This will be the first year I will be directing, and teaching much of, the cardiovascular section of the physiology course for the first year medical students. I have reviewed the syllabus and lectures from 2015, the MEC’s recommendations for improvement, and the student evaluations from last year. I have met with Drs. Nattie and Daubenspeck as well as with Dr. Manning (respiratory), Drs. Weinstein and Robey (renal), Carrie Hertel and of course Dr. Swenson.

A clear message I have heard from Drs. Nattie and Swenson, as well as from the student evaluations, is that the text *Physiology* by Costanzo was preferred by the students. I do not intend to create an iBook, but will rely on the text and lecture/small group materials. My effort this year will be directed primarily at developing lectures and slide sets that will directly follow Costanzo’s text, using her diagrams with side annotations that will outline the reasoning/explanations given in the whole text. While some of this may seem repetitive, I believe it will help the students truly understand (rather than memorize) the important concepts. It helps me!

I have asked Dr. Barbara Gerling, electrophysiologist, to give the lectures previously given by Dr. Katz. She has access to the materials Dr. Katz used, and in addition she has clinical insights into the electrophysiology of the vascular system, at the molecular, cellular and gross anatomical levels. This will bring tangible relevance to the students’ understanding of the subject. The students will be exposed to three levels of membrane function at the molecular level; the perspective of membrane potentials and ion fluxes in electrophysiology, the concept of osmotic and oncotic pressure in the discussion on microcirculation, and a very in depth discussion of membrane biology during the renal section of the course.

During my lectures involving basic hemodynamics, the cardiac and vascular cycles, cardiac muscle function, and the special circulations I will be introducing points of clinical interest and clinical discussions aimed at demonstrating the relevance of the basic science material to the daily practice of clinical medicine.

The small group sessions will be based on clinical cases built around the basic concepts being discussed. I will be leading one of the groups, and thanks to Dr. Lyons I have been able to identify four 4th year students who are eager to lead the other groups. I will be meeting with them to discuss format, what worked for them and what did not, and review each sections material before the sessions. The simulation sessions will be the same as those used last year.

Carrie Hertel will be helping to build the Canvas site so that it will be the same as the other courses. I have communicated with Drs. Gemignani and Welch who are running the cardiovascular SBM course this year. Neither of us will have the time to substantially link the syllabi of the two courses this year, but if the present model for physiology continues next year, we intend to meet shortly after the two courses end to discuss how the two courses can be linked in a way that is meaningful for the students’ ongoing development from basic science to clinical science.

Finally, and as an aside, I have invited a speaker for Medical Grand Rounds to speak on the social issue of disparities in health care. Dr. Joseph Betancourt is the director of the Massachusetts General Hospital Center for Health Care Disparities. This grand rounds is scheduled at the same time as a two hour
session for cardiovascular physiology. Arrangements have been made for the students to attend grand rounds. The presentation will be an excellent introduction for the students to issues of social inequity in our health care system and to academic events in the clinical arena. We will spend the second hour to discuss clinical scenarios relevant to disparities in access to evidence-based care in the context of cardiovascular disease.