

# Scientific Proposals for Neuroscience Trainees (N292) Spring 2020

**Time:** Tuesdays 2:00 pm – 4:50 pm,

**Course Instructor:**

Karina Cramer

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**Textbook:**

Friedland, A.J. & Folt, C.L. (2000) *Writing Successful Science Proposals*. 1<sup>st</sup> Ed

**Class Goals:**

***To learn about mechanisms for scientific communication.*** This quarter the focus will be on individual NIH training grants. We will learn about the mechanism, all of the components, and the review criteria. Students will also learn to present proposed research in chalk talks.

***To gain experience presenting scientific ideas.*** This course aims to prepare graduate students to present their research in a clear and concise manner in writing and through oral/visual presentations. Students will give oral presentations on their proposals to the class. Written communication skills will be addressed as students work through each section of the research proposal. Students will have a complete draft at the end of the quarter. The course is structured to give students ample opportunity to hone their skills both through practice and through careful critique of their own work and the work of others.

***To learn about peer review and gain experience with constructive critiques.*** Students will engage in peer review, evaluating each other's oral and written presentations. For the grant proposals, students will follow NIH review criteria and learn to give meaningful, constructive critiques. Students will also have opportunities to respond to critiques and to rewrite sections accordingly.

During class, we will be giving presentations and evaluating written work. Assignments will be completed outside of class each week. Writing assignments must be turned in by **Friday at noon** so that classmates will have time to review them before class on Tuesday. In addition, you will have opportunities to get one-on-one feedback from the instructor.

**Grading:**

Grades will be based on classroom attendance and participation. This class will involve a lot of discussion and critiques, so participation is mandatory. You will also be graded on your efforts for the final grant proposal and slide presentation.

<b>Date</b>	<b>Topic</b>	<b>Reading</b>	<b>Homework</b>
3/31	Introduction and overview: Perspectives on science communication, types of grants, components of grant proposals  NIH guidelines for F31	Friedland and Folt, Ch.1, Ch. 4	Write Specific Aims draft
4/7	<i>Review of Specific Aims</i>  Introduction to preparing slide presentations; “chalk talks”		Prepare slide presentation
4/14	<i>Slide Presentations: Specific Aims</i>  Talks and critiques	Friedland and Folt, Ch.7-8	Rewrite Specific Aims Outline of Research Strategy
4/21	<i>Review of revised Specific Aims; presentation and review of outlines</i>  Organization of the Research Strategy	Friedland and Folt, Ch.9	Write Significance and Innovation sections
4/28	<i>Review and critique of Significance and Innovation</i>  Approach Preliminary data and figures		Write Approach, including preliminary data.  Assemble and turn in draft of Research Strategy
5/5	<i>Review and critique of Research Strategy</i>		Rewrite Research Strategy, responding to critiques.  Draft other grant sections.
5/19	<i>Review of biosketch, personal statement, training plan</i>		Write critiques for review panel.
5/26	<i>Review of completed proposals</i>  Mock review panel Strategies for responding to critiques.		
6/2	<i>Slide Presentations: Proposal Overview</i>  Talks and critiques		

