

# **1. Molecular-epidemiological characteristics of bacteria isolated from inpatient health care facilities in Slovakia and its use for optimization of diagnostics and preventive measures in hospital hygiene**

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Monitoring of the spectrum of resistance and its transferability in hospital isolates of bacteria obtained from the environment of healthcare facilities in Slovakia is not a common standard. There are many unanswered research questions in this area. The main objective of the project will be a detailed molecular-epidemiological analysis and mapping of the situation in the occurrence of resistance and its transferability in environmental isolates of bacteria obtained from the health care environment in Slovakia in the years 2015 to 2019. isolates of bacteria from the environment of healthcare facilities in Slovakia ”(HOSPITAL-ENVIRO-REZ), when we were the first in Slovakia to comprehensively monitor species spectrum of environmental strains from hospital environment in 2015 - 2017. We proved the presence of all pathogens with clinically and epidemiologically important mechanisms of resistance in healthcare facilities in Slovakia. A study of a similar nature, which would comprehensively monitor microbial contamination of hospitals with pathogenic species, has never been performed in Slovakia before.