



## Simulation Engineer W/M

### Company description

CorWave is a medical technology company developing implantable heart pumps with the goal of improving the survival and daily lives of patients with heart failure. The CorWave pump with an undulating membrane is a disruptive technology protected by over 50 patents and 20 years of research. Funded by leading international investors, supported by renowned surgeons, CorWave aims to become a major player in heart surgery.

### Missions presentation

- Perform numerical simulations of various concepts and designs of complex electro-mechano-hydraulic implantable medical device.
- Create various numerical models using multi-parametric simulations.
  - Fluid-Structure Interactions
  - CFD
  - Solid Mechanics (non-linear behavior materials)
  - Heat transfer
  - Chemical convection-diffusion
- Apply numerical simulation knowledge to ensure that models can be performed with efficient and high-quality results processes.
- Create and perform post-hoc analysis for simulations.
- Apply knowledge of simulation analysis to generate reports guiding design for pump performance improvements.
- Assist in the development, revision and validation of designs.
- Generate pictures and animations for internal and external presentation and communication.

### Background

A degree in Mechanical Engineering or Mechatronics or equivalent practical numerical simulation experience and 2+ years of experience in fluid mechanics numerical simulations in professional environment are required.

Familiarity with the Fluid-Structure Interaction, Hemodynamic, and blood-trauma models would be greatly appreciated. Experience with 2D and 3D modeling systems, preferably COMSOL, CAD software such as SolidWorks and with post-processing software such as MATLAB or Tecplot would be also appreciated.

With a strong team spirit, autonomy, rigor, and a positive spirit, you are the Simulation Engineer that CorWave is looking for. You will be able to demonstrate effective leadership, flexibility and ability to work in an international team environment using the talents of various individuals to provide the best results

Your level of English is fluent in both spoken and written English.

### Offer and application

- Contract: CDI full time
- Availability: ASAP
- Remuneration: depending on experience
- Location: Clichy (Ligne L Clichy-Levallois ou Métro 13 Mairie de Clichy)
- Travel: Rarely

Please send your CV and letter of introduction to: [careers@corwave.com](mailto:careers@corwave.com), reference « Sim Eng ».