

BIOC 462/491 Internship Position in Industry

Fall 2024

Restrictions

Open only to Honours Students enrolled in BIOC 462/491 during the fall 2024 semesters

Company



RNA Technologies and Therapeutics

500 Cartier Boul. West

Laval (Quebec) H7V 5B7

T. 514 985-6511

<https://www.rnatechnologies.com/>

Project Title

Assessing *In Vitro* Transcribed mRNA Quality, Stability and Efficiency in Human Cells

Project Description

RNA Technologies and Therapeutics Inc. specializes in the design, optimization and production of RNA and the development of mRNA-based technologies/therapeutics. Our mRNAs are synthesized by *in vitro* transcription and our expert production team have established robust and reproducible methods to produce high-quality mRNA. As a company, we always strive towards innovative solutions to enhance the stability and efficacy of our products. As such, we are currently evaluating different formulations and modifications of mRNA moieties (cap-structure and nucleosides) to increase mRNA production, *in vitro* and *in vivo* stability as well as *in vivo* expression.

We are looking for an individual who would participate in the analysis of multiple parameters of in-house produced mRNAs and compare their respective efficacy to express proteins in cellular models. The candidate would be closely working with both mRNA Production and Research and Development departments. The individual would be using a wide range of techniques to achieve their goals. These techniques include, tissue culture of mammalian cell lines, mRNA transfection, RNA purification, RNA electrophoresis, flow cytometry and fluorescence/colorimetric assays.

Contact information

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