January 22, 2013

Board of Governors, State University System of Florida

Request to Offer a New Degree Program

University of South Florida
University Submitting Proposal

May 2015
Proposed Implementation Term

Morsani College of Medicine
Name of College(s) or School(s)

Internal Medicine
Name of Department(s)/ Division(s)

Physician's Assistant
Academic Specialty or Field

Master's Degree in Physician Assistant Studies
Complete Name of Degree

51.0912
Proposed CIP Code

The submission of this proposal constitutes a commitment by the university that, if the proposal is approved, the necessary financial resources and the criteria for establishing new programs have been met prior to the initiation of the program.

_____
Date Approved by the University Board of Trustees

_____   _____
President   Date

_____   _____
Signature of Chair, Board of   Date
Trustees

_____   _____
Vice President for Academic   Date
Affairs

Provide headcount (HC) and full-time equivalent (FTE) student estimates of majors for Years 1 through 5. HC and FTE estimates should be identical to those in Table 1 in Appendix A. Indicate the program costs for the first and the fifth years of implementation as shown in the appropriate columns in Table 2 in Appendix A. Calculate an Educational and General (E&G) cost per FTE for Years 1 and 5 (Total E&G divided by FTE).

Implementation Timeframe	Projected Enrollment (From Table 1)		Projected Program Costs (From Table 2)				
	HC	FTE	E&G Cost per FTE	E&G Funds	Contract & Grants Funds	Auxiliary Funds	Total Cost
Year 1	20	24	$62,310	$1,518,500	$0	$0	$1,518,500
Year 2	55	75					
Year 3	100	119					
Year 4	125	141					
Year 5	135	145	$23,337	$3,380,324	$0	$0	$3,380,324

Note: This outline and the questions pertaining to each section __must be reproduced__ within the body of the proposal to ensure that all sections have been satisfactorily addressed. Tables 1 through 4 are to be included as Appendix A

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and not reproduced within the body of the proposals because this often causes errors in the automatic calculations.

INTRODUCTION

I. **Program Description and Relationship to System-Level Goals**

   A. **Briefly describe within a few paragraphs the degree program under consideration, including (a) level; (b) emphases, including concentrations, tracks, or specializations; (c) total number of credit hours; and (d) overall purpose, including examples of employment or education opportunities that may be available to program graduates.**

   (a)   Level: Masters

   (b)   Emphasis: The program will be distinctive in that our goal is to specifically attract and recruit US military veterans, active duty military as well as civilian students to the program. As such, this program will be an important component to our Veterans Reintegration and Resilience initiative. The Physician Assistant (PA) program at USF will emphasize primary care and offer elective sequences in primary care, mental health management and technical and procedural based interventions. Specific curriculum will include content in understanding and influencing social and environmental determinants of health and how to support military culture and families – all in an active, clinically-relevant fashion.

   The USF PA program will also target students who are geographically bound to the Tampa Bay area and pending approval from the Accreditation Review Commission on Education for the Physician Assistant, Inc. (ARC-PA), we will also explore the ability to offer a decompressed first year curriculum offered via face-to-face and blended learning methodologies.

   (c)   Credit hours: Total 103 credit hours: 39 credit hours plus 64 credit hours for clinical rotation weeks.

   (d)   Overall purpose: With the impending physician shortages and the Patient Protection and Affordable Care Act with its emphasis on increased coverage and disease prevention, there will be a greater reliance on the services of mid-level providers such as physician assistants. As such, PA employment is expected to grow significantly between 2008–2018. Physician assistants with their generalist education, commitment to team-based practice, and relatively short training are ideally positioned to address both the short-term and long-term needs of the United States and the State of Florida. A PA program at the USF Morsani College of Medicine (MCOM) will help increase the number of licensed medical providers in Florida allowing for improved access to quality medical care for more Floridians.

   B. **Describe how the proposed program is consistent with the current State University System (SUS) Strategic Planning Goals. Identify which specific goals the program will directly support and which goals the program will indirectly support. (See the SUS Strategic Plan at http://www.flbog.org/about/strategicplan/)**

This new PA program is fully aligned with several of the State University System Strategic Planning Goals. Specifically, this PA program will increase the number of degrees awarded in an existing critical needs STEM area by graduating 120 new PA graduates – when program is at full capacity. With a wholly new curriculum which will emphasize the needs of active military and returning veterans and their families, we fully expect this program will meet the goal of becoming an academic program with state, national and or international preeminence and one which increases degree productivity and program efficiency by including returning adult students. By working closely with our VA partner hospitals and many community health providers this new program will meet the goals of increasing and strengthening the quality and recognition of commitment to community and business engagements. Further, because we will specifically target students who are current residents of the state, this program will likely see graduates who chose to remain in Florida after their education, thereby meeting the goal of increased community and business workforce.

This program is aligned with the USF system strategic plan goals of Academic Excellence, Student Access and Student Success, Impactful Research, Economic Leadership and Community Engagement and Increased Academic and Administrative Collaborations.

C. **If the program is to be included in an Area of Programmatic Strategic Emphasis as described in the SUS Strategic Plan, please indicate the category and the justification for inclusion.**

The Areas of Programmatic Strategic Emphasis:
1. Critical Needs:

• Health Professions

The United States has long suffered from a shortage of primary care health professionals. The Association of American Medical Colleges estimated the nation would have a shortage of approximately 21,000 primary care physicians by 2015. Without action, experts project a continued primary care shortfall due to the needs of an aging population, and a decline in the number of medical students choosing primary care. Concomitant, the Patient Protection and Affordable Care Act expands coverage. There will be more patients waiting to see fewer and fewer doctors. The Association of American Medical Colleges projects that by 2015, in just three years, we'll be 63,000 (which includes the shortage of primary care physicians) physicians short of the number we need. This number could double by 2025.

Most experts believe that this shortage can be alleviated, not just by having more physicians, but by having physicians work in teams with other less highly trained specialists who can deliver good primary care

such as physician assistants and nurses. A physician assistant is a healthcare professional who is authorized by the state/province to practice medicine as part of a team with the direct or, more commonly, indirect supervision of a physician. Not only can PAs help reduce the demand on primary care doctors, they can they can extend the reach of physicians. Further, because all PAs are trained as generalists, they're able to provide some of that coordination primary-care-like services even if they're in a specialty practice.

It takes a long time to train a fully qualified physician. Training for PAs, however, is typically 24-30 months so PAs with a master's degree can enter the workforce more quickly.

2. Economic Development:
   • Globalization
   • **Regional Workforce Demand**
   According to Lisa Shock, CEO of Hillsborough-based Utilization Solutions in Healthcare, "As millions more become insured through the efforts of healthcare reform, the question of who will treat these patients is a real concern. The United States has a deficit of nearly 40,000 primary care physicians, and this situation is expected to worsen as the population continues to age and as more patients enroll in healthcare exchanges. Upcoming PA students will be viewed as valued professionals in the nation's future healthcare workforce and therefore eligible for increased financial support through the National Health Service Corps' scholarship and loan repayment programs. Tapping these health professionals' expertise and ability in a primary care capacity will undoubtedly improve access to care and also promote workforce diversity."[11] This, coupled with research that suggests that the number of and availability of PA programs drives where a PA workforce is geographically distributed, leads to a compelling argument to add a PA educational program in the Tampa Bay area. [3]

   The occupational group with the most online ads in July 2012 (as compiled by the Help Wanted OnLine[TM] data series from The Conference Board) were healthcare practitioners. Online job demand for STEM was strongest in the large metro areas, led by Hillsborough County, Miami-Dade County, Orange County, Broward County, Palm Beach County, and Duval County.

Top Advertised STEM Occupations for Florida	Online Ads July 2012	Online Ads July 2011
Florida Total Ads	**65,000**	**56,588**
Registered Nurses	17,553	14,063
Web Developers	4,786	3,694
Computer Systems Analysts	4,348	3,713
Computer Support Specialists	3,135	2,892
Accountants	3,041	2,533
Network and Computer Systems Administrators	2,487	2,149
Computer Software Engineers, Applications	2,389	1,886
Financial Managers, Branch or Department	1,831	1,848
Computer Programmers	1,709	1,560
Industrial Engineers	1,382	1,443
Information Technology Project Managers	1,273	1,127
Software Quality Assurance Engineers and Testers	1,241	990
Physician Assistants	1,023	647
Database Administrators	1,012	884
Computer and Information Systems Managers	979	833
Computer Systems Engineers/Architects	872	933
Financial Analysts	857	685
Auditors	772	674
Family and General Practitioners	764	857
Pharmacists	624	944

SOURCE: The Conference Board, Help Wanted OnLine, prepared by the Florida Department of Economic Opportunity, Labor Market Statistics Center.

3. Science, Technology, Engineering, and Math (STEM)

STEM Jobs In Demand, Statewide Summary—July 2012

STEM Occupational Demand by Major Groups

Major Group	Occupation	Online Ads July 2012	Online Ads July 2011	Percentage Change
Top Advertised STEM Occupations by Major Group				
Healthcare Practitioners and Technical Occupations		25,796	21,680	19.0%
	Registered Nurses	17,553	14,063	
	Physician Assistants	1,023	647	
	Family and General Practitioners	764	857	
Computer and Mathematical Occupations		25,164	21,563	16.7%
	Web Developers	4,786	3,694	
	Computer Systems Analysts	4,348	3,713	
	Computer Support Specialists	3,135	2,892	
Business and Financial Operations Occupations		5,168	4,276	20.9%
	Accountants	3,041	2,533	
	Financial Analysts	857	685	
	Auditors	772	674	
Architecture and Engineering Occupations		5,152	5,276	-2.4%
	Industrial Engineers	1,382	1,443	
	Electrical Engineers	624	657	
	Mechanical Engineers	611	652	
Management Occupations		3,969	3,759	5.6%
	Financial Managers, Branch or Department	1,831	1,848	
	Computer and Information Systems Managers	979	833	
	Treasurers and Controllers	464	390	
Life, Physical, and Social Science Occupations		871	833	4.6%
	Medical Scientists, Except Epidemiologists	403	425	
	Biological Technicians	99	93	
	Chemists	83	74	
Education, Training, and Library Occupations		749	798	-6.1%
	Health Specialties Teachers, Postsecondary	200	281	
	Nursing Instructors and Teachers, Postsecondary	165	158	
	Biological Science Teachers, Postsecondary	80	89	
Sales and Related Occupations		289	250	15.6%
	Sales Engineers	289	250	
Installation, Maintenance, and Repair Occupations		247	233	6.0%
	Medical Equipment Repairers	151	152	
	Electrical and Electronics Repairers, Commercial and Industrial	60	32	
	Computer, Automated Teller, and Office Machine Repairers	36	49	
Arts, Design, Entertainment, Sports, and Media Occupations		174	139	25.2%
	Broadcast Technicians	121	98	
	Commercial and Industrial Designers	33	25	
	Sound Engineering Technicians	20	16	
Production Occupations		59	81	-27.2%
	Numerical Tool and Process Control Programmers	58	81	
	Nuclear Power Reactor Operators	1	-	
Transportation and Material Moving Occupations		8	12	-33.3%
	Traffic Technicians	8	12	

SOURCE: The Conference Board, Help Wanted OnLine, prepared by the Florida Department of Economic Opportunity, Labor Market Statistics Center.

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STEM Jobs In Demand, Statewide Summary— July 2012
Counties and Cities With the Most Ads for STEM

County	City	Online Ads July 2012	Online Ads July 2011
Hillsborough County		**9422**	**7868**
	Tampa	8385	7161
	Brandon	461	219
	Temple Terrace	276	251
Miami-Dade County		**8216**	**6890**
	Miami	6529	5532
	Hialeah	521	449
	Coral Gables	388	255
Orange County		**7483**	**5875**
	Orlando	6758	5359
	Winter Park	369	212
	Maitland	222	159
Duval County		**6002**	**5146**
	Jacksonville	5892	5067
	Jacksonville Beach	62	34
	Mayport	32	19
Palm Beach County		**5600**	**4520**
	Boca Raton	1784	1193
	West Palm Beach	1491	1345
	Delray Beach	415	403
Broward County		**5557**	**4905**
	Fort Lauderdale	2808	2484
	Hollywood	427	380
	Miramar	427	483
Pinellas County		**4402**	**3812**
	Saint Petersburg	2349	1872
	Clearwater	986	875
	Largo	425	336

SOURCE: The Conference Board, Help Wanted OnLine, prepared by the Florida Department of Economic Opportunity, Labor Market Statistics Center.

> **D. Identify any established or planned educational sites at which the program is expected to be offered and indicate whether it will be offered only at sites other than the main campus.**
>
> The program will be offered at the University of South Florida Morsani College of Medicine, on the Tampa (main) campus only.

INSTITUTIONAL AND STATE LEVEL ACCOUNTABILITY

II. **Need and Demand**

> A. **Need: Describe national, state, and/or local data that support the need for more people to be prepared in this program at this level. Reference national, state, and/or local plans or reports that support the need for this program and requests for the proposed program**

which have emanated from a perceived need by agencies or industries in your service area. Cite any specific need for research and service that the program would fulfill.

Nationally, employment of PAs is expected to increase 30% from 2010 to 2020 – much faster than the average for all occupations. The Centers for Medicare and Medicaid Services maintains the National Provider Identifier (NPI) dataset, which listed approximately 70,000 practicing PAs in 2010. The estimate represents approximately 10,000 fewer practicing PAs than projections by the American Academy of Physician Assistants (AAPA) in a 2008 survey.[2] For job potential, Forbes rated physician assistant No. 1 and nursing No. 7 among master's degree programs.[4] Physician assistants and nurses made the U.S. News and World Report list of the top 50 best careers, and physician assistant was ranked No. 9 among top jobs for working parents by CNN Money.[5,6] Further, the median annual wage for physician assistant in May 2010 was reported as $86,410 by the US Bureau of Labor Statistics.

B. **Demand: Describe data that support the assumption that students will enroll in the proposed program. Include descriptions of surveys or other communications with prospective students.**

USF has a Pre-PA society with more than 30 active members and an active Facebook group showing 166 members under the name "Pre-Physician Assistant Society USF". Faculty advisors in the USF College of Art and Sciences have indicated that many of the students they counsel are interested in a PA program and most all would be very interested in pursuing such a degree at USF if such a program became available.

C. **If substantially similar programs (generally at the four-digit CIP Code or 60 percent similar in core courses), either private or public exist in the state, identify the institution(s) and geographic location(s). Summarize the outcome(s) of communication with such programs with regard to the potential impact on their enrollment and opportunities for possible collaboration (instruction and research). In Appendix B, provide data that support the need for an additional program as well as letters of support, or letters of concern, from the provosts of other state universities with substantially similar programs.**

	Type of Institution	Geographic Location
University of Florida	Public, Non-Profit	Gainesville
NOVA Southeastern	Private	Ft. Lauderdale, Jacksonville, Fort Meyers
Barry University	Private	Miami Shores, St. Petersburg, St. Croix, Virgin Islands
Miami Dade	Public, Non-Profit	Miami
South University	Private, For-Profit	Tampa
Keiser University	Private, For-Profit	Ft. Lauderdale
University of St. Augustine for Health Sciences	Private	St. Augustine

The University of Florida is the only SUS School which offers a Master's degree in Physician Assistant Studies. As such, a letter from Stephen Klasko, Dean of the Morsani College of Medicine was sent to Dr. Michael Good, Dean of the University of Florida's College of Medicine in November 2012. The letter provided an overview of the proposed program as well as the key reasons USF is pursuing the development of a PA program. Dr. Klasko indicated he welcomed the opportunity to collaborate with Dr. Good on this and other initiatives. We have not received any feedback thus far.

D. **Use Table 1 in Appendix A (A for undergraduate and B for graduate) to categorize projected student headcount (HC) and Full Time Equivalents (FTE) according to primary sources. Generally undergraduate FTE will be calculated as 40 credit hours per year and graduate FTE will be calculated as 32 credit hours per year. Describe the rationale underlying enrollment projections. If, initially, students within the institution are expected to change majors to enroll in the proposed program, describe the shifts from disciplines that will likely occur.**

The enrollment projections show in Table 1 of Appendix A reflect our goal and vision to primarily recruit students who are geographically bound to the Tampa Bay area - both for students who have recently graduated with a bachelor's degree from USF as well as students from agencies/industries – particularly the military. We expect that less than half of all recruited students will be students who graduated from other Florida public universities or who are from out-of-state. We do not expect student within USF to change majors to enroll in the proposed program.

E. **Indicate what steps will be taken to achieve a diverse student body in this program. If the proposed program substantially duplicates a program at FAMU or FIU, provide, (in consultation with the affected university), an analysis of how the program might have an impact upon that university's ability to attract students of races different from that which is predominant on their campus in the subject program. The university's Equal Opportunity Officer shall review this section of the proposal and then sign and date in the area below to indicate that the analysis required by this subsection has been reviewed and approved.**
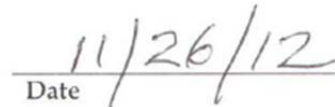
We will advertise this program broadly throughout Florida and the US in all publications, including those that focus on student diversity and academic programs. This will include Diverse Issues in Higher Education (formerly Issues in Higher Education) http://www.diverseeducation.com/index.asp and Hispanic Outlook Magazine http://www.hispanicoutlook.com/. We also will utilize the Voice of Hispanic Higher Education magazine. For international and domestic students we will advertise in the International Educator magazine, the Chronicle of Higher Education, and the Connections magazine through EducationUSA.

We will utilize the College's existing marketing and recruitment strategies through professional associations and conferences and other mediums and venues, such as social networking, together with collaborating with other institutional Colleges and the Office of International Affairs to promote the program. We will utilize the Hispanic Association of Colleges and Universities, Florida/Georgia Louis Stokes Alliance for Minority Participation, National McNair Scholars Research Conference, the American Biomedical Research Conference for Minority Students and the

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Southern Regional Education Board meetings and programs. We will consult with USF's partnering international institutions in China, the United Kingdom, India and the City of Knowledge in Panama.

Ted Williams   _11/26/12_

Signature of Equal Opportunity Officer   Date

III.   **Budget**

    A. **Use Table 2 in Appendix A to display projected costs and associated funding sources for Year 1 and Year 5 of program operation. Use Table 3 in Appendix A to show how existing Education & General funds will be shifted to support the new program in Year 1. In narrative form, summarize the contents of both tables, identifying the source of both current and new resources to be devoted to the proposed program. (Data for Year 1 and Year 5 reflect snapshots in time rather than cumulative costs.) If the university intends to operate the program through continuing education on a cost-recovery basis or market rate, provide a rationale for doing so and a timeline for seeking Board of Governors' approval, if appropriate.**

        The PA Program's I&R costs for year 1 are projected to be $1,518,500. The majority of the costs are estimated to come from personnel expenses (88%) with 5.10 Faculty FTE, 7.95 A&P FTE, and 1.00 USPS FTE being on board before May 1, 2015. We anticipate that E&G Tuition and start-up funding will be the sole funding sources with Tuition bringing in $468,000 and start-up funding at $1,050,500 for year 1. If start-up funding is available from either existing E&G base or the infusion of a non-recurring appropriation from the state, the E&G cost per FTE will be approximately $62k in year 1. If a non-E&G source is used for start-up needs, the E&G cost per FTE will drop to approximately $19k per FTE.

        By year 5, I&R costs are projected to be $3,380,324 which will support 17.48 Faculty FTE, 8.95 A&P FTE, and 1.50 USPS FTE on a continual basis. E&G Tuition is expected to be the sole source of funding with $3,136,007 of continuing base support and $244,317 being generated from expected tuition increases.

        These projections are dependent on the USF Board of Trustees approving a separate state graduate tuition rate for this program (similar to what is currently in place at the University of Florida). If, however, a separate state-tuition rate is not approved, we plan to make this program self-funded.

    B. **If other programs will be impacted by a reallocation of resources for the proposed program, identify the program and provide a justification for reallocating resources. Specifically address the potential negative impacts that implementation of the proposed program will have on related undergraduate programs (i.e., shift in faculty effort, reallocation of instructional resources, reduced enrollment rates, greater use of adjunct faculty and teaching assistants). Explain what steps will be taken to mitigate any such impacts. Also, discuss the potential positive impacts that the proposed program might have on related undergraduate programs (i.e., increased undergraduate research opportunities, improved quality of instruction associated with cutting-edge research, improved labs and library resources).**

We believe that adding this program will add another health care related field of choice for students who are interested in health care professions but who do not meet the more rigorous undergraduate science requirements for the MD degree program.

We do not anticipate that any existing programs in the College of Medicine will be adversely impacted by the proposed program or that exiting educational activities will be impacted by any reallocation of resources.

C. **Describe other potential impacts on related programs or departments (e.g., increased need for general education or common prerequisite courses, or increased need for required or elective courses outside of the proposed major).**

There should be no impacts on related programs or departments in the Morsani College of Medicine. All accepted students will be required to have completed a bachelor's degree. The program will be delivered by a number of existing USF Health faculty together with the recruitment of selected new faculty. The proposed enrollment should not place undue burden on faculty commitment nor the institutional budget.

D. **Describe what steps have been taken to obtain information regarding resources (financial and in-kind) available outside the institution (businesses, industrial organizations, governmental entities, etc.). Describe the external resources that appear to be available to support the proposed program.**

We believe there may be various grant and sponsorship opportunities to assist with the funding of students and further development of this new degree program. In August 2012, Health and Human Services (HHS) Secretary Kathleen Sibelius announced $2.3 million in grants to train primary care physician assistants and help veterans transition from the military to civilian PA careers when they return home. While these awards have already been granted, we believe that there will continue to be federal funding to help support this and other veteran's reintegration initiatives.

Further, USF's Veterans Reintegration and Resilience initiative will be an invaluable asset to the new program. With its mission to provide the best care possible for our veterans and their families and a specific focus on the treatment of behavioral health disorders – one of the unique curricula elements of this PA program, we believe this new PA program will become another strong component to the USF Veteran's Reintegration Initiative.

IV. **Projected Benefit of the Program to the University, Local Community, and State**

Use information from Tables 1 and 2 in Appendix A, and the supporting narrative for "Need and Demand" to prepare a concise statement that describes the projected benefit to the university, local community, and the state if the program is implemented. The projected benefits can be both quantitative and qualitative in nature, but there needs to be a clear distinction made between the two in the narrative.

There will be considerable benefit to the Morsani College of Medicine (MCOM), USF Health and the University of South Florida with the development of this program. The

USF MCOM PA program will support many of the SUS Strategic Planning Goals as well as the University's goal to increase the number of graduates in high work force demand fields – particularly STEM disciplines. Further, this program will contribute to the Board of Governors' and USF goals to increase levels of community and business engagement. This program will broaden our partnerships with our local VA affiliates, enhance our Veterans Reintegration and Resilience initiative, and will strengthen our commitment and ties to the Villages Health System, Tampa General Hospital, and our new ties with Lakeland Regional Medical Center.

Physician assistants with their generalist education, commitment to team-based practice, and relatively short training are ideally positioned to address both the short-term and long-term needs of the nation and the state of Florida. A PA program at the MCOM will help increase the number of licensed medical providers in Florida allowing for improved access to quality medical care for more Floridians.

Additionally, we would like to develop a "*bridge*" program for qualified applicants lacking necessary prerequisites as well as a pathway for incoming USF freshman to apply to a 4 + 2 program. This type of program will allow for a direct path for qualified freshmen to acquire the necessary academic prerequisites as well as obtain hands-on clinical experience that will prepare them for the rigors of the program.

V. **Access and Articulation – Bachelor's Degrees Only**

A. **If the total number of credit hours to earn a degree exceeds 120, provide a justification for an exception to the policy of a 120 maximum and submit a separate request to the Board of Governors for an exception along with notification of the program's approval. (See criteria in Board of Governors Regulation 6C-8.014)**

Not applicable.

B. **List program prerequisites and provide assurance that they are the same as the approved common prerequisites for other such degree programs within the SUS (see the Common Prerequisite Manual at FACTS.org). The courses in the Common Prerequisite Counseling Manual are intended to be those that are required of both native and transfer students prior to entrance to the major program, not simply lower-level courses that are required prior to graduation. The common prerequisites and substitute courses are mandatory for all institution programs listed, and must be approved by the Articulation Coordinating Committee (ACC). This requirement includes those programs designated as "limited access."**

If the proposed prerequisites are not listed in the Manual, provide a rationale for a request for exception to the policy of common prerequisites. NOTE: Typically, all lower-division courses required for admission into the major will be considered prerequisites. The curriculum can require lower-division courses that are not prerequisites for admission into the major, as long as those courses are built into the curriculum for the upper-level 60 credit hours. If there are already common prerequisites for other degree programs with the same proposed CIP, every effort must be made to utilize the previously approved prerequisites instead of recommending an additional "track" of prerequisites for that CIP. Additional tracks may not be approved by the ACC, thereby holding up the full approval of the degree program. Programs will not be entered into the State University System

Inventory until any exceptions to the approved common prerequisites are approved by the ACC.

Not applicable.

C. **If the university intends to seek formal Limited Access status for the proposed program, provide a rationale that includes an analysis of diversity issues with respect to such a designation. Explain how the university will ensure that community college transfer students are not disadvantaged by the Limited Access status. NOTE: The policy and criteria for Limited Access are identified in Board of Governors Regulation 6C-8.013. Submit the Limited Access Program Request form along with this document.**

Not applicable.

D. **If the proposed program is an AS-to-BS capstone, ensure that it adheres to the guidelines approved by the Articulation Coordinating Committee for such programs, as set forth in Rule 6A-10.024 (see Statewide Articulation Manual at FACTS.org). List the prerequisites, if any, including the specific AS degrees which may transfer into the program.**

Not applicable.

INSTITUTIONAL READINESS

VI. **Related Institutional Mission and Strength**

A. **Describe how the goals of the proposed program relate to the institutional mission statement as contained in the SUS Strategic Plan and the University Strategic Plan.**

The proposed PA program is fully aligned with the State University System Strategic Planning Goals of Access and Degree Production to:
- Meet Statewide Professional and Workforce Needs
- Build World-Class Academic Programs and Research Capacity
- Meet Community Needs
- Fulfill Unique Institutional Responsibilities.

It will also respond to State University System (SUS) critical needs in health professions and regional workforce demands. The goals for PA program are a match with the USF system strategic plan goals in relation to:
- Achieving Academic Excellence
- Providing for Student Access and Student Success
- Insuring Impactful Research, Economic Leadership and Community Engagement
- Increasing Academic and Administrative Collaborations.

The PA program is being designed to meet and exceed the USF's goal to increase the number of graduates in high work force demand fields – particularly STEM-Health disciplines. Further, the PA program will contribute to the Board of Governors' continuing focus on increasing the level of community and business engagement with a focus on Florida.

This PA program will increase the number of degrees awarded in an existing critical needs STEM-Health area by graduating 120 new PA graduates each year– when the program is at full capacity. With a new curriculum which will emphasize the needs of active military and returning veterans and their families, USF fully expects this program will meet and exceed the goal of becoming an academic program with state, national and or international preeminence. The PA program affords the opportunity to provide returning adult students further their personal career growth through degree productivity and program efficiency. USF will continue to collaborate with our partners, such as the local VA hospitals and many community health providers to provide excellent internship and clinical experiences. The PA program will increase and strengthen the quality and recognition of a commitment to community and business engagements. USF is committed to specifically target students who are current residents of the State of Florida. The PA program is likely to create graduates who chose to remain in Florida after their education, thereby meeting the goal of a better educated health workforce.

B. **Describe how the proposed program specifically relates to existing institutional strengths, such as programs of emphasis, other academic programs, and/or institutes and centers.**

The USF MCOM PA program will build upon the already strong foundations of the medical, pharmacy, physical therapy and nursing curriculums to provide the most advanced and focused PA education possible. Our curriculum will respond to the need to increase access to primary care providers and we will also leverage USF Health's unique opportunity to use simulation for training in technical and procedural based specialties. Students will be educated side by side with medical, physical therapy, pharmacy, nursing and other health care students to develop inter-professional collaboration and communication skills that will allow them to become health care providers for our next generation. Our affiliations with Tampa General Hospital, two VA hospitals (James A. Haley and Bay Pines) and our new partnership with Lakeland Regional Medical Center (the fifth largest hospital in Florida and the state's largest single-site emergency department) will provide many clinical rotation opportunities for these students. Further, the USF MCOM's close partnership with The Villages Health System will allow students to dedicate time to learning about the unique issues affecting geriatric health care.

C. **Provide a narrative of the planning process leading up to submission of this proposal. Include a chronology (table) of activities, listing both university personnel directly involved and external individuals who participated in planning. Provide a timetable of events necessary for the implementation of the proposed program.**

Planning Process

Date	Participants	Planning Activity
January 2012 – March 2012	Monroe, Ekarius, Barber, Koehler, Strobbe	Conducted initial demand and feasibility study
April – June 2012	Monroe, Klasko, Ekarius, Petersen,	Discussion of potential USF PA program

	Morrison-Beedy, Sneed, Quillen	at USF Health Leadership Meeting

Events Leading to Implementation

Date	Implementation Activity
July 2012 – November 2012	Program planning and development
October 2012	Initial discussion with MCOM Curriculum Committee and Graduate Education Council
October 2012	MCOM Faculty Council
October 2012	APPCC review and approval
November 2012	MCOM Curriculum Committee and Graduate Education Council
January 2013	Pending: Graduate Council Approval
Pending	Pending: Academic Campus Environment (ACE) workgroup
Pending	Pending: Review by ACE workgroup
Pending	Pending: Review by Board of Trustees
Pending	Pending: Review of Board of Governors
Pending	Pending: Program implementation

VII.　　**Program Quality Indicators - Reviews and Accreditation**

Identify program reviews, accreditation visits, or internal reviews for any university degree programs related to the proposed program, especially any within the same academic unit. List all recommendations and summarize the institution's progress in implementing the recommendations.

The MCOM PA program is currently listed on the ARC-PA website as an applicant program. Applicant programs are active in the development of PA programs, in preparation for entry into accreditation by the ARC-PA via the provisional accreditation pathway. The ARC-PA has determined that the institutions listed meet the basic eligibility requirements to apply for accreditation, as noted in the accreditation *Standards*. They do not yet possess an accreditation status from the ARC-PA, nor is their listing here any guarantee that they will achieve provisional accreditation. Other institutions actively developing a PA program have chosen not to be listed at this point in time.

A feasibility study/needs assessment and supporting documentation along with application materials submitted to (ARC-PA) is due in December, 2013.

The ARC-PA site visit is currently scheduled for February 24-25, 2014.

ARC-PA agenda meeting for accepting provisional applications is scheduled for September 2014.

VIII.　　**Curriculum**

A. **Describe the specific expected student learning outcomes associated with the proposed program. If a bachelor's degree program, include a web link to the Academic Learning Compact or include the document itself as an appendix.**

Successful graduates of the USF MCOM PA Program will have completed a course of study following the guidelines set forth by ARC-PA and reflected in the Competencies for the Physician Assistant Profession. (http://www.nccpa.net/pdfs/definition%20of%20pa%20competencies%203.5%20for%20publication.pdf).

The competencies are a comprehensive document outlining the necessary skills, knowledge, judgment and attitudes developed by representatives from the National Commission on Certification of Physician Assistants (NCCPA), ARC-PA, the Physician Assistant Education Association (PAEA), and the American Academy of Physician Assistants (AAPA).

The Competencies for the PA profession mirror and parallel the competencies utilized for graduate medical education, in general, and outlined in "An Introduction to Competency-based Residency Education" by the Accreditation Council for Graduate Medical Education (ACGME). The objectives and outcomes measured by the USF MCOM PA program closely mirror these competencies.

Upon the successful completion of the requirements for the program of study leading to the MPAS degree, the student will be have demonstrated the following knowledge, skills, attitudes, emotional maturity, leadership skills and values across the life span and in multiple settings demonstrating the ability to function in a medical team.

Medical knowledge

Medical knowledge includes an understanding of the physiological, molecular, biochemical, genetic and cellular systems necessary for normal function and associated with the abnormal function of these systems in various disease states. The successful graduate will be able to:

- Demonstrate knowledge of the structure and function of the body, the molecular, genetic, biochemical and cellular mechanisms that are important in maintaining the body's homeostasis, and the pathogenesis and epidemiology of disease states and conditions.
- Demonstrate the appropriate use of methods and procedures for detection, diagnosis, and treatment of disease states.
- Identify the complex interaction of physical, psychological, social, economic, cultural, and developmental factors that contribute to illness and disease.
- Manage the appropriate methods for prevention of disease and promotion of health.
- Appreciate the impact that illness has on the patient, the patient's family, the community, the physician and other health care professionals.
- Demonstrate understanding of the theories and principles that govern ethical decision-making and the major ethical dilemmas in health care.
- Understand the components of health care that influence the organization, financing and delivery of health care.
- Understand the methods necessary to engage in lifelong learning to stay abreast of relevant scientific and societal advances.

Interpersonal & communication skills

Interpersonal and communication skills encompass verbal, nonverbal, and written exchange of information. Physician assistants must demonstrate interpersonal and communication skills that result in effective information exchange with patients, their patients' families, physicians, other health care providers, and the health care system. Upon completion of the Physician Assistant Program, graduates are expected to:

- Create and sustain a therapeutic and ethically sound relationship with patients.
- Use effective listening, nonverbal, explanatory, questioning, and writing skills to elicit and provide information.
- Appropriately adapt communication style and messages to the context of the individual patient interaction.
- Work effectively with physician and other health care professionals as a member or leader of a health care team or other professional group.
- Demonstrate emotional resilience and stability, adaptability, flexibility, tolerance of ambiguity and anxiety, and understanding of human behaviors.
- Accurately and adequately document and record information regarding the care process for medical, legal, quality, and financial purposes.

Patient care

Patient care includes age appropriate assessment, evaluation, and management. Physician Assistants must demonstrate care that is effective, patient-centered, timely, efficient, and equitable for the treatment of health problems and the promotion of wellness. Upon completion of the physician assistant program, graduates are expected to:

- Work effectively with physicians and other health care professionals to provide evidence-based, patient-centered care.
- Demonstrate caring and respectful behaviors when interacting with patients and their families.
- Gather essential and accurate information about their patients.
- Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment.
- Develop and carry out patient management plans.
- Counsel and educate patients and their families.
- Competently perform medical and surgical procedures considered essential in the area of practice.
- Provide health care services and education aimed at preventing health problems or maintaining health.

Professionalism

Professionalism is the expression of positive values and ideals as care is delivered. Foremost, it involves prioritizing the interests of those being served above one's own. Physician Assistants must know their professional and personal limitations. Professionalism also requires that PAs practice without impairment from substance

abuse, cognitive deficiency, or mental illness. Physician assistants must demonstrate a high level of responsibility, ethical practice, sensitivity to a diverse patient population, and adherence to legal and regulatory requirements. Upon completion of the Physician Assistant Program, graduates are expected to:

- Understand legal and regulatory requirements, as well as the appropriate role of the physician assistant.
- Develop and maintain professional relationships with physician supervisors and other health care providers.
- Demonstrate respect, compassion, and integrity and responsiveness to the needs of patients and society.
- Be accountable to patients, society, and the profession.
- Demonstrate commitment to excellence and ongoing professional development.
- Uphold ethical principles pertaining to the provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices.
- Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities.
- Display self-reflection, critical curiosity, and initiative.

Practice-based learning and improvement

Practice-based learning and improvement includes the processes through which clinicians engage in critical analysis of their own practice experience, the medical literature, and other information resources for the purpose of self- improvement. Physician assistants must be able to assess, evaluate, and improve their patient care practices. Upon completion of the Physician Assistant Program, graduates are expected to:

- Analyze practice experience and perform practice-based improvement activities using a systematic methodology in concert with other members of the health care delivery team.
- Locate, appraise, and integrate evidence from scientific studies related to their patients' health problems.
- Obtain and apply information about their population of patients and the larger population from which their patients are drawn.
- Apply knowledge of study designs and statistical methods to the appraisal of clinical studies and other information on diagnostic and therapeutic effectiveness.
- Apply information technology to manage information, access online medical information, and support their personal educational needs.
- Facilitate the learning of students and/or other health care professionals.
- Recognize and appropriately address gender, cultural, cognitive, emotional, and other biases; gaps in medical knowledge; and physical limitations in themselves and others.

Systems-based practice

Systems-based practice encompasses the societal, organizational, and economic environments in which health care is delivered. Physician Assistants must demonstrate an

awareness of and responsiveness to the larger system of health care to provide patient care that is of optimal value. Physician Assistants should work to improve the larger health care system of which their practices are a part. Upon completion of the physician assistant program, graduates are expected to:

- Use information technology to support patient care decisions and patient education.
- Effectively interact with different types of medical practice and delivery systems.
- Understand the funding sources and payment systems that provide coverage for patient care.
- Practice cost-effective health care and resource allocation that does not compromise quality of care.
- Advocate for quality patient care and assist patients in dealing with system complexities.
- Partner with supervising physicians, health care managers, and other health care providers to assess, coordinate, and improve the delivery of health care and patient outcomes.
- Accept responsibility for promoting a safe environment for patient care and recognizing and correcting systems-based factors that negatively impact patient care.
- Use information technology to support patient care decisions and patient education.
- Apply medical information and clinical data systems to provide more effective, efficient patient care.
- Utilize the systems responsible for the appropriate payment of services.

B. Describe the admission standards and graduation requirements for the program.

Once eligible, the program will utilize the Central Application Service for Physician Assistants (CASPA) which is offered through the Physician Assistant Education Association (PAEA) as a convenient, state-of the-art, web-based application service.

ADMISSION STANDARDS

Entrance Exams:

Applicants must submit scores from the General Test of the Graduate Record Examination (GRE) (verbal reasoning, quantitative reasoning and analytical writing) or the Medical College Admission Test (MCAT).

Direct Patient Care Experience

Applicants must have an awareness of the intricacies of health care delivery as it exists today and be prepared to commit to a profession that aids the sick and injured. Applicants will be expected to have some amount of direct 'hands-on' health care experience. This may include experience as a medical assistant, military corpsman, EMT or paramedic, nurse, surgical technician, athletic trainer, health educator, therapy aide, medical scribe or Peace Corps volunteer or other cross-cultural health care experience.

Academic

Applicants must complete a bachelor's degree at a college or university that is accredited by one of the six regional accrediting bodies, such as the Southern Association of Colleges and Schools. Applicants from all academic disciplines will be welcome to apply, provided they meet the preparatory course prerequisites.

Required prerequisite courses:
- At least five biological science courses (totaling at least 15 semester credits) including:
  - human anatomy with lab (4 credits)
  - physiology with lab (4 credits)
  - microbiology with lab (4 credits)
  - The remaining biological science courses may be in any of the following disciplines: genetics, cell biology, molecular biology, embryology, histology, or immunology.
- One general chemistry courses with lab (4 credits)
- Organic chemistry or biochemistry with lab (4 credits)
- Statistics (2 credits)

Recommended courses:
Courses in the following subject areas will help provide the applicant with a solid foundation for the study of medicine:
- Medical Terminology
- Sociology
- Physics
- Technical Writing
- Nutrition
- Public Health
- Genetics
- Humanities
- Communications
- Psychology
- Anthropology
- Human Growth and Development
- Medical Ethics
- Wellness

GRADUATION REQUIREMENTS

Promotion from the academic year to the clinical year, and graduation from the College of Medicine, will be based on the student's readiness to assume a professional role as a PA, as well as their academic performance. Decisions for promotion and graduation will be based on the composite picture of both academic performance and professional growth and development.

The Program's Professional Standards and Promotions Committee (PS&P) will meet regularly to address questions related to promotion and graduation, and to determine each

student's eligibility for promotion and/or graduation. The PS&P Committee will include faculty members in the Morsani College of Medicine and the Physician Assistant Program.

To earn the Master of Physician Assistant Studies Degree, the PA student must accomplish the following:

- Successfully complete all courses within the professional curriculum earning a GPA of 3.0 or better.
- Demonstrate competence in evaluating diagnostic studies (diagnostic imaging, laboratory data, ECG, etc.) through successful completion of a clinical skills examination.
- Demonstrate competence in patient evaluation skills through successful completion of an Objective Structured Clinical (OSCE) or similar examination.
- Demonstrate a medical knowledge through successful completion of the clinical year ePackRat (standardized clinical knowledge exam) or similar examination.
- Receive a satisfactory evaluation from the PS&P Committee demonstrating a professional assessment of the student's overall suitability to practice as a physician assistant.
- Comply with the mission and policies of the Morsani College of Medicine Physician Assistant Program.

C. **Describe the curricular framework for the proposed program, including number of credit hours and composition of required core courses, restricted electives, unrestricted electives, thesis requirements, and dissertation requirements. Identify the total numbers of semester credit hours for the degree.**

The proposed master's program will total 103 credit hours and will take 26 months to complete. Of the 103 credit hours, 39 credit hours are required in the first 11 months of the "pre-clinical" portion of the curriculum. The remaining 64 credit hours include 52 required clinical rotation credit hours (varying in length from four to 12 weeks) and another required 6 "selective" credit hours and 6 "elective" credit hours which will take an additional 12 weeks to complete.

Provide a sequenced course of study for all majors, concentrations, or areas of emphasis within the proposed program.

Program Summary:

Required pre-clinical curriculum credit hours:	39
Required clinical rotation credit hours:	52
Required selective clinical rotation credit hours:	6
Required elective clinical rotation credit hours:	6
Total Minimum credit hours:	**103**

(For clinical rotations, 1 credit hour = min. 60 clock hours per week)

January 22, 2013

Year 1 – Summer - 7credits
       PAS 6022: Gross Anatomy (4 credits)
       PAS 6003: Medical Communication & Cultural Competency (2 credits)
       PAS 6005: Behavioral Dynamics/Community Medicine/Military/Special Populations (1 credit)

Year 1 – Fall – 16 credits
       PAS 6010: Human Physiology (4 credits)
       PAS 6000: Physical Diagnosis (2 credits)
       PAS 6025: Epidemiology and Public Health (2 credits)
       PAS 6008: Laboratory and Diagnostic Studies (2 credits)
       PAS 6001: Patient Evaluation and Hospital Practicum (2 credits)
       PAS 6028R: Pathophysiological Basis of Disease I (4 credits)

Year 1 – Spring – 16 credits
       PAS 6023: Pharmacotherapeutics I (4 credits)
       PAS 6004: Clinical problem-solving / differential diagnosis (1 credit)
       PAS 6007: Clinical procedures (1 credit)
       PAS 6013: Evidence-based medicine (1 credit)
       PAS 6002: Advanced clinical practicum (1 credit)
       PAS 6029R: Pathophysiological Basis of Disease II (4 credits)
       PAS 6026: Pharmacotherapeutics II (4 credits)

Total required pre-clinical credit hours: 39

Clinical Training

Year 2: 52 credits
Required Clinical Rotations - students are required to complete rotations in the following specialties:
     I.   PAS 6876: Emergency Medicine – 6 weeks (6 credits)
    II.   PAS 6840: Internal Medicine – 6 weeks (6 credits)
   III.   PAS 6870: Obstetrics/Gynecology – 6 weeks (6 credits)
   IV.   PAS 6860: Pediatrics – 4 weeks (4 credits)
    V.   PAS 6866: Family Medicine – 12 weeks (12 credits)
   VI.   PAS 6842: Psychiatry – 6 weeks (6 credits)
  VII.   PAS 6850: Surgery (General) – 6 weeks (6 credits)
 VIII.   PAS 6701: Advanced Care Medicine – 6 weeks (6 credits)

Year 2: 12 credits

   IX.   Selective – 6 weeks (6 credits) (Either Mental Health Care, Primary Care Geriatrics or Surgery: Technical/Procedural Skills)
    X.   Elective – 6 weeks (6 credits) Student's choice from list of electives below

       PAS 6105   Rehabilitative Medicine (6 credits)
       PAS 6110   Hematology And Oncology (6 credits)
       PAS 6120   Neurology (6 credits)

PAS 6125	Psychiatry – Mental Health Care (6 credits)	
PAS 6150	Nephrology (6 credits)	
PAS 6160	Gastroenterology (6 credits)	
PAS 6170	Rheumatology (6 credits)	
PAS 6180	Pulmonology (6 credits)	
PAS 6181	Endocrinology (6 credits)	
PAS 6182	Cardiology (6 credits)	
PAS 6184	Infectious Disease (6 credits)	
PAS 6190	Dermatology (6 credits)	
PAS 6201	General Surgery II – Technical/Procedural Skills (6 credits)	
PAS 6205r	Pediatric Surgery (6 credits)	
PAS 6210	Cardiovascular Surgery (6 credits)	
PAS 6220	Plastic Surgery (6 credits)	
PAS 6230	Trauma Surgery (6 credits)	
PAS 6240	Orthopedic Surgery (6 credits)	
PAS 6260	Neurosurgery (6 credits)	
PAS 6270	Urology (6 credits)	
PAS 6280	Otorhinolaryngology (ENT) (6 credits)	
PAS 6301	Pediatrics II (6 credits)	
PAS 6402	Family Practice III (6 credits)	
PAS 6404	Student Health (6 credits)	
PAS 6405	Public Health (6 credits)	
PAS 6500	Obstetrics & Gynecology II (6 credits)	
PAS 6601	Emergency Medicine II (6 credits)	
PAS 6702	Advanced Care Medicine II (6 credits)	
PAS 6841	Gerontology (6 credits)	

Total required clinical rotation credit hours: 64

D. Provide a one- or two-sentence description of each required or elective course.

PAS 6022: Gross Anatomy (4)
This course is a comprehensive study of human anatomy utilizing systemic and regional approaches to the human body. The course will cover all aspects of human anatomy through lectures combined with practical application using full cadaveric dissection along with concentrated exposures to human dissection. The course will establish sound anatomic principles that underlie the clinical sciences.

PAS 6003: Medical Communication & Cultural Competency (2)
This course is an introduction to and development of communication skills necessary for obtaining medical histories and performing counseling during patient interactions. The course will provide students with proper knowledge and skills to work with diverse populations, develop cross-cultural competence, and identify and utilize culturally appropriate strategies in health care delivery and health promotion.

PAS 6005: Behavioral Dynamics/Community Medicine/Military/Special Populations (1)
The study of the Bio-psychosocial model of medical practice demonstrated through multiple

interdisciplinary perspectives of needs and interventions for patients with obvious functional deficits. Introduce aspects of military medical practice including functioning within an operational and military focused health system. Provide an overview of populations of individuals with special needs from the perspective of language, gender, socioeconomic status, ethnic and academic diversity with an emphasis on factors that affect health care.

PAS 6010: Human Physiology (4)
This is a comprehensive course detailing the essential concepts of physiology and mechanisms of body function. The concepts are presented at various levels of organization, ranging from cellular and molecular to tissue and organ system levels. Emphasis is placed on understanding the integrated regulation of various body processes among the major systems.

PAS 6000: Physical Diagnosis (2)
This course instructs the student in the art and technique of the patient interview and physical examination through extensive clinical exposure to techniques used in the proper performance and recording of the physical examination of patients. Both lecture and laboratory formats are utilized.

PAS 6025: Epidemiology and Public Health (2)
This is a comprehensive course examining the principles and methods of epidemiologic investigation, appropriate summaries and displays of data, and the use of classical statistical approaches to describing population health. Through lectures and discussions students will study the application of the epidemiologic sub-disciplines in the areas of health services/systems, screenings genetics, and environment policy, as well as the intricacies of epidemiology and biostatistics with the legal and ethical issues in public health.

PAS 6008: Laboratory and Diagnostic Studies (2)
This course is an introduction to radiologic imaging, clinical laboratory medicine, ECG and cardiac diagnostics. Focus on the ability to select, perform, and interpret the results of basic clinical laboratory and diagnostic studies. Applications in primary care medicine for the physician assistant, with common office laboratory procedures taught and practiced in the laboratory.

PAS 6001: Patient Evaluation and Hospital Practicum (2)
Utilizing the hospital setting, the student will obtain experience in performing and recording patient histories and physical examinations and presenting clinical data. Teaching methods include weekly small group meetings and weekly clinical assignments to examine and/or interview patients in hospital, outpatient, and long-term care settings.

PAS 6028R: Pathophysiological Basis of Disease I (4)
The course deals with the essentials of diagnosis and management of the most common clinical problems seen by primary care practitioners.   Using an organ systems and life stages approach, clinical information is presented in conjunction with appropriate correlative lectures and labs in pathophysiology, emergent and preventive care. Signs, symptoms, and pathophysiology of common diseases affecting pediatric, adult, and geriatric patients will be covered, along with appropriate diagnosis, therapeutic interventions, and follow   up. Patient education and preventive medicine principles will be introduced. Patient and medical ethics cases are used in small group settings students will assess standardized patients to enhance readings and lectures.

PAS 6023: Pharmacotherapeutics I (4)
The first semester of a two-semester overview of pharmacology- this course will focus on the principles of pharmacologic action, and the therapeutic indications for pharmaceutical preparations used in clinical medicine. Drug side effects and contraindications are discussed in detail.

PAS 6004: Clinical problem-solving / differential diagnosis (1)
This course uses small group format and problem-based learning theory to develop critical thinking and problem solving skills in the individual student. This class will apply the knowledge, skills, and attitudes learned across the curriculum to individual patient cases. This course integrates evidence-based medicine into clinical decision-making.

PAS 6007: Clinical procedures (1)
The student will develop an understanding of and basic competence in the skills needed to perform diagnostic, outpatient and emergency procedures. Basic skills and knowledge learned here will prepare the student to further refine these skills with more intense, personalized instruction in the clinical setting. Use of the simulation labs and clinical experiences will enhance the student's abilities to perform necessary procedures.

PAS 6013: Evidence-based medicine (1)
This course will establish the basic principles of utilizing evidence-based medicine in clinical practice. Efficient strategies for tracking and appraising evidence and examining available evidence-based journals will be developed. Students will be instructed in the creation of systematic reviews and concise summaries and how to critically appraise the evidence for its validity, impact, and applicability and how to integrate the evidence along with patient's characteristics and values into clinical practice.

PAS 6002: Advanced clinical practicum (1)
Utilizing clinical settings, the student will further develop their capabilities in performing and recording patient history and physical examinations, presenting clinical data, formulating patient assessments, and developing treatment plans. The student will examine case presentations from an epidemiologic perspective through utilization of referenced medical literature searches and refine problem-solving skills. In addition, the student will be presented with a lecture series covering a variety of topics of importance to the PA profession that may have been covered briefly in previous courses. These include cultural diversity, environmental medicine, occupational and military medicine settings.

PAS 6029R: Pathophysiological Basis of Disease II (4)
The course deals with the essentials of diagnosis and management of the most common clinical problems seen by primary care practitioners. Using an organ systems and life stages approach, clinical information is presented in conjunction with appropriate correlative lectures and labs in pathophysiology, emergent and preventive care. Signs, symptoms, and pathophysiology of common diseases affecting pediatric, adult, and geriatric patients will be covered, along with appropriate diagnosis, therapeutic interventions, and follow up. Patient education and preventive medicine principles will be introduced. Patient and medical ethics cases are used in small group settings students will assess standardized patients to enhance readings and lectures.

PAS 6866 Family Practice (12)

The twelve-week family practice clinical rotation provides students with experience refining their skills in performing history and physical exams, ordering and interpreting laboratory/diagnostic tests, synthesizing information in establishing a diagnosis, and developing treatment plans for the diversity of patients in a typical Family Practice setting. The student will begin to appreciate the long term impact of health care on patients" lives, and becomes more skilled in preventive health care and the long term management of chronic medical conditions. Where possible, students participate in grand rounds, noon conferences and other clinically relevant didactic presentations.

PAS 6850 General Surgery (6)
This six-week general surgery rotation allows the student to develop preoperative skills with verbal or written presentations to the preceptor. They will be exposed to routine and emergency surgical problems. The student will assist in the operating room after demonstrating proper scrubbing, gowning and gloving techniques in a sterile environment. Student will perform two handed and one handed surgical ties. They will write op notes and develop postoperative care plans. Student will assess patients for common postoperative complications and wound healing. There will also be non-operating room surgical procedure exposure.

PAS 6840 Internal Medicine (6)
During the six-week internal medicine rotation, physician assistant students become a part of an internal medicine practice caring for adult and geriatric patients. Students perform patient history and physical examinations, obtain diagnostic testing and present data to their precepting physician with a proposed differential diagnosis and treatment plan. Students function in a role similar to the intended role of a practicing physician assistant, including participation in hospital rounds where diagnostic and therapeutic plans for acutely ill patients are discussed, performing and observing various clinical procedures, and preparing written and oral communication about patients. Where possible, students participate in grand rounds, noon conferences and other clinically relevant didactic presentations.

PAS 6860 Pediatrics (4)
During the four-week pediatric rotation, the PA student gains familiarity with normal growth and development, pediatric preventive medicine, and evaluation and management of common childhood illness. These experiences are obtained primarily in the outpatient setting, although students may be exposed to the acute care of hospitalized pediatric patients. The student also develops appreciation for working with many professionals, such as teachers, psychologists, speech and hearing pathologists, nurses and social workers, involved in the care and evaluation of children. Where possible, students participate in grand rounds, noon conferences and other clinically relevant didactic presentations.

PAS 6870 Obstetrics/Gynecology (6)
The purpose of this rotation is to provide the physician assistant student with a solid foundation in the diagnosis and management of common obstetric and gynecologic conditions as well as health care maintenance and disease prevention for women. The rotation focuses on the health care of women during the reproductive and post-reproductive years. The course emphasizes care of the pregnant female, normal labor and delivery, common obstetrical and gynecologic problems, preventive care, screening for gynecologic malignancies, and family planning and sexuality.

PAS 6876 Emergency Medicine (6)

January 22, 2013

This six-week rotation allows the student to develop skills in managing patients in the emergency room setting. These skills include those necessary for appropriate triage, stabilization, and initial management of patients with traumatic injuries and illnesses, the management of the less life threatening problems which present to the emergency room, working with the pre-hospital emergency medical service team, and making appropriate secondary referrals. Where possible, students participate in grand rounds, noon conferences and other clinically relevant didactic presentations.

PAS 6842 Psychiatry/Behavioral Medicine (6)
This clinical rotation allows the student the opportunity to develop skills in the evaluation and treatment of patient's suffering from behavioral and/or psychiatric medical conditions in the confines of a behavioral medicine hospital or outpatient clinic. The students will become involved in the care of persons experiencing a spectrum of emotional, behavioral, and psychiatric disorders on an inpatient and outpatient basis. This experience will allow students to gain a greater understanding of informed consent, civil commitment, and patient refusal of treatment. Additionally, the rotation will provide the student insight into the needs of these individuals, reinforce the need to maintain boundaries in the provider-patient relationship, and assist in shaping the student's approach to rapport development with patients to facilitate the accurate collection of health risk and disease-related information during the interview and physical examination. The student will also gain invaluable experience in their ability to recognize and categorize psychiatric disturbances and become familiar with techniques of implementing early intervention and providing appropriate psychiatric referral. Where possible, students participate in clinically relevant didactic presentations.

PAS 6702 Advanced Internal Medicine Selective (6)
The Hospitalist Medicine rotation provides students advanced training and experiences in the Hospitalist setting. Providing direct patient care under the supervision of a faculty hospitalist, the student develops more independence in assessment, treatment and discharge planning. In the complex inpatient environment, the student learns to coordinate care plan and understand the roles of specialist physicians and health care providers from multiple disciplines.

PAS 6125 Mental Health Care (6)
This clerkship provides both outpatient and inpatient experiences. Students have primary responsibility under supervision of attending psychiatrists and residents for diagnosis and care of patients in a variety of inpatient and outpatient settings. Emergency room, crisis intervention, consultation appropriate to patients with psychiatric dysfunction; familiarity with psychopharmacology, and short-term hospitalization are emphasized.

PAS 6841 Primary Care and Geriatrics (6)
The rotation in Geriatric Medicine is designed to expose the student to numerous aspects of clinical care, education, and research methodology of the older adult. The student will participate in a variety of clinical experiences including outpatient comprehensive geriatric assessments, subspecialty inpatient and outpatient care, comprehensive inpatient geriatric consults, rehabilitation, gero-psychiatry, and sub-acute and chronic care in the nursing home setting. You will have exposure to several ancillary services, including adult day care, community programs such as the Alzheimer's Association, and hospice. The rotation will provide a framework and foundation that will assist your current and future care of the older adult.

PAS 6201 Surgery: Technical/Procedure Skills (6)

January 22, 2013

This rotation is an opportunity for the physician assistant student to further develop their surgery skills and to gain a better understanding of the general principles of surgery. The student will focus on developing their surgical skills. Special emphasis is placed on assisting at the operating table and developing the skills necessary to working in a surgical environment.

 E. **For degree programs in the science and technology disciplines, discuss how industry-driven competencies were identified and incorporated into the <u>curriculum and indicate whether any industry advisory council exists to provide input for curriculum development and student assessment.</u>**

 In 2003, the National Commission on Certification of Physician Assistants (NCCPA) initiated an effort to define PA competencies in response to similar efforts being conducted within other health care professions and growing demand for accountability and assessment in clinical practice. The NCCPA is the only certifying organization for physician assistants in the United States. Established as a not-for-profit organization in 1975, NCCPA is dedicated to assuring the public that certified physician assistants meet established standards of clinical knowledge and cognitive skills upon entry into practice and throughout their careers. All U.S. states, the District of Columbia and the U.S. territories have decided to rely on NCCPA certification as one of the criteria for licensure or regulation of physician assistants.

 In 2004, representatives from three other national PA organizations, each bringing a unique perspective and valuable insights, joined NCCPA in the effort to define PA competencies. Those organizations were the Accreditation Review Commission for Education of the Physician Assistant (ARC-PA), the body that accredits PA educational programs; the Association of Physician Assistant Programs (APAP), the membership association for PA educators and program directors; and the American Academy of Physician Assistants (AAPA), the national membership association representing PAs.

 The resultant document, Competencies for the Physician Assistant Profession, is a foundation from which each of those four organizations, other physician assistant organizations and educators can chart a course for advancing the competencies of the PA profession. It is these competencies that help form the substance of PA educational programs. http://www.nccpa.net/PAC/Competencies_home.aspx

 F. **For all programs, list the specialized accreditation agencies and learned societies that would be concerned with the proposed program.   Will the university seek accreditation for the program if it is available? If not, why? Provide a brief timeline for seeking accreditation, if appropriate.**

- Accreditation Review Commission for Education of the Physician Assistant (ARC-PA) – accrediting agency that protects the interests of the public and physician assistant profession by defining the standards for physician assistant education and evaluating physician assistant educational programs within the territorial United States to ensure their compliance with those standards.
- Physician Assistant Education Association (PAEA) – national organization

representing physician assistant educational programs in the United States
- National Commission on Certification of Physician Assistants (NCCPA) – national certifying organization for physician assistants in the United States
- American Academy of Physician Assistants (AAPA) – national membership association representing PA's.

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The ARC-PA site visit is currently scheduled for February 24-25, 2014.

ARC-PA agenda meeting for accepting provisional applications is scheduled for September 2014.

G. **For doctoral programs, list the accreditation agencies and learned societies that would be concerned with corresponding bachelor's or master's programs associated with the proposed program. Are the programs accredited? If not, why?**

N/A

H. **Briefly describe the anticipated delivery system for the proposed program (e.g., traditional delivery on main campus; traditional delivery at branch campuses or centers; or nontraditional delivery such as distance or distributed learning, self-paced instruction, or external degree programs). If the proposed delivery system will require specialized services or greater than normal financial support, include projected costs in Table 2 in Appendix A. Provide a narrative describing the feasibility of delivering the proposed program through collaboration with other universities, both public and private. Cite specific queries made of other institutions with respect to shared courses, distance/distributed learning technologies, and joint-use facilities for research or internships.**

The program will be delivered in a traditional style utilizing a combination of classroom lectures, discussions, small group active learning sessions and hands-on laboratory skill sessions. On-line resources and non-traditional web-based learning modules will also be utilized to enhance student learning. An alternative primarily web-based learning option may be offered to non-traditional students to allow for self-paced learning prior to entering the clinical portion of the program.

IX. **Faculty Participation**

A. **Use Table 4 in Appendix A to identify existing and anticipated ranked (not visiting or adjunct) faculty who will participate in the proposed program through Year 5. Include (a) faculty code associated with the source of funding for the position; (b) name; (c) highest degree held; (d) academic discipline or specialization; (e) contract status (tenure, tenure-earning, or multi-year annual [MYA]); (f) contract length in months; and (g) percent of annual effort that will be directed toward the proposed program (instruction, advising, supervising internships and practica, and supervising thesis or dissertation hours).**

PA faculty will teach a number of the courses in the PA curriculum, depending on their areas of specialty and their academic and professional interests. More than 300 physicians, PA's, basic science faculty and other health care professionals in the MCOM and College of Pharmacy will contribute to prepare and deliver classroom lectures in their areas of expertise to enhance inter-professional educational opportunities. When a non-PA provides classroom instruction, a PA faculty member will attends the lecture, take notes, and write the exam questions directed toward the desired knowledge base of the physician assistant students. This concept will ensure that the classroom education and testing provided to PA students remains at the level expected of physician assistants and also ensures continuity of coverage for all evaluation methodologies.

By ARC-PA accreditation standards, a new PA program director will be hired at 1.0 FTE and an existing MD faculty member, Dr. Allan Goldman, will be the medical director for the program with .30 of his effort allocated to the program. In addition, several existing PA and MDs will teach in the new program.

As is customary in PA training programs, we expect to recruit additional voluntary faculty from the community to assist with the clinical precepting performed during the clinical rotations.

Like the MD program, it is our expectation that all of the courses will be delivered by a team of qualified faculty members, coordinated by a "super" course director. All faculty participating in the development of the program are/will be selected for their expertise in the various areas of the basic and clinical medical sciences.

B. **Use Table 2 in Appendix A to display the costs and associated funding resources for existing and anticipated ranked faculty (as identified in Table 2 in Appendix A). Costs for visiting and adjunct faculty should be included in the category of Other Personnel Services (OPS). Provide a narrative summarizing projected costs and funding sources.**

By May 1, 2015, we expect to have 5.10 Faculty FTE on board and dedicated in some part to the new PA program. Of that first-year faculty complement, we estimate that 1.50 of existing Faculty FTE will be reassigned to the PA program and 3.60 of new Faculty FTE to have been hired and fully dedicated to the program for the 2015-16 academic year. By year 5, the program is expected to be at full capacity from an enrollment standpoint with 17.48 Faculty FTE. Approximately 5.60 Faculty FTE will be new hires that are fully dedicated to the program and 11.88 Faculty FTE will be reassigned faculty from existing lines. We do not anticipate having any visiting or adjunct faculty supporting the program. E&G Tuition is expected to be the sole funding source.

C. **Provide in the appendices the curriculum vitae (CV) for each existing faculty member (do not include information for visiting or adjunct faculty).**

D. **Provide evidence that the academic unit(s) associated with this new degree have been productive in teaching, research, and service. Such evidence may include trends over time for average course load, FTE productivity, student HC in major or service courses, degrees granted, external funding attracted, as well as qualitative indicators of excellence.**

The academic units affiliated with this degree have been very productive and interdisciplinary. The Morsani College of Medicine (MCOM), Nursing, and Public Health generate a substantial portion of the institution's research dollars (MCOM generates over 50% of USF's annual research expenditures) and combined produce a significant proportion of the doctoral and masters graduates at USF. In the 2010-2011 academic year, the University granted 453 doctoral degrees of which 53 (12%) were granted in the MCOM. In terms of Masters degrees, in the 2010-2011 academic year, USF granted 2511 M.S. degrees, of which 191 (8%) were awarded by the MCOM. MCOM graduates students in a timely fashion and is nationally competitive in time-to-degree metrics. The enrollment and graduation trends in USF Health have been very positive over the last few years. In the MCOM, fall 2011 applications for Master's degree programs increased 46% over fall 2010 applications while applications for the Ph.D. program remained constant.

X. **Non-Faculty Resources**

A. **Describe library resources currently available to implement and/or sustain the proposed program through Year 5. Provide the total number of volumes and serials available in this discipline and related fields. List major journals that are available to the university's students. Include a signed statement from the Library Director that this subsection and subsection B have been reviewed and approved.**

The USF Libraries provide access to more than 2 million volumes and an extensive collection of electronic resources including approximately 25,156 e-journal subscriptions, 736 aggregator databases, 256 e-books, and 826,000 digital images. In addition, students have access to over 65,000 audio-visual materials including videos, CDs, and DVDs. We believe the existing library resources are adequate to sustain the proposed program.

The following resources currently held by the USF Libraries have been identified as supporting a Physician Assistant program.

Books (by subject, 2000 or later)	Total	Online
Anatomy or Physiology	6,612	4,151
Diagnostic Techniques and Procedures or Laboratory Techniques and Procedures	348	271
Medical History Taking or Physical Examination	170	70

Pharmacotherapy or Drug Therapy or Pharmaceutical Preparations or Pharmacology	51,101	24,634

Journals (current subscriptions)

Physician Assistant specific related titles
Clinician Reviews
Internet Journal of Academic Physician Assistants
Journal of the American Academy of Physician Assistants (JAAPA)
Journal of Physician Assistant Education
Physician Assistants' Prescribing Reference/MPR Monthly Prescribing Reference

Medicine (general titles)
AAMC Reporter
Academic Medicine
American journal of clinical medicine
American journal of the medical sciences
American journal of medicine
American journal of therapeutics
Annals of the New York Academy of Sciences
Annals of thoracic surgery
Archives of medical research
Artificial Intelligence in medicine
Biomedical safety and standards
BMJ
Canadian medical association journal CMAJ
Clinical cornerstone
Clinical therapeutics
Computers in biology and medicine
Current therapeutic research
JAMA - Journal of the American Medical Assn.
Journal of clinical investigation
Journal of experimental medicine
Journal of investigative medicine
Journal of patient safety
Lancet
Mayo Clinic Proceedings
Medical hypotheses
Medicine
Nature
Nature Genetics
Nature Medicine
New England journal of medicine
New physician
Postgraduate medical journal
Professional case management
QJM
Reviews in medical microbiology
Reviews in medical virology

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Science
Science Signaling
Science, technology and human values
Simulation in health care
Southern medical journal
Teaching and learning in medicine
Trends in biochemical sciences

Medicine (titles by discipline)
Cardiology
    American heart journal
    American journal of cardiology
    American journal of cardiovascular drugs
    Basic Research in Cardiology
    Cardiology in review
    Cardiovascular pathology
    Cardiovascular research
    Circulation
    Circulation: arrhythmia and electrophysiology
    Circulation research

Dermatology
    American journal of dermatopathology
    Archives of Dermatological Research
    Archives of dermatology
    Clinics in dermatology

Family Medicine
    American family physician
    Annals of family medicine

Internal Medicine
    Annals of internal medicine
    Archives of Internal Medicine

Molecular Medicine
    Molecular aspects of medicine

Neurology
    Annals of neurology
    Archives of neurology

Neurosurgery & Brain Repair
    Acta Neurochirurgica
    Contemporary neurosurgery

Obstetrics & Gynecology
    American journal of obstetrics and gynecology

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      Clinical obstetrics and gynecology

Oncologic Sciences
      American journal of clinical oncology
      Annals of Surgical Oncology
      Anti-Cancer drugs
      Cancer
      Cancer and Metastasis Reviews
      Cancer cell
      Cancer Chemotherapy and Pharmacology
      Cancer detection and prevention
      Cancer genetics and cytogenetics
      Cancer Immunology, Immunotherapy
      Cancer Journal
      Cancer letters
      Cancer treatment reviews

Ophthalmology
      American journal of ophthalmology
      Annals of Ophthalmology
      Archives of ophthalmology
      British journal of ophthalmology
      Contact lens spectrum
      Contemporary ophthalmology
      Contemporary Optometry

Orthopaedics & Sports Medicine
      American journal of physical medicine and rehabilitation
      American Journal of sports medicine
      Archives of physical medicine and rehabilitation
      Arthroscopy
      British journal of sports medicine
      Clinical journal of sport medicine
      Clinical Orthopaedics and Related Research
      Clinics in sports medicine

Otolaryngology & Head & Neck Surgery
      American journal of otolaryngology
      Annals of Otology, Rhinology & Laryngology
      Archives of otolaryngology - head & neck surgery

Pathology & Cell Biology
      Advances in anatomic pathology
      American journal of pathology
      Archives of pathology and laboratory medicine

Pediatrics
      Advances in neonatal care
      Archives de Pediatrie

Archives of disease in childhood
Archives of pediatric and adolescent medicine
Childhood obesity
Children's Health Care
Clinical pediatric emergency medicine
Clinical pediatrics

Psychiatry & Behavioral Neurosciences
Addictive disorders and their treatment
Alzheimer disease and associated disorders
American journal of geriatric psychiatry
American Journal of Psychiatry
Archives of general psychiatry
Child Psychiatry and Human Development

Radiology
Abdominal Imaging
AJNR American Journal of neuroradiology
Clinical imaging
Clinical radiology
Computerized medical imaging and graphics
Contemporary diagnostic radiology

Surgery
American journal of surgery
Annals of surgery
Archives of surgery
British journal of surgery

Urology
American journal of kidney diseases

Databases
AccessMedicine
AccessPharmacy
AccessSurgery
ACP Pier & AHFS DI Essentials
CINAHL
Cochrane Library
DynaMed
EBM Reviews
Facts and Comparisons
MD Consult
Medline
Micromedex
Natural Medicines
Natural Standard
Patient Education Reference Center
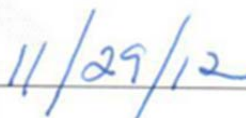Psychiatry Online

PsycINFO
SportDiscus
STATRef

B. **Describe additional library resources that are needed to implement and/or sustain the program through Year 5. Include projected costs of additional library resources in Table 3 in Appendix A.**

We have included some resources in the program budget to permit purchasing access to select on-line journals specially tailored to the profession of PA studies that are not currently accessible through the USF library system.

_____   _____
Signature of Library Director   11/29/12
                                        Date

C. **Describe classroom, teaching laboratory, research laboratory, office, and other types of space that are necessary and currently available to implement the proposed program through Year 5.**

Currently available classroom and office space are adequate to support the program.

D. **Describe additional classroom, teaching laboratory, research laboratory, office, and other space needed to implement and/or maintain the proposed program through Year 5. Include any projected Instruction and Research (I&R) costs of additional space in Table 2 in Appendix A. Do not include costs for new construction because that information should be provided in response to X (J) below.**

No additional classroom, laboratory or office space is required for the program.

E. **Describe specialized equipment that is currently available to implement the proposed program through Year 5. Focus primarily on instructional and research requirements.**

With similar medical and health care programs already in place, this program will be able to make use of our existing Center for Advance Clinical Lab (CACL) – where students receive clinical skills instruction and evaluation in a state of the art facility.

Additionally, the Center for Advanced Medical Learning and Simulation (CAMLS), a 90,000 square foot, state-of-the-art, three-story facility with every possible form of health professional education and training, for individuals and teams, under one roof, will also be able to be used for this program. CAMLS integrates simulation technology, team training, and evidence-based best practice into innovative programs with measurable outcomes.

F. **Describe additional specialized equipment that will be needed to implement and/or sustain the proposed program through Year 5. Include projected costs of additional equipment in Table 2 in Appendix A.**

With similar basic science and clinical programs already in place, there should not be additional specialized equipment needed for instructional or research

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requirements.

G. Describe any additional special categories of resources needed to implement the program through Year 5 (access to proprietary research facilities, specialized services, extended travel, etc.). Include projected costs of special resources in Table 2 in Appendix A.

We do not anticipate that any additional special resources will be required for this program.

H. Describe fellowships, scholarships, and graduate assistantships to be allocated to the proposed program through Year 5. Include the projected costs in Table 2 in Appendix A.

Since 2009, the total institutional funding for medical student grants and scholarship increased while the dollar amount of institutional loans decreased. We are hopeful that this trend will continue and that the new PA program will be able to establish additional sources of grants and scholarships to assist students with the costs of completing the program.

I. Describe currently available sites for internship and practicum experiences, if appropriate to the program. Describe plans to seek additional sites in Years 1 through 5.

USF Health and MCOM have a large number of existing clinical placements sites at Tampa General Hospital, James A. Haley and Bay Pines Veteran's hospitals and our new partnership with Lakeland Regional Medical Center. We further expect to develop additional clinical placements sites with new community sites – including with The Villages Health System.

J. If a new capital expenditure for instructional or research space is required, indicate where this item appears on the university's fixed capital outlay priority list. Table 2 in Appendix A includes only Instruction and Research (I&R) costs. If non-I&R costs, such as indirect costs affecting libraries and student services, are expected to increase as a result of the program, describe and estimate those expenses in narrative form below. It is expected that high enrollment programs in particular would necessitate increased costs in non-I&R activities.

With similar basic science and clinical programs already in place, we do not anticipate new capital expenditures for instructional or research space nor do we anticipate the need for additional specialized equipment for instructional or research requirements.

With respect to non-I&R costs, IT infrastructure and University Governance Support costs have been calculated - $38,000 the first year of the program, rising to $170,000 in year five of the program. All other costs for the program are direct and have been included in Table 2, Appendix A.

References:
1. The Registered Nurse Population: Findings from the 2008 National Sample Survey of Registered Nurses. Table 45, Appendix A. http://thefutureofnusring.org/sites/default/files/RN%2020Populations.pdf

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2. American Academy of Physician Assistant – AAPA's Research Steering Committee Meeting Results and A Proposed National PA Research Agenda. http://www.aapa.org/uploadedFiles/content/Research/Summit%20Proceedngs%20and%20Proposed%20Agenda%20for%20Web.pdf

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6. Muse H, Rosato D. Best jobs for working parents. CNN Money. http://http://money.cnn.com/magazines/moneymag/best   jobs/2011/jobs   working   parents/1.html.

7. Council on Graduate Medical Education (COGME). Tenth Report: Physician Distribution and Health Care Challenges in Rural and Inner   City Areas. Washington, DC: Government Printing Office; 1998.

8. Fryer GE, Green LA, Dovey SM, Phillips RI Jr. The United States relies on family physicians unlike any other specialty. Am Fam Physician 2001;63:1669–1703.

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10. Burnett WH, Mark DH, Midtling JE, Zellner BB. Primary care physicians in underserved areas: family physicians dominate. West J Med 1995;163:532–536.

11. Understanding the role of PAs in aftermath of Supreme Court decision on healthcare. http://manasara.medicalnewsinc.com/vital   signs   cms   1479

12. The Conference Board, Help Wanted OnLine, prepared by the Florida Department of Economic Opportunity, Labor Market Statistics Center.