# Who are the IMCUSTOMEYE partners?





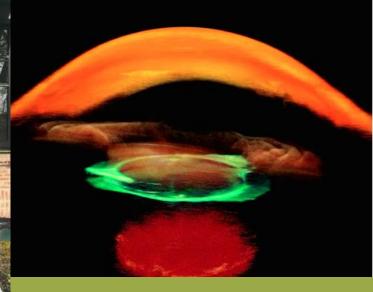
- Consejo Superior de Investigaciones Científicas (CSIC) – ES
- University of Liverpool UK
- National University of Galway IE
- Institute of Physical Chemistry, Polish Academy of Sciences (IChF PAN) – PL
- Instituto Oftalmológico Fernández Vega ES
- University College of London UK
- IROC Science to Innovation CH
- OCULUS DE
- 2Eyes Vision ES
- Optimo Medical CH
- Moorfields Eye Hospital UK

### Who are the Key Contacts in IMCUSTOMEYE?

Coordination & Project Management: CSIC

Exploitation & Commercialization: IROC Science

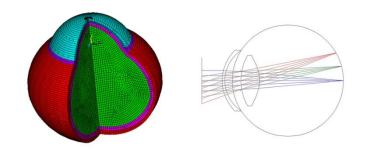
Project Website: http://www.imcustomeye.eu/



IMaging-based CUSTOMised EYE diagnostics

### IMCUSTOMEYE

New diagnostic paradigms for visionthreatening conditions



## What is IMCUSTOMEYE about?

IMCUSTOMEYE is a EU-funded project aiming at developing a novel, non-invasive, label-free, imaging-based and in-depth diagnostic tool which will mean a change in the paradigm for diagnosis and treatment of vision-threatening conditions such as keratoconus, myopia, glaucoma, cataract and presbyopia. The prevalence of these conditions ranges between 0.05% (keratoconus) to 100% (presbyopia, in the >50 yr old population), and can often lead to loss of independence and productivity.

Current standards for diagnosis and treatment rely on limited quantitative information, which limits the ability for treatment to be customised in line with individual patient needs. The novel imaging device delivers morphological, biomechanical and optical biomarkers for improved diagnosis, as well as inputs to customised numerical eye models for treatment guidance. This customised approach will lead to significant improvement in both the provision and cost of eye healthcare.

### Objectives of IMCUSTOMEYE

a) To develop an innovative imaging product for quantification of corneal biomechanical properties in vivo based on air-puff and nanosensitive optical coherence tomography.

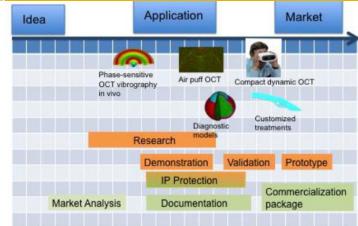
b) To develop sophisticated, patient-specific, eye numerical models that are predictive of the optical and mechanical response to both disease and treatment, and to validate the models with clinical data from patients following standard treatments. In comparison with state-of-the-art screening tools, the predictive models allow more accurate diagnosis, and therefore more selective treatment, and is integrated into the product as a software tool for diagnosis and treatment optimisation.

c) To translate the new imaging modalities, which incorporate the predictive numerical models, into a compact diagnostic tool in the clinic.

d) To validate the impact of this customised imaging-based tool on ocular disease treatment and diagnosis.



#### Innovation Potential



#### Key Data

Start date: 1<sup>st</sup> January 2018 Duration: 4 years Structure: 10 Workpackages Funding: € 6 552 841,25

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