

Research Center for Immunotherapy (FZI) Core Facilities

Core Facilities at the Paul Klein Center for Immune Intervention

Flow Cytometry

Director: Prof. Dr. Tobias Bopp

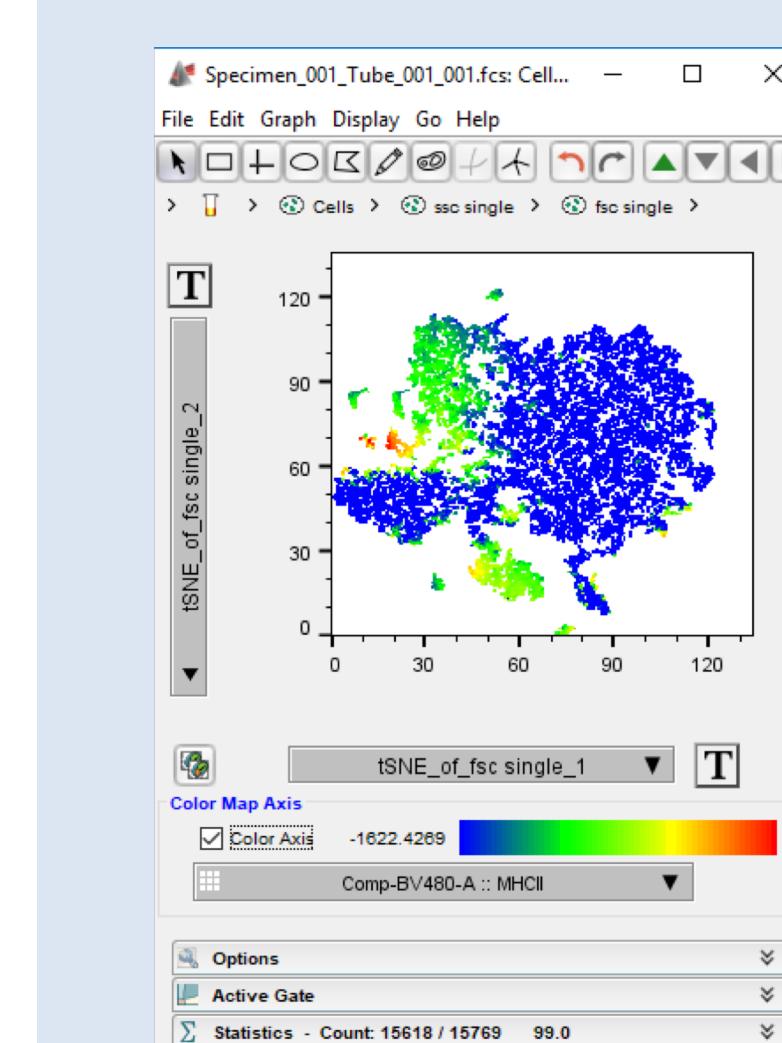
Instrumentation

- **Facs Symphony:**
33 parameter, 5 laser
- **Imagestream Mark II**
two orca flash cameras, 12 parameter 3 laser
- three **FACS Aria** High speed Cell Sorters
up to 20 parameter and 5 laser
- **Moflo Legacy** in S2 cabinett coming up soon

Analysing, sorting and imaging in one centralized Core Facility

Analysis workstations:

- up to 32 cores; 128 gb ram
- FlowJo t-SNE
- Diva
- Ideas

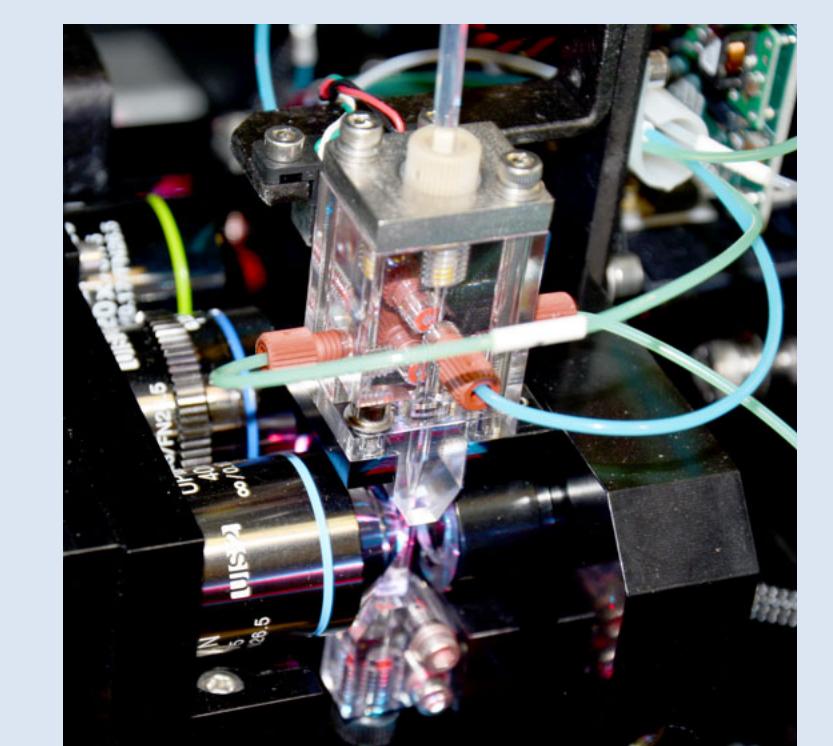


FZI Backbone drop in panels:

- T and B cell panel
- human and mouse
- ILC panel mouse
- Stem cell panel
- Human DC/ Macrophages panel

FZI backbone panel feature:

- Streamlined panels with L/D fixable dye
- Lineage dump Pe-Cy5 and L/D 7AAD
- First color on laserline



kindly provided by K. Schütze and D. Nothmann

Quantitative Proteomics

Director: Prof. Dr. Stefan Tenzer

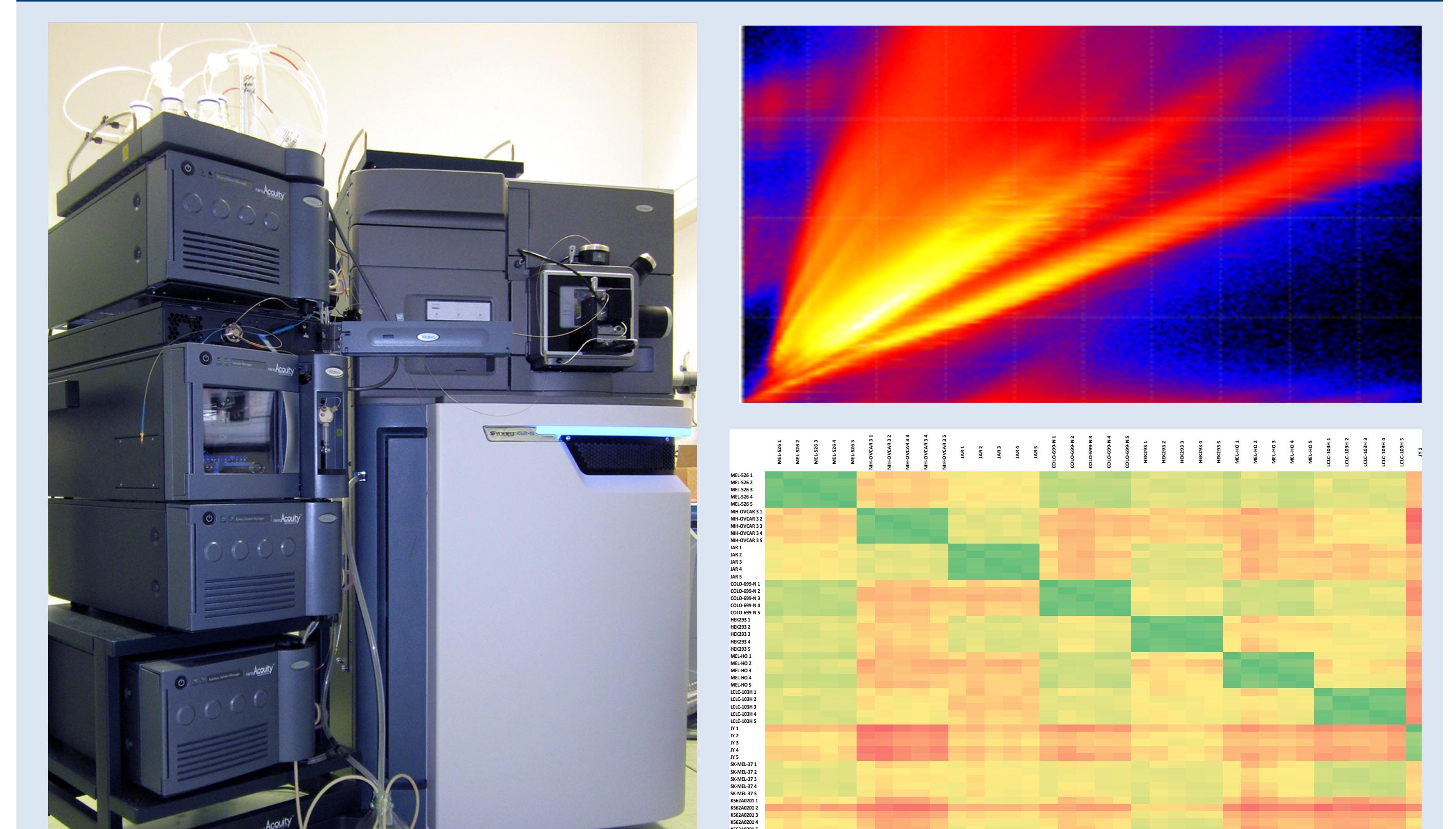
Instrumentation

- **Two Waters nanoUPLC + Synapt G2-Si platforms**
High resolution (25,000 FWHM) and sensitivity
Integrated ion-mobility cell

Available Techniques & Methods

- Label-free quantitative proteome analysis
- Analysis of post-translational modifications
- Characterization of the MHC-ligandome
- Cell secretome analysis

Quantitative proteome profiling of human cancer cells using ion-mobility enhanced data-independent acquisition¹



¹Distler et al., Nature Methods 2014

Advanced Light Microscopy Unit

Director: Prof. Dr. Krishnaraj Rajalingam

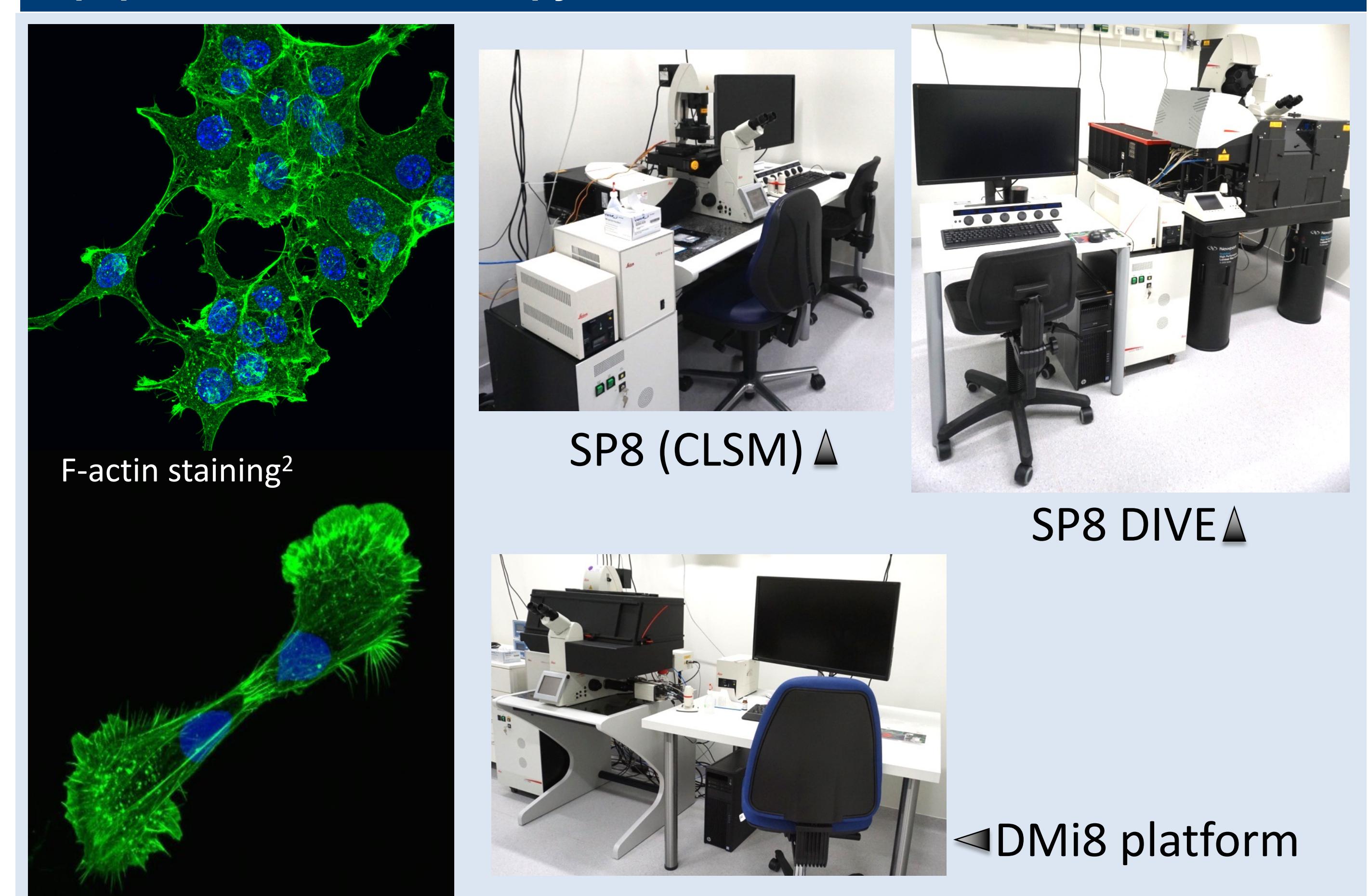
Instrumentation

- **Leica SP8 CLSM, DMi8 TIRF and SP8 DIVE**

Available Techniques & Methods

- Confocal imaging: SP8 CLSM platforms (new HyD detectors) and widefield applications (DMi8 platforms)
- SP8 DIVE multiphoton confocal system → deep *in vivo* imaging
- DMi8 Infinity TIRF → high resolution imaging of dynamic processes (at the cell membrane)
- *In vivo* live cell imaging (DMi8 platforms equipped with environmental control box)
- offline LAS-X and Bitplane Imaris 9.1 software

Equipment of the Microscopy Unit



² kindly provided by K. Bogucka and Dr. H. Yurugi