Fluorescent microscopy Core Facility at the Faculty of Biology, Sofia University "St. Kl. Ohridski" now opened

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New Fluorescent microscopy Core Facility has now opened to allow sophistication of cell biology research at the Faculty of Biology, Sofia University "St. Kl. Ohridski". With the financial support of the Ministry of Education and Science under the project" Research Infrastructure of Cell Technologies in Biomedicine" of the NRRI 2017-2023 an unique **DeltaVision Ultra® (GE Healthcare)** automated bright field microscope for advanced imaging applications was purchased through an open tender procedure (http://host.bglot.com/ACTweb/2020/Announcements/20201501_AnnouncementENG_Tender.pdf).

Installed high-resolution microscope DeltaVision™ Ultra, GE Healthcare

The Core Facility open doors in new completely reconstructed premises at the Faculty of Biology, Sofia University "St. Kl. Ohridski "adapted to the specific requirements for the installation and operation of the unique system. Comprehensive training and introduction to the features of DeltaVision™ Ultra, the seventh- generation automated widefield microscope from GE Healthcare was conducted by GE staff of experts in the Faculty of Biology in November 2019.

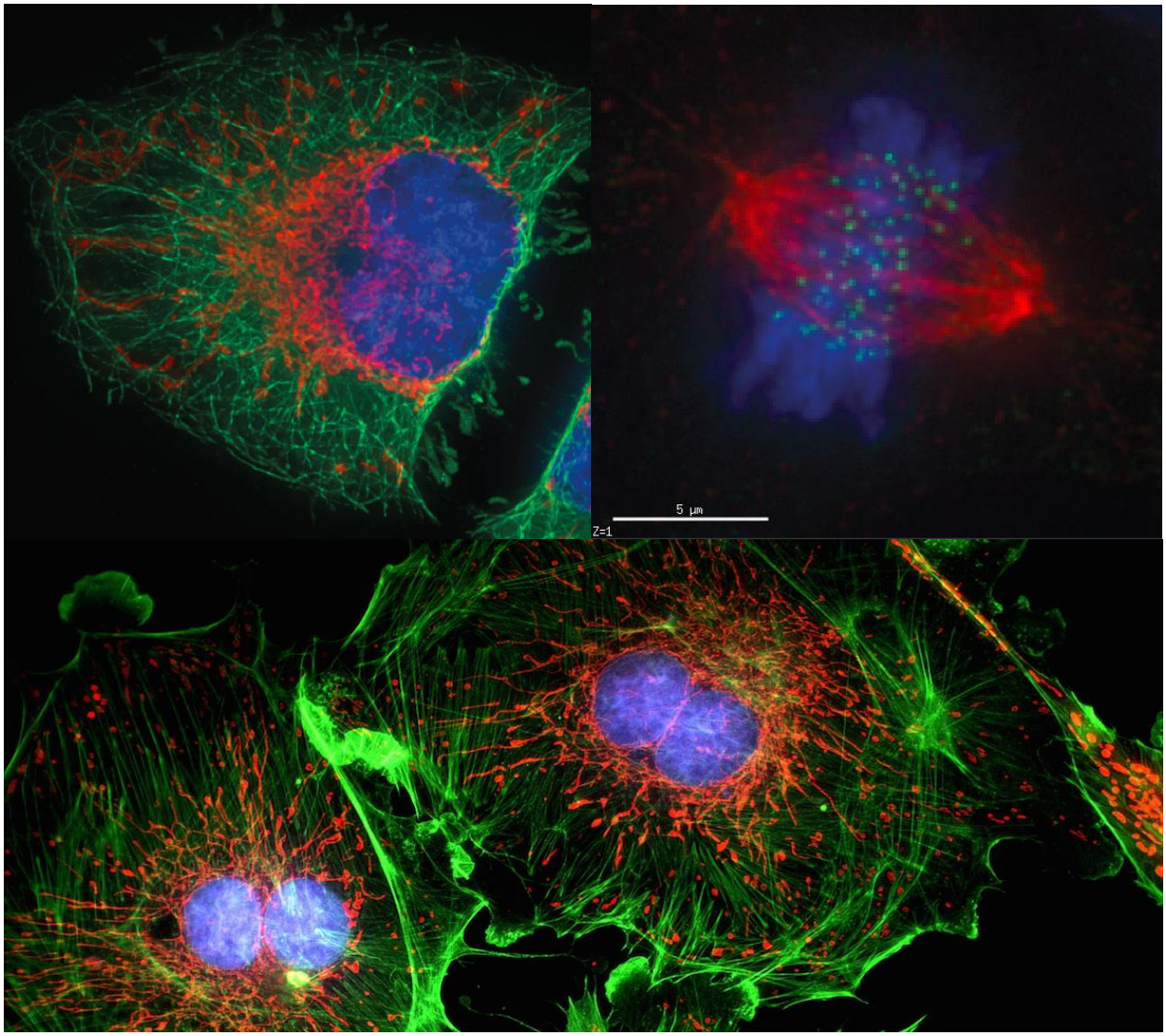


Moments from the installation, commissioning and training of specialists in the completely renovated premises in the former Photo Lab. In the Faculty of Biology. Introducing GE Healthcare's next generation of microscopic systems to Faculty academicians in the Aula of Faculty of Biology

Enhanced data quality is ensured by the system's automatic focus and exclusive deconvolution method that boosts contrast and resolution. The system provides users with the opportunity to observe versatile biological processes in fixed or live cells. Live cell imaging applications may include fast events or long-term cellular observation.

Superiority to other fluorescent imaging systems in advanced cell biology research include:

- nanoscale observations of cell structures
- single cell analysis
- time-lapse live cell imaging
- multi-point cell tracking
- multi-well plate scanning and assay quantification



Visualization of cellular structures involved in cell division by multiplex fluorescence analysis with a high-resolution microscope DeltaVision ™ Ultra, GE Healthcare

Applications fields relate to innovative research on cell membrane dynamics, kinetic profiling of cytoskeleton, cell signaling, cell adhesion and motility, proliferation and differentiation - inevitable analytic tools exploring stem cells, cancer cells, toxicity studies and many more.