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Decreto Rettore Università di Roma “La Sapienza” n 1033/2023 del 27.04.2023

## ARIANNA MONTANARI

### Curriculum Vitae

#### Part I – General Information

Full Name	Arianna Montanari
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#### Part II – Education

Type	Year	Institution	Notes (Degree, Experience,...)
University graduation	2006	Sapienza University of Rome	Degree in Biology with major in Biotechnology. Final score: 110 cum laude/110. Title of Final Thesis: “Characterization of G51A mutation of the mitochondrial tRNA <sup>His</sup> gene in <i>S.cerevisiae</i> : phenotypic analysis and suppression in different nuclear contexts”
Pre-doctorate training	2007	Sapienza University of Rome	The training at Prof. L. Frontali and S. Francisci laboratory was very formant to acquire relevant expertises on different molecular, cellular and microbiological techniques
PhD	2011	Sapienza University of Rome	PhD program in Developmental and Cell Biology at Department of Biology and Biotechnologies “C. Darwin”. Title of PhD Thesis: “Yeast as a model to study pathogenetic human equivalent mutations in mitochondrial tRNA genes”
Licensure 01	2006	University of Tuscia (VT)	Qualification as Biologist after passing the State Examination
Licensure 02	2017	Ministry of Education, University and Research	National Scientific Qualification as Associate Professor in Applied Biology (SC 05/F1, Call D.D. 1532/2016)
Licensure 03	2023	Ministry of Education, University and Research	Application for National Scientific Qualification as Associate Professor (n 95465) sent in the sixth quarter of the Call for Candidates 2021/2023 (SC 03/D1 – SSD CHIM/11).

#### Part III – Appointments

##### IIIA – Academic Appointments

Start	End	Institution	Position
19/07/2021	11/02/2022	Sapienza University of Rome	Occasional self-employment assignment at Department of Biology and Biotechnologies “C. Darwin” (Call n. 16/2021 – C.E. of 31/05/2021)
01/06/2020	31/05/2021	Sapienza University of Rome	Research fellow at Department of Biology and Biotechnologies “C. Darwin” (Cat. B – Type II, SSD CHIM/11. Call. n. 03/2020 of 23/01/2020)
13/01/2020	10/03/2020	Sapienza University of Rome	Occasional self-employment assignment at Department

			of Biology and Biotechnologies “C. Darwin” (Call n. 27/2019 C.E. of 30/10/2019)
01/06/2018	31/05/2019	Sapienza University of Rome	Research fellow at Department of Biology and Biotechnologies “C. Darwin” (Cat. B – Type II, SSD CHIM/11. Call. n. 9/2018 of 13/04/2018)
01/04/2017	31/03/2018	Sapienza University of Rome	Research fellow at Department of Biology and Biotechnologies “C. Darwin” (Cat. A – Type II, SSD BIO/19. Call. n. 01/2017 of 11/01/2017)
01/12/2015	30/11/2016	Sapienza University of Rome	Research fellow at Department of Biology and Biotechnologies “C. Darwin” (Cat. B – Type II, SSD CHIM/11. Call. n. 12/2015 of 11/09/2015)
01/06/2014	31/05/2015	Sapienza University of Rome	Research contract with Telethon Foundation, project n. GGP13097 at Department of Radiological Sciences, Oncology and Anatomical Pathology
01/05/2013	30/04/2014	Sapienza University of Rome	Research fellow at Department of Radiological Sciences, Oncology and Anatomical Pathology (Cat. B – Type II, SSD MED/08. Call n. 2/2013 of 21/01/2013)
01/04/2012	31/03/2013	Sapienza University of Rome	Research fellow at Department of Biology and Biotechnologies “C. Darwin” (Cat. B – Type II, SSD BIO/10. Call n. 33/2011 of 15/12/2011)
01/10/2011	31/12/2011	Newcastle University (UK)	FEBS Short-Term Fellow (Federation of European Biochemical Societies) at Prof. R.N. Lightowers laboratory, Wellcome Trust Centre for Mitochondrial Research.
01/04/2011	31/03/2012	Sapienza University of Rome	Post-doc fellow “Teresa Ariaudo” at Department of Biology and Biotechnologies “C. Darwin”, granted by Pasteur Institute Italy - Cenci Bolognetti Foundation.
01/07/2006	30/06/2007	Sapienza University of Rome	Contract researcher at Department of Biochemical Sciences “A. Rossi Fanelli”

### IIIB – Other Appointments (Tutoring)

Start	End	Institution	Position
16/07/2021	20/10/2021	Sapienza University of Rome	Tutor for laboratory activities in the context of the Scientific Degrees Plan (PLS) in Biology and Biotechnology at Department of Biology and Biotechnologies “C. Darwin” (Call n. 12/2021-C.E of 16/04/2021)
03/12/2019	30/06/2020	Sapienza University of Rome	Tutor for laboratory activities in the context of the Scientific Degrees Plan (PLS) in Biology and Biotechnology at Department of Biology and Biotechnologies “C. Darwin” (Call n. 21/2019 PLS CE del 02/10/2019)
12/11/2018	07/03/2019	Sapienza University of Rome	Tutor for laboratory activities in the context of the Scientific Degrees Plan (PLS) in Biology and Biotechnology at Department of Biology and Biotechnologies “C. Darwin” (Call n. 10/2018-PLS of 20/09/2018)
12/07/2017	31/12/2017	Sapienza University of Rome	Tutor for laboratory activities in the context of the Scientific Degrees Plan (PLS) in Biology and Biotechnology at Department of Biology and Biotechnologies “C. Darwin” (Call n. 3/2017-PLS of 18/05/2017)

20/11/2016	20/02/2017	Sapienza University of Rome	Tutor for laboratory activities in the context of the Scientific Degrees Plan (PLS) in Biology and Biotechnology at Department of Biology and Biotechnologies "C. Darwin" (Call n. 7/2016-PLS of 05/10/2016)
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#### Part IV – Teaching experience

Year	Institution/Conference	Lecture/Course
2023	ICS Sandro Pertini Fonte Nuova (RM)	Teaching of Mathematics and Sciences (Class of competition A028) at lower secondary school
2019	Universidad Pablo de Olavide, Siviglia (Spain)	Member of the International PhD Examination Board for PhD thesis presented by Dr. Marina Villanueva Paz (group of Prof. José Antonio Sánchez Alcázar)
From 2018	Sapienza University of Rome	Co-supervisor of bachelor's and master's theses for the Faculties of Biology and Industrial Biotechnologies.
From 2018	Sapienza University of Rome	Seminar activities for the course of Model systems and industrial applications, degree program in Biology and Cell Technology
2017	12 <sup>th</sup> International Meeting on Yeast Apoptosis, Bari (Italy)	Speaker in the Session: "Mitochondrial function and pathophysiology". Title: "Mitochondrial diseases: yeast as a model for the study of suppressors"
2015	XXVII International Conference on Yeast Genetics and Molecular Biology, Levico Terme (Italy)	Speaker in the Plenary Session: "Yeast as a model for human diseases and drug testing". Title: "The yeast model for the study of mitochondrial diseases"
2015	Italian Genetic Association (AGI), Cortona (Italy)	Speaker at Course: "Modelling in yeast of the molecular mechanisms of genomic instability of mammalian cells". Title: "The yeast <i>Saccharomyces cerevisiae</i> as a model to study diseases due to mutations in mitochondrial tRNA genes"
From 2014	Sapienza University of Rome	Member of the Examination Committee for the course of Fermentation chemistry and industrial microbiology, degree program in Industrial Chemistry
From 2014	Sapienza University of Rome	Member of the Examination Committee for the course of Model systems and industrial applications, degree program in Biology and Cell Technology
2013	XXVI International Conference on Yeast Genetics and Molecular Biology, Frankfurt (Germany)	Speaker in the Session: "Yeast as a model to understand disease mechanisms, Mitochondrial and cytosolic RNA metabolism". Title: "Catalytic activity of mt tRNA interactors is not required to rescue the defective phenotype of yeast mt tRNA mutations associated to diseases"
From 2011	Sapienza University of Rome	Referent for the technical-scientific training of university students
2010	VII MiPmeeting "Mitochondrial Physiology - The Many Functions of the Organism in our Cells", Obergurgl (Austria)	Speaker in the Session: "Mitochondria – the organism in communication with the cell". Title: "Mitochondrial tRNA pathogenetic human substitutions: analysis of the yeast equivalent mutants and study of suppressive effect of interactor molecules"

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

Year	Title
From 2010	Member of the Italian Society of Biochemistry and Molecular Biology (SIB)

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

Year	Title	Program	Position
2020	Use of microbial model systems to study the effect of stress on aging and related diseases	Scientific Research Project Ateneo 2020, n. RP120172A30C991B	I-investigator
2018	Identification and characterization of new epigenetic factors and metabolic control	Scientific Research Project Ateneo 2018, n. RM118164282E464E	I-investigator
2017	Yeast as a cell model to study the influence of mtDNA background on the mitochondrial metabolism	Scientific Research Project Ateneo 2017, n. RP11715C2F8D31A3	I-investigator
2015/2017	Towards a therapy for mitochondrial tRNA disorders	Project to Start Research by Pasteur Institute Italy - Cenci Bolognetti Foundation	PI-principal investigator
2016	Yeast as a model to investigate cellular and molecular mechanisms of human diseases	Scientific Research Project Ateneo 2016, n. RM116154E1B39A79	I-investigator
2015	Evaluation of the efficacy of carbon nanotubes for delivering peptides into mitochondria	Scientific Research Project Ateneo 2015, n. C26A15RCZ3	I-investigator
2013/2015	Isolated domains of aminoacyl tRNA synthetases as a novel therapeutic tool for mt tRNA mutation associated disease	Research Project by Telethon n. GGP13097	I-investigator
2012	Towards a therapy for mitochondrial DNA disorders - Is the defective phenotype of pathogenic mitochondrial tRNA mutations rescued by a contact with an RNA-binding domain of type I aminoacyl-tRNA synthetases?	Project to Start Research by Sapienza University of Rome, prot. C26N12757J	PI-principal investigator
2010/2011	<i>S. cerevisiae</i> yeast as a study model of human pathologies and aging	PRIN 2010-2011	I-investigator
2010	A yeast model for human mitochondrial diseases. Suppressors of respiratory defects in yeast and human cells	Scientific Research Project funded by Pasteur Institute Italy - Cenci Bolognetti Foundation	I-investigator
2006	Nuclearly encoded mitochondrial protein synthesis factors can "cure" the respiratory defects due to pathogenetic human equivalent base substitutions in yeast mt tRNA genes	Scientific Research Project funded by Pasteur Institute Italy - Cenci Bolognetti Foundation	I-investigator

## Part VII – Patents

Year	Registrant	Patent number
2011	Sapienza University of Rome	International extension n° PCT 114994: "Peptides for treatment of mitochondrial pathologies"
2010	Sapienza University of Rome	RM 2010 A 000696: "Molecole peptidiche per il trattamento di patologie mitocondriali"

## Part VIII – Course participation

Year	Institution	Course
2023	Atelier Koinè	"Promuovere il potenziale degli studenti all'interno della comunità scolastica in chiave innovativa"
2012	Sapienza University of Rome	"La Mitosi: Approcci sperimentali e sistemi modello"
2008	Sapienza University of Rome	"Corso teorico-pratico sull'utilizzo della Real time RT-PCR"

2008	Applied Biosystems	“Dall'estrazione dell'RNA all'analisi dei dati: ottimizzazione del flusso di lavoro di un esperimento di espressione genica”
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## Part IX – Research Activities

Keywords	Brief Description
Model systems	The research concerns the study in different model systems the pathogenic effect of mitochondrial (mt) mutations affecting health and mt function. The yeast <i>Saccharomyces cerevisiae</i> has been optimized to understand the molecular mechanisms of pathogenic human equivalent mutations in mt tRNA genes. Moreover, this simple model system resulted very useful to isolate new suppressor genes able to rescue the functionality of mutated mt tRNAs. Small suppressive sequences have been isolated and their chemical structure and biological activity have been studied. The research is also focused on the role of epigenetic modifiers on mt stability. The expertise in molecular and cell biology has been applied to human cells in culture, using transfection techniques to test the effect of suppressor genes identified in yeast. The research is also extended to pluricellular model systems, such as the nematode <i>Caenorhabditis elegans</i> to promote the generation of platforms for multi-drugs screening by which testing molecules for different therapeutic approaches.
Mitochondria	
Human diseases	
DNA mutations	
tRNA structure	
Nuclear suppressors	

## Part X – Summary of Scientific Achievements

Product type	Number	Data Base	Start	End
Papers [international]	28	Scopus	2008	2023
Books [scientific]	1	Web of Science (WoS)	2015	2015

Total Impact factor	128
Total Citations	379
Average Citations per Product	13,1
Hirsch (H) index	11
Normalized H index*	0,73

\*H index divided by the academic seniority.

## PART XI –List of Scientific Achievements (as in Part X)

1. Camponeschi I, **Montanari A**, Mazzoni C, Bianchi MM (2023) Light Stress in Yeasts: Signaling and Responses in Creatures of the Night, *Int J Mol Sci* 24:6929
2. Pompa L, **Montanari A**, Tomassini A, Bianchi MM, Aureli W, Miccheli A, Uccelletti D, Schifano E (2023) In Vitro Probiotic Properties and In Vivo Anti-Ageing Effects of Lactopantibacillus plantarum PFA2018AU Strain Isolated from Carrots on *Caenorhabditis elegans*, *Microorganisms* 11:1087
3. Ficociello G, Schifano E, Di Nottia M, Torraco A, Carrozzo R, Uccelletti D, **Montanari A** (2023) Silencing of the mitochondrial ribosomal protein L-24 gene activates the oxidative stress response in *Caenorhabditis elegans*, *BBA Gen Subj* 1867:130255
4. **Montanari A** (2022) *In vivo* analysis of mitochondrial protein synthesis in *Saccharomyces cerevisiae* mitochondrial tRNA mutants, *Methods Mol Biol* 2497, 243-254

5. De Luca V, Leo M, Cretella E, **Montanari A**, Saliola M, Ciaffi G, Vecchione A, Stoppacciaro A, Filetici P (2022) Role of yUbp8 in Mitochondria and Hypoxia Entangles the Finding of Human Ortholog Usp22 in the Glioblastoma Pseudo-Palisade Microlayer, *Cells* 11, 1682
6. Torraco A, Morlino S, Rizza T, Di Nottia M, Bottaro G, Bisceglia L, **Montanari A**, Cappa M, Castori M, Bertini E, Carozzo R. (2022) A novel homozygous variant in COX5A causes an attenuated phenotype with failure to thrive, lactic acidosis, hypoglycemia, and short stature, *Clin Genet* 102, 56-60
7. Camponeschi I, **Montanari A**, Beccaccioli M, Reverberi M, Mazzoni C and Bianchi MM (2021) Light-stress response mediated by the transcription factor *KIMga2* in the yeast *Kluyveromyces lactis*, *Frontiers in Microbiology* 12, 705012
8. **Montanari A**, Leo M, De Luca V, Filetici P, Francisci S (2019) Gcn5 histone acetyltransferase is present in the mitoplasts, *Biol Open* 8, bio041244
9. Leo M, Fanelli G, Di Vito S, Traversetti B, La Greca M, Palladino RA, **Montanari A**, Francisci S, Filetici P (2018) Ubiquitin protease Ubp8 is necessary for *S. cerevisiae* respiration, *BBA-Molecular Cell Research*, 1865, 1491-1500
10. Francisci S, **Montanari A** (2017) Mitochondrial diseases: Yeast as a model for the study of suppressors, *BBA-Molecular Cell Research*, 1864, 666-673
11. Di Nottia M, **Montanari A**, Verrigni D, Oliva R, Torraco A, Fernandez-Vizarrá E, Diodato D, Rizza T, Bianchi M, Catteruccia M, Zeviani M, Dionisi-Vici C, Francisci S, Bertini E, Carozzo R (2017) Novel homozygous mutation in mitochondrial elongation factor EF-Tu associated to dysplastic leukoencephalopathy and defective mitochondrial DNA translation, *BBA- Molecular Basis of Diseases* 1863, 961-967
12. Canzonetta C, Leo M, Guarino SR, **Montanari A**, Francisci S, Filetici P (2016) SAGA complex and Gcn5 are necessary for respiration in budding yeast, *BBA-Molecular Cell Research* 1863, 3160-3168
13. Ficociello G, Salemme A, Uccelletti D, Fiorito S, Togna AR, Vallan L, González-Domínguez JM, Da Ros T, Francisci S, **Montanari A** (2016) Evaluation of the efficacy of carbon nanotubes for delivering peptides into mitochondria, *RSC Adv* 6, 67232-67241
14. Torraco A, Bianchi M, Verrigni D, Gelmetti V, Riley L, Niceta M, Martinelli D, **Montanari A**, Guo Y, Rizza T, Diodato D, Di Nottia M, Lucarelli B, Sorrentino F, Piemonte F, Francisci S, Tartaglia M, Valente EM, Dionisi-Vici C, Christodoulou J, Bertini E, Carozzo R (2016) A novel mutation in NDUFB11 unveils a new clinical phenotype associated with lactic acidosis and sideroblastic anemia, *Clin Genet* 91, 441-447
15. De Angelis L, Rinaldi T, Cirigliano A, Bello C, Reverberi M, Amaretti A, **Montanari A**, Santomartino R, Raimondi S, Gonzalez A, Bianchi MM (2016) Functional roles of the fatty acid desaturases encoded by KIOLE1, FAD2 and FAD3 in the yeast *Kluyveromyces lactis*, *Microbiology* 162, 1435-1445
16. Perli E, Fiorillo A, Giordano C, Pisano A, **Montanari A**, Grazioli P, Campese AF, Di Micco P, Tuppen HA, Genovese I, Poser E, Preziuso C, Taylor RW, Morea V, Colotti G, d'Amati G (2016) Short peptides from leucyl-tRNA synthetase rescue disease-causing mitochondrial tRNA point mutations *Hum Mol Genet* 25, 903-915
17. Ottaviano D, **Montanari A**, De Angelis L, Santomartino R, Visca A, Brambilla L, Rinaldi T, Bello C, Reverberi M, Bianchi MM (2015) Unsaturated fatty acids-dependent linkage between respiration and fermentation revealed by deletion of hypoxic regulatory KIMGA2 gene in the facultative anaerobe-respiratory yeast *Kluyveromyces lactis*, *FEMSYR* 15: fov028
18. **Montanari A**, Bolotin-Fukuhara M, Fazzi D'Orsi M, De Luca C, Bianchi MM and Francisci S (2015) Biolistic transformation for delivering DNA into the mitochondria, Chapter 10, van den

Berg MA and Maruthachalam K – *Genetic Transformation Systems in Fungi, Volume 1*, ISBN: 978-3-319-10141-5, Springer International Publishing Switzerland

19. Di Micco P, Fazzi D'Orsi M, Morea V, Frontali L, Francisci S, **Montanari A** (2014) The yeast model suggests the use of short peptides derived from mt LeuRS for the therapy of diseases due to mutations in several mt tRNAs, *BBA-Molecular Cell Research* 1843, 3065-3074
20. **Montanari A**, Francisci S, Fazzi D'Orsi M, Bianchi MM (2014) Strain-specific nuclear genetic background differentially affects mitochondria-related phenotypes in *Saccharomyces cerevisiae*, *MicrobiologyOpen* 3, 288-298
21. Hornig-Do HT, **Montanari A**, Rozanska A, Tuppen HA, Almalki AA, Abg-Kamaludin DP, Frontali L, Francisci S, Lightowlers RN, Chrzanowska-Lightowlers ZM (2014) Human mitochondrial leucyl tRNA synthetase can suppress non cognate pathogenic mt-tRNA mutations, *EMBO Molecular Medicine* 6, 183-193
22. Perli E, Giordano C, Pisano A, **Montanari A**, Campese AF, Reyes A, Ghezzi D, Nasca A, Tuppen HA, Orlandi M, Di Micco P, Poser E, Taylor RW, Colotti G, Francisci S, Morea V, Frontali L, Zeviani M, d'Amati G (2014) The isolated carboxy-terminal domain of human mitochondrial leucyl-tRNA synthetase rescues the pathological phenotype of mitochondrial tRNA mutations in human cells, *EMBO Molecular Medicine* 6,169-182
23. **Montanari A**, Zhou YF, Fazzi D'Orsi M, Bolotin-Fukuhara M, Frontali L and Francisci S (2013) Analysing the suppression of respiratory defects in the yeast model of human mitochondrial tRNA diseases, *Gene* 527, 1-9
24. Perli E, Giordano C, Tuppen HAL, Montopoli M, **Montanari A**, Orlandi M, Pisano A, Catanzaro D, Caparrotta L, Musumeci B, Autore C, Morea V, Di Micco P, Gallo P, Francisci S, Frontali L, Taylor RW, d'Amati G (2012) Isoleucyl-tRNA synthetase levels modulate the penetrance of a homoplasmic m.4277T>C mitochondrial tRNA<sup>Ile</sup> mutation causing hypertrophic cardiomyopathy, *Hum Mol Genet* 21, 85-100
25. Francisci S, **Montanari A**, De Luca C, Frontali L (2011) Peptides from aminoacyl-tRNA synthetases can cure the defects due to mutations in mt tRNA genes, *Mitochondrion* 11, 919-923
26. **Montanari A**, De Luca C, Di Micco P, Morea V, Frontali L, Francisci S (2011) Structural and functional role of bases 32 and 33 in the anticodon loop of yeast mitochondrial tRNA<sup>Ile</sup>, *RNA* 17, 1983-1996
27. **Montanari A**, De Luca C, Frontali L, Francisci S (2010) Aminoacyl-tRNA synthetases are multivalent suppressors of defects due to human equivalent mutations in yeast mt tRNA genes, *BBA-Mcr* 1803, 1050-1057
28. De Luca C, Zhou YF, **Montanari A**, Morea V, Oliva R, Besagni C, Bolotin-Fukuhara M, Frontali L, Francisci S (2009) Can yeast be used to study mitochondrial diseases? Biolistic tRNA mutants for the analysis of mechanisms and suppressors, *Mitochondrion* 9, 408-417
29. **Montanari A**, Besagni C, De Luca C, Morea V, Oliva R, Tramontano A, Bolotin-Fukuhara M, Frontali L, Francisci S (2008) Yeast as a model of human mitochondrial tRNA base substitutions: investigation of the molecular basis of respiratory defects, *RNA* 14, 275-283

## Part XII – Selected Publications

List of the 12 publications selected for the evaluation in the period of 10 years preceding the publication of Call issued with D.R. n. 1033/2023 of 27/04/2023, C.C. 2023RTDB001 (as indicated at Art. 1 of this Call).

For each publication report title, authors, reference data, journal IF - calculated in the year of publication by using Journal Citations Reports (jcr.clarivate.com), citations (using Scopus or WoS).

- 1) Ficociello G, Schifano E, Di Nottia M, Torracco A, Carrozzo R, Uccelletti D, **Montanari A** (2023) Silencing of the mitochondrial ribosomal protein L-24 gene activates the oxidative stress response in *Caenorhabditis elegans*, *BBA Gen Subj* 1867:130255. doi: 10.1016/j.bbagen.2022.130255.  
IF<sub>(2023)</sub>= 4,117; Citations<sub>(WoS)</sub>=0
- 2) Camponeschi I, **Montanari A**, Beccaccioli M, Reverberi M, Mazzoni C and Bianchi MM (2021) Light-stress response mediated by the transcription factor *KIMga2* in the yeast *Kluyveromyces lactis*, *Frontiers in Microbiology* 12, 705012. doi: 10.3389/fmicb.2021.705012.  
IF<sub>(2021)</sub>= 6,064; Citations<sub>(WoS)</sub>= 2
- 3) **Montanari A**, Leo M, De Luca V, Filetici P, Francisci S (2019) Gcn5 histone acetyltransferase is present in the mitoplasts, *Biol Open* 8, bio041244. doi: 10.1242/bio.041244.  
IF<sub>(2019)</sub>= 2,029; Citations<sub>(WoS)</sub>= 12
- 4) Francisci S, **Montanari A** (2017) Mitochondrial diseases: Yeast as a model for the study of suppressors, *BBA-Molecular Cell Research*, 1864, 666-673. doi: 10.1016/j.bbamcr.2017.01.008.  
IF<sub>(2017)</sub>= 4,615; Citations<sub>(WoS)</sub>= 3
- 5) Di Nottia M, **Montanari A**, Verrigni D, Oliva R, Torracco A, Fernandez-Vizorra E, Diodato D, Rizza T, Bianchi M, Catteruccia M, Zeviani M, Dionisi-Vici C, Francisci S, Bertini E, Carrozzo R (2017) Novel homozygous mutation in mitochondrial elongation factor EF-Tu associated to dysplastic leukoencephalopathy and defective mitochondrial DNA translation, *BBA- Molecular Basis of Diseases* 1863, 961-967. doi: 10.1016/j.bbadis.2017.01.022.  
IF<sub>(2017)</sub>= 5,108; Citations<sub>(Scopus)</sub>= 9
- 6) Ficociello G, Salemme A, Uccelletti D, Fiorito S, Togna AR, Vallan L, González-Domínguez JM, Da Ros T, Francisci S, **Montanari A** (2016) Evaluation of the efficacy of carbon nanotubes for delivering peptides into mitochondria, *RSC Adv* 6, 67232-67241. doi: 10.1039/C6RA14254K.  
IF<sub>(2016)</sub>= 3,108; Citations<sub>(Scopus)</sub>= 7
- 7) Perli E, Fiorillo A, Giordano C, Pisano A, **Montanari A**, Grazioli P, Campese AF, Di Micco P, Tuppen HA, Genovese I, Poser E, Preziuso C, Taylor RW, Morea V, Colotti G, d'Amati G (2016) Short peptides from leucyl-tRNA synthetase rescue disease-causing mitochondrial tRNA point mutations, *Hum Mol Genet* 25, 903-915. doi: 10.1093/hmg/ddv619.  
IF<sub>(2016)</sub>= 5,34; Citations<sub>(WoS)</sub>= 15
- 8) Ottaviano D, **Montanari A**, De Angelis L, Santomartino R, Visca A, Brambilla L, Rinaldi T, Bello C, Reverberi M, Bianchi MM (2015) Unsaturated fatty acids-dependent linkage between respiration and fermentation revealed by deletion of hypoxic regulatory *KIMGA2* gene in the facultative anaerobe-respiratory yeast *Kluyveromyces lactis*, *FEMSYR* 15: fov028. doi: 10.1093/femsyr/fov028.  
IF<sub>(2015)</sub>= 2,479; Citations<sub>(WoS)</sub>= 14
- 9) Di Micco P, Fazzi D'Orsi M, Morea V, Frontali L, Francisci S, **Montanari A** (2014) The yeast model suggests the use of short peptides derived from mt LeuRS for the therapy of diseases due

to mutations in several mt tRNAs, *BBA-Molecular Cell Research* 1843, 3065-3074. doi: 10.1016/j.bbamcr.2014.09.011.

IF<sub>(2014)</sub>= 5,019; Citations<sub>(WoS)</sub>= 6

- 10) **Montanari A**, Francisci S, Fazzi D'Orsi M, Bianchi MM (2014) Strain-specific nuclear genetic background differentially affects mitochondria-related phenotypes in *Saccharomyces cerevisiae*, *MicrobiologyOpen* 3, 288-298. doi: 10.1002/mbo3.167.

IF<sub>(2014)</sub>= 2,213; Citations<sub>(WoS)</sub>= 6

- 11) Hornig-Do HT, **Montanari A**, Rozanska A, Tuppen HA, Almalki AA, Abg-Kamaludin DP, Frontali L, Francisci S, Lightowlers RN, Chrzanowska-Lightowlers ZM (2014) Human mitochondrial leucyl tRNA synthetase can suppress non cognate pathogenic mt-tRNA mutations, *EMBO Molecular Medicine* 6, 183-193. doi: 10.1002/emmm.201303202.

IF<sub>(2014)</sub>= 8,665; Citations<sub>(Scopus)</sub>= 41

- 12) **Montanari A**, Zhou YF, Fazzi D'Orsi M, Bolotin-Fukuhara M, Frontali L and Francisci S (2013) Analysing the suppression of respiratory defects in the yeast model of human mitochondrial tRNA diseases, *Gene* 527, 1-9. doi: 10.1016/j.gene.2013.05.042.

IF<sub>(2013)</sub>= 2,082; Citations<sub>(WoS)</sub>= 9