

OLFA MAGHREBI

PERSONAL DETAILS

EDUCATION

2016 current	to	Ph.D. candidate: Biological and Biomedical Sciences. University Tunis El Manar- Faculty of medicine of Tunis in collaboration with Institut Pasteur de Tunis.
2013		Master of Science :Molecular and Cellular biology-Human Genetics and animal models major University Tunis El Manar- Faculty of sciences of Tunis-Tunisia
2010		Bachelor of Science: Medical biology University Tunis El Manar- Graduate School of Health Sciences and Technology - Tunisia
2007		Baccalaureate in experimental sciences High school of Ben Arous – Tunisia

RESEARCH EXPERIENCE

11/2016 current	to	PhD's thesis: Institut Pasteur de Tunis- Tunisia Laboratory of transmission, control and immunobiology of infections The aim of my PhD's research is to assess the involvement of B cells in neuro-immunological disorders. We are investigating the roles of B cells in blood and cerebrospinal fluid of patients with neuro inflammation and the effects of neurotropic viruses including herpes viruses in the shaping of immune responses within the central nervous system.
04/2012 12/2013	to	Master's thesis: Institut Pasteur de Tunis- Tunisia Laboratory of Molecular and Cellular Hematology I studied the involvement of KLF1 in the Persistence of Fetal Hemoglobin and the modulation of the beta-thalassemia intermedia syndrome in Tunisian patients.
01/2010 06/2010	to	Bachelor's thesis Hôpital Charles Nicolle Tunis- Tunisia Research Laboratory of Transplantation Immunopathology The objective of this study was to evaluate whether preformed antibodies modified acute allograft rejection.

CONFERENCE PRESENTATIONS

Olfa Maghrebi , Meriam Belghith , Cyrine Jeridi , Khadija Bahrini , Amine Rachdi , Fatma Nabli Fatnassi , Zakaria Saied, Samir Bellal , Samia Ben Sassi^{3, 4}, Mohamed Ridha Barbouche **B cells population is behind the high IL-10 content in Cerebrospinal fluid of NBD patients** .Oral presentation delivered at to the IBRO-MENA School and Conference on Clinical Neuroscience: From Bench to Bedside held in Tunis on 1-6 November 2021

Maghrebi Olfa, Hanachi Mariem, Bahrini Khadija, Kchaou Mariem, Jeridi Cyrine, Belal Samir, Ben Sassi Samia, Barbouche Mohamed-Ridha, Souiai Oussama, Belghith Meriam **Differential gene expression patterns in blood and cerebrospinal fluid of multiple sclerosis and neuro-Behçet**

disease . Oral presentation delivered at the first IBRO-MENA Online School on Neurogenetics held in virtual on December 10-12, 2020

Olfa Maghrebi, M.Belghith, K.Bahrini, M. Hannachi, S. Ben Sassi,S.Belal, M.R. Barbouche.**Differential pattern of gene expression in multiple sclerosis and neuro-behçet disease**. e-Poster presentation delivered at 15th scientific days of the Tunisian Society of Immunology held in virtual 6, 7 et 8 Avril 2021

Olfa Maghrebi, M.Belghith, K.Bahrini, S. Ben Sassi, S.Blel, M.R. Barbouche **Etude des lymphocytes B et T producteurs de l'il-10 dans le LCR de patients atteints de troubles neuroimmunologiques**, Poster presentation delivered at 5th Maghreb Congress of Immunology/15th scientific days of the Tunisian Society of Immunology, Hammamet, Tunisia, February 28th to March 2nd, 2019

O. Maghrebi, M. belghith, K. Bahrini, S. ben Sassi, S. Blel, M. R. Barbouche. **Circulating IL-10 producing B cells in CSF of neuroimmunological disorders patients**, Poster presentation delivered at the 5th european congress of Immunology, Amsterdam, Netherland, September, 2018.

Olfa Maghrebi,M.Belghith, K.Bahrini, S. Ben Sassi ,S.Blel, M.R. Barbouche. **Circulating IL-10 producing B cells and TCD4 cells in CSF and blood of neuroimmunological disorders patients**. Oral presentation delivered at 10th African Congress of Immunology, Hammamet, Tunisia, December, 2017.

Olfa Maghrebi, Ghada Bouguerra, Imen Darragi, Fethi Mellouli, Salem Abbas. **Molecular exploration of the KLF1 gene in patients with beta-thalassemia intermedia**. Poster presentation delivered at Scientific symposium of Pasteur institute of Tunis, Gammaret, Tunisia, November, 2013.

PEER-REVIEWED PUBLICATION

- Meriam Belghith, Khadija Bahrini, Mariem Kchaou, **Olfa Maghrebi**, Samir Belal, Mohamed-Ridha Barbouche; **Cerebrospinal fluid IL-10 as an early stage discriminative marker between multiple sclerosis and neuro-Behçet disease**.*Cytokine*, Volume 108, August 2018, Pages 160-167
- Mariem Kchaou; Meriam Belghith; Khadija Bahrini; **Olfa Maghrebi**; Najla Mekki; Samir Belal; Mohamed Ridha Barbouche. **IL-17 and IL-6 as inflammatory response in a case of Neurobrucellosis presenting as Leucoencephalopathy** *Archives of Clinical and Medical Case Reports*, Volume 3, 2019, Pages 353-359
- Khadija Bahrini, Meriam Belghith, **Olfa Maghrebi**, Mariem Kchaou, Ines Ben Abdelaziz, Samir Belal, Faycel Hentati, Samia Ben Sassi and Mohamed-Ridha Barbouche. **Discriminative expression of CD39 and CD73 in Cerebrospinal fluid of patients with Multiple Sclerosis and Neuro-Behçet's disease**. *Cytokine*. Volume 130, June 2020, 155054.
- **Maghrebi Olfa**, Hanachi Mariem, Bahrini Khadija, Kchaou Mariem, Jeridi Cyrine, Belal Samir, Ben Sassi Samia, Barbouche Mohamed-Ridha, Souiai Oussama, Belghith Meriam. **Differential Gene Expression Patterns in Blood and Cerebrospinal Fluid of Multiple Sclerosis and Neuro-Behçet Disease**. *Frontiers in Genetics*. Volume 12, 26 February 2021, Pages 233
- **Olfa Maghrebi**, Meriam Belghith , Cyrine Jeridi, Amine Rachdi,,Zakaria Saied, Samir Belal, Samia Ben Sassi, Mohamed Ridha Barbouche. **B Cells Specific CpG Induces High IL-10 and IL-6 Expression In Vitro in Neuro-Behçet's Disease**. *Cells*. Accepted: 17 February 2022
- Mariem Hanachi, **Olfa Maghrebi**, Haifa Bichiou, Ferdaous Trabelsi, Bouyahia N. Maha, Fethi Zhioua, Meriam Belghith, emna Harigua-Souiai, Meriem Baouendi, Lamia Guizani-Tabbane, Alia Benkahla, Oussema Souiai. **Longitudinal and comparative analysis of Tunisian newborns gut microbiota according to delivery mode**.*Frontiers in microbiology* . accepted 15 March , 2022

PROFESSIONAL EXPERIENCE

- 02/2016 to 10/2016** Trainee
Institut Pasteur de Tunis- Tunisia-Laboratory of transmission, control and immunobiology of infections
- 09/2009 to 01/2010** Development internship: Laboratories of university hospitals –Tunis – Tunisia
- Centre de greffe de moelle osseuse (laboratory of bacteriology)
 - Institut Pasteur de Tunis (laboratory of parasitology)
 - Institut Salah Azaiez (laboratory of hematology)
 - Hôpital Militaire d’instruction de Tunis (laboratory of biochimistry)
 - Hôpital Charles Nicolle (laboratory of immunology)
- 09/2008 to 05/2009** Development internship: Laboratories of university hospitals –Tunis – Tunisia
- Hôpital Charles Nicolle (laboratory of immunology)
 - Institut Pasteur de Tunis (laboratory of parasitology)
 - Hôpital Aziza Othmana (laboratory of hematology)
 - Hôpital Militaire d’instruction de Tunis (laboratory of bacteriology)
 - Centre de traumatologie et des grands brûlés (laboratory of biochimistry)
- 07/2008 to 08/2008** Volunteer -Hopital charles nicolle- Tunisia ; Nursing
- 01/2008 to 03/2008** Trainee -Institut Salah Azaiez- Tunisia ; Venipuncture

SKILLS

- Strong understanding of immune system function and dysregulation
- Deep understanding of the principles of cellular immunology and how these relate to the pathogenesis and treatment of autoimmune/inflammatory disease
- Strong interdisciplinary communication skills
- Ability to independently design, execute, and analyze experiments
- Ability to rapidly learn and apply techniques
- Experience in flow cytometry Analysis
- Proficiency with FlowJo and FACSDiva software for flow cytometry data analysis
- Additional experience in standard molecular and cell biology techniques a strong plus (mammalian cell culture, ELISA, qPCR, PCR/sanger sequencing)
- Experience with various immune cell isolation techniques
- Proficiency with SPSS and R software for data analysis
- Proficiency with PolyPhen-2, SIFT, PROVEAN, YASARA, FOLDX, PyMol, sequencher, and Ugene softwares.

LANGUAGES

Arabic, French, English

RELEVANT COURSEWORK

- 2021 **Capacity Building in Research Methods and Ethics on: Good Health Research Practice (WHO-EMRO)**
- 2021 **IBRO-MENA School and Conference on Clinical Neuroscience: From Bench to Bedside (6 days)**
- 2021 **The AAI Advanced Course in Immunology (6 days)**
- 2020 **The H3ABioNet Introduction to Bioinformatics course (2 months)**

MEMBERSHIPS / AFFILIATIONS/ EXTRA-CURRICULAR ACTIVITIES

- 09/2019 to current Organizing committee member of the 3rd symposium of Young Researchers of Pasteur institute of Tunisia (President of sponsoring and financing commission)

- 2019 to Treasurer of AJC-IPT(association of young researchers of Pasteur Institute of Tunis)
current
- 2019 to Freelancer as script assistant and director assistant (Hypnos Production company)
current
- 2018 to Volunteer and member on AJC-IPT (Pasteur Institute Young Researchers Association)
current
- 09/2017 to Organizing committee member of the 2nd symposium of Young Researchers of Pasteur institute
04/2018 of Tunisia (President of sponsoring and financing commission)
- 07/2017 Volunteer: Organization and presentation of summer courses on DNA
(Youth For Science Organization)
- 2015 to Volunteer and member on WAAÏ Association (youth for sexual and reproductive health)
current

PARTICIPATION IN FUNDED EUROPEAN PROJECTS

- **Scientific responsible for young researchers association of Institut Pasteur de Tunis in the H2020 - INSPIRES; CO-principal investigator of transdisciplinary-transfrontalier project in Tunisia :** Ingenious Science shops to promote Participatory Innovation, Research and Equity in Science. InSPIRES brings together Civil Society, practitioners and other stakeholders from across and beyond Europe to co-design, jointly pilot, implement and roll out innovative models for Science Shops. The InSPIRES models integrate Responsible Research and Innovation, Open Science and Impact Evaluation as part of their DNA in order to open the research process up in a more strategic way. The inputs from systematic impact evaluation studies will be continuously integrated in order to make InSPIRES Science Shops 2.0 models more accurate and responsive to civil society needs and concerns. European Union's Horizon 2020 Research and innovation programme under grant agreement No 741677. Partners: Barcelona Institute for Global Health (InSPIRES Coordinator) SPAIN, Environmental Social Sciences Research Groups Ltd. (ESSRG) HUNGARY, Fundación Privada Institut de Recerca de la Sida-Caixa (IRSIcaixa) SPAIN, Université de Lyon (UDL) FRANCE, The VU Institute for research on innovation and communication in the health and life sciences (VU) NETHERLANDS, Università degli studi di Firenze (UNIFI) ITALY. Duration: 48 months. Total budget: € 2,995,606.25

TEACHING EXPERIENCE

- 2021** • **Assistant Professor in molecular biology (one semester)**
Biological Engineering. Department of Biological Engineering , Université Libre de Tunis

RESEARCH COORDINATION TASKS

- 2020-2021** Supervisor (50% with Dr. Meriam belghith) of the master in neurosciences (Tunis) of Rafika Laamari. The topic of her research: Investigation of the correlation between viral infection and effector TCD8+ cells in patients with neuroinflammatory diseases
- 2019-2020** Supervisor (50% with Dr. Thouraya Boussafara) of the Master in fundamental and applied Immunology (Tunis) of Hela Oueslati . The topic of her research the investigation of immune response during *Leishmania major* infection
- 2018-2019** Supervisor(50% with Dr.Meriam Belghith) of the Master in fundamental and applied Immunology (Tunis) of Jihène Bekir Guerfali. The topic of her research is Exploring the relationship between CD39 expression and viral infection in patients with multiple sclerosis
- 2018-2019** Supervisor(50% with Dr.Meriam Belghith) of the Bachelor in Biotechnology(Tunis) of Rawya Ben Said and Rihab Bouzezi. The topic of their research is Molecular exploration of the A20 TNFAIP3 gene in Neuro Behçet patients.
- 2016-2017** Supervisor (50% with Dr.Meriam Belghith) of the Bachelor in analytical and experimental biology major bioanalysis and quality control(Tunis) of Rania Belhouane. The topic of her research is Analysis of IL-10 secreting B and T populations in patients with CNS inflammatory diseases