



# Go Beam: Go inside a Bacterial cell methylating Mercury

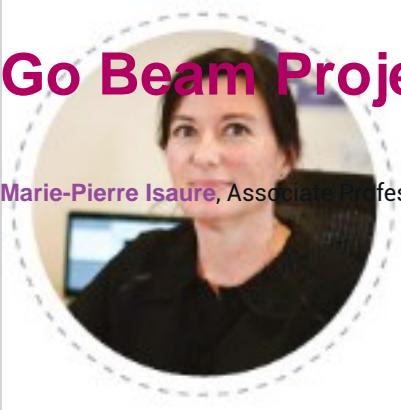


**An exploratory project invites teams of 3 to 4 scientists to propose innovative research, new or disruptive topics, to reduce identified barriers, but also to promote interdisciplinarity and dissemination of information.**

**Mercury (Hg)** is one of the most worrying **pollutants** on Earth because of its conversion into methylmercury, a powerful **neurotoxic**, operated by bacteria. The cellular and environmental mechanisms involved in this process are poorly understood.

The Go Beam project aims to **characterize** mercury methylation at the cellular level, from recognition to export. To this end, we are developing a new interdisciplinary approach combining genetics, mass spectrometry-based analytical chemistry, and state-of-the-art synchrotron imaging and X-ray absorption spectroscopy techniques to probe a collection of methylating/demethylating strains and mutants. Our results will contribute to a better understanding of the risks and lay the foundation for a new approach to mercury methylation.

## Go Beam Project Leader



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