The idea of DNA barcoding as species identification tool is quite young and dates back to the first publications by Paul Hebert that appeared in 2003. It is the vision of being able to distinguish species and identify whole or even only parts of specimens accurate across any life stage using a short gene sequence.

Once a species has been characterized genetically at a commonly accepted genetic locus (usually part of the mitochondrial cytochrome c oxidase subunit I – in short **COI**), and the resulting DNA sequence has been stored in an accessible electronic database it serves as a standardized reference for this particular species.

In this context it is important to mention that these sets of DNA barcodes should derive from voucher individuals with authoritative taxonomic identifications - only this will guarantee sustainability of the identification system. This is where **FREDIE** wants to make the difference by bringing together the taxonomic expertise of the respective organism group with a strict link between the voucher and the barcode.

Structure of the FREDIE project >>>