Surgical Physician Assistant Studies (M.S.P.A.S.)

Degree Offered: M.S.P.A.S.

Director: Patricia R Jennings DrPH, PA-C

Phone: (205) 934-3209

E-mail: AskCDS@uab.edu

Web site: www.uab.edu/shp/cds/academic/graduate/spa

Faculty

Donald Reiff, Medical Director; Trauma

John Baddley, Associate Medical Director; Infectious Disease

Kara Caruthers, Assistant Professor; Emergency Medicine

William R. Drace, Assistant Professor; Director of Admissions; Cardiothoracic Surgery

Chad Epps, Associate Professor, Medicine Simulation

Paul M. Harrelson, Assistant Professor, Associate Program Director; Pain Management

Patricia R. Jennings, Professor; Infectious Diseases.

Kristopher Maday, Assistant Professor; Trauma

Stephanie McGilvray, Assistant Professor; Emergency Medicine

Kelley Swatzell, Assistant Professor; Public Health

General Information

Physician Assistants (PAs) are valuable members of a multidisciplinary healthcare team. The profession was established in 1965 to help physicians provide healthcare services to underserved and rural populations. While the profession remains committed to its historical mission, PAs are now employed in almost all medical and surgical specialties.

PAs are healthcare professionals licensed to practice medicine under the supervision of a physician. Individual state practice laws and hospital bylaws define the scope of practice and prescribing authority of
physician assistants. In general, most states authorize PAs to prescribe non-controlled substances and perform any task delegated by a supervising physician.

To be eligible for licensure, PAs must graduate from an accredited physician assistant program and pass the Physician Assistant National Certification Examination (PANCE). To maintain licensure, PAs must complete 100 hours of continuing medical education credits every two years and pass the Physician Assistant National Recertification Examination (PANRE) every six years. PAs may obtain additional training through postgraduate residency programs in subspecialty areas, but these programs are not required for licensure or practice in subspecialty areas.

The mission of the UAB Surgical Physician Assistant Program is to provide qualified individuals with the knowledge, skills, and judgment needed to assist physicians in the care of patients in surgical, acute-care, and medical settings. While surgical physician assistants function under the direction of the physicians, they are capable of performing selected tasks autonomously.

Accreditation:


Credentials Conferred:

Diploma–The Master of Science in Physician Assistant Studies (MSPAS) degree is awarded by the University of Alabama at Birmingham.

Professional Certification:

Graduates of the UAB SPA program are eligible to take the Physician Assistant National Certifying Examination (PANCE) sponsored by the National Commission on Certification of Physician Assistants to become a certified PA.

Essential Requirements

Fundamental tasks, behaviors, and abilities necessary to successfully complete the academic and clinical requirements of the program and to satisfy licensure/certification requirements have been outlined (see Technical Standards). These technical standards are also available upon request from the PA academic program office. Students requesting disability accommodations should contact UAB Disability Support Services (DSS) at 205-934-4205 or visit DSS at 516 Hill University Center or http://students.uab.edu/dss.

Program Curriculum:
Course requirements are listed below with semester credit hours in parentheses

**Didactic Curriculum**

**Fall Semester**
- PA 601 Human Gross Anatomy (4)
- PA 602 Medical Physiology (4)
- PA 605 Pathology (3)
- PA 610 Clinical Laboratory Medicine (3)
- PA 615 Introduction to the PA Profession (1)

**Spring Semester**
- PA 603 Pharmacology I (3)
- PA 606 Clinical Medicine I (4)
- PA 608 Surgical Disease I (3)
- PA 611 History and Physical Examination I (3)
- PA 613 Surgical Techniques (3)
- PA 616 Electrocardiography (1)

**Summer Semester**
- PA 604 Pharmacology II (3)
- PA 614 Operating Room Techniques (2)
- PA 619 Fundamental of Clinical Research (3)
- AHS 530 Health Admin. & Management (3)

**Fall Semester**
- PA 607 Clinical Medicine II (6)
- PA 609 Surgical Disease II (3)
- PA 612 History and Physical Examination II (3)
- PA 617 Applied Behavioral Medicine (2)
- PA 618 Risk Management (1)
- PA 620 Analysis of Professional Literature (2)
- PA 634 Simulation Lab (1)

**Clinical Curriculum**
Consists of 12 clinical rotations PA 621 – PA 632 (4 credits each) plus Senior Seminar I, II & III and
Masters Research Project Presentation. Of the 12 clinical rotations, 10 are required and 2 are electives. (One required clinical rotation in either CVS, Orthopedics, or General Surgery will be an 8 week rotation.)

<table>
<thead>
<tr>
<th>Spring Semester</th>
<th>Summer Semester</th>
<th>Fall Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>PA 621 Clinical Service I (4)</td>
<td>PA 625 Clinical Service V (4)</td>
<td>PA 629 Clinical Service IX (4)</td>
</tr>
<tr>
<td>PA 622 Clinical Service II (4)</td>
<td>PA 626 Clinical Service VI (4)</td>
<td>PA 630 Clinical Service X (4)</td>
</tr>
<tr>
<td>PA 623 Clinical Service III (4)</td>
<td>PA 627 Clinical ServiceVII (4)</td>
<td>PA 631 Clinical Service XI (4)</td>
</tr>
<tr>
<td>PA 624 Clinical Service IV (4)</td>
<td>PA 628 ClinicalServiceVIII (4)</td>
<td>PA 632 Clinical ServiceXII (4)</td>
</tr>
<tr>
<td>PA 638 Senior Seminar I (3)</td>
<td>PA 639 Senior Seminar II (3)</td>
<td>PA 640 Senior Seminar III (2)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PA 698 Presentation of Research Project (1)</td>
</tr>
</tbody>
</table>

**Clinical Rotations (PA 621-632)**

10 Required Clinical Rotations

- Cardiovascular Surgery (4)
- Emergency Medicine (4)
- General Surgery (4)
- Inpatient Medicine (4)
- Obstetrics and Gynecology (4)
- Outpatient Medicine (4)
- Orthopedics (4)
- Pediatrics (4)
- Psychiatry / Geriatrics (4)

<table>
<thead>
<tr>
<th></th>
<th>2 Elective Clinical Rotations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Neurosurgery</td>
</tr>
<tr>
<td></td>
<td>Outpatient Surgery</td>
</tr>
<tr>
<td></td>
<td>Plastic Surgery</td>
</tr>
<tr>
<td></td>
<td>Renal Transplantation</td>
</tr>
<tr>
<td></td>
<td>Surgical Oncology</td>
</tr>
<tr>
<td></td>
<td>Thoracic Surgery</td>
</tr>
<tr>
<td></td>
<td>Trauma Surgery</td>
</tr>
</tbody>
</table>

**Admission Requirements:**

- Baccalaureate degree from a regionally-accredited college/university
- Graduate Record Examination (GRE) General Test scores from the Verbal, Quantitative and Analytic sections. Applicants with advanced degrees whose GRE scores are older than 5 years (the time limit that ETS will send scores) can send reports from previously attended graduate programs.
- A minimum cumulative undergraduate grade point average of at least 3.0 (A = 4.0)
- A minimum GPA of 3.0 in natural science courses
- A minimum cumulative grade point average of 3.0 in the program prerequisite courses, with a minimum grade of C in each
Technical ability to complete the program (see Essential Requirements and Technical Standards)

Interview with faculty

Satisfactory screening on health data questionnaire by the UAB Medical Center Student Health Service.

The following prerequisites:

3-4 semester hours of biology I, lab preferred (UAB BY 123)

3-4 semester hours of biology II, lab preferred (UAB BY 124)

3-4 semester hours of microbiology, lab preferred (UAB BY 261 or BY 271)

3-4 semester hours of human anatomy, lab preferred (UAB BY 115)

3-4 semester hours human physiology, lab preferred (UAB BY 116 or BY 409)

8-9 semester hours of general chemistry, labs preferred,(UAB CH 115, 116, 117 & 118 preferred; CH 105, 106, 107, 108 accepted)

3-4 semester hours of statistics (upper level, population, and/or health-related with lab preferred, UAB PY 214, PY 217, AHS 360 preferred, MA 180 accepted)

3 semester hours of general psychology (UAB PY 101 or PY 201)

3 semester hours of developmental psychology (UAB PY 212)

3 semester hours of abnormal psychology (UAB PY 218)

Credit for Prior Learning Experience

Credit is not offered for prior experiential learning or prior course work (the Program does not offer advanced placement). Furthermore, credit is not offered for courses provided by another physician assistant program. No student may omit or waive any of the required clinical year rotations.

Applicants are evaluated on the following criteria:

Academics - Overall GPA, Science GPA, Prerequisite Grades and GRE Scores.
Clinical Experience - Although not required for admission into the program, experience in health care settings, (providing direct patient care and/or surgical experience) is considered in the application score.
Personal statement - Applicants are evaluated on the quality of their personal statement.

Letters of support - Three (3) letters of support are reviewed and considered.

The PA Program is committed to recruiting and matriculating minority and disadvantaged students for careers as physician assistants.

Listed below are the midrange scores of students admitted into the program. These scores are provided so that applicants can assess their competitiveness.

<table>
<thead>
<tr>
<th>25th Percentile</th>
<th>Mean</th>
<th>75th Percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Old GRE Verbal Score</td>
<td>440</td>
<td>495</td>
</tr>
<tr>
<td>New GRE Verbal Score</td>
<td>149</td>
<td>153</td>
</tr>
<tr>
<td>GRE Verbal % Score</td>
<td>40%</td>
<td>57%</td>
</tr>
<tr>
<td>Old GRE Quantitative Score</td>
<td>580</td>
<td>650</td>
</tr>
<tr>
<td>New GRE Quantitative Score</td>
<td>147</td>
<td>151</td>
</tr>
<tr>
<td>GRE Quantitative % Score</td>
<td>31%</td>
<td>48%</td>
</tr>
<tr>
<td>GRE Analytical Score</td>
<td>3.5</td>
<td>4.0</td>
</tr>
<tr>
<td>Science GPA</td>
<td>3.38</td>
<td>3.50</td>
</tr>
<tr>
<td>Overall GPA</td>
<td>3.51</td>
<td>3.60</td>
</tr>
</tbody>
</table>

Application Procedures:

This program participates in the Central Application Service for Physician Assistants (CASPA). Please consult www.caspaonline.org for more information regarding specific CASPA application requirements, procedures and fees. The CASPA application needs to be completed by September 1 of the year prior to admission. Applicants should send all CASPA application materials (except official GRE scores) directly to CASPA. CASPA will verify the application information and send completed applications to the program. Applicants should make arrangements to send official GRE scores directly to the UAB Graduate School. The GRE code is 1856.

After completing the CASPA application the applicant should complete the UAB SPA Supplemental Application. Following the program’s receipt of the CASPA application, official GRE scores, and UAB SPA Supplemental Application, the UAB Surgical PA Program will review the packet.

Completed applications are reviewed by members of the admissions committee. Approximately 100 of the best applicants are selected to interview. Interviews are held in December and in January. Admissions decisions are finalized in February. Students who are accepted to the Surgical Physician Assistant program will need to complete the UAB Graduate School application.

Admissions Timeline

August 31:: Last day to take the GRE

- May – September 1: Complete the CASPA application www.caspaonline.org
- September 7: Postmark deadline for mailing the UAB Supplemental Application.
September – December: Application review
November, December and January: Interviews
February: Admissions decisions finalized
February – March: Complete the UAB Graduate School Application (admitted and waitlisted students only)
August: Program starts

Additional Information

<table>
<thead>
<tr>
<th>Deadline for All Application Materials to be received by the CASPA:</th>
<th>Completed applications must be received by the Central Application Service for Physician Assistants (CASPA) no later than September 1 the year prior to the expected term of enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Evaluations/ Letter of Recommendations Required:</td>
<td>Three</td>
</tr>
<tr>
<td>Entrance Tests</td>
<td>GRE (TOEFL is required for international applicants whose native language is not English.)</td>
</tr>
</tbody>
</table>

Financial Support

Scholarships available to students enrolled in the Surgical Physician Assistant Program are:

**Albert E. Purser Scholarship**: A grant for first or second year students with financial need who are permanent residents of Alabama. Contact Patricia Jennings for an application.

**Dean’s Merit Scholarship**: One one-year scholarship is awarded each year to a senior student in the Surgical Physician Assistant Program. The scholarship is based strictly on academic merit and is disbursed over a three-semester period.

**Dean’s Diversity Scholarship**: One one-year scholarship is awarded each year to a second year student in the Surgical Physician Assistant Program. The scholarship is based on academic merit and financial need, and is disbursed over a three-semester period.

**Henry L. Laws Scholarship Loan**: A loan for a first or second-year student in good academic standing and a demonstrated financial need. The amount of the loan varies, and it is only awarded once to a student. The loan is established and supported by alumni. Contact Patricia Jennings for an application.
Earl W. Hall Loan: Seniors with an emergency financial need may apply for this low-interest loan. See SHP administrative offices for further details. The loan is administered by the Matthew F. McNulty, Jr. Health Sciences Emergency Loan Fund Committee.

Contact Information

For detailed information, contact:

CDS Admissions Surgical Physician Assistant Program
University of Alabama at Birmingham, SHPB 430
Birmingham, Alabama 35294-1212

Telephone: (205) 934-3209

E-mail: AskCDS@uab.edu

Web address: www.uab.edu/shp/cds/academic/graduate/spa

Course Descriptions

PA 601. Human Gross Anatomy. This course provides a comprehensive survey of the gross anatomy of the human along with functional and applied anatomy as it relates to common clinical findings. It utilizes a lecture format and cadaver dissection laboratory sessions. (4 Credits). Prerequisites: enrollment in the Surgical PA Program or approval of the instructor.

PA 602. Medical Physiology. This course emphasizes the normal function and control of various systems within the human body. The principles taught will serve as a foundation for understanding the etiology, management and prevention of disease processes. (4 Credits). Prerequisites: enrollment in the Surgical PA Program.

PA 603 and PA 604 Pharmacology I. and II. These two courses provide students with the pharmacologic knowledge needed to begin practice as primary care physician assistants. They are delivered via classroom lecture and supplemented with case studies that require students to critically evaluate medical conditions and choose safe and effective medications for treating those conditions. (3 credits each). Prerequisites: enrollment in the Surgical PA Program. Enrollment in PA 604 requires successful completion of PA 603.

PA 605. Pathology. This course is designed to describe the pathologic processes involved in common disorders and diseases, introduce students to the principles of clinical medicine and clinical problem
solving, and provide students with the background needed for the clinical courses taught later in the curriculum. (3 credits). Prerequisites: enrollment in the Surgical PA Program.

PA 606. **Clinical Medicine I.** This is an introductory course in clinical medicine that is designed to introduce PA students to common disorders and disease encountered in primary care medicine. It covers the etiology, evaluation and treatment of diseases of the dermatologic, ophthalmologic, musculoskeletal, cardiovascular, pulmonary and neurological systems. It is taught at the level of a primary care PA, and endeavors to provide students with the background needed for the clinical courses taught later in the curriculum. Guest lecturers are utilized in this course. (4 Credits. Prerequisites: successful completion of PA 602, PA 605, PA 610, and PA 601.

PA 607. **Clinical Medicine II.** This is the second semester of an introductory course in primary care clinical medicine for PAs. It covers the etiology, evaluation, and treatment of common diseases and disorders encountered in obstetrics and gynecology, pediatrics, nephrology, endocrinology, and preventive medicine. Guest lecturers are utilized in this course. (6 Credits). Prerequisites: successful completion of PA 606.

PA 608. **Introduction to Surgical Diseases I.** This course introduces students to common surgical disorders, with an early emphasis on physiologic changes and evaluation of patients before, during, and after surgery. It provides basic instruction in the diagnosis, management, and complications associated with common surgical gastrointestinal and musculoskeletal disorders. (3 credits). Prerequisites: enrollment in the Surgical PA Program.

PA 609. **Introduction to Surgical Diseases II.** This course is the second course in a two-semester series that focuses on the preoperative and postoperative evaluation and management of common disorders of the heart, lungs, urogenital, vascular systems, and organ transplant. This course also provides instruction in the emergency medicine team concept, and the management of trauma patients. (3 credits). Prerequisites: successful completion of PA 608.

PA 610. **Clinical Laboratory Medicine.** This is an introductory course in laboratory diagnostics that emphasizes pathology, microbiology, hematology, and clinical chemistry. It utilizes a lecture format, as well as specimen handling in a clinical laboratory and cost effective diagnostic algorithms in problem-based case scenarios. (3 Credits). Prerequisites: enrollment in the Surgical PA Program.

PA 611 and PA 612. **History and Physical Diagnosis I and II.** These courses provide students with the skills necessary to elicit a comprehensive medical history, perform a complete physical examination, and systematically report their findings. A variety of teaching formats are utilized, including lectures, small
group activities, video productions, and simulated patients. (3 Credits per semester). Prerequisites: enrollment in the Surgical PA Program. Enrollment in PA 612 requires successful completion of PA 611.

PA 613. Surgical Care Techniques. PA 614. Operating Room Techniques. These are two courses in a two-semester series that provide instruction in the skills and surgical techniques involved in a variety of invasive surgical procedures. Skills are taught in a surgical laboratory utilizing live pigs in PA 613. In PA 614, students are assigned to operating rooms within Birmingham hospitals to learn the basics of surgical first assisting. (3 credits for Surgical Care Techniques, 2 credits for Operating Room Techniques). Prerequisites: enrollment in the Surgical PA Program. Enrollment in PA 614 requires successful completion of PA 613.

PA 615. Introduction to the Profession. This course is designed to introduce students to the Physician Assistant Profession and to prepare them to practice as professionals in a physician/PA/patient team in various health care settings with varied health care professionals. It will cover roles and responsibilities of the PA including their expected legal and moral behavior, their understanding of laws governing their practice and their ethical responsibilities in being health care professionals. The course will also teach students to respect the health, safety, welfare, and dignity of all human beings and to assess their own personal capabilities and limitations, striving always to improve their medical practice. This course is required by the accrediting body for the Physician Assistant profession and will be presented at the level of a primary care provider and utilize guest lecturers and program faculty. (1 credit). Prerequisites: enrollment in the Surgical PA Program.

PA 616. Electrocardiography. This course presents the basic concepts needed to interpret the electrocardiogram and will provide opportunities to develop interpretive skills through analysis of rhythm strips and 12-lead electrocardiograms. Upon completion of the course, students will be able to systematically interpret basic rhythm strips and 12-lead electrocardiograms. (1 Credit). Prerequisites: enrollment in the Surgical PA Program.

PA 617. Applied Behavioral Medicine. This course provides the surgical physician student with an introduction to clinical psychiatry and health behavior. Topics covered in psychiatry include psychiatric evaluation, mood disorders, anxiety disorders, schizophrenia and other psychotic disorders, psychiatric emergencies, personality disorders and psychopharmacology. Health behavior topics include the use of health education and communication theoretical models to affect behavioral change. This knowledge will enable students to incorporate health promotion and disease prevention strategies in their daily clinical practice to the benefit of their patients. (2 Credits)
PA 618. **Risk Management.** This course provides an introduction to the legal, political and professional issues affecting physician assistant practice. (1 credit). Prerequisites: enrollment in the Surgical PA Program.

PA 619. **Fundamentals of Clinical Research.** This course provides students with the foundation of epidemiologic measures, the reasons for patterns of disease occurrence, the principles of medical surveillance, the methods for investigating disease outbreaks, and the principles of diagnostic tests. Students will review study designs, the roles of variability and bias in the interpretation of scientific literature, and the principles of clinical decision-making based on medical literature. (3 credits). Prerequisites: enrollment in the Surgical PA Program.

PA 620. **Literature Evaluation.** This course is designed to prepare students to be critical thinkers. Covers methods on how to critically evaluate medical literature and strategies that should be utilized when making medical decisions based on current literature. By the end of the course, the student will identify their master’s research topic. (2 credits). Prerequisites: enrollment in the Surgical PA Program.

PA 634. **Simulation Lab.** Laboratory simulated clinical experience to provide supervised practice in clinical skills, practical procedures, teamwork, patient management, and decision making in preparation for the student’s clinical year (1 semester credit).

PA 621-PA 637. **Clinical Services I-XII.** The 12 month clinical phase is composed of 10 required and 2 elective rotations lasting 4 weeks each. Required rotations include Obstetrics and Gynecology, Emergency Medicine, Pediatrics, Inpatient Medicine, Outpatient medicine, Psychiatry/Geriatrics, Orthopedics, General Surgery, and Cardiovascular Thoracic surgery. Students must successfully complete the end-of-rotation exam at the conclusion of all required rotations. (4 credits/rotation). Prerequisites: enrollment in the Surgical PA Program.

PA 638, PA 639, PA 640. **Senior Seminar Series.** Clinical year students return to campus each week to participate in a seminar series and evaluation exercises. These courses are taught during the clinical year of the curriculum, and focus on a review of primary care medicine topics covered in the PA National Certification Examination (PANCE). Students are required to orally present 30-minute pre-assigned topics and develop an accompanying one-page outline summarizing important points. Student presentations may be supplemented by cases seen on rotations or information gained from professional development seminars. (3 credits each for PA 638 and PA 639; 2 credits for PA 640). Prerequisites: enrollment in the clinical phase of the Surgical PA Program.

PA 698. **Master’s Project.** This course runs concurrently with the students’ clinical year rotations. Students will have chosen a project of study/research as a component of PA 620 during their last didactic
semester. Each student will be assigned to a SPA Program faculty with whom he/she will work closely in designing, researching, writing, and presenting his/her final paper as a culminating academic achievement. Other advisors may be assigned if the student chooses a topic better mentored by a faculty member in another department or school. The purpose of the Master's Project is to have the student demonstrate “satisfactory” ability to analyze and synthesize scientific information and contextual learning in a focused area of medicine. (2 credits). Prerequisites: successful completion of PA 619 and PA 620.