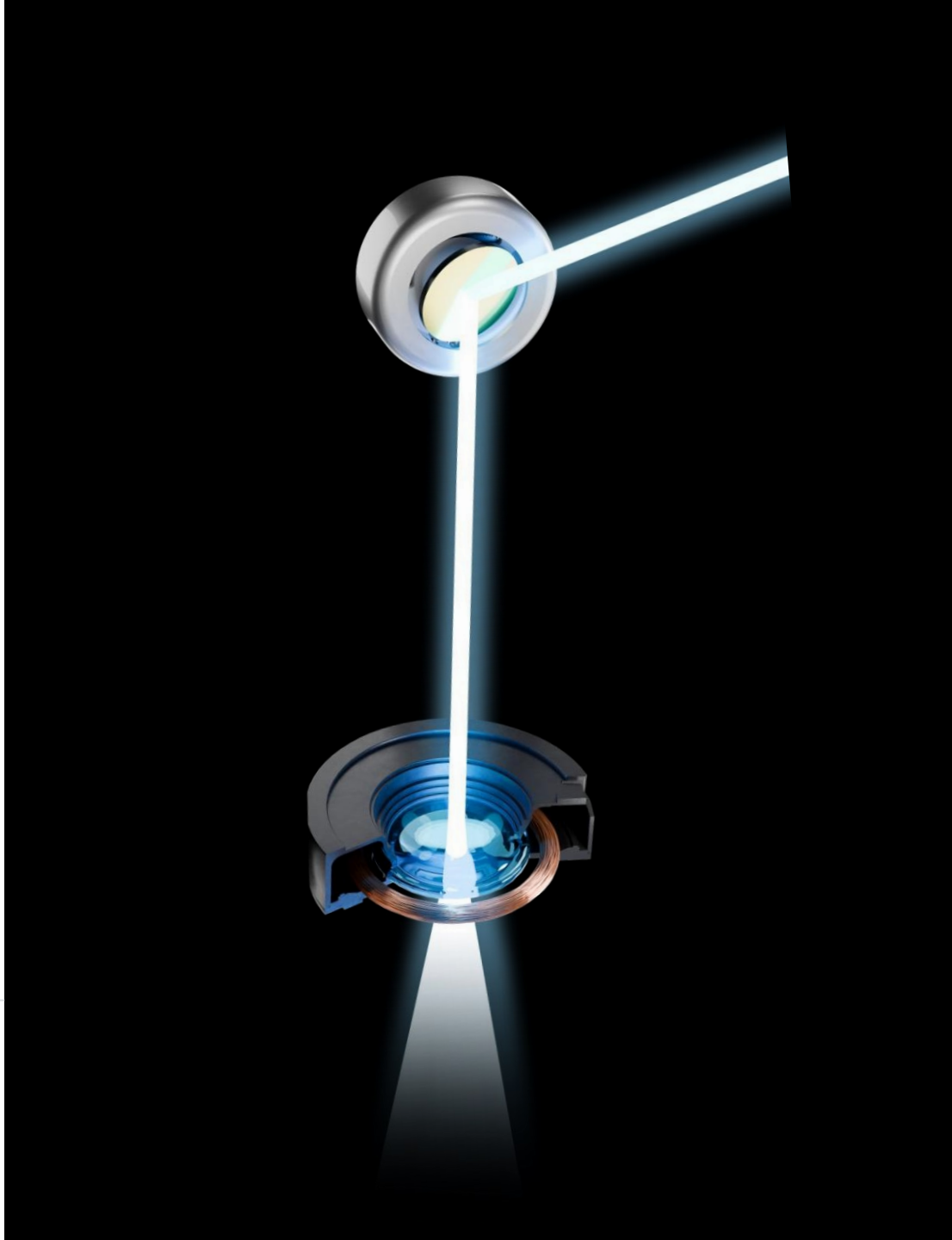
optotune

How Tunable Optics Impacts and Benefits Our Lives

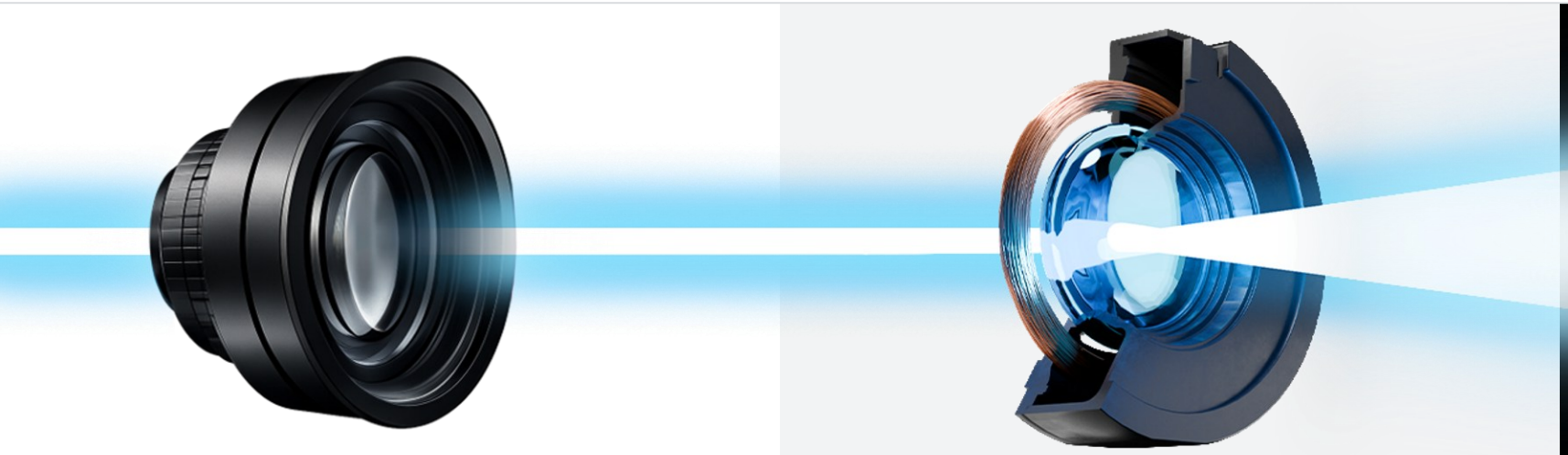


20 Years of Swissphotonics

21 October 2026 · Dietikon · Dr. David Leuenberger, Head of Product Management

Optics used to be a fixed thing

THE CATEGORY WE HELPED CREATE



Fixed optics

Ground and polished for one condition. Changing focus or alignment means motors, moving parts, wear and time.

Tunable optics

A liquid-filled membrane reshaped by a current. Focus or direction changes in milliseconds.

Controllable systems

Optical performance becomes a function of the system, not a property of the glass.

Five product families, one job: control light

MISSION-CRITICAL COMPONENTS FOR OEMS

FOCUS



Focus tunable lenses

Change focus quickly and precisely.

STABILIZE



Tunable prisms

Correct tilt. Stabilize images.

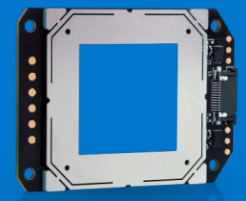
STEER



Steering mirrors

Direct a beam in a compact package.

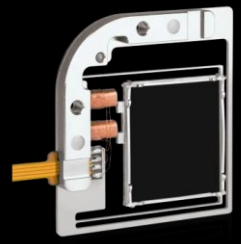
SHIFT



Beam shifting devices

Enable higher pixel resolution.

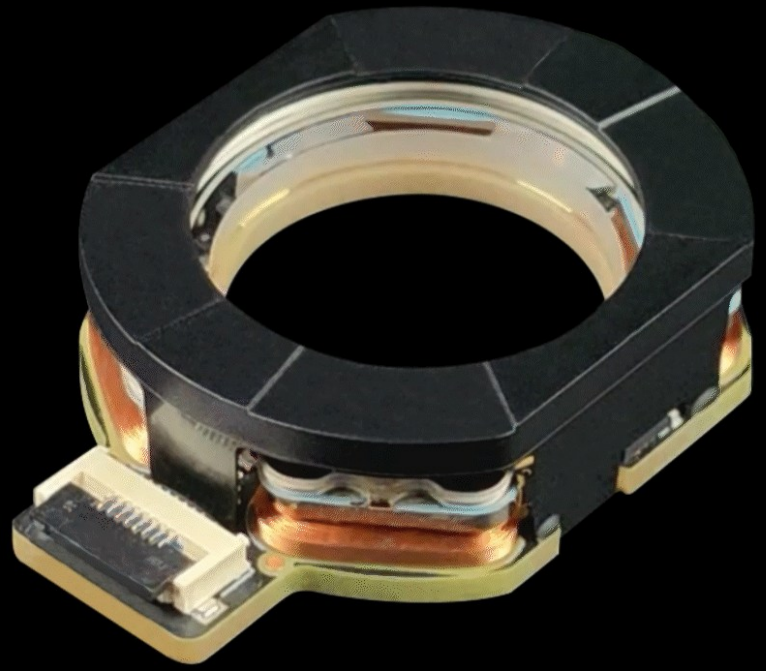
DESPECKLE



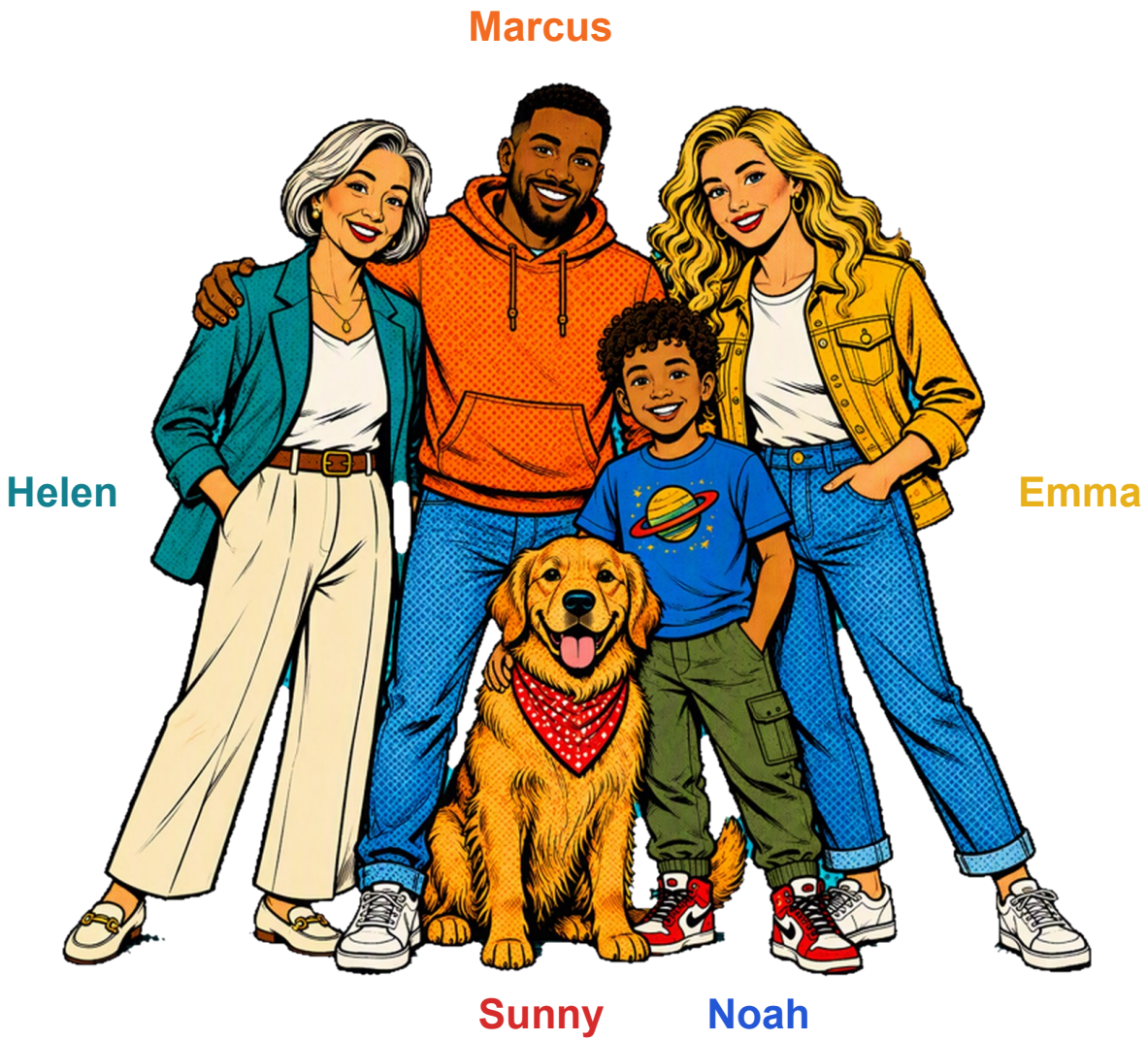
Laser speckle reducers

Remove speckle from laser light.

How many times will tunable optics touch your life today?



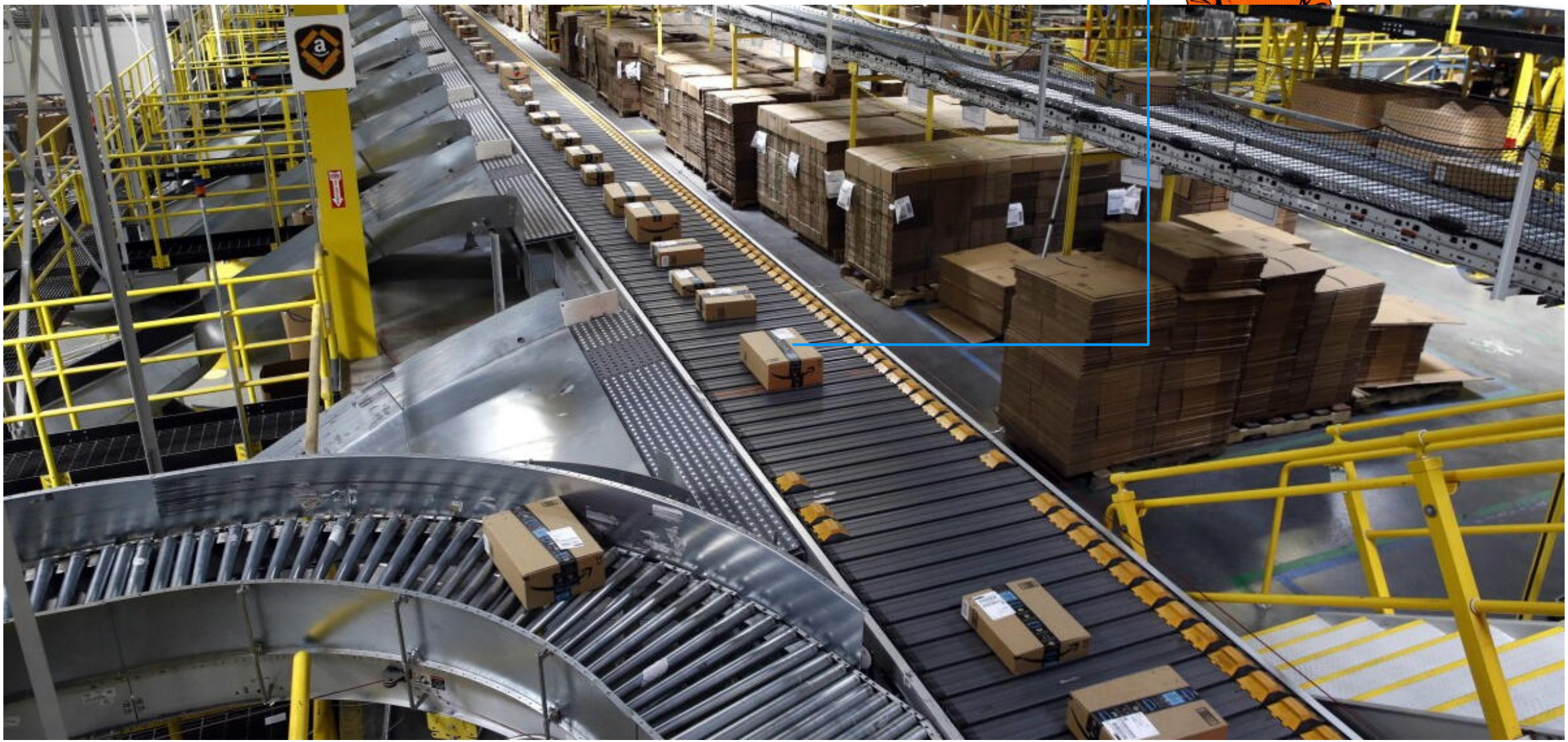
Let’s look at one day in the lives of the Smith family



04:00 - The family is still deep asleep

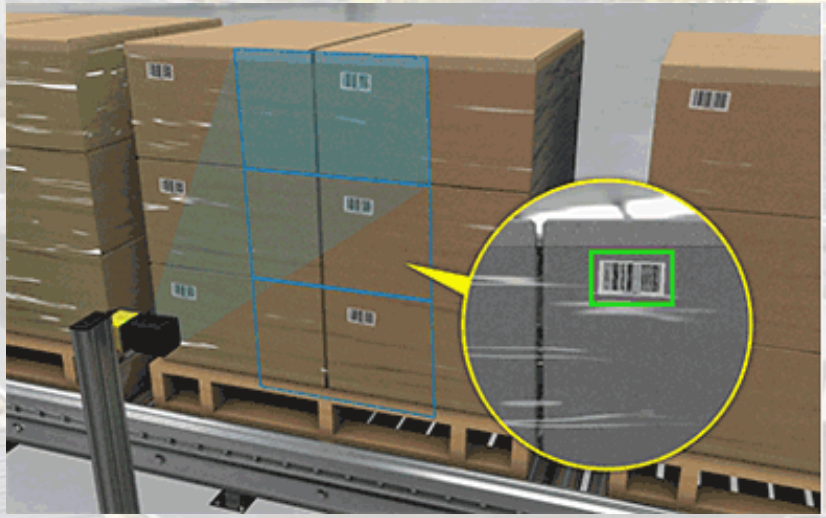


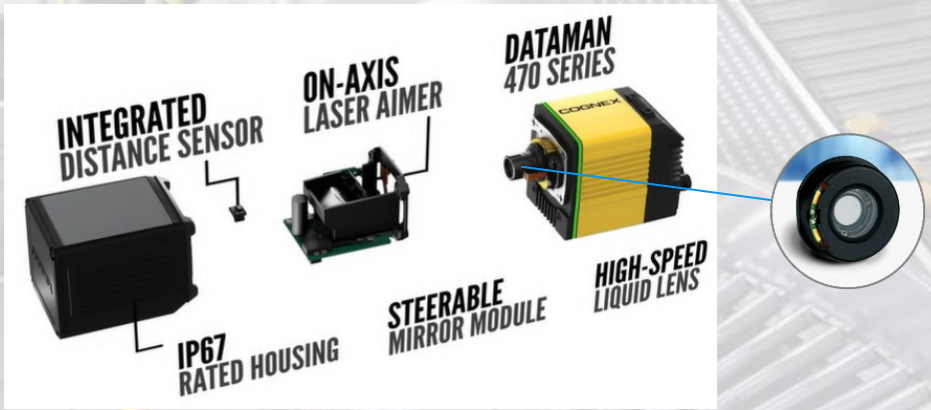
04:10 - Marcus’s order is already moving



Optotune's focus tunable lenses and 2D mirrors enable fast and reliable barcode reading



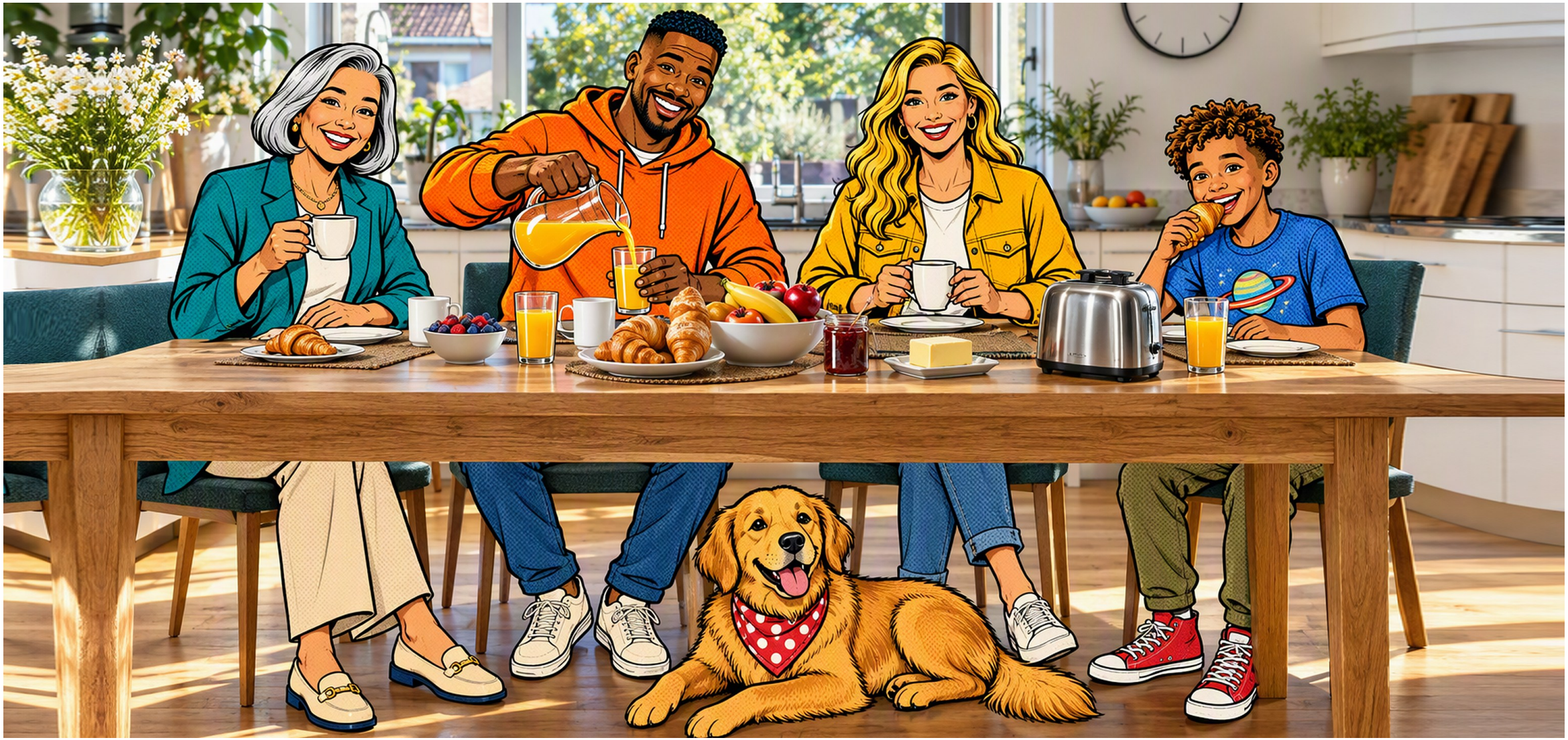




One compact reader now covers a full pallet

- 10X larger field of view
- One code every 20 ms
- Focus from 10 cm to infinity

07:30 - The family enjoys breakfast

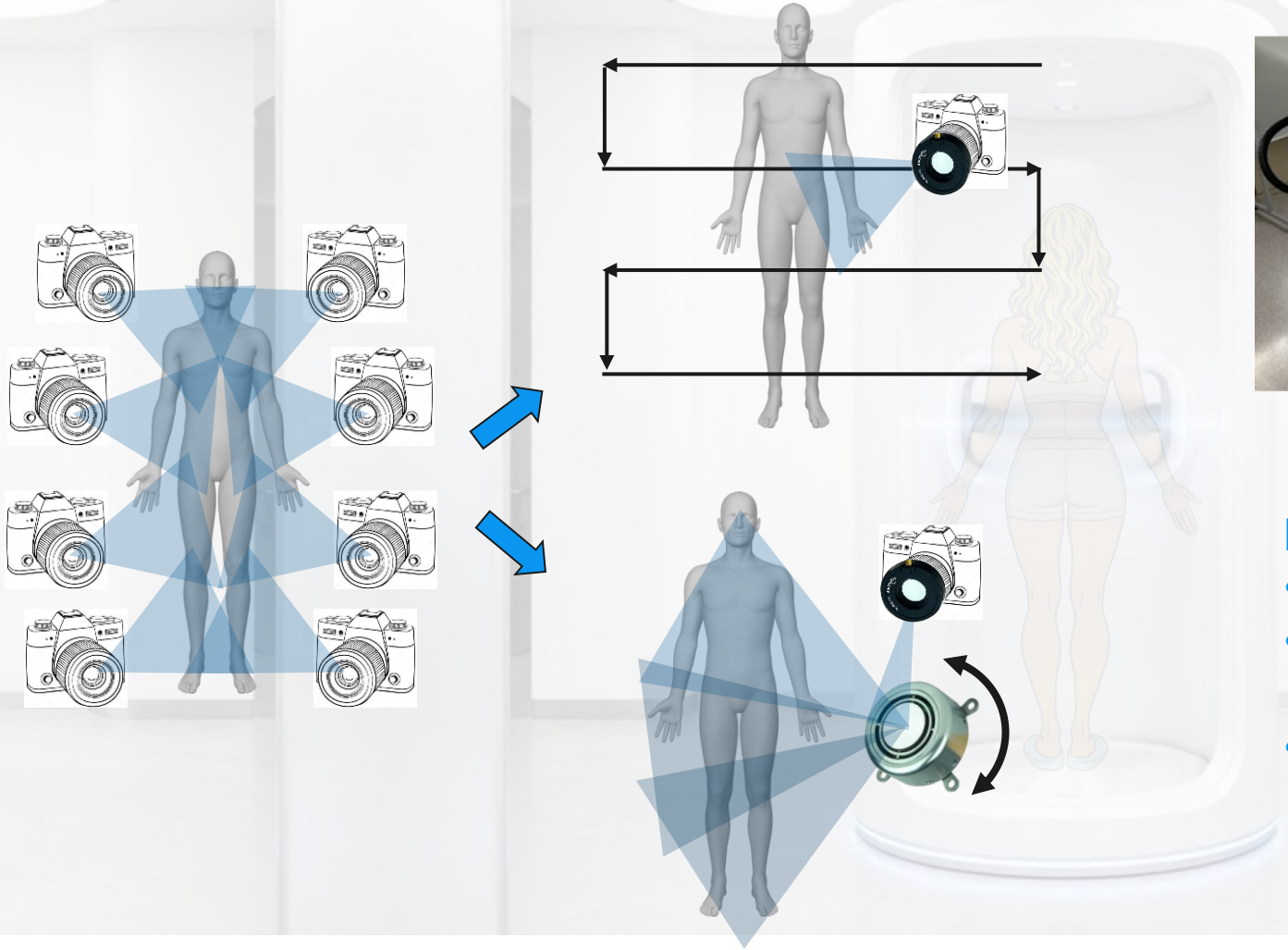


10:00 – Emma’s appointment for a full-body scan

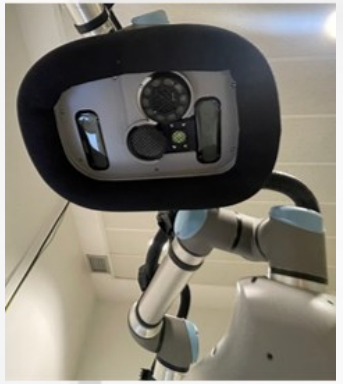


Lens + 2D mirror let one compact optical head cover the full body at high resolution

Screening fast and affordable enough to offer as a consumer service



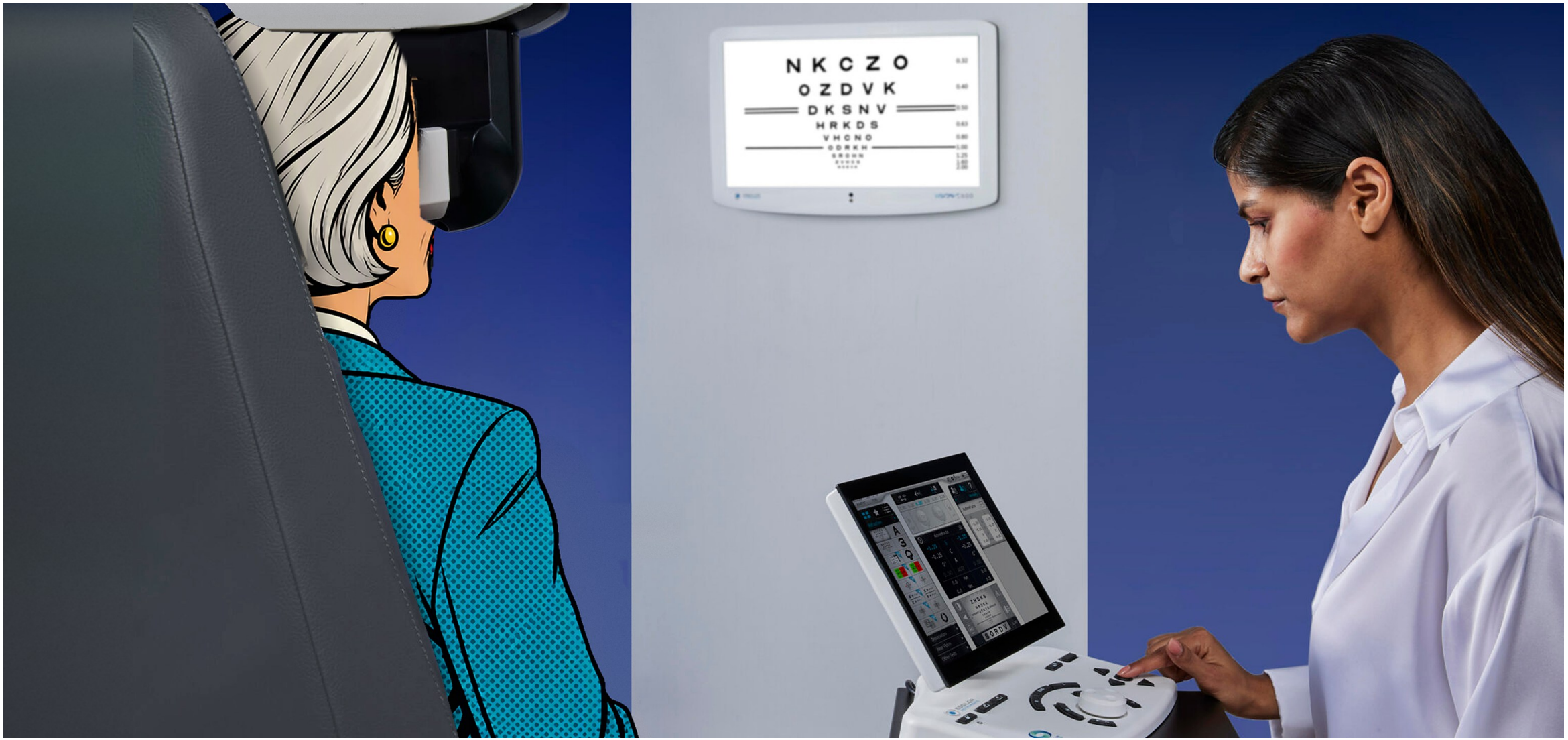




Benefits

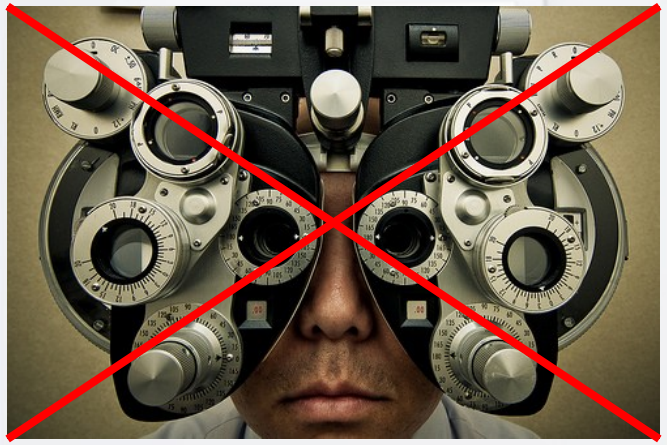
- Significant system cost reduction
- Full-body ultra-high resolution (10-15µm resolution with ELM-75) iToBOS
- System size reduction

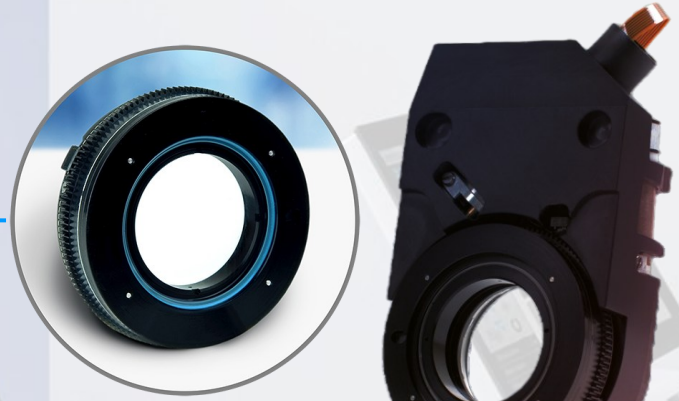
11:00 – Helen gets a new prescription from the optometrist



Optotune’s lenses enable more accurate refraction







Benefits:

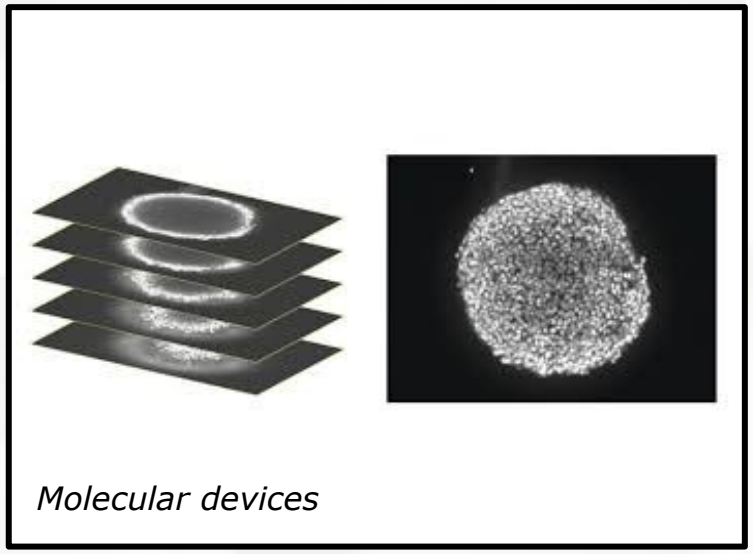
- Silent and continuous spherical and cylindrical power changes
- From traditional 0.25 D down to 0.01 D resolution in both sphere and cylinder.

14:00 – Noah brings Sunny to the vet for a pathology scan





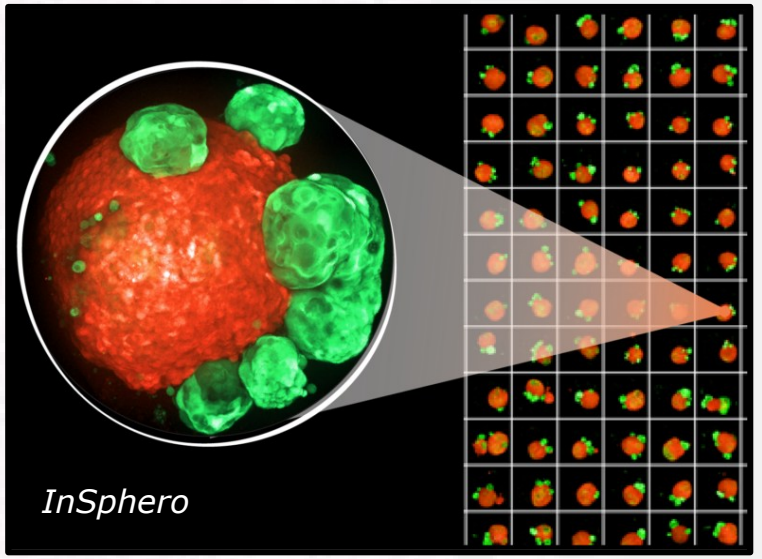
Focus tunable lenses enable rapid focus control across the complete pathology slide



Molecular devices

Replacing motorized z-stage with focus tunable lenses

- ***Speed:*** *more slices for accurate z-stacking*
- ***No mechanical vibration:*** *sharper images*
- ***Less components:*** *compact equipment*



InSphero

Replacing x-y moving stage by mirror system

- ***Less components:*** *compact equipment*

17:00 - Marcus plays a round of golf



Optotune’s tunable prism for OIS in a golf rangefinder

Your handicap, unfortunately, remains your own.



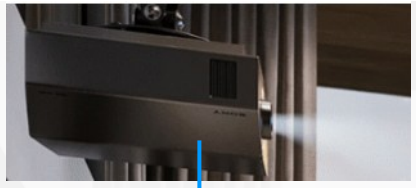
TP-17-25 tunable prism

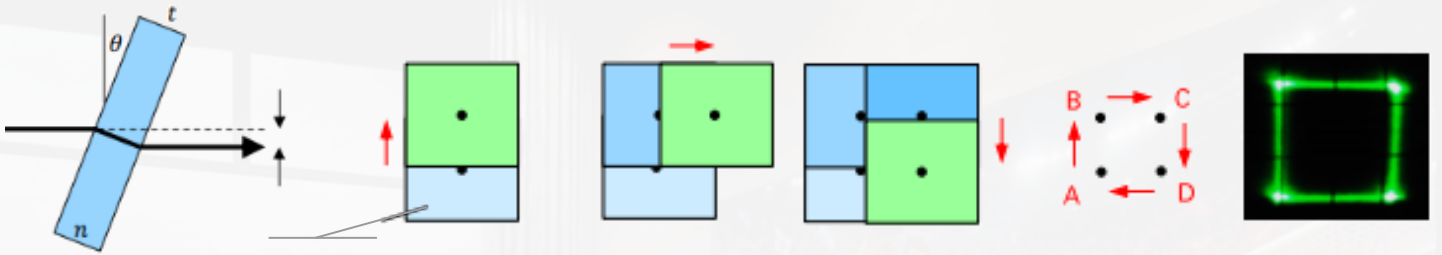
Benefit:
The prism tilts the optical path to cancel for hand shake, keeping the flag in the crosshair.

20:00 - The family watches a football match in crisp 4K

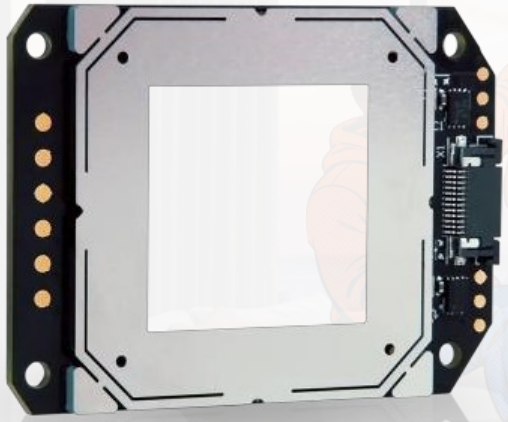


Optotune’s pixel shifters enable crisp 4K resolution





Pixel





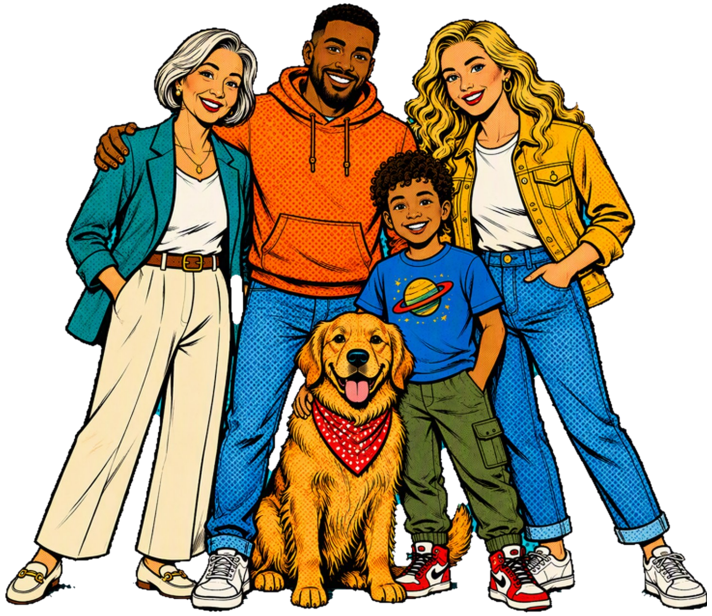
HD



4K Ultra HD

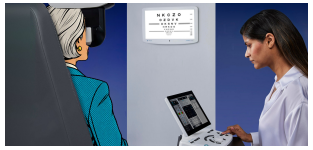
Tunable optics improve more moments than most people ever see.

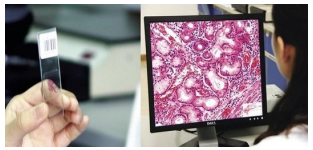
That is the impact of Optotune.















04:10 **10:00** **11:00** **14:00** **17:00** **20:00**

You might still never see our products.

You will keep using them.

Dr. David Leuenberger

Head of Product Management



David Leuenberger, MBA

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