**Basem Battah** 

Date of birth: 1/1/1986

Nationality: Syrian-Italian residency

# Work address

Department of Biochemistry and Microbiology

Faculty of pharmacy - SPU university

00393661349560

00963930648043

Personal E.mail: basem.battah.sc@hotmail.com

**Research:** 

### **Faculty member**

2019 - present

Syrian Private University - Syria

# **Professor in Pharmaceutical Biotechnology**

2019 - present

Department of Microbiology and Biochemistry, Faculty of pharmacy,

Syrian Private University - Syria.

# **Scientific Researcher**

2018 - 2019

Institute of Microbiology, Gemelli University Hospital,

Catholic University - Rome - Italy.

Prof. Giovanni Delogu

Prof. Maurizio Sanguinetti .

# Home address

Via Lucilio 29, 00136 Roma Murshed Khater street 01, Damascus

#### **Post Doc**

2017 - 2018

Institute of Microbiology, Gemelli University Hospital,

Catholic University - Rome - Italy.

Prof. Giovanni Delogu.

Projects:

-Studying the possible role of the PE\_PGRSs proteins during

autophagy process.

-Studying the antibacterial effect of the Mesenchymal stem cells.

-Studying and verifying the anti TB activity of new compounds.

### **PHD in Life Sciences and Biotechnologies**

2014 - 2017

Department of Biomedical and Biotechnological Science, University of Sassari - Sassari - Italy.

Institute of Microbiology, Gemelli University Hospital, Catholic University - Rome - Italy.

Prof. Salvatore Rubino.

Prof. Giovanni Delogu.

Project: studying the genetic variability of the PE\_PGRS gene Family and their impact on the virulence of *M. tuberculosis*.

Thesis title: PE\_PGRS3: a new player in *M. tuberculosis* pathogenesis.

#### Master of Pharmacy in laboratory Diagnosis

2010 - 2014

Department of Microbiology and Biochemistry, faculty of Pharmacy-Damascus - Syria.

Prof. Jumana al slaleh.

Project: Determination the serum values of M30 antigen during therapy in Syrian breast cancer patients.

# **Education:**

# PhD in life Sciences and Biotechnologies

2014 - 2017

Department of Biomedical and Biotechnological Science, University of Sassari - Sassari Italy.

Institute of Microbiology, Gemelli University Hospital, Catholic University - Rome - Italy.

#### Master of Pharmacy in laboratory Diagnosis

2010 - 2014

Department of Microbiology and Biochemistry Faculty of Pharmacy-Damascus University.

### **Bachelor Degree in Pharmacy**

2004 - 2009

Faculty of Pharmacy - Damascus University.

#### **Publications:**

Basem Battah, Jumana Saleh, Marroan Bachour, Maher Salamoon, serum CK18 as predictive factor of response to chemotherapy in locally advanced and metastatic breast cancer- Advances in Breast Cancer Research (2014).

Valentina Straniero, Marco Pallavicini, Giuseppe Chiodini, Carlo Zanotto, Luca Volontè, Antonia Radaelli, Cristiano Bolchi, Laura Fumagalli, Maurizio Sanguinetti, Giulia Menchinelli, Giovanni Delogu, Basem Battah, Carlo De Giuli Morghen, Ermanno Valoti –3-(Benzodioxan-2-ylmethoxy)-2,6-difluorobenzamides bearing hydrophobic substituents at the 7-position of the benzodioxane nucleus potently inhibit methicillin-resistant *Sa* and *Mtb* cell division- European Journal of Medicinal Chemistry (2016).

Giovanni Delogu, Valentina Vanini, Gilda Cuzzi, Teresa Chiacchio, Flavio De Maio, Basem Battah, Carmela Pinnetti, Alessandro Sampaolesi, AndreaAntinori-Lack of response to HBHA in HIV-infected individuals coinfected with *Mycobacterium tuberculosis* and prediction for active TB development- Scandinavian Journal of Immunology (2016).

Poster "Phosphate starvation as a signaling factor for PE\_PGRS3, but not PE\_PGRS4, expression in *M. smegmatis* " presented at the 26<sup>th</sup> European Society of Clinical Microbiology 9-12 April (2016).

Poster " inorganic phospohate starvation induces PE\_PGRS3 expression and its post translational modification in *M. smegmatis* " presented at the 44<sup>th</sup> national congress of the Italian Society of Microbiology 25-28 September (2016).

Minerva Mariachiara, De Maio Flavio, Camassa Maria Serena, Basem Battah, Palucci Ivana, Riccardo Manganelli, Sanguinetti Maurizio, Sali Michela, and Delogu Giovanni- Evaluation of PE\_PGRS33 as a potential surface target for humoral responses against *Mycobacterium tuberculosis*-Pathogens and Disease (2017).

Basem Battah, Flavio De Maio, Valentina Palmieri, Linda Petrone, Francesco Corrente, Alessandro Salustri, Ivana Palucci, Silvia Bellesi, Massimiliano Papi, Salvatore Rubino, Michela Sali, Delia Goletti, Maurizio Sanguinetti, Riccardo Manganelli, Marco De Spirito, and Giovanni Delogu1-PE\_PGRS3 of *Mycobacterium tuberculosis* is specifically expressed at low phosphate concentration and its arginine-rich C-terminal domain mediates adhesion and persistence in host tissues when expressed in *Mycobacterium smegmatis* Cellular Microbiology (2018).

Michela Sali, Danilo Buonsenso, Pamela D'Alfonso, Flavio De Maio, Manuela Ceccarelli, Basem Battah, Ivana Palucci, Teresa Chiacchio, DeliaGoletti, Maurizio Sanguinetti, Piero Valentini, Giovanni Delogu-Combined use of Quantiferon and HBHA-based IGRA supports tuberculosis diagnosis and therapy management in children Journal of Infection (2018).

Ivana Palucci, Basem Battah, Alessandro Salustri, Flavio De Maio, Linda Petrone, Fabiola Ciccosanti, Michela Salia, Vincent Bondet, Darragh Duffy, Gian Maria Fimia, Delia Goletti, Giovanni Delogu -IP-10 contributes to the inhibition of mycobacterial growth in the *ex vivo* whole blood assay International Journal of Medical Microbiology (2019).

Poster "PE\_PGRS3 of *Mycobacterium tuberculosis* is specifically expressed at low phosphate concentration, and its arginine-rich C-terminal domain mediates adhesion and persistence in host tissues" presented at XXXIII SIMGBM congress Florence 19-22 June (2019).

Poster "Arginine rich C-terminal domain of the PE\_PGRS3 of Mycobacterium tuberculosis promotes adhesion and specifically binds phosphatidylinositols " presented at 47<sup>th</sup> national congress of the Italian society of microbiology SIM Rome 18-21 Sep (2019).

Basem Battah, Stefania Butini, Giulia Chemi, Giuseppe Campiani, Simone Brogi, Giovanni Delogu, Sandra Gemma- A repurposing approach for uncovering the anti-tubercular activity of FDA-approved drugs with potential multi-targeting profile Molecules (2019).

Basem Battah, Rana Hallak and Manfred kuepper- Impact of *TP53* Mutations in Hepatocellular Carcinoma on Carcinogenesis, Diagnosis, Prognosis and Treatment world Journal of Oncology Research (2020).

Basem Battah- Travelling contagions Journal of Pulmonology Study and Treatment (2020).

Basem Battah- emerging bacterial resistance : an ongoing threat during and after Syrian crisis Journal of Infection in Developing Country (2021).

Flavio De Maio, Alessandro Salustri, Basem Battah, Ivana Palucci, Maurizio Sanguinetti, Massimiliano Papi, Michela Sali, Giovanni Delogu- PE\_PGRS3 is cleaved in Mycobacterium tuberculosis and its arginine rich C-terminal domain specifically binds phosphatidylinositols Virulence (2021).

Basem Battah, Zeinab Dayoub, Leen AL Ani, Murhaf Aljebeh, Adeeb Darwisha and Firas AL Khani - Multi drug resistant *Escherichia coli* superinfection in patient with COVID19 Journal of Biosciences and Medicines (2021).

Basem Battah - Mesenchymal stem cells potential role against bacterial infection under publication (2021).

### **Technical skills**

# **Cellular Biology :**

- Apoptosis and viability assays.
- Autophagic and transformation assays.
- Flow cytometer FACS.
- Macrophages epithelial cell infection, CFU.

# **Molecular Biology:**

- cloning, PCR, RT.PCR, RNA and DNA extraction.
- Knock out technique.

# **Biochemistry:**

- Western blotting.
- Immunoprecipitation.
- Immunofluorescence.
- Elisa assays.
- HPLC.
- Light scattering.

# **Imaging and Microscopy:**

- Confocal spinning disk system (for 3D movies).
- Wide field Epi fluorescence.

### **Image analysis:**

- Image j basic manipulation.
- Photos.

# **Transferable skills**

### **Marketing:**

#### 2009 - 2014

I worked in Asia pharmaceutical company, cardiology – endocrinology line as medical scientific representative of following medicines ( bisoprolol, atorvastatine, clopidogrel, prasugrel, aspirin, glimepiride, metformine, pioglitazone).

**Management:** Attending many courses in management, leadership, selling and communication skills with international companies.

# **Memberships:**

2014 - present

Reviewer at the JIDC journal of infectious diseases in developing country.

2016 - present

Italian society of microbiology.

2020-present

Reviewer at reports journal -MDPI (Basel, Switzerland).

2020-present

Editorial board member at ScienceVolks microbiology journal.

2020-present

Editorial board member at Journal of Pulmonary Study and Treatment.

Languages: English fluent

Italian fluent

German

Arabic mother tongue language

# Referees

Prof. Giovanni Delogu
Gemelli University Hospital, Catholic University - Rome - Italy.
Email: giovanni.delogu@unicatt.it
Prof. Salvatore Rubino
University of Sassari - Sassari - Italy
Email: rubino@uniss.it
Prof. Maurizio Sanguinetti
Gemelli University Hospital, Catholic University - Rome - Italy.
Email: maurizio.sanguinetti@unicatt.it
Faculty of pharmacy, SPU university - Syria.
Email: info@spu.edu.sy