## THE PROBLEM ADDRESSED

Medical diagnostic techniques often rely on high resolution microscopy image analysis. However, current slide scanners are time-consuming, costly, require high mechanical precision and deliver images with varying image quality across its field of view. As a result, these technologies are not well suited for clinical use.

**FastGlide** is a non-mechanical, time-efficient, cost-effective and label-free technique that provides access to enriched, high resolution, controlled high-quality images—making microbiological analysis accessible to a much broader market. Furthermore, through virtualization, samples can be saved and stored for subsequent analysis.

## TECHNOLOGY

The developed technology is based on Fourier Ptychographic Microscopy (FPM) combined with specific reconstruction algorithms to correct local optical aberrations such as defocus aberrations.

In FPM, the sample is imaged under different illumination conditions, and an inverse problem-solving algorithm is applied to reconstruct a super-resolved image.

## COMPETITIVE ADVANTAGES

**High throughput WSI scanner**
- Extended field of view (25x-100x)
- Extended depth of field (10x)

**Quantitative imaging**
- Enriched RGB images with access to intensity and phase modalities
- High resolution (150nm)
- Compensation of optical aberrations
- Label-free imaging

**Others**
- Compact and cost effective solution with limited mechanics
- Complete sample virtualization
- Possible integration to existing setup (microscopy, Raman spectroscopy)

## APPLICATIONS

**Industry**
- Whole Slide Imaging (WSI)
- Diagnostic device
- Digital and label-free microscopy solution

**Health**
- Hematology
- Microbiology

**Education**
- Training
- Serious game
- Virtual specimen manipulation

## DEVELOPMENT STATUS

TRL 4-5
- *Protype of slide scanner is ready*
- Demo possible
- Automated blood smear slide diagnostic system (with propriatory numerical biomarkers)

## INTELLECTUAL PROPERTY

- FR2108256 / FR3136301
- IDDN.FR.001.230001.000.S.P.2025.000.20000
- IDDN.FR.001.230002.000.S.P.2025.000.10000

## INVENTORS & CONTACTS

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## PUBLICATIONS

- 10.1364/BOE.489776
- 10.3390/S23156829
- 10.3390/S23187932

## LOOKING FOR

- Expending to new use cases
- Co-development partners, active CEO
- Investors
- Partnership for biomarker development