



# Francesca Brunetti

Email: francesca.brunetti@uniroma1.it 🕒 Github: https://github.com/Francii-B

LinkedIn: www.linkedin.com/in/francesca-brunetti-ab8b13206

**ORCID:** www.orcid.org/0000-0001-9067-6343

**Gender:** Female **Date of birth:** 5 Jan 1998 **Nationality:** Italian

## **EDUCATION AND TRAIN-**ING

Ph.D. student in Infectious Diseases, Microbiology, Legal Medicine and

[ Nov 2022 - Current ] Public Health Sciences

Sapienza University of Rome

**City:** Rome | **Country:** Italy

38th Ph.D. cycle

Supervisor: Prof. Maria Pia Conte Co-Supervisor: Dr. Karel Břinda

Venue: Computational Microbiology Lab (Microbiology section), Department of Public

Health and Infectious Diseases, Sapienza University of Rome

Theme: Innovative modelling, statistical and/or bioinformatic approaches in the study of

infectious disease and public health

[Sep 2020 – Jul 2022] MSc in Bioinformatics

Tor Vergata University of Rome

City: Rome | Country: Italy | | Final grade: 110 with honours / 110

**Thesis project**: "Genotypic characterization of Staphylococcus aureus strains from patients

affected by atopic dermatitis"

Thesis Advisors: prof. Maria Pia Conte, Dr. Massimiliano Marazzato

Thesis Internship duration: 9 months (October 2021 - July 2022)

Venue: Computational Microbiology Lab (Microbiology section), Department of Public

Health and Infectious Diseases, Sapienza University of Rome

Area: Genomics, Microbiology

[Sep 2016 – Oct 2019] **BSc in Bioinformatics** 

Sapienza University of Rome

City: Rome | Country: Italy | Final grade: 110 with honors / 110

**Thesis project**: "Characterization of the Nasal Microbiota in children with chronic nasal

inflammation: role of adenoid hypertrophy and allergic rhinitis"

Thesis Advisors: prof. Maria Pia Conte, Dr. Massimiliano Marazzato

**Thesis Internship duration**: 6 months (May - October 2019)

Venue: Computational Microbiology Lab (Microbiology section), Department of Public

Health and Infectious Diseases, Sapienza University of Rome

Area: Metagenomics, Microbiology

BSc entirely held in English.

## **PHD EXPERIENCE - RE-SEARCH PERIOD ABROAD**

[ Nov 2023 – Nov 2024 ]

Research period at INRIA centre at Rennes University

Supervisor: Dr. Karel Brinda (Genscale team)

**Institute:** <u>INRIA centre</u> at Rennes University, Rennes (France)

## **UNDERGRADUATE RE-**SEARCH EXPERIENCE

[ Jan 2020 – Apr 2021 ]

**Training Experience in Computational Microbiology** 

Venue: Computational Microbiology Lab (Microbiology section), Department of Public Health and Infecious Disease, Sapienza University of Rome

Tutor: Dr. Massimiliano Marazzato

**Themes**: Application of bioinformatic techniques for the analysis of microbial organisms.

**Gained Experience**: NGS analyses starting from raw data; Genome assembly; Characterization of single microorganisms (WGS analysis) or/and microbial communities (16S Metagenomics analysis); Comparative genomics; Pangenomics analysis.

#### **HONOURS AND AWARDS**

[ May 2021 ]

Undergraduate Research Fellowship Awarding institution: Sapienza University of

Rome

Undergraduate Research Fellowship

Duration: 6 months (May - October 2021)

Supervisor: prof. Anna Teresa Palamara

Venue: Computational Microbiology Lab (Microbiology section), Department of Public

Health and Infecious Disease, Sapienza University of Rome

**Themes**: Application of bioinformatic techniques for the analysis of microbial organisms.

**Gained Experience**: NGS analyses starting from raw data; Genome assembly; Characterization of single microorganisms (WGS analysis) or/and microbial communities (16S Metagenomics analysis); Comparative genomics; Pangenomics analysis.

#### **PEER REVIEW ACTIVITIES**

[ May 2023 – Current ] Peer reviewer for Ecotoxicology and Environmental Safety

[ Dec 2023 – Current ]

Peer reviewer for PLOS Computational Biology

## SUPPLEMENTARY TEACH-**ING ACTIVITIES**

[ Nov 2022 – Current ] Laboratory sessions for Dentistry and Dental Prosthodontics students

**Theme**: Introduction to Computational microbiology and its applications

**Activity**: Laboratory sessions held for the students from the "Microbiology and Hygiene" course (MED/07), MSc in Dentistry and Dental Prosthodontics, Sapienza University of Rome

Course teacher: Prof. Maria Pia Conte, Associate professor

[ Nov 2022 – Current ] Laboratory sessions for Biotechnology students

**Theme**: Introduction to Computational microbiology and its applications

**Activity**: Laboratory sessions held for the students from the "General microbiology, microbial biotechnology and elements of medical microbiology I" course (MED/07), BSc in Biotechnology, Sapienza University of Rome

Course teacher: Prof. Catia Longhi, Associate professor

## **PROJECTS**

# [ Jan 2021 – Jun 2021 ] MSc Bioinformatics website development

**Aim**: Development of the new <u>official website</u> for the MSc in Bioinformatics, <u>Tor Vergata</u> University of Rome.

Supervisor: prof. Andrea Cabibbo, Tor Vergata University of Rome

#### LANGUAGE SKILLS

Mother tongue(s): Italian

Other language(s):

**English** 

LISTENING C1 READING C1 WRITING C1

SPOKEN PRODUCTION C1 SPOKEN INTERACTION C1

**French** 

LISTENING B1 READING B1 WRITING B1

**SPOKEN PRODUCTION B1 SPOKEN INTERACTION B1**