

**Iñigo Yoldi Bergua** is a graduate student from the National Graduate School of Chemistry, University of Montpellier, France who is undertaking a double Master of Science degree in Biology and Health while furthering his bioinformatic skills. He is in his last academic year of studies and spending 6 months, April to September 2023, engaged in research at the Center for TRiM. Working under the supervision of Vadim Fedorov, PhD and receiving practical advising from Anya Goropashnaya, PhD, Iñigo is being trained in functional genomics research that he will use to complete his MS thesis project.



Springtime rock climbing to Grapefruit Rocks, Fairbanks, AK 4.30.2023

PI Fedorov's research focuses on the post-transcriptional regulation of genes involved in skeletal muscle metabolism of arctic ground squirrels and black bears using microRNA expression, ribosome profiling, transcripts translated to proteins, and other pathways that reduce muscle loss during hibernation. This research focus is of keen interest to Iñigo who applied to the Center to gain an understanding about the metabolomics of hibernating black bears and arctic ground squirrels and how this knowledge could be applied to human neurocritical care.

Iñigo learned about TRiM's research and internship opportunities through a former colleague from the University of Montpellier, Arthur Garreau, who spent 3 months studying under Dr. Fedorov during the summer of 2022. Iñigo was intrigued by Arthur's training that involved extracting RNA from hibernating bears to explore transcriptional changes and performing large data analysis which could potentially be used to inform treatment addressing muscle atrophy in humans.

Iñigo said he is "... fascinated by how arctic ground squirrels are able to survive Alaskan winters by lowering their body temperature below 0°C. ... I am interested in understanding the molecular mechanisms that regulate this natural adaptation, while keeping an eye on potential applications into human medicine."

The highpoint for Iñigo during his time at UAF was participation in the Hibernation Science Workshop, organized by the Center for TRiM and partners in August 2023. He said that the workshop was "very enriching to meet members from the hibernation community and learn about their expertise, that may one day lead to collaboration."

Iñigo came to UAF in search of the Alaskan adventure! He enjoys rock climbing, hiking, camping, UAF Music in the Gardens, and has made many friends during his time here. In addition to completing his MS degree, Iñigo plans to pursue a PhD in molecular biology research. He adds "Who knows, perhaps it will be in the hibernation field!" That is our hope too, Iñigo, for you to be part of the next generation of hibernation research scientists!