## Projecte:

- NOM DE PROJECTE: Development of a method for the simultaneous analysis of toxic non-protein amino acids and saxitoxins from cyanobacteria using HPLC-MS/MS.
- VACANT: Master's Student
- RESUM: Due to the increasing global temperatures caused by climate change and the intensive use of fertilizers in the agricultural industry, the presence of cyanobacteria in freshwater is becoming more common worldwide. Some cyanobacterial species can produce potent neurotoxins such as saxitoxins, as well as non-proteinogenic amino acids like  $\beta$ -methylamino-L-alanine (BMAA), 2,4-diaminobutyric acid (2,4-DAB), or aminoethylglycine (AEG).

These metabolites are highly toxic and have been associated with neurodegenerative diseases such as amyotrophic lateral sclerosis, Parkinson's, or Alzheimer's. The project aims to develop a method for analyzing these cyanotoxins in aqueous matrices using HPLC(HILIC)-MS/MS

 PERSONA DE CONTACTE: Dr. Xavier Ortiz Almirall (Xavier.ortiz@iqs.url.edu)