



PROJECT TITLE	Norovirus infection and disease in Portuguese elderly: a glimpse on epidemiology and host genetics – Refª. PTDC/DTP-EPI/1222/2012
BRIEF DESCRIPTION	Epidemiology of acute gastroenteritis (AGE) is poorly investigated in Portugal. Norovirus (NoV) is considered the most important cause of viral AGE in all ages, affecting particularly the elderly, with NoV outbreaks in aged-care facilities accounting for 31-80% of the total AGE outbreaks worldwide. The prevalence of NoV in Portuguese elderly, characterization of the circulating genotypes, the potential influence of host genetic factors in susceptibility to this infection were not studied before. Therefore, this epidemiological study could be highly relevant, considering that these questions can be answered and new preventive measures against the disease can be implemented.
OBJECTIVES	The main objectives of this study were: - to determine the epidemiological profile of NoV infection and to describe the circulating genotypes in the elderly population from aged-care facilities in the Greater Lisbon and the Algarve; - to determine the host genetic factors (i.e. secretor status, Lewis, and ABO phenotype) mediating susceptibility to NoV infection.
IMPLEMENTATION	Objectives accomplished: <ol style="list-style-type: none">1. Detection of NoV by multiplex real-time PCR in stool samples from elderly people living in aged-care facilities (individuals belonging to a designated “surveillance group” and samples collected during “screening”);2. NoV genotyping targeting the NS region (ORF2);3. Evaluation of the secretor status, Lewis and ABO phenotype based on saliva samples of the individuals enrolled;4. Genotyping of FUT2 and FUT3 genes. Stool and saliva samples were collected between November 2013 and June 2015 from elderly people living in nine aged-care facilities located in Almada, Amadora, Cascais, Lisbon and Santa Bárbara de Nexe (Algarve).
FUNDING AGENCY	Fundação para a Ciência e a Tecnologia (FCT)
DURATION	2013-2015
PRINCIPAL INVESTIGATOR	Claudia Istrate (GHTM/IHMT)
RESEARCH TEAM / INSTITUTION	Instituto de Higiene e Medicina Tropical/ Global Health and Tropical Medicine, Portugal (Coordinator Institution): Aida Esteves, João Piedade, Rosa Teodósio; Linköping University, Sweden: Johan Nordgren, Lennart Svenson;