

Renal Pathology Society Training Program Recommendations

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Renal pathology represents a distinct subspecialty of pathology, however, there is currently no formal process (e.g. through the American Board of Pathology) to recognize minimum training and certification requirements for this subspecialty. In the absence of such accreditation/certification standards, this document is intended to provide general guidance regarding recommendations for appropriate subspecialty training in renal pathology for current and future renal pathology fellows and fellowship program directors, as well as individuals in positions to recruit and hire renal pathologists. This information may be useful for the development of new programs and the assessment of existing ones. The criteria outlined in this document are only intended to reflect consensus opinion suggestions of the Renal Pathology Society, rather than absolute criteria for renal pathology training programs or requirements for the practice of renal pathology.

1. Recommended Training Environment Characteristics:

- Caseload and Infrastructure
 - Recommended timeframe: minimum 6 months, preferably 12 months.
 - Approximate 500 minimum case volume; balanced mix of native and transplant.
 - Environment supportive of basic training in specimen handling and laboratory procedures.
 - Light microscopy (with special stains), Immunofluorescence and Electron microscopy.
 - Additional Immunohistochemistry and special stains used in renal pathology, including stains also used in anatomic pathology practice.
 - Resources for other/new special testing (e.g. C4d, Col IV a chains, IgG subclasses, PLA2R, EBER-ISH, other molecular, mass spectrometry).
 - Resources for training in testing and interpretation of clinical genomic sequencing results in the diagnosis and prognosis of kidney diseases are desirable.
 - Resources for training in image analytics, machine learning, multi-omics, and computational pathology applied to renal pathology are desirable.
- Training, Development, and Evaluation
 - Senior attending(s) with formal training in renal pathology or renal pathology experience providing active and involved mentorship.
 - Strong clinical (nephrology) learning environment with frequent interdisciplinary conferences, interactions, and collaborations.
 - Frequent and timely progress evaluation.
 - Progressive responsibility and independence up to and including sign out (subject to timely review) where appropriate and possible.
- Scholarship

- Clinical and/or Basic research resources – highly desirable.
- Opportunities to create and share new knowledge (presentations at meetings; publication of peer-reviewed articles).
- Opportunity to participate in the education of others (students, residents, fellows, attending pathologists).
- Access to references and pertinent literature in renal pathology, through a medical library or private collection, both in the form of books and periodicals, as well as access to electronic databases.
- Opportunity/incentive to engage within the community of renal pathology and nephrology, fostering the inclusion of fellows during training into organizations such as the Renal Pathology Society and the American Society of Nephrology.
- Encouragement to pursue online engagement through social media platforms.

2. Recommended Training Stages that Integrate Diagnostic Knowledge, Patient Care, Systems Based Practice, and Interpersonal and Communication Skills:

- Stage 1: The pathologist is proficient in basic renal histology and understands common clinical syndromes in nephrology.
- Stage 2: The pathologist can accurately recognize major lesions and pathological patterns of disease and can describe these elements in a report, can create a differential diagnosis, and understands the importance of clinical-pathologic correlation in arriving at a differential diagnosis.
- Stage 3: The pathologist recognizes less common or subtle lesions and pathological patterns of disease, applies clinical-pathologic correlation to appropriately narrow the final clinicopathological differential diagnosis and can use these to generate a comprehensive report. The pathologist understands which are the most important elements to communicate to a nephrologist.
- Stage 4: The pathologist recognizes most renal pathology lesions, integrates these with the clinical findings to generate accurate differential and final diagnoses, and can create a comprehensive, accurate and clear report. The pathologist is able to independently communicate appropriate information with nephrologists.
- Stage 5: Exhibits ongoing strong commitment to contribute to and learn from the knowledge, understanding, and new insights of others about renal pathology. The pathologist becomes familiar with emerging technologies that will impact renal pathology such as WSI, artificial intelligence, multi-omic data. The pathologist is able to interpret clinical genomic sequencing results as they are increasingly being incorporated into diagnosis and prognosis of kidney diseases. Pathologist successfully completes scholarly activity such as a peer reviewed publication.
- GRADUATION TARGET: Stage 4 minimum; Stage 5 desirable.