

Curriculum Vitae

Fiammetta Verni

Place: Rome
Date: 08/08/21



General Information

Full Name	Fiammetta Verni
Spoken Languages	Italian, English

Education

Type	Year	Institution	Notes (Degree,
University graduation	1988	Sapienza, University of Rome	Laurea cum laude in Biological Sciences
PhD	1994	Sapienza, University of Rome	Ph.D. in Evolutionary Biology

Appointments

Academic Appointments

Start	End	Institution	Position
1989	1989	Cornell University (Ithaca N.Y.)	Visiting Fellow
1994	1994	Sapienza, University of Rome	Post-doctoral fellowship Cenci-Bolognetti Foundation (Rome)
1995	1995	Sapienza, University of Rome	Post-doctoral Fellowship Telethon Foundation
1997	to date	Sapienza, University of Rome	University Researcher/Assistant Professor of Genetics
2020		ASN, National Scientific Habilitation	Associate Professor of Genetics (Qualification)

Other Appointments

Start	Institution	Position
Since 2015	Sapienza, University of Rome	Teaching board member, PhD School in Genetics and Molecular Biology
Since 2016	Sapienza, University of Rome	Board member of "Science Journalism" Master (SGP)"
Since	Sapienza, University of Rome	Board member of "Stem cells and genome

2017	editing” Master
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Teaching experience

Year	Institution	Lecture/Course
2001-2002	Sapienza, University of Rome	Course of Principles and Methods of Formal Genetic Analysis, Specialization school in Applied Genetics
2001-2006	Sapienza, University of Rome	Course of Genetics, degree in Biotechnology
2004-2006	Sapienza, University of Rome	Course of Methods and Systems in Genetics, master degree in Genetics and Molecular Biology
Since 2006	Sapienza, University of Rome	Course of Genetics (9CFU), Biological Sciences degree
Since 2021/22	Sapienza, University of Rome	Course of Cytogenetic and Mutagenesis (6CFU), Biological Sciences degree
Since 2021/22	Sapienza, University of Rome	Course of Genomic of Model Organisms (3CFU), master’s degree in Genomic, Industrial and Environmental Biotechnology

Society memberships

Year	Title
Since 2011	Member of Italian Society of Genetics (AGI)
Since 2011	Member of Genetics Society of America (GSA)

Funding Information

Year	Title	Program	Grant value
2016	Role of Pyridoxal phosphate (PLP) in preventing chromosomal aberrations induced by high levels of glucose	Sapienza Ateneo Research Grant. Protocol Number: RP116154BD677B11 (PI Fiammetta Verni)	€4500
2017	Mechanisms underlying the role of Pyridoxal phosphate (PLP) in counteracting chromosome aberrations in high glucose conditions	Sapienza Ateneo Research Grant. Protocol Number: RP11715C3AA9895A (PI Fiammetta Verni)	€3200
2018	Clastogenic effect of vitamin B6 deficiency in Drosophila diabetic cells	Sapienza Ateneo Research Grant. Protocol Number: RP1181641BD39C83 (PI Fiammetta Verni)	€3500

2019	Validation of <i>PDXK</i> as a novel GDM diabetes gene	Sapienza Ateneo Research Grant. Protocol Number: RP11916B55A6FCDE (PI Fiammetta Verni)	€4000
2020	The role of vitamin B6 in cancer using <i>Drosophila melanogaster</i> as model system	Sapienza Ateneo Research Grant. Protocol Number: RP120172838CFF6C (PI Fiammetta Verni)	€3500
	GRANTS as Investigator in the last 10 years		
2011-2013	Identification and Characterization of <i>Drosophila</i> telomere capping proteins	AIRC #IG10793 (PI Maurizio Gatti)	€ 300.000
2015-2017	Exploiting the <i>Drosophila</i> model system to investigate the function of human proteins involved in telomere maintenance.	AIRC #IG16020 (PI Maurizio Gatti)	€ 446.000

Research Activities

Keywords

Brief Description

DNA damage	<p>Our research is focused on the comprehension of the molecular mechanisms underlying the impact of the diet on genome integrity maintenance.</p> <p>The specific aims of our research deal with three main issues:</p> <ol style="list-style-type: none"> 1) <i>DNA damage and diabetes</i>. In particular, we are investigating the mechanisms through which hyperglycemia impairs genome integrity in different diabetic contexts by modeling different types of diabetes in flies. 2) <i>Relationship between vitamin B6, diabetes and genome integrity</i>. More specifically, we are studying the role of vitamin B6 in chromosome integrity maintenance and in diabetes and unraveling an unanticipated relationship between vitamin B6 deficiency, levels high glucose and chromosome aberrations. 3) <i>Role of vitamin B6 in cancer</i>. In particular we are investigating whether chromosome aberrations induced by low vitamin B6 levels can promote cancer development, using different <i>Drosophila</i> cancer models. <p>Given that <i>Drosophila</i> and humans share the majority of metabolic pathways, these studies will be instrumental for the identification of some of the mechanisms through which diet can protect from chromosome instability and ultimately from cancer</p>
Chromosome aberrations	
Vitamin B6	
Diabetes	
Cancer	

Peer review activity

Journals	Scientific Reports, Journal of cellular Physiology, Mutation Research, Cell stress, Tissue and cell, International Journal of Molecular Science
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Review editor	Frontiers in Genetics Frontiers in Cell and Developmental Biology (Epigenomics and Epigenetics section)
Funding Agencies	MIUR (PRIN grants)

Editorial board member activity

Since 2019	Editor Board member of Scientific Reports
2020	Guest Editor for the research topic entitled.” Shedding light on the complex relationship between vitamin deficiencies, epigenetics, DNA damage and cancer for <i>Frontiers in Nutrigenomics</i> .
Since 2021	Editor Board member of International Journal of Molecular Science
2021	Guest Editor for the Special issue of Int J Mol Sci entitled: DNA Damage Response (DDR) and DNA Repair

Organization of Conferences

2017	Organization of <i>Diabetes</i> section in the Biomedicine upfront in Genetics and Neurobiology, Erasmus exchange DDIF meeting. Dept of Biology and Biotechnology “Charles Darwin” Sapienza
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Speaker at Conferences

2011	AGI, SIBV, SIGA Joint congress
2012	XVI Italian Drosophila Research Conference
2017	Annual Meeting of the Department of Biology and Biotechnology “Charles Darwin”.
2017	Biomedicine upfront in Genetics and Neurobiology, Erasmus exchange DDIF meeting. Dept of Biology and Biotechnology “Charles Darwin” Sapienza University
2018	Biomedicine upfront in Genetics and Neurobiology, Erasmus exchange DDIF meeting. Dept of Biology and Biotechnology “Charles Darwin” Sapienza University

Summary of Scientific Achievements

Product type	Number	Data Base	Start	End
Papers [international]	35	Scopus, WOS	1994	2021
Books [teaching]	1	Translation of two chapters (23rd and 24th) of the book “PRINCIPI DI GENETICA” Snustad, DP,	2014	

		Simmons MJ, V edizione, Casa editrice Edises, , ISBN 8879598392		
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Total Impact factor	186.94
Mean Impact factor	5.34
Impact factor as first, co-first, corresponding or co-corresponding author	77.625
Total Citations	1019
Average Citations per Product	29.11
Hirsch (H) index	15

Publications in the last five years

1. Merigliano C, Burla R, La Torre M, Del Giudice S, Teo H, Liew CW, Chojnowski A, Goh WI, Olmos Y, Maccaroni K, Giubettini M, Chiolo I, Carlton JG, Raimondo D, Verni F, Stewart C, Rhodes D, Wright G, Burke B, Saggio I. AKTIP interacts with ESCRT I and is needed for the recruitment of ESCRT III subunits to the midbody Plos Genetic 2021 in press **IF 5.33**
2. Mascolo E, Liguori F, Stufiera Mecarelli L, Amoroso N, Merigliano C, Amadio S, Volonté C, Contestabile R, Tramonti A, Verni F. Functional Inactivation of Drosophila GCK Orthologs Causes Genomic Instability and Oxidative Stress in a Fly Model of MODY-2. Int J Mol Sci. 2021;22. doi:10.3390/ijms22020918 **IF 5.923; citations: 0**
3. Burla R, La Torre M, Maccaroni K, Verni F, Giunta S, Saggio I. Interplay of the nuclear envelope with chromatin in physiology and pathology. Nucleus. 2020;11: 205–218. doi:10.1080/19491034.2020.1806661. **IF 2.792; citations: 1**
4. Mascolo E, Verni F. Vitamin B6 and Diabetes: Relationship and Molecular Mechanisms. Int J Mol Sci. 2020;21. doi:10.3390/ijms21103669 **IF:5.923; citations: 6**
5. Licursi V, Anzellotti S, Favaro J, Sineri S, Carucci N, Cundari E, Fiore M, Guarguaglini G, Pippa S, Nisi P S, Verni F, Biagioni S, Cacci E, Amendola R, Lupo G, Negri R. X-ray irradiated cultures of mouse cortical neural stem/progenitor cells recover cell viability and proliferation with dose-dependent kinetics. Sci Rep. 2020;10: 6562. doi:10.1038/s41598-020-63348-2 **IF:3.998; citations: 2**
6. Contestabile R, di Salvo ML, Bunik V, Tramonti A, Verni F. The multifaceted role of vitamin B(6) in cancer: Drosophila as a model system to investigate DNA damage. Open Biol. 2020;10: 200034. doi:10.1098/rsob.200034. **IF:4.931; citations: 4**
7. Raimondo D, Remoli C, Astrologo L, Burla R, La Torre M, Verni F, Tagliafico E, Corsi A, Del Giudice S, Persichetti A, Giannicola G, Robey PG, Riminucci M, Saggio. Changes in gene expression in human skeletal stem cells transduced with constitutively active Gs α correlates with hallmark histopathological changes seen in fibrous dysplastic bone. PLoS One. 2020;15: e0227279. doi:10.1371/journal.pone.0227279. **IF:2.74; citations: 0**
8. Mascolo E, Amoroso N, Saggio I, Merigliano C, Verni F. Pyridoxine/pyridoxamine 5'-phosphate oxidase (Sgll/PNPO) is important for DNA integrity and glucose homeostasis maintenance in Drosophila. J Cell Physiol. 2020;235: 504–512. doi:10.1002/jcp.28990. **IF:5.546; citations: 7**

9. Mascolo E, Barile A, Mecarelli LS, Amoroso N, Merigliano C, Massimi A, Saggio I, Hansen T, Tramonti A, Di Salvo M., Barbetti F, Contestabile R, Verni F. The expression of four pyridoxal kinase (PDXK) human variants in *Drosophila* impacts on genome integrity. *Sci Rep.* 2019;9: 14188. doi:10.1038/s41598-019-50673-4 **IF:3.998; citations: 5**
10. Merigliano C, Mascolo E, Cesta A, Saggio I, Verni F. A new role for *Drosophila* Aurora-A in maintaining chromosome integrity. *Chromosoma.* 2019;128: 41–52. doi:10.1007/s00412-018-00687-0 **IF:3.442; citations: 3**
11. Burla R, La Torre M, Zanetti G, Bastianelli A, Merigliano C, Del Giudice S, Vercelli A, Di Cunto F, Boldo M, Verni F, Saggio I. p53-Sensitive Epileptic Behavior and Inflammation in *Ft1* Hypomorphic Mice. *Front Genet.* 2018;9: 581. doi:10.3389/fgene.2018.00581. **IF:3.517; citations: 4**
12. Merigliano C, Mascolo E, Burla R, Saggio I, Verni F. The Relationship Between Vitamin B6, Diabetes and Cancer. *Front Genet.* 2018;9: 388. doi:10.3389/fgene.2018.00388. **IF: 3.517; citations: 17**
13. Merigliano C, Mascolo E, La Torre M, Saggio I, Verni F. Protective role of vitamin B6 (PLP) against DNA damage in *Drosophila* models of type 2 diabetes. *Sci Rep.* 2018;8: 11432. doi:10.1038/s41598-018-29801-z. **IF:4.011; citations: 10**
14. Burla R, La Torre M, Merigliano C, Verni F, Saggio I. Genomic instability and DNA replication defects in progeroid syndromes. *Nucleus.* 2018;9: 368–379. doi:10.1080/19491034.2018.1476793. **IF:2.157; citations: 15**
15. La Torre M, Merigliano C, Burla R, Mottini C, Zanetti G, Del Giudice S, Carcuro M, Virdia I, Bucciarelli E, Manni I, Rampioni Vinciguerra G, Piaggio G, Riminucci M, Cumano A, Bartolazzi A, Verni F, Soddu S, Gatti M, Saggio I. Mice with reduced expression of the telomere-associated protein *Ft1* develop p53-sensitive progeroid traits. *Aging Cell.* 2018;17: e12730. doi:10.1111/accel.12730. **IF:7.346; citations: 6**
16. Di Giorgio ML, Esposito A, Maccallini P, Micheli E, Bavasso F, Gallotta I, Verni F, Feiguin F, Cacchione S, McCabe BD, Di Schiavi E, Raffa GD. *WDR79/TCAB1* plays a conserved role in the control of locomotion and ameliorates phenotypic defects in SMA models. *Neurobiol Dis.* 2017;105: 42–50. doi:10.1016/j.nbd.2017.05.005. **IF:5.227; citations: 9**
17. Bianchi FT, Tocco C, Pallavicini G, Liu Y, Verni F, Merigliano C, Bonaccorsi S, El-Assawy N, Priano L, Gai M, Berto GE, Chiotto AA, Sgrò F, Caramello A, Tasca L, Ala U, Neri F, Oliviero S, Mauro A, Geley S, Gatti M, Di Cunto F. Citron Kinase Deficiency Leads to Chromosomal Instability and TP53-Sensitive Microcephaly. *Cell Rep.* 2017;18: 1674–1686. doi:10.1016/j.celrep.2017.01.054. **IF: 8.032; citations: 26**
18. Merigliano C, Marzio A, Renda F, Somma MP, Gatti M, Verni F. A Role for the Twins Protein Phosphatase (PP2A-B55) in the Maintenance of *Drosophila* Genome Integrity. *Genetics.* 2017;205: 1151–1167. doi:10.1534/genetics.116.19278. **IF:4.075; citations: 14**
19. Cicconi A, Micheli E, Verni F, Jackson A, Gradilla AC, Cipressa F, Raimondo D, Bosso G, Wakefield JG, Ciapponi L, Cenci G, Gatti M, Cacchione S, Raffa GD. The *Drosophila* telomere-capping protein Verrocchio binds single-stranded DNA and protects telomeres from DNA damage response. *Nucleic Acids Res.* 2017;45: 3068–3085. doi:10.1093/nar/gkw1244. **IF:11.561; citations: 13**

20. Gai M, Bianchi FT, Vagnoni C, Verni F, Bonaccorsi S, Pasquero S, Berto GE, Sgrò F, Chiotto AA, Annaratone L, Sapino A, Bergo A, Landsberger N, Jacqueline Bond J, Huttner WB, Di Cunto F. ASPM and CITK regulate spindle orientation by affecting the dynamics of astral microtubules. *EMBO Rep.* 2016;18: 1870. doi:10.15252/embr.201745023. **IF:8.749; citations:35**