



## General Information

**Module Title** *Proteomics, technology and application*

**Tutor Name(s)** *C. Zabel, J. Klose*

**Location where module takes place** *Charité, Institute for Human Genetics  
Charité Campus Virchow Klinikum  
Forschungshaus, Forum 4  
meeting in the entrance hall  
21 to 25 September, 09:00 to 18:00*

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<b>Suitable for the tracks</b>	<input checked="" type="checkbox"/> <i>Biology/Biochemistry Track</i>		
	<input checked="" type="checkbox"/> <i>Chemistry/Physics/Engineering Track</i>		
	<input type="checkbox"/> <i>Clinical Scientist</i>		
<b>Type</b>	<i>Practical; Seminar</i>	<b>Level</b>	<i>advanced</i>
<b>Days</b>	<i>5</i>	<b>Max. Participants</b>	<i>4</i>

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## Objectives this module

*Technology: Electrophoretic separation of total cell proteins to high resolution (number of proteins separated), mass spectrometry for protein identification, evaluation of highly complex protein patterns by special evaluation software. New methods for protein visualization (differential in gel electrophoresis (DIGE)). Application: protein expression changes in embryonic stem cells in development and disease, protein changes in cell differentiation; protein changes in disease models.*

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## Which course materials, software, or instruments do students use in this module?

*Please bring your lab coat and wear shoes suitable for wet lab (No sandals please!)*

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## What are the prerequisites for taking this subject?

*Laboratory experience with basic techniques such as 1-D SDS PAGE are desirable but not mandatory. Basic training in a biochemically or molecular biology oriented laboratory is mandatory.*