

Preparing Students to be Competitive

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With thanks to

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Rutgers University

mmg.rutgers.edu/601.html



**Advanced topics in Microbial and Molecular Genetics:
Writing a Preliminary Exam and Grant Proposal
16:681:601 Fall 2007**

Thurs 3:00 -5:00 PM in [Waksman](#) Rm 311

Course Instructors
[Andrew Vershon](#) - Waksman Institute,
[Teresa M. Delcorso](#), Dean's Office, Graduate School of New Brunswick,

Description: This course will provide guidance and practice in writing a biological research grant proposal. Topics include funding agencies, types of grants, forms, budgets, proposal format and the review process. Students will be required to write and critique research proposals. This course may serve as a good start for students to begin writing their research proposal as a part of their oral preliminary exam that is required by their Graduate Program. Some of the material on this web site is intended only for students registered in the course and is not for general public use. Access to some of the links is therefore password protected. The material on these pages is provided for educational purposes only. Unauthorized use of this material is prohibited.

Note: Your research advisor will have to read your proposal twice during the semester. Please check with them first before signing up for the course to make sure they have the time to spend on it.

Week	Date	Topic						
1	September 6	Introductions, Course Organization, Non-Disclosure Agreement, Academic Integrity, Specific Aims: NIH Tutorial , Checklist , Class Handouts: Notes.doc / Figures.ppt / Aims Examples						
2	September 13	Review examples of Specific Aims Background and Significance: NIH Tutorial , Checklist , Class Handouts: Notes.doc / Figures.ppt / Grant Examples / Grant Outline.doc						
3	September 20	Due: Proposal Outline and Specific Aims (.5-1 page) Preliminary Results/Progress Report- NIH Tutorial , Checklist , Research Design and Methods - NIH Tutorial , Checklist , Class Handouts: Notes.doc , Figures.ppt						
4	September 27	Writing Basics - References - Endnote, NIH Tutorial , Checklist Text Layout - Formatting, figures Class Handouts: Notes.doc , Figures.ppt						
5	October 4	<table border="1"> <tbody> <tr> <td>NIH PHS398 (R01)</td> <td>Combined NIH PHS 398 Forms (doc) (pdf) Cover page (Waksman/RU) NIH PHS 398 Instructions (doc)</td> </tr> <tr> <td>Rutgers University Office of Research and Sponsored Programs (ORSP) Rates Budget Template</td> <td>Instructions Endorsement Form (pdf) Human subjects Animals Recombinant DNA Hazardous Materials</td> </tr> <tr> <td>UMDNJ Office of Research and Sponsored Programs (ORSP) Rates</td> <td>Investigator Conflict of Interest policy and forms Animal Use (IACUC) form IRB application and instructions Recombinant DNA forms and instructions Pathogen Registry</td> </tr> </tbody> </table> <p>Due: Revised Aims, Background, Significance and Preliminary Results (3-5 pages)</p>	NIH PHS398 (R01)	Combined NIH PHS 398 Forms (doc) (pdf) Cover page (Waksman/RU) NIH PHS 398 Instructions (doc)	Rutgers University Office of Research and Sponsored Programs (ORSP) Rates Budget Template	Instructions Endorsement Form (pdf) Human subjects Animals Recombinant DNA Hazardous Materials	UMDNJ Office of Research and Sponsored Programs (ORSP) Rates	Investigator Conflict of Interest policy and forms Animal Use (IACUC) form IRB application and instructions Recombinant DNA forms and instructions Pathogen Registry
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6	October 11	Grant Funding Search: Lecture Figures (ppt) Chaser - RU Resource Center for Graduate Student External Support CRISP - NIH Computer Retrieval of Information on Scientific Projects ORSP - RU Resource Center Internal Funding Support
7	October 18	Due: Research Design and Methods (5-7 pages) Presenting a Research Seminar (Notes) (Figures)
8	October 25	Review Process
9	November 1	Research Presentations Powerpoint Files due by 11:00 AM by e-mail
10	November 8	Research Presentations Powerpoint Files due by 11:00 AM by e-mail
11	November 15	Due: <u>Second Draft of Complete Proposal</u> e-mail final version is due by 2:00 PM
12	November 20 (Tues Class)	
	November 29	Due: <u>Third Draft of Complete Proposal</u> e-mail final version is due by 2:00 PM
13	December 6	Proposal Reviews are Due by 3:00 PM by e-mail.
		Individual Review Meetings. Waksman Rm 233

Suggested Reading:

[Grant Applications Writers Handbook](#), 4th Ed. by Liane, Reif-Lehrerr, Jones & Barlett Publishers (2005).
[The Elements of Style](#) 4th Ed. by Strunk, White & Angell, Longman Publishers (2000)
[On Writing Well \(30th Anniversary Ed\)](#) William Zinsser, Collins Publishers (2006)
[The Craft of Scientific Presentations](#) Michael Alley, Springer Publishers (2005)
[Writing readable prose: When planning a scientific manuscript, following a few simple rules has a large impact.](#) Amin S Bredan & Frans van Roy, (2006) *EMBO Reports*, 7: 846-849

Usefull Links for Grant Applications:

[NIH PHS 398 \(R01 Application\)](#)
[NIH Ruth L Kirschstein National Research Service Award PHS 416-1 \(doc\) \(pdf\) \(Instructions\)](#)
[NIH F31 Program Announcement](#)
[NSF Graduate Research Fellowship](#)
[Ford Foundation Diversity Fellowships](#)
Grant Application and Review Process: Grant Application Basics [NIH Tutorial](#), [Checklists](#)
Oral Preliminary Exam Process ([MMG Program](#))
R01 Sample ([NIH](#))
Writing a Grant Tutorial, ([NIH Tutorial](#))

[ORSP - Funding Database](#)

[Chaser- Resource Center for Graduate Student External Support](#)
[Graduate Programs in Molecular Biosciences](#)

[NIH Funding Database](#)

[Rutgers, The State University of New Jersey](#)
[Graduate Program in Microbiology and Molecular Genetics](#)

<http://chaser.rutgers.edu/index.html>

<http://www.niaid.nih.gov/ncn/grants/basics/index.htm>

<http://www.niaid.nih.gov/ncn/grants/write/index.htm>

<http://www.niaid.nih.gov/ncn/grants/app/default.htm>

<http://www.niaid.nih.gov/ncn/grants/charts/checklists.htm#gbeforebeg>

