

**Supplementary sheet for the masters` program in Molecular Medicine.
Please fill in this form completely and upload it!**

Family name	
First name	
Applicant number (see application form)	

Request to Laboratory Classes/Practical Laboratory Skills for prospective Students in Molecular Medicine

Dear Sir/Madam,

Thank you very much for your application and for your interest in our Master's program in Molecular Medicine. Our Master's program in Molecular Medicine is a consecutive, research-oriented program, which leads to a Master of Science (M. Sc.) degree. It is characterized amongst others by practice orientation with the ambition to qualify future excellent scientists for medical research. The one year curriculum is divided into two main parts, the first concentrating on deepening knowledge and advanced laboratory research training, the second on an individual research project (= Master's thesis).

To study successfully in our program, applicants/prospective students are expected to have already a good deal of lab experience including the theoretical knowledge as well as practical laboratory skills.

To check your competency profile we need to identify and specify your degree of competency – which helps you likewise to check (with respect to the other requirements) if you fit for our program.

To self-appraise one's own competency level, we use a simple, clear, and accurate description for each competency level following Miller's Pyramid.

Competency Level	Description
Knows	Novice, fact gathering, theoretical knowledge
Knows how	Competence , Interpretation & Application during Laboratory Classes
Shows	Performance , Demonstration of learning under supervision
Does	Expert, Performance integrated into practice

Please complete and sign this form (please tick).

THANK YOU

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Classification of Competencies/ Specifying competency levels		Knows	Knows how	Shows	Does
Chemistry	Basics for Scientists				
Physics	Basics for Scientists				
Biochemistry	Western Blot				
	Photometric measurements				
	Enzyme kinetics				
	Protein isolation				
	Protein separation				
Molecular Biology	DNA isolation				
	RNA isolation				
	cDNA synthesis				
	reverse transcriptase PCR				
	E. coli plasmide transfection				
	Real Time PCR				
	gel electrophoresis				
Plus Microbiology	bacteria culture				
	typing of bacteria using PCR				
	antibiotic resistance tests				
	Bacterial Cell Culture				
	biofilm preparation				
Plus Human Genetics	Sequencing				
	Ceytogenetics				
	RFLP Analysis				
	microsatellite analysis				
Plus Laboratory Diagnostics	FACS				
	TEM presentation and slide preparation (ultra thin cut)				
	deep sequencing theory				
	laser micro dissection				
	microscopy				
Plus Immunology	PBMC isolation				
	tetramer staining				
	HLA typing				
	FACS, chromium release cytotoxicity assay				
Plus Cell Biology	Basics of cell culture				
	Transfection of eukaryotic cells				
	immunohistochemistry				
Plus Molecular Pathology	mouse dissection				
	fluorescence microscopy				

