



# Deep Light Vision

A new imaging modality for physiological diagnostics at depth

# Today's discussion

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PLAN & ASK

# The opportunity & why now

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# A STRUCTURAL GAP IN MODERN DIAGNOSTICS

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## COST PRESSURES

Care is becoming more personalized and time-critical



## LACKING INFORMATION

Physiological tissue state at depth is only available invasively



## WASTE

Delayed diagnosis, invasive care, and poor patient experience

**Key takeaway:** A new optical modality makes non-invasive imaging to determine physiological tissue state at depth viable for the first time.

# WHERE CURRENT IMAGING FAILS

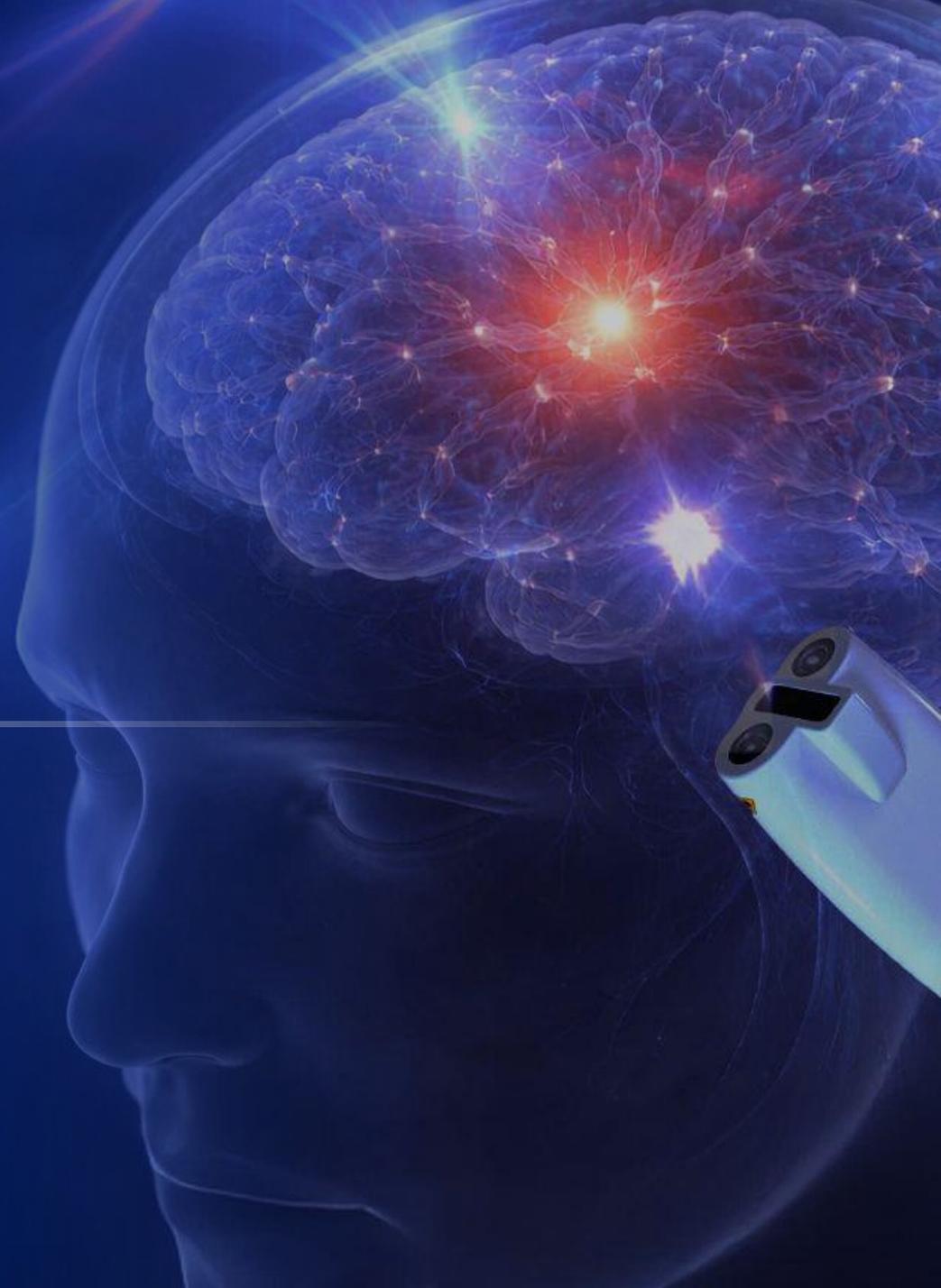
Hospitals, clinicians and patients want physiological information at depth and non-invasive / non-ionizing techniques

Modality	Depth	Physiological information	Non-invasive / non-ionizing / bedside
Ultrasound	✓	✗	✓
MRI	✓	✓	✗
CT	✓	✗	✗
NIRS/PAT	✗	✓	✓

**No existing modality combines all three.**

# A constraint-breaking solution

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# ULTRASOUND OPTICAL TOMOGRAPHY (UOT)

A fundamentally different imaging modality



**Leverages light** to access physiological tissue information



**Ultrasound** tags light inside tissue



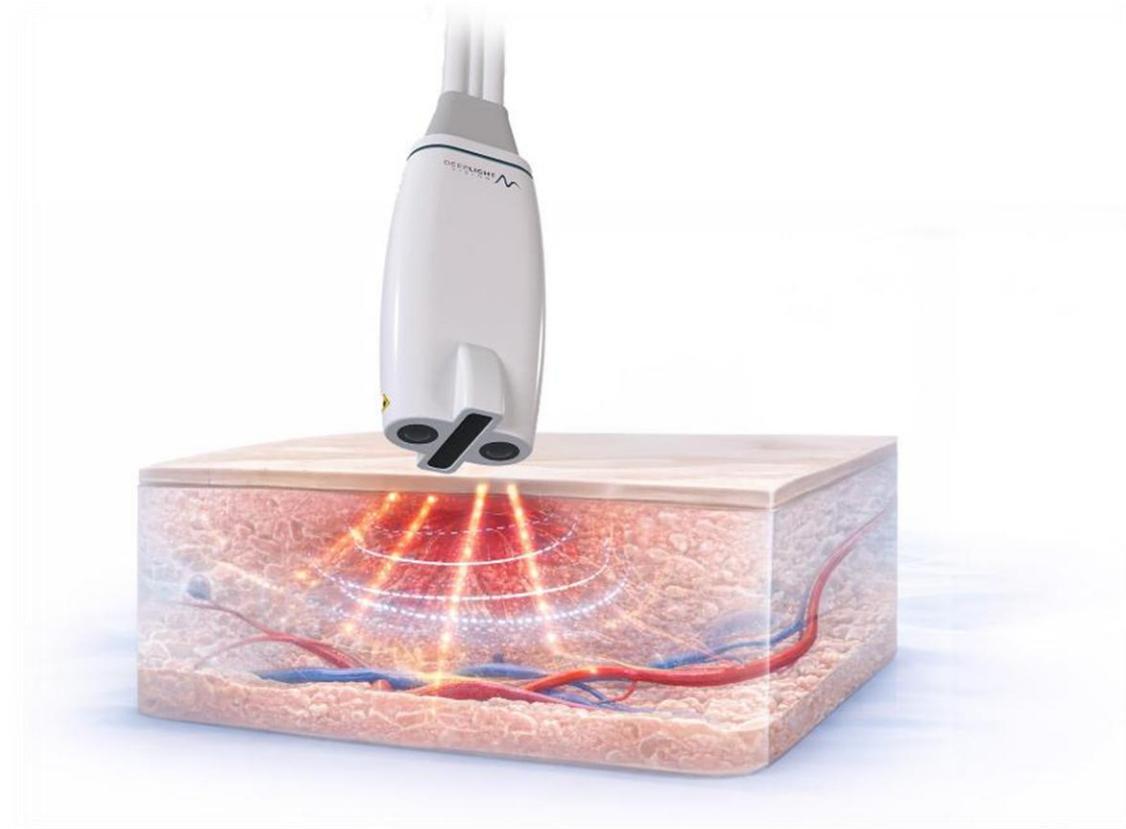
**Tagged optical signals** are recovered at depth



**No ionizing radiation** or contrast agents



**Ultrasound-like** workflow at the bedside



# WHY UOT BREAKS THE CONSTRAINT

Versus other imaging approaches

## MRI/CT



- Physiological tissue state of full body
- Contrast agents or ionizing radiation
- Centralized, expensive workflows

→ Not suitable for frequent, bedside decision-making

## ULTRASOUND



- Real-time, bedside
- Structural information of internal organs

→ Lacks physiological tissue information

## NIRS / optical methods



- Shallow physiological tissue state
- Non-invasive

→ Limited to very shallow tissue depths

## UOT



- Physiological tissue state of internal organs
- No contrast agents, nor ionizing radiation
- Ultrasound-like, real-time bedside workflow

Rooted in decades of quantum physics research

# First application: Breast cancer

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# WHY BREAST CANCER IS THE FIRST CLINICAL APPLICATION

Filling the gap in modern diagnostics

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## CLINICALLY UNMET NEED

- Dense breast tissue reduces the sensitivity of current imaging
- High recall rates and false positives in diagnostics
- Two out of three biopsies are unnecessary (US specific)



## WHY UOT

- Breast tissue is optically accessible at relevant depth
- Physiological tissue state is critical for malignancy assessment
- Seamless integration into existing diagnostic pathways



## MARKET CONTEXT

- Initial focus on improving recall specificity
- Estimated \$1B global annual UOT breast recall imaging market
- ~\$2B/year spent on unnecessary biopsies (US only)

# PROOF & MOMENTUM

From theory to early clinical data



## TECHNICAL VALIDATION

- Demonstrated image quality at depth in early studies.
- ~200× improvement in image acquisition speed



## CLINICAL VALIDATION

- Clinical study confirms safety
- Full breast penetration demonstrated



## FORWARD MOMENTUM

- Clear roadmap to clinical evidence of improved diagnostic outcomes
- Clear pathway to ~300× signal improvement within 18 months

# Platform Upside & Leadership

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# PLATFORM UPSIDE

One modality – multiple high-value applications



## FOCUSED EXECUTION

- **Breast cancer** - first clinical proof point
- **Neonatal hypoxia** - next target domain



## ADDITIONAL HIGH-POTENTIAL APPLICATIONS

- Stroke & acute brain injury
- Sports medicine & muscle oxygenation
- Cardiovascular disease
- Other diagnostics of internal organs



# PROVEN LEADERS



## SCIENTIFIC LEADERSHIP

World-leading expertise in UOT and quantum optics



### Prof. Stefan Kröll, PhD

Pioneer and world-leading UOT expert.



### Alexander Bengtsson, PhD

International expert in advanced optical imaging research



## CLINICAL LEADERSHIP

Leading clinical experts in breast imaging and neonatology



### Prof. Sophia Zackrisson, MD, PhD

Leading European Breast Cancer research doctor



### Dr. Emilie Krite Svanberg, MD, PhD

Specialist physician in intensive care, pediatric anesthesiology



## MEDTECH STARTUPS

Operational medtech leaders



### Anders Sjögren, CEO, PhD

Experienced venture builder executive, including medtech



### Johannes Swartling, CTO, PhD

Deep technical leadership in medtech and optical systems

## LEADERSHIP AT SCALE



### Alan Harris, PhD

Sr VP R&D at Ferring, 30+ years of medical executive leadership



### Tomas Kramar, MSc

Former CEO, Siemens Healthineers Sweden



### Per Kröll, MSc

Built product org with >\$1B in annual profit, extensive M&A



### Masoud Khayyami, Chairman, PhD

Serial medtech leader and entrepreneur

# Plan & ask

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# PLAN & ASK

From belief to proof

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## This round

- Raise ~10 MSEK
- Expand runway from 12 to 24 months



## What this enables

- Accelerate clinical validation and product development
- Establish clinical feasibility
- Release of research product



## Forward path

- Clinical product readiness
- Position company for multiple exit options

# Deep Light Vision

A new imaging modality for internal organ diagnostics

## WHAT WE HAVE

- A constraint-breaking advance in medical imaging
- Early clinical validation
- A clear path to better diagnostics

## WHAT WE'RE BUILDING

- A platform with multiple high-value clinical applications

## WHAT WE'RE LOOKING FOR

- Partners to accelerate the journey from proof to product



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