

Maria Cristiano, PhD student

Short Biographical Sketch

Maria Cristiano is a PhD student in Biology at the University of Naples Federico II (2024–2027), working in the field of molecular and cellular biochemistry. She obtained her Master's degree in Biological Sciences from the same university in 2024, graduating with full marks and honors (110/110 cum laude), with a thesis entitled “Use of a cytosolic variant of angiogenin in the analysis of the stress response in human keratinocytes.”

Her research activity focuses on the production and characterization of recombinant proteins, with particular interest in antimicrobial proteins and their mechanisms of action against bacterial pathogens. She has hands-on expertise in a broad range of molecular and cellular biology techniques, including recombinant protein production and purification, nucleic acid and protein extraction, polyacrylamide, agarose and urea gel electrophoresis, enzymatic activity assays, RT-qPCR, immunofluorescence, western blotting, and eukaryotic cell culture and functional assays.

Her current scientific interests include:

- RNA biology and ribonucleases
- Recombinant protein production and characterization
- Antimicrobial peptides and peptoids
- Host-defense peptides
- Antimicrobial resistance
- Cellular stress response and stress granules
- Bioactive peptides for biomedical applications

Publications

1. Culurciello R. *et al.* **Role of human RNase 7 in neuronal and glial cell models: moving towards an unexpected new functional link.** *The FEBS Journal*. 2026.

Selected Congress Participation

Oral Presentation

- **2025 – 1st International Meeting on RNA & RNases (Barcelona, Spain)**
Exploring antimicrobial and immunomodulatory activities of native and denatured versions of human angiogenin
- **2026 – 1st SIB Young Meeting (Abano Terme, Italy)**
Role of human RNase 7 in neuronal and glial cell models: moving towards an unexpected new functional link

Selected Poster Presentations

- **2025 – SIB Campania (Napoli, Italy)**
Exploring antimicrobial and immunomodulatory activities of native and denatured versions of human angiogenin