

Memorandum for the Record

From: John W. Yarbrow, M.D.

Subject: Core Grant Evolution

The long-range evolution of the cancer center core grant must be viewed in context with the overall long-term evolution of CCCs which I have discussed elsewhere. The following brief historical perspective may be helpful in viewing desirable future developments in the core grants. We must begin with two fundamental assumptions which I believe have been demonstrated repeatedly to be valid. First, multidisciplinary research and the team approach to patient care represents a recent and highly beneficial development in academic institutions; second, because any multidisciplinary effort crossed historical academic lines of chain of command it is to be assumed that such progress will be apposed by traditional medical school faculties and administration. From the point of view of these assumptions, then, the past decade of developments of cancer centers make a lot more sense than would appear at first glance. Initially a single grant was used to develop a multidisciplinary program. The principle investigator using the leverage of funding (<sup>especially</sup> ~~and~~ construction funds) was able to overcome the natural opposition within his institution and develop modest multidisciplinary research and treatment programs. The key to this success was the awarding of a single large grant in the name of the principle investigator and under his control. As centers grew larger and programs extended in breadth there were two natural consequences of this mechanism of funding. The first consequence was that an efficient effective review became almost impossible because of the size and scope of the grant. The second consequence was that there was a tendency for the better investigators to escape from the cancer center by obtaining their own grants and for the mediocre investigators to remain in the cancer center with the result that the academic institution in which a center was placed could, with some justification, view the center as a less than optimal academic activity. The net effect of this approach to building centers was that a center revolved around a single individual and upon his ~~departure~~ departure the entire structure would collapse. In short, our centers were not long term ~~dependent~~ stable integrated components of the academic institutions in which they developed.

If one assumes that oncology is in fact a legitimate academic discipline and that the multidisciplinary approach to research and patient care is the wave

of the future then it becomes necessary to devise a system in oncology which will have permanence and high academic standards. Therefore, to improve the quality and longevity of our cancer centers and to solve the problem of the review of large grants the core grant concept was born. The birth was neither uncomplicated nor voluntary. Many, in fact most, center directors did not support the core concept because they recognized immediately that it would produce an erosion of their power base in their institutions and that they would be required to seek out an alternate mechanism for producing stability of their cancer centers. That is, they had to find an alternate mechanism to retain sufficient control over the activities of the members of their centers to permit them to develop a coordinated multidisciplinary program. The center directors, in short, were placed on the spot. But this was an essential element in the overall strategy because it was far more likely that multiple solutions would be found to this problem than a single solution and far more likely that these solutions would be found by multiple top investigators in the field than by NCI staff in Washington. Furthermore, implementation of the systems which would evolve could be predicted to be easier at the local level than if attempted from Washington. In summary, the adoption of the core concept was a sound fiscal move, a sound review move, and a sound move from the standpoint of the long-range evolution of cancer centers which would be permanent components of their institutions rather than temporary phenomena based around a single outstanding investigator. Nonetheless it was clear that this development would separate the wheat from the chafe.

Indeed, this is precisely what happened and at a number of institutions effective cancer centers developed which are likely to be long standing (the University of Wisconsin, the University of Miami, Mayo Medical School, all of which developed on the basis of a departmental structure and the Farber center and the Hutchinson Center which developed as institutes affiliated with medical schools). At other institutions the whole effort fell apart because of this concept and examples here would be the University of Utah, Washington University in St. Louis, the Medical College of Virginia, University of Kansas, University of Oregon, and several others. Still other institutions stubbornly refused to budge from their previous positions notably Stanford, Wayne State, University of Chicago, Duke University, University of

of Southern California, University of Alabama, Yale University, and several others. However, among this last group <sup>there are</sup> ~~there are~~ a number of institutions in which development suggest that progress be forthcoming. The construction of a cancer hospital in Los Angeles could have a major impact on the development on the program at USC and the construction of a cancer hospital in Birmingham could have a similar effect on the program a the University of Alabama. Furthermore, the quality of individuals and the spirit of cooperation at Yale University could lead over the long haul to a substantial and permanent program.

In making this transition from an unstable center to a stable center the use of the core grant by the center director is critical. He must have flexibility to reprogram and reinvest these funds in the development of those components of the center which are most likely to lead <sup>to</sup> effective funding and long-term stability. Therefore, the key element in any consideration of a core grant is flexibility. A second element in a core grant is the necessity to link <sup>the</sup> ~~the~~ loyalty <sup>of</sup> ~~of~~ faculty members to the cancer center rather than to their traditional department and this can be accomplished to some extent by the use of salaries for key personnel. Thirdly, the loyalties of more junior individuals can be directed toward the center by virtue of control of the facilities with which they conduct their research and it is for this reason that the support for common facilities is of particular importance. You will note that I have given a totally separately rationale for the inclusion of salaries for key personnel, support for common facilities, and developmental or seed money than is normally given in describing the core grant. This rationale is the "hidden agenda" behind the core grant and its purpose. It should not detract from this purpose that the core grant make a great deal of sense in terms of the review process and in terms of fiscal accountability-- indeed it does, but there are longer range purposes behind the core grant than just fiscal accountability and ease of review.

In the short range our goal with the core grants should be to "cleanup" <sup>space</sup> or "purify" the grant so that long-range research supported by a separate grant or contract. This process must be gradual and it must be different at different institutions because ~~because~~ a too abrupt change may lead to

a loss of authority on the part of the center director and a collapse of the center. Thus at some institutions we should allow the core grant to retain funds for research whereas at others we should encourage the transfer of this support to a grant or contract. The decision here relates to the inherent stability of the center. When one deals with a department of oncology or with an institute one can urge very strongly that the core grant be rapidly purified whereas when one deals with an unstable center such as USC, Alabama, Duke, and others one would not urge so rapid a shift to the strict interpretation of the core grant.

In the long range, however, we must begin to move towards core grant<sup>d</sup> which follow the guidelines and in the unstable centers continue to place subtle pressure on the director to bring about those developments which will lead to long range stability. There is a further point to be noted here with regard to those centers which have achieved stability and which are part of an institution such as a university which provides hard money support for its departments. Under these circumstances it is desirable to urge and apply subtle pressure to achieve a gradual transfer of the salaries of key senior personnel from the core grant to the hard money budget money of the institution in the form of tenured faculty within the department of oncology.<sup>(Miami, Wisconsin, Mayo)</sup> On the other hand, in those cancer centers which are functioning as essentially free-standing institutes affiliated with medical schools such as the Farber, the Hutchinson, and Fox Chase it will be necessary to retain for a considerable period of time the salaries of key senior investigators in the core grant. This apparent inequity is necessary in order to promote long-range stability for the Cancer Centers Program.

In this connection I have described under the heading "Department of Oncology Development Grant" a possible idea for the future for your consideration.

It would be hoped that the core grant budget would be available for a number of years to come but in the unfortunate circumstance that this budget seems threatened at a national level beyond the ability of our friends to defend it the consequences on the university based centers will be far less severe if

we have been successful in shifting the key personnel to tenured positions and the consequences on the free-standing institutes can be modified by shifting these personnel from the core grant to a network of program project grants which should have been developed by that time. In this connection, therefore, we must encourage a clear distinction between our program project center grants and our core center grants so that if the concept of cancer centers is successfully attacked the program project budgets can be preserved and the centers can live on by a transfer of key personnel to program project grants.

In summary then, the core grants evolve from umbrella type center grants and in doing so serve not only the purpose of better review and better fiscal accountability but also the more important purpose long range of providing a stimulus for cancer center directors to convert unstable centers into stable centers. The conversion of an umbrella type grant into a core grant should be encouraged in the stable centers immediately and should be accomplished <sup>more</sup> gradually in the unstable centers in association with local developments which would improve the stability of each center. In managing core grants the key elements of management are to provide maximum flexibility for reprogramming of funds to develop necessary areas and in stable university based centers to encourage the transfer of key personnel to tenured faculty rank. Programmatically it is desirable to repeatedly draw sharp distinctions between the core grant budget and the program project budget in order to provide for the unfortunate contingency of an attack on the centers program and allow a mechanism for survival of the centers even if the core budget is severely cut back. Finally, these considerations must be viewed in light of overall comprehensive cancer center evolution which I have described elsewhere.