Pathologists' Assistant

Degree Offered

- Master of Health Science

The Profession

A pathologists' assistant is a healthcare professional who is qualified through academic and practical training to provide services in anatomic pathology under the direction of a qualified pathologist. Pathologists' assistants serve as physician-extenders in the same manner as physicians' assistants. The addition of pathologists' assistants to the pathology team can reduce cost, increase revenue, and improve workflow in the anatomic pathology lab. In practice, pathologists' assistants (PAs) are responsible for the processing of the surgical pathology specimen from receipt to dissection and description to submission of tissue to histology. In autopsy practice, the PA is involved in reviewing the medical record of the decedent, evisceration, dissection, and selection of tissue for submission to histology as well as formulation of a preliminary anatomic diagnosis and autopsy report under the direction of a pathologist. Many PAs are involved in laboratory management, teaching at the university-level, training of residents and medical students, forensic investigation, or research.

Nature of Program

The graduate program for pathologists' assistants began in January 2008 and is administered by the School of Medicine. Students are admitted into the Master of Health Science program after earning a baccalaureate degree from a regionally accredited college or university. Students with a cumulative grade point average of 3.25 or higher in the B.S. degree program in Medical Laboratory Science at West Virginia University may be provisionally admitted directly into the pathologists' assistant program at the end of their junior year.

This program is a twenty-four month master’s-level program that prepares graduates as allied health professionals for careers as pathologists’ assistants. During the second year, the student receives both didactic instruction and practical experience. Students receive practical experience at several of the program’s affiliated medical laboratories including the following:

- WVU Medicine - Ruby Memorial Hospital, Morgantown, WV
- WVU Medicine Berkeley Medical Center, Martinsburg, WV
- UPMC Health System including Presbyterian, Shadyside, Magee Womens, and Children's Hospitals, Pittsburgh, PA
- Thomas Memorial Hospital, Charleston, WV
- St. Clair Hospital, Pittsburgh, PA
- Conemaugh Memorial Medical Center, Johnstown, PA
- Butler Health System, Butler, PA
- The Ohio State University Wexner Medical Center, Columbus, OH
- Charleston Area Medical Center, Charleston, WV

The WVU Pathologists’ Assistant Program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), 8410 W. Bryn Mawr Avenue, Suite 670, Chicago, IL 60631-3415, (773) 714-8880.

Graduates are eligible for certification by the Board of Certification of the American Society for Clinical Pathology (ASCP).

Pathologists’ Assistant Program Essential Functions

In accordance with Section 304 of the 1973 Vocational Rehabilitation Act, the West Virginia University Pathologists’ Assistant program has adopted minimum technical standards for assessment of all applicants.

Because the master’s degree in health science/pathologists’ assistant signifies that the holder has obtained minimum competencies in all areas of the anatomic pathology laboratories, it follows that graduates must have the knowledge and skills to function in a wide variety of laboratory situations and to perform a wide variety of procedures.

1. Candidates for the master's degree in health science/pathologists' assistant must have somatic sensation (sense of touch) and the functional use of the senses of vision and hearing.
2. Candidates' diagnostic skills will also be lessened without the functional use of the sense of equilibrium, smell, and taste.
3. Additionally, they must have sufficient motor function to permit them to carry out the activities described in the sections that follow.
4. They must be able to consistently, quickly, and accurately integrate all information received by whatever sense(s) employed, and they must have the intellectual ability to learn, integrate, analyze, and synthesize data.
5. A candidate for the master's degree in health science/pathologists' assistant must have abilities and skills which include observation, communication, motor, conceptual, integrative, quantitative, behavioral, and social. Technological compensation can be made for some disabilities
in certain areas, but a candidate should be able to perform in a reasonably independent manner. The use of a trained intermediary means that a candidate’s judgment must be mediated by someone else’s power of selection and observation.

6. **Observation:** The candidate must be able to observe demonstrations, procedures, and instruments in the basic sciences and clinical courses. Observation necessitates the functional use of the sense of vision and somatic sensation. It is enhanced by the functional use of the sense of smell.

7. **Communication:** A candidate should be able to speak, hear, and observe people in order to elicit information and perceive nonverbal communications. A candidate must be able to communicate effectively and efficiently in oral and written form with members of the health care team.

8. **Motor:** Candidates should have sufficient motor function to perform laboratory procedures. This action requires the coordination of both gross and fine muscular movements, equilibrium, and functional use of the senses of touch and vision.

9. **Intelectual—conceptual, integrative, and quantitative abilities:** These abilities include measurement, calculation, reasoning, analysis, and synthesis. Problem-solving requires all of these intellectual abilities. In addition, the candidate should be able to comprehend three-dimensional relationships and to understand spatial relationships of structures.

10. **Behavioral and Social Attributes:** A candidate must possess the emotional health required for full utilization of his/her judgment, the prompt completion of all responsibilities, and the development of mature, sensitive relationships with patients and coworkers.

Candidates must be able to tolerate physically taxing workloads and to function effectively under stress. They must be able to adapt to changing environments, to display flexibility, and to learn to function in the face of uncertainty. Compassion, integrity, concern for others, interpersonal skills, interest, and motivation are all personal qualities that should be assessed during admissions and education process. In its evaluation of applicants to the West Virginia University Pathologists’ Assistant program, the Admissions Committee will approach each applicant with the following questions in mind.

When an applicant does not meet a non-academic standard as defined above, and when this would, in the professional judgment of the committee, not satisfy the pathologists’ assistant objectives for the student in performing laboratory procedures, education, and research, such opinion will be documented by the Admissions Committee.

The questions are not designed to disqualify an applicant but rather to give the Admissions Committee more complete information about an applicant’s ability to meet the following nonacademic standards:

1. Is the candidate able to observe demonstrations and perform procedures in the basic sciences and clinical courses?
2. Is the candidate able to analyze, synthesize, solve problems, and make judgments about results obtained on patient specimens?
3. Does the candidate have sufficient use of the senses of vision, hearing, and somatic sensation necessary to perform the indicated laboratory procedures?
4. Can the candidate reasonably be expected to communicate the results of laboratory tests to other members of the health care team with accuracy, clarity, and efficiency?
5. Can the candidate reasonably be expected to learn and perform laboratory tests and operate instruments?
6. Can the candidate reasonably be expected to display good judgment in the analysis of procedure results?
7. Can the candidate reasonably be expected to accept criticism and respond by appropriate modification of behavior?
8. Can the candidate reasonably be expected to possess the perseverance, diligence, and consistency to complete the pathologists’ assistant program and to become a practicing pathologists’ assistant?

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**FACULTY**

**PROGRAM DIRECTOR**
- Michelle M. Costas - MHS, PA(ASCP)
  Assistant Professor

**CLINICAL COORDINATOR**
- Justin Falcon - MHS PA(ASCP)
  Assistant Professor

**MEDICAL DIRECTOR**
- David Howell - MD, PhD
  Assistant Professor

**FACULTY**
- Carie Boykin - MHS, PA(ASCP)
  Assistant Professor
- Trevor Wolfe - MHS, PA(ASCP)
  Instructor
Admissions

All students seeking admission to the Master of Health Science, Pathologists’ Assistant program must meet the following admissions requirements:

- Hold an earned baccalaureate degree from a regionally accredited institution of higher education
- Successfully complete the specific prerequisite coursework in mathematics and sciences
- Have a cumulative GPA of 3.0 (on a 4.0 scale)
- Submit two letters of recommendation electronically, as part of the application
- Complete a shadowing experience with a certified PA in surgical pathology or have equivalent work experience
- Complete an interview with the admissions committee
- Submit an electronic admissions packet including the application form, personal statement, essential functions form, shadowing statement, and official transcripts from all colleges and universities attended

**REQUIREMENT**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>College Prep</td>
<td>Baccalaureate Degree</td>
</tr>
<tr>
<td>Pre-requisite Courses</td>
<td>8 hours of Biology with laboratory</td>
</tr>
<tr>
<td>Pre-requisite Courses</td>
<td>8 hours of College Chemistry with lab</td>
</tr>
<tr>
<td>Pre-requisite Courses</td>
<td>3-4 hours of Organic Chemistry (CHEM 231 at WVU) or 3-4 hours of Biochemistry</td>
</tr>
<tr>
<td>Pre-requisite Courses</td>
<td>3-4 hours of Microbiology, Immunology, Parasitology, or Virology</td>
</tr>
<tr>
<td>Pre-requisite Courses</td>
<td>3 hours of college Algebra or higher</td>
</tr>
<tr>
<td>Grade Point Average required</td>
<td>3.0 cumulative</td>
</tr>
<tr>
<td>Grade Point Average preferred</td>
<td>3.0 in the pre-requisite courses</td>
</tr>
<tr>
<td>Recommendations</td>
<td>Two letters of recommendation</td>
</tr>
<tr>
<td>Interview</td>
<td>A personal interview with the Pathologists’ Assistant Program Admissions Committee</td>
</tr>
</tbody>
</table>

**Shadowing or Work Experience**

Applicants must complete a shadowing experience with a practicing pathologists’ assistant in surgical pathology or have applicable work experience in surgical or autopsy pathology. A statement regarding this experience is required in the application packet. Please contact the program specialist for assistance if necessary.

**Admissions Classifications**

Students must have a baccalaureate degree prior to beginning the professional sequence. However, the program has established the following admissions classifications:

- Direct Admit: a limited number of students completing the bachelor of science program in Medical Laboratory Science with an emphasis in either Medical Laboratory Science or Histotechnology who have a cumulative GPA of 3.25 may apply to the Master of Health Science, Pathologists’ Assistant Program at the end of their junior year. These students will be admitted into the program after completing the B.S. in Medical Laboratory Science at West Virginia University.
- Regular Decision: a student applies in the admission cycle during their senior year.

Typically, applications will be submitted in the application period which extends from January 1 to May 31 of the senior year. Admission is contingent upon satisfactory completion of the baccalaureate degree.

**Performance Standards**

Students are required to maintain a minimum GPA of 3.0 to progress in the first and second year of the professional program.

**Application Procedure**

Each year, the pathologists’ assistant program selects a limited number of students from the applications received for admission. Applications for admission to the program are available between January 1 and May 31 for the class beginning the following January. The application fee is sixty dollars. A completed admissions packet contains the following: completed application form (electronic), personal and shadowing statements, official transcripts.
transcripts, two recommendation letters, and the signed essential functions form. Each applicant must arrange for transcripts to be sent directly from all institutions attended to the Office of Admissions. The admissions office does not handle the recommendation letters. When the application is complete, the file is sent to the Pathologists’ Assistant Admissions Committee. Recommendation letters can be from faculty in a pre-requisite course, a lab professional with whom the applicant has worked, current employer, or professional peer. Interviews are granted to qualified applicants after the committee has reviewed the completed admissions packet.

### Degree Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>MICB 702</td>
<td>Microbiology</td>
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<tr>
<td>PALM 465</td>
<td>Medical Laboratory Management</td>
<td>2</td>
</tr>
<tr>
<td>PALM 603</td>
<td>Pathology and Anatomy</td>
<td>6</td>
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<tr>
<td>PALM 605</td>
<td>Advanced Microanatomy</td>
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<tr>
<td>PALM 610</td>
<td>Pathology Assistant Education Methods</td>
<td>1</td>
</tr>
<tr>
<td>PALM 620</td>
<td>Clinical Pathology Seminar</td>
<td>2</td>
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<tr>
<td>PALM 625</td>
<td>Anatomical Pathology Techniques</td>
<td>4</td>
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<tr>
<td>PALM 627</td>
<td>Pathology Assistant Practicum 1</td>
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<td>PALM 628</td>
<td>Pathology Assistant Practicum 2</td>
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<td>PALM 629</td>
<td>Pathologists’ Assistant Practicum 3</td>
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<td>PALM 630</td>
<td>Pathology Review 1</td>
<td>2</td>
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<tr>
<td>PALM 631</td>
<td>Pathology Review 2</td>
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<tr>
<td>PSIO 743</td>
<td>Fundamentals of Physiology</td>
<td>5</td>
</tr>
<tr>
<td>PALM 648</td>
<td>Surgical and Autopsy Pathology Procedures</td>
<td>3</td>
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<tr>
<td>PALM 750</td>
<td>Systemic Pathology for Pathologists’ Assistant Students</td>
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<tr>
<td>PALM 650</td>
<td>Introduction to Disease Mechanisms</td>
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<td>PALM 652</td>
<td>Histology for Pathologists’ Assistants</td>
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Total Hours: 74

### SUGGESTED PLAN OF STUDY

#### First Year

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<thead>
<tr>
<th>Fall</th>
<th>Hours Spring</th>
<th>Hours Summer</th>
<th>Hours</th>
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<tr>
<td>MICB 702</td>
<td>5 PALM 603</td>
<td>6 PALM 620</td>
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<tr>
<td>PSIO 743</td>
<td>5 PALM 625</td>
<td>4 PALM 750</td>
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<tr>
<td>PALM 465</td>
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<td>PALM 605</td>
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<tr>
<td>PALM 648</td>
<td>3 PALM 652</td>
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#### Second Year

<table>
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<tr>
<th>Fall</th>
<th>Hours Spring</th>
<th>Hours Summer</th>
<th>Hours</th>
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<tbody>
<tr>
<td>PALM 629</td>
<td>7 PALM 627</td>
<td>9 PALM 628</td>
<td>9</td>
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<tr>
<td>PALM 631</td>
<td>2 PALM 630</td>
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<td>11</td>
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</table>

Total credit hours: 74

### GRADUATION REQUIREMENTS

Students are required to maintain an overall GPA of at least 3.0 as a graduate student while enrolled in the pathologists’ assistant program. A minimum 3.0 GPA is required to graduate from the program.

### Major Learning Outcomes

#### PATHOLOGISTS’ ASSISTANT

The mission of the program for the Pathologists’ Assistant at West Virginia University is to provide a high quality educational experience leading to a Master’s Degree in Health Science as a Pathologists’ Assistant. This degree prepares Pathologists’ Assistants for their integral role as a member of a healthcare team.

Program Goals:
• Provide a program for Pathologists' Assistants which meets the academic standards of West Virginia University.
• Offer high quality, skilled graduates for a variety of health care settings in both surgical pathology and autopsy services.
• Provide an educational background which enables graduates to assume teaching and supervisory roles in pathology and medical laboratories.

COURSES

PATH 601. Special Studies in Oral Pathology. 1-3 Hours.
PR: PATH 738 and PATH 753. Advanced study of local or systemic disease processes affecting oral structures through seminars, assignment of specific topics, or research activities.

PATH 790. Teaching Practicum. 1-3 Hours.
PR: Consent. Supervised practice in college teaching of behavior medicine and psychiatry. Note: This course is intended to insure that graduate assistants are adequately prepared and supervised when they are given college teaching responsibility. It will also present a mechanism for students not on assistantships to gain teaching experience. (Grading may be S/U.).

PATH 791. Advanced Study. 1-6 Hours.
PR: Consent. Investigation of advanced topics not covered in regularly scheduled courses.

PATH 792. Directed Study. 1-6 Hours.
Directed study, reading, and/or research.

PATH 794. Seminar. 1-6 Hours.
Special seminars arranged for advanced graduate students.

PATH 795. Independent Study. 1-9 Hours.
Faculty supervised study of topics not available through regular course offerings.

PATH 796. Graduate Seminar. 1 Hour.
PR: Consent. Each graduate student will present at least one seminar to the assembled faculty and graduate student body of his or her program.

PATH 797. Research. 1-15 Hours.
PR: Consent. Research activities leading to thesis, problem report, research paper or equivalent scholarly project, or a dissertation. (Grading may be S/U.).

PATH 798. Thesis or Dissertation. 1-6 Hours.
PR: Consent. This is an optional course for programs that wish to provide formal supervision during the writing of student reports (698), or dissertations (798). Grading is normal.

PATH 799. Graduate Colloquium. 1-6 Hours.
PR: Consent. For graduate students not seeking coursework credit but who wish to meet residency requirements, use the University's facilities, and participate in its academic and cultural programs. Note: Graduate students who are not actively involved in coursework or research are entitled, through enrollment in their department's 699/799 Graduate Colloquium to consult with graduate faculty, participate in both formal and informal academic activities sponsored by their program, and retain all of the rights and privileges of duly enrolled students. Grading is P/F; colloquium credit may not be counted against credit requirements for masters programs. Registration for one credit of 699/799 graduate colloquium satisfies the University requirement of registration in the semester in which graduation occurs.