IMaging-based CUSTOMised EYE diagnostics

Project ID: 779960

Funded under: H2020-EU.2.1.1. - INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial technologies - Information and Communication Technologies (ICT)

D8.5. Patient and general public engagement

This project has received funding from the *European Union's Horizon 2020 research and innovation programme* under grant agreement No 779960.

Document control information	
Title	Patient and general public engagement
Contributing partners	CSIC
Type	Websites, patents filing, etc.
Dissemination level	❒ **CO** Confidential, only for members of the consortium (including the Commission Services) ❒ **RE** Restricted to a group specified by the consortium (including the Commission Services) ❒ **PP** Restricted to other programme participants (including the Commission Services) ☒ **PU** Public
Status	❒ Draft ☒ WP Manager accepted ☒ Co-ordinator accepted
Due date	30/06/2022
Delivery date	31/12/2022
Action requested	❒ to be revised by Partners involved in the preparation of the deliverable ❒ to be reviewed by applicable IMCUSTOMEYE Partners ❒ for approval of the WP Manager ❒ for approval of the Project Coordinator

Revision history			
Version	**Date**	**Author**	**Comments**
<1.0>	22/12/2022	Elena Rico	
<2.0>	31/12/2022	Susana Marcos	

This project has received funding from the *European Union's Horizon 2020 research and innovation programme* under grant agreement No 779960.

Tabla de contenido

This project has received funding from the *European Union's Horizon 2020 research and innovation programme* under grant agreement No 779960.

1. Executive Summary

The present deliverable, part of the Dissemination Work Package (WP8), targets an audience ranging from scientific community to end users (patients and clinicians) and general public. Dissemination activities are coordinated by CSIC.

In the context of Research and Innovation, public engagement concerns activities that involve researchers and general public together, analyzing science and technology impacting our daily lives. Scientists can expand the reach of their work, and make it more relevant to society, raising public awareness on the development of a new technology.

Public engagement helps people strengthening their attitudes towards science and ensures that research work performed in public institutions is relevant to society. We have brought IMCUSTOMEYE closer to the public through a series of activities and dissemination tools enhancing the impact of the project and encouraging citizens to consider research results in a more concrete way, feeling and experiencing them directly. Since our goal was to engage the public on IMCUSTOMEYE results and impact at the right time we have organized these events in the final stage of the project.

2. Science Week Conference

National science week initiatives seek to forge closer ties between the world of science and the lives of European citizens. The Science and Technology Week organized by CSIC since 2001 is the most important scientific outreach initiative in Spain. It is organized at a national basis every year during two weeks with the objective of bringing science closer to the public of all ages. Dissemination activities are organized in museums, universities, research centers, technology parks, etc.

The Spanish National Research Council (CSIC) is the largest public institution in Spain dedicated to research and one of the most renowned of the European Research Area (ERA). CSIC is the main delivery agent of the Spanish System for Science, Technology and Innovation.

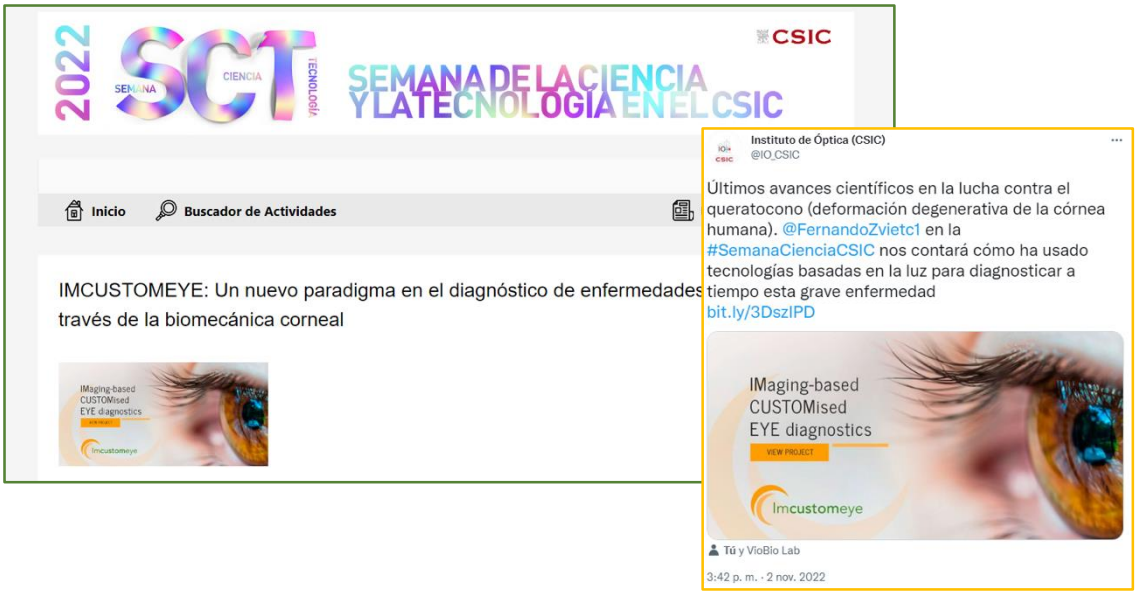
IMCUSTOMEYE organized the lecture “IMCUSTOMEYE: A new paradigm in the diagnosis of ocular diseases through corneal biomechanics” as one of the main activities of the National Science Week at the Institute of Optics (CSIC), on November 10th 2022. Speakers were Judith Birkenfeld (PhD) and Fernando Zvietcovich (PhD).

Eye diseases such as keratoconus and other ocular conditions such as myopia affect millions of people in the world, but current tools for the diagnosis and monitoring of these conditions are based on topographic biomarkers that only take into account the shape of the ocular surface. In this talk, the main conclusions of IMCUSTOMEYE were shared, showing that the project has achieved the development of optical imaging and modeling tools capable of measuring corneal biomechanics that allow: (1) early

This project has received funding from the *European Union’s Horizon 2020 research and innovation programme* under grant agreement No 779960.

diagnosis of keratoconus, (2) improvement monitoring and optimization of different corneal related treatments, and (3) assistance, via numerical models, in the planning and decision-making of physicians. The conference showed how IMCUSTOMEYE represents a new paradigm in the diagnosis, monitoring and treatment of eye diseases and refractive errors contributing to personalized treatment in the area of ophthalmology.

The talk was attended at full capacity and the event was promoted through CSIC and IMCUSTOMEYE website and social media. CSIC website is the most visited of the Spanish research institutions and the 8th most visited in the world ranking.



This project has received funding from the *European Union's Horizon 2020 research and innovation programme* under grant agreement No 779960.

3. Open Doors Day and Lab Visit

We also held an open doors day on November 17th 2022 to present our research to the general public, giving them access to the spaces where scientific knowledge is generated and bringing them into direct contact with laboratories and researchers.

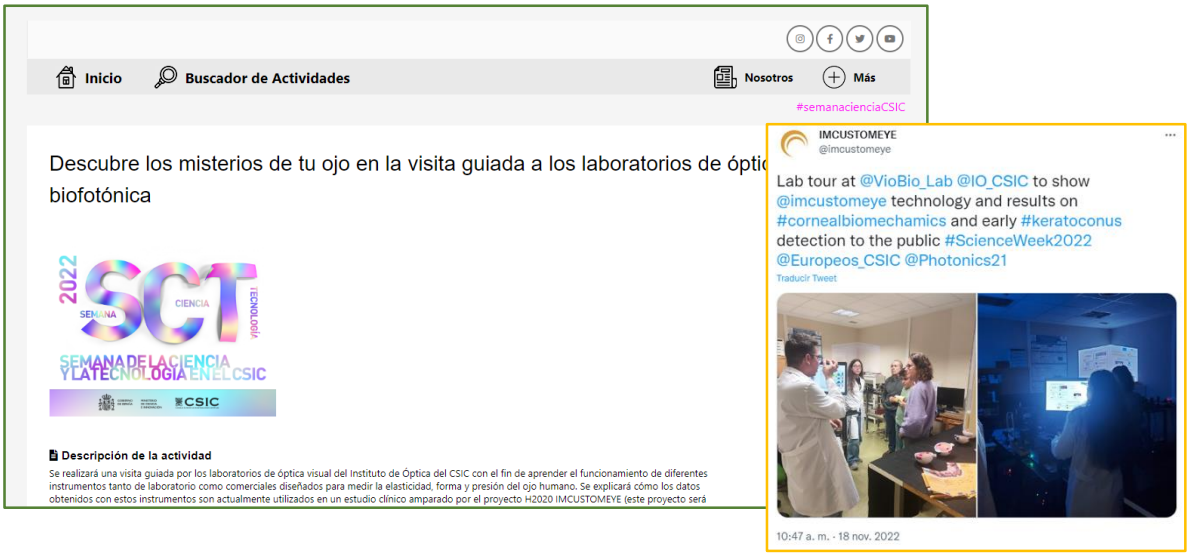
During this day IMCUSTOMEYE researchers organized two visits to our laboratories at the Institute of Optics (CSIC, Spain). The attendees included people of a wide range of ages, including college students and children.

During the visit the researchers explained es how IMCUSTOMEYE's technology provides advanced biomechanical corneal mapping and parameters, allowing the clinicians for the first time to evaluate quantitatively the biomechanical state of their patients' eyes. The attendees got acquainted with the IMCUSTOMEYE technologies and measurements on patients.

Besides, these outreach activities have allowed us to disseminate the results in patient populations, increasing the awareness about the clinical scope of the new IMCUSTOMEYE technology and promoting recruitment for future studies.

This project has received funding from the *European Union's Horizon 2020 research and innovation programme* under grant agreement No 779960.

This outreach activity was also promoted through CSIC and IMCUSTOMEYE website and social media.



The lab tours were designed to show also different dissemination tools developed throughout the project:

3.1. Videos

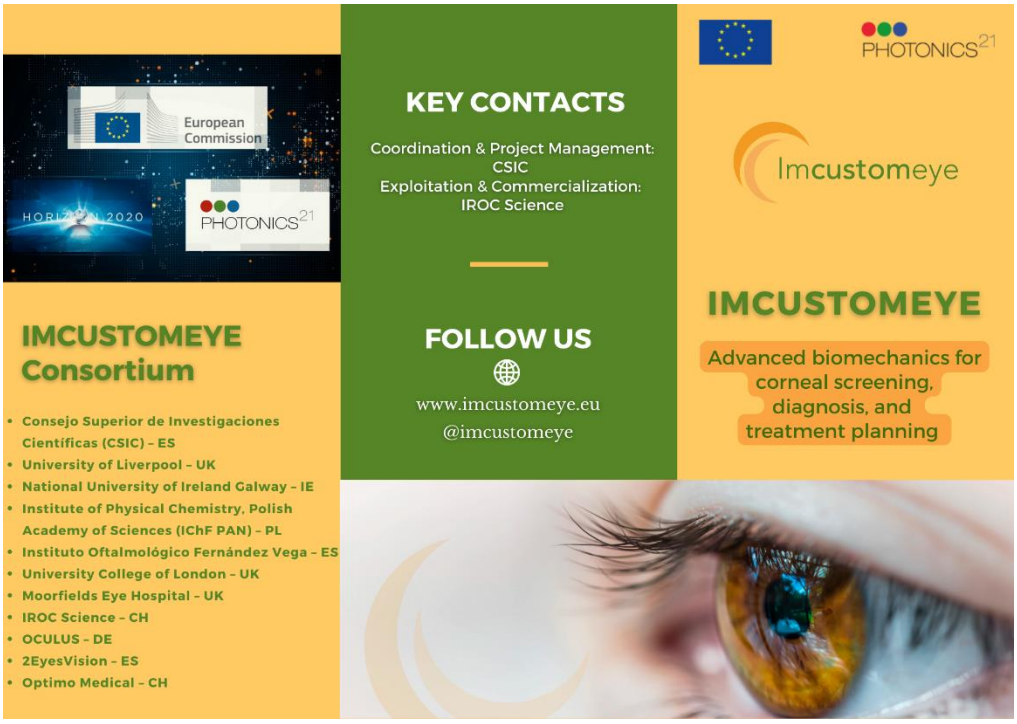
Prior experience by the partners revealed that short videos are an extremely powerful tool to communicate projects. These serve to illustrate concepts and potential impact of the technology and capitalize on the imaging nature of the results and data analysis.

We have launched three IMCUSTOMEYE videos. The first video introduces corneal biomechanics to the general public and showcase the consortium and objectives of the project. The second video has a technological approach and focuses on the development of the different hardware and software. In the third one, launched in 2022, we show the path from the lab to the clinic focusing on how IMCUSTOMEYE improves the lives of patients with safer and more reliable disease detection and individualized treatment. During the visit this third video was shown to the attendees.

This project has received funding from the *European Union's Horizon 2020 research and innovation programme* under grant agreement No 779960.

3.2. Flyers

Flyers introducing European Commission H2020 program and IMCUSTOMEYE objectives, results and technology were designed, printed and distributed.



This project has received funding from the *European Union's Horizon 2020 research and innovation programme* under grant agreement No 779960.