



Report evaluation

Dr. Josef Matousek Award

Competition for Matoušek Award 2019

Nomination number

DRMA-2019-0001

Nominee

Mgr. Rajan Iyappan, Ph.D.

Workplace

81 / 810002 (810002)

Name of Project

Understanding the regulation of translational reprogramming in the meiosis and mitosis pre and post fertilization

Period

1.2.2019 - 31.1.2020

Short review

In his Final Report, RI describes experiments leading to improved and detailed description of global translation blocks and resumption during the oocyte, zygote, and early embryo development. I appreciate the unprecedented correspondence of several quantitative parameters of global translation (35S-methionine incorporation, proximity of large and small ribosomal subunit components, and WB detection of translation factors). This part of work puts the definition of oocyte translation block at higher level and creates a forecourt for further analyses.

As stated by the PI (A. Susor), the principal part of RI's work exclusively supported by this award was the polysome-bound RNAseq, which identified multiple genes that were up- and down-regulated in different developmental stages. These candidates will be analyzed in detail and confirmed by qRT-PCR techniques in the close future.

The conclusions given in the final report are correct and fully substantiated by presented results. I am sure that RI will be able to publish this work as soon as the RNAseq analyzed will be completed. I also think that Matousek award to RI contributed to his career progress.

The allocated budget has been meaningfully utilized. In fact, not all of this work could have been supported exclusively from the small award and contribution from other sources probably helped to accomplish the presented results.

The results of the project are

A - Excellent

Final comment

The project was successfully completed in accordance with the original experimental design. The results obtained within the last year are innovative and important for wider field. We can expect publication of the results in a respected journal.