



## Erasmus+ Traineeship

EMPLOYER INFORMATION		
Name of Organization	University of Murcia	
UMU Contact Person and	Marta Garaulet Aza,	
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UMU Address	Facultad de Medicina, Campus Ciencias de la Salud, Edificio Laib, IMIB-Arrixaca.	
UMU Telephone	868889478	

ENTERPRISE JOB DES	CRIPTION
Name of enterprise	At University of Murcia (UMU):
	Obesity Research Group (study of obesity, treatments and associated metabolic disorders).
Duration	From 3 to 12 months
Working Hours	Around 30 h/week
Project Description	The focus of our research is to introduce Chronotherapy and Nutrigenetics to the science of Nutrition and Obesity. Our studies have shown that there is an internal clock in human adipose tissue. We know that genetics is behind our circadian machinery. We collaborate with "Garaulet Nutrición. S.L" with 8 Nutritional Clinics in different towns in Spain and we have performed several research projects funded by the Spanish Ministry of Science and Innovation, SENECA Foundation, and National Institute of Health (NIH) from USA, focused in translating Nutrigenetics and Chronobiology techniques to the clinical practice. As a result, we have constructed three populations (ONTIME, ONTIME JR and ONTIME MT, with more than 6000 subjects ( <u>ClinicalTrials.gov</u> Identifier: NCT02829619,



	NCT03036592, NCT02895282). In the current moment in collaboration with Harvard University we are working in a new project from the Spanish ministry with the aim to assess whether siesta is a beneficial or deleterious behavior in health, we are willing to perform a GWAS (Genome Wide Association Study) to study the genetics of siesta in Spain.
Tasks of the Erasmus intern	According to the skills and independence in the bench, the student will participate in data analyses of the different populations or in the laboratory in the study of adipose tissue in culture, RNA and DNA extraction, and determination of gene expression in adipose tissue (Molecular Biology). Another task will be to perform nutritional evaluations of the participants at the clinics, and weight loss evolutions. We will also perform chronobiological therapies based on the determination of body temperature, actimetry and electrocardiography rhythms.
Requirements	<ul> <li>The applicant must have some knowledge in statistical processes and softwares (R, STAT, SPSS), some skills in database analyses, a minimum of laboratory experience.</li> <li>Students of bioinformatic, Biotechnology, Mathematics, Biostatistics, Nutrition, Biology, Medicine, Biomedicine, Biochemistry, Pharmacy, and Veterinary are welcome. However, a motivated student with minimal experience working on a laboratory bench can be accepted. We have frequent meetings by zoom with our colleges from Harvard University. Therefore, English speaking is required.</li> </ul>
What do we offer	The student will be part of our currently active studies in a project supported by national competitive funding. Experience will be guaranteed by our modern research facilities and by friendly and highly qualified teamwork with highly competent PhD students and post-doctoral researchers, under the close supervision and guidance of senior staff. The student will be collaborating with Harvard University team from USA. If the student is nutritionists will have access to the Nutritional Clinics in Murcia. We organize our activities in a friendly and collaborative environment, guaranteeing possibilities to increase your skills during the experience. He / she will gain experience in data analyses, adipose tissue culture, genetics, and nutrition.



Website	At UMU:
	https://www.um.es/web/investigacion-obesidad/inicio