ANAT 7240
Advances in Anatomical Sciences I

Overview
In this seminar course, each student is required to present one original research paper on a current topic in anatomical science research (cell, animal model, human), and will receive a letter grade for this seminar.

Goals
The objective of this course is to prepare you to give effective oral presentations of scientific work. You will be expected to critically evaluate the study you present. This is an important skill for all scientists to develop. Whenever you read a scientific paper, you should examine the data, and evaluate whether the conclusions drawn by the authors are supported by their data, whether the experiments were well designed and implemented, and whether other experiments or controls should have been included.

Course format: Seminar topics
Students self-select a current topic in anatomical science research (cell, animal model, human). The research paper must be sent to the instructor by email for approval at least one week prior to the presentation. Two papers will be discussed in each class. Thus, we have about half an hour for each one. You should plan to talk for around 20 minutes, and then initiate a lively discussion of the paper.

Grading
Your seminar presentation will be scored based on:
- clarity of the presentation 1 2 3 4 5
- understanding of the material 1 2 3 4 5
- critical evaluation of the study 1 2 3 4 5

These are reflected by what you say during the presentation and how well you address questions. Your grade in the class will also depend on attendance and participation. You are expected to attend every class. Your grade will be lowered if you have one unexcused absence. More than 1 unexcused absence will result in an F grade for the course. Excused absences must be cleared by the course director within 24 hours of the absence. Participation involves contribution during each presentation. Each audience student is expected to ask a minimum of 1 question related and relevant to the presentation topic. Audience students will be individually scored according to the following schematic:
- Quality and relevance of contributed questions 1 2 3

There is no written test or examination in this course. Final grade for the course will be calculated from the points earned in the presentation and discussions.

Outline:

• Objective
  o what is the goal of this work, what problem is addressed, why do the authors find it important, what was the current state of the art?
• Hypothesis
  o if this paper presents a new idea, what, in a nutshell, is it? What is the rationale for the hypothesis?
• Contributions/claims
  o what contributions does the paper claim to make? Which one is the most significant?
• Evidence
  o how does the paper support its claims?
  o does the evidence presented address the key issues needed to support the claims being made?
• Impact
  o what is the impact of this work?
• Your input
  o your opinion of the quality of the paper
• Discussion points
  o end your presentation with a slide giving a number of questions which you think should arise in the discussion that follows. Try to include a range of questions, technical and non-technical, so that there is something for everyone to think about regardless of background.

Hints for giving a presentation

• Use powerpoint and video projector
• Point at the projector screen, facing the audience
• Don’t be embarrassed about taking time to think
• Don’t be shy about reading the words written on the slide. However, try to TALK not to READ. Prepare notes specifically for an informal address and force yourself to speak naturally and to avoid jargon. However, do not depend on these notes. It’s best to make your slides in such a way that they serve as your notes, and to know your subject so well that you could give the talk smoothly without notes. On the other hand, don’t become too informal. ‘Cute’ remarks can sometime offend the audience.
• Present your ideas with a few verbal punches to stimulate your listeners. Look at the audience and look for nods of agreement or signs of differing viewpoints. You will find that this kind of communication is more rewarding than just reading your notes.

Hints on slides:
  ➢ Use a light-colored background.
  ➢ Limit each slide to one main idea.
  ➢ Use a slide series for progressive disclosure - it clarifies greatly.
  ➢ Limit each slide; include no more than you will discuss.
  ➢ Leave space - at least the height of a capital letter - between lines.
  ➢ Include titles to supplement, not duplicate, slide data.
  ➢ Use several simple slides rather than one complicated one, especially if you must discuss a subject at length.
  ➢ Use duplicates if you need to refer to the same slide at several different times in your talk. It is impractical for the projectionist to search for and reshow a slide.
  ➢ Make sure your slides are legible from every point in the room.
  ➢ If there are slides that you have prepared, but which you think we won’t have time for, move them to the end of the presentation, after a blank slide. Then you can refer to them if discussion/questions require it.