

## Curriculum Vitae

### Education

Type	Year	Institution	Notes
<b>Bachelor's Degree</b>	2006	University of Salento	Biochemical approach for the study of <i>Drosophila</i> proteins involved in telomere protection
<b>Master's Degree</b>	2009	University of L'Aquila	Functional characterization of factors required for telomeric chromatin maintenance in <i>Drosophila melanogaster</i>
<b>Visiting fellowship</b>	2010	Telomere biology lab- Cancer research UK	2D gel electrophoresis and southern blot analysis for replication forks studies
<b>PhD</b>	2013	University of L'Aquila	Characterization of separase as a new factor involved in telomere maintenance and chromosome integrity in <i>Drosophila melanogaster</i>
<b>Visiting fellowship</b>	2017	Cornell University	Mass-Spectrometry analysis (SILAC and Stable Isotope dimethyl labeling) of <i>Drosophila</i> Separase mutant

### Positions

Type	Period	Institution	Notes
Postdoctoral Research Fellow 'Assegno di ricerca'	April 2013 March 2014	University of Rome La Sapienza Department of Biology and Biotechnology Charles Darwin	Genetic and biochemical interaction of factors involved in <i>Drosophila melanogaster</i> cellular division
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Postdoctoral Research Fellow	April 2015 November 2015	Pasteur Institute of Rome Fondazione Cenci Bolognetti	Identification of new factors required for telomere capping in <i>Drosophila</i>
Postdoctoral Research Fellow	February 2016 April 2016	Pasteur Institute of Rome Fondazione Cenci Bolognetti	Identification of new factors required for telomere capping in <i>Drosophila</i>
Postdoctoral Research Fellow	June 2016 May 2018	Centro Studi e Ricerche Enrico Fermi	Effects of low doses radiation <i>in vivo</i> on model organism <i>Drosophila melanogaster</i>
Postdoctoral Research Fellow	June 2018 May 2020	Pasteur Institute of Rome	Role of HP1 / Cbx protein ubiquitination in chromatin

		Fondazione Cenci Bolognetti	organization
Research Fellow	November 2020 May 2021	University of Rome Tor Vergata	Autophagy in cell differentiation
Research Fellow	July 2021 September 2021	University of Rome Tor Vergata	Autophagy in cell differentiation

## Grants

<i>Type</i>	<i>Period</i>	<i>Institution</i>	<i>Notes</i>
Intramural grant for young researchers	June 2013 June 2014	University of Rome La Sapienza	Roles of the protease Separase in telomere maintenance and chromosome integrity in <i>Drosophila melanogaster</i>
Intramural grant for young researchers	July 2014 July 2015	University of Rome La Sapienza	Identification of novel Separase interacting factors involved in telomere maintenance
Intramural grant for young researchers	July 2015 July 2016	University of Rome La Sapienza	A <i>Drosophila</i> model for Emery-Dreifuss muscular dystrophy

## Partecipation in scientific projects

<i>Project name</i>	<i>Institution</i>
Molecular mechanisms preventing chromosome end fusions in eukaryotes	MIUR (Italian Ministry of University and Research)
Separase has a conserved role in chromosome stability	AIRC (Italian Association for Cancer Research)
Identification of new factors required for telomere capping in <i>Drosophila</i>	Pasteur Institute Fondazione Cenci Bolognetti
FLYINGLOW: effects of protracted low radiation doses on <i>Drosophila</i> metabolism	FERMI Institute for Multidisciplinary Studies
Using <i>Drosophila</i> mutants in the Separase-encoding gene as a model for Autosomal Dominant Emery-Dreifuss Muscular Dystrophy (AD-EDMD)	AFM Telethon
Role of HP1/Cbx protein ubiquitination in chromatin organization	Institut Pasteur PTR ACIP
Characterization of the role of Separase in the regulation of Lamins and Rad50	Pasteur Institute Fondazione Cenci Bolognetti

## Tutoring activities

<i>Role</i>	<i>Period</i>	<i>Institution</i>	<i>Title</i>
Tutor for master degree thesis.	September 2012	University of L'Aquila	Functional relationships between separase and HP1 in telomeres regulation in <i>Drosophila melanogaster</i>

Tutor for master degree thesis.	October 2016	University of Rome La Sapienza	Role of <i>Drosophila melanogaster</i> separase in the regulation of lamins
Tutor for bachelor degree thesis	March 2018	University of Rome La Sapienza	Molecular cloning of drad21 cohesin in expressing vectors for <i>Drosophila melanogaster</i> S2 cells
Tutor for master degree thesis.	October 2018	University of Rome La Sapienza	Genetic and molecular analysis of HP1-Nbs interaction in <i>Drosophila melanogaster</i>
Tutor for bachelor degree thesis	January 2019	University of Rome La Sapienza	Localization and expression of transgenes encoding tagged lamins in <i>Drosophila melanogaster</i>
Tutor for master degree thesis	October 2021	University of Rome La Sapienza	Functional relationship between separase and nuclear lamins in <i>Drosophila melanogaster</i>

## Awards

September 2013 - Notable PhD thesis from Italian Genetics Association (A.G.I.)

## Reviewer activities

March-2021 - Review Editor on the Editorial Board of Epigenomics and Epigenetics (specialty section of Frontiers in Genetics and Frontiers in Cell and Developmental Biology).

## Oral Presentations

XIII IDRC Italian *Drosophila* Research Conference: Functional analysis and chromosomal localization of UbcD1 in *Drosophila melanogaster*. BOLOGNA (Italy) 2006

XIV IDRC Italian *Drosophila* Research Conference: Role of UbcD1 at *Drosophila* telomeres: new perspectives PONZANO ROMANO (Italy) 2 July 2008

XVI IDRC Italian *Drosophila* Research Conference: Role of Separase at *Drosophila* telomeres PALERMO (Italy) 2 October 2012

XVII IDRC Italian *Drosophila* Research Conference: Not canonical roles for *Drosophila* Separase. 7 October ANAGNI (Italy) 2014

Sif, Società Italiana di Fisica: FLYINGLOW: Influence of radiation environment on *Drosophila melanogaster* metabolism and response to genotoxic agents. PADOVA (Italy) 26 September 2016

XIX IDRC Italian *Drosophila* Research Conference: HP1a interacts with NBS to maintain chromosome integrity in both *Drosophila* and human cells. PADOVA (Italy) 21 June 2018

IBPM CNR Conference: *Drosophila melanogaster* models in neurodegenerative diseases (Italy) 8 July 2021

## Selected poster presentations

EDRC European *Drosophila* Research Conference: Separase is required for telomere maintenance in *Drosophila* BARCELONA (Spain) 2015

EMBO Meeting on Telomeres, Telomerase and Disease: Separase is required for telomere protection. LIEGE (Belgium) 29 February 2016

AGI-SIMAG, Associazione Genetica Italiana - Società Italiana di Mutagenesi Ambientale e Genomica: NBS1 interacts with HP1 to ensure genome integrity. CORTONA (Italy) 27 September 2019

#### PEER-REVIEWED PUBLICATIONS (IN CHRONOLOGICAL ORDER)

1. Porrazzo A, Cipressa F, De Gregorio A, De Pittà C, Sales G, Morciano P, Esposito G, Tabocchini MA, Cenci G. Low dose/dose rate  $\gamma$  irradiation protects *Drosophila melanogaster* chromosomes from double strand breaks and telomere fusions by modulating the expression of *Loquacious*. BioRxiv 2021 July doi: <https://doi.org/10.1101/2021.07.23.453515>
2. Sferra A, Fortugno P, Motta M, Aiello C, Petrini S, Ciolfi A, Cipressa F, Moroni I, Leuzzi V, Pieroni L, Marini F, Boespflug Tanguy O, Eymard-Pierre E, Danti FR, Compagnucci C, Zambruno G, Brusco A, Santorelli FM, Chiapparini L, Francalanci P, Loizzo AL, Tartaglia M, Cestra G, Bertini E. Biallelic mutations in RNF220 cause laminopathies featuring leukodystrophy, ataxia and deafness. Brain. 2021 May 8;awab185. doi: 10.1093/brain/awab185. Epub ahead of print. PMID: 33964137. **IF: 11,337**
3. Esposito G, Anello P, Ampollini M, Bortolin E, De Angelis C, D'Imperio G, Dini V, Nuccetelli C, Quattrini MC, Tomei C, Ianni A, Balata M, Carinci G, Chiti M, Frasciello O, Cenci G, Cipressa F, De Gregorio A, Porrazzo A, Tabocchini MA, Satta L, Morciano P. Underground Radiobiology: A Perspective at Gran Sasso National Laboratory. Front Public Health. 2020 Dec 7;8:611146. doi: 10.3389/fpubh.2020.611146. PMID: 33365298; PMCID: PMC7750398. **IF: 3,709**
4. Di Giorgio ML, Morciano P, Bucciarelli E, Porrazzo A, Cipressa F, Manzi D, Rong YS, Cenci G. The *Drosophila* citrate lyase is required for cell division during spermatogenesis Cells. 2020 Jan 14;9(1):206. doi: 10.3390/cells9010206. PMID: 31947614 **IF: 6,6**
5. Bosso G#, Cipressa F#, Pennisi R, Albanesi J, Brandi V, Cugusi S, Renda F, Ciapponi L, Polticelli F, Antoccia A, di Masi A, Cenci G. NBS1 interacts with HP1 to ensure genome integrity Cell Death Dis. 2019 Dec 13;10(12):951. doi:10.1038/s41419-019-2185-x. PMID: 31836699 **IF: 6,304**
6. Graziadio L#, Palumbo V#, Cipressa F, Williams BC, Cenci G, Gatti M, Goldberg ML, Bonaccorsi S. Phenotypic characterization of diamond (dind), a *Drosophila* gene required for multiple aspects of cell division Chromosoma. 2018 Dec;127(4):489-504. doi: 10.1007/s00412-018-0680-y. Epub 2018 Aug 18. PMID: 30120539 **IF: 3,53**
7. Morciano P, Cipressa F, Porrazzo A, Esposito G, Tabocchini MA, Cenci G. Fruit flies provide new insights in low radiation background biology at the INFN underground Gran Sasso National Laboratory (LNGS) Radiat Res. 2018 Sep;190(3):217-225. doi: 10.1667/RR15083.1. Epub 2018 Jun 4. PMID: 29863430 **IF: 2,779**
8. Morciano P, Iorio R, Iovino D, Cipressa F, Esposito G, Porrazzo A, Satta L, Alesse E, Tabocchini MA, Cenci G. Effects of reduced natural background radiation on *Drosophila melanogaster* growth and development as revealed by the FLYINGLOW program J Cell Physiol. 2018 Jan;233(1):23-29. doi: 10.1002/jcp.25889. Epub 2017 Jun 5. PMID: 28262946 **IF: 5,546**
9. Cicconi A., Micheli M., Verni F., Jackson A., Gradilla AC., Cipressa F., Raimondo D., Bosso G., Wakefield JG., Ciapponi L., Cenci G., Gatti M., Cacchione S. and Raffa GD. The *Drosophila* telomere-capping protein Verrocchio binds single-stranded DNA and protects telomeres from DNA damage response Nucleic Acids Res. 2017 Apr 7;45(6):3068-3085. doi: 10.1093/nar/gkw1244. PMID: 27940556 **IF: 11,561**
10. Cipressa F., Morciano P., Bosso G., Mannini L., Galati A., Raffa G. D., Cacchione S., Musio A.,

Cenci G. A role for Separase in telomere protection Nat Commun. 2016 Jan 18;7:10405. doi: 10.1038/ncomms10405.PMID:26778495 **IF:12,124**

11. Cipressa F\*, Di Giorgio ML, Cenci G\*. A simple approach for multicolor immunofluorescence staining in different *Drosophila* cell types J Cell Physiol. 2014 Jun;229(6):683-7. doi: 10.1002/jcp.24506.PMID:24170430 **IF: 3.839**
12. Cipressa F, Cenci G. Effete, an E2 ubiquitin-conjugating enzyme with multiple roles in *Drosophila* development and chromatin organization. Fly (Austin). 2013 Oct-Dec;7(4):256-62. doi: 10.4161/fly.26567. Epub 2013 Oct 2. PMID: 24088712; PMCID: PMC3896498. **IF: 1,475**
13. Cipressa F, Cenci G. DNA damage response, checkpoint activation and dysfunctional telomeres: face to face between mammalian cells and *Drosophila*. Tsitologia. 2013;55(4):211-7. PMID: 23875450.
14. Cipressa F., Romano S., Centonze S., P. I. Zur, Verni F. , Dimitri P., Gatti M., Cenci G. Effete, a *Drosophila* Chromatin-Associated Ubiquitin-Conjugating Enzyme that Affects Telomeric and Heterochromatic Position Effect Variegation Genetics. 2013 Sep;195(1):147-58. doi: 10.1534/genetics.113.153320. Epub 2013 Jul 2.PMID:23821599 **IF: 4,866**
15. Burgio G., Cipressa F., Ingrassia A., Cenci G., Corona D. The histone deacetylase Rpd3 regulates the heterochromatin structure of *Drosophila* telomeres J Cell Sci. 2011 Jun 15;124(Pt 12):2041-8. doi: 10.1242/jcs.078261.PMID:21625008 **IF: 6,111**

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# Co-first authors

Roma 19/10/2021