Donatella Ambroselli

PhD student

PROFESSIONAL PROFILE

My current research is focused on food chemistry, on the characterization and monitoring the foodstuff metabolic profiles by means of advance methodologies as NMR (Nuclear Magnetic Resonance) and HPLC (High Performance Liquid Chromatography). In particular, my study is aimed at characterizing the chemical profile of matrices plants, such as dandelion, burdock and lemon balm. The knowledge of the chemical composition allows me to identify the proper application for the development of new nutraceutical products and functional foods.

EXPERIENCE

Rome
December 2021 - Present

PhD student
Department of Chemistry and Technology of Drugs, Sapienza University of Rome
Molecular design and characterization for the promotion of health and well-being: from drug to food

PhD Supervisor: Prof. Luisa Mannina

Rome
October 2022-January 2023

Tutoring
Department of Pharmacy and Medicine, Biomedical Scientific Communication

Chemistry lessons and university support activities for students.

Rome
April 2021 - July 2021

Research Fellow
Department of Chemistry and Technology of Drugs, Sapienza University of Rome

Study on the chemical characterization of foodstuffs and on the metabolic profile investigation of biological fluids through HPLC and NMR methodologies.

Rome
July 2017 - February 2018

Pharmacy internship
Farmacia Casalbertone - Rome

- Galenic drug preparation
- Medication procurement and stock control
- Sales of pharmaceutical and para-pharmaceutical products under the supervision of trained employee

EDUCATION

Rome
2021

Pharmacist license
Sapienza University of Rome

Rome
2020

Master's degree in Chemistry and Pharmaceutical Technologies
Sapienza University of Rome

Grade: 107/110
Thesis: "Identificazione di biomarkers predittivi di Leucoencefalopatia Multifocale Progressiva (PML) causata dal Polyomavirus umano JC (JCPyV) in pazienti affetti da Sclerosi Multipla (SM) in trattamento con Natalizumab"

Identification of gene sequences by PCR (Polymerase Chain Reaction), Real Time PCR and gel electrophoresis.

Advisors: Prof.Valeria A. Pietropaolo

- Molecular diagnosis of Human Polyomavirus JC in patients affected by autoimmune diseases for the risk of possible reactivation of the virus and subsequent development of progressive multifocal leukoencephalitis (PML).
- Study of BK and JC human Polyomavirus control region sequences and cellular molecular pathways implicated in oncogenic and pathogenic activity of these viruses as possible predictive markers of virulence.
- In vivo and in vitro cell culture study of the JC virus functional rearrangements transcription control region in different lymphocyte clusters isolated from patients affected by immune-mediated diseases and treated with biological drugs in association to gene expression of cellular transcription factors.

LANGUAGES

Italian
Native speaker

English
Good both written and spoken

Chemistry - Food Chemistry
Pharmacy
Virology
Microbiology

PUBLICATIONS

- Prezioso, C., Ciotti, M., Obregon, F., **Ambroselli, D.**, Rodio, D. M., Cudillo, L., Gaziev, J., Mele, A., Nardi, A., Favalli, C., Arcese, W., Palamara, A. T., & Pietropaolo, V. (2019). Polyomaviruses shedding in stool of patients with hematological disorders: detection analysis and study of the non-coding control region's genetic variability.
  Medical microbiology and immunology, 208(6), 845854.
  https://doi.org/10.1007/s00430-019-00630-9
- Prezioso, C., Obregon, F., **Ambroselli, D.**, Petrolo, S., Checconi, P., Rodio, D. M., Coppola, L., Nardi, A., Vito, C., Sarmati, L., Andreoni, M., Palamara, A. T., Ciotti, M., & Pietropaolo, V. (2020). Merkel Cell Polyomavirus (MCPyV) in the Context of Immunosuppression: Genetic Analysis of Noncoding Control Region (NCCR) Variability among a HIV-1-Positive Population.
  Viruses, 12(5), 507.
  https://doi.org/10.3390/v12050507
- Spano, M.; Di Matteo, G.; Ingallina, C.; **Ambroselli, D.**; Carradori, S.; Gallorini, M.; Giusti, A.M.; Salvo, A.; Grosso, M.; Mannina, L. Modulatory Properties of Food and Nutraceutical Components Targeting NLRP3 Inflammasome Activation.
  Nutrients 14(3), 490.
  https://doi.org/10.3390/nu14030490
- Masciulli F., **Ambroselli D.**, Romano E. and Mannina L (2022) The Smell of the Kitchen.
  Front. Young Minds.
  10:914163. doi: 10.3389/frym.2022.914163.

POSTERS

- *Polyomaviruses stool shedding in patients with hematological disorders: detection analysis and study of the non-coding control region genetic variability* presented *at **47° Congresso Nazionale della Società Italiana di Microbiologia***, Rome (Italy), 18 - 21 September 2019.
- *NMR metabolomic profiling of fresh Goji berries from two varieties grown in Lazio* presented *at **VII workshop Applicazioni della Risonanza Magnetica nella Scienza degli Alimenti**, Rome (Italy), 23-24 June 2022.*
- *Cauliflower by-products valorization by applying NMR based metabolomics at Italian-French International Conference on Magnetic Resonance, Milan, 27-30 September 2022*

PARTECIPATION IN CONFERENCES

- ***47° Congresso Nazionale della Società Italiana di Microbiologia***
  Rome, SIM 2019
- ***48° Congresso Nazionale della Società Italiana di Microbiologia***
  Virtual SIM 2020
- ***Workshop ORTOPACKHEALTH - Il packaging per gli alimenti ad alto valore nutrizionale: metodologie avanzate per nuove soluzioni***

  Rome, 16 June 2021
- ***Workshop "PRODUZIONE DI BIOSTIMOLANTI A PARTIRE DA SCARTI DI CARCIOFO E CAVOLFIORE"***
  Rome, 27 May 2022
- ***VII Workshop - Applicazioni della Risonanza Magnetica nella Scienza degli Alimenti***
  Rome, 23-24 June 2022
- ***Workshop FITO-BIO "Caratterizzazione multi-metodologica di piante officinali"***
  Rome, 9 September 2022
- ***Italian-French International Conference on Magnetic Resonance***
  Milan, 27-30 September 2022

TECHNICAL SKILLS

Software

- Microsoft Office

Operating system

- Mac
- Windows