



University of Salento, Lecce, Italy
Department of Excellence 2018-2022 - CUP: F85D18000130001

Public Selection for the assignment of n. 1 grant for 1 research assistant
Scientific Area BIO/09

Title "Physiological and pathophysiological mechanisms of autophagy in neurodegenerative diseases"- Scientific Advisor Prof. Michele Maffia,

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| DEPARTMENT | Di.S.Te.B.A. (Department of Biological and Environmental Sciences) |
| DURATION | 12 months (extendable or renewable for another year) |
| TOTAL GROSS ANNUAL SALARY | € 35.000,00 (including all the charges) |
| SCIENTIFIC DISCIPLINE | BIO/09 – Physiology |
| LOCATION | Di.S.Te.B.A. Prov.le Lecce-Monteroni, Campus Ecotekne, Lecce, Italy |
| SCIENTIFIC ADVISOR | Prof. Michele Maffia, michele.maffia@unisalento.it |
| CO-TUTOR | Prof. Bruno Di Jeso, bruno.dijeso@unisalento.it |
| PROGRAMME | Physiological and pathophysiological mechanisms of autophagy in neurodegenerative diseases |

Physiological and pathophysiological mechanisms of autophagy in neurodegenerative diseases

Autophagy is a process dedicated to the degradation and recycling of macromolecules and intracellular organelles. Defects of autophagy are involved in the pathogenesis of Parkinson's and Alzheimer's disease. These neurodegenerative diseases are characterized by the neuronal accumulation of protein aggregates related to the metabolism of some metals such as copper. The activation of autophagy represents a therapeutic target for the treatment of these pathologies. To achieve the objectives of this multidisciplinary research, the candidate must have: i. a strong background in molecular biology, gene amplification and sequencing, protein extraction and analysis, proteomics and immunohistochemistry, ii. skills in immortalized and primary cell cultures, iPSc iii. experiences in handling animals and in fluorescent, confocal and flow cytometry microscopy techniques.

General entry Requirements

Those eligible to participate in the present selection will have a degree or will be studying for a PhD and will have a professional scientific CV which proves them to be qualified to carry out research.

Minimum admission requirements:

- 1) Degree (course of study lasting at least four years, provided by the teaching systems to DM 03/11/1999, n. 509), Master's degree (art. 3, paragraph 1, letter b, DM 03/11/2009, n. 509; Art. 3, paragraph 1, letter b, DM 22/10/2004, n. 270).
- 2) Documented research experience abroad lasting at least 2 years