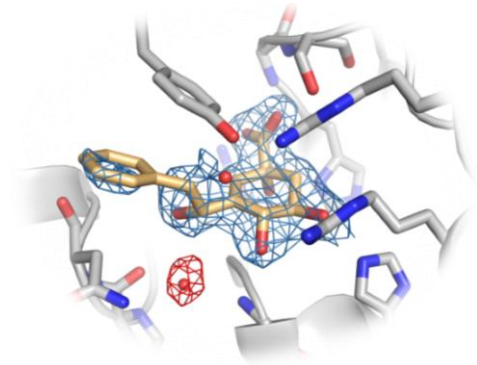


PREDOCTORAL POSITION OFFERED IN STRUCTURAL BIOLOGY



We offer the opportunity to apply for a 4-year research fellowship (research assistant) to develop a doctoral thesis in the Research Group on Hypothalamic Regulation of Obesity and Diabetes (NeuroLipid Group: <https://www.uic.es/neurolipid-group>) under the supervision of Dr. Nuria Casals and Dr. Miguel Baena. Our group has extensive expertise in lipid metabolism and the structural biology of CPT1 proteins.

Project description:

The main goal of the proposed PhD project is to express and purify both human CPT1A and CPT1C proteins in eukaryotic expression systems for further structural and binding studies. CPT1A and CPT1C are transmembrane proteins that play a key role in the control of metabolism and obesity. The work will include the culture of human cells in suspension to express and purify the target proteins, followed by structural and binding studies to determine the 3D structure and analyze protein-ligand interactions. Additionally, kinetic studies will be performed on these purified proteins to obtain enzymatic values such as K_m and V_{max} .

This position also offers the opportunity to teach 60 hours per course in biology-related topics at UIC Barcelona (in Medicine, Dentistry, or Biomedicine degrees).

Contract type: PhD contract.

Start date and duration: September 2024 /March2025

Eligibility: Candidates with a bachelor's degree in Biomedicine, Chemistry, Biochemistry, Biotechnology, Pharmacy, or similar, with a good academic record and a high level of motivation are invited to apply. Preference will be given to candidates with previous research experience in structural biology. Interested candidates should send a brief cover letter indicating their research interests, a CV and their academic record by e-mail to: **Dr Miguel Baena** (mbaena@uic.es). The best candidates will be called for a personal interview.

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