# Northwestern University Department of Chemistry 4<sup>th</sup> year – Research Proposal Approval

### Assessment Criteria for Original Research Proposals

The following three criteria will be used to assess the overall quality of your original research proposal, and should serve as a useful guide for the generation of ideas and preparation of your proposal. These criteria are based on the review criteria used at the National Institutes of Health when evaluating proposals, and can be applied universally to research proposals regardless of field.

#### • Significance

Does the project address an important problem or a critical barrier to progress in the field? Assuming that the aims of the project are achieved, how will scientific knowledge and/or technical capability be improved? How will successful completion of the aims change the concepts, methods, and technologies that drive this field?

#### • Innovation

Does the project challenge and seek to shift current research paradigms by utilizing novel theoretical concepts, approaches, methodologies, or instrumentation? Are the concepts, approaches, methodologies, or instrumentation novel to one field of research or novel in a broad sense? Is a refinement, improvement, or new application of theoretical concepts, approaches or methodologies, or instrumentation proposed?

#### • Approach

Are the overall strategy, methodology, and analyses well-reasoned and appropriate to accomplish the specific aims of the project? Are potential problems, alternative strategies, and benchmarks for success presented?

### **Original Research Proposal Evaluation**

Strengths	Weaknesses
Significance:	Significance:

Strengths	Weaknesses
Innovation:	Innovation:
Approach:	Approach:

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Step 1: The student must demonstrate the further development of one of more of your three quad charts.

The quad chart of	has been evaluated by a
committee consisting of (faculty, please sign):	

**Step 2: Approval Signatures** 

**Step 3: Student Signature** 

Advisor

Student

Committee Member

Committee Member