

Engineer for aptamer selection and characterization

Missions

The engineer will have to:

- Carry out various and complex operations, based on general instructions requiring the analysis and interpretation of information, the choice of solution and the ability to manage priorities within the framework of R&D programs
- Implement various techniques for the production and the characterization of biomolecules (electrophoresis, spectroscopy, PCR, etc.)
- Handle oligonucleotides (purification, titration)
- Select aptamers manually or automatically
- Analyze bioinformatic results
- Carry out physical-chemical characterization using suitable methods for the analysis of aptamer-ligand complexes (UV absorption, fluorescence)

Main activities

- Design aptamer selection procedures implementing different strategies
- Perform molecular biology experiments (PCR, *in vitro* transcription)
- Analyze oligonucleotides (electrophoresis, spectroscopy)
- Write protocols for handling and selecting oligonucleotides
- Implement bioinformatics tools for the analysis of oligonucleotide sequences and secondary structures
- Hold a laboratory notebook
- Prepare the measuring equipment (fluorescence, UV absorption, electrophoresis)
- Write technical and scientific reports
- Participate in periodic scientific meetings of the R&D teams
- Monitor a bibliographic survey
- Apply laboratory safety rules

Secondary activities

- Contribute to the general organization of the company
- Contribute to the mentoring of new entrants
- Prepare orders for chemical / biological products and consumables
- Manage chemical / biological products and consumables stocks
- Ensure first level maintenance of equipment

Know-How

- Strong knowledge in molecular biology (Engineer School, BTS, IUT, Licence Pro)
- Expertise in PCR and handling of nucleic acids
- Knowledge and practice of bioinformatics algorithms dedicated to the analysis of nucleic acid sequences
- Knowledge in physical-chemicals methods or nucleic acid chemistry would be a plus
- Good English and French skills (written and verbal)

Soft-skills

- Thoroughness and high-quality work
- Instructions compliance and observe strict confidentiality
- Autonomy and self-initiative
- Adaptability and evolving capacity

- Strong communication skills

Experience and working environment

Experience in a biotech company would be an added advantage.

The engineer will be under the supervision of Novaptech Scientific Director and Technical Director, and will work in a R&D team comprising several engineers.