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Cryopreservation of the specie *Pseudomonas aeruginosa* comparison of various methods

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Low-temperature cryopreservation is a common method for the preservation of microorganisms. However, this method has a major defect which is a strong rate of bacterial mortality. To limit this loss, many studies have shown the efficiency of additives in the cryopreservation medium. Called cryoprotectives, these additives allow to protect bacteria against freezing and thawing damages. However, this protection is only partial and it changes according to the used cryoprotective agent and preserved bacterial strain. This preliminary study compares four methods of cryopreservation, using as cryoprotective glycerol or skimmed milk. Our results demonstrate that the use of glycerol (18 %) in the cryopreservation of *Pseudomonas aeruginosa* strains allows to obtain higher bacterial viability than skimmed milk (10 %).

Biography

Xavier Bernasconi is completing his Master of biobank management degree at the age of 22 years from School of Biology Biochemistry Biotechnologies (ESTBB), Faculty of Sciences, Catholic University of Lyon, France (Diploma of the Faculty of Medicine of the University of Nice Sophia Antipolis, France). He worked as a intern in 3 biobanks (2 in France and 1 in England) and in 2 laboratory.

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