

## General presentation

The laboratory of Biometry and Evolutionary Biology was created in 1966 by Jean-Marie Legay (1925-2012) with the aim of integrating biometry to answer questions in population biology. Jean-Marie Legay was a precursor of interdisciplinarity in the life sciences by promoting the mathematical formalization of complex biological systems to better understand their organization. The development of the LBBE was built on this conception of the scientific approach.

Today, the LBBE is based on three pillars: (i) biometry with methodological developments in statistics, computer science and mathematics for the modelling of living systems; (ii) ecology and evolution approached from molecular and genomic to population and community organization levels; (iii) health, by developing precision medicine and evidence-based medicine. The specificity of the laboratory stems from the synergy between methodological challenges and issues in ecology, evolution and health, in order to develop a project on health, dynamics and evolution of living organisms at all scales. In order to successfully orchestrate this research activity, the LBBE is organized into four scientific departments, each composed of multiple research teams (

[Functional Chart](#)

).

Although mainly centered on fundamental research, our activity is articulated with major societal issues, including the digital revolution and the accumulation of data, the anthropocene and the related environmental crisis, and finally the development of global health and personalized medicine.

The LBBE also has a strong implication in training. We are involved in initial training at the University Lyon 1, where we contribute to the teaching of evolutionary biology at all levels, to the training of health students and to the teaching of methodology (statistics, bioinformatics, mathematics) to biologists. LBBE members are coordinating various Bachelor's and Master's degrees and courses (

[Teaching](#)

). Through the affiliation of some of our teacher-researchers, we also contribute to the initial training of biology technicians (IUT Génie Biologique Lyon 1) and veterinarians (VetAgro Sup).

All these activities benefit from the work of the staff involved in supporting research and teaching, staff who are grouped in three mutualized poles: the Biotechnology Pole, the Computer Science Pole and the Administrative Pole.