

UCCH Department	Laboratory	Methods
Dept. of Dermatology and Venereology	<b>Gorzelanny / Huck Lab:</b> Rheology in Tumor Metastasis	<ul style="list-style-type: none"> <li>• vascular microfluidics</li> <li>• live cell imaging in whole blood (reflection interference contrast microscopy)</li> <li>• cell-based impedance spectroscopy</li> </ul>
Dept. of Gastroenterology (Internal Medicine I)	<b>Huber Lab:</b> Control of CD4+ Helper Cells	<ul style="list-style-type: none"> <li>• <i>in vivo</i> models for colitis and colitis-associated cancer</li> <li>• murine endoscopy</li> <li>• analysis of T helper subsets <i>in vivo</i> and <i>in vitro</i> via reporter mice</li> </ul>
Dept. of Neurology	<b>Kluwe Lab:</b> Tumor Genetics	<ul style="list-style-type: none"> <li>• mutation analysis</li> <li>• Sanger sequencing</li> <li>• microsatellite analysis for loss-of-heterozygosity in tumors</li> <li>• genetic verification of cell lines</li> </ul>
Dept. of Neurosurgery	<b>Lamszus Lab:</b> Brain Tumor Biology	<ul style="list-style-type: none"> <li>• intracranial injection of tumor cells</li> </ul>
Dept. of Pediatric Hematology and Oncology / Research Institute Kinderkrebszentrum Hamburg	<b>Schüller Lab:</b> Developmental Neurobiology and Pediatric Neuro-oncology	<ul style="list-style-type: none"> <li>• conditional murine knockout systems</li> <li>• culture and manipulation of primary murine neural precursor cells</li> <li>• neuropathological analysis of murine and human tissue</li> <li>• global methylome analysis of human tumors</li> </ul>
Dept. of Radiotherapy and Radio-oncology	<b>Kriegs Lab:</b> Signal Transduction and Molecular Targeting	<ul style="list-style-type: none"> <li>• Western blot</li> <li>• immunocytology</li> <li>• flow cytometry</li> <li>• cell culture</li> <li>• constant field gel electrophoresis</li> <li>• UCCH Kinomics Core Facility</li> </ul>
Dept. of Radiotherapy and Radio-oncology	<b>Mansour Lab:</b> Regulation of DNA Double Strand Break Repair in Tumors	<ul style="list-style-type: none"> <li>• plasmid reporter assays for detection of specific DNA repair mechanisms</li> </ul>

		<ul style="list-style-type: none"> <li>• detection of DNA double strand breaks (DSB) and DSB repair via immunofluorescence</li> <li>• detection of histone posttranslational modifications (HPTM) using IF</li> </ul>
Institute of Biochemistry and Signal Transduction	<b>Windhorst Lab:</b> Cytoskeletal Dynamics	<ul style="list-style-type: none"> <li>• cellular proliferation, adhesion and migration assays</li> <li>• Western blot</li> <li>• immunoprecipitation</li> <li>• immunocytology</li> <li>• actin dynamics assays</li> <li>• measurement of cellular calcium</li> <li>• protein expression and purification in pro- and eukaryotic cells incl. lentiviral approaches</li> <li>• inositol phosphate analysis</li> <li>• preparation of cell fractions</li> </ul>
Institute of Clinical Chemistry / Central Laboratories	<b>Schlüter Lab:</b> Mass Spectrometric Proteomics	<ul style="list-style-type: none"> <li>• mass spectrometric proteomics</li> </ul>
Institute of Tumor Biology	<b>Wikman Lab:</b> Characterization of Metastasis-associated Genes	<ul style="list-style-type: none"> <li>• detection and characterization of circulating tumor cells (CTCs) in cancer patients</li> </ul>