



Matteo Fracella

Nationality: Italian **Date of birth:** 20/04/1997

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WORK EXPERIENCE

PhD in "Medicina Sperimentale"

Department of Molecular Medicine, Sapienza University of Rome, Italy. [31/10/2021 – Current]

City: Rome

Country: Italy

Laboratory training

Sapienza University of Rome, Italy [2019 – 2021]

City: Roma

Country: Italy

Training for experimental Master's Degree thesis at Department of Molecular Medicine, Laboratory of Virology, SAPIENZA, Rome. Title of thesis: " Infezione di MmuPV1 su cheratinociti di topo come modello per lo studio di geni associati all'Interferon nel controllo della replicazione del papillomavirus ".

Laboratory training

Università del Salento, Italy [2015 – 2016]

City: Lecce

Country: Italy

Training for experimental Bachelor's Degree thesis at Anatomia Comparata e Citologia, Università del Salento, Lecce. Title of thesis: "Vescicole extracellulari: attività immuno-modulatoria dei macrofagi in condizioni di stress iperglicemia"

EDUCATION AND TRAINING

Master's Degree - "Genetica e Biologia Molecolare" (110/110 e lode)

Sapienza University of Rome, Italy [2020]

Address: (Italy)

Bachelor's Degree - "Scienze Biologiche" (108/110)

Università del Salento, Italy [2018]

Address: Lecce (Italy)

High School Diploma (100/100)

Liceo Scientifico Galileo Galilei, Nardò (LE) [2015]

Address: Nardò (Italy)

LANGUAGE SKILLS

Mother tongue(s): **Italian**

Other language(s):

inglese

LISTENING B2 **READING** B2 **WRITING** B1

SPOKEN PRODUCTION B1 **SPOKEN INTERACTION** B1

DIGITAL SKILLS

Microsoft Word / Microsoft Excel / Google Drive / Microsoft Powerpoint

COMMUNICATION AND INTERPERSONAL SKILLS

Interpersonal skills

Good interpersonal skills acquired during laboratory training and as a PhD student during teaching activities to Master's Degree students

MAIN RESEARCH TOPICS

Scientific topics

Host-virus interaction; antiviral immunity with focused attention to IFN pathways and cell-mediated responses in acute and chronic viral infection; principal viruses investigated: human papillomavirus (HPV); human immunodeficiency virus (HIV); respiratory viruses [e.g. respiratory syncytial virus (RSV), rhinovirus (HRV) and coronaviruses, including SARS-CoV-2].

PUBLICATIONS

Sorrentino L, Silvestri V, Oliveto G, Scordio M, Frasca F, Fracella M, Bitossi C, D'Auria A, Santinelli L, Gabriele L, Pierangeli A, Mastroianni CM, d'Ettorre G, Antonelli G, Caruz A, Ottini L, Scagnolari C. Distribution of Interferon Lambda 4 Single Nucleotide Polymorphism rs11322783 Genotypes in Patients with COVID-19. *Microorganisms*. 2022 Feb 4;10(2):363. doi:10.3390/microorganisms10020363. PMID: 35208821; PMCID:PMC8876137.

[2022]

Pierangeli A, Gentile M, Oliveto G, Frasca F, Sorrentino L, Matera L, Nenna R, Viscido A, Fracella M, Petrarca L, D'Ettorre G, Ceccarelli G, Midulla F, Antonelli G, Scagnolari C. Comparison by Age of the Local Interferon Response to SARS-CoV-2 Suggests a Role for IFN- ϵ and - ω . *Front Immunol*. 2022 Jul 12; 13:873232. doi: 10.3389/fimmu.2022.873232.

[2022]

Bitossi C, Viscido A, Prezioso C, Brazzini G, Trancassini M, Borrazzo C, Passerini S, Frasca F, Scordio M, Sorrentino L, Oliveto G, Fracella M, D'Auria A, Selvaggi C, Cimino G, Midulla F, Pierangeli A, Antonelli G, Moens U, Pietropaolo V, Scagnolari C. High prevalence of Merkel cell polyomavirus is associated with dysregulation in transcript levels of TLR9 and type I IFNs in a large cohort of CF patients from the Italian (Lazio) reference center for cystic fibrosis. *Microb Pathog*.169:105644.

[2022]

Fracella M, Oliveto G, Sorrentino L, Roberto P, Cinti L, Viscido A, Di Lella FM, Giuffrè F, Gentile M, Pietropaolo V, Prezioso C, Palma E, Recine N, Palaia I, Scagnolari C, Antonelli G, Pierangeli A. Common Microbial Genital Infections and Their Impact on the Innate Immune Response to HPV in Cervical Cells. *Pathogens*. 2022 Nov 16;11(11):1361. doi: 10.3390/pathogens11111361.

[2022]

Mori M, Quaglio D, Calcaterra A, Ghirga F, Sorrentino L, Cammarone S, Fracella M, D'Auria A, Frasca F, Criscuolo E, Clementi N, Mancini N, Botta B, Antonelli G, Pierangeli A, Scagnolari C. Natural Flavonoid Derivatives Have Pan-Coronavirus Antiviral Activity. *Microorganisms*. 2023 Jan 25;11(2):314. doi: 10.3390/microorganisms11020314.

[2023]

Santinelli L, Lazzaro A, Sciarra F, Maddaloni L, Frasca F, Fracella M, Moretti S, Borsetti A, Bugani G, Alessandri F, Zullino V, Ruberto F, Pugliese F, Sorrentino L, Gianfrilli D, Isidori A, Venneri MA, Mastroianni CM, Ceccarelli G, d'Ettorre G. Cellular Immune Profiling of Lung and Blood Compartments in Patients with SARS-CoV-2 Infection. *Pathogens*. 2023 Mar 11;12(3):442. doi: 10.3390/pathogens12030442.

[2023]

Sorrentino L, Fracella M, Frasca F, D'Auria A, Santinelli L, Maddaloni L, Bugani G, Bitossi C, Gentile M, Ceccarelli G, Turriziani O, Mastroianni CM, Antonelli G, d'Ettorre G, Pierangeli A, Scagnolari C. Alterations in the Expression of IFN Lambda, IFN Gamma and Toll-like Receptors in Severe COVID-19 Patients. *Microorganisms*. 2023 Mar 8;11(3):689. doi: 10.3390/microorganisms11030689.

[2023]

CONFERENCES AND SEMINARS

(Poster) 32^o European Congress of Clinical Microbiology and Infectious Diseases (2022): How bacterial vaginosis influence the innate immune response to HPV in cervical cells.

[LISBON]

Matteo Fracella, Mirko Scordio, Leonardo Sorrentino, Federica Frasca, Giuseppe Oliveto, Agnese Viscido, Federica Di Lella, Massimo Gentile, Carolina Scagnolari, Valeria Pietropaolo, Nadia Recine, Guido Antonelli, Alessandra Pierangeli.

Role: presenting author

(Oral Poster) XLIX CONGRESSO NAZIONALE AMCLI (2022): Dysregulation of IFN pathways in anal cells from HIV-1 men during HPV infection.

[RIMINI]

Matteo Fracella, Mirko Scordio, Leonardo Sorrentino, Federica Frasca, Giuseppe Oliveto, Agnese Viscido, Letizia Santinelli, Eugenio Nelson Cavallari, Gabriella D'Ettorre, Paolo Gozzo, Guido Antonelli, Carolina Scagnolari, Alessandra Pierangeli.

Role: presenting author

(Oral Poster) 14° CONGRESSO ITALIAN CONFERENCE ON AIDS AND ANTIVIRAL RESEARCH (ICAR) (2022) Alteration of IFN pathways in anal cells from HIV-1/HPV co-infected men

[BERGAMO]

Matteo Fracella, Mirko Scordio, Leonardo Sorrentino, Federica Frasca, Giuseppe Oliveto, Agnese Viscido, Letizia Santinelli, Eugenio Nelson Cavallari, Gabriella D'Ettorre, Paolo Gozzo, Guido Antonelli, Carolina Scagnolari, Alessandra Pierangeli.

Role: presenting author

(Oral Presentation) 6° NATIONAL CONGRESS OF THE ITALIAN SOCIETY FOR VIROLOGY (2022) Molecular epidemiology of RSV strains causing an unusual peak of hospitalization in autumn 2021

[NAPOLI]

Matteo Fracella, Leonardo Sorrentino, Carolina Scagnolari, Giuseppe Oliveto, Federica Frasca, Laura Petrarca, Raffaella Nenna, Fabio Midulla, Guido Antonelli, Alessandra Pierangeli.

Role: presenting author

(Poster) 50° CONGRESSO NAZIONALE DELLA SOCIETA' ITALIANA DI MICROBIOLOGIA (2022) Study of immunological parameters associated with Long COVID in children/adolescents

[NAPOLI]

Matteo Fracella, Leonardo Sorrentino, Federica Frasca, Mirko Scordio, Giuseppe Oliveto, Agnese Viscido, Camilla Bitossi, Alessandra D'auria, Stefania Rossi, Lucia Gabriele, Anna R. Ciccaglione, Roberto Bruni, Laura Petrarca, Enrica Mancino, Raffaella Nenna, Fabio Midulla, Guido Antonelli, Alessandra Pierangeli, Carolina Scagnolari.

Role: Presenting Author

(Oral Presentation) 21° Congresso SIMIT-Società Italiana di Malattie Infettive e Tropicali (2022) Inflammasome but not type III Interferon response is increased in children/adolescents with long COVID

[ROMA]

Matteo Fracella, Leonardo Sorrentino, Federica Frasca, Mirko Scordio, Giuseppe Oliveto, Carla Selvaggi, Agnese Viscido, Camilla Bitossi, Alessandra D'auria, Laura Petrarca, Enrica Mancino, Raffaella Nenna, Fabio Midulla, Guido Antonelli, Alessandra Pierangeli, Carolina Scagnolari

Role: Presenting Author

(Oral Presentation) 33° European Congress of Clinical Microbiology and Infectious Diseases (2023): Alteration of serum cytokine profile in children with long covid.

[COPENAGHEN]

Matteo Fracella, Leonardo Sorrentino, Federica Frasca, Mirko Scordio, Giuseppe Oliveto, Alessandra D'Auria, Stefania Rossi, Lucia Gabriele, Anna R. Ciccaglione, Roberto Bruni, Enrica Mancino, Gabriella D'Ettore, Guido Antonelli, Alessandra Pierangeli, Carolina Scagnolari.

Role: Presenting Author

(Oral Presentation) 35th International Papillomavirus Conference-IPVC (2023): Kinetics of Expression of Viral mRNA and U-ISGF3-Regulated Interferon Stimulated Genes In Mpek.B16 Keratinocytes Infected with MMUPV1

[WASHINGTON D.C.]

Matteo Fracella, Richard Roden, Alessandra Pierangeli, Mirko Scordio, Leonardo Sorrentino, Jiafen Hu, Federico De Marco, Guido Antonelli, Carolina Scagnolari, Raphael Viscidi.

Role: Presenting Author

TEACHING ASSIGNMENT

Teaching assignment, Second level Master's in Molecular Virology a.a. 2021-2022, Department of Molecular Medicine

[18/05/2022]

Topic of the lecture "Applicazione della tecnologia CRISPR/CAS9"

Teaching assignment, Second level Master's in Molecular Virology a.a. 2021-2022, Department of Molecular Medicine

[12/10/2022]

Topic of the lecture "Ruolo della risposta immunitaria innata nell'infezione da HPV"

Tutoring assignment for Master's degree students of Medicina e Odontoiatria, Sapienza University of Rome (Tutorati in ingresso e in itinere)

a.a. 2021-2022

Attività Didattiche Elettive (ADE): SARS-CoV-2: PATOGENESI E GESTIONE CLINICA DEL PAZIENTE DURANTE E POST COVID-19

[14/04/2022]

Attività Didattiche Elettive (ADE)

Role: Presenting Author

Attività Didattiche Elettive (ADE): PATOGENESI E TRASMISSIONE DELL'INFEZIONE DA VIRUS DELL'EPATITE C (HCV)

[06/05/2022]

Attività Didattiche Elettive (ADE)

Role: Presenting Author

Attività Didattiche Elettive (ADE): MALARIA: CONTAGIO, SINTOMI E PROFILASSI

[25/05/2022]

Attività Didattiche Elettive (ADE)

Role: Presenting Author