

Rubric for research proposal oral presentation in 20.109

The *idea*, *details/methods*, and *outcomes* categories define the core of the talk.

Category	Elements of a strong presentation
Knowledge and explanation of subject matter:	<ul style="list-style-type: none"> relates proposal to topics covered in 20.109 when appropriate sufficiently explains concepts/ methods/etc. <i>not</i> covered in 20.109
Idea	<ul style="list-style-type: none"> the what, why, and how (<i>are you going to do it</i>) of the idea are each clear and compelling the project scope is reasonable exhibits novelty/creativity
Overview	<ul style="list-style-type: none"> clear and concise description of the social and scientific context (and/or central question and significance)
Background	<ul style="list-style-type: none"> sufficient for intelligent non-experts to understand the proposal describes/credits relevant prior art
Problem and Goals	<ul style="list-style-type: none"> well-defined hypothesis and goals (specific research aims)
Details/Methods	<ul style="list-style-type: none"> staged roadmap for investigation and/or helpful schematics as you go the experiments address the central question and include good controls methods needed to understand the predicted outcomes are explained, without unnecessary detail
Outcomes	<ul style="list-style-type: none"> show sample data if experiment works (summarize in tabular form, make mock graphs, show published images from similar work, etc.) describe alternate assays, questions, and/or information still gained if experiment does not work
Resources	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> reiterate central question and its significance to science and society
Q&A	<ul style="list-style-type: none"> answers that convey understanding when you lack knowledge, tell how you would approach the question based on what you know
Overall organization of talk	<ul style="list-style-type: none"> content introduced in logical, easy-to-follow sequence main points emphasized, repeated transition statements between ideas
Overall effectiveness of slide	<ul style="list-style-type: none"> slide titles convey key message

text/visuals	<ul style="list-style-type: none"> • good balance of text and figures • text/figures large enough to be seen (including axis labels!) • considered use of color • not too many or too few slides
Overall effectiveness of delivery	<ul style="list-style-type: none"> • all elements of a good individual presentation (effective use of voice, body, and language), plus: • collaborative effort: partners speak for equal times, don't interrupt each other, take turns being "on stage" • overall appears rehearsed, with smooth transitions between speakers; talk is cohesive • review/preview structure of talk • 12' length (+/- 0.5 min)
Talking points	<ul style="list-style-type: none"> • main points to be made during talk (can be incomplete sentences) • well thought-out transitions • best work will include supporting detail, in case needed for Q&A