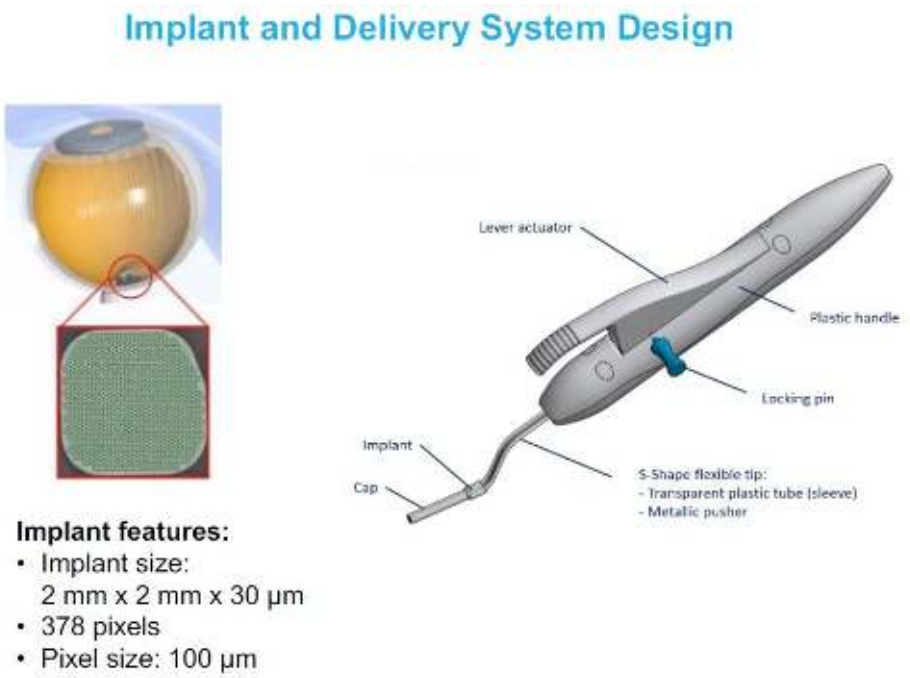
Lead Product Engineer

Leading the development, industrialization and manufacturing of the implantation kit of the Prima Bionic Vision system

Pixium Vision is developing innovative Vision Restoration Systems, which are active implantable medical devices intended to have blind people regain visual perception and greater autonomy. Pixium leverages the rapid advances in visual processing, microelectronics/nanoelectronics, optoelectronics neurobiology, and intelligent software algorithms in its miniaturized complex optoelectronic systems.

The Prima implant is to date the smallest artificial vision device and holds the world record for prosthetic visual acuity in patients. The implant is a 2-mm large, 30-µm thick microchip array of photodiodes and electrodes coated with biomaterials. This chip combines cutting edge semiconductor and MEMS manufacturing technologies as well as advances in bio-coatings for neurostimulation.

The Prima retinal implant set is composed of the miniature implant loaded in a Delivery System and packaged for surgical use. During surgery, the implant is smoothly injected under the retina by activation of the delivery system's lever.



Pixium is looking for its leader for the research, development, industrialization and production of the Prima retinal implant set.

We are looking for a passionate, scientifically skilled and hands-on technical engineer who wants to make a difference in surgeries and patient's life while developing state of the art medical devices within a fast-paced start-up environment.

Role

Drive the development, industrialization and manufacturing of the retinal implant set products of Pixium Vision

Responsibilities

- Leadership of the activities linked to the retinal implant set, including surgical tools, implant processing, packaging and sterilization.
- Development of surgical tools, implant packaging and related manufacturing processes, including design improvements with inputs from KOL/surgeons and design for manufacturing.
- Manage the verification and validation of the implant, delivery system, packaging and sterilization, and all associated manufacturing processes, including IQ/OQ/PQ. Ensure and document compliance of the retinal implant set to applicable standards and regulation.
- Ensure proper specifications, detailed manufacturing procedures and operating instructions are available, including to suppliers. Set up quality control tests and adequate process controls, ensure final delivery quality.
- Define, maintain and manage the manufacturing of the retinal implant set, whether subcontracted or internalized. Develop and manage supplier relationships.
- Manage production planning and related component and supply stocks. Trouble shoot manufacturing issues, e.g. poor yields, exceptional quality events and lead time issues.
- Support the development of the implant core technology and manufacturing, propose improvement of implant design and features as necessary.
- Support implant production as necessary, including opto-electrical characterization
- Accomplishment of all the above whilst ensuring compliance with the Quality System.

Minimum Qualifications/Experience

- Engineering degree from a good University or Engineering school in micromechanics, biomedical engineering or related fields
- 3+ years of experience, preferably in the implantable medical devices field
- Able to understand and tackle complex technical issues
- Excellent communication skills (written and verbal) in French and English.

Personal Attributes

- Analytical, methodical engineer
- Technically competent, problem solver, results-oriented
- Team player, open mindset

Position reporting to the Implant Platform Manager