OSBP Report on Candidacy Examination

- Each member of the candidacy examination committee must complete the following assessment page during the candidacy exam.

- Students will collect the pages immediately following the exam. Signed pages from each committee member must be submitted by the student to the OSBP office (or scanned to osbp@osu.edu) by 5pm the day following completion of the candidacy exam.

Student: _____

Advisor: _____

Date of Examination: _____

Name of Committee member: _____

Signature of Committee member: _____

*Completion of the following rubric is a **requirement** for each OSBP student completing candidacy.*
The information collected on this report will **NOT** be used to evaluate the results of any specific exam, but will be aggregated for all students in the program to enable assessment of student learning, particularly focused on the learning outcomes that have been established for all students in OSBP. OSBP expects most students to achieve at least medium performance in the majority of categories listed below, but it remains solely up to the committee's discretion to decide the result of an individual student's exam. Committee members are nevertheless strongly encouraged to incorporate their evaluations into post-exam discussions with the students to help students identify areas of strength and weakness for their own improvement.

Performance (check one box for each category)	**Highest**	**Medium**	**Low**
Demonstrate sound foundational knowledge in biochemistry			
Master and critically evaluate the literature of the specific area related to the thesis			
Develop a testable and compelling hypothesis			
Design appropriate experiments to test the hypothesis			
Write a proposal that is readable and persuasive			
Display effective oral communication skills and field questions effectively			

	Highest performance	Medium Performance	Low Performance
Demonstrate sound foundational knowledge in biochemistry (Learning Outcome 1)	• Student is an authority in general subject area of biochemistry • There are no major gaps in knowledge • Level of knowledge approaches what would be expected for a senior graduate student	• Student demonstrates understanding of most fundamental concepts • Level of knowledge is clearly above that expected for a typical undergraduate, but noticeably below that of a senior graduate student	• Student does not demonstrate understanding of many key fundamental concepts • Level of knowledge is not much beyond that of a typical undergraduate student
Master and critically evaluate the literature of the specific area related to the thesis (Learning Outcomes 3 and 4)	• Student knows the literature on his/her specific project to a level that approaches that of their advisor • Student stays abreast of literature and is aware of recent developments • Student is able to critically evaluate recent publications in a manner that approaches a typical peer review.	• Student is aware of and understands publications from his/her own lab, but is deficient in understanding publications from other laboratories • Student demonstrates that he/she is keeping abreast of recent developments in his/her field, but is deficient in critically evaluating them	• Student is not familiar enough with publications from his/her own lab, let alone publications from other laboratories working in same area • Student's advisor needs to correct the student several times on the facts related to the thesis project
Develop a testable and compelling hypothesis (Learning Outcome 4)	• The hypothesis is sound, testable, and addresses a key gap in the field • The hypothesis is based on evidence from the literature or from preliminary data • The hypothesis is as compelling as those in competitive NIH/NSF proposals	• The hypothesis is reasonable and addresses an important question but is not compelling enough to be the focus of a competitive NIH/NSF proposal	• The hypothesis is too simple and not based on a critical evaluation of the literature • The hypothesis could be disproved or proved from information already available in the literature

	Highest performance	Medium Performance	Low Performance
Design appropriate experiments to test the hypothesis (Learning Outcome 4)	• The experimental design is creative, innovative, and directly addresses the question at hand • The line of investigation is arguably the best way to address the hypothesis and will, advance the field regardless of the results obtained	• The experimental design is reasonable and should at least in part address the questions posed, but may lack in creativity and innovation. • Student has considered alternative approaches and is able to provide a reasonable argument for his/her choice of experiments	• There are major flaws with the experimental design; student cannot think "outside the box" and is fixated on a single approach used in his/her lab • Student is unable to come up with alternative approaches to address the research objective
Write a proposal that is readable and persuasive in terms of working hypothesis and experimental plan (Learning Outcome 5)	• The written proposal is of the quality typical of a fundable NIH/AHA fellowship application or a peer-reviewed publication • Text has been carefully edited, well-designed figures are accompanied by easy-to-comprehend legends, and citations are complete	• The proposal is of the quality one might expect for a submitted, but not funded NIH/AHA fellowship application • Lacks scientific vigor but is carefully presented in terms of the work plan • Text has a few typos and illustrations have minor imperfections	• The proposal would stand out as being clearly not of the quality that one would expect for a submitted NIH/AHA fellowship proposal • Text is filled with grammatical errors and typos, poor organization and sentence structure, and/or incomplete figures/citations

	Highest performance	**Medium Performance**	**Low Performance**
Display effective oral communication skills and field questions effectively (Learning Outcome 5)	• Student clearly describes background material relevant to the project and its significance; demonstrates evidence of creativity and innovation • Student listens to the questions, correctly answers most of them, or at least provides information that is closely related • Student is able to confidently hold his/her ground, much like a faculty member delivering a seminar • When student does not know the answer, he/she is candid in acknowledging lack of knowledge to address the query	• Student is able to describe background in a manner that is easy to follow, interesting, and logical, but may be lacking in creativity and innovation • Student is able to answer most of the basic questions, but struggles with more challenging ones • Some answers reflect lack of confidence, student occasionally gets flustered, tries to talk around questions if he/she doesn't know the answer	• Student is difficult to understand or presents with lack of enthusiasm; flow of information is not logical • Student does not listen well to the questions and does not answer the questions directly • Student is not able to answer many of the most basic questions correctly