

Pixium Vision

[www.pixium-vision.com](http://www.pixium-vision.com)

74 rue du faubourg St Antoine

75012 Paris, France

*Contact:*

Grégory RAPHAËL

Mechanical Group Leader

+33 1 76 21 47 64

[graphael@pixium-vision.com](mailto:graphael@pixium-vision.com)

## **Internship proposal**

**Subject: R&D mechanical design intership**

**Duration: 6 months**

**Start: February or March 2024**

Pixium Vision is developing a prosthetic vision system called PRIMA that allows to patients suffering from degenerated photoreceptor pathologies such as AMD (DMLA) to partially regain their sight. The PRIMA system is composed of the following sub-assemblies:

- A subretinal photovoltaic implant, minimally invasive, wireless, based on advanced semiconductor and biomaterials technologies.
- An electronic control unit that manages the stimulation LASER source and the patient interface.
- Glasses for interfacing between the LASER source, the implant and the patient.

### **Global overview:**

As part of the R&D team, you will cooperate with the Mechanical Group Leader and take in charge the design and the development of mechanical components and their integration in PRIMA product and tooling. This includes CAD design, functional drawing, prototyping and R&D testing. You will collaborate with the differents departements (clinical, production and quality), gathering their feedback for product or tooling changes or improvements.

### **Task/responsibilities:**

- Design, develop and support mechanical related components and systems (products and tooling), including CAD design (SolidWorks), technical drawing, prototyping (3D printer).
- Establish protocol and report for solution and design testing or design validation.
- Gather feedbacks from stakeholders for product or tooling changes or improvements.
- Participate to mechanical parts specification writting and update (BOM, assembly work-instructions)

- Ensure follow-up suppliers on mechanical parts (supplier selection, quotation)
- Analyze and solve product issues (which may include modifications and repairs) related to mechanical design
- Provide technical support to clinical and production teams when needed.

**Qualifications & experience:**

- Engineering student with generalist background
- Knowledge or specialization in mechanical design/conception and materials.
- Knowledge of CAD software tools (Solidworks experience ideally),
- Analytical, methodical, rigorous and meticulous.
- Good communication skills, written and spoken, in French and English.
- Sensitive to startup environment, teamwork and open mindset.
- Knowledge in ISO 13485 and medical device regulation is a plus.