With the 2014 Residency requirement approaching, education and training program directors are scurrying to have adequate numbers of CAMPEP-accredited residency training slots in place. One limited, yet viable solution is to combine the didactic education and residency training experience into one program; this professional degree concept has been discussed within AAPM committees and among the membership for the past five years. As with the start-up of any new education/training program the issues of finance and staffing resources are critical elements in a program's success. In the basic sciences, graduate education has been supported by universities and subsequent dollars from the research enterprise. In contrast, the costs of a professional education have primarily been borne by the student. Presently with most MS Medical Physics programs, the cost is borne by the student; PhD Medical Physics programs continue to finance student education from research dollars. This financial matter of bearing one's own educational costs for a degree becomes more of an issue when considering the new 4-year DMP degree. This dollar issue is a hard sell for both students and those institutions considering implementation of DMP graduate programs.

After three years of DMP Program experience, modifications continue within the Vanderbilt Program: these are necessary to help meet the challenges of limited dollars both at the departmental resource level and the university level. I want to suggest the Residency Hub and Spoke Model as a potentially viable educational and financial model for medical physics professional doctorate programs. In Years 1 and 2, the student completes the didactic classroom and laboratory requirements and completes an equivalent 300-hr clinical practicum "starter" experience at the HUB institution. Beginning with the Summer Term between the Years 2 & 3, the student begins the first year of residency at the HUB institution, with the appropriate observations, participation, and competency-attained clinical medical physics experience and training. At the beginning of the 4th year the student joins a SPOKE community medical physics practice and completes the final twelve months of clinical experience. In my opinion this model would have five major benefits: (1.) the educational institution may be able to reduce the price of tuition during the off-campus 4th year, (2.) the educational institution may be able to admit more professional students during Years 1, 2, and 3 in that institutional resources are not required for Year 4, (3.) the student has the opportunity to participate in a non-academic medical physics practice, acquire skills, and share in assignments and problem solving perhaps not as readily available to the student at an academic practice, (4.) financial and relational contracts between the HUB and SPOKE institutions may allow dollars for student stipends, and (5.) the community medical physics practice gains a one year clinically-trained resident without the organizational difficulty of administrating a residency program and the two-year commitment of significant financial resources. This shared financial model resulting in a net reduction of out-of-pocket student expenses may assist in allowing sufficient numbers of students to continue to choose clinical careers in medical physics.