## Rubric: Research Proposal Oral Presentation

Category	Elements of a strong presentation
Knowledge and explanation of	• relates proposal to topics covered in 20.109 when
subject matter:	appropriate
<b>3</b>	• sufficiently explains concepts/ methods/etc. <i>not</i>
	covered in 20.109
Idea	• the what, why, and how (are you going to do it) of
	the idea are each clear and compelling
	• the project scope is reasonable
	exhibits novelty/creativity
Overview	clear and concise description of the central question
	to be investigated, and its significance
Background	sufficient for intelligent non-experts to understand
	the proposal
	<ul> <li>describes/credits relevant prior art</li> </ul>
Problem and Goals	well-defined hypothesis and goals
Details/Methods	staged roadmap for investigation
	• the experiments address the central question and
	include good controls
	<ul> <li>methods needed to understand the predicted</li> </ul>
	outcomes are explained, without unecessary detail
Outcomes	• show sample data if experiment works (summarize in
	tabular form, make mock graphs, show published
	images from similar work, etc.)
	<ul> <li>describe alternate assays, questions, and/or</li> </ul>
	information still gained if experiment does not work
Resources	• consider specialized resources needed (e.g., plasmids,
	cell lines, access to large/costly equipment)
	• detail is good, but not needed for every resource, nor
	is detailed budget info. required
Impact and Summary	• reiterate question, detail its importance to science and
	society
Q&A	answers that convey understanding
	• admit when you lack knowledge, tell how you would
	approach the question based on what you know
Overall organization of talk	• content introduced in logical, easy-to-follow
	sequence
	• main points emphasized, repeated
0 11 66 4 9 11 7	• transition statements between ideas
Overall effectiveness of slide	• slide titles convey key message
text/visuals	• good balance of text and figures
	• text/figures large enough to be seen
	• considered use of color
	not too many or too few slides

Overall effectiveness of delivery	<ul> <li>all elements of a good individual presentation (effective use of voice, body, and language), plus:</li> <li>collaborative effort: partners speak for equal times, don't interrupt each other, take turns being "on stage"</li> <li>overall appears rehearsed, with smooth transitions between speakers, talk is cohesive</li> <li>review/preview structure of talk</li> <li>12' length (+/- 0.5 min)</li> </ul>
Talking points	<ul> <li>main points to be made during talk (can be incomplete sentences)</li> <li>well thought-out transitions</li> <li>best work will include supporting detail, in case needed for Q&amp;A</li> </ul>

MIT OpenCourseWare http://ocw.mit.edu

20.109 Laboratory Fundamentals in Biological Engineering Spring 2010

For information about citing these materials or our Terms of Use, visit: http://ocw.mit.edu/terms.