

Curriculum vitae
Silvia Beatriz Lanzavecchia

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Education

1999-2005: PhD, Molecular Biology and Biotechnology, Faculty of Exact and Natural Sciences, University of Buenos Aires, Argentina.

1991-1998: Bachelor in Biological Sciences, Faculty of Exact and Natural Sciences, University of Buenos Aires, Argentina.

Professional Experience

2008-present: Researcher in Insect Genetics, Genetics Institute "Ewald A. Favret", National Institute of Agricultural Technology, Buenos Aires, Argentina.

2007-2008: INTA Postdoctoral position, Genetics Institute "Ewald A. Favret", INTA. Buenos Aires, Argentina.

2005-2007: CONICET Postdoctoral position, Genetics Institute "Ewald A. Favret", INTA. Buenos Aires, Argentina.

1999-2004: CONICET Post-graduated fellow, Institute of Microbiology and Agricultural Zoology (IMYZA), INTA. Buenos Aires, Argentina.

1998: PMI-SID 0615 fellow, Institute of Microbiology and Agricultural Zoology (IMYZA), INTA. Buenos Aires, Argentina.

1998: Ad-honorem assistant, IMYZA, INTA. Buenos Aires, Argentina.

1997: Ad-honorem assistant, Institute of Research in Genetics Engineering and Molecular Biology (INGEBI), Buenos Aires, Argentina.

Grants received

2015-2020 FAO/IAEA Coordinated Research Project, Contract N°18822 on the Evaluation of genetic and biotechnological tools for the development of an *Anastrepha fraterculus* sexing strain in Argentina. SBL Chief Scientific Investigator.

2009-2014 FAO/IAEA Coordinated Research Project, Contract N° 15745 on Hyper variable molecular markers in support of SIT implementation for *Anastrepha fraterculus* in Argentina. SBL Chief Scientific Investigator.

PICT 2013 0054. FONCyT .Analysis of the Interactions among fruit flies and parasitic species, host plants and symbionts, as a tool to develop environmentally-friendly strategies to control this insect pest in Argentina. SBL Chief investigator group. Diego Segura chief investigator. 2015-2017.

INTA PNAPI-1112042 Multidisciplinary strategies to decrease the negative effect of global change in apiculture. SBL Chief investigator group (Honey bee genetics). Graciela Rodriguez chief investigator. 2013-2018.

PICT 2012-0704. FONCyT. Development and application of hyper-variable molecular markers in support to the SIT implementation against *Anastrepha fraterculus* in Argentina. SBL Chief investigator group. Jorge Cladera chief investigator.: 2014-2016.

2009-2012: INTA AEBIO-242411 on Agricultural and molecular epidemiology of economic importance pathogens and pest. SBL Scientific Investigator of Unit: Pest.

2009-2012: INTA AEBIO-244621 on Functional analysis of relevant genes related to the interaction between insects, microorganisms and parasitoids. Co-Investigator.

2009-2012: INTA PNAPI-123022 on Multidisciplinary strategy to achieve the best beehive for a competitive apiculture, National Program of Apiculture. Co-Investigator.

2009-2012: INTA AEPV-215022 on Bio-ecological basis, design, development and evaluation of management strategies against damaging arthropods. Co- Investigator.

1998-2002: ANPCYT SECYT 0615 on Fruit Flies: Development of sexing strain and molecular typification of the pest. Participant

Publications

Transcriptome profiling of *Diachasmimorpha longicaudata* towards useful molecular tools for population management. 2016. Mannino MC, Rivarola M, Scannapieco AC, González S, Farber M, Cladera JL, **Lanzavecchia SB**. BMC genomics, Oct 12;17(1):793.

Individual precocity, temporal persistence, and task-specialisation of hygienic bees from selected colonies of *Apis mellifera*. 2016. Scannapieco A. **Lanzavecchia S**, Parreño, Liendo MC, Cladera JL, Spivak M, María A. Palacio. JAS. Volume 60, Issue 1 (Jun 2016)

Cytogenetic analysis of the South American fruit fly *Anastrepha fraterculus* (Diptera:Tephritidae) species complex: construction of detailed photographic polytene chromosome maps of the Argentinian Af. sp.1 species member. 2016. Angeliki Gariou-Papalexidou, Maria Cecilia Giardini, Antonios A. Augustinos, Elena Drosopoulou, **Silvia B. Lanzavecchia**, Jorge L. Cladera, Carlos Caceres, Kostas Bourtzis, Penelope Mavragani-Tsipidou P, Antigone Zacharopoulou. Plos One. Jun 30;11(6): e0157192.

Sex chromosomes in mitotic and polytene tissues of *Anastrepha fraterculus* (Diptera, Tephritidae) from Argentina: a review. 2015. María Cecilia Giardini, Fabián H. Milla, **Silvia Lanzavecchia**, Mariela Nieves, Jorge L. Cladera. ZooKeys 540: 83–94 (2015) doi: 10.3897/zookeys.540.6058.

Relevant genetic differentiation among Brazilian populations of *Anastrepha fraterculus* (Diptera, Tephritidae). 2015. Mosè Manni, Katia Manuela Lima, Carmela Rosalba Guglielmino, **Silvia Beatriz Lanzavecchia**, Marianela Juri, Teresa Vera, Jorge Cladera, Francesca Scolari, Ludvik Gomulski, Mariangela Bonnizoni, Giuliano Gasperi, Janisete G Silva, Anna Rodolfa Malacrida. ZooKeys 540: 157–173 (2015).

Complementary Sex Determination in the Parasitic Wasp *Diachasmimorpha longicaudata*. Carabajal Paladino L, Muntaabski I, **Lanzavecchia S**, Le Bagousse-Pinguet Y, Viscarret M, Juri M, et al. (2015). PLoS ONE 10(3): e0119619.

Microsatellite markers from the 'South American fruit fly' *Anastrepha fraterculus*: a valuable tool for population genetic analysis and SIT applications. **Lanzavecchia SB**, Juri M, Bonomi A, Gomulski L, Scannapieco AC, Segura DF, Malacrida AR, Cladera JL, Gasperi GG. BMC Genetics 2014, 15(Suppl 2):S13.

Dynamics of genetic variability in *Anastrepha fraterculus* (Diptera: Tephritidae) during adaptation to laboratory conditions of rearing. Scannapieco AC, Parreño MA, Remis MI, Juri M, Vera MT, Segura DF, Cladera JL, **Lanzavecchia SB**. BMC Genetics 2014, 15(Suppl 2):S14.

Genetics and biology of *Anastrepha fraterculus*: research supporting the use of the sterile insect technique (SIT) to control this pest in Argentina. Cladera JL, Vilardi JC, Juri M, Paulin LE, Giardini MC, Gómez Cendra PV, Segura DF, **Lanzavecchia SB**. BMC Genetics 2014, 15(Suppl 2):S12.

Cytogenetic characterization of *Diachasmimorpha longicaudata* (Hymenoptera: Braconidae) a parasitoid wasp used as a biological control agent. 2013. Paladino L, Papeschi A, **Lanzavecchia**, Jorge Cladera and M.Bressa. 2013. Eur. J. Entomol. 110(3): 401–409, 2013 ISSN 1210-5759 (print), 1802-8829 (online)

Rearing of the fruit fly parasitoid *Diachasmimorpha longicaudata* (Hymenoptera: Braconidae) on X-ray irradiated larvae of *Ceratitis capitata* (Diptera: Tephritidae). 2012. Mariana M. Viscarret, Claudia A. Conte, Leonela Z. Carabajal Paladino, Silvia N. Lopez, Diego F. Segura, Irina Muntaabski, **Silvia B. Lanzavecchia** and Jorge L. Cladera. Biocontrol Science & Technology. Volume 22, Issue 12, 2012.

Molecular detection of the parasitoid *Diachasmimorpha longicaudata* Ashmead (Hymenoptera: Braconidae) in immature stages of *Ceratitis capitata* Wied. and *Anastrepha fraterculus* Wied. (Diptera: Tephritidae). 2012. Conte, C.A.1, **Lanzavecchia, S.B.**, Petit-Marty, N., Mannino, M.C., Segura, D.F.1, Carbajal-Paladino, L.Z., Zandomeni, R.O., Cladera, J.L. Enviado a Entomología Experimentalis et applicata.

Precocious sexual signalling and mating in *Anastrepha fraterculus* (Diptera: Tephritidae) sterile males achieved through juvenile hormone treatment and protein supplements. 2012. María Clara Liendo, Francisco Devescovi, Guillermo Bachmann, María Eugenia Utgés, Solana Abraham, María Teresa Vera, **Silvia Beatriz Lanzavecchia**, Juan Pedro Bouvet, Paula Gómez-Cendra, Jorge Hendrichs, Peter Teal, Jorge Luis Cladera, Diego Fernando Segura. Bulletin of Entomological Research. Aceptado para publicación.

Adh 1 First Intron Polymorphisms in Argentinean Populations of *Ceratitis capitata*. 2010. **Lanzavecchia Silvia**, Remis María Isabel, Cladera Jorge, Zandomeni Rubén. Entomologia Experimentalis et Applicata 136: 136: 53–6.

Cytogenetic studies in three species of Pseudacteon (Diptera: Phoridae) parasitoids of the Solenopsis fire ants (Hymenoptera: Formicidae). 2009. Mónica G. Chirino, Patricia J. Folgarait, Lawrence E. Gilbert, **Silvia Lanzavecchia** and Alba G. Papeschi. Genetics and Molecular Biology. vol.32 (4). 740-747.

Origin and distribution of *Ceratitis capitata* mtDNA haplotypes in Argentina. 2008. **Lanzavecchia S.**, Faccio P., Petit N., Cladera J. and R. Zandomeni. Annals of the Entomological Society of America, Vol. 101, No. 3, pp. 627-638. US SIN 00138746. Inglés.

Uso de marcadores moleculares para el estudio genético de *Apis mellifera* en Argentina. 2007. **Lanzavecchia S.**, Agra M., Conte C., Cladera J., Corva P. y A.. Palacio. Apicultura sin Fronteras. II Nro. 19.

Uso de Marcadores Moleculares de abeja en Argentina. 2007. M. Agra, A. Palacio, **S. Lanzavecchia**, P. Corva, y J. Cladera. Campo y abejas X, vol.50. ISSN 1514-2078. Español.

Producción Masiva y Simultánea de machos de *Ceratitis capitata* (Diptera: Tephritidae) y parasitoides *Diachasmimorpha longicaudata* (Hymenoptera: Braconidae). 2006. Lopez S.; Viscarret M.; **Lanzavecchia S.**; Goneaga S.; y Cladera J. Rev. Soc. Entomol. Argent. 65 (3-4). ISSN: 0373-5680. Español.

Gene discovery through genomic sequencing of *Brucella abortus*. 2001. Sanchez DO, Zandomeni RO, Cravero S, Verdun RE, Pierrou E, Faccio P, Diaz G, **Lanzavecchia S**, Agüero F, Frasch AC, Andersson SG, Rossetti OL, Grau O, Ugalde RA. Infect Immun. (2001); 69(2):865-8. ISSN: 0019-9567. Inglés.