

Curriculum vitae – Sara Soldano

PERSONAL DATA

Date of birth: 28/12/1999

Place of birth: Sciacca (Ag), Italy

Nationality: Italian

E-mail: sara.soldano01@universitadipavia.it

EDUCATION

2024-present **PhD Program in Genetics, Molecular and Cellular Biology.**

Department of Biology and Biotechnology “Lazzaro Spallanzani”,
University of Pavia, Pavia.

2022-2024 **Master Degree in Experimental and Applied Biology, curriculum “Biomedical and molecular sciences”, 109/110.**

Department of Biology and Biotechnology “Lazzaro Spallanzani”,
University of Pavia, Pavia. Supervisor: Prof. M. Biggiogera.

Thesis title “*Feeding micro-and nano-plastics to Aedes albopictus (Diptera: Culicidae) larvae: a fluorescence microscopy - and preliminary metabolomics-based analysis*”, in collaboration with IGM-CNR

2018-2022 **Bachelor Degree in Biological Sciences, 108/110.**

Department of Biological, Chemical and Pharmaceutical Sciences and Technologies,
University of Palermo, Palermo. Supervisor: Prof. G. Bazan.

Thesis title “*Elettroforesi sieroproteica: analisi di un tracciato normale*”

2018 **High School Degree, 100/100.**

Liceo Scientifico “Enrico Fermi” di Sciacca (Ag)

SCIENTIFIC PUBLICATIONS

1. Croce AC, Garbelli A, Moyano A, **Soldano S**, Tejada-Guzmán C, Missirlis F, Scolari F. Developmental and Nutritional Dynamics of Malpighian Tubule Autofluorescence in the Asian Tiger Mosquito *Aedes albopictus*. *International Journal of Molecular Sciences*. 2024; 25(1):245. <https://doi.org/10.3390/ijms25010245> [impact factor 2022: 5.6, JCR]

CONTRIBUTIONS TO INTERNATIONAL CONGRESSES

1. Croce AC, Moyano A, **Soldano S**, Scolari F. Sperm energy metabolism in the Asian tiger mosquito: A combined autofluorescence imaging and microspectrofluorimetric analysis approach. FAO/IAEA First Research Coordination Meeting on “Reproductive biology of male *Aedes* mosquitoes for SIT applications” Vienna, Austria, 03–07 July 2023

LANGUAGE SKILLS

March 2021 B2 English Certification “Cambridge Assessment”

TRAINING COURSES

- 12/06/2024 Webinar “Primi passi con R: introduzione al linguaggio per analisi statistiche” organizzato da Consortium GARR e tenuto da Elio Romano (CREA).
- 27/04/2023 Corso FAD “Chi ben comincia...Sicurezza nei laboratori Chimici e Biologici”- Parte Biologica.
Corso FAD “Chi ben comincia...Sicurezza nei laboratori Chimici e Biologici”- Parte Chimica.
- 26/04/2023 Corso di formazione specifica: “Sicurezza e Salute nei luoghi di lavoro ai sensi del D.Lgs. 81/08 formazione specifica per attività a basso rischio”.
- 20/04/2023 Corso di formazione generale: Sicurezza e Salute nei luoghi di lavoro ai sensi del D.Lgs.81/08.
- 28/02/2023 Corso di formazione sui Rischi Specifici per lavoratori, presso IGM-CNR di Pavia.
- 21/11/2019 Partecipazione a incontro sulla “Giornata mondiale del diabete”, presso il Dipartimento di Scienze e Tecnologie Biologiche, Chimiche e Farmaceutiche, Università degli studi di Palermo, Palermo.

PARTECIPATION IN RESEARCH PROJECTS

2023-present FAO/IAEA research agreement under D44005 – “Reproductive Biology of male *Aedes* Mosquitoes for SIT Applications” – Role: **Main additional Scientific Staff.**

LABORATORY ACTIVITIES

2023-2024 Internship of experimental thesis at Institute of Molecular Genetics Luigi Luca Cavalli-Sforza (IGM-CNR) of Pavia.

Activities: use of optical, fluorescence and confocal microscopy techniques; manipulation of insect samples for microscopy and molecular type analysis; inclusion techniques and cryostat sample preparation.

- 2022-2023 Volunteer activities at the Provincial Health Company of Agrigento, Sciacca, via Pompei.
U.O.C. Clinical pathology, for a total of six months (from 20/04/2022 to 05/01/2023).
Activities: chemical-clinical analysis (blood count, coagulation, VES, glycated hemoglobin, enzyme immunology), bacteriology (seeding of biological samples, identification of bacteria and antibiograms), urine and drug analysis, blood test occult, virology (toxoplasmosis), parasitological.
- 2021 Traineeship at the Provincial Health Company of Agrigento, Sciacca (AG), via Pompei (from 23/08/21 to 10/12/21).
Activities carried out: chemical-clinical analysis (blood count, coagulation, VES, enzyme immunology), bacteriology (seeding of biological samples, identification of bacteria and antibiograms), urine analysis, capillary electrophoresis and gel.

TUTORING ACTIVITIES

- 2022 During the volunteer activity at the provincial health company of Agrigento, informal tutoring activities to three students (thesis).
Support provided for routine clinical-chemical analysis such as blood count, coagulation, and subsequent reading and interpretation of results.
In the field of bacteriology, support for the preparation of all biological samples before seeding, explanation of the seeding method, identification of bacteria and antibiograms followed by interpretation of data. Reading and interpretation of results in urine and sediment analysis.

TECHNICAL SKILLS

- Basic knowledge of insect handling (*Aedes albopictus*)
- Good knowledge of the techniques for the dissection and preparation of samples derived from different developmental stages and organs of mosquitoes for optical, confocal and fluorescence microscopy applications
- Basic knowledge of histological techniques: preparation and inclusion of samples for cryostat microtome applications
- Good knowledge of microbiology techniques (seeding, identification of bacteria, antibiogram, parasitological, blood cultures), virology (e.g. toxo), electrophoresis, immuno-enzymatic, clinical chemistry
- Good knowledge of the preparation and analysis of biological samples (e.g. urine, blood, faeces, plasma, serum)
- Basic knowledge of the main molecular biology techniques, in particular RNA purification, cDNA synthesis, real time PCR

COMPUTER SKILLS

- Excellent knowledge of the Windows operating system and the main computer applications, in particular Microsoft Office
- Basic knowledge of statistical softwares and data analysis (R e R-Studio)
- Basic knowledge of bibliographic management software, in particular Mendeley Desktop

SKILLS AND RELATIONAL COMPETENCE

- Good interpersonal skills, even in multicultural environments
- High readiness for teamwork and interpersonal relationships
- Excellent communication skills.

PhD Program in Genetics, Molecular and Cellular Biology informations:

Title project: Studies on the reproductive physiology and behaviour of insect disease vectors and pests.

Supervisor: Prof. Gomulski Ludvik

Reviewer: Prof.ssa Piazza Aurora