

## Innovation in Intraocular Lenses and Injectors for Cataract Surgery

**HOYA Surgical Optics**, a global provider of intraocular lenses (IOLs) and equipment used in cataract surgery, is seeking opportunities related to **IOL development, preloaded intraocular lens injectors and biocompatibility of hydrophobic lens materials**. They are interested in correcting a variety of ophthalmological disorders such as cataracts, presbyopia, aphakia, post-capsular opacification, myopia, astigmatism, age related macular degeneration and higher order aberrations.



### Approaches of Interest:

- Innovations in **optical and mechanical lens design** (e.g. to split/spread light for presbyopia correction, accommodative IOLs, light adjustable IOLs, phakic IOLs).
- **Modification of lens materials** (e.g. acrylic or others) to alter refractive index, stimuli responsive change in refractive index (particularly *in vivo*), and reduction of glistening. Novel lens materials are also of interest, including electro-active materials, metamaterial, photochromic materials, non-acrylic hydrophobic materials or piezo-electric materials.
- Novel resin injector materials and injection methods for preloaded intraocular lens injectors.
- Solutions to lens epithelial cell adhesion: anti-cell or cell-resistant surfaces, surface modification for reduced cell adhesion and reduction of anterior and posterior chamber opacification.
- Lens material and surface characterisation and tackiness measurement.
- Approaches for improved power calculations and refractive predictability.
- Novel optical equipment such as visual simulators, novel biometers and optical metrology approaches.

### Out of Scope:

- Research relating to contact lenses or scleral lenses.

### Developmental Stages of Interest:

- Research from preclinical phase to registration and approval are within scope.
- Research with at least *in vitro* validation is of highest interest, although opportunities with earlier stages of validation will still be considered as long as there is proof-of-concept.

### Submission Information and Opportunity for Collaboration

Submission of one page, 200-300 word briefs are encouraged, along with any optional supplementary information e.g. relevant publications. Intellectual property status of the research should be included where relevant. In submitting to this campaign, you confirm that your submission contains only non-confidential information.

HOYA Surgical Optics is open to a range of collaboration opportunities, with the most appropriate outcome being decided on a case-by-case basis. Example outcomes include licensing assets, project/PhD funding, and research collaborations.

## Opportunities sought

-  Technologies
-  Academics and expertise
-  Centres of excellence
-  Research projects
-  Spinout companies
-  Biotech assets

## Submissions

Please submit relevant, non-confidential opportunities online via: [discover.in-part.com](https://discover.in-part.com)

Deadline: **7th August 2023 - 10:59 pm GMT**

### Have any questions?

Contact our team at [discover@in-part.co.uk](mailto:discover@in-part.co.uk)

