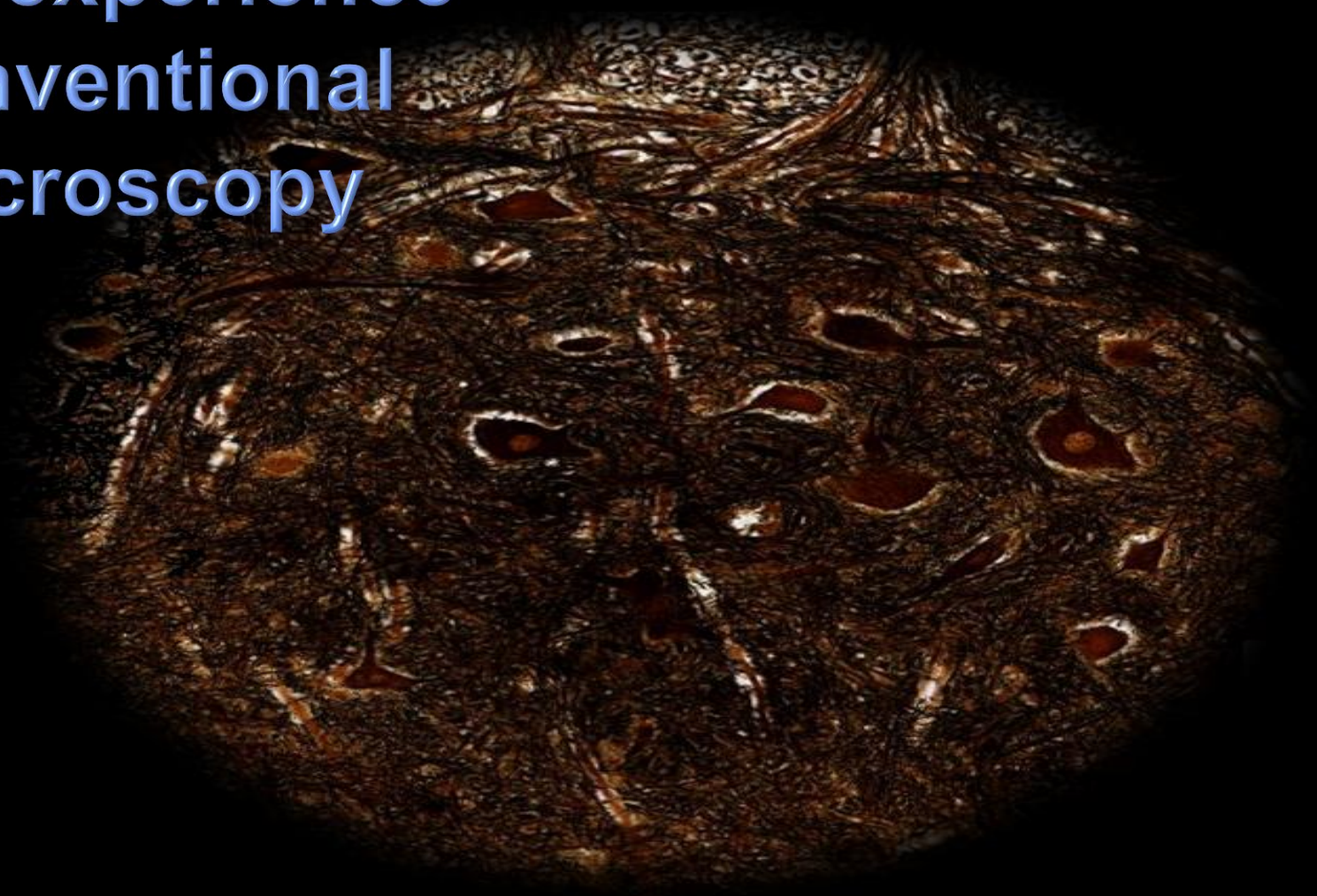


Zoom into the Micro-world and Beyond

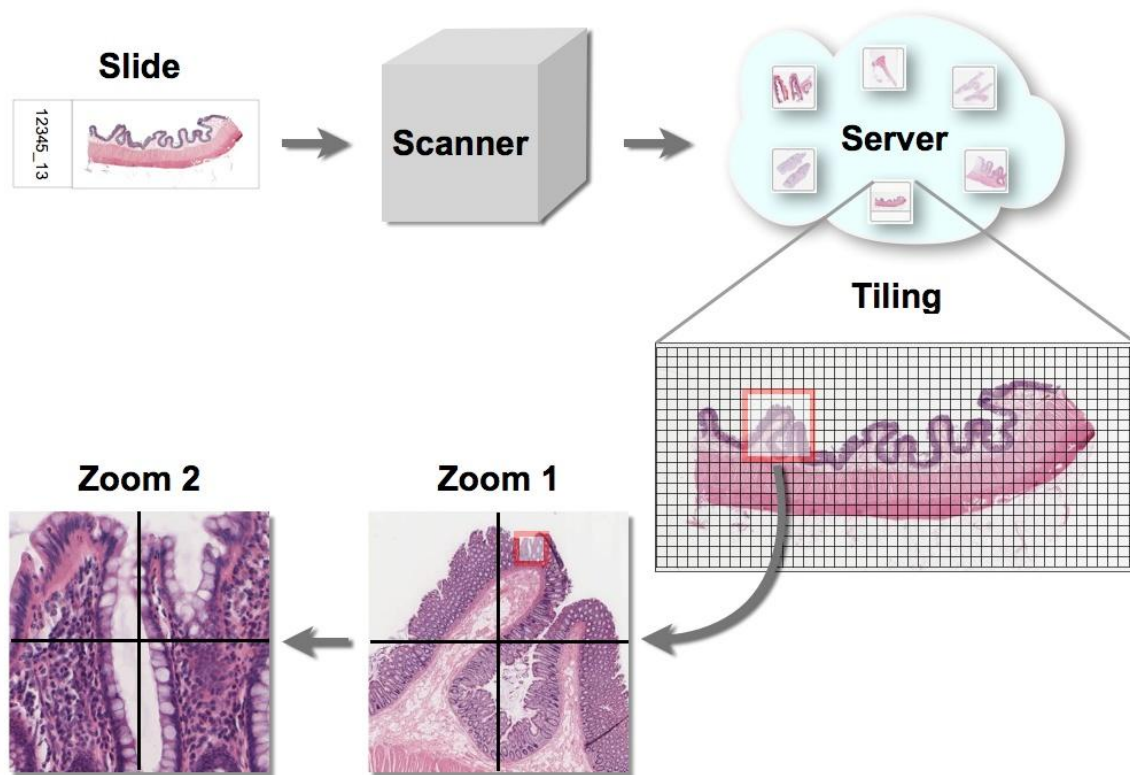
Anton Tonchev – Medical University-Varna

cell experience

Conventional microscopy



Virtual microscopy



The problem today

- ✓ Over €50,000 for software licenses from each manufacturer
- ✓ Incompatible formats - Zeiss cannot open Aperio, Leica - Hamamatsu
- ✓ 5–50 GB images - impossible to share via email or the cloud
- ✓ No access outside the lab - science locked inside the room

**The world's first open (flexible, upgradable) platform
for virtual microscopy.**

**One interface. All microscopy formats. Access
from anywhere.**

Why are we unique?

The only platform in the world that unites ALL microscopy formats in a single web-based interface.

Zeiss • Aperio • Hamamatsu • Leica • Philips • Sakura • Ventana

ViRMiC: The Breakthrough

- ✓ Open ANY format. One platform. Zero additional licenses.
- ✓ Deep Zoom technology - load a 50 GB image in seconds
- ✓ Access via phone, tablet, or PC - from anywhere in the world
- ✓ Calibrated measurements with micron-level precision
- ✓ Annotations, comparisons, collections - a complete scientific workflow

The TEAM



Prof. A. Tonchev, MD, PhD, DSc
PI; R4, MedUni-Varna



Assoc. Prof. Dr. S. Pavlov, MD, PhD
R3, MedUni-Varna



Assoc. Prof. G. Momcheva, PhD
R3, ИМИ-БАИ



Asst. Prof. L. Veleva
R1, MedUni-Varna



RV Solutions
Full-stack development



Eng. Ts. Ivanov
IT, MedUni-Varna

The Technology

- ✓ OpenSeadragon + Deep Zoom = Google Maps for microscopy
- ✓ VIPS converter - support for 10+ specialized formats
- ✓ WordPress integration
- ✓ SSL encryption - medical data security

CONNEXUS



Impact

- ✓ Medical education
- ✓ Other fields: clinical imaging, astronomy, architecture



PUBLIC FUNDING



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the European Union
NextGenerationEU

**National Recovery
and Resilience Plan**
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