

Marie Skłodowska Curie Individual Fellowship 2020

Expression of Interest for hosting Marie Curie Fellows

1. Supervisor (name and e-mail address)

Prof. Rezzani Rita, rita.rezzani@unibs.it

2. Department (name and address)

Anatomy and Physiopathology Division, Department of Clinical and Experimental Sciences, University of Brescia, Brescia, Italy.

3. Panel (choose one)

- Chemistry (CHEM)
- Social Sciences and Humanities (SOC)
- Economic Sciences (ECO)
- Information Science and Engineering (ENG)
- Environment and Geosciences (ENV)
- Life Sciences (LIF)
- Mathematics (MAT)
- Physics (PHY)

4. Description of your research activities (max 10 lines)*

The research programs in my laboratory are actually focused on studying the anatomical, morphostructural, molecular and biochemical alterations induced by autism spectrum disorders at encephalic level. The second, but not least, purpose is evaluate the effects and mechanism(s) of action of melatonin (multitasking endogenous indoleamine) supplementation in genetically modified mice with altered social behaviour compatible with the autism spectrum disorders. The actually knowledge are only indicative of the effectiveness of melatonin to promote quality of sleep, but insufficient for a long-term therapy with the aim of a cognitive improvement. The carrying out of this research projects will have a huge impact on the management of this disease in health and social terms, improving the life quality of patients.

5. Key-words

Autism Spectrum Disorders, Melatonin, Morphology.

6. Short CV of the supervisor (max 5 lines)

2007- present Full Professor of Human Anatomy and Chairman of Anatomy and Physiopathology Division, Department of Clinical and Experimental Sciences, University of Brescia, Brescia, Italy;
2014- present President of the Interdepartmental Research Centre of Adaptation and Regeneration of Tissues and Organs, University of Brescia, Italy.

7. List of 5 main publications of the supervisor

- 1- **Rezzani R.**, Franco C., Favero G., Rodella L.F. Ghrelin-mediated pathway in Apolipoprotein-E deficient mice: a survival system. *Am J Transl Res.* 2019;11(7):4263-4276.
- 2- **Rezzani R.**, Franco C., Rodella L.F. Sex differences of brain and their implications for personalized therapy. *Pharmacol Res.* 2019;141:429-442.
- 3- Favero G., Bonomini F., Franco C., **Rezzani R.** Mitochondrial dysfunction in skeletal muscle of a fibromyalgia model: the potential benefits of melatonin. *Int J Mol Sci.* 2019;20(3).
- 4- Favero G., Franceschetti L., Buffoli B., Moghadasian M.H., Reiter R.J., Rodella L.F., **Rezzani R.** Melatonin: Protection against age-related cardiac pathology. *Ageing Res Rev.* 2017;35:336-349.
- 5- **Rezzani R.**, Rodella L.F., Favero G., Damiani G., Paganelli C., Reiter R.J. Attenuation of ultraviolet A-induced alterations in NIH3T3 dermal fibroblasts by melatonin. *Br J Dermatol.* 2014; 170(2): 382-391.

*Please consider that the preparation of a Marie Curie proposal requires some time. Fellow and supervisor have to agree on a project and training opportunities for the fellow.