Welcome to Scientific Manuscripts & Proposals! I am very excited about having the opportunity to help you improve your scientific writing skills - skills that you will need to be successful in your chosen scientific career.

Course Goals
In the rush to churn out scientific data, students rarely take enough time to produce a polished, written document worthy of presenting their hard earned data to the world. The overall goals of this course are to:

1. Understand what constitutes a well-written scientific manuscript both from the perspective of a reader and a scientific editor.
2. Understand the similarities and differences between scientific manuscripts and grant proposals.
3. Understand how to create digital data figures that are publication ready.

Learning Objectives
The course is divided into several learning modules, each of which will focus on a specific topic. Each module has been designed to help you reach the goals outlined above. The major objectives are:

- Understand how individuals read scientific documents and what their expectations are
- Learn techniques to improve writing proficiency
- Understand the importance of word selection and how it can improve writing clarity
- Recognize and learn to write logically cohesive paragraphs
- Generate written examples of the major sections of a research manuscript
- Learn to critique others' writing and develop the ability to self-edit
- Learn how to use various software platforms to create "publication ready" scientific figures
- Understand the similarities between writing research papers and proposals
- Generate a specific aims page for a research proposal

This is a Hybrid Course
Writing is a dynamic process! Over the years, I have found that writers who receive timely feedback on their efforts and use these reviews to revise their documents, do not lose writing momentum and make rapid progress toward creating superior documents. Feedback can be given in many forms such as written editorial comments, spoken recorded comments, and comments that combine audio, visual, and written modalities. To enable each of you to get the most out of this course, I have integrated several new online communication tools into the course that will enable you to participate in the class assignments using both synchronous, "same time, different place" and asynchronous, "different time, different place" online learning platforms. This "hybrid" course format should improve your ability to interact and work with each other by permitting you to participate in course conversations on "your time".

For synchronous interactions, we will either meet face-to-face in class during our scheduled class period to discuss assignments or we will schedule a synchronous, online meeting using BigBlueButton, a synchronous teaching platform that you will be able to access through Sakai. For asynchronous feedback, we will use the review features in Microsoft Word or Google Docs, and set up discussions in Voice Thread.
Digital copies of your assignments and your reviews will be exchanged using DropBox. Please watch the video tutorials that will introduce you to some of these platforms. Links to these videos can be found on the course Welcome Page found under Course Materials on the Sakai course site. You do not need to worry about creating accounts to use these platforms since they will be provided through UF.

Dr. Semple-Rowland is a Professor of Neuroscience at UF. She currently serves on the editorial board for two scientific journals and she has successfully authored and published 53 peer-reviewed scientific manuscripts. She recently created an online course on how to write the research proposal for the Neuroscience IDP qualifying exam and served as the Director of the Neuroscience IDP graduate program from 2003-2010.

Prerequisites
Students must have a desire to improve their abilities to create a publishable scientific manuscript. Permission of the instructor

Catalog Description
Scientific Manuscripts and Proposals covers the practices of good scientific writing with an emphasis on generating publishable biomedical research papers. Students will apply scientific writing principles to the construction of the primary sections of a biomedical research paper, including the design and creation of publication ready data figures. In addition, the sections of current NIH research proposals will be discussed and students will create a specific aims page, the focus of which will be their doctoral research.

Textbooks (strongly suggested)

*Scientific Writing and Communication* by Angelika H. Hofmann
Oxford University Press
ISBN-10 0195390059

*Grant Application Writer's Workbook - NIH* by Russell and Morrison

Grading
Evaluation of students (S/U grading) will be based on completion of all assignments, class attendance and active participation in classroom discussions. Failure to complete all assignments, to participate in classroom discussion, or to attend a minimum of 70% of the scheduled classes will result in an unsatisfactory evaluation.

Class Attendance
All students are expected to attend the weekly 1-hour classes that will either take place in a classroom or online using BigBlueButton. If a situation arises where attendance is not possible, the student should notify the instructor that they will not be attending the class prior to the class. Students must attend a minimum of 70% of the scheduled classes to receive a satisfactory evaluation.

Make-up Assignments
All students will be required to complete every assignment in a timely manner. Assignments assigned at the end of a class period are usually due two to three days prior to the next class period to allow sufficient time for the instructor and the students to complete and post their reviews.