



Fund “Nauka” Project № 21021 Resume – Competition-Based Session 2021:
“Evaluation of the expression levels of selected miRNAs as potential biomarkers
in girls with polycystic ovary syndrome”
Project leader: Prof. Violeta Mihova Iotova, MD, PhD, DSc

The **aim** of the study is to evaluate the expression levels of selected miRNAs as biological markers of diagnostic value in girls with polycystic ovary syndrome (PCOS). Such studies have not been performed in Bulgaria, especially in adolescent patients.

The following research tasks are planned for the realization of the set goal:

1. Comparative study of the expression levels of selected miRNAs among girls with PCOS and among healthy girls;
2. Finding miRNAs with a potential role in differentiating patients with PCOS.

The research is interdisciplinary in nature, combining the competence of molecular biologists, pediatric endocrinologists and pediatricians. It envisages the application of modern molecular biological methods – extraction, quantitative and qualitative characterization of miRNAs from plasma, as well as expression qPCR analysis.

As a result of the implementation of the current project proposal, new data are expected to be obtained: for the presence of miRNAs, typically associated with PCOS.