



# Azza Dabous

Assistant Professor at An-Najah National University



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## ABOUT ME

I'm an assistant Prof at An-Najah National University, with a strong background in microbiology, nutrition, and biotechnological sciences, I am eager to contribute my expertise to your esteemed institution.

## WORK EXPERIENCE

Sep. 2024 - Present

### Assistant Professor at An-Najah National University.

#### Teaching experience:

- Biochemistry, theoretical and practical.
- Food microbiology, theoretical and practical.
- General microbiology, practical.
- Principles of food science & Nutrition.

Sep. 2018 –Jun . 2020

### Lecturer at An-Najah National University.

Sep. 2015 – .2018

### Lab technician, Medicare "Medipal" lab companies.

#### Work responsibilities and experiences:

- Clinical sample reception and collection.
- Clinical microbiology section.
- Serology and immunological examinations.
- Hematology and endocrinology examination.
- Histopathology section
- Various Body fluids analysis and examination.

## ACADEMIC BACKGROUND

Feb. 2024-July.2024

### Fellowship Researcher at Campania university "Luigi Vanvetilli", Naples-Italy.

Nov. 2020-Jan.2024

Finished three years of PhD studies + 3 months extended period for Corona outbreak, In the field of Biochemical and Biotechnological sciences. | [University of Campania, Naples-Italy](#).

**Thesis title:** Biotechnological aspects of probiotics fermentation, their cryopreservation, for the development and evaluation of novel formulations for the treatment of inflammatory conditions using *in vitro* 2D and 3D gastrointestinal models.

Sep.2023-Jan.2024

### An internship period was conducted at the institute of bioengineering of Catalonia, Barcelona-Spain.

#### Main acquired skills and experiences:

- The principles of 3D printing.
- Introducing to the various types of hydrogels used as ECM.
- Learning different protocols for protein and RNA extraction from 3D model.
- Manipulating with different types of cell cultures.
- Acquiring deeper knowledge on immunofluorescence imaging.
- The evaluation of tight junction complexes using TEER measurements.

Sep. 2016-July.2018

**Dual master degree in food science & technology, An-Najah National University & FEDRICO II university, Italy.**

**Thesis title:** Performances of wet granulated lactic acid bacteria for the direct fermentation of Wheat doughs. GPA: 110/110, 3.84.

Sep.2011-May.2015

**Bachelor degree in Medical Laboratory Sciences, An-Najah National University.**

GPA: 3.34.

## PUBLICATIONS

### 1- Optimization of growth of *Levilactobacillus brevis* SP 48 and *in vitro* evaluation of the effect of viable cells and high molecular weight potential postbiotics on *Helicobacter pylori*.

Cimini D, D'ambrosio S, Stellavato A, Fusco A, Corsaro MM, **Dabous A**, Casillo A, Donnarumma G, Giori AM, Schiraldi C. (2022) doi: 10.3389/fbioe.2022.1007004. PMID: 36394050; PMCID: PMC9661962.

### 2- *Limosilactobacillus fermentum* buffalo milk is suitable for potential biotechnological process development and inhibits *Helicobacter pylori* in a gastric epithelial cell model.

D'ambrosio S, Ventrone M, Fusco A, Casillo A, **Dabous A**, Cammarota M, Corsaro MM, Donnarumma G, Schiraldi C, Cimini D. (2022) doi: 10.1016/j.btre.2022.e00732. PMID: 35686014; PMCID: PMC9171443.

### 3- Novel hydroxyectoines based formulations are suitable for preserving viability of *Limosilactobacillus fermentum*, *Levilactobacillus brevis* SP-48 and *Bifidobacterium lactis* HN019 during freeze-drying and storage, and in simulated gastrointestinal fluids.

**Atta Dabous**, Sergio D'ambrosio, Donatella Cimini & Chiara Schiraldi (2023) DOI: 10.1080/07373937.2023.2217242.

### 4- A probiotic multi-strain mixture combined with hydroxyectoine improves intestinal barrier function by alleviating inflammation in lipopolysaccharide stimulated differentiated Caco-2 cells.

**Atta Dabous**, Antonietta Stellavato, Donatella Cimini, Valentina Vassallo, Maria D'Agostino and Chiara Schiraldi. (2024) doi.org/10.1039/D4FO03130J.

### 5- *Bifidobacterium animalis* subsp. *lactis* HN019 live probiotics and postbiotics: production strategies and bioactivity evaluation for potential therapeutic properties.

Sergio D'ambrosio, **Atta Dabous**, Saba Sadiq, Angela Casillo, Chiara Schiraldi, Elisabetta Cassese, Emiliano Bedini, Maria Michela Corsaro and Donatella Cimini. (2024) doi.org/10.3389/fbioe.2024.1379574

- Two more manuscripts in preparation.

## CONFERENCES & WORKSHOPS

- Participated in poster presentation at the Federation of European Biochemical Societies (FEBS) conference titled “Anti-inflammatory effect of exopolysaccharides from *Lactobacillus brevis* on co-culture models of macrophage - like and enterocyte. **Lisbon – 9-14/July 2022**.
- Participated as a co-author in oral presentation at SIB conference “Trends in Biotechnology”. Titled “Biotechnological process development for probiotics production and exopolysaccharides purification”. **Naples 23-24 June 2022**.
- Participated as a co-author in oral presentation at SIB conference “Trends in Biotechnology”. Titled “Anti-inflammatory effect of exopolysaccharides on co-culture models of macrophage-Like and enterocyte”. **Naples 23-24 June 2022**.
- Poster presentation at Trends in Biotechnology: The SIB group perspectives conference titled “ Biotechnological process development for probiotics production and exopolysaccharides purification”. **Naples 23-24/June 2022**.
- Participated in poster presentation titled “Optimization of growth of *Levilactobacillus brevis* CSL and *in vitro* evaluation of the effect of viable cells and high molecular weight postbiotics on *Helicobacter pylori*” At SIB conference, **Naples 26/October 2022**.
- Participated in poster presentation titled “Novel probiotic formula containing hydroxyectoine for preserving the viability and enhance the biological activity of probiotic on enterocyte based in vitro model”. At SIB conference. **Florence 7-9/September 2023**.

- Poster presentation titled “ The ability of three strains probiotics formula contain hydroxyectoine to alleviate the inflammation in LPS induced intestinal in vitro model” at the symposium of probiotics, postbiotics and natural compounds”. **Rome-16-19/September 2023**

Participated in poster presentation at the Federation of European Biochemical Societies (FEBS) conference titled “*Bifidobacterium animalis* subsp. *lactis* HN019 live probiotics and postbiotics: production strategies and bioactivity evaluation for potential therapeutic properties”. **Milan 30-3/July 2024.**

## LANGUAGES

- English
- Arabic
- Italian level A1 &2

## OTHER SKILLS

- **Experimental Design & Data Analysis**
- **Laboratory Techniques (e.g., PCR, cell culture, electrophoresis)**
- **Scientific Writing & Publishing**
- **Grant Writing & Funding Proposals**
- **Statistical Tools (e.g., SPSS, R, GraphPad Prism)**
- **Microscopy & Imaging Analysis**