



Alessandro Caioli

Nationality: Italian

WORK EXPERIENCE

BIostatistician – MEDTRONIC – 15/11/2025 – Current – ROMA, ITALY

- Design, implement, and validate statistical analyses for clinical and real-world data in accordance with study objectives, regulatory requirements, and pre-specified Statistical Analysis Plans (SAPs).
- Author and review Statistical Analysis Plans, including definition of estimands, endpoints, analysis populations, and handling of missing data.
- Perform statistical analyses using R and SAS, including descriptive statistics, regression models, survival analysis, longitudinal and repeated-measures methods.
- Develop and maintain analysis datasets, perform data cleaning and quality checks, and ensure traceability from raw data to analysis outputs.
- Produce tables, listings, and figures (TLFs) for internal decision-making, clinical study reports, and scientific publications.
- Interpret statistical results and communicate findings clearly to cross-functional stakeholders (clinical, medical, regulatory, and data management teams).
- Support protocol development and provide statistical input on study design, sample size justification, and analysis strategy.
- Contribute to responses to internal and external statistical queries, including reviewer comments and ad-hoc analyses.

PHD STUDENT IN NETWORK ONCOLOGY AND PRECISION MEDICINE – SAPIENZA UNIVERSITÀ DI ROMA

– 31/10/2024 – Current – ROMA, ITALY

BIostatistician – INMI LAZZARO SPALLANZANI - DEPARTMENT OF EPIDEMIOLOGY AND PRECLINICAL RESEARCH – 01/06/2024 – 14/11/2025 – ROME, ITALY

- Statistical analysis
- Data analysis
- Data visualisation
- Data management

DATA ANALYST – INMI LAZZARO SPALLANZANI - DIPARTIMENTO DI MALATTIE INFETTIVE ED EPATOLOGIA –

01/04/2022 – 01/06/2024 – ROME, ITALY

- Data analysis
- Statistical analysis
- Data visualisation
- Data management

EDUCATION AND TRAINING

01/09/2021 – 19/03/2024 Rome, Italy

MASTER'S DEGREE IN DATA SCIENCE Sapienza Università di Roma

- Neural Networks design and implementation (FeedForward, CNN, RNN, LSTM, Transformers, Graph Neural Networks)
- Data Analysis
- Network Medicine
- Statistical Analysis

- Optimization Methods
- Signal Processing
- Cloud computing

Website <https://www.uniroma1.it> | Final grade 107 |

Thesis Identification of disease gene associations using heterogeneous graph learning on domain knowledge graphs

09/10/2019 – 15/07/2021 Rome, Italy

BACHELOR'S DEGREE IN BIOINFORMATICS Sapienza Università di Roma

Website <https://www.uniroma1.it> | Field of study Bioinformatics | Final grade 110/110 cum Laude |

Thesis A network-based approach for drug repurposing and its application to thyroid cancer

18/12/2022 – 19/03/2023

BIOSTATISTICS IN PUBLIC HEALTH Coursera

Website <https://www.coursera.org/>

09/03/2022 – 01/05/2022

STATISTICAL ANALYSIS WITH R FOR PUBLIC HEALTH Coursera

Website www.coursera.org

31/01/2019 – 16/05/2019

DEEP LEARNING SPECIALIZATION Coursera

Website <https://www.coursera.org/>

● LANGUAGE SKILLS

Mother tongue(s): **ITALIAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C2	C2	C2	C2	C2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

● SKILLS

Microsoft Access | Microsoft Excel | LaTeX | Microsoft Word | Microsoft Powerpoint | Microsoft Office

Programming languages and frameworks

Python | R | SAS language | SQL | Deep Learning frameworks: Pytorch, Tensorflow, Keras

● PUBLICATIONS

2022

[Exploratory pharmacovigilance with machine learning in big patient data: A focused scoping review](#)

2022

Approccio terapeutico dell'epatite delta

Oral presentation at the XXI SIMIT (Società Italiana Malattie Infettive e Tropicali) congress

2022

Vaccinazione per SARS CoV-2 nei pazienti trapiantati di fegato HIV positivi: stessa risposta e durata

Poster at the XXI SIMIT (Società Italiana Malattie Infettive e Tropicali) congress

2023

[Humoral Immune Response after COVID-19 mRNA Vaccination in Patients with Liver Cirrhosis: A Prospective Real-Life Single Center Study](#)

2023

["Real world" efficacy of bulevirtide in HBV/HDV-related cirrhosis including people living with HIV: Results from the compassionate use programme at INMI Spallanzani in Rome, Italy](#)

2023

Viral load decrease in SARS-CoV-2 Omicron infection after early treatment with monoclonal antibodies and antiviral agents in solid organ transplant recipients

Oral presentation at the 6th GISA (Gruppo Italiano per la Stewardship Antimicrobica) congress, where it was ranked among the best eight presentations, and at the XXII SIMIT (Società Italiana Malattie Infettive e Tropicali) congress.

2023

L'evoluzione del trapianto epatico nei pazienti che vivono con infezione da HIV: l'esperienza del polo ospedaliero interaziendale trapianti di Roma

Oral presentation at the XXII SIMIT (Società Italiana Malattie Infettive e Tropicali) congress.

2024

Sorveglianza e monitoraggio della colonizzazione rettale da germi multi-farmaco resistenti (MDRO) in una popolazione di pazienti cirrotici e trapiantati di organo solido (SOT).

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Journal Name: XXIII Congresso Nazionale SIMIT

2024

Incidence of hepatocellular carcinoma in patients with hepatitis C treated with direct antiviral agents: results of a long term prospective study period

Poster at the 2024 EASL (European Association for the Study of Liver) congress

2024

Bulevirtide, nuovo trattamento per l'infezione da virus dell'epatite delta (hdv): un focus su dati di real life

Journal Name: SIFACT

2025

[Reactogenicity and Immunogenicity Against MPXV of the Intradermal Administration of Modified Vaccinia Ankara Compared to the Standard Subcutaneous Route](#)

2025

[Liver transplantation in people living with HIV: An Italian nationwide survey focusing on hepatocellular carcinoma and oncologic recurrences](#)

2025

Two-year neutralizing and T-cell response after MVA-BN vaccination according to HIV infection and CD4 cell count

Poster at CROI 2025

2025

[Cancer incidence in people with HIV in Italy: Comparison of the ICONA COHORT with general population data](#)

Journal Name: International Journal of Cancer

2025

[Humoral and T-cell responses following MVA-BN booster vaccination against mpox virus clades Ib and IIb](#)

Journal Name: Journal of Infection

2025

[A Single-Center Retrospective Study on Early Treatment for COVID-19 in Solid Organ Transplant Recipients During the Omicron Era: Outcomes and SARS-CoV-2 Viral Kinetics](#)

Journal Name: Microorganisms

2025

[A survey on the continuum of care for hiv in sex-workers in Italy: the Contribution of NGOs.](#)

Journal Name: Short communication at ICAR 2025

2025

[Investigation on the continuum of care in people who inject drug in Italy: The italian NGOS contribution.](#)

Journal Name: Poster at ICAR 2025

2025

[NGO role in continuum of care \(COC\): an opportunity not to be missed.](#)

Journal Name: Oral communication at ICAR 2025

2025

[Testing for HIV and other sexual transmitted diseases offered in the context of community based voluntary counselling and testing services In the last years in Italy \(2019-2023\).](#)

Journal Name: Poster at ICAR 2025

2025

[Disaggregated data on testing activity for hiv in the context of Community based voluntary counselling and testing services in the last Years in italy \(2019-2023\): towards a national registry.](#)

Journal Name: Oral communication at ICAR 2025

2025

[Predictors of linkage to prevention services after HIV Post-Exposure Prophylaxis \(PEP\): a retrospective analysis from 2019 to 2024](#)

Journal Name: Oral communication at ICAR 2025

2025

[Comparison of STI burden and its predictors in people diagnosed with Mpox or vaccinated with MVA-BN](#)

Journal Name: Poster at ICAR 2025

2025

[Implementation of a same-day ART start model in a real-life setting: experiences from a clinical centre in Italy](#)

Journal Name: Poster at ICAR 2025

2025

[Two-year neutralizing and T-cell response after MVA-BN vaccination according to HIV infection and CD4 cell count](#)

Journal Name: Poster at ICAR 2025

2025

Assessment and monitoring of psychological, sexual, and relational status in individuals accessing a pre-exposure prophylaxis (PrEP) program

Journal Name: Poster at ICAR 2025

2025

A model of screening and cascade of care for chronic viral hepatitis in asylum seekers and refugees in Rome

Journal Name: Poster at ICAR 2025