ghirga F, Bufalieri F, Quaglio D, **Infante P** and Di Marcotullio L.

Hedgehog signalling as a therapeutic target for medulloblastoma.

*Expert Opinion On Therapeutic Targets*

Publisher: Taylor and Francis

**2-** Veneziani I, **Infante P**, Ferretti E, Melaiu O, Battistelli C, Lucarini V, Compagnone M, Castellano A, Petrini S, Ognibene M, Pezzolo A, Di Marcotullio L, Moretta L, Pistoia V, Fruci D, Barnaba V, Locatelli F, Cifaldi L.

Nutlin-3a enhances Natural Killer cell-mediated killing of neuroblastoma by restoring p53-dependent expression of ligands for NKG2D and DNAM-1 receptors.

*Cancer Immunology Research*

Publisher: American Association for Cancer Research

## Part XI- Total Publications

**1-** Bufalieri F, Lospinoso Severini L, Caimano M, **Infante P\***, Di Marcotullio L.\*  
DUBs activating Hedgehog signaling pathway: a promising therapeutic target in cancer.  
*Cancers (Basel)*. 2020 Jun 10;12(6):E1518. doi: 10.3390/cancers12061518. Review

**\*Co-corresponding authors**

Publisher: MDPI, ST ALBAN-ANLAGE 66, CH-4052 BASEL, SWITZERLAND

**2-** 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; 10: 560. doi: 10.3389/fonc.2020.00560

Publisher: Frontiers Media S.A.

**IF: 4.137 Citations: 0**

**3-** Quaglio D.\*, **Infante P.\***, Di Marcotullio L., Botta B., Mori M.

Hedgehog signaling pathway inhibitors: an updated patent review (2015-present).

*Expert Opinion on Therapeutic Patents*. 2020 doi: 10.1080/13543776.2020.1730327

**\*Co-first authors**

Publisher: Taylor and Francis Ltd

**IF: 3.699 Citations: 0**

**4-** 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 B.V.

**IF: 7.815 Citations: 1**

**5-** 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). pii: E321. doi: 10.3390/cancers12020321.

**\*Co-corresponding authors**

Publisher: MDPI AG

**IF: 6.162 Citations: 0**

**6-** 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: Nature Research

**IF: 4.011 Citations: 0**

**7-** Cappabianca L, Farina AR, Di Marcotullio L, **Infante P**, De Simone D, Sebastiano M, Mackay AR.  
Discovery, characterization and potential roles of a novel NF-YAx splice variant in human neuroblastoma. *J Exp Clin Cancer Res*. 2019 Dec 5;38(1):482. doi: 10.1186/s13046-019-1481-8.

Publisher: BioMed Central Ltd.

**IF: 5.646 Citations: 0**

**8-** Spiombi E, Angrisani A, Fonte S, De Feudis G, Fabretti F, Cucchi D, Izzo M, **Infante P**, Miele E, Po A, Di Magno L, Magliozzi R, Guardavaccaro D, Maroder M, Canettieri G, Giannini G, Ferretti E, Gulino A, Di Marcotullio L, Moretti M, De Smaele E.

KCTD15 inhibits the Hedgehog pathway in Medulloblastoma cells by increasing protein levels of the oncosuppressor KCASH2. *Oncogenesis*. 2019, Nov 4;8(11):64. doi: 10.1038/s41389-019-0175-6.

Publisher: Nature Publishing Group

**IF: 5.995 Citations: 1**

**9-** Lospinoso Severini L, Quaglio D, Basili I, Ghirga F, Bufalieri F, Caimano M, Balducci S, Moretti M, Romeo I, Loricchio E, Maroder M, Botta B, Mori M, **Infante P\***, Di Marcotullio L.\*

A Smo/Gli Multitarget Hedgehog Pathway Inhibitor Impairs Tumor Growth. *Cancers (Basel)*. 2019 Oct 9;11(10). pii: E1518. doi: 10.3390/cancers11101518.

**\*Co-corresponding authors**

Publisher: MDPI AG

**IF: 6.162 Citations: 2**

**10-** D'Alessandro G, Quaglio D, Monaco L, Lauro C, Ghirga F, Ingallina C, De Martino M, Fucile S, Porzia A, Di Castro MA, Bellato F, Mastrotto F, Mori M, **Infante P**, Turano P, Salmaso S, Caliceti P, Di Marcotullio L, Botta B, Ghini V, Limatola C.

<sup>1</sup>H-NMR metabolomics reveals the Glabrescione B exacerbation of glycolytic metabolism beside the cell growth inhibitory effect in glioma. *Cell Commun Signal*. 2019 Aug 28;17(1):108. doi: 10.1186/s12964-019-0421-8.

Publisher: BioMed Central Ltd.

**IF: 5.111 Citations: 2**

**11-** Bufalieri F\*, **Infante P\***, Bernardi F, Caimano M, Romania P, Moretti M, Lospinoso Severini L, Talbot J, Melaiu O, Tanori M, Di Magno L, Bellavia D, Capalbo C, Puget S, De Smaele E, Canettieri G, Guardavaccaro D, Busino L, Peschiaroli A, Pazzaglia S, Giannini G, Melino G, Locatelli F, Gulino A, Ayrault O, Fruci D, Di Marcotullio L.

ERAP1 promotes Hedgehog-dependent tumorigenesis by controlling USP47-mediated degradation of  $\beta$ TrCP. *Nat Commun*. 2019, Jul 24;10(1):3304. doi: 10.1038/s41467-019-11093-0.

**\*Co-first authors**

Publisher: Nature Publishing Group

**IF: 11.878 Citations: 4**

**12- Infante P**, Lospinoso Severini L, Bernardi F, Bufalieri F, Di Marcotullio L.

Targeting Hedgehog Signalling through the Ubiquitylation Process: The Multiple Roles of the HECT-E3 Ligase Itch. *Cells*. 2019, Jan 29;8(2). pii: E98. doi: 10.3390/cells8020098. Review.

Publisher: MDPI AG

**IF: 5.656 Citations: 4**

**13-** 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). pii: E147. doi: 10.3390/cancers11020147.

Publisher: MDPI AG

**IF: 6.162 Citations: 3**

**14-** Palermo R, Ghirga F, Piccioni MG, Bernardi F, Zhdanovskaya N, **Infante P\***, Mori M.\*

Natural Products Inspired Modulators of Cancer Stem Cells-specific Signaling Pathways Notch and Hedgehog. *Curr Pharm Des*. 2018; 24(36):4251-4269. doi: 10.2174/1381612825666190111124822. Review.

**\*Co-corresponding authors**

Publisher: Bentham Science Publishers B.V.



**IF: 2.412 Citations: 13**

**15-** Ghirga F, Mori M, **Infante P**.

Current trends in Hedgehog signaling pathway inhibition by small molecules.

*Bioorg Med Chem Lett*. 2018 Oct 15;28(19):3131-3140. doi: 10.1016/j.bmcl.2018.08.033. Review.

Publisher: Elsevier Ltd

**IF: 2.448 Citations: 11**

**16-** 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: Nature Publishing Group

**IF: 5.959 Citations: 6**

**17-** Berardozzi S, Bernardi F, **Infante P**, Ingallina C, Toscano S, De Paolis E, Alfonsi R, Caimano M, Botta B, Mori M, Di Marcotullio L, Ghirga F.

Synergistic inhibition of the Hedgehog pathway by newly designed Smo and Gli antagonists bearing the isoflavone scaffold. *Eur J Med Chem*. 2018 Aug 5;156:554-562. doi: 10.1016/j.ejmech.2018.07.017.

Publisher: Elsevier Masson SAS

**IF: 4.833 Citations: 8**

**18-** **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/ $\beta$ -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: Nature Publishing Group

**IF: 11,878 Citations: 14**

**19-** Calcaterra A, Iovine V, Botta B, Quaglio D, D'Acquarica I, Ciogli A, Iazzetti A, Alfonsi R, Lospinoso Severini L, **Infante P**, Di Marcotullio L, Mori M, Ghirga F.

Chemical, computational and functional insights into the chemical stability of the Hedgehog pathway inhibitor GANT61. *J Enzyme Inhib Med Chem*. 2018 Dec;33(1):349-358. doi: 10.1080/14756366.2017.1419221.

Publisher: Taylor and Francis Ltd

**IF: 4.027 Citations: 14**

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### Impact Factor (IF)

Total IF as first, co-first, co-corresponding and last author	102,616
Average IF as first, co-first, co-corresponding and last author	6,841

### Part XII- Patents

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