



UNIVERSITÀ
DEGLI STUDI
DI TRIESTE

Fondazione
CARIPLO



Postdoctoral position in Optogenetics

University of Trieste, Italy

We are seeking an exceptional candidate for a **Postdoctoral position in Synaptic Physiology** to join our team at the **University of Trieste**, Italy.

The project explores the potential of the unknown 'Tdark' gene *HPCAL4* as a molecular target for developing gene therapies for ataxia and epileptic encephalopathy. The focus is on deciphering how *HPCAL4* regulates *CACNA1A*, a pivotal calcium channel implicated in various brain disorders. Through cutting-edge techniques (super-resolution imaging, electrophysiology and cellular-resolution optogenetics), you will investigate functional connectivity within the mammalian cortex.

The ideal candidate is a determined and creative individual with a PhD in physiology, physics, neuroscience or related fields. Previous experience in electrophysiology and/or optogenetics, coupled with a background in neuroscience, is highly recommended. The ability to thrive in an international and highly competitive research environment is essential.

Join a dynamic research team driven by passion and curiosity for science. Benefit from access to state-of-the-art facilities and collaboration opportunities across Europe with renowned experts in the field. With a commitment to fostering diversity and inclusion, we welcome applicants from all backgrounds.

The position is funded by the Cariplo-Telethon alliance dedicated to supporting research on Tdark genes (i.e. genes with unknown functions in rare diseases). Our laboratory adopts an integrative experimental approach, combining molecular, imaging and electrophysiological techniques in both *in vitro* and *in vivo* models of neurological disorders (Thalhammer et al., 2017 Cell Rep 20, 333-343; Ferrante et al., 2021 Cell Rep 35 109248, Jaudon et al., 2022 Mol Ther Nucleic Acids 29 462-480, Moretto et al. 2023 Elife 12, Jaudon and Cingolani, 2024 Trends Cell Biol.).

<https://dsv.units.it/en/research/researchareas/researchgroups/43349>

Direct your enquiries or submit your application to Prof. Lorenzo Cingolani (lcingolani@units.it) before June 5, 2024. Please include a motivation letter, your CV and contact details of at least two referees.