## The University of Texas MD Anderson Cancer Center UTHealth Graduate School of Biomedical Sciences

## **EVALUATION OF THE M.S. DEFENSE PERFORMANCE**

The attached evaluation has been formulated and approved for use by the GSBS standing committees in an effort to assist students and faculty alike. The evaluation should be of assistance to students since they will provide guidelines as to what will be expected of students by faculty during their defense. The evaluation should be of assistance to faculty in that they will provide guidelines for assessing student performance during the defense. They are by no means the only criteria by which students may be assessed, and they are not intended to specifically dictate to faculty how to assess student performance.

After the Defense, the completed evaluation should be submitted to the GSBS Office of Academic Affairs along with the Results of the Defense form. The Advisory Committee submits one form that reflects the composite decision of the entire Advisory Committee.

The evaluation is intended to be advisory. The final decision regarding the defense is to be made by the faculty serving on the defense committee. The outcome of the defense should, however, reflect the scores noted on the evaluation.

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## **Evaluation of the M.S. Defense**

Chair of Defense					
	Poor (1)	Developing (2)	Good (3)	Outstanding (4)	Score
Knowledge	☐ Limited breadth or depth of understanding of the area of study; ☐ Limited ability to apply information learned in another context to issue(s) at hand; ☐ Unaware of implications of project to general biomedical sciences.	☐ Sufficient breadth or depth (but not both) of the subject; ☐ With prodding could apply information from another context to project at hand; ☐ Limited understanding of implications.	<ul> <li>☐ Sufficient breadth and depth of understanding;</li> <li>☐ With some help, could apply information from another context to the project;</li> <li>☐ Sufficient understanding of the implications.</li> </ul>	<ul> <li>☐ Solid breadth and depth of knowledge;</li> <li>☐ Able to integrate information from multiple sources;</li> <li>☐ Excellent grasp of broader implications of project.</li> </ul>	□ 1 □ 2 □ 3 □ 4
Hypothesis and Aims	<ul> <li>No hypothesis provided;</li> <li>No rationale for hypothesis;</li> <li>Aims unfocused;</li> <li>Each aim is simply a single experiment;</li> <li>Aims interdependent;</li> <li>Aims not related to hypothesis.</li> </ul>	<ul> <li>☐ Hypothesis is imprecise/poorly stated, no understanding of need for hypothesis;</li> <li>☐ Significance of hypothesis is unclear;</li> <li>☐ Individual aims are focused, but don't clearly address the hypothesis.</li> </ul>	<ul> <li>☐ Hypothesis is well-stated with adequate rationale;</li> <li>☐ Significance of hypothesis is clear and well-stated;</li> <li>☐ Aims are generally sufficient to address the hypothesis but need some modification.</li> </ul>	☐ Can clearly describe the significance, rationale and novelty of the hypothesis; ☐ Well-conceived aims that directly and completely address the hypothesis.	□ 1 □ 2 □ 3 □ 4
Experimental Approach and Results	<ul> <li>☐ Experimental design not explained;</li> <li>☐ Pitfalls of techniques not understood;</li> <li>☐ Results not interpreted or not interpretable.</li> </ul>	<ul> <li>☐ Experiments lack critical controls;</li> <li>☐ Theory behind methods not well understood;</li> <li>☐ Poor choices of approaches;</li> <li>☐ Limited understanding of pitfalls of methods;</li> <li>☐ Interpretation of data and discussion of results lack depth.</li> </ul>	<ul> <li>□ Experiments relevant to the aims;</li> <li>□ Experiments well-designed but need more quantitative analysis;</li> <li>□ Some results not clear – need alternate approaches;</li> <li>□ Interpretation consistent with data.</li> </ul>	<ul> <li>□ Experiments well-designed with appropriate controls and proper analysis;</li> <li>□ Understands the theory and practice of the methods;</li> <li>□ Indicates pitfalls and uses alternate methods;</li> <li>□ Results clearly explained.</li> </ul>	□ 1 □ 2 □ 3 □ 4
Communication	<ul> <li>☐ Thesis did not follow the standard format;</li> <li>☐ Grammatical errors and misspellings;</li> <li>☐ Poor oral presentation;</li> <li>☐ Did not understand the questions or did not address the question asked;</li> <li>☐ Poor English language skills.</li> </ul>	<ul> <li>☐ Sub-standard writing resulting in lack of clarity;</li> <li>☐ Oral presentation was clear, but student read the slides;</li> <li>☐ Understood most of the questions but provided only partial answers;</li> <li>☐ Spoken English was, for the most part, understandable.</li> </ul>	<ul> <li>For the most part well written, but some discontinuities;</li> <li>Clear and focused oral presentation;</li> <li>Understood questions and provided adequate answers;</li> <li>Spoken English was readily understood.</li> </ul>	<ul> <li>☐ Thesis clearly written in the appropriate format;</li> <li>☐ Poised and polished in the oral presentation;</li> <li>☐ Understood the questions and provided clear, thorough, engaging answers;</li> <li>☐ Engaged the committee in a collegial discussion;</li> <li>☐ Took the proposal to a higher level.</li> </ul>	□1 □2 □3 □4
Technical Skills	<ul> <li>□ Does not understand theory behind techniques;</li> <li>□ Cannot (does not) follow standard lab protocol;</li> <li>□ Generates irreproducible data.</li> </ul>	<ul> <li>☐ Has difficulty applying the theory to troubleshooting;</li> <li>☐ Deviates from standard lab protocol on occasion;</li> <li>☐ Experiments repeated multiple times to generate reproducible data.</li> </ul>	<ul> <li>☐ Can troubleshoot most problems;</li> <li>☐ Deviates from standard protocols on occasion, but documents deviation;</li> <li>☐ Data are reproducible.</li> </ul>	<ul> <li>☐ Understands theory behind techniques and is excellent at troubleshooting;</li> <li>☐ Correctly follows standard lab protocols, or documents deviations;</li> <li>☐ Data are highly reproducible.</li> </ul>	□ 1 □ 2 □ 3 □ 4

Student Name: