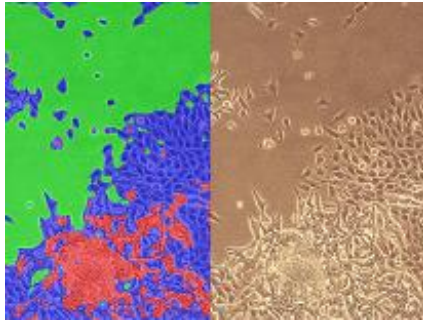


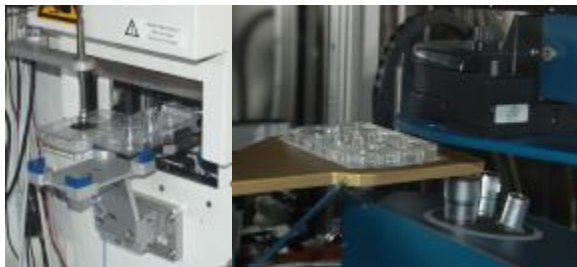
# Automation

Automated Cell Cultivation and Monitoring (ACCM) - Live Cell Imaging



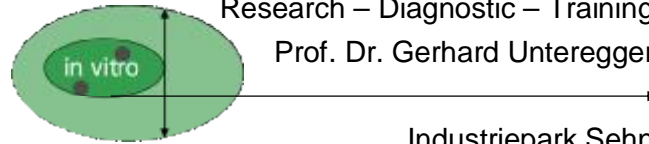
Today, many questions require a continuous monitoring of the cells rather than endpoint-measurement. So far, the continuous observation of cells was only possible manually and therefore very time-consuming. ACCM provides automated monitoring and documentation of the cells in free selectable time intervals. ACCM could be used in a variety of fields of research:

Cell counting, Morphology, Migration, Invasion, Adhesion, Gene Expression (Transfection), Detection of Cell Death, ...



## INSTITUTE OF MOLECULAR BIOLOGY

Research – Diagnostic – Training  
Prof. Dr. Gerhard Unteregger



Industriepark Sehn  
Neue Industriestraße 4  
66424 Homburg

[www.invitro.de](http://www.invitro.de) – [info@invitro.de](mailto:info@invitro.de)

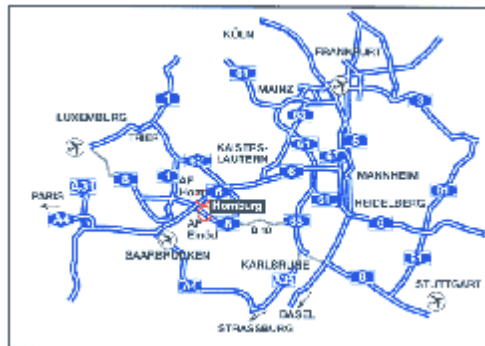
Tel.: +49 6841 - 17 61 11; Fax: - 17 61 13

### Access route to our Institute

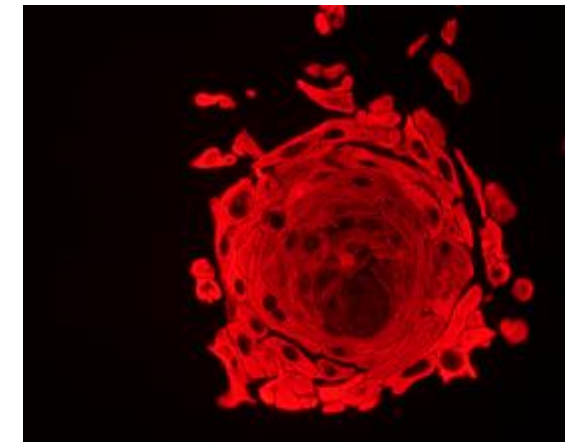
**by car:** take the freeway **A 6** until the exit Homburg/Saar and continue towards the "Sehn industrial park".

**by railway:** on the railway line Mannheim – Saarbrücken, exit Homburg Central Railway Station. Take the bus line 501 or MS3 towards Kleinblittersdorf or Saargemünd. The bus stop is named „Beeden Schule“ and located 300 m away from our institute.

**by air plane:** there are air connections to Berlin, Dresden, Leipzig, Hamburg, München and Luxemburg. The price of the Taxi from the airport of Saarbrücken (Ensheim) is about 35-45 €.



## Institute of Molecular Biology



**Prof. Dr. Gerhard Unteregger**

**Dipl. Biol.**

Homburg/Saar  
Germany

## Research

In vitro is a typical contract research organisation. Focus of our company is the provision, improvement and development of complex cell culture systems for research and screening. We are offering services in the following research topics:

Drug Testing and Screening

Primary Cell Cultures

Advanced Cell Culture Systems / 3D-models

*in vivo*-like Culture Conditions (ECM-Coating, Co-Cultivation)

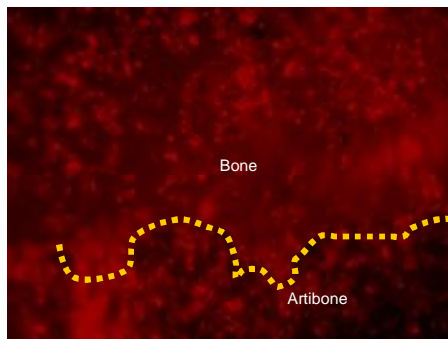
Oncology: innovative Culture Models

3D-Screening

Biocompatibility Testing

Standard Analytical Techniques: e.g.

Viability, Proliferation, Apoptosis, Necrosis



## Quality Control

Quality control and standardization have become indispensable tools in cell culture laboratories. The need for quality control was mainly underlined due to the fact that false cell lines are constantly in circulation whereby the results of numerous experiments were disabled. We offer the following services for testing the identity and stability and for determination of the expression profile of your cell lines:

Karyotyping, FISH, CGH, Array-CGH, DNA-Fingerprint, Multiplex-PCR, PCR, RT-PCR, quantitative Realtime-PCR, Proteomics, ELISA-test systems, Immunocytochemistry.



Furthermore, we offer a broad array of testing procedures for the detection of mycoplasma contamination in cell cultures, even for surveillance of your tissue engineering and transplantation experiments in the context of regenerative medicine.

## Training

For more than 15 years, we offer special trainings on different topics around the cell culture. In addition to the theory, the practical work is an essential part of our workshops. Additionally to our trainings in our own laboratory, we organize special inhouse-trainings, external courses in the laboratories of our clients.



National and international workshops

In-house trainings

Cell culture techniques

Advisory service

Cell Culture and Troubleshooting; Quality Control; Biocoating: Migration, Invasion and Angiogenesis; Primary Cell Cultures, Tumor Cells and Stem Cells; Dynamic of Cell Population: Proliferation, Growth and Cell Death; Up-scaling; Gene Silencing; Live Cell Imaging; Current Animal Models