

**University of Washington School of Medicine
Department of Pathology
Cardiovascular and Pulmonary Pathology Fellowship
Goals, Skills and Competencies**

OVERALL EDUCATIONAL GOALS

The Cardiovascular and Pulmonary (CVP) pathology fellowship program is a one-year fellowship designed to provide unique educational opportunities for fellows. The fellowship provides extensive and in-depth exposure to all aspects of CVP pathology. The goals of the fellowship include education in diagnostic, communication skills, and critical thinking, in order to succeed as a surgical pathologist with expertise in CVP pathology. The fellow is responsible for previewing and establishing the diagnosis for cases, either independently or along with residents, assisting and teaching residents in gross examination of complex surgical specimens, leading different multidisciplinary patient care conferences and developing at least one major clinicopathological and/or translational research project, leading to presentation in national meetings and publication. Additional opportunities for training in basic cardiovascular and pulmonary research are available.

FELLOWSHIP PROGRAM ORGANIZATION AND EXPECTATIONS

During the fellowship year the CVP pathology fellow will participate in the preparation and sign-out of diagnostic biopsies, surgical specimens, slide reviews and consultation cases, supervision of gross examination, teaching of residents, presentation in grand rounds and other conferences related to CVP pathology, and evaluation of intraoperative frozen section consultations. Residents are expected to and develop and participate in at least a major clinicopathological and/or translational research project.

In the first 3 months, the fellow should focus on the fundamentals of CVP pathology, participate in grossing explanted hearts and lungs, and surgical CVP specimens, formulate detailed microscopic differential diagnoses, recognize the limitations of their diagnostic abilities, and seek consultation from an attending faculty member.

In the next 3 months, the CVP fellow is expected to have more independence, allowed to handle complex gross specimens such as explanted hearts with devices or prior repair, en block section for lung cancer, etc., supervise grossing by residents, call preliminary results to clinicians on in-house and consult cases, and order ancillary tests. The fellow will work closely with junior residents, supervising, teaching and assisting in formulating and dictating microscopic diagnosis and completing all their cases as needed.

As the fellow gains further experience and demonstrate increasing competence and confidence, he/she will be granted increased responsibility, especially in the final 6 months of the program. At this time, the fellow is expected to know recently described, rare and provisional entities, syndromic associations, diagnostic mimics, updates in staging criteria, detailed tumor subtyping, molecular features, prognostic and theranostic markers.

Throughout the year, the fellow will be partly responsible for teaching the fundamentals of CVP pathology to residents and rotating medical students, as well as helping out with the medical student pathology labs as required. They will assist in the regular resident CVP pathology

conferences, help organize the resident didactic conferences, compile study sets, and review CVP cases with residents. The fellow will present and discuss relevant CVP pathological findings at all applicable clinical conferences and tumor boards, as required.

The fellow is responsible for learning about issues in laboratory management, federal and state laws governing pathology laboratories, CAP requirements, and QA issues. Fellow should learn how to improve patient care through enhanced communication and consultative skills with clinicians and patients.

The fellow is expected to develop at least one major clinicopathologic and/or translational research project towards to the national meeting and publication during the year of the fellowship. There are collaborative translational projects with NIH-funded investigators that fellows can actively participate in. Additional research training opportunities in cardiovascular and lung diseases at UWMC are very remarkable.

SKILLS AND COMPETENCIES

A number of CVP pathology specific skills and competencies subtend the overall goals and organized in compliance with the Accreditation Council for Graduate Medical Education (ACGME) requirements.

PATIENT CARE AND PROCEDURAL SKILLS

The CVP pathology fellow will demonstrate ability to:

- Communicate with patients and family members with compassion and courtesy.
- Gather appropriate and accurate clinical information.
- Interpret diagnostic information and test results within the clinical context for effective patient management.
- Use clinical decision-making concepts and techniques and interpret results.
- Advise clinicians on the choice of clinically appropriate, cost-effective tests.
- Advise clinicians on appropriate follow-up for unexpected test results.
- Gross common, uncommon, combined, and complex CVP specimens including explanted hearts and lungs, wedge biopsy/resection of the lung, lobectomy, pneumonectomy and en block resection, etc.
- Accurately assess histopathology of explanted heart and lung, native and transplant endomyocardial and lung biopsies, non-neoplastic and neoplastic lung disease, and vascular, thymic and pleural specimens and provide intraoperative consultations by generating complete, logical and concise descriptions.
- Achieve more confidence in the diagnosis of a wide range of CVP pathology specimens.

MEDICAL KNOWLEDGE

The CVP pathology fellow will demonstrate:

- Knowledge of common and advanced clinical and diagnostic procedures and their medical application and correlation.
- Knowledge, expertise and teaching of specialized diagnostic procedures, including special staining techniques, immunohistochemistry, advanced molecular biologic and imaging techniques.

- Ability to collect and evaluate medical evidence relevant to CVP pathology.
- Ability to use a variety of resources to investigate clinical questions.
- Development of a personal strategy to regularly maintain and update medical knowledge.

PRACTICE-BASED LEARNING AND IMPROVEMENT

The CVP pathology fellow will demonstrate:

- Ongoing identification and remediation of gaps in personal knowledge.
- Understanding of an ability to apply the principles of quality control and quality assurance.
- Ability to identify process improvements that may minimize opportunities for medical errors.
- Understanding of principles of disease prevention.

INTERPERSONAL AND COMMUNICATION SKILLS

The CVP pathology fellow will demonstrate:

- Ability to counsel and educate in a clear and effective manner with patients and family members.
- Ability to function effectively as a member of the clinical care team with fellow clinicians, nursing and laboratory staff, and administrative personnel.
- Ability to use appropriate modes of communication (direct, telephone, email, written) in a timely manner.
- Ability to communicate clearly and effectively in written documents (including legible handwriting).
- Ability to prepare and deliver effective presentations.

PROFESSIONALISM

The CVP pathology fellow will demonstrate:

- Knowledge and understanding of ethical and confidential issues affecting patient care.
- Knowledge of issues concerning cultural diversity in the patient population.
- Respectful behavior towards all patients and medical personnel, including punctuality and courtesy.
- Maintain a professional demeanor in appearance and interactions with others, including acceptance of responsibility, responding effectively to criticism, and taking initiative.

SYSTEMS-BASED PRACTICE

The CVP pathology fellow will demonstrate:

- Understanding of the role of the diagnostic clinician and the health care system, and the importance of reliable, cost-effective, and timely results in clinical decision-making.
- Ability to work with clinicians, administrators, and others to determine the role of diagnostic testing in specific situations to optimize patient outcomes.
- Understanding of the CLIA, CAP, AJCC, FDA and HIPAA requirements for practice management.
- Understanding of the basic reimbursement mechanisms and regulatory requirements, including kickbacks and compliance with the Medicare/Medicaid "fraud and abuse" avoidance requirements.

- Understanding of effective managerial practices.