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Decreto Rettore Università di Roma "La Sapienza" n 3103/2021 del 24.11.2021

MICHELE ZAMPIERI
Curriculum Vitae

Roma
03/12/2021

Part I – General Information

Full Name	Michele Zampieri
Date of Birth	02/03/1974

Part II – Education

Type	Year	Institution	Notes (Degree, Experience,…)
University graduation	2003	Università di Roma "La Sapienza"	Biology, 110/110 cum laude
PhD	2007	Università di Roma "La Sapienza"	Human Biology and Genetics
Pre-doctorate training	2003-2004	Pasteur Institute, Cenci Bolognetti Foundation	Research Fellow
Licensure	2003	Università di Roma "La Sapienza"	Passed the State Professional Practice Examination

Part III – Appointments

Academic Appointments

Start	End	Institution	Position
11/2006	12/2006	Università di Roma "La Sapienza"	Research Fellow, research contract
01/2007	12/2007	Università di Roma "La Sapienza"	Research Fellow, Italian Association for Cancer Research (AIRC)
01/2008	03/2008	Università di Roma "La Sapienza"	Research Fellow, research contract
04/2008	11/2008	Università di Roma "La Sapienza"	Research Fellow, Pasteur Institute, Cenci Bolognetti Foundation
12/2008	11/2010	Università di Roma "La Sapienza"	Post-Doctorate research Fellow
11/2010	To date	Università di Roma "La Sapienza"	Academic researcher
2014	2017	Università di Roma "La Sapienza"	Member of the Council (Giunta), Faculty of Pharmacy and Medicine
2014	2017	Università di Roma "La Sapienza"	Member of the Council (Giunta), Department of Cellular Biotechnologies and Haematology

Part IV – Teaching experience

Year	Institution	Lecture/Course
2007-2008	Università di Roma "La Sapienza"	Tutorial seminars (SSD BIO/12) in "Le basi della Medicina di Laboratorio" (cod. 10592837) course, 3rd year, 2nd semester, for the Degree in Medicine, Faculty of Medicine and Psychology
2006	Federation of European Biochemical Societies	Lecturer at the FEBS Advanced Lecture Course "Biology and Pathophysiology of Poly (ADP-ribosylation)". Granada, Spain, 01/2006. Org.: F Javier Oliver, Instituto de Biomedicina Lopez Neyra, CSIC, Granada, Spain.
2007-2011	Università di Roma "La Sapienza"	Lecturer on the "Laboratorio generale di Biochimica Clinica- SSD MED/46" module in the "Basi di Biochimica Clinica e di Genetica" (cod. 1035803) course, 1st year, 2nd semester, for the Degree in Medical Laboratory Technician, Faculty of Medicine and Psychology
2009-to date	Università di Roma "La Sapienza"	Lecturer on the "Biochimica Clinica e Biologia Molecolare clinica – SSD BIO/12" module in the "Metodologie di Diagnostica Molecolare e Statistica" course (cod. 1035811), 2nd year, 1st semester, for the Degree in Medical Laboratory Technician, Faculty of Medicine and Psychology
2014-to date	Università di Roma "La Sapienza"	Lecturer on the "Biochimica Clinica – SSD BIO/12" module in the "Biochemistry II" course (cod. 1026230), 2nd year, 2nd semester, for the Degree in Medicine, Faculty of Pharmacy and Medicine
2017-to date	Università di Roma "La Sapienza"	Lecturer on the "Biochimica Clinica – SSD BIO/12" module in the "Metodologie Diagnostiche di Patologia Clinica" course (cod. 1035192), 2nd year, 2nd semester, for the Degree in Medical Laboratory Technician, Faculty of Pharmacy and Medicine
2018-to date	Università di Roma "La Sapienza"	Lecturer of the "Tecniche di Medicina di Laboratorio – SSD BIO/12" module in the "Tecniche e strumentazione di base" course (cod. 1036441), 2nd year, 1st semester, for the Degree in Medical Laboratory Technician, Faculty of Pharmacy and Medicine
2014-2019	Università di Roma "La Sapienza"	Member of the Academic Board of the PhD Course in Human Biology and Medical Genetics, Faculty of Pharmacy and Medicine
2018-to date	Università di Roma "La Sapienza"	Lecturer in Clinical Biochemistry (SSD BIO/12) in the School of Specialisation in

	Hygiene and Preventive Medicine (Public Health), Faculty of Pharmacy and Medicine & Faculty of Medicine and Dentistry

Part V - Society memberberships, Awards and Honours

Year	Title
2004-to date	Member of the Italian group "The ADP-ribosylation processes", http://www.adpr.unina.it/indexit.html
2019-to date	Member of the international scientific society “The Epigenetics Society”, President Prof. Melanie Ehrlich, Tulane University school of Medicine, New Orleans, USA. http://epigeneticssocietyint.com/
2014-to date	Member of the Review Editors board of the “Frontiers in Endocrinology” journal (ISSN: 1664-2392), section “Endocrinology of Aging”
2021-to date	Member of the Topical Advisory Panel of the “Cells” journal (ISSN: 2073-4409), MDPI
2007	Awarded a postdoctoral fellowship for the project “PARP activity controls the methylation status of the DNMT1 promoter - possible impact of PARP inhibitors in preventing tumorigenesis” by the Italian Association for Cancer Research (AIRC)
2013	Awarded by the international journal “The Biochemical Journal” (ISSN:0264-6021) for the most cited article in the year 2013 contributing to an impact factor of 4.779 (2013 Journal Citation Reports - Thompson Reuters 2014). Article: Zampieri, M. et al. 2012. Biochem J., 441:645-52.
2018	Participation in the European patent "METHOD FOR THE DETERMINATION OF BIOLOGICAL AGE IN HUMAN BEINGS" (Cod.: EP2976433) as investigator in the WP1- DNA based Markers, European project MARK-AGE (200880 FP7-HEALTH).

Part VI - Funding Information

Grants as PI-principal investigator

Year	Title	Program	Grant value
2012	CTCF, PARP1 e DNMT1: loro possibile ruolo nella regolazione dello stato di metilazione di promotori di geni coinvolti nell'oncogenesi - C26A12PN9T.	Finanziamenti Ateneo Sapienza	12000
2013	CTCF, PARP1 e DNMT1: loro possibile ruolo nella regolazione dello stato di metilazione di promotori di geni coinvolti nell'oncogenesi - C26A134WJ2	Finanziamenti Ateneo Sapienza	12000
2014	Controllo trascrizionale del gene NOTCH3: ruolo epigenetico di CTCF e della poli-ADP-ribosilazione - C26A14932L	Finanziamenti Ateneo Sapienza	3000
2015	Epigenetic causes of NOTCH3	Finanziamenti Ateneo	4000

	overexpression in cancer cells: a role for the cancer testis antigen CTCFL/BORIS - C26A15JC9J	Sapienza	
2016	Link between 5-hydroxymethycytosine levels and poly(ADP-ribosyl)ation in human MS brain - 2015/R/25	Associazione Italiana Sclerosi Multipla	29000
2017	Epigenetic origins of Ten-eleven translocation (TET) enzyme 2 silencing in normal appearing white matter of the Multiple Sclerosis affected brain - RP11715C4AF2F983	Finanziamenti Ateneo Sapienza	3000
2017	Finanziamento delle attività base di ricerca	MIUR	3000
2020	Increased PARylation impacts DNA demethylation processes in type 2 diabetes mellitus - RM120172AC70973A	Finanziamenti Ateneo Sapienza	10000

Grants as I-investigator

Year	Title	Program	PI
2003 & 2005	Is poly-ADPribose polymerases inhibition responsible for anomalous oncosuppressor gene hypermethylation?	Istituto Pasteur – Fondazione Cenci-Bolognetti	Paola Caiafa
2007	Crosstalk between poly(ADP-ribosyl)ation and DNA methylation in the regulation of gene expression	Istituto Pasteur – Fondazione Cenci-Bolognetti	Paola Caiafa
2007	Meccanismo d'azione ed efficacia di molecole biologiche e farmaci citotossici di ultima generazione e loro interazione	Ministero della Salute	Gabriella Zupi
2008	PARP-1 poli (ADP-ribosil)ata inserisce un segnale epigenetico sulla cromatina?	PRIN	Paola Caiafa
2008	MARK-AGE, European Study to Establish Biomarkers of Human Ageing	FP7-HEALTH-2007	Alexander Bürkle
2009	Does PARylated PARP-1 introduce an epigenetic mark on chromatin?	Istituto Pasteur – Fondazione Cenci-Bolognetti	Paola Caiafa
2010	Basi Molecolari delle Malattie	FIRB	Paolo Amati
2011	Studio dei meccanismi molecolari e cellulari coinvolti in patologie neuromuscolari	Finanziamenti Ateneo Sapienza	Antonio Musarò
2011	Reverse phase protein array: una nuova metodologia per la	Finanziamenti Ateneo Sapienza	Agostino Tafuri

	valutazione di profili proteomici in popolazioni staminali normali e neoplastiche		
2011	Does PARylated PARP-1 introduce an epigenetic mark on chromatin?	Istituto Pasteur – Fondazione Cenci-Bolognetti	Paola Caiafa
2011	Riprogrammazione epigenetica nella sclerosi multipla	Associazione Italiana Sclerosi Multipla	Paola Caiafa
2013	Una nuova metodologia per lo studio del profilo metabolico di cellule da pazienti con patologie onco-ematologiche	Finanziamenti Ateneo Sapienza	Agostino Tafuri
2013	Role of Parp-1 in the transcriptional control of key genes involved in pathological events	Istituto Pasteur – Fondazione Cenci-Bolognetti	Paola Caiafa
2015	Interfering with telomere replication of cancer cells: implication for therapy	AIRC	Erica Salvati
2018	Integrated Platform for phenotypic, functional, and molecular profiles of mouse models	Finanziamenti Ateneo Sapienza	Antonio Musarò
2018	Characterization of the 5mC profile of miRNAs in human cell lines and primary cells from healthy donors and Multiple Sclerosis patients	Finanziamenti Ateneo Sapienza	Valerio Fulci
2019	Molecular insights into the role of AGO2 in the assembly of telomerase holoenzyme	Finanziamenti Ateneo Sapienza	Claudia Carissimi

Part VII – Research Activities

Keywords	Brief Description
Epigenetics DNA methylation Poly(ADP-ribosyl)ation Aging Multiple Sclerosis Type 2 Diabetes Mellitus	Dr. Michele Zampieri is a Molecular Biology scientist and lecturer in Clinical Biochemistry and Molecular Biology at the Sapienza University of Rome. His scholarship was based on research questions and methods in the field of epigenetics. The current research interests of Dr Zampieri are mainly focused on epigenetic modifications as molecular events that regulate chromatin structure and function and in particular on the mechanisms by which DNA methylation patterns are maintained in mammalian cells. His recent work resolved the molecular mechanisms by which poly(ADP-ribosyl)ation (PARylation) can protect DNA methylation patterns in the mammalian genome. In particular, he found that auto-modified (i.e. PARylated) poly(ADP-ribose) polymerase-1 [PARP-1], either by itself or through the binding with transcription factors such as CTCF, can mark DNA regions on some gene promoters to maintain their unmethylated state, thus introducing an epigenetic code on chromatin. Since epigenetic deregulation underlies the pathogenesis of several complex diseases, the results of this research have high translational potential. In fact, his most recent research findings have shown that alterations in

PARylation and DNA methylation processes are involved in the pathogenesis of complex diseases, such as Multiple Sclerosis and Type 2 Diabetes Mellitus, and in human ageing, providing the basis for new therapeutic, prevention and monitoring strategies.
Research areas of specific interest:
- Role of PARylation and CTCF in the control of epigenetic regulatory mechanisms of oncogenic processes.
- Role of PARylation in the DNA demethylation processes and in controlling the expression and activity of TET enzymes.
- Epigenetic reprogramming by PARylation in multiple sclerosis and Type 2 Diabetes Mellitus
- DNA methylation in the physiology and pathology of human aging.

Part VIII – Summary of Scientific Achievements

Product type	Number	Data Base	Start	End
Papers [international]	38	Scopus	2003	2021
Papers [national]	0			
Books [scientific]	1	Academic Press, Elsevier	2018	2018
Books [teaching]	0			

	Total number	With IF>2	With IF>5
Papers, first author	8	8	2
Papers, corresponding author	5	5	4

Total Impact factor[§]	182,045
Average Impact factor per Product[§]	4,791
Total Citations[†]	1429
Average Citations per Product[†]	37,60
Hirsch (H) index[†]	21
Normalized H index*[†]	1,17

*H index divided by the academic seniority (18 years from 2003 to 2021).
[†]Source: Scopus, https://www.scopus.com/search/form.uri?display=basic#basic
[§]Based on the year of publication value, source: Journal Citation Reports, https://jcr.clarivate.com/jcr/home

ASN 2021-2023 simulation*

Associate professor (PA)

Value	Index	Threshold
15	Number of articles, last 5 years	10
797	Number of citations, last 10 years	319
16	H-index, last 10 years	10

Full professor (PO)

Value	Index	Threshold
28	Number of articles, last 10 years	20

1216	Number of citations, last 15 years	657
20	H-index, last 15 years	14

Commissioner

Value	Index	Threshold
28	Number of articles, last 10 years	35
1216	Number of citations, last 15 years	897
20	H-index, last 15 years	20

***Simulation report produced by IRIS – CINECA on December 1st 2021.**

Part IX– Selected Publications

List of the publications selected for the evaluation, in chronological order. For each publication, the journal 2021 IF (Source: Journal Citation Reports) is reported.

1) Bacalini MG, Reale A, Malavolta M, Ciccarone F, Moreno-Villanueva M, Dollé MET, Jansen E, Grune T, Gonos ES, Schön C, Bernhardt J, Grubeck-Loebenstein B, Sikora E, Toussaint O, Debacq-Chainiaux F, Capri M, Hervonen A, Hurme M, Slagboom PE, Breusing N, Aversano V, Tagliatesta S, Franceschi C, Blasco MA, Bürkle A, Caiafa P, **Zampieri M**.
Ageing affects subtelomeric DNA methylation in blood cells from a large European population enrolled in the MARK-AGE study.
Geroscience, 2021 Jun;43(3):1283-1302. doi: 10.1007/s11357-021-00347-9.
IF = 7.713

2) **Zampieri M**, Bacalini MG, Barchetta I, Scalea S, Cimini FA, Bertoccini L, Tagliatesta S, De Matteis G, Zardo G, Cavallo MG, Reale A.
Increased PARylation impacts the DNA methylation process in type 2 diabetes mellitus.
Clin Epigenetics, 2021 May 17;13(1):114. doi: 10.1186/s13148-021-01099-1.
IF = 6.551

3) Giacconi R, Costarelli L, Piacenza F, Basso A, Bürkle A, Moreno-Villanueva M, Grune T, Weber D, Stuetz W, Gonos ES, Schön C, Grubeck-Loebenstein B, Sikora E, Toussaint O, Debacq-Chainiaux F, Franceschi C, Hervonen A, Slagboom E, Ciccarone F, **Zampieri M**, Caiafa P, Jansen E, Dollé MET, Breusing N, Mocchegiani E, Malavolta M.
Zinc-induced Metallothionein in centenarian offspring from a large European population: the MARK-AGE Project.
J Gerontol A Biol Sci Med Sci, 2018 May 9;73(6):745-753. doi: 10.1093/gerona/glx192.
IF = 6.053

4) Ciccarone F, Valentini E, Malavolta M, **Zampieri M**, Bacalini MG, Calabrese R, Guastafierro T, Reale A, Franceschi C, Capri M, Breusing N, Grune T, Moreno-Villanueva M, Bürkle A, Caiafa P.
DNA hydroxymethylation levels are altered in blood cells from Down syndrome persons enrolled in the MARK-AGE project.
J Gerontol A Biol Sci Med Sci, 2018 May 9;73(6):737-744. doi: 10.1093/gerona/glx198.
IF = 6.053

5) Ciccarone F, **Zampieri M*,** Caiafa P.
**Joint senior authorship*
PARP1 orchestrates epigenetic events setting up chromatin domains.
Semin Cell Dev Biol, 2017 Mar;63:123-134. doi: 10.1016/j.semcdb.2016.11.010. Epub 2016 Nov 28.
IF = 7.727

6) Valentini E, **Zampieri M**, Malavolta M, Bacalini MG, Calabrese R, Guastafierro T, Reale A, Franceschi C, Hervonen A, Koller B, Bernhardt J, Slagboom PE, Toussaint O, Sikora E, Gonos ES, Breusing N, Grune T, Jansen E, Dollé ME, Moreno-Villanueva M, Sindlinger T, Bürkle A, Ciccarone F, Caiafa P.
Analysis of the machinery and intermediates of the 5hmC-mediated DNA demethylation pathway in aging on samples from the MARK-AGE Study.
Aging (Albany NY), 2016 Aug 29;8(9):1896-1922. doi: 10.18632/aging.101022.
IF = 5.682

7) Ciccarone F, Malavolta M, Calabrese R, Guastafierro T, Bacalini MG, Reale A, Franceschi C, Capri M, Hervonen A, Hurme M, Grubeck-Loebenstein B, Koller B, Bernhardt J, Schön C, Slagboom PE, Toussaint O, Sikora E, Gonos ES, Breusing N, Grune T, Jansen E, Dollé M, Moreno-Villanueva M, Sindlinger T, Bürkle A, **Zampieri M*,** Caiafa P. 2015.
**Joint senior authorship*
Age-dependent expression of DNMT1 and DNMT3B in PBMCs from a large European population enrolled in the MARK-AGE study.
Aging Cell 2016 Aug;15(4):755-65. doi: 10.1111/acel.12485. Epub 2016 May 11.
IF = 9.304

8) **Zampieri M**, Ciccarone F, Calabrese R, Franceschi C, Bürkle A, Caiafa P.
Reconfiguration of DNA methylation in aging.
Mech Ageing Dev, 2015 Nov;151:60-70. doi: 10.1016/j.mad.2015.02.002. Epub 2015 Feb 20.
IF = 5.432

9) Mariano G, Ricciardi MR, Trisciuoglio D, **Zampieri M**, Ciccarone F, Guastafierro T, Calabrese R, Valentini E, Tafuri A, Del Bufalo D, Caiafa P, Reale A.
PARP inhibitor ABT-888 affects response of MDA-MB-231 cells to doxorubicin treatment, targeting Snail expression.
Oncotarget, 2015 Jun 20;6(17):15008-21. doi: 10.18632/oncotarget.3634.
IF = 5.168

10) **Zampieri M**, Ciccarone F, Palermo R, Cialfi S, Passananti C, Chiaretti S, Nocchia D, Talora C, Screpanti I, Caiafa P.
The epigenetic factor BORIS/CTCFL regulates the NOTCH3 gene expression in cancer cells.
Biochim Biophys Acta, 2014 Sep;1839(9):813-25. doi: 10.1016/j.bbagrm.2014.06.017.
IF = 6.332

11) Calabrese R, **Zampieri M*,** Mechelli R, Annibali V, Guastafierro T, Ciccarone F, Coarelli G, Umeton R, Salvetti M, Caiafa P.
**Shared first name*
Methylation-dependent PAD2 upregulation in multiple sclerosis peripheral blood.
Mult Scler, 2012 Mar;18(3):299-304. doi: 10.1177/1352458511421055. Epub 2011 Aug 30.
IF = 6.312

12) **Zampieri M**, Ciccarone F, Guastafierro T, Bacalini MG, Calabrese R, Moreno-Villanueva M, Reale A, Chevanne M, Bürkle A, Caiafa P.
Validation of suitable internal control genes for expression studies in aging.
Mech Ageing Dev, 2010 Feb;131(2):89-95. doi: 10.1016/j.mad.2009.12.005. Epub 2009 Dec 28.
IF = 5.432

Il sottoscritto, consapevole che – ai sensi dell'art. 76 del D.P.R. 445/2000 – le dichiarazioni mendaci, la falsità negli atti e l'uso di atti falsi sono puniti ai sensi del codice penale e delle leggi speciali, dichiara che le informazioni rispondono a verità.

Il sottoscritto in merito al trattamento dei dati personali esprime il proprio consenso al trattamento degli stessi nel rispetto delle finalità e modalità di cui al d.lgs. n. 196/2003.

Roma, 03/12/2021

Il dichiarante