

ALL. B

Decreto Rettore Università di Roma "La Sapienza" n 2755/2018 del 19.11.2018

ALESSANDRO ROSA

Curriculum Vitae
ai fini della pubblicazione

Place: ROMA

Date: 13/12/2018

Signature: Alessandro Rosa

Part I – General Information

Full Name	Alessandro Rosa
-----------	-----------------

Part II – Education

Type	Year	Institution	Notes (Degree, Experience,...)
University graduation	2003	Sapienza University of Rome, Italy	Laurea in Scienze Biologiche (MS Degree in Biological Sciences) - 110/110 <i>cum laude</i>
PhD	2007	Sapienza University of Rome, Italy	PhD in Genetics and Molecular Biology

Part III – Appointments

III A – Academic Appointments

Start	End	Institution	Position
2003	2007	Sapienza University of Rome, Italy	PhD student (Genetics and Molecular Biology)
2007	2007	Sapienza University of Rome, Italy	Post-doctoral Fellow. Short term Institute Pasteur – Fondazione Cenci-Bolognetti
2007	2010	Rockefeller University, NY, USA	Postdoctoral Associate. Laboratory of Stem Cell Biology and Molecular Embryology. Human Frontiers Science Program (HFSP)

2010	2011	Sapienza University of Rome, Italy	Postdoctoral Fellow. Human Frontiers Science Program (HFSP)
2011	Present	Sapienza University of Rome, Italy	Assistant Professor (Ricercatore a tempo indeterminato; SSD BIO/11). Dept. Biology and Biotechnologies "C. Darwin"

III B – Other Appointments

Start	End	Institution	Position
2009	2010	The Rockefeller University, NY, USA	Director of the Rockefeller University Human Embryonic Stem Cell and Induced Pluripotent Stem Cell Core Facility
2014	Present	The Rockefeller University, NY, USA	Member of the Adjunct Faculty
2017	Present	Istituto Italiano di Tecnologia (IIT), Italy	Affiliated researcher

Part IV – Teaching experience

IV A - Titolarità di corsi

Year	Institution	Lecture/Course
2012/13	Sapienza University – LM Biologia e Tecnologie Cellulari	Corso: Biologia Molecolare delle Cellule Staminali – 6 CFU - SSD BIO/11 - docente titolare
2013/14	Sapienza University – LM Biologia e Tecnologie Cellulari	Corso: Biologia Molecolare delle Cellule Staminali – 6 CFU - SSD BIO/11 - docente titolare
2014/15	Sapienza University – LM Biologia e Tecnologie Cellulari	Corso: Biologia Molecolare delle Cellule Staminali – 6 CFU - SSD BIO/11 - docente titolare
2015/16	Sapienza University – LM Biologia e Tecnologie Cellulari	Corso: Biologia Molecolare delle Cellule Staminali – 6 CFU - SSD BIO/11 - docente titolare
2016/17	Sapienza University – LM Genetica e Biologia Molecolare (Canale in lingua italiana)	Corso: Biologia Molecolare delle Cellule Staminali – 6 CFU - SSD BIO/11 - docente titolare
2016/17	Sapienza University – LM Genetica e Biologia Molecolare (Canale in lingua inglese)	Corso: Molecular Biology of Stem Cells – 6 CFU - SSD BIO/11 - docente titolare
2017/18	Sapienza University – LM Genetica e Biologia Molecolare (Canale in lingua italiana)	Corso: Biologia Molecolare delle Cellule Staminali (Modulo I) – 3 CFU - SSD BIO/11 - docente titolare
2017/18	Sapienza University – LM Genetica e Biologia Molecolare (Canale in lingua inglese)	Corso: Molecular Biology of Stem Cells – 6 CFU - SSD BIO/11 - docente titolare

2018/19	Sapienza University – LM Genetica e Biologia Molecolare (Canale in lingua italiana)	Corso: Biologia Molecolare delle Cellule Staminali (Modulo I) – 3 CFU - SSD BIO/11 - docente titolare
2018/19	Sapienza University – LM Genetica e Biologia Molecolare (Canale in lingua inglese)	Corso: Molecular Biology of Stem Cells – 6 CFU - SSD BIO/11 - docente titolare

IV B - Other activities

2012 - present	Sapienza University	Primo Relatore di Tesi per studenti di Laurea in Scienze Biologiche (7) e Laurea Magistrale in Genetica e Biologia Molecolare (35; 6 tesi interne, 29 tesi esterne).
2012 - 2015	Sapienza University	Seminars on stem cells in the “Erasmus Exchange Course” program. LM in Genetica e Biologia Molecolare.
2012 - present	Sapienza University	Lectures on stem cell-based model systems in the Sapienza Scuola Superiore di Studi Avanzati (SSSAS; Sapienza School for Advanced Studies).

IV C - Qualitative aspects

2012 - present	Students’ evaluation of the teacher’s performance (OPIS): in all academic years the indicators are consistently above the average scores of the other courses of the LM programs (<i>Biologia e Tecnologie Cellulari</i> and <i>Genetica e Biologia Molecolare</i>) and of the Faculty of Sciences of the Sapienza University (<i>source: INFOSTUD - Sapienza</i>).
2017	For the quality of teaching, A. Rosa resulted in the top 15% of the teachers of the Sapienza University Faculty of Sciences in 2016-17 (<i>source: verbale Assemblea di Facoltà 23/04/2018</i>).
2018	Riconoscimento per l'eccellente insegnamento universitario (<i>Acknowledgement for the excellence in University teaching</i>) 2017-18. Awarded by the Faculty of Sciences of the Sapienza University to the top 5% of the teachers (<i>source: verbale Assemblea di Facoltà 13/12/2018</i>).

Part V - Activities in the PhD School

Year	Institution	Responsibility
2012 - present	Sapienza University	Supervisor/Tutor di studenti di dottorato: “Scienze Della Vita” (Life Sciences; 4 students); “Genetica e Biologia Molecolare” (Genetics and Molecular Biology; 2 students).
2012/13	Sapienza University	Membro del Collegio Docenti della Scuola di Dottorato in “Scienze Pasteuriane” (Codice MIUR DOT0326802)
2013/14	Sapienza University	Membro del Collegio Docenti della Scuola di Dottorato in “Scienze Della Vita” (Codice MIUR DOT1326CGG)
2014/15	Sapienza University	Membro del Collegio Docenti della Scuola di Dottorato in “Scienze Della Vita” (Codice MIUR DOT1326CGG)

2015	Sapienza University	Membro della Commissione per il conferimento del titolo di Dottorato in “Morfogenesi e Ingegneria Tissutale” (Morphogenesis and Tissue Engineering).
2015/16	Sapienza University	Membro del Collegio Docenti della Scuola di Dottorato in “Scienze Della Vita” (Codice MIUR DOT1326CGG)
2016/17	Sapienza University	Membro del Collegio Docenti della Scuola di Dottorato in “Scienze Della Vita” (Codice MIUR DOT1326CGG)
2017	University of Padova	Valutatore esterno di tesi di Dottorato. Corso di Dottorato in Medicina Molecolare.
2017/18	Sapienza University	Membro del Collegio Docenti della Scuola di Dottorato in “Scienze Della Vita” (Codice MIUR DOT1326CGG)
2018/19	Sapienza University	Membro del Collegio Docenti della Scuola di Dottorato in “Scienze Della Vita” (Codice MIUR DOT1326CGG)

Part VI - Institutional and academic responsibilities

Year	Institution	Responsibility
2013 - Pres.	Sapienza University	Redattore sito web. LM Genetica e Biologia Molecolare. Dip. di Biologia e Biotecnologie “C. Darwin”.
2013 - 2018	Sapienza University	Membro della commissione per le valutazioni comparative di accesso al Percorso di Eccellenza. LM Genetica e Biologia Molecolare.
2014 - 2018	Sapienza University	Membro eletto della Giunta di Dipartimento - rappresentante dei Ricercatori. Dip. di Biologia e Biotecnologie “C. Darwin”.
2016 - 2018	Sapienza University	Membro eletto della Giunta di Facoltà di Scienze MMFFNN - rappresentante dei Ricercatori del Dip. di Biologia e Biotecnologie “C. Darwin”.
2018	Sapienza University	Membro della Commissione per l’attribuzione di borse di studio per tesi di laurea all'estero. Dip. di Biologia e Biotecnologie “Charles Darwin”, Facoltà di Scienze MMFFNN.
2018 - present	Sapienza University	Membro del Team Qualità. LM Genetica e Biologia Molecolare. Dip. di Biologia e Biotecnologie “C. Darwin”
2018 - present	Sapienza University	Membro della commissione per le valutazioni comparative di accesso. LM Genetica e Biologia Molecolare. Dip. di Biologia e Biotecnologie “C. Darwin”

Part VII - Editorial and reviewer activity

VII A - Scientific journals

Year	Activity
2018 - Pres.	Member of the Editorial Board of “Stem Cells International” journal (2017 Journal Impact Factor: 3.989).
2018 - Pres.	Guest Editor for the journal “Frontiers in Cell and Developmental Biology”. Special issue on “The RNA revolution in embryonic development and cell differentiation in health and disease”.

2011 - Pres.	Reviewer activity: Science Translational Medicine; Nature Structural and Molecular Biology; Stem Cell Reports; Scientific Reports; PLOS ONE; Translational Neurodegeneration; Stem Cell Research; Acta Neuropathologica Communications.
--------------	---

VII B - Funding agencies and associations

2015 - Pres.	External reviewer for Motor Neurone Disease (MND) Association Research Grants (UK Registered Charity no. 294354).
2017 - Pres.	REPRISE Expert. Register Of Expert Peer Reviewers For Italian Scientific Evaluation. Italian Ministry of Education, Universities and Research (MIUR).
2018 - Pres.	COST Expert. European Cooperation in Science and Technology Association. Evaluation of scientific activities related to COST research networks.

Part VII - Scientific societies memberships, Awards and Honours

Year	Title
2006	Winner of the 2006 SIBBM (Italian Society of Biophysics and Molecular Biology) Award
2008	Winner of a post-doctoral fellowship “The New York Stem Cell Foundation (NYSCF)” (2008). The fellowship was declined by the candidate in favour of the “Long term 2008 Human Frontier Science Program (HFSP)”
2008	Winner of a post-doctoral fellowship “Long term 2008 Human Frontier Science Program (HFSP)”
2008	Winner of the RNA Society 2008 poster award in the category “Genetics and Development”
2012	Winner of the Bioeconomy 2012 Award “For the most innovative Italian intuitions of 2011 in the field of biomedical sciences”. Awarded by CNCCS (“Collezione Nazionale di Composti Chimici e Centro Screening”)
2013-present	Member of the Stem Cell Research Italy scientific society
2017	Member of the International Society for Stem Cell Research (ISSCR)
2017	1 st Award at the business plan competition for startup projects, StartCup Lazio 2017
2017	PNI (National Prize for Innovation, Italy) special award for Best Project for Equal Opportunities
2018	“Acknowledgement for the excellence in University teaching” awarded by the Faculty of Sciences of the Sapienza University.

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

Year	Title	Program	Grant value
2010 - 2015	Analysis of TGFbeta-regulated microRNAs in hESC stemness and differentiation. (I)	R01 Grant (USA)	1.276.769 USD

2012 - 2017	Novel Nanotech-Based Approaches for the Study and Treatment of Amyotrophic Lateral Sclerosis. (I)	Italian Institute of Technology Seed Grant	5.000.000 EUR
2013 - 2016	Integrated computational and experimental approach for the study of human diseases. (I)	Italian Ministry of Education, Universities and Research (MIUR) – Progetti di Rilevante Interesse Nazionale (PRIN)	168.000 EUR
2014 - 2018	RNA circuitries in Amyotrophic Lateral Sclerosis pathogenesis (ARCI) (I)	Italian Foundation for Research on Amyotrophic Lateral Sclerosis (AriSLA)	240.000 EUR
2014 - 2015	Identification of interactors of long non-coding RNAs involved in cell differentiation. (PI)	Sapienza University – Bando Ricerca di Ateneo	10.000 EUR
2015 - 2016	Study of pathways affected by mutations in the FUS gene in an iPSC-based ALS model system. (PI)	Sapienza University – Bando Ricerca di Ateneo	8.000 EUR
2016 - present	Epigenetic control of gene expression in muscle differentiation and in Duchenne Muscular Dystrophy. (I)	Sapienza University – Bando Ricerca di Ateneo	48.600 EUR
2017 - present	Dissecting the role of the long non-coding RNA Charm in cardiomyogenesis. (I)	Sapienza University – Bando Ricerca di Ateneo	11.000 EUR
2017 - present	Determinazione quantitativa di acidi nucleici con Real Time PCR in diversi contesti sperimentali. (I)	Sapienza University – Bando Medie Attrezzature Scientifiche	36.055 EUR
2017	Fondo di finanziamento per le attività base di ricerca (FFABR). (PI)	Italian Ministry of Education, Universities and Research (MIUR)	3.000 EUR
2017-2018	Digging the circle: role of circular RNAs in ALS. (I)	Technological and industrial scientific cooperation agreement between Italy and Israel – Italian Ministry of Foreign Affairs	95.000 EUR
2017 - 2018	Impairment of the stress response by mutant FUS in iPSC-derived human ALS motoneurons. (PI)	Italian Foundation for Research on Amyotrophic Lateral Sclerosis (AriSLA)	60.000 EUR

Part X – Organization of scientific meetings

2012	Coordinator of the “Stem Cells, iPS, Cancer Stem Cells” session. 2012 FISV (Italian Federation of Life Sciences) Annual Meeting, Italy.
2013 - present	Member of the organizing committee of the annual meeting of the Dept. Biology and Biotechnologies “C. Darwin” of Sapienza University, Rome, Italy.
2016	Coordinator of the “Stem Cells, iPS, Cancer Stem Cells” session. 2016 FISV (Italian Federation of Life Sciences) Annual Meeting, Italy.

Part XI – Research Activities

Keywords	Brief Description
Cell differentiation	My field of research concerns the characterization of the molecular mechanisms of cell differentiation and development, in physiological and pathological conditions. In recent years, a growing number of RNA molecules and RNA-binding proteins able to actively regulate gene expression and significantly affect important cellular processes, in health and disease, has been discovered. During my PhD I studied the role of microRNAs in hematopoietic differentiation (Fazi, Rosa et al., 2005; Rosa et al., 2007). As a post-doc at the Laboratory of Stem Cell Biology and Molecular Embryology (Rockefeller University, USA), I focused on the function of microRNAs during early stages of embryonic development (Rosa et al., 2009; Rosa et al., 2011; Vonica et al., 2011; Rosa et al., 2014). Present research activity at the Sapienza University is aimed to elucidate the pathological mechanisms underlying Amyotrophic Lateral Sclerosis (ALS) and other neurodegenerative or neurodevelopmental diseases, in which RNA metabolism dysregulation represents a contributing factor. We take advantage of iPSCs, which can be derived from patients, modified by gene editing and differentiated in vitro into tissues of interest, thus representing excellent model systems for the study of the molecular and cellular basis of genetic diseases. In last years, a collection of iPSC lines with ALS mutations in RNA-binding proteins has been raised in my lab by reprogramming and gene editing. We have set up appropriate protocols to differentiate iPS cells into neurons and muscle cells. These tools allow studying how RNA-binding protein alteration lead to the disease. We showed that ALS mutant iPSC-derived motor neurons recapitulate disease phenotypes in vitro. Moreover, we have characterized changes in the transcriptome of motor neurons, including alteration in the miRNA pathway, due to mutations in the ALS gene FUS (Lenzi et al., 2015; Lenzi et al., 2016; De Santis et al., 2017; De Santis et al., 2018).
Model systems	
Disease modelling	
Stem cells	
Neurodegenerative diseases	
RNA	

Part XII – Summary of Scientific Achievements

Product type	Number	Data Base	Start	End
Papers [international]	33	Scopus	2004	2018
Patents [international]	2	WIPO Patentscope	2003	2018

Hirsch (H) index (source: Scopus)	18
H-index normalized by age*	1,125
H index past 10 years (2009-2018)	12
Total Citations	1971
Total Citations obtained in the last 10 years (2009-2018)	1693
Citations of articles published in the last 10 years (2009-2018)	706
Average Citations per Product	59.73
Total Impact factor	227.196
Average Impact factor per Product	6.88

*H-index divided by the academic seniority (16 years from “Laurea in Scienze Biologiche”)

Abilitazione Scientifica Nazionale (ASN), Bando 2013, II fascia (National Scientific Qualification for associate professor):

- 05/E2 - Molecular Biology
- 05/B2 - Cellular and Developmental Biology
- 05/F1 - Applied Biology

Bibliometric parameters overcome the 2018 ASN thresholds for the sector Molecular Biology (S.C. 05/E2 - S.S.D. BIO/11 - Biologia Molecolare) (D.M. 8 AGOSTO 2018, N. 589), for both “II fascia” (associate professor) and “I fascia” (full professor).

Parametro	Soglia ASN 2018	A. Rosa
I Fascia		
Numero articoli 10 anni	18	24
Numero citazioni 15 anni	723	1971
Indice H 15 anni	14	18
II Fascia		
Numero articoli 5 anni	8	17
Numero citazioni 10 anni	284	706
Indice H 10 anni	9	12

Part XIII A – Patents

RM2007A000595 - Use of miRNA and siRNA in therapy. Inventors: Bozzoni I, Fatica A & Rosa A. Dep. 15-11-2007
RM2003A000335 (Foreign extension: PCT/IT04/00038) - Construction of a new vector for siRNA in vivo expression. Inventors: Bozzoni I, Denti MA & Rosa A. Dep. 9-7-2003 Licensed to Promega Corporation for the commercialization of the invention under the name GeneClip™ U1 Hairpin Cloning Systems

Part XIII B – Publications

Researcher Identifiers	ORCID ID: 0000-0001-9999-7223
	Scopus ID: 9638433400

	IF	5 years IF	Citations (Scopus)	First author	Corresp. /last author
1. De Santis R, Garone MG, Pagani F, de Turreis V, Di Angelantonio S, Rosa A. (2018) . Direct conversion of human pluripotent stem cells into cranial motor neurons using a piggyBac vector. Stem Cell Research 29, 189-196. doi:10.1016/j.scr.2018.04.012.	3.902 (2017)	4.127 (2017)	0		X

2. Antonacci G, de Turris V, Rosa A , Ruocco G (2018) Background-deflection Brillouin microscopy reveals altered biomechanics of intracellular stress granules by ALS protein FUS. Commun Biol. 1:139. doi: 10.1038/s42003-018-0148-x	Not yet available	Not yet available	0		
3. Catanzaro G, Sabato C, Russo M, Rosa A , Abballe L, Besharat ZM, Po A, Miele E, Bellavia D, Chiacchiarini M, Gessi M, Peruzzi G, Napolitano M, Antonelli M, Mastronuzzi A, Giangaspero F, Locatelli F, Screpanti I, Vacca A, Ferretti E (2017). Loss of miR-107, miR-181c and miR-29a-3p Promote Activation of Notch2 Signaling in Pediatric High-Grade Gliomas (pHGGs). Int J Mol Sci 18. doi:10.3390/ijms18122742.	3.687	3.878	2		
4. De Santis R, Santini L, Colantoni A, Peruzzi G, de Turris V, Alfano V, Bozzoni I, Rosa A (2017). FUS Mutant Human Motoneurons Display Altered Transcriptome and microRNA Pathways with Implications for ALS Pathogenesis. Stem Cell Reports 9, 1450-1462.	6.537	7.181	3		X
5. Gilistro E, de Turris V, Damizia M, Verrico A, Moroni S, De Santis R, Rosa A , Lavia P (2017). Importin- β and CRM1 control a RANBP2 spatiotemporal switch essential for mitotic kinetochore function. J Cell Sci 130, 2564–2578.	4.401	5.094	1		
6. Rosa A and Brivanlou AH (2017). Role of MicroRNAs in Zygotic Genome Activation: Modulation of mRNA During Embryogenesis. Methods Mol Biol 1605, 31-43.	N/A	N/A	1	X	
7. Errichelli L, Dini Modigliani S, Laneve P, Colantoni A, Legnini I, Caputo D, Rosa A , De Santis R, Scarfò R, Peruzzi G, Lei L, Caffarelli E, Shneider N, Morlando M and Bozzoni I (2017) FUS affects circular RNA expression in murine embryonic stem cell-derived motor neurons. Nature Communications. 8:14741.	12.353	13.691	30		
8. Rosa A [#] and Ballarino M [#] (2016) Divergent lncRNAs take the lead on pluripotent cell differentiation. Stem Cell Investigation. 3: 47.	N/A	N/A	0	X	X
9. Giliberti V, Baldassarre L, Rosa A , de Turris V, Ortolani M, Nucara A and Calvani P (2016) Protein clustering in chemically stressed HeLa cells studied by infrared nanospectroscopy. Nanoscale. DOI: 10.1039/C6NR05783G	7.367	7.713	8		
10. Lenzi J, Pagani F, De Santis R, Limatola C, Bozzoni I, Di Angelantonio S & Rosa A (2016) Differentiation of control and ALS mutant human iPSCs into functional skeletal muscle cells, a tool for the study of neuromuscular diseases. Stem Cell Research 17:140-7	3.963	4.127	6		X

11. Rosa A[#] and Ballarino M[#] (2016) Long Noncoding RNA Regulation of Pluripotency. <i>Stem Cells International</i> 2016: 1797692	3.540	3.983	28	X	X
12. Baldassarre L, Giliberti V, Rosa A, Ortolani M, Bonamore A, Baiocco P, Kjoller K, Calvani P & Nucara A (2016) Mapping the amide I absorption in single bacteria and mammalian cells with resonant infrared nanospectroscopy. <i>Nanotechnology</i> 27: 075101	3.440	3.467	24		
13. Lenzi J, De Santis R, de Turris V, Morlando M, Laneve P, Calvo A, Caliendo V, Chiò A, Rosa A[#] & Bozzoni I[#] (2015) ALS mutant FUS proteins are recruited into stress granules in induced Pluripotent Stem Cells (iPSCs) derived motoneurons. <i>Disease Models & Mechanisms</i> 8: 755–766	4.316	4.978	38		X
14. Di Salvio M, Piccinni V, Gerbino V, Mantoni F, Camerini S, Lenzi J, Rosa A, Chellini L, Loreni F, Carri MT, Bozzoni I, Cozzolino M & Cestra G (2015) Pur-alpha functionally interacts with FUS carrying ALS-associated mutations. <i>Cell Death and Disease</i> 6: e1943	5.378	5.497	12		
15. Garofalo S, D'Alessandro G, Chece G, Brau F, Maggi L, Rosa A, Porzia A, Mainiero F, Esposito V, Lauro C, Benigni G, Bernardini G, Santoni A & Limatola C (2015) Enriched environment reduces glioma growth through immune and non-immune mechanisms in mice. <i>Nature Communications</i> 6: 6623	11.329	12.001	32		
16. Orticello M, Fiore M, Totta P, Desideri M, Barisic M, Passeri D, Lenzi J, Rosa A, Orlandi A, Maiato H, Bufalo DD & Degrassi F (2015) N-terminus-modified Hec1 suppresses tumour growth by interfering with kinetochore-microtubule dynamics. <i>Oncogene</i> 34: 3325–3335	7.932	7.401	8		
17. Rosa A, Papaioannou MD, Krzyspiak JE & Brivanlou AH (2014) miR-373 is regulated by TGFβ signaling and promotes mesendoderm differentiation in human Embryonic Stem Cells. <i>Developmental Biology</i> 391: 81-88	3.547	3.761	18	X	
18. Rosa A & Brivanlou AH (2013) Regulatory Non-Coding RNAs in Pluripotent Stem Cells. <i>Int J Mol Sci</i> 14: 14346-14373	2.339	2.721	25	X	
19. Morlando M, Dini Modigliani S, Torrelli G, Rosa A, Di Carlo V, Caffarelli E & Bozzoni I (2012) FUS stimulates microRNA biogenesis by facilitating co-transcriptional Droscha recruitment. <i>EMBO Journal</i> 31: 4502-4510	9.822	9.602	108		

20. Rosa A & Brivanlou AH (2011) A regulatory circuitry comprised of miR-302 and the transcription factors OCT4 and NR2F2 regulates human embryonic stem cell differentiation. EMBO Journal 30: 237-248	9.205	8.833	126	X	
21. Vonica A, Rosa A, Arduini BL & Brivanlou AH (2011) APOBEC2, a selective inhibitor of TGF β signaling, regulates left-right axis specification during early embryogenesis. Developmental Biology 350: 13-23	4.069	4.407	27		
22. Rosa A & Brivanlou AH (2010) Synthetic mRNAs: powerful tools for reprogramming and differentiation of human cells. Cell Stem Cell 7: 549–550	25.943	26.967	10	X	
23. Rosa A & Brivanlou AH (2009) microRNAs in early vertebrate development. Cell Cycle 8: 3513-3520	4.087	3.693	39	X	
24. Rosa A, Spagnoli FM & Brivanlou AH (2009) The miR-430/427/302 Family Controls Mesendodermal Fate Specification via Species-Specific Target Selection. Developmental Cell 16: 517–527	13.363	14.058	158	X	
25. Fatica A, Rosa A, Ballarino M, De Marchis ML, Rasmussen KD & Bozzoni I (2008) Role of microRNAs in myeloid differentiation. Biochem Soc Trans 36: 1201-1205	2.979	3.298	15		
26. Rosa A, Ballarino M, Sorrentino A, Sthandier O, De Angelis FG, Marchioni M, Masella B, Guarini A, Fatica A, Peschle C & Bozzoni I (2007) The interplay between the master transcription factor PU.1 and miR-424 regulates human monocyte/macrophage differentiation. Proc Natl Acad Sci USA 104: 19849–19854	9.598	10.369	195	X	
27. Fazi F, Zardo G, Gelmetti V, Travaglini L, Ciolfi A, Di Croce L, Rosa A, Bozzoni I, Grignani F, Lo-Coco F, Pelicci PG & Nervi C (2007) Heterochromatic gene repression of the retinoic acid pathway in acute myeloid leukemia. Blood 109: 4432–4440	10.896	9.768	70		
28. Nervi C, Fazi F, Rosa A, Fatica A & Bozzoni I (2007) Emerging role for microRNAs in acute promyelocytic leukemia. Curr Top Microbiol Immunol 313: 73–84	4.411	3.827	16		
29. Denti MA, Rosa A, D'Antona G, Sthandier O, De Angelis FG, Nicoletti C, Allocca M, Pansarasa O, Parente V, Musarò A, Auricchio A, Bottinelli R & Bozzoni I (2006) Body-wide gene therapy of Duchenne muscular dystrophy in the mdx mouse model. Proc Natl Acad Sci USA 103: 3758–3763	9.643	N/A	105		
30. Denti MA, Rosa A, D'Antona G, Sthandier O, De Angelis FG, Nicoletti C, Allocca M, Pansarasa O,	4.514	N/A	36		

Parente V, Musarò A, Auricchio A, Bottinelli R & Bozzoni I (2006) Chimeric adeno-associated virus/antisense U1 small nuclear RNA effectively rescues dystrophin synthesis and muscle function by local treatment of mdx mice. Human Gene Therapy 17: 565–574					
31. Fatica A, Rosa A, Fazi F, Ballarino M, Morlando M, De Angelis FG, Caffarelli E, Nervi C & Bozzoni I (2006) MicroRNAs and Hematopoietic Differentiation. Cold Spring Harb Symp Quant Biol 71: 205–210	N/A	N/A	14		
32. Fazi F*, Rosa A*, Fatica A, Gelmetti V, De Marchis ML, Nervi C & Bozzoni I (2005) A Minicircuitry Comprised of MicroRNA-223 and Transcription Factors NFI-A and C/EBP α Regulates Human Granulopoiesis. Cell 123: 819–831	29.431	N/A	755	X	
33. Denti MA, Rosa A, Sthandier O, De Angelis FG & Bozzoni I (2004) A new vector, based on the PolII promoter of the U1 snRNA gene, for the expression of siRNAs in mammalian cells. Molecular Therapy 10: 191–199	5.204	N/A	61		

Part XIII C – Oral presentations at scientific meetings, conferences and workshops

2003	Rosa A., Denti M.A., De Angelis F.G., Sthandier O. and Bozzoni I. (2003) Un nuovo vettore per l'espressione stabile di siRNA in cellule di mammifero, basato sulla trascrizione dipendente da RNA polimerasi II. Atti 5° Convegno FISV, Rimini, Oct. 10-13, 2003
2004	Fiori M.E., Laneve P., Rosa A., Frapane P., Fatica A., Caffarelli E., Bozzoni I. (2004) Regolazione trascrizionale e post-trascrizionale dei geni per i microRNA. Atti 6° convegno FISV, Riva del Garda (TN), Sept. 30 – Oct. 3, 2004
2005	Rosa A., Denti M.A., Sthandier O., De Angelis F.G. and Bozzoni I. (2005) Body-wide rescue of dystrophin and muscle function in mdx mice by antisense-snRNAs mediated exon-skipping. Atti 7° convegno FISV, Riva del Garda (TN), Sept. 22-25, 2005
2009	Rosa A. (2009) microRNAs in Embryonic Stem Cells and Early Vertebrate Development. Dept. of Genetics and Molecular Biology, Sapienza University. Rome Oct. 5, 2009
2011	Rosa A. (2011) Role of microRNAs in differentiation and development. Dept. of Biology and Biotechnology "Charles Darwin", Sapienza University. Rome June 14, 2011
2011	Rosa A. (2011) Role of miRNAs in embryonic stem cells. New frontiers in microRNAs analysis meeting. Rome June 15, 2011. INVITED TALK
2012	Rosa A., Lenzi J., Morlando M., Sthandier O., Ungaro F., Caliendo V., Calvo A., Chiò A., Broccoli V. and Bozzoni I. (2012) Generation of new tools and iPS cell-based in vitro model systems to study Amyotrophic Lateral Sclerosis (ALS). ABCD meeting "Stem Cells, Development and Regenerative Medicine". Turin May 4-6, 2012
2012	Rosa A. (2012) Seminar on Regenerative medicine: stem cells and nanotechnology. Master "The life sciences in journalism and in political-institutional relations" Sapienza University. Rome May 9, 2012. INVITED TALK
2012	Rosa A., Lenzi J., Morlando M., Sthandier O., Bozzoni I. (2012) Reprogramming somatic cells into iPS cells to generate an in vitro model system of Amyotrophic Lateral Sclerosis (ALS). Departmental Retreat, Dept. BBCE of the Sapienza University. Ponzano Romano (RM) June 6-

	7, 2012.
2012	Rosa A., Lenzi J., Morlando M., Sthandier O., Bozzoni I. (2012) Generation of patient-specific iPS cells to provide an in vitro model system of Amyotrophic Lateral Sclerosis (ALS). FISV 2012 Congress, Rome, Sept. 24-27, 2012
2012	Rosa A. (2012) From stem cells to reprogramming: applications in basic research and regenerative medicine. CSS Mendel. Rome November 12, 2012. INVITED TALK
2013	Rosa A. (2013) In vitro disease modeling with human iPS cells. Workshop: xeno-free culture of human ES cells and iPS cells. Catholic University of Rome. May 7, 2013. INVITED TALK
2015	Rosa A., Lenzi J., De Santis R., de Turreis V., Bozzoni I. (2015) In vitro disease modeling of Amyotrophic Lateral Sclerosis: an iPS TALE(N). Departmental Retreat, Dept. BBCD of the Sapienza University. Ponzano Romano (RM). June 9-10 2015
2015	Rosa A. (2015) Setting up of suitable model systems for the study of alteration of RNA metabolism in the pathogenesis of Amyotrophic Lateral Sclerosis. Symposium EBRI at Sapienza University: a decade since its foundation, in memory of Rita Levi-Montalcini. Sapienza University. Rome. November 26, 2015. INVITED TALK
2016	Rosa A. (2016) Gene editing and piggyBac vectors as useful tools to boost neurodegenerative disease modeling with iPSCs. IFOM-IEO campus. Milan. April 14, 2016. INVITED TALK
2016	Rosa A., De Santis R., Lenzi J., de Turreis V., Santini L., Bozzoni I. (2016) In vitro disease modeling of Amyotrophic Lateral Sclerosis with induced Pluripotent Stem Cells (iPSCs). VII Meeting Stem Cell Research Italy. Bologna. June 21-23, 2016
2017	Rosa A. (2017) Cellule staminali pluripotenti indotte e gene editing: nuove opportunità per le malattie neurodegenerative (Induced pluripotent stem cells and gene editing: new opportunities for neurodegenerative diseases). Accademia Medica di Roma. Rome. May 25, 2017. INVITED TALK
2017	Rosa A. (2017) In vitro disease modeling of Amyotrophic Lateral Sclerosis with iPS cells and gene editing. IRBM Science Park. Pomezia (RM). December 14, 2017. INVITED TALK
2018	Rosa A. (2018) Alterations of the microRNA pathway in human motoneurons with mutations in the FUS gene, linked to Amyotrophic Lateral Sclerosis. "RNA metabolism in neurologic diseases" Meeting. Pavia, Italy. July 6, 2018. INVITED TALK
2018	Rosa A. (2018) Dysregulation of RNA metabolism in iPSC-derived FUS mutant human motor neurons, an in vitro model system for Amyotrophic Lateral Sclerosis. FISV 2018 Congress. Rome. Sept. 18-21, 2018
2018	Rosa A. (2018) StressFUS - Impairment of the stress response by mutant FUS in iPSC-derived human ALS motoneurons. "FOCUS ON ALS" Meeting. Genova Sept. 27-29, 2018. INVITED TALK
2018	Rosa A. and Colosi C. (2018) Bioprinting of human iPS cells to generate 3D neural constructs. "Discovering Organoids: The Journey Of 3D Culture Systems" Workshop. Rome. Sept. 18, 2018. INVITED TALK