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Current position: Researcher CR1 INSERM (ICM, Paris, France)

General information: Date of birth: September 26th 1977
Place of birth: Coulommiers, France
Nationality: French

Education: **B.S.** Biology, University El Manar, Tunis, Tunisia, 2001
M.S. Immunology, Pasteur Institute, University of Paris 6, 2002
Ph.D. Immunology, University of Lille 2, 2006

Professional experience:

Jan 2015- Researcher CR1 INSERM (ICM, U1127, Paris, France)

Jul 2012- Dec 2014 Postdoctoral Fellow at ICM (Paris)
Pr. Bertrand Fontaine
Genetic risk and autoimmunity in Multiple sclerosis

Mar 2010-Jun 2012 Postdoctoral Fellow at Curie Institute (Paris)
Dr. Clotilde Thery
Immune escape mechanisms in bladder cancer progression

Jan 2007 – Jan 2010 Postdoctoral Fellow in Thomas Jefferson University, Department of
Neurology – Dr. Abdolmohamad Rostami Role of IL-23 and IL-27
in the pathogenesis of experimental autoimmune encephalomyelitis
and autoimmune diabetes.

2003 - 2006 Ph.D in University of Lille 2 – Pr. Lionel Prin
B cell response during experimental autoimmune encephalomyelitis.

2002 M.S. Immunology, University of Paris 6 – Dr. Salem Chouaib Role of
hsp70 in tumor resistance to CTL cytotoxicity

Lectures and courses:

Aug 2015 : Lecture on Immunopathogenesis of Multiple Sclerosis
during « the brain to market summer school », ICM, Paris

**Professional Affiliations and
expertise**

- French Association of Immunologist
- National Multiple Sclerosis Society
- MS Research Australia and the Research

Management Committee

Grants and fellowships:

2002	Government of Tunisia- Master Fellowship
2010-2012	FRM postdoctoral fellowship
2013	Young investigator fellowship from ARSEP foundation
2014	France Foundation Award: Marie-Ange Bouvet Labruyère Award
2015-2016	INSERM Starting grant

Publications in international peer-reviewed multi-disciplinary scientific journals

* equal contribution

- 1) ***EI Behi M**, Sanson C, Bachelin C, Guillot-Noël L, Fransson J, Stankoff B, Maillart E, Sarrazin N, Guillemot V, Abdi H, Cournu-Rebeix I, Fontaine B, Zujovic V. Adaptive immunity drives remyelination failure or success in multiple sclerosis. *Brain*. Under revision
- 2) **EI-Behi M**, Dai H, Magalhaes JG, Hwang D, Zhang GX, Rostami A, Ciric B. Committed Tc17 cells are phenotypically and functionally resistant to the effects of IL-27. *Eur J Immunol*. 2014 Oct; 44 (10):3003-14.
- 3) Damotte V, Guillot-Noel L, Patsopoulos NA, Madireddy L, **EI Behi M**; International Multiple Sclerosis Genetics Consortium; Wellcome Trust Case Control Consortium 2, De Jager PL, Baranzini SE, Cournu-Rebeix I, Fontaine B. A gene pathway analysis highlights the role of cellular adhesion molecules in multiple sclerosis susceptibility. *Genes Immun*. 2014 Mar;15(2):126-32
- 4) **EI-Behi M**, Krumeich S, Lodillinsky C, De Reynies A, Sugano G, Kamoun A, Chapeaublanc E, Eijan AM, Allory Y, Radvanyi F, Lantz O, Bernard-Pierrot I*, Théry C*. An essential role for decorin in bladder cancer invasiveness. *EMBO Mol Med*. 2013. Dec;5(12):1835-51.
- 5) **EI-Behi M**, Ciric B, Rostami A. GM-CSF in Autoimmune Inflammation of the Central Nervous System. In: Yamamura T, Gran B, editors. *Multiple Sclerosis Immunology*: Springer New York; 2013. p. 127-47.
- 6) ***EI-Behi M**, *Ciric B, Dai H, Yan Y, Cullimore M, Safavi F, Zhang GX, Dittel BN, Rostami A. The encephalitogenicity of T_H17 cells is dependent on IL-1- and IL-23-induced production of the cytokine GM-CSF. 2011. *Nat Immunol*. Jun;12(6):568-75
- 7) **EI-Behi M**, Rostami A, Ciric B. Current views on the roles of Th1 and Th17 cells in experimental autoimmune encephalomyelitis. 2010. *J Neuroimmune Pharmacol*. Jun;5(2):189-97
- 8) **EI-Behi M**, Ciric B, Yu S, Zhang GX, Fitzgerald DC, Rostami A. Differential effect of IL-27 on developing versus committed Th17 cells. 2009. *J Immunol* Oct 15;183(8):4957-67
- 9) *Ciric B, ***EI-Behi M**, Cabrera R, Zhang GX, Rostami A. IL-23 drives pathogenic IL-17-producing CD8⁺ T cells in autoimmune diabetes. 2009. *J Immunol* May 1;182(9):5296-305
- 10) Li H, Ciric B, Yang J, Xu H, Fitzgerald DC, **Elbehi M**, Fonseca-Kelly Z, Yu S, Zhang GX, Rostami A. Intravenous tolerance modulates macrophage classical activation and antigen presentation in experimental autoimmune encephalomyelitis. 2009. *J Neuroimmunol*. Mar 31;208(1-2):54-60.
- 11) Zhao Z, Yu S, Fitzgerald DC, **Elbehi M**, Ciric B, Rostami A, Zhang GX. IL-12Rbeta2 promotes the development of CD4⁺CD25⁺ regulatory T cells. 2008. *J Immunol*. Sep 15;181(6):3870-6.
- 12) Fitzgerald DC, Zhang GX, **EI-Behi M**, Fonseca-Kelly Z, Li H, Yu S, Saris CJ, Gran B, Ciric B, Rostami A. Suppression of autoimmune inflammation of the central nervous system by interleukin 10 secreted by interleukin 27-stimulated T cells. 2007. *Nat Immunol*. Dec;8(12):1281-3.
- 13) **EI Behi M**, Zephir H, Lefranc D, Dussart P, Dubucquoi S, Vermersch P, Prin L. Changes in self-reactive IgG antibody repertoire by anti-allergic drugs in experimental autoimmune encephalomyelitis. 2006. *J Neuroimmunol* ;182(1-2):80-8
- 14) Zephir H, Almeras L, **EI Behi M**, Dussart P, de Seze J, Steibel J, Trifilieff E, Dubucquoi S, Dessaint JP, Vermersch P, Prin L, Lefranc D. Diversified serum IgG response involving non myelin CNS proteins during Experimental autoimmune encephalomyelitis. 2006 *J neuroimmunol* 179(1-2):53-64
- 15) **EI Behi M**, Dubucquoi S, Lefranc D, Zephir H, De Seze J, Vermersch P, Prin L. New insights into cell responses involved in experimental autoimmune encephalomyelitis and multiple sclerosis. 2005. *Immunol Lett*. Jan 15; 96(1):11-26

16) Dangles-Marie V, Richon S, **El-Behi M**, Echchakir H, Dorothee G, Thiery J, Validire P, Vergnon I, Menez J, Ladjimi M, Chouaib S, Bellet D, Mami-Chouaib F. A three-dimensional tumor cell defect in activating autologous CTLs is associated with inefficient antigen presentation correlated with heat shock protein-70 down-regulation. *Cancer Res.* 2003 Jul 1; 63(13):3682-7.

17) Chouaib S, Thiery J, Gati A, Guerra N, **El Behi M**, Dorothee G, Mami-Chouaib F, Bellet D, Caignard A Tumor escape from killing: role of killer inhibitory receptors and acquisition of tumor resistance to cell death. *Tissue Antigens.* 2002 Oct; 60(4):273-81.

Publications in peer- reviewed conferences proceedings:

C. Sanson, M. El Behi , C. Bachelin, L. Guillot-Nöel, N. Sarrazin, B. Stankoff, E. Maillart, I. Rebeix, B. Fontaine, V. Zujovic . Multiple sclerosis patient's lymphocytes crosstalk with microglial cells impacts the remyelination process. XII European Meeting on Glial Cells in Health and Disease. Bilbao | July 15 - 18, 2015

C. Sanson, M. El Behi, C. Bachelin, L. Guillot-Nöel, N. Sarrazin, B. Stankoff, E. Maillart, I. Rebeix, B. Fontaine, V. Zujovic . Multiple sclerosis patient's lymphocytes crosstalk with microglial cells impacts the remyelination process. Understanding the Function of Glia in the Healthy and Diseased CNS. Manly Beach, Sydney, Australia, August 19-22, 2015

M. El Behi, V. Damotte, L. Guillot-Nöel, V. Zujovic, I. Rebeix, B. Fontaine. Role of immune gene variants in multiple sclerosis susceptibility and severity: Genetic burden consequences on immune cell functionality. 12th International Congress of Neuroimmunology. Mainz, Germany, 9-13 november 2014.

El Behi M, Damotte V, Guillot-Nöel L, Zujovic V*, Rebeix I*, Fontaine B* Role of immune gene variants in multiple sclerosis (MS) susceptibility and severity: Genetic burden consequences on immune cell functionality. Annual Meeting of the French Society for Immunology (SFI), Paris, 4-7 november 2013

El Behi M, Krumeich S, Lodillinsky C, Kamoun A, Tibaldi L, Sugano G, De Reynies A, Chapeaublanc E, Laplanche A, Lebret T, Allory Y, Radvanyi F, Lantz O, Eiján AM, Bernard-Pierrot I*, Théry C* Two complementary strategies developed by a variant of bladder tumor to achieve invasiveness: immune escape and decorin secretion. Annual Meeting of the French Society for Immunology (SFI), Paris, 4-7 november 2013

Ciric B, **El Behi M**, Puskovic V, Rostami A. Developmental and functional characterization of IL-17-producing CD8+ T cells. 15th Annual Meeting of the International Cytokine Society. October 2007. San Fransisco, California

Fitzgerald DC, Zhang GX, **El Behi M**, Fonseca-Kelly Z, Li H, Yu S, Saris CJ, Gran B, Ciric B, Rostami A. Suppression of autoimmune inflammation of the central nervous system by interleukin 10 secreted by interleukin 27-stimulated T cells. 15th Annual Meeting of the International Cytokine Society. October 2007. San Fransisco, California

El Behi M, Lefranc D, Zephir H, Almeras L, Dussart P, Dutoit V, Drobecq H, Launay D, de Seze J Dubucquoi S, Vermersch, P and Prin L. 8th International Conference of Neuroimmunology, OCT 15-19, 2006, Nagoya, Japan.

El Behi M, Zéphir H, Lefranc D, Dubucquoi S, de Seze J, Vermersch P, Prin L. Changes in self reactive IgG antibody repertoire in experimental autoimmune encephalomyelitis after modulation of CD4+ CD25+ Regulatory T cells. European Committee for Treatment and Research In Multiple Sclerosis, Thessaloniki, Grèce, October 2005.

El Behi M, Zéphir H, Lefranc D, Dubucquoi S, de Seze J, Vermersch P, Prin L. Changes in self-reactive IgG antibody repertoire by anti-allergic drugs in experimental autoimmune encephalomyelitis. 57th Annual meeting of the American Academy of Neurology, Miami, USA, April 2005

Zéphir H, de Seze J, Lefranc D, Dubucquoi S, **EI behi M**, Papeix C, Prin L, Vermersch P. Serum autoreactivity profiles of neuromyelitis optica (Devic's syndrome) : a comparative study with MS. European Committee for Treatment and Research In Multiple Sclerosis, Vienne, Autriche, October 2004.

EI Behi M, Zéphir H, Almeras L, Lefranc D, Steibel J, Maurage CA, Trifilief E, De Seze J, Dubucquoi S, Vermersch P, Prin L. Sequential analysis of the autoimmune antibody repertoire alteration in a PLP-induced Encephalomyelitis in SJL mice. Annual Congress of French Immunological Society. November 2003

Invited presentations:

- Adaptive immunity drives remyelination failure or success in multiple sclerosis. International Congress of Immunology, Melbourne, Australia, August 21-26, 2016

- Role of immune gene variants in multiple sclerosis susceptibility and severity: Genetic burden consequences on immune cell functionality. 12th International Congress of Neuroimmunology. Mainz, Germany, 9-13 november 2014.

- Two complementary strategies developed by a variant of bladder tumor to achieve invasiveness: immune escape and decorin secretion. Annual Meeting of the French Society for Immunology (SFI). November 2013

- New insights in the pathogenesis of Multiple Sclerosis: GM-CSF, IL-23 and IL-27 in the highlights. Seminars of the Brain and spine institute, 2012, Paris, France

- Interleukin (IL-) 23, IL-27 and GM-CSF in the circle of autoimmunity, Curie Institute Seminars, 2009, Paris France