

Here are my ideas about the resources that Block 3 would need in order to accommodate an increased class size. These comments are based on a projected class size of 220, and some of the numbers would need to be adjusted if the actual class size ends up being different. After much thought, I have decided to give you two different proposals. Option A is an incremental plan, based on what we are doing now with no innovative changes in curriculum or instructional techniques. Option B would lay the groundwork to radically transform Block 3.

Option A

(1) Adequate funding for the Basic Science Block Director, to reflect the true effort that it takes to run the block effectively. I think 30 - 50% year-round salary support is appropriate (for reference, this last year I spent essentially 100% of my effort in December, January, and February, 20% of my effort in October, November and March, and a small additional effort apportioned over the rest of the year, working on Block 3). For a senior level faculty member this support would amount to approximately \$40 - 65,000/year plus fringe benefits.

(2) 25% salary for an administrative support person (for reference, Adriana Tavernise spent 100% of her time working on Block 3 in December, January, and February). This would amount to approximately \$12,000/year plus fringe benefits.

(3) A \$5,000/year supply budget for incidentals -- this includes \$1,500 for duplicating the DVD that is used to teach histology, plus additional funds for miscellaneous items, such as data transport media (CDs and memory sticks), reference materials, printing costs for internal memos and documents, copy costs for downloaded papers required to update lecture/small group content, etc. The status of computer purchases at UNC has gotten complex recently, with the clear message that research funds can NOT be used to purchase computers that will be used for teaching purposes. Therefore, a portion of the supply budget will be dispensed, as needed, to gradually replace computers and software that are used primarily for teaching in Block 3.

(4) Stipends for junior level assistants (graduate students, post docs, and/or clinical fellows) to be recruited for small group teaching. The ideal size for small groups is around 18 medical students. Thus, for a class size of 220, we will need 12 small group instructors. We currently have 8 faculty instructors for physiology small groups and 10 faculty instructors for histology small groups. We project that this number will remain stable for the next few years. Therefore, we would need to recruit four more instructors for physiology and two more for histology. In the past, we have had great success recruiting small group instructors from among advanced graduate students and postdocs within the Department of Cell and Molecular Physiology... we have chosen the best of the best, and they have always gotten stellar reviews from the medical students. We would continue to recruit from within this pool, and expand our recruiting efforts to also include students/postdocs in Cell Biology, as well as the large pool of outstanding clinical fellows on campus. To help us recruit the best candidates, we will offer a \$3,000 stipend. Thus, the cost of adding six junior colleagues would be \$18,000/year.

(5) Funds to develop a high quality digital video library of selected lectures. Some of these will become GUTS lectures. Others will be used to take the place of in-class lecture time (which will instead be used for question-and-answer sessions, ARS-type activities, and as opportunities to focus in-class time only on the most complex concepts). I do not know the cost of this... perhaps Eve Juliano could give you an estimate. I propose video taping 15 lectures per year over the next five years.

(6) Lecture hall: this is a VERY important point, but I cannot attach a price tag to it. We need a room that is designed for teaching. It must be built for the appropriate number of students, and it must not put the professor on a stage which separates him/her from the class. It should permit teaching at a white board (not a "smart" board, which has not proven to be instructor-friendly). For PowerPoint presentations, the instructor needs to be able to see what is projected on the screen without risk of injury. The acoustics need to be attended to, so that the podium is not placed in such a way that distracting echoes and feedback are generated. The chronic "dead-batteries-in-the-microphone-and-laser-pointer" situation needs to be permanently eradicated. Up- and down-loading documents from the computer at the podium needs to be flawless (there is some bug in the present system that makes it impossible to upload lecture documents from remote faculty computers). Active teaching faculty need to be consulted AT THE DESIGN STAGE. I suggest one consultant from each Block, and nominate Bob Rosenberg as the consultant from Block 3 (I will leave it up to him to name his consulting fee!).

(7) Twelve small group teaching rooms need to be constructed with all the features necessary for interactive learning, including internet access, digital projectors, and whiteboards. These rooms need to be available throughout the day (not just in the morning hours, as is currently the case with rooms in Bondurant and Carrington Halls). There is a special issue with regard to the small group rooms: The five homerooms that we used to have in Berryhill Hall were very effective at creating small "communities" within the larger class as a whole. These smaller subgroups of students remained intact over the whole first year, and created a comfort zone that impacted very positively on our teaching efforts. Within these smaller communities, students interacted easily with one another, felt comfortable speaking up in class, and had a sense of esprit de corps that has been missing ever since we initiated the block system. Its lack has been evident to all of us on the faculty side of the teaching equation. An expansion of the class size will make such smaller communities even more imperative, so that students won't fall victim to a sense of anonymity, and so that small group instructors will be able to interact with stable, defined, and enthusiastic subsets of students. Any construction plan that is put into place must take this into consideration. Thus, the small group rooms should also be built with an eye towards comfortable occupancy, perhaps with a small hot plate, refrigerator, and sink, and with the right kind of seating and storage facilities so that the students can use them as a home base. Location in reasonable proximity to the large lecture hall is also critical.

Option B

Right now, the size of the Block 3 teaching faculty is large and the composition is heterogeneous. This reflects both history (the teaching pool has not changed much since the pre-Block era) and exigency (in a research-dominated environment, nobody has time to teach more than a circumscribed set of material). The consequence is a lack of integration, a lack of uniformity, and a lack of continuity that I have been fighting ever since we moved to the block system. I have made progress, to be sure, but have come to believe that the optimal way to craft a cohesive block is to reduce the number of faculty, and to create a system in which this smaller number of faculty will have "protected" time (i.e. financial support) to really work together in an integrated way. This will require salaries. I propose that the Block 3 faculty be limited to nine (this does not include the Clinical Course Director, and a set of clinical faculty who will be separately recruited to present clinical capstone sessions). The nine proposed (salaried) faculty positions will be: the Basic Science Block Director (who will attend all lectures, read and critique all syllabi, and take responsibility for streamlining the curriculum, updating it yearly, and incorporating innovative teaching methods), and eight additional primary teaching faculty with expertise in (1) cellular neuroscience, (2) systems neuroscience, (3) endocrine and GI physiology, (4) cardiovascular physiology, (5) respiratory physiology, (6) renal physiology, (7) histology, and (8) pharmacology. The lecturing faculty will meet weekly as a group with the Basic Science and Clinical Block Directors throughout December and for the duration of the Block, will attend all lectures (to ensure continuity and integration), and will teach all small groups (along with the Block Director and three additional junior instructors recruited at the graduate student/post doc/clinical fellow level, as needed to provide the required 12 small group leaders). The primary faculty will also be involved in curriculum development throughout the year.

Implementing this proposal would require a big change in all aspects of the block, and working out the details would require hard work and compromise... particularly with regard to the integration of physiology with histology and neuroanatomy. But I am absolutely convinced that this plan would make the block significantly better, and would put in place a dedicated set of faculty that would ensure constant evolution of the block as required to meet the teaching needs of the future. The cost to the medical school would be 9 faculty salaries (perhaps all but the Block director could be supported at the 50% level -- though this is something that should be considered carefully, because the salaries should be commensurate with the effort that will be required and should allow the faculty to make teaching their first priority). Faculty could be drawn from existing Block 3 faculty (if they are willing to make the necessary time commitment in exchange for the salary support provided) or could be recruited from outside of the block and/or outside of UNC. Each faculty member would also need full computer support (see comment about computers in Option A).

In addition, Option B also includes points 2 - 7 raised in Option A.