

CURRICULUM VITAE

Name Luciano Toma

Date and place of birth: [REDACTED]

E-mail [REDACTED]

Educational background

2007 - PhD in Animal Biology at the University of Rome "La Sapienza";

2003 - Master in "Conservation Biology" at the University of Rome "La Sapienza";

2001, February - Degree in Natural Sciences at the University of Rome "La Sapienza".

Language skills: English.

Position

Senior Researcher, Dept of Infectious Diseases, Vector Borne Diseases Section, Istituto Superiore di Sanità (ISS), Viale Regina Elena 199, 00161 Rome, Italy.

Reserch activity description

The research activity, mainly focused on the study of health concern arthropods mainly mosquitoes and ticks, is performed within the following topics:

- bionomics of mosquitoes and ticks of medical interest;
- molecular analysis of mosquito samples by PCR-RFLP;
- rearing mosquito colonies aimed to be artificially infected for arboviruses competence studies;
- studies around possible insecticides alternative to synthetic chemical compounds;
- study of the possible incoming of alien tick species and related pathogens via migratory birds.

Recent activities

Since 2017 he has been in charge of the operational unit relating to the morphological and molecular study of tick samples collected as part of the RC2014 project "Risk of introduction and spread of virus transmitted by vectors in Italy (N. IZS AM 03/14 RC) ", Managed by the IZS of Abruzzo and Molise G. Caporale.

From 2010 to 2015 he has been involved in the European Project WP7 "EuroWestNile", contributing to a series of artificial infection experiments with the WNvirus on populations of Italian *Culex pipiens*.

Other activities

2003 up to 2008: Consultancy for entomological activity management within the National West Nile surveillance at Experimental Zooprophyactic Institute of Abruzzo e Molise in Teramo, Italy.

Last publications

- Fortuna C., Severini F., Marsili G., Toma L., Amendola A., Venturi G., Argentini C., Casale F., Bernardini I., Boccolini D., et al., 2024. Assessing the Risk of Dengue Virus Local Transmission: Study on Vector Competence of Italian *Aedes albopictus*. *Viruses* , 16, 176. <https://doi.org/10.3390/v16020176>

- Menegon M., Casale F., Mancuso E., Di Luca M., Severini F., Monaco F., Toma L. 2023. Argas ticks (Ixodida: Argasidae) on migratory birds from Africa: first record of a genotype close to *Argas africolumbae* in Italy. *Ticks and Tick-borne Diseases* 14 (2023) 102205.
- Mancuso E., Di Domenico M., Di Gialleonardo L., Menegon M., Toma L., Di Luca M., Casale F., Di Donato G., D'Onofrio L., De Rosa A., et al. Tick Species Diversity and Molecular Identification of Spotted Fever Group Rickettsiae Collected from Migratory Birds Arriving from Africa. 2023. *Microorganisms*, 11, 036. <https://doi.org/10.3390/microorganisms11082036>
- Mancuso E., Toma L., Pascucci I., d'Alessio S.G., Marini V., Quaglia M., Riello S., Ferri, A., Spina, F., Serra L., et al. 2022. Direct and Indirect Role of Migratory Birds in Spreading CCHFV and WNV: A Multidisciplinary Study on Three Stop-Over Islands in Italy. *Pathogens* 2022, 11, 1056. <https://doi.org/10.3390/pathogens11091056>
- Manzi S., Nelli L., Fortuna C., Severini F., Toma L., Di Luca M., Michelutti A., Bertola M., Gradoni F., Toniolo F., Sgubin S., Lista F., Paziienza M., Montarsi F., Pombi M. 2023. A modified BG-Sentinel trap equipped with FTA card as a novel tool for mosquito-borne disease surveillance: a field test for flavivirus detection.
- Menegon M., Tomazatos A., Severini F., Raele D.A., Lilja T., Werner D., Boccolini D., Toma L., Vasco I., Lühken R., Kampen H., Cafiero M.A., Di Luca M. 2022. Molecular Characterization of *Anopheles algeriensis* Theobald, 1903 (Diptera: Culicidae) Populations from Europe. *Pathogens* 2022, 11, 990. <https://doi.org/10.3390/pathogens11090990>
- Severini F., Toma L., Di Luca M. 2022 Mosquitoes in Italy: collection, identification and preservation of the most common species. Istituto Superiore di Sanità. *Rapporti ISTISAN 22/3* (in Italian).
- Casale F., Severini F., Menegon M., Piccari F., Gori R., Della Rosa G., Di Luca M., Toma L. 2022. Further investigation on the mosquitoes (Diptera: Culicidae) in the Caffarella Valley, Appia Antica Regional Park: first record of *Culex Theileri* in Rome, Italy. *REDIA*, 105, 2022: 169-174 <http://dx.doi.org/10.19263/REDIA-105.22.21>
- Fortuna C., Montarsi F., Severini F., Marsili G., Toma L., Amendola A., Bertola M., Michelutti A., Ravagnan S., Capelli G., Rezza G., Di Luca M. 2021. The common European mosquitoes *Culex pipiens* and *Aedes albopictus* are unable to transmit SARS-CoV-2 after a natural-mimicking challenge with infected blood. *Parasites Vectors* (2021) 14:76 <https://doi.org/10.1186/s13071-021-04578-9>.
- Raele D.A., Severini F., Boccolini D., Menegon M., Toma L., Vasco I., Franco E., Miccolis P., Desiante F., Nola V., Salerno P., Cafiero M.A., Di Luca M. 2021. Entomological Surveillance in Former Malaria-endemic Areas of Southern Italy. *Pathogens* 2021, 10, 1521. <https://doi.org/10.3390/pathogens10111521>.
- Toma L., Mancuso E., d'Alessio S.G., Menegon M., Spina F., Pascucci I., Monaco F., Goffredo M., Di Luca M. 2020. Tick species from Africa by migratory birds: a 3-year study in Italy. *Experimental and Applied Acarology* <https://doi.org/10.1007/s10493-020-00573-4>
- Toma L., Severini F., Romi R., Goffredo M., Torina A., Di Luca M. 2020. Checklist of the mosquito species from four Sicilian Islands: Lampedusa, Linosa, Ustica and Pantelleria. *Journal of Entomological and Acarological Research* 2020; volume 52:8968
- Boccolini D., Menegon M., Di Luca M., Toma L., Severini F., Marucci G., D'Amato S., Caraglia A., Maraglino F.P., Rezza G., Romi R., Gradoni L., Severini C., and The Italian Malaria Surveillance Group. 2020. Non-imported malaria in Italy: paradigmatic approaches and public health implications following an unusual cluster of cases in 2017. *BMC Public Health* 20:857. <https://doi.org/10.1186/s12889-020-08748-9>
- Tagliapietra V., Arnoldi D., Di Luca M., Toma L., Rizzoli A. 2019. Investigation on potential malaria vectors (*Anopheles* spp.) in the Province of Trento, Italy. *Malaria Journal*, 18:151 <https://doi.org/10.1186/s12936-019-2785-z>.

- Mancini F., Vescio M.F., Toma L., Di Luca M., Severini F., Cacciò S.M., Mariano C., Nicolai G., Laghezza Masci V., Fausto A.M., Pezzotti P., Ciervo A. 2019. Detection of tick-borne pathogens in ticks collected in the suburban area of Monte Romano, Lazio Region, Central Italy. *Annali dell' Istituto Superiore di Sanità*, 55(2): 143-150 - DOI: 10.4415/ANN_19_02_06 .

Updated to April, 2024

Luciano Toma

Il sottoscritto dichiara di essere a conoscenza delle sanzioni penali in caso di dichiarazioni mendaci o contenenti dati non più rispondenti a verità, come previsto dal D.P.R. 28.12.2000, n. 445.

Autorizzo il trattamento dei miei dati personali ai sensi della legge 196/2003 (Testo unico privacy).