

**Personal information:**

Name: Anna Maria

Surname: Floriano

Date of birth (dd/mm/yyyy): 06/07/1990

Born in Pavia, Italy

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Education:

10/10/2014–19/10/2016: M.Sc. in Molecular Biology and Genetics, University of Pavia, Pavia (Italy). Final evaluation: 109/110. Thesis: "*Candidatus* Fokinia solitaria", endosymbiont of *Paramecium* sp. and first representative of a novel clade of family "*Candidatus* Midichloriaceae". Supervisor: Dr. Davide Sassera, Laboratory of Parasitology, Department of Biology and Biotechnology "Lazzaro Spallanzani", Università degli Studi di Pavia, Pavia (Italy).

10/10/2009–29/04/2014: B.Sc. in Biological Sciences, curriculum *Molecular Biology and Genetics*, Università degli Studi di Pavia, Pavia (Italy). Final evaluation: 87/110. Thesis: "Development of a proteomic approach to the study of Nasu-Hakola Disease". Supervisor: Prof. Paolo Iadarola, Laboratory of Biochemistry, Department of Biology and Biotechnology "Lazzaro Spallanzani", University of Pavia, Pavia (Italy).

Additional training:

"Methods to detect the underpinnings of host-parasite coevolution in genomic data", 25-28 March 2019, ESEB-STN 2019, TUM Munich, DE.

"Comparative methods in Evolutionary Biology", 5-7 December 2016, Stazione Zoologica Anton Dorn, Naples, IT.

Professional experiences:

April - September 2019: guest researcher in the laboratory of Prof. Lionel Guy, BMC, Uppsala University (Sweden).

April - September 2017: Granted fellow in the Parasitology laboratory coordinated by Dr. Davide Sassera, Department of Biology and Biotechnology "Lazzaro Spallanzani", Università degli Studi di Pavia, Pavia (Italy).

January 2015 - October 2016: bioinformatics stage at the Department of Biology and Biotechnology "Lazzaro Spallanzani", Università degli Studi di Pavia, Pavia (Italy). Supervisors: Dr. Davide Sasserà, Dr. Francesco Comandatore.

March 2012 - March 2014: biochemistry stage at the Department of Molecular Medicine, University of Pavia, Pavia, Italy. Supervisors: Prof. Paolo Iadarola, Dr. Anna Bardoni.

Tutor within Bioinformatics course (Dr. Silvia Bione, Dr. Davide Sasserà; LM Molecular Biology and Genetics, University of Pavia)

Practical lectures for the M.Sc. classes in University of Pavia, University of Milan, Uppsala University within the years 2013-2019:

- Methods in Biochemistry (Prof. P. Iadarola)
- Functional Genomics and the Molecular Basis of Differentiation (Prof. C Bazzocchi)
- Parassitologia Biomedica (Dr. D. Sasserà)
- Bioinformatics (Dr. D. Sasserà, Dr. S. Bione)
- Biotechnological and molecular strategies in the control of parasites and vector-borne diseases (Prof. S. Epis, Dr. F. Comandatore)
- Antimicrobials, Resistance, Epidemiology and Evolution (Prof. L. Guy)

Cosupervisor of two B.Sc. theses and one M.Sc. thesis

Informatics and bioinformatics skills:

Operative systems: Linux, Windows
MicrosoftOffice, LibreOffice, Google platforms
NGS (Illumina, PacBiosciences, Oxford Nanopore) and Sanger sequencing analysis
genome assembly, annotation, analysis
phylogenetics and phylogenomics
ancestral state reconstruction
PCA, DAPC
identification of molecules putatively involved in host-symbiont interactions
programming in Bash, R, rudiments of python and SQL

Laboratory skills:

Nucleic acids and protein extraction and purification for molecular biology and sequencing
qualitative and quantitative PCR
Electrophoretic techniques (agarose gel, 1D- and 2D-Electrophoresis preparation and analysis)
Protein identification through LC/MS
Transmission Electron Microscopy samples preparation and analysis
Ticks dissection
Handling of stabulary animals (Guinea Pigs, ticks)

Communication skills:

Mother-tongue: Italian

Other languages: English (proficient)

Poster and Oral Presentations at International Congresses

Laboratory website curator: <http://sasseralab.unipv.it/>

Grants and awards:

Bando di mobilità internazionale 8^a edizione (2019)

EMBO STF (2019)

Best Poster Award at EMAC-4, Zagreb, HR 2017

Grant for joining SIBE 2017 congress held in Rome, IT 2017

Research Project:

A multidisciplinary approach to understand the evolution of intramitochondrial tropism in the "*Candidatus* Midichloriaceae" family of bacteria

Research articles on peer-reviewed journals:

1. Castelli M, Sabaneyeva E, Lanzoni O, Lebedeva N, Floriano AM, Gaiarsa S, Benken K, Modeo L, Bandi C, Potekhin A, Sassera D, Petroni G, "Deianiraea, an extracellular bacterium associated with the ciliate *Paramecium*, suggests an alternative scenario for the evolution of Rickettsiales", *ISME journal* (2019): 1.
2. Floriano AM, Castelli M, Krensek S, Berendonk TU, Bazzocchi C, Petroni G, Sassera D, "The genome sequence of "*Candidatus* *Fokinia solitaria*": insights on reductive evolution in Rickettsiales", *Genome biology and evolution*, 10(4), 1120-1126 (2018).
3. Piazza A, Comandatore F, Romeri F, Pagani C, Floriano AM, Ridolfo AL, Antona C, Brillì M, Bandi C, Gismondo MR, Rimoldi SG, "Identification of a Successful International *Escherichia coli* Clone as a Hidden Spreader of the blaOXA-181-Harboring IncX3 Epidemic Plasmid", *Microbial Drug Resistance* (2018).

Conference abstracts:

1. Olivieri E, Floriano AM, Mulatu Tafesse Y, Cafiso A, Kariuki E, Alali S, Montagna M, Sassera D, "Molecular investigation of pathogenic and symbiotic bacteria in African hard ticks infesting wild and domestic animals", International Symposium on Tick-Borne Pathogens and Disease Vienna, AT 2019.
2. Pintore E, Olivieri E, Floriano AM, Sassera D, Sanna N, Succu L, Garippa G, "First detection of *Amblyomma variegatum* and molecular finding of *Rickettsia africae* in Sardinia, Italy" International Symposium on Tick-Borne Pathogens and Disease Vienna, AT 2019.
3. Floriano AM, Olivieri E, Castelli M, Gaiarsa S, Clementi E, Vijay A, Makepeace B,

- Hartley C, Serra V, Kariuki E, Kumsa B, Kybicova K, Rinaldi L, Mysterud A, Rispe C, Plantard O, Lo N, Jex A, Bandi C, Guy L, Sasser D, "Towards the understanding of the evolution of intramitochondrial tropism in ticks symbionts", SIBE2019, Padova, IT 2019.
4. Castelli M, Kashkouli M, Fathipour Y, Floriano AM, Spairani F, Bandi C, Mehrabadi M, Sasser D, "Convergent genome reduction patterns in bacterial symbionts of stink bugs", SIBE2019, Padova, IT 2019.
 5. Floriano AM, Olivieri E, Cafiso A, Kariuki E, Di Carlo D, Pajoro M, Matteri R, Montanaro S, Bazzocchi C, Sasser D, "Molecular screening of pathogenic and symbiotic bacterial species in African ticks", SoIPa 2019, Milano, IT 2019.
 6. Olivieri E, Varotto Boccazzi I, Romeo C, Desirò I, Cafiso A, Serra V, Floriano AM, Epis S, Sasser D, "*Midichloria mitochondrii* localization and quantification in the organs of the hard tick *Ixodes ricinus*", SoIPa 2019, Milano, IT 2019.
 7. Castelli M, Floriano AM, Bandi C, Petroni G, Sasser D, "Endless interactions, most beautiful: genomics of novel *Rickettsiales* provides insight into the evolution of the order", SoIPa 2019, Milano, IT 2019.
 8. Rigamonti S, Floriano AM, Longbottom D, Scaltriti E, Comandatore F, Casadei G, Capucci L, Donati M, Vicari N, Magnino S, "Genomic analysis of PMPs and plasticity zone of two isolates of *Chlamydia pecorum* from chamois and buffalo", SIDiLV 2018, Perugia, IT 2018.
 9. Rigamonti S, Floriano AM, Longbottom D, Scaltriti E, Comandatore F, Casadei G, Capucci L, Donati M, Vicari N, Magnino S, "Genomic analysis of *pmps* and plasticity zone of two *C. pecorum* isolates from a chamois and a water buffalo", EMAC-5, Odessa, UA 2018.
 10. Castelli M, Kashkouli M, Fathipour Y, Floriano AM, Bandi C, Mehrabadi M, Sasser D, "Genomic investigation on midgut bacterial symbionts of the phytophagous stink bug *Acrosternum arabicum*", 79 Congresso dell'Unione Zoologica Italiana - UZI 2018, Lecce, IT 2018.
 11. Castelli M, Floriano AM, Bandi C, Petroni G, Sasser D, "Endless interactions, most beautiful: genomics of novel *Rickettsiales* provides insight into the evolution of the order", SoIPa 2018, Milano, IT 2018.
 12. Olivieri E, Varotto Boccazzi I, Romeo C, Desirò A, Cafiso A, Serra V, Floriano AM, Epis S, Sasser D, "Midichloria mitochondrii localization and quantification in the organs of the hard tick *Ixodes ricinus*", SoIPa 2018 - Mutamenti ambientali e parassiti, Milan, IT 2018.
 13. Floriano AM, Olivieri E, Cafiso A, Kariuki E, Di Carlo D, Pajoro M, Matteri R, Montanaro S, Bazzocchi C, Sasser D, "Molecular screening of pathogenic and symbiotic bacterial species in African ticks", SoIPa 2018 - Mutamenti ambientali e parassiti, Milan, IT 2018.
 14. Floriano AM, Kashkouli M, Fathipour Y, Carnevale C, Bandi C, Mehrabadi M, Sasser D, "Investigating the genomic features of a *Pantoea* midgut bacterial symbiont of the phytophagous stinkbug *Acrosternum arabicum*", ULiverpool.InsectEvolution.Mar21-22, Liverpool, UK 2018.
 15. Kashkouli M, Floriano AM, Carnevale C, Fathipour Y, Bandi C, Epis S, De Marco L, Mehrabadi M, Sasser D, "Habitat Visualization and Phylogenetic Analysis of a Midgut Bacterial Symbiont of the Stinkbug *Acrosternum arabicum*", The 3rd Iranian Conference on System Biology, Tehran, IR 2018.
 16. Kashkouli M, Floriano AM, Carnevale C, Fathipour Y, Bandi C, Mehrabadi M, Sasser D, "Exploring Genomic Traits of a Midgut Bacterial Symbiont of the Stinkbug *Acrosternum arabicum* (Hem., Pentatomidae)", The 7th Conference on Bioinformatics, Tehran, IR 2018.

17. Rigamonti S, Floriano AM, Scaltriti E, Vecchio Nepita E, Comandatore F, Casadei G, Donati M, Vicari N, Magnino S, "Whole genome sequencing of *C. avium* and *C. pecorum* isolates from Italy", EMAC-4, Zagreb, HR 2017.
18. Castelli M, Sabaneyeva E, Lanzoni O, Floriano AM, Lebedeva N, Benken K, Potekhin A, Sassera D, Petroni G, "Characterisation of a novel epibiotic bacterium of *Paramecium* showing distinctive features", SIBE2017, Roma, IT 2017.
19. Castelli M, Sabaneyeva E, Lanzoni O, Floriano AM, Lebedeva N, Benken K, Sassera D, Potekhin A, Petroni G, "Infectious epibiotic bacteria produce lethal effects on the host *Paramecium primaurelia*", ICOP15, Prague, CZ, 2017.
20. Floriano AM, Castelli M, Szokoli F, Sabaneyeva E, Krenek S, Schrallhammer M, Berendonk TU, Bazzocchi C, Petroni G, Sassera D, "Evolutionary investigations on "*Candidatus* Midichloriaceae" endosymbionts of the ciliate *Paramecium*", SIBE2017, Roma, IT 2017.
21. Floriano AM, Castelli M, Szokoli F, Sabaneyeva E, Krenek S, Schrallhammer M, Berendonk TU, Bazzocchi C, Petroni G, Sassera D, "*Candidatus* Fokinia solitaria": investigating symbiosis and genome reduction in a novel member of the order *Rickettsiales*, Bageco 14, Aberdeen, UK 2017.
22. Castelli M, Szokoli F, Sabaneyeva E, Floriano AM, Krenek S, Schrallhammer M, Berendonk TU, Bazzocchi C, Sassera D, Petroni G, "Multidisciplinary investigation on two "*Candidatus* Fokinia" *Rickettsiales* endosymbionts of *Paramecium*" The Microbiology Society Annual Conference 2017, Edinburgh, UK 2017.
23. Sassera D, Comandatore F, Gaiarsa S, Corbella M, Floriano AM, Bandi C, Marone P, "Correlating *K. pneumoniae* genomics with metadata. What makes an outbreak?" 26 th ECCMID, Amsterdam, NL 2016.
24. Cafiso A, Serra V, Plantard O, Sassera D, Floriano AM, Bazzocchi C, "Emerging pathogens in vertebrates: bacteria of the *Midichloriaceae* family (order *Rickettsiales*)" Pathobiome 2015, Maison-Alfort, Paris, FR.
25. Di Venere M, Cagnone M, Cafiso A, Floriano AM, Parisio G, Sassera D, "Proteomic approaches to investigate the biology of the hard tick *Ixodes ricinus* and its relation with the symbiont *Midichloria mitochondrii*" SOIPA 2016, Bari, IT.
26. Giuliano S, Montalbetti L, Floriano AM, Salvini R, Bardoni A, "Implications of Nasu-Hakola disease on protein profiles of lymphoblastoid B-cells" SIB 2012, Chieti, IT.
27. Giuliano S, Montalbetti L, Floriano AM, Salvini R, Bardoni A, "Nasu-Hakola disease: a pilot study for the research of possible biomarkers" 56 th National Meeting of the Italian Society of Biochemistry and Molecular Biology 2012, Chieti, IT.