

Functional genomics (Ramot)

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The Shomron research team focuses on the analysis of genomics aimed at understanding human diseases. Combining high-throughput methods and bioinformatics (such as AI and deep learning), our team's research explores DNA changes and gene regulators.

Our goal is to reach a global perspective on the roles DNA and RNA play during disease development.

Among our projects:

- Identification of microRNAs that are in the intersection of several oncogenes
- Revealing the effect of coding and non-coding RNAs on pharmacogenomics and personalized medicine
- Profiling pathogens in human tissues based on deep sequencing of DNA and RNA molecules
- Running advanced rapid DNA and RNA sequencing for real-time feedback in medical scenarios

Overall we aim to deepen our understanding of disease development in order to generate a significant impact through translating ideas into clinical reality.

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