# Appendix B

### FINAL REPORT

Feasibility Study of A Graduate Program in Physician Assistant Studies at Indiana University School of Health and Rehabilitation Sciences Indianapolis, Indiana

# Prepared by:

Dana Sayre-Stanhope, EdD, PA-C Associate Professor & Director, Physician Assistant Program Emory University School of Medicine 1462 Clifton Rd NE, #280 Atlanta, GA 30322 404-727-2762 404-727-7836 (fax) dsayres@emory.edu

#### Introduction

The Indiana University, through its' School of Health and Rehabilitation Sciences, is exploring the feasibility of opening a physician assistant (PA) program. This visit and the subsequent report are designed to provide the salient points for further consideration of this proposition and will examine three major questions. Is there a need for additional physician assistants in Indiana? Does Indiana University contain the academic and clinical resources to develop a topnotch PA educational offering? What are the barriers to development and implementation of a physician assistant program should the University decide to continue?

## Purpose of Visit

The purpose of this visit was to explore the feasibility of the School of Health and Rehabilitation Sciences at Indiana University opening a master's level physician assistant program (PA) program. The visit was designed to examine the strengths of the University, the School and its facilities as well as potential barriers to the implementation of such a program. Specifically this report will examine three major questions. First is there a need for additional physician assistants in Indiana? Second, does Indiana University contain the academic and clinical resources to develop a top-notch PA educational offering? Finally what are the barriers to development and implementation of a physician assistant program should the University decide to continue?

#### Structure of the Visit

To address these questions, a two-day site visit was conducted June 15 and 16, 2009. During the visit documents were reviewed and interviews were held with campus leaders, SHRS faculty, health professional, and community members. The goal in the meetings and document review was to ascertain their readiness on the University to integrate physician assistant faculty into their current academic structure; to determine whether the necessary physical facilities were available for the education physician assistant students; to assess the level of interest and enthusiasm on the part of the SHRS faculty as well as related University faculty to a new resource intensive program and finally to evaluate the availability of clinical training sites in specific disciplines as the absence of these sites precludes the creation of a PA program. One potential physical facility was visited and several potential alternative sites were discussed.

Visits were conducted with the following campus leaders:

From the University leadership:

Mr. James Johnson, Director of Academic Program Initiatives who provided information regarding potential space and its configuration at

the primary site under consideration. In addition we discussed the health science Center organization, startup funding and continuing funding process including tuition reassignment to the program in the determination of the degree whether graduate or professional and its impact on admissions.

Dr. Stephen Leapman, Executive Associate Dean for Educational Affairs, (now retired). Discussion with Dr. Leapman centered around the current structure of undergraduate medical education at IU and the impact the current model might have on identifying appropriate clinical sites for the PA students. In addition, the availability of on-campus resources such as the simulation center were briefly discussed.

Dr. Bart Ng, Dean School of Science, with whom discussion centered around the overlap between the instruction necessary for physician assistant students and instructions currently being offered within the School of Science. Dr. Ng seemed enthusiastic about the positive impact a PA program at IU could have on the School of Science. He expressed interest in the possibility of including the PA students in the MD "prep" program's anatomy course perhaps during the summer semester.

Dr. David W. Lewis, Dean, University Library was helpful in explaining how responsibility centered management might impact physician assistant students access to certain databases and collections unique to the School of Medicine's library. He also provided information on the support that the University Library could provide to the PA students.

Dr. Uday Sukhatme, Exec Vice Chancellor, Chief Academic Officer and Dean of the Faculties discussed two primary issues. The first was the way in which the physician assistant students might contribute to the undergraduate RISE program because many of the experiences that are core to physician assistant education are component of this program. International medical experiences and service learning are common components of physician assistant education in the 21st century. As programs have advanced to the graduate level many now include small research projects as the capstone experience prior to graduation. Some of these might incorporate the talents of undergraduate students who have an interest in the physician assistant profession for themselves. We also discussed the challenges facing many PA faculty in institutions where the vast majority of faculty have completed doctoral preparation prior to joining. As this appears to be an issue with which SHRS must grapple this conversation was particularly helpful.

Dr. Charles Bantz, IUPUI Chancellor and Executive Vice President for IU provided insight on the overall organizational structure of IU and the steps necessary to secure approval for this program from the Board of Trustees.

Mr. Patrick Murray, Director of Facilities Program and Utilization and Ms. Donna Kent, Assistant to the Assoc. Vice Chancellor for Facilities provided information pertaining to specific facility needs for a PA program at IU particularly in terms of classroom both lecture and lab space, small group rooms and faculty offices.

Ms. Sue Klinger, President, SHRS Alumni Association reiterated the importance of PA students relationship to other students in the SHRS and with the University as a whole.

## From the School of Nursing

- Dr. Deborah Cullen, Professor, Department of Family Health
- Dr. Judith Halstead, Executive Associate Dean for Academic Affairs
- Dr. Melinda Swenson, Professor, Department of Family Health

My conversation with the representatives from the School of Nursing focused on their ability to support the development of the physician assistant program, the difficulty in identifying appropriate clinical training sites, and current space constraints on the main campus including the newly developed simulation lab jointly sponsored by the School of Nursing and the School of Medicine. We discussed the possibility of cross listed courses particularly Pharmacology in Primary Care, Pathophysiology and a Diagnostic Reasoning course. They also discussed the potential competition for both entry-level students and preceptor sites.

#### From the School of Health and Rehabilitative Sciences

- Dr. Joyce Mac Kinnon, Associate Dean
- Dr. Peter Altenburger, Chair, Department of Physical Therapy
- Dr. Thomas Fisher, Chair, Department of Occupational Therapy
- Dr. Jacquelynn O'Palka, Chair, Nutrition and Dietetics

Much of the conversation with the SHRS faculty revolved around the current appointment and promotions guidelines and the impact that could have on the full participation of non-doctorally prepared PA faculty. In addition, the current space constraints of the School and the need for the PA program to be off campus were discussed along with ways to incorporate both the students and the faculty into the life of the school. Lastly, we discussed the guidelines for faculty and

department chair teaching credit load, salary recovery and 10 (vs. 12) month appointments.

From the clinical community

Dr. Mark Mattes, Director of Academic Affairs, Clarion Methodist Hospital

Dr. Debra Uhl, CEO of IU Hospital

Dr. Robert Lubitz, Executive Director, Academic Affairs and Research, St. Vincent's Hospital

Mr. Peter Wright, MBA, MPAS, PA-C

Conversations with these three representatives of clinical agencies all centered around the opportunity for clinical placements for second-year physician assistant students. Dr. Mattes explains the prior relationship with Butler University and how of the new clinical contract between Clarion and Indiana University gives preference to IU students. Given the size of the medical school class Clarion is not expected to be able to provide all the necessary clinical rotation sites however Dr. Lubitz indicated St. Vincent's deep interest in increasing its educational offerings which may provide a significant source of clinical rotation sites through its network in 45 counties. Mr. Wright and Dr. Agho have had ongoing conversations about the potential structure and faculty needs of a PA program at IU.

In addition to these meetings, documents and websites reviewed included:

The Bureau of Health Professions determination of Health Professions Shortage areas for the state of Indiana;

The Physician Workforce Strengths: Projections and Research into Current Issues Affecting Supply and Demand (2008) which discusses the penetration of both NP's and PA's in addressing these health professions shortage areas.

The  $24^h$  Annual Report on Physician Assistant Educational Programs in the United States. 2007 -2008

Indiana University Academic Handbook, (http://www.indiana.edu/~deanfac/acadhbk/acad\_handbk\_2008.pdf)

The IUPUI Supplement to the IU Academic Handbook. <a href="http://www.iupui.t expect to see">http://www.iupui.t expect to see</a> <a href="mailto:inedu/~fcouncil/documents/iupui">inedu/~fcouncil/documents/iupui</a> supplement fac guide-09-07.pdf (accessed August 5, 2009)

The IU School of Health & Rehabilitation Sciences website <a href="http://shrs.iupui.edu">http://shrs.iupui.edu</a>

Butler University Physician Assistant Program website <a href="http://www.butler.edu/pharmacy-pa/academic-programs/physician-assistant/physician-assistant-features">http://www.butler.edu/pharmacy-pa/academic-programs/physician-assistant-features</a>

University of Saint Francis, Fort Wayne, IN program website <a href="http://www.sf.edu/healthscience/pa/index.shtml">http://www.sf.edu/healthscience/pa/index.shtml</a>

# **Findings**

As the following section demonstrates there is both a primary care manpower shortage in Indiana and as well pent up demand for PA educational opportunities within the state.

As of January 2009, 39 of 92 Indiana counties (42%) were officially Primary Care Health Professional Shortage Areas (HPSA). Virtually half of all Indiana counties bear the designation of a MUA or a MUPA region. Although the Indiana University School of Medicine is the only medical school in Indiana and one of the largest in the country with nearly 350 students graduating annually, the state's ratio of primary care providers to patients remains one of the lowest in the country. In fact, the Bureau of Health Professions report placed Indiana 18th out of 50 states for physician: patient supply overall and with only 1.7 physician assistants per 100 physicians, it ranked 47th among states in the ratio of PA: physicians. When coupled with the increasing proportion of women in medicine who typically work fewer hours per year than male colleagues, the number of physician work hours is increasing less rapidly than the absolute number of physicians, resulting in an overall decrease in providers for the state. The most recent Bureau of Health Professions' report entitled The Physician Workforce: Projections and Research into Current Issues Affecting Supply and Demand (2008) discusses non-physician providers (NPC) as both complementary to and potential competition for physicians while also noting that PA's and NP's are disproportionately employed in rural areas unattractive to physicians and projecting the need for a 50% increase in their number by 2020.

At present there are two accredited physician assistant programs operating in Indiana, one at Butler University in Indianapolis and one in Fort Wayne at the University of St. Francis. Both are relatively small and combined they graduate approximately 75 students each calendar year. Both programs award master's degrees upon completion of their respective course of studies. Although specific data is not available regarding deployment of graduates of these programs, the need for medical professionals in Indiana, especially as in this case physician assistants cannot be met by two private institutions with limited production capacity.

Nationally, graduate PA programs report an average of 850 applicants each admissions cycle with some reporting as many as 1100. Butler reported about 800 applicants for its class of 60 students last year. Nationally seventy-two percent of all PA programs use the Centralized Application Service for Physician Assistants (CASPA), which processed over 11,000 discrete applicants last year. As to the qualifications of these applicants, CASPA reports an average undergraduate GPA of approximately 3.4 with health care experience averaging four (4) years of full-time activities. Clearly there is no shortage of well qualified applicants with an expressed interest in living in Indiana while receiving their PA education.

Indiana University, as the only university hosting a School of Medicine and the state's premier physical and occupational therapy programs, is a logical home for a graduate level physician assistant program. It is also clear in recent conversations and in the author's prior experience as an Indiana resident that although the state has many fine private institutions there is strong loyalty to IU across its citizenry that will translate into a preference for this institution for many potential applicants. It is equally clear that more physician assistants are necessary to help address access to medical care in the state with a significant health provider shortage and the inability of the two existing programs to fill the PA gap. Regarding IU's potential attractiveness to applicants, two factors in particular play to IU's strengths:

- 1) that a state institution is financially a better choice for a resident student, particularly in a time of economic instability and
- 2) the increasingly sophisticated applicants are attracted to programs based in academic health centers for their breath of educational opportunities and services and IU would be attractive to out-of-state students because of its location in an academic medical center in a city of moderate size.

Next to consider is the ability of the University and the School of Health and Rehabilitation Sciences to provide an appropriate venue for the education and training of PAs. The School of Health and Rehabilitation Sciences (SHRS) houses the graduate programs previously housed within the School of Medicine. As such it is home to Physical Therapy, Occupational Therapy, Nutrition and Dietetics, and a doctoral program in health and rehabilitation sciences. The curriculum of some of these programs contains components that will be required in a physician assistant curriculum. For example, basic sciences such as gross anatomy and physiology are common to most graduate health professions programs. In addition to these common curricular components contained within SHRS, the School of Nursing has several advanced practice nursing programs that also share common curricular components such as pharmacology. The existence of these courses on the IUPUI campus means that qualified instructors are already identified who may in turn be available for instruction to the PA

students. Potential cross listing of courses could result in considerable cost saving by reducing duplication in required courses. However there is a caveat that must be attended to in attempting to share courses across multiple disciplines. Physician assistant curricula must be clinically oriented and sufficiently broad with sufficient depth to ensure that the students are adequately prepared in all requisite areas. In fact physician assistant education more closely approximates the first two years of medical school than does any other health-related profession. For example pharmacology courses for physician assistant students covers all classes of drugs, across all age groups and provides instruction in therapeutics for both acute and chronic disorders while pharmacology courses for nurse practitioners tends to focus on either acute or chronic care but not both. Should a combined course be pursued attention must be paid to ensuring that the physician assistant students receive appropriate instruction.

The majority of a physician assistant curriculum is instruction in the clinical and behavioral medical sciences. Typically this instruction draws on academic and community physicians and physician assistants to ensure that instruction is current and relevant to the physician assistant students' needs. Since the program could reasonably draw on School of Medicine faculty as well as community physicians and physician assistants who may have taught Butler PA students it is unlikely that a PA program at IUPUI would have difficulty in identifying faculty to teach the clinical medical sciences. In fact since the University hospital does not currently utilize physician assistants and since PAs have at present a minimal presence within the IUPUI system, academic faculty teaching the PA students can only enhance their understanding of both PA education and PA practice parameters. For both the basic and clinical sciences one of the challenges to a PA program at SHRS will be the fact that given the current space constraints, the program will be housed off the main campus. Several sites are under consideration one of which is approximately 20 minutes from the downtown campus. Space issues will be considered in greater detail below however the physical situation of the program cannot help but impact on the willingness or availability of SOM or other UI faculty to instruct students offsite.

Physician assistant programs are required to provide students with clinical experience in a variety of settings. Those clinical rotations are internal medicine, family medicine, psychiatry, emergency medicine, pediatrics, general surgery and women's health. These experiences must take place in outpatient and inpatient units, long-term care units and emergency/trauma centers. Given the responsibility of the SOM to place approximately 720 third year fourth-year students in the Indianapolis, IUPUI system, it will be difficult for the PA faculty to identify appropriate clinical training sites for its students in the greater Indianapolis area. Methodist Hospital, a part of the Clarian health care system served as the primary clinical site for the Butler University PA program. Recently however Methodist reduced its relationship to Butler to that of the standard affiliation agreement. The good news for a PA program is that the Clarian

affiliation now gives priority to IU students in arranging clinical placements. While that priority for IU students implies that an IU PA Program might accommodate clinical placements for their students, the sheer number of medical students to be accommodated suggests that PA program will not be able to depend on the Clarian system as a major component of its clinical training. St. Vincent's system, on the other hand, has 18 hospitals across Central Indiana covering 45 counties and currently accommodates medical, pharmacy, nursing students and residents. This system, which values medical education as a component of its mission and is interested in expanding the number of students it accommodates, may be a primary site for the development of appropriate clinical rotations for physician assistant students. In addition IU operates eight regional centers, largely hospital-based, scattered throughout the state, which may also serve as clinical training sites for physician assistant students particularly as some of those sites may offer some housing opportunities within the communities. The challenge of identifying and nurturing clinical experiences for physician assistant students are common to all PA programs, particularly those where medical students compete for the same rotations within a hospital system. Given the need for rural health care providers and the mission of the Indiana at University health related schools to its citizenry, identifying sites outside the greater Indianapolis area may advance this mission by developing a decentralized model of clinical training for the PA students placing them in small community hospitals not previously thought of as teaching facilities. While these difficulties need not be a deal breaker as SHRS considers implementing a PA program, it is an important responsibility for the parent organization to be mindful of as they move forward. The accreditation standards require that the sponsoring institution demonstrate its ability to provide adequate and appropriate clinical training sites for its students. Finally in a state with a paucity of graduate PAs in practice and therefore relative unfamiliarity with PAs and their scope of practice in potential preceptors, it will be incumbent upon a young PA faculty to provide appropriate training to preceptors to ensure they understand the education of and the clinical practice needs of physician assistant students while rotating with them. The need for preceptorship development and training will need to be factored into the PA faculty work load.

Because of the paucity of space the program is likely to locate its offices and classrooms distant from the main, downtown campus. While the potential sites explored to date provide the opportunity to design space based entirely on the educational needs of the program and its faculty, location off-campus means that the program and SHRS will be responsible for leasing this space and the costs associated with such a lease. It also means that the students will have limited opportunity to mix with other SHRS students, or with other IUPUI students. This failure to intermingle with other health care science students will not contribute to the PA students' sense of belonging to either SHRS or IU and will need specific activities on the part of the school administration to overcome. Ultimately a failure to connect, to develop an allegiance to a university or a school tends to result in an inactive alum who contribute little time and fewer dollars to alumni activities. Most importantly it deprives all members of the "health care

team" the opportunity to learn each other's skills and abilities.

Indiana University faces several major resource challenges in developing and implementing a master's level physician assistant program in the School of Health and Rehabilitation Sciences. Whenever a new program is initiated the issue of resource allocation and the potential impact on the pre-existing programs must be addressed. It is the nature of older programs to be concerned that new programs not result in a change to the older program's resources. As the new program in the SHRS, it is important that neither the students nor the faculty should be denied equitable access to resources on the basis of current space or resource constraints. As an example, cadaver dissection based anatomy does not appear to be available to the physician assistant students for this very reason. While accreditation standards do not require such a dissection-based course, the availability of this type course to PT, OT, and Med students may be viewed by applicants and students alike as an issue of educational equality. While there may be reasonable alternatives in the form of plastinated cadavers, ultimately the decision should rest not on space or resource constraints but on the best educational model to prepare competent providers.

Another example of educational equity is the Simulation Center which the School of Medicine in partnership with the School of Nursing is in the process of opening. This center could provide physician assistant students with extraordinary opportunity for simulated training in physical assessment, emergency care and procedural experiences. Unfortunately because SHRS was not initially included in the discussions of the design or use of the simulation center, there is no guarantee that the facilities will be available to them. However a physician assistant program could provide a helpful bridge to the incorporation of all the SHRS programs into simulations in the lab advancing interprofessional education within the academic health science center. The educational technology embedded in this lab will make it worth the potential challenge facing the physician assistant faculty to ensure opportunities for their students in this lab setting.

Regardless of the specific location, the program will require at least two fully electronically equipped lecture-type classrooms, several small group rooms which may double as physical examination rooms, a multi-purpose lab room that can be arranged to facilitate cadaver study, procedure labs such as casting and splints and has surgical sinks. Ultimately the anticipated maximum enrollment will dictate the need for specific room numbers. If the maximum enrollment anticipated is 60 students per cohort then projecting lab groups of no more than 10 would suggest that 6 exam and 6 small group rooms would be ideal. Making the small group rooms of sufficient size to house a 10 person conference-type table, with a sink and exam table to the side would decrease the overall square footage required while accommodating the instructional needs of the students. Should the decision be made to start with fewer than 60 students, then a stepwise approach to the small rooms might also be reasonable. For example, if the program matriculates 30 students its' first year, then only 3 rooms would be

necessary, adding rooms as finances are available and student numbers increase.

A medical library available to the PA student is of paramount importance in assuring access to the most up to date clinical information. One of the organizing principles of the IUPUI system, responsibility centered management, means that the School of Medicine has responsibility for the health sciences library which is administratively distinct from the main University Library. While that ensures that the medical collection is contemporary it also means that some subscription databases may not be available to students within other IU schools. For example, "Up-To-Date" is a subscription-based system which may require that SHRS negotiate with and reimburse the SOM to ensure that PA students have appropriate access.

Just as it is incumbent on the institution and school to insure educational parity, so it is equally important to insure faculty parity where rank and promotion are concerned. The accreditation standards for physician assistant education require that core PA faculty be certified physician assistants. A consistent problem for new programs has been the ability to recruit and retain faculty with the appropriate credentials who meet the institution's expectation for faculty rank with the opportunity for advancement and tenure. Most but not all physician assistants who would be interested in teaching full time have terminal masters' degrees. Although some physician assistants have gone on to receive doctorates the percentage of the PA population who have done so mirrors the national average of approximately 3%. Academic Handbook and in conversation with the leadership of the SHRS, Indiana University then has two problems to consider:

- 1) the institutional expectation that faculty preparing Masters degree students will themselves have doctorates.
- 2) the paucity of doctorally prepared physician assistants;

In addition, the rank, tenure and promotional requirements of the SHRS and Indiana University have rules and regulations supporting their expectation of such doctoral preparation. The likelihood of recruiting PA faculty without doctorates suggests that their appointments would be in the Clinical Track faculty or that they must accept appointments below that of Assistant Professor, neither of which provides them with the right to vote on governance issues or the academic freedom protections afforded "regular" tenured or tenure track faculty. The accreditation standards for physician assistant programs state that PA faculty must have the same rights, privileges and responsibilities as other faculty in the institution. Some institutions have dealt with this problem by modifying their criterion for appointment and advancement; others have created systems which support faculties' efforts to obtain doctoral preparation through release time and financial support.

Initial funding for the program's start up costs can be a significant challenge to the institution. Because the accrediting body expects the program to be fully developed with all full-time faculty hired, instructors identified, syllabi and examinations written, educational resources obtained and preliminary agreements with clinical rotation sites completed the startup costs prior to an accreditation site visit can easily be upwards of \$500,000. Given the need to lease, renovate and equip educational and faculty space, the cost for IU could easily climb higher. While the potential return on investment to a program can be high it can be difficult to fund this effort for a year or more prior to any tuition revenue. Given this stepped nature of a PA curriculum it is often two or more years before full enrollment can be achieved generating sufficient revenue to fund the ongoing life of the program.

Nationally, the 2007-08 Annual Report produced by the Physician Assistant Education Association reported an average annual program budget of approximate \$1.37 million, the majority of which was derived from tuition and fees. Using the least squares regression analysis to estimate the relationship between budget and the number of professional students, IU should anticipate a budget of approximately \$1.088 million with 50 total enrollees (program budget = 794.5 + 5.87 \* 50) or a direct cost per student of approximately \$21,760 per year. It should be noted that these figures do not include overhead when covered by the institution (heat, light, etc.), adjunct or faculty costs beyond the "core" faculty and preceptor costs if they are compensated by the program. Also important to consider is the wide variation in annual budgets (ranging from a low of \$106,000 to a high of \$2.4 million) from which these figures are derived. Thus, IU should anticipate a higher cost per student to reflect the additional expense associated with leased space.

The same report indicated that the mean total program tuition for resident students in PA programs (N = 108) was \$48,649 in 2007 while the non-resident tuition was \$57,280 (N=106). Total costs (tuition, books, fees and equipment) were reported as \$55,447 (resident) and \$64,078 (non-resident) in 2007. Since nearly 90% of all PA students receive financial aid, both subsidized and unsubsidized, the average indebtedness upon completion of studies is estimated at approximately \$60,000.00 (2006).

# **Summary**

In summary on the positive side of the ledger, the need for a PA program is self evident and there is no reason to suppose that an IU program would not draw on the previously unmet need of a group of applicants who want to attend a PA program and also want to attend their state institution. The ability of the University to meet the basic educational requirements of the PA program is not in question but will be organizationally challenging because of the compartmentalization of the schools. On the other side of the ledger the physical resource needs of the program as addressed above will require thoughtful consideration to identify an appropriate geographic location as will the considerable financial investment needed to develop and shepherd the program through the accreditation process. Ensuring an organizational structure which supports the inclusion of PA faculty in the academic life of the school and provides them with adequate opportunity for promotion presents the final

challenge. Finally, in reviewing the nature of the highly ranked physician assistant programs in the country it is worth noting that without exception they are all housed in academic medical centers, as an IU program would be, in contradistinction to the other IN programs.

All of the challenges outlined above can be overcome with reasonable efforts on the part of the administration to address them. The sites under current consideration for location of the PA program have all been viewed with an eye to mitigating the distance both geographic and psychic between the main and an adjunct campus. Likewise the SHRS faculty are aware of the issues in the current tenure and promotion criterion. Mindful that the terminal degree for physician assistants is the master's degree if the SHRS faculty are not able to address the potential disparity in PA faculty appointment and promotion then it is incumbent on the school to identify ways in which PA faculty can obtain doctoral degrees.

Ultimately there is no reason that the School of Health and Rehabilitation Sciences at Indiana University cannot develop an excellent PA program which will be attractive to not only residents of Indiana but also candidates from outside the state. With appropriate support from the administration PA faculty can identify and develop long-term relationships with clinical entities outside the immediate Indianapolis area which will serve to strengthen IU's position in the regional communities. It is equally important that PA students in their didactic phase be afforded the same opportunities for excellence in education as those students in older more established programs currently experience. Located on an academic health science campus with a growing reputation, it seems likely that a program at IU would rapidly rise in reputation and national ranking.

#### **Recommendations:**

- 1. Explore space options that would ensure adequate educational facilities for faculty, staff and students with reasonable proximity to campus to provide interaction with other health professions students and faculty, and limit the necessity for travel to and from the main campus for UI faculty.
- 2. If gross anatomy including dissection is not possible given the space constraints, consider implementing an integrated, longitudinal curriculum where anatomy instruction is provided within an organ system approach using plastinated cadavers. These organ system modules would incorporate the medical sciences (anatomy, physiology, pathophysiology) appropriate to the system, with the physical examination, imaging, diagnostic and therapeutic modalities appropriate to generate and validate a diagnosis.

If the use of plastinated cadavers is considered, consultations with schools that are using them is recommended. They represent considerable investment and anecdotal reports suggest they have not had the longevity expected

- 3. Given the realities of the academic credentials of most physician assistant faculty, the SHRS should revisit its' rank and tenure requirements for full-time faculty to ensure the appropriate incorporation of non-doctorally prepared faculty into the life of the school. Recognizing that the prestige of a school is often viewed by the percent of doctorally prepared faculty then if this is not possible, the following recommendation becomes critically important.
- 4. Create a mechanism to fund faculty's doctoral studies to ensure that PA faculty are not disenfranchised by the current appointment and promotion policies. This could be in the form of a loan to the individual with the expectation that it be forgiven after a given number of year's employment with IU. Given the nature of PA program work, it should also include release time.
- 5. The IU medical education system uses a regional approach which may work to the PA program's advantage. The program should consider the rural dissemination model used by the Southern Illinois University PA program which sends its' students to a single rural site for the duration of the clinical year. Each of these sites has the facilities to provide all the required rotations within the town or city. Students live and work in the area increasing the likelihood that they will remain upon graduation. Web based conferences are conducted on the main campus along with regular site visits by the program faculty. At the time the program was designed, such teleconferences required a significant investment on the part of the program; however, given the significant decrease in web cams and VOIP such as Skype, this should not be unduly expensive.