

**Standards for grading PhD thesis
International Graduate School in Molecular Medicine Ulm**

Rite (3.0)

Work that is ***purely descriptive*** in nature without novel functional analyses (e.g. expression analysis of a gene during embryogenesis or in the adult by application of existing standard molecular biology, biochemistry, genetic and/or bioinformatics methods).

Cum laude (2.0)

Work that is ***purely descriptive*** in nature without novel functional analyses (e.g. expression analysis of a gene during embryogenesis or in the adult) but is based on high quality novel data. (e.g. whole mount in situ data, immunofluorescence studies, microarray analysis for gene expression, yeast two hybrid screens) or the establishment of novel methods without later on functional analyses. Implementation of existing algorithms and their application.

Magna cum Laude (1.0)

Work that provides us with ***novel mechanistic insights*** into biological systems, or molecular mechanisms underlying diseases. This necessarily requires functional analyses that involve manipulation of a biological system by state-of-the-art techniques (e.g. loss of function approaches, gain of function approaches, etc.). This also includes development and implementation of algorithms or methodologies and their validation through simulation.

Summa cum laude (1.0 with distinction, outstanding)

Work that (1) provides us with ***novel mechanistic insights*** into biological systems or molecular mechanisms underlying diseases and (2) has a strong impact on a given research area. This includes development and implementation of new algorithms and their analysis by theoretical and simulation based approaches. The candidate has delivered one or more publications in highly ranked journals of the field as first author. Most importantly, the candidate provided significant intellectual contributions to the paper that clearly is higher than average. The published data should be part of the written thesis.