
BIOGRAPHICAL SKETCH

NAME: Francesco Montinaro

orcid ID: **0000-0002-4506-963X**

POSITION TITLE: Researcher (Tenure-track)

EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE (if applicable)	Start Date MM/YYYY	Completion Date MM/YYYY	FIELD OF STUDY
University of Tartu, Estonia	Visiting Researcher	09/2020	Present	Human genetic variation and its impact on disease and evolution
University of Tartu, Estonia	Post-Doc	09/2017	09/2020	Human genetic variation and its impact on disease and evolution
University of Oxford, UK	Post-Doc	05/2014	09/2017	Human evolutionary genetics
University of Oxford, UK	Visiting Researcher	01/2012	02/2015	Human evolutionary genetics
University Cattolica (Rome, Italy)	PhD	01/2012	02/2015	Human evolutionary genetics
University of Rome Sapienza, Italy	Research Assistant	03/2010	01/2012	Human evolutionary genetics
University of Bologna, Italy	Msc (2 years)	10/2007	03/2010	Evolutionary biology and biodiversity
University of Bologna, Italy	BA (3 years)	10/2006	07/2010	Biology

A. Personal Statement

I am a researcher of Biological Anthropology and Human genetics with extensive research experience in the study of Human genetic variation and its impact on the evolution and epidemiology in different human populations.

My research focused on investigating the impact of past demographic events in different human populations by analysing modern and ancient genetic data and assessing their impact on modern-day populations.

Currently, I am the Principal Investigator of two projects aiming to dissect the genetic role of complex behaviours related to substance use, abuse, and addiction in Southern Italy.

B. Positions, Scientific Appointments and Honors

2022 - 2024 Tenure track Researcher (rtd-B). Department of Biosciences, Biotechnology and Environment, University of Bari, Italy.

2020 - 2022 Junior Researcher (rtd-A). Department of Biology, University of Bari, Italy

C. Contributions to Science

1. The ideation, development and set-up of the first Italian Biobank focused on behavioural traits related to Substance Use Disorders (Ribatti et al. in press).
2. Extensive characterisation of the genomic variability of the Italian populations by using many different orthogonal approaches, such as haplotypic data, ancient DNA and unilinear markers (Raveane, Aneli, Montinaro et al. 2019, Raveane et al. 2022 (senior author), Saupe, Montinaro et al. 2021, Busby et al. 2015, Aneli et al. 2022, Bortolini et al. 2019, Coia et al. 2012, Capocasa et al. 2013, Montinaro et al. 2012)
3. Development of a novel deep-learning method for the evaluation of different evolutionary models and its use for the evaluation of the out-of-Africa process (Montinaro, Pankratov et al. 2021)
4. Development of a novel method to infer the ancestral composition of large-scale genetic datasets by combining Principal component Analysis and non negative Least square regression. The method has been used for dissecting the ancient and modern ancestry of individuals from biobank scale datasets (de Gennaro et al., under review).
5. Characterisation of the genomic variation of Southern Africa by analysing haplotypic data. We clarified the prehistory of the region and assessed the impact of later migrations on currently observe genomic variation (Montinaro et al, 2017, Marks. Montinaro et al, 2015, Gonzalez-Santos, Montinaro et al, 2015).

D. Funding and Awards

2020 – 2024 Brain2South (PI, 375,000 €) "BIO-SUD, a BIObankfor Substance Use Disorders in Apulia: looking at genomes toward a personalized medicine approach." Funded by Fondazione con il Sud, Via del Corso, 267 00186 Roma.

2023 – 2025 PRIN, (Role: PI, 252,504 €): "SUDWAY: Substance Use Disorders through Whole genome, psychological and neuro-endophenotypes AnalYsis". Italian Ministry of University and Research.

2021 – 2022 RIPARTI: assegni di Ricerca per riPARTire con le Imprese" (Member, 36,000 €), "Università ed impresa insieme per migliorare il trattamento dei disturbi da uso di sostanze utilizzando approcci farmacogenomici". Bando competitivo ". Apulia Regional Development Fund.

2021 – 2022 Horizon Seeds (Member, 50,000 €). "Esplorazioni omiche" alla scoperta dei disturbi da uso di sostanze: un viaggio dal cervello all'intestino". University of Bari.

2017 – 2020 Member of the ASTRA project funded by European Union in the "European Regional Development Funds" Framework (No. 2014-2020.4.01.16-0030).

2015–2017 Member of the project "The human genetic Landscape of Southern Africa", funded by The Leverhulme Trust, UK

2016 Travel Award to attend the SMBE Satellite Meeting on the Genetics of Admixed Populations, San Antonio, Texas, 18-20th May 2016.

E. Teaching

2023 – 2024 MSc Full course (36 h) -- Population and Quantitative Genetics. Dept. of Biology, University of Bari, Bari, IT

2022 – 2023 MSc Full course (36 h) -- Molecular Anthropology. Dept. of Biology, University of Bari, Bari, IT

2021 – 2022 MSc Full course (36 h) -- Molecular Anthropology. Dept. of Biology, University of Bari, Bari, IT

2020 – 2021 MSc Full course (36 h) -- Molecular Anthropology. Dept. of Biology, University of Bari, Bari, IT

2020 – 2021 Course module (20 h) -- Molecular Genetics and Genetic Engineering. Dept. of Biology, University of Bari, Bari, IT

2020 – 2021 PhD course module (20 h) -- The genetics of substance Use Disorder. Dept. of Biology, University of Bari, Bari, IT

2019 – 2020 BSc course module (4 h) -- Human Evolutionary genetics. Institute of Genomics, University of Tartu, Tartu, EE

2015 – 2016 Tutor course (16 h) -- Human Evolutionary Genetics for an MSc student OSAP school, Oxford

2008 – 2010 Course Module (8 h) -- Molecular Anthropology Dept. of Biology, Sapienza University, Rome, Italy