GÖTEBORGS UNIVERSITET

SAHLGRENSKA AKADEMIN
INSTITUTIONEN FÖR BIOMEDICIN

Utlysning

Project Title: Investigation of mitochondrial ribosomes
Project duration and dates: 20260201 - 20260314
Application deadline: 20260126
Amount: 18750

Project summay:
Mitochondria convert chemical energy into ATP by utilizing a system of molecular machines, the respiratory chain complexes. The complexes driving oxidative phosphorylation are a mosaic of proteins encoded by the nuclear and the mitochondrial DNA. Therefore, assembly of the respiratory chain and the ATPase requires not only expression and import of many nuclear encoded proteins but also translation of mitochondrially encoded proteins. The mitochondrial genetic system is responsible for replication and transcription of the mitochondrial genome, and for the synthesis of a few polypeptides within the organelle by mitochondrial ribosomes (mitoribosomes). Dysfunction of these processes underlies many human disorders and aging. It is therefore surprising that so little is known about how mitochondrial protein synthesis and how the proteins are assembled into complexes.

Applicant:
We are looking for an applicant with a keen interest in molecular biology and structural biology. Previous experience with single-particle cryo-EM and handling mutants of baker´s yeast is necessary.

Application:
Applications should be emailed to; martin.ott@gu.se
The application should include; Motivation letter, CV including contact info.