

PERSONAL INFORMATION



Debora Stelitano

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WORK EXPERIENCE

Present

Research fellow (RTD-a) at University of Campania “Luigi Vanvitelli”, Experimental Medicine Department, Microbiology and Clinical Microbiology section, Naples, Italy.
Main topics: identification and study of the mechanism of action of small molecules and peptides against different viruses (i.e, Coronaviridae, Paramyxoviridae, Herpesviridae).

2019-2021

Adjunct Associate Research Scientist at Pediatrics Department, Division of Infectious Diseases, Columbia University, New York, USA.
Main topics: design and evaluation of the activity of antiviral peptides against several viruses including SARS-CoV-2, canine distemper virus, measles, respiratory syncytial virus, human parainfluenza virus 3 and influenza.

Present

Lecturer for the Microbiology course, for the degree programs in Pharmacy and Nursing, University of Campania “Luigi Vanvitelli”, Caserta, Italy

2018-2019

Post-doc at Pediatrics Department, division of Infectious Diseases, Columbia University, New York, USA.
Main topics: study of the pathogenesis of measles infection in the brain.

2017-2018

Post-doc at University of Campania “Luigi Vanvitelli”, Experimental Medicine Department, Microbiology and Clinical Microbiology section, Naples, Italy.
Main topics: identification of novel antiviral molecules from natural extracts.

EDUCATION AND TRAINING

2014-2017

PhD student in Molecular Biomedicine at L.N.CIB (Area Science Park ,99, Padriciano, Trieste, 34149, Italy).
Supervisor: PhD Silvano Piazza.
Main topics: molecular oncology and cell biology.
Thesis: “GTSE1: a novel direct TEAD4-E2F1 target gene involved in cell protrusions formation in TNBC”.

October-December 2013

Trainee at IGA (Applied Genomic Institute), Udine, Italy.
Main topics: next generation sequencing.

2013-2014

Assignee of a scholarship for the advanced training course “Researchers in functional genomics, genetic improvement and innovations for the citrus industry” at Science and Technology Park of Sicily, Z.I Blocco Palma I – Stradale V.Lancia, 57 - 95121 Catania

Main topics: functional genomics, molecular biology and next generation sequencing.

January 2013

Achieved qualification for the biologist profession (200/200)

From October 2010 to July 24, 2012

Master's degree in Biology. Date 24/07/2012 Final mark: 110/110 *cum laude*
Curriculum: biotechnology and applied microbiology. University of Messina.
Main topics: molecular, cellular, microbial and environmental biotechnology and applied microbiology in general.

2011-2012

Assignee of a scholarship (criteria: number of exams taken and marks obtained)

Name and type of organization providing

E.R.S.U. Messina, Regional Agency for the Right to Education, via Ghibellina, 146, 98123, Messina.

From October 2005 to 17 March 2010

Bachelor's degree in Biological Sciences. Date 17/03/2010. Thesis: "Three killers of the neurons in Parkinson's disease."
Graduation mark: 110/110 *cum laude*, University of Messina, Messina, Italy.

From March to May 2009

Trainee at Clinical Institute "Prof. Dr. R. De Blasi", via Torrione 55, 89123, Reggio Calabria.

2005

Scientific High School Degree, Scientific Lyceum "Leonardo Da Vinci", via Possidonia 8, 89100, Reggio Calabria.

PERSONALSKILLS

Mother tongue(s)

Italian

Other languages

English

UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Spoken interaction	Spoken production	
C1	C1	C1	C1	C1

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user Common European Framework of Reference for Languages

List of publications

1. **Stelitano D**, Weisberg SP, Goldklang MP, Zhu Y, Bovier FT, Kalantarov GF, Greco G, Decimo D, Franci G, Cennamo M, Portella G, Galdiero M, Mathieu C, Horvat B, Trakht IN, Moscona A, Whitt MA, Porotto M. Rapid and Flexible Platform To Assess Anti-SARS-CoV-2 Antibody Neutralization and Spike Protein-Specific Antivirals. *mSphere*. 2021 Aug 25;6(4):e0057121. doi: 10.1128/mSphere.00571-21. Epub 2021 Jul 28. PMID: 34319126.
2. Fusco A, Savio V, **Stelitano D**, Baroni A, Donnarumma G. The Intestinal Biofilm of *Pseudomonas aeruginosa* and *Staphylococcus aureus* Is Inhibited by Antimicrobial Peptides HBD-2 and HBD-3. *Applied Sciences*. 2021; 11(14):6595. <https://doi.org/10.3390/app11146595>.
3. Weisberg SP, Connors TJ, Zhu Y, Baldwin MR, Lin WH, Wontakal S, Szabo PA, Wells SB, Dogra P, Gray J, Idzikowski E, **Stelitano D**, Bovier FT, Davis-Porada J, Matsumoto R, Poon MML, Chait M, Mathieu C, Horvat B, Decimo D, Hudson KE, Zotti FD, Bitan ZC, La Carpia F, Ferrara SA, Mace E, Milner J, Moscona A, Hod E, Porotto M, Farber DL. Distinct antibody responses to SARS-CoV-2 in children and adults across the COVID-19 clinical spectrum. *Nat Immunol*. 2021 Jan;22(1):25-31. doi: 10.1038/s41590-020-00826-9. Epub 2020 Nov 5. PMID: 33154590.
4. Chianese A, Santella B, Ambrosino A, **Stelitano D**, Rinaldi L, Galdiero M, Zannella C, Franci G. Oncolytic Viruses in Combination Therapeutic Approaches with Epigenetic Modulators: Past, Present, and Future Perspectives. *Cancers*. 2021 Jun 2;13(11):2761. doi: 10.3390/cancers13112761.
5. Squillaci G, Zannella C, Carbone V, Minasi P, Folliero V, **Stelitano D**, Cara FL, Galdiero M, Franci G, Morana A. Grape Canes from Typical Cultivars of Campania (Southern Italy) as a Source of High-Value Bioactive Compounds: Phenolic Profile, Antioxidant and Antimicrobial Activities. *Molecules*. 2021; 26(9):2746. <https://doi.org/10.3390/molecules26092746>.
6. Folliero V., Zannella C., Chianese A., **Stelitano D**, Ambrosino A., De Filippis A., Gianluigi Franci G., Galdiero M. Application of dendrimers for treating parasitic diseases. *Pharmaceutics* (2021) 13(3), 1-22.
7. B.M. Nastri, C. Zannella, V. Folliero, L. Rinaldi, L. Restivo, **D. Stelitano**, R. Sperlongano, L.E. Adinolfi, G. Franci Editorial – Role of Highly Active Antiretroviral Therapy (HAART) for the COVID-19 treatment, *Eur Rev Med Pharmacol Sci* 2020 Vol. 24 - N. 22 Pages: 11982-11984 DOI: 10.26355/eurrev_202011_23861.
8. Outlaw VK, Kreitler DF, **Stelitano D**, Porotto M, Moscona A, Gellman SH. Effects of Single α -to- β Residue Replacements on Recognition of an Extended Segment in a Viral Fusion Protein. *ACS Infect Dis*. 2020 Aug 14;6(8):2017-2022. doi: 10.1021/acsinfecdis.0c00385. Epub 2020 Jul 27. PMID: 32692914.
9. Serretiello E, Astorri R, Chianese A, **Stelitano D**, Zannella C, Folliero V, Santella B, Galdiero M, Franci G, Galdiero M. The emerging tick-borne Crimean-Congo haemorrhagic fever virus: A narrative review. *Travel Med Infect Dis*. 2020 Sep-Oct;37:101871. doi: 10.1016/j.tmaid.2020.101871. Epub 2020 Sep 3. PMID: 32891725.
10. **Stelitano D**, Franci G, Chianese A, Galdiero S, Morelli G, Galdiero M. Chapter: HSV membrane glycoproteins, their function in viral entry and their use in vaccine studies. Royal Society of Chemistry Book: Amino Acids, Peptides and Proteins Volume 43. 2019; 978-1-78801-866-1. doi:10.1039/9781788013857-00014.
11. **Stelitano D**, Squillaci G, Santella B, Chianese A, D'Oriano V, Finamore E, Vitiello M, Di Lella F M, Galdiero M, Franci G. Airborne microbial flora in Buffalo farms in a Mediterranean climate. *Translational Medicine Reports*. 2019, Volume 3, n.1. doi:10.4081/tmr.8146.
12. **Stelitano D**, Chianese A, Astorri R, Serretiello E, Zannella C, Folliero V, Galdiero M, Franci G, Crudele V, Vitiello M. Chikungunya virus: update on molecular biology, epidemiology and current strategies. *Translational Medicine Reports*. 2019, Volume 3, n.1. doi: 10.4081/tmr.8156.
13. Zannella C, **Stelitano D**, Folliero V, Palomba L, Bovier T F, Monda M, Galdiero M, Franci G. Antibacterial and

antiviral potential of neuropeptides. *Translational Medicine Reports*. 2019, Volume 3, n.1. doi:10.4081/tmr.8142

14. Chianese A, **Stelitano D**, Astorri R, Serretiello E, Vitiello M, Galdiero M, Franci G. West Nile virus: an overview of current information. *Translational Medicine Reports*. 2019, Volume 3, n.1. doi:10.4081/tmr.8145
15. Iovene MR, Pota V, Galdiero M, Corvino G, Di Lella FM, Stelitano D, Passavanti MB, Pace MC, Alfieri A, Di Franco S, Aurilio C, Sansone P, Niyas VKM, Fiore M. First Italian outbreak of VIM-producing *Serratia marcescens* in an adult polyvalent intensive care unit, August-October 2018: A case report and literature review. *World J Clin Cases*. 2019 Nov 6;7(21):3535-3548. doi: 10.12998/wjcc.v7.i21.3535. PMID: 31750335; PMCID: PMC6854422.
16. Cyrille Mathieu, Marion Ferren, Eric Jurgens, Claire Dumont, Ksenia Rybkina, Olivia Harder, **Debora Stelitano**, Silvia Madeddu, Giuseppina Sanna, Dayna Schwartz, Sudipta Biswas, Diana Hardie, Takao Hashiguchi, Anne Moscona, Branka Horvat, Stefan Niewiesk, Matteo Porotto. Measles virus bearing MIBE-derived fusion protein is pathogenic after infection via the respiratory route. *J Virol*. 2019 Feb 6. pii: JVI.01862-18. doi: 10.1128/JVI.01862-18.
17. Franci G, Dell'Aversana C, **Stelitano D**, Rinaldi M, Altucci L. Commentary "LncRNA SBF2-AS1 promotes hepatocellular carcinoma metastasis by regulating EMT and predicts unfavorable prognosis". *Eur Rev Med Pharmacol Sci*. 2019 Jan;23(1):1-2. doi: 10.26355/eurrev_201901_16739.
18. Angius F, Smuts H, Rybkina K, **Stelitano D**, Eley B, Wilmshurst J, Ferren M, Lalande A, Mathieu C, Moscona A, Horvat B, Hashiguchi T, Porotto M, Hardie D. Analysis of a subacute sclerosing panencephalitis (SSPE) Genotype B3 virus from the 2009/10 South African measles epidemic shows hyperfusogenic F proteins contribute to measles virus infection in the brain. *J Virol*. 2018 Nov 28. pii: JVI.01700-18. doi: 10.1128/JVI.01700-18.
19. Figueira TN, Augusto MT, Rybkina K, **Stelitano D**, Noval MG, Harder OE, Veiga AS, Huey D, Alabi CA, Biswas S, Niewiesk S, Moscona A, Santos NC, Castanho MARB, Porotto M., Effective in Vivo Targeting of Influenza Virus through a Cell-Penetrating/Fusion Inhibitor Tandem Peptide Anchored to the Plasma Membrane. *Bioconjug Chem*. 2018 Oct 17;29(10):3362-3376. doi: 10.1021/acs.bioconjchem.8b00527. Epub 2018 Sep 14.
20. **Stelitano D**, Leticia YP, Dalla E, Monte M, Piazza S, Schneider C. GTSE1: a novel TEAD4-E2F1 target gene involved in cell protrusions formation in triple-negative breast cancer cell models. *Oncotarget*. 2017;8(40):67422-67438. doi:10.18632/oncotarget.18691.

Posters

Stelitano D, Bovier F T, Mathieu C, Horvat B, Zannella C, Folliero V, Franci G, Cennamo M, Portella G, Galdiero M, Porotto M. A rapid high-throughput assay for the identification of neutralizing antibodies and antiviral molecules against SARS-CoV-2 virus. Webinar meeting AICC day 2020, 15th October 2020.

Stelitano D, Bovier F T, Mathieu C, Horvat B, Zannella C, Folliero V, Franci G, Cennamo M, Portella G, Galdiero M, Porotto M. A high-throughput platform for the rapid screening of neutralizing antibodies against SARS-CoV-2 virus. Annual Conference of the Società Italiana di Microbiologia (SIM), 21-22 September 2020, virtual meeting.

Stelitano D, Menzo S, Moscona A and Porotto M. Analysis of a measles inclusion body encephalitis (MIBE) isolate from a 2017 measles outbreak shows a hyperfusogenic fusion protein (F) phenotype common to other F proteins obtained from measles central nervous system infections. Annual meeting of the American Society for Virology, 20-24 July 2019 at University of Minnesota in Minneapolis.

Mathieu C, Ferren M, Dumont C, Rybkina K, Harder O, **Stelitano D**, Hardie D, Hashiguchi T, Moscona A, Horvat B, Niewiesk S, and Porotto M. Measles virus bearing MIBE-derived fusion protein is pathogenic after infection via the respiratory route. Annual meeting of the American Society for Virology, 20-24 July 2019, University of Minnesota in Minneapolis.

Ferren M, Angius F, Smuts H, Rybkina K, **Stelitano D**, Mathieu C, Moscona A, Horvat B, Hashiguchi T, Porotto M, Hardie D. Analysis of a subacute sclerosing panencephalitis (SSPE) virus shows hyperfusogenic F protein contributes to measles

virus infection in the brain. Annual meeting of the American Society for Virology, 20-24 July 2019, University of Minnesota in Minneapolis.

Zannella C, Franci G, Bellavita R, Grieco P, **Stelitano D**, Serramia M J, Muñoz-Fernandèz M A, Galdiero M. "Temporin L derived peptides: new potential anti-HIV agents". Annual Conference of the Società Italiana di Microbiologia(SIM), 26-29 September 2018, Palermo (Italy).

Chianese A, **Stelitano D**, Petrillo A, Sarno F, Altucci L, Nebbioso A, Galdiero M, Franci G. "Epigenetic impact in HSV-1 infection via small molecules regulation." Annual Conference of the Società Italiana di Microbiologia(SIM), 26-29 September 2018, Palermo (Italy).

Angius F, **Stelitano D**, Porotto M. Measles virus and CNS adaptation. Annual Conference of the Società Italiana di Microbiologia(SIM), 26-29 September 2018, Palermo (Italy).

Folliero V, Della Pepa M E, Zannella C, D'Oriano V, Martora F, **Stelitano D**, Franci G, Galdiero M, Finamore E. Monitoring and control of Echinococcosis-Idatidosis in Campania Region, Italy, Annual Conference of the Società Italiana di Microbiologia(SIM), 27-30 September 2017, Genova (Italy).

Stelitano D, Peche L, Piazza S, Ciani Y, Dalla E and Schneider C. "Insight into hGTSE1 regulation in triple negative breast cancer". EMBO Conference "Cell signaling and cancer therapy", 27-31 May 2016, Cavtat (Croatia).

Oral communications

High-throughput platforms to assess neutralizing antibodies and antiviral molecules against SARS-CoV-2. "5th National Congress of the Italian Society for Virology. One Virology One Health" 5-6 July 2021.

"A hyperfusogenic fusion machinery is observed in measles central nervous system infection from an Italian case", Annual Conference of the Società Italiana di Microbiologia (SIM), 18-21 September 2019.

Seminar on measles infection in the brain at University of Campania *Luigi Vanvitelli*, Napoli (Italy), 8 April 2019..

Seminar for Immunology and Microbiology course, 05 April 2019, at Università degli Studi di Salerno, Facoltà di Medicina e Chirurgia, Scuola Medica Salernitana, Baronissi, Salerno (Italy).

Seminar "Mechanisms of Measles virus central nervous system infection", February 15th 2019, at Columbia University, Department of Microbiology and Immunology, New York, NY (USA).

Seminar "An intriguing model for hGTSE1 regulation in TNBC", 21 April 2016, at ICGEB, Trieste (Italy).

Seminar "Insight into hGTSE1 regulation in triple-negative breast cancer", 30 July 2015, at ICGEB, Trieste (Italy).