

Postgraduate student: **Sotiris Konstantinidis**

Thesis Title:

Comparative Study of Target Prediction Algorithms, utilizing artificial and experimental data on Kaposi's sarcoma-associated herpesvirus & Epstein–Barr virus

Abstract:

miRNAs are small non-coding molecules of 20-22 nucleotides. The role of these molecules is to regulate the gene expression in the post-transcriptional level by silencing genes through translational repression or the degradation of the transcript of the genes. Due to their role, special interest shows the study of the behavior as well as the impact of viral miRNAs to their host. The goal of this thesis is the study of popular and established algorithms that predict interactions between miRNAs and genes and also the evaluation of their predictive capabilities, utilizing both artificial and experimental data of Kaposi's sarcoma-associated herpesvirus and Epstein–Barr viruses, derived by state of the art experimental methods

Examining Committee

Phd. Artemis Hatzigeorgiou, Professor, Department of Computer & Communication Engineering, University of Thessaly (thesis advisor)

Phd. Vangelis Karkaletsis, Research Director, Institute of Informatics and Telecommunications, NCSR "Demokritos"

Phd. Ilias Maglogiannis, Assistant Professor, Department of Computer Science and Biomedical Informatics, University of Central Greece