

PERSONAL INFORMATION

Paolo Maccallini

OCCUPAZIONE PER LA QUALE
SI CONCORRE
POSIZIONE RICOPERTA
OCCUPAZIONE DESIDERATA
TITOLO DI STUDIO
OBIETTIVO PROFESSIONALE

Research Fellow/ Post Doc

WORK EXPERIENCE

01/07/2024 – to date

Research Fellow

Dept. Biology and Biotechnology C. Darwin, Sapienza University of Rome

Project title: "Sequenziamento di interi genomi ed analisi bioinformatica di regioni ripetitive";
project funded by Next Generation EU.

01/07/2022 – 30/06/2024

Research Fellow

Dept. Biology and Biotechnology C. Darwin, Sapienza University of Rome

Project title: "Relation between Transcriptional stress, R-Loop formation and genome instability in
Drosophila and in Humans"; project funded by AIRC.

15/04/2020 – 15/06/2022

Research Fellow

IBPM-CNR Project title: "Exploiting the Drosophila model system to investigate the function of human
proteins involved in telomere maintenance"; project funded by AIRC.

01/02/2019 – 31/01/2020

Research Fellow

Dept. Biology and Biotechnology C. Darwin, Sapienza University of Rome

Project title: "Exploiting the Drosophila model system to investigate the function of human proteins
involved in telomere maintenance".

EDUCATION AND TRAINING

01/11/2014 – 15/02/2018

PhD in Genetics and Molecular Biology

8 EQF

Sapienza University of Rome

Classification: Excellent

Protocol n° 14744, released by Sapienza University of Rome in 15/02/2018

11/2015

**Qualified Biologist Enable to the Biologist Profession passing the
Italian State Exam**

Sapienza University of Rome

Protocol number not available in the certificate, released by Sapienza University of
Rome, in November 2015

01/10/2012 – 22/10/2014

**Master Degree in Genetics and Molecular biology applied to basic
and biomedical research**

7 EQF

Sapienza University of Rome

Protocol n° 11523/173, released by Sapienza University of Rome, in 22/10/2014

01/10/2005 – 23/02/2012

Bachelor Degree in Biological Sciences

6 EQF

Sapienza University of Rome

Protocol n° 9918/130, released by Sapienza University of Rome, in 23/02/2012

PERSONAL SKILLS

Mother tongue(s)

Italian

Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B2	B2	B2	B2	B2

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user
Common European Framework of Reference for Languages

Communication skills Good communication skills, able to interact with people at all levels of organization.
Good presentation skills demonstrated during seminars, lab meeting and journal/data club presentations at university.

Organisational / managerial skills Highly adaptable, mobile, positive and dynamic. Flexible and responsive. Ability to manage multiple initiatives with deadlines. Ability to work well in teams and individually.

Job-related skills

List of Technics

Molecular Biology

- DNA and RNA isolation from Human, Drosophila and bacterial cell cultures
- cDNA synthesis
- PCR, RT-PCR, qPCR, qRT-PCR
- DNA and RNA gel electrophoresis
- DNA and RNA quantification using NanoDrop and Qbit spectrophotometers
- Plasmidic DNA preparation (mini-, midi-, maxi-prep)
- Cloning techniques (restriction enzyme manipulation, ligation, bacterial transformation)
- Mutagenesis techniques
- Data analysis of DNA sequencing

Protein Biochemistry

- Protein isolation
- Native and SDS-PAGE
- Western blotting
- Dot blotting
- Pull Down
- Immunoprecipitation (IP)
- Chromatine IP (ChIP)
- RNP IP (RIP)
- DNA/RNA Hybrids IP (DRIP)
- ELISA

Cellular Biology

- Human cell cultures (HeLa, fibroblasts, EBV)
- Drosophila S2 cell cultures
- E.Coli cultures
- Cell transfection

Genetics

- Drosophila molecular and formal genetics
- Double mutant analysis
- Double heterozygote analysis
- Recombination techniques
- Survival test
- Locomotory assay
- Transgenic flies construction
- UAS:Gal4 fruit fly expression system
- Tissue specific and inducible RNAi-mediated gene silencing/Transgene expression techniques in Drosophila.

Microscopy

- Stereo and Optical Microscopy
- Zeiss Apotome Microscopy

Lab Equipment

Highly skilled in the use of Centrifuges, Spectrophotometer, Nanodrop, pH meter, Electrophoresis equipment, Sonicator, Incubator.

Computer skills

- Excelent command of Microsoft Office™ tools
- Good command of Gene and Protein Databank (i.e. ENSEMBL, Fly Base)
- Highly skilled in DNA and Protein Analysis Software (i.e. PCR and RT-PCR software, Image Lab)
- Basic knowledge of Microscopy Software (i.e. Zeiss Zen, ImageJ/Fiji)
- Very handy in the use of Statistical Software (i.e. Excel, VBA, GraphPad Prism)

Driving licence

B

ADDITIONAL INFORMATION

Publications

H Index: 2 (Scopus)
2 (Google Scholar)

- Chen L, Roake CM, **Maccallini P**, Bavasso F, Dehghannasiri R, Santonicola P, Mendoza-Ferreira N, Scatolini L, Rizzuti L, Esposito A, Gallotta I, Francia S, Cacchione S, Galati A, Palumbo V, Kobin MA, Tartaglia GG, Colantoni A, Proietti G, Wu Y, Hammerschmidt M, De Pittà C, Sales G, Salzman J, Pellizzoni L, Wirth B, Di Schiavi E, Gatti M, Artandi SE, Raffa GD. TGS1 impacts snRNA 3'-end processing, ameliorates survival motor neuron-dependent neurological phenotypes in vivo and prevents neurodegeneration. *Nucleic Acids Res.* 2022 Nov 28;50(21):12400-12424. doi: 10.1093/nar/gkac659. Erratum in: *Nucleic Acids Res.* 2022 Sep 12;; PMID: 35947650; PMCID: PMC9757054.
- Galati A, Scatolini L, Micheli E, Bavasso F, Cicconi A, **Maccallini P**, Chen L, Roake CM, Schoeftner S, Artandi SE, Gatti M, Cacchione S, Raffa GD. The S-adenosylmethionine analog sinefungin inhibits the trimethylguanosine synthase TGS1 to promote telomerase activity and telomere lengthening. *FEBS Lett.* 2022 Jan;596(1):42-52. doi: 10.1002/1873-3468.14240. Epub 2021 Dec 5. PMID: 34817067.
- **Maccallini P**, Bavasso F, Scatolini L, Bucciarelli E, Noviello G, Lisi V, Palumbo V, D'Angeli S, Cacchione S, Cenci G, Ciapponi L, Wakefield JG, Gatti M, Raffa GD. Intimate functional interactions between TGS1 and the Smn complex revealed by an analysis of the Drosophila eye development. *PLoS Genet.* 2020 May 26;16(5):e1008815. doi: 10.1371/journal.pgen.1008815. PMID: 32453722; PMCID: PMC7289441.
- **Maccallini P**, Di Giorgio ML, Esposito A, 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 Sep;105:42-50. doi: 10.1016/j.nbd.2017.05.005. Epub 2017 May 11. PMID: 28502804.

Conferences

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|---------|---|
| 09/2022 | Telomere function and evolution in health and disease
Troia, Portugal
Poster session presented |
| 06/2022 | SIBBM - The RNA World 3.0
Rome, Italy
Poster session presented |
| 02/2020 | 2nd International Scientific Congress of SMA Europe
Paris-Evry, France |
| 10/2018 | Corso in "SEQUENZIAMENTO DI NUOVA GENERAZIONE (NGS) NEL LABORATORIO DI GENETICA UMANA"
Rome, Italy |
| 03/2017 | 58th Annual Drosophila Research Conference
San Diego, California
Poster session presented |
| 11/2017 | 8th Biology BeMM Symposium Biology and Molecular Medicine PhD School
Rome, Italy
Member of the organizing committee |

Memberships

Member of "Ordine Nazionale dei Biologi", section A, n° AA_07415, since 24/01/2018

Il sottoscritto dichiara di essere consapevole che il presente *curriculum vitae* sarà pubblicato sul sito istituzionale dell'Ateneo, nella Sezione "Amministrazione trasparente", nelle modalità e per la durata prevista dal d.lgs. n. 33/2013, art. 15.

Data

Rome 10/06/2025