

## NOVADISCOVERY | INTRODUCTION

You are an engineer curious about sciences, particularly in the field of systems biology. You are open-minded, and ready to work with a team of innovation enthusiasts in various fields of expertise. At Novadiscovery, you will participate in the development of *in silico* biomedical models with direct applications to improve new drug R&D.

Novadiscovery is a pioneer in the emerging field of *in silico* medicine based in Lyon (France). Working with an innovative company in its scale-up phase is an entirely different experience than working for a large established company. You will be assigned a great number of responsibilities and work in a dynamic environment with strongly motivated people who will help you fast-climb a steep learning curve. More information on [www.novadiscovery.com](http://www.novadiscovery.com)

### YOU ARE...

- **A team player**, a good listener and an effective communicator  
*Join a growing multidisciplinary team of enthusiastic innovators*
- **Curious and proactive** with a solid grounding in biology  
*Particularly in cell biology, molecular biology and omics, to address real life clinical issues.*
- **Autonomous** and self-motivated with strong analytical and problem-solving skills  
*Find innovative solutions to science and engineering problems*
- **Eager to learn** and use mathematical methods for the modeling of biological systems  
*To simulate virtual diseases and treatments with ODE, PDE, Monte-Carlo Simulations*
- **Willing** to explore and exploit large datasets and virtual populations  
*Apply machine learning, statistical analysis, outliers detection*
- **Responsive** and capable of facing time-sensitive challenges  
*Project management with client facing opportunities are awaiting you*

### YOU WILL...

- **Contribute** actively to the creation of *in silico* pathophysiological models
- **Impact** the development of the company's simulation platform
- **Analyze** and exploit large simulation results
- **Participate** in weekly and monthly project meetings and reporting

### SKILLS & INTERESTS

We're looking for people who know some of the following or are eager to learn and work with them:

- Unix environment (Linux)
- Functional programming (Haskell)
- Statistical/Scientific computing (R)
- Biomodelling
- Big data (SQL, Spark)
- Markup languages (Markdown, LaTeX)
- Miscellaneous (Git, bash, zsh)
- Systems medicine

### DETAILS

<b>Type</b>	Full-time job
<b>Salary</b>	Competitive
<b>Start date</b>	<b>S2 2018</b>
<b>Contact</b>	<a href="mailto:recruitment@novadiscovery.com">recruitment@novadiscovery.com</a>

### APPLY

[Online Form](#)



## JOB DESCRIPTION | New drug R&D

### Background:

NOVA is a pioneer in the field of *in silico* clinical trials, which are poised to become an industry standard as regulators now see Modeling and Simulations (M&S) as a strategic priority. Each commercial project is aimed to unlock the potential of M&S and allow our biotech and pharma partners to accelerate and de-risk the R&D of new therapies by establishing their clinical benefits upstream of human trials. To predict drug efficacy, NOVA applies a proprietary methodology (the Effect Model) with WISE® (Whitebox In Silico Engine), an open ecosystem which brings together the modeling and simulation expertise of the company.

### Objective:

Active contribution to the creation of pathophysiological models and the exploitation of their results. You will be responsible of the development of a submodel to be integrated in a complete model. The actual model to be implemented will depend on the partner's need of the moment. You will be part of the R&D process within that project.

### Work Process:

- Participation in weekly and monthly project meetings and reporting (scientific and project management meetings)
- Literature review on the biological system to model
- Logical modelling of the physiopathological system
- Creation of a computational model in the simulation platform
- Integration of the new submodel in the complete model
- Redaction of an *in silico* experimental protocol and run simulations to answer the client's question

### Deliverables:

- Knowledge Model
- Logical Model
- Computational Model

**Keywords:** Commercial Project, Systems Biology, Biomodelling, Drug R&D