



ESCRS Moving MicroRec Devices

ABOUT CUSTOM SURGICAL

Empowering surgeons with smart recording technology

About Custom Surgical

Custom Surgical is a medical technology company specializing in surgical video recording and digital education solutions for ophthalmology.

We design, manufacture, and support MicroREC—a compact, purpose-built device that captures high-quality surgical video directly from the microscope.

Our mission is to make surgical recording accessible, organized, and impactful for training and mentoring.



Based in Munich, Germany



Specialized in Ophthalmology



+3000 surgeons using our devices worldwide



+80 countries



CE-marked and FDA approved devices



GDPR and HIPPA compliant

SUCCESS CASES

Trusted by leading institutions and doctors worldwide

“

“I love the design and how the software works. It helps me manage my patient database and pictures. It allows me to securely share them with patients and lets my residents share pictures with me whenever they need my opinion on an issue.”

Dr. George Hayek

Ophthalmologist and Clinic owner

Luxemburg



SUCCESS CASES

Trusted by leading institutions and doctors worldwide

“

“We are streaming all the live surgeries with MicroREC and smartphones. Look at this amazing quality!”

Dr. Durval Carvalho Jr.

Former President of BRASCRS

Brazil



SUCCESS CASES

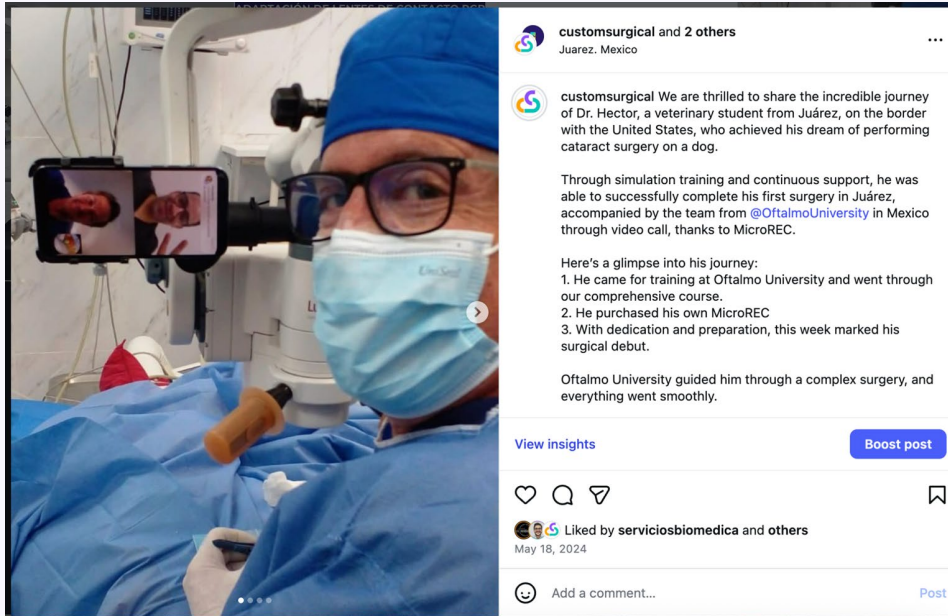
Trusted by leading institutions and doctors worldwide

“

"The concept is pretty clear ! What @customsurgical did with microrec is disruptive technology! I'd you mix that with an authentic community, passion and willing to truly share.m knowledge and skills.. this kinda of disruptive magic can happen!"

Dr. Ivo Ferreira

Ophthalmologist and Founder of Oftalmo University
Uruguay



ESCRS Moving Micro Rec Devices

A strategic partnership to advance surgical education in ophthalmology

ESCRS (European Society of Cataract & Refractive Surgeons) needs a reliable way to help ophthalmologists record their surgeries on a secure, organized platform —where mentors can review, comment on, and discuss surgical videos with trainees.

What ESCRS will deliver:

- MicroREC Kit hardware deployed to several training centers
- MicroREC Connect platform for video management & mentoring
- Full logistics, online training, and ongoing support
- Quarterly cohort rotation —~30 users/quarter, ~120 users/year
- 3-year program

THE PROBLEM

What ophthalmologists and training centers face today



No Standard Recording

Surgeries are not consistently recorded, losing valuable learning opportunities and case documentation.



Disorganized Video Files

When recordings exist, they're scattered across personal devices with no central library or tagging system.



Data Security Gaps

Patient data in surgical videos requires GDPR compliant handling that most ad-hoc solutions don't provide.



Limited Remote Mentorship

Mentors can't easily review cases remotely—feedback is delayed, unstructured, and hard to track.

THE SOLUTION

MicroREC Kit + MicroREC Connect: a complete product & service package



MicroREC Kit

HARDWARE

Each Kit has 1 MicroREC + 2 Beam Splitters

- Compact optical system
- Direct microscope integration
- Highest definition
- Easy to install
- Compatible with microscopes and slit lamps



MicroREC Connect

SOFTWARE PLATFORM

- Automatically upload on the cloud
- Secure cloud video storage
- Organize, tag & search recordings
- Create sessions with descriptions
- Easy to share
- Multi-role access control
- GDPR-compliant infrastructure

MICROREC KIT

What's included & what sets it apart

What's Included



MicroREC



Beam Splitter type Z



Beam Splitter type L

Key Differentials



Purpose-built for most of the microscopes and slit lamps in the market, and all smartphones.



Plug & play setup : start recording in less than 5 minutes



Full HD video quality optimized for surgical detail



No IT infrastructure needed



CE-marked medical device and FDA approved

Each center would need one smartphone to attach to the MicroREC. It could either be a phone provided by each doctor or one dedicated smartphone for each attached MicroREC unit.

MICROREC CONNECT

A secure platform for video management & surgical mentoring



Automatic Upload to the cloud

No time spend sending videos to mentors, they have access a few minutes after the surgery is over.



One organized database

Full surgical recordings organized by procedure, date, and surgeon.



GDPR Compliant

End-to-end encryption and patient data protection.



Multi - Role Access

Separate views for surgeons, mentors, and admins.



Multi - Center Dashboard

Manage multiple training centers from one interface separated by tags



Smart Search & Tags

Find any video by procedure type, tag, or surgeon name.

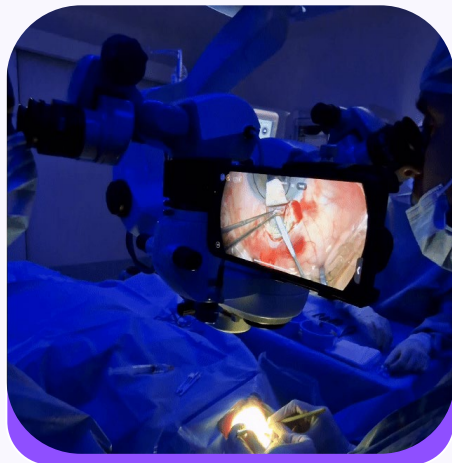


Case Categorization

Organize by difficulty level, procedure type, and outcomes.

MENTORING STRUCTURE

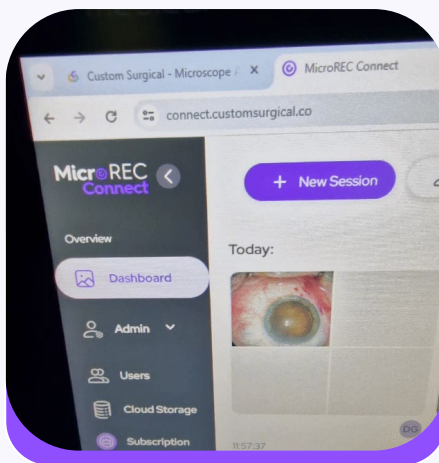
How the mentoring workflow operates



01

**Surgeon Records
with MicroREC App**

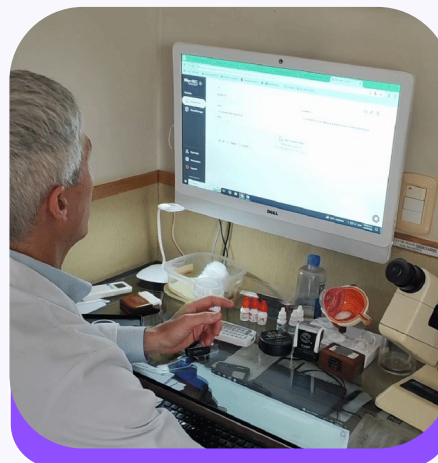
Records surgical cases easily using MicroREC, capturing high-quality images and videos directly from the microscope.



02

**Upload automatically
to Connect**

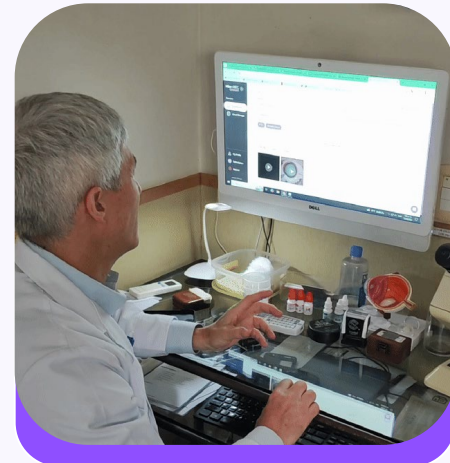
Content syncs securely to MicroREC Connect, organizing cases in the cloud for structured review.



03

Mentor Reviews

Mentor accesses the uploaded cases, analyzes techniques, decision-making, and outcomes in detail.



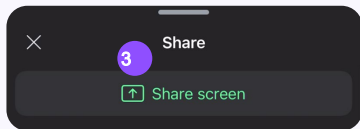
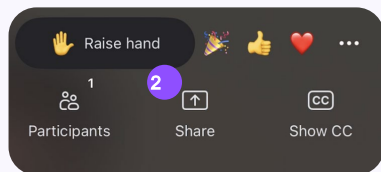
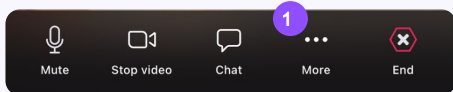
04

Feedback & Discussion

Personalized feedback is shared, enabling discussion, learning points, and continuous improvement.

LIVE SURGERIES: MicroREC App + Zoom

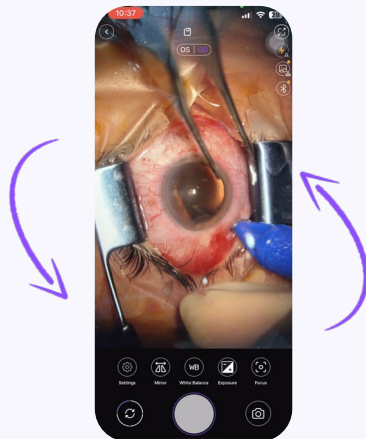
How the mentoring workflow operates



01

Open Zoom and share screen

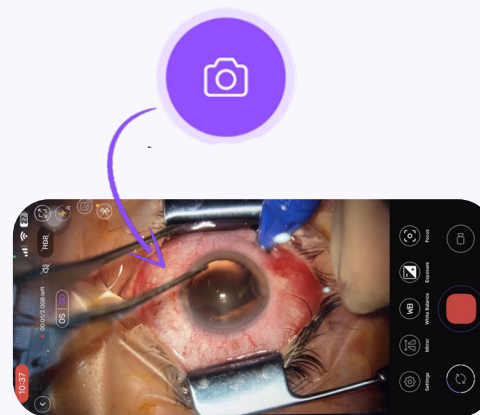
Ophthalmologist records surgery using MicroREC Kit during the procedure.



02

Open MicroREC App and rotate image

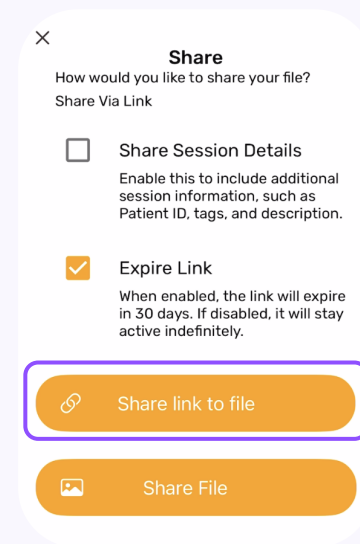
Video is securely uploaded and tagged with procedure details.



03

Start recording

Assigned ESCRS mentor watches the recording at their own pace.



04

Share the procedure through the online link

Mentor leaves timestamped comments. Surgeon reviews and can reply.

EXTRA SERVICES

End-to-end support



Logistics

Full shipping coordination to all centers. We handle customs, tracking, and delivery confirmation.



Quality Assurance

Quality control of the hardware before every new center receives the hardware.

Software organization and support with our team during the project.



Training

Remote onboarding sessions for surgeons and center staff.
Video tutorials & documentation.



Ongoing Support

Dedicated support channel for troubleshooting. Firmware updates and platform improvements included.

PROJECT STRUCTURE

Quarterly center rotations over a 3-year program



12

Training Centers



~30

Users / Quarter



~120

Users / Year



3

Year Program

Quarterly Rotation Model

Each quarter, a new cohort of ~30 ophthalmologists across 4 centers receives MicroREC Kit hardware and MicroREC Connect access. Surgeons record their procedures, organize their video libraries, and receive structured feedback from assigned ESCRS mentors. At the end of each quarter, the program rotates to the next group, building a growing community of trained surgeons over 3 years.

At the end of the 3-year program, ESCRS will have built a network of 360+ surgeons with documented, mentored surgical experience.