Tomás Masson

ORCID iD: 000-0002-2634-6283

GitHub: https://github.com/tomasMasson

National University of La Plata, Faculty of Exact Sciences

Department of Biological Sciences Calle 49 y 115, La Plata, Argentina

tomasmasson@gmail.com / tomas.masson@biol.unlp.edu.ar

Current Position

PhD Candidate, Molecular Virology

2016-Present

Thesis title: 'Characterization of Autochthonous Baculovirus as Candidates for the Control of the Fall Armyworm (*Spodoptera frugiperda*)'

Education

Masters Degree (Licenciatura) in Biotechnology and Molecular Biology La Plata National University

2011-2016

2019

2019

Awards and Funding

• Young Investigators Travel Fellowship Program
11th International Meeting of the Global Virus Network Global Virus Network (GVN)
Barcelona, Spain

• Short term visit at CNPEM Electron Criomicroscopy Group National Laboratory of Nanotechnology (LNNano) National Center for Energy and Materials Research (CNPEM) Campinas, Brazil

• PhD fellowship
National Council of Scientific and Technical Research (CONICET) Argentina

• Scholarship for Undergraduate Research National Interuniversitary Council (CIN) Argentina 2014-2016

Peer-Reviewed Publications

- Gisonno $R^{\#}$, Masson $T^{\#}$, Ramella N, Barrera EE, Romanowski V & Tricerri MA (2020). Evolutionary and Structural Constraints Influencing Apolipoprotein A-I Amyloid Behavior. BioRxiv. Link
- Fabre ML, Masson T, Haase S, Ferrelli ML & Romanowski V (2020). A Simplified Strategy to Package Foreign Proteins into Baculovirus Occlusion Bodies without Engineering the Viral Genome. Journal of Biotechnology. 307, 175-181. Link
- Masson T, Fabre ML, Pidre ML, Ferrelli ML, Romanowski V (2019). Protein Composition of the Occlusion Bodies of *Epinotia aporema* Granulovirus. PLoS ONE 14(2): e0207735. Link

• Ferrelli ML, Pídre ML, Ghiringhelli PD, Torres S, Fabre ML, Masson T, Cédola MT, Sciocco-Cap A and Romanowski V (2018). Genomic Analysis of an Argentinean Isolate of *Spodoptera frugiperda* Granulovirus Reveals that Various Baculoviruses Code for Lef-7 Proteins with Three F-box Domains. PLoS ONE 13(8): e0202598. Link

Skills and Techniques

Languages: spanish (native) and english (proficient)

Experimental (wet lab):

- Insect cell culture
- Insect in vivo assays
- Virus amplification and purification
- Molecular cloning (cloning design, PCR, restriction/ligation)
- Protein analysis (SDS-PAGE, mass spectrometry sample preparation)
- High-Throughput DNA sequencing sample preparation

Computational (dry lab):

- Bash, Git and Python proficiency
- Intermediate level in R
- Implementation of Snakemake pipelines
- Analysis of genomic data
- Phylogenetic reconstructions
- Data analysis with Python Stack (Numpy, Pandas, Scikit-Learn, Seaborn)

Scientific Meetings

• XLVIII Annual Meeting of the Argentine Society of Biophysics

2019

2019

National University of San Luis

San Luis, Argentins

Lighting Talk/Poster Presentation:

"Structural Properties of Apolipoprotein A1 Associated with Evolutionary Constraints" **Masson T**, Tricerri MA, Ramella NA, Gisonno RA

• 11th International Meeting Global Virus Network (GVN)

Spanish Scociety of Virology

Barcelona, Spain

Poster Presentations:

"Proteogenomic Analysis of EpapGV occlusion body"

Masson T, Fabre ML, Pidre ML, Ferrelli ML, Romanowski V

"Recombinant Polyhedron Envelope Protein Produced by a Stably Transformed Insect Cell Line can be Included in the Occlusion Bodies upon Infection with Alternative Baculoviruses" Fabre ML, **Masson T**, Ferrelli ML, Romanowski V

• XXXVIII Annual Meeting of the Argentine Society of Virology

2019

Argentine Society of Virology

Vaquerías, Córdoba

Oral presentations:

"Epinotia aporema Granulovirus Occlusion Bodies Proteome"

Ferrelli ML, Masson T, Fabre ML, Pidre ML, Romanowski V

"Improvement of the Baculovirus of $Anticarsia\ gemmatalis$ as a Biological Control Agent by Incorporating Heterologous Proteins in the Occlusion Bodies"

Fabre ML, Masson T, Ferrelli ML, Romanowski V

• XII Argentine Congress of Virology

2017

Argentina Society of Virology

Ciudad Autónoma de Buenos Aires, Argentina

Poster Presentations:

"Proteome of the Occlusion Derived Virions (ODVs) of the granulovirus of Spodoptera frugiperda (SfGV)"

Masson T, Fabre ML, Ferrelli ML, Pidre ML, Romanowski V

"Improvement of the Baculovirus of *Anticarsia gemmatalis* as a Biological Control Agent by Incorporating Heterologous Proteins in the Occlusion Bodies"

Fabre ML, **Masson T**, Romanowski V

Academic Courses

• Computational tools for scientists Institute of Liquids and Biological Systems, La Plata, Argentina	2019
• Cryo-EM and X-ray Crystallography: on the Frontier of Structural Biology Faculty of Exact and Natural Sciences, University of Buenos Aires, Argentina	2019
• Computational Approaches to Study Intrinsically Disordered Proteins National University of Quilmes, Argentina	2018
• Comparative Analysis of Microbial Genomes: Pangenomics and Phyloinformatics Faculty of Exact Sciences, National University of La Plata, Argentina	2018
• Basic and Advanced Applications of Flow Cytometry Faculty of Exact Sciences, National University of La Plata, Argentina	017-2018
• Training in the Handling of Databases for the Study of Biomedical Sciences Faculty of Medical Sciences, National University of Rosario, Argentina	2017
• Statistical Treatment of Life Sciences Data with Free Software R Faculty of Pharmacy and Biochemistry, University of Buenos Aires, Argentina	2017
• Peptide and Protein Mass Spectrometry Multidisciplinary Institute of Cell Biology (IMBICE), La Plata, Argentina	2017
• Molecular and Cellular Bases of Immunopathologies Institute of Immunological and Physiopathological Studies (IIFP), La Plata, Argentina	2016