Curriculum Vitae

Personal information

First name / Surname	**Artem Smirnov**
Address	Via Montpellier 1, 00133 Rome (RM)
E-mail	artem.smirnov@uniroma2.it

Research area Biochemistry and Molecular Biology

Scientific interests My research activity has been mainly focused on the understanding of molecular mechanisms of cellular homeostasis and differentiation, as well as alteration of these pathways in tumours. Specifically, I have been studying the role p53 family of proteins in epithelial homeostasis and epithelial cancer tumorigenesis

Research experience

Dates	2022-present
Position held	Postdoctoral researcher (RTDa)
Research topic	p63 in carcinoma
Head of the laboratory | Institution	Professor Eleonora Candi | University of Rome (Rome, Italy)
Dates	2019-2022
Position held	Postdoctoral researcher
Research topic	p53 in EBV-associated epithelial cancer
Head of the laboratory | Institution	Professor Xin Lu | University of Oxford (Oxford, UK)
Dates	2014-2019
Position held	MSc, PhD student, and Postdoctoral researcher
Research topic	p53&p63 in epithelial biology
Head of the laboratory | Institution	Professor Gerry Melino | University of Rome “Tor Vergata” (Rome, Italy)
Dates	2013-2014
Position held	BSc and MSc student
Research topic	Cancer therapy via p53 reactivation
Head of the laboratory | Institution	Professor Nick Barlev | St. Petersburg Institute of Technology (St. Petersburg, Russia)
Dates	2012-2013
Position held	BSc student
Research topic	Visualisation of p53 in tumour cells
Head of the laboratory | Institution	Professor Nick Barlev | St. Petersburg Institute of Technology (St. Petersburg, Russia)

Education

Date	2017
Title of qualification awarded	PhD in Biochemistry & Molecular Biology
University or Institution	University of Rome “Tor Vergata” (Rome, Italy)
Thesis title	ZNF185 is a novel target of p63 and p53 involved in keratinocyte differentiation and DNA damage response
Date	2015
Title of qualification awarded	MSc in Biotechnology
University or Institution	St. Petersburg Institute of Technology (St. Petersburg, Russia)
GPA	Major GPA: 5.0/5.0; Overall GPA: 5.0/5.0 cum laude
Date	2013
Title of qualification awarded	BSc in Chemical Technology and Biotechnology

University or Institution	St. Petersburg Institute of Technology (St. Petersburg, Russia)
GPA	Overall GPA: 4.8/5.0

Personal skills and competences

Mother tongue	Russian
Other languages	English (fluent), Italian (fluent), Spanish (intermediate)
Research techniques	DNA purification, preparation and electrophoresis, molecular cloning, PCR, ChIP, luciferase assay RNA purification, preparation and electrophoresis, RT-PCR, qPCR Protein electrophoresis and western blotting, co-immunoprecipitation, proximity ligation assay Human tumour and primary cell culture work, RNAi and DNA transfection *in vitro* Preparation and analysis of samples by FACS, cell sorting Human samples processing, IHC on Fr/FFPE human tissue sections, ICC/IF and confocal microscopy; High-throughput screening of therapeutic compounds *in vitro*; Basics of animal work (mouse) and tumour xenograft models Basics of analysis of genomics, proteomics, and transcriptomics processed data Basics of -omics data visualisation in R and genome browsers
Computer skills	MS Word, Excel, PowerPoint Adobe Illustrator, Photoshop, InDesign GraphPad, FlowJo
Editorial experience	Peer reviewer for international journals: *Cell Cycle, Molecular Oncology, Cell Death & Differentiation, Cell Death & Disease, Cell Death Discovery,* and *FEBS journal*
Teaching experience	
10/2022-01/2022	Lectures on Molecular Biology for MSc students (Medical Biotechnologies) (2 CFU) | University of Rome
09-10/2021	Supervision of one PhD student | University of Oxford
05-06/2019	Supervision of two MSc students | University of Oxford
08/02 – 23/02/2019	Lectures on "Meccanismi molecolari di morte cellulare", Master I livello in "Nutrizione e Cosmesi" | University of Rome
19/01/2017	Lecture on “Ruolo della proteina-oncosoppressore p53 nel cancro” for MSc students (Medical Biotechnologies) | University of Rome
2016-2017	Supervision of one MSc student | University of Rome
Awards	09/2014 | Scholarship of the President of Russian Federation for undergraduate students
Courses	07/2021 | Oxford, UK Introduction to Bioinformatics at the CCB 03/2020 | Oxford, UK Experimental design and Statistics in Preclinical Research: the Good, the Bad and the Ugly 01/2020 | Oxford, UK Research techniques day 07/2019 | Oxford, UK Oxford FELASA accredited course 030/10 for carrying out procedures on animals (Function A) as per Directive 2010/63/EU 07/2019 | Oxford, UK Animals (Scientific Procedures) Act 1986: Personal License Category B training Course 06/2019 | Oxford, UK R: Data handling 05/2019 | Oxford, UK R: Kick-off 10/2017 | Rome, Italy Corso per l’accesso all’utilizzo delle strutture di servizio alla sperimentazione animale

Publications

Published **17** papers, including:
2 Aging (IF 5.682), 2 Biochem Biophys Res Comms (IF 3.575), 1 Cell Cycle (IF 4.534), 1 Cell Death & Differ (15.828), 1 Cell Death Discovery (IF 4.53), 1 EMBO Rep (IF 8.807), 1 Europ J of Dermat (IF 3.328), 2 Int J of Mol Sci (IF 5.542), 1 Mol Oncology (IF 6.603), 1 Nat Comms (IF 14.919), 1 Oncogene (IF 9.867), 1 Int J of Lower Extreme Wounds (IF 2.057), 1 Cell Reports (IF 9.995), 1 Viruses (5.818).

First/co-first author - **7** papers.
H-index = 8; citations = 513 (source: Google Scholar)
Cumulative IF=115 (source: Academic Accelerator)

Research articles and reviews

Al Moussawi* K, Chung* K, Carroll* TM, Osterburg* C, **Smirnov*** A, Lotz R, Miller P, Dedeic Z, Zhong S, Oti M, Kouwenhoven EN, Asher R, Goldin R, Tellier M, Murphy S, Zhou H, Dotsch V, Lu X. Mutant Ras and inflammation-driven skin tumorigenesis is suppressed via a JNK-iASPP-AP1 axis. Cell Reports. 2022. 41. *contributed equally IF: 9.995, citations: 0.

Barbaglia MN, Harris JM, **Smirnov** A, Burlone ME, Rigamonti C, Pirisi M, Minisini R, Magri A. 17ß-Oestradiol Protects from Hepatitis C Virus Infection through Induction of Type I Interferon. Viruses. 2022. 14. IF: 5.818, citations: 1.

Lena AM, Rossi V, Osterburg S, **Smirnov** A, Osterburg C, Tuppi M, Cappello A, Amelio I, Dötsch V, De Felici M, Klinger FG, Annicchiarico-Petruzzelli M, Valensise H, Melino G, Candi E. The p63 C-terminus is essential for murine oocyte integrity. Nature Communications. 2021;12(1). IF: 14.919, citations: 8.

Montanaro M, Meloni M, Anemona L, Giurato L, Scimeca M, Izzo V, Servadei F, **Smirnov** A, Candi E, Mauriello A, Uccioli L. Macrophage Activation and M2 Polarization in Wound Bed of Diabetic Patients Treated by Dermal/Epidermal Substitute Nevelia. The International Journal of Lower Extremity Wounds. 2020. IF: 2.057, citations: 6.

Panatta E, Lena AM, Mancini M, **Smirnov** A, Marini A, Delli Ponti R, Botta-Orfila T, Tartaglia GG, Mauriello A, Zhang X, Calin GA, Melino G, Candi E. Long non-coding RNA uc.291 controls epithelial differentiation by interfering with the ACTL6A/BAF complex. EMBO reports. 2020;21(3). IF: 8.807, citations: 12.

*Nicolai S, *Pieraccioli M, ***Smirnov** A, Pitolli C, Anemona L, Mauriello A, Candi E, Annicchiarico-Petruzzelli M, Shi Y, Wang Y, Melino G, Raschellà G. ZNF281/Zfp281 is a target of miR-1 and counteracts muscle differentiation. Molecular Oncology. 2019;14(2):294-308. *contributed equally. IF: 6.603, citations: 5.

Piro M, Ventura A, **Smirnov** A, Saggini A, Lena A, Mauriello A, Bianchi L, Melino G, Candi E. Transglutaminase 3 Reduces the Severity of Psoriasis in Imiquimod-Treated Mouse Skin. International Journal of Molecular Sciences. 2020;21(5). IF: 5.542, citations: 5.

Michaletti A, Mancini M, **Smirnov** A, Candi E, Melino G, Zolla L. Multi-omics profiling of calcium-induced human keratinocytes differentiation reveals modulation of unfolded protein response signaling pathways. Cell Cycle. 2019;18(17):2124-40. IF: 4.534, citations: 7.

Smirnov A, Anemona L, Novelli F, Piro CM, Annicchiarico-Petruzzelli M, Melino G, Candi E. p63 Is a Promising Marker in the Diagnosis of Unusual Skin Cancer. International Journal of Molecular Sciences. 2019;20(22). IF: 5.542, citations: 13.

Smirnov A, Anemona L, Montanaro M, Mauriello A, Annicchiarico-Petruzzelli M, Campione E, Melino G, Candi E. Transglutaminase 3 is expressed in basal cell carcinoma of the skin. European Journal of Dermatology. 2019;29(5):477-83. IF: 3.328, citations: 8.

Smirnov A, Cappello A, Lena AM, Anemona L, Mauriello A, Di Daniele N, Annicchiarico-Petruzzelli M, Melino G, Candi E. ZNF185 is a p53 target gene following DNA damage. Aging. 2018;10(11):3308-26. IF: 5.682, citations: 3.

Smirnov A, Lena AM, Cappello A, Panatta E, Anemona L, Bischetti S, Annicchiarico-Petruzzelli M, Mauriello A, Melino G, Candi E. ZNF185 is a p63 target gene critical for epidermal differentiation and squamous cell carcinoma development. Oncogene. 2018;38(10):1625-38. IF: 9.867, citations: 17.

Panatta E, Lena AM, Mancini M, Affinati M, **Smirnov** A, Annicchiarico-Petruzzelli M, Piro MC, Campione E, Bianchi L, Mazzanti C, Melino G, Candi E. Kruppel-like factor 4 regulates keratinocyte senescence. Biochemical and Biophysical Research Communications. 2018;499(2):389-95. IF: 3.575, citations: 6.

Cassandri M, **Smirnov** A, Novelli F, Pitolli C, Agostini M, Malewicz M, Melino G, Raschellà G. Zinc-finger proteins in health and disease. Cell Death Discovery. 2017;3(1). IF: 4.53, citations: 282.

	Candi E, **Smirnov** A, Panatta E, Lena AM, Novelli F, Mancini M, Viticchiè G, Piro MC, Di Daniele N, Annicchiarico-Petruzzelli M, Melino G. Metabolic pathways regulated by p63. Biochemical and Biophysical Research Communications. 2017;482(3):440-4. IF: 3.575, citations: 14.
	Smirnov A, Panatta E, Lena A, Castiglia D, Di Daniele N, Melino G, Candi E. FOXM1 regulates proliferation, senescence and oxidative stress in keratinocytes and cancer cells. Aging. 2016;8(7):1384-97. IF: 5.682, citations: 40.
	Peintner L, Novelli F, **Smirnov** A, Maurer U, Borner C, von Karstedt S. 9th Tuscany Retreat on Cancer Research: genetic profiling, resistance mechanisms and novel treatment concepts in cancer. Cell Death & Differentiation. 2015;23(1):183-4. IF: 15.828, citations: 1.
Book chapters	Candi E, McLean WHI, Didona B, Terrinoni A, **Smirnov** A, and Melino G. (Mar 2018) Cornification Diseases (Skin Cell Death). In: eLS. John Wiley & Sons Ltd, Chichester.
	Candi E, Knight RA, Panatta E, **Smirnov** A, and Melino G. (Nov 2016) Cornification of the Skin: A Non-apoptotic Cell Death Mechanism. In: eLS. John Wiley & Sons, Ltd: Chichester.
Manuscripts in preparations	Zentelis S*, **Smirnov** A*, Carroll TM*, Ebner D, …, and Lu X. A controlled kick and kill strategy for EBV-infected gastric cancer cells | in preparation | *contributed equally
	Chung* K, Al Moussawi* K, Carroll* TM, Osterburg* C, **Smirnov*** A, …, and Lu X. iASPP selectively inhibits AP-1/p63 co-regulated genes and is a paradoxical suppressor of mutant Ras and inflammation driven tumorigenesis | in preparation | *contributed equally

CONFERENCES

Oral presentations	08/2017 | 10th Tuscany Retreat on Cancer Research | Sarteano-Siena, Italy
	08/2015 | 9th Tuscany Retreat on Cancer Research | Sarteano-Siena, Italy
	12/2013 | V International Youth Medical Congress | St. Petersburg, Russia
	03/2013 | LXXIV conference "Modern problems of experimental medicine" | St. Petersburg, Russia
Posters	12/2019 | Ludwig Retreat | Oxford, UK
	03/2014 | The International conference "Biotechnology and quality of life" | Moscow, Russia
Conference abstracts	09/2017 | 47th annual ESDR meeting | Salzburg, Austria
	07/2017 | The 17th international p53 workshop | Singapore
	06/2017 | 2nd International Symposium on Frontiers in Molecular Science | Basel, Switzerland