OMICS Group Conferences
Accelerating Scientific Discovery

International Conference and Exhibition on
Biochemical & Molecular Engineering

October 07-08, 2013 Hilton San Antonio Airport, TX, USA

Phagetherapies for infections caused by multi-resistant *Pseudomonas aeruginosa*

Ricardo Ferraz[1,2], Ana Reis[1], Cristina Prudêncio[1,3], Pilar Baylina[1,4] and Rúben Fernandes[1,3]

[1]School of Allied Health Sciences, Porto Polytechnic, Portugal
[2]Universidade Nova de Lisboa, Portugal
[3]Porto University, Portugal
[4]InnoPhage, Ltd, Universidade Católica Portuguesa, Portugal

The hospital infections can be prevented by controlling some factors related with staff, material, and environment. At this moment the existing legislation regulates procedures that prevent the propagation of the infection and/or of the agents that causes it. The *Pseudomonas aeruginosa* is a gram-negative opportunistic responsible for most of the hospital infections. Because it is opportunistic it is more frequent in immunocompromised patients submitted to transplants and surgical interventions. In short, this thesis has contributed for the understanding of the biology of *P. aeruginosa*, antibacterial treatment and its resistance to this treatment by using efflux bombs, and so as establishing associations with others factors, such as biochemical. This study has the objective to understand the resistance factors used by the *P. aeruginosa* in order to develop alternative therapies for this agent. Initially, 72 hospitalar isolated were characterized and 91.67% have revealed more than 3 classes of Antimicrobians.

Biography

Ricardo Ferraz is a teacher at School of Allied Health Sciences, Porto Polytechnic, Porto. He graduated in Chemistry in 2002 and received his Master degree in 2006 at Faculdade de Ciências da Universidade do Porto. At the moment he is finishing his Ph.D. at Faculdade de Ciências e Tecnologia da Universidade Nova de Lisboa under the Supervision of Cristina Prudêncio, João Paulo Noronha and Zeljko Petrovski. His thesis is focused on the development of new ionic liquids as active pharmaceutical ingredients.

ricardoferraz@eu.ipp.pt