

# Letter from the Chair

Welcome to this year's Yale Pathology Labs Calendar. The past year has seen continued advances in the responsiveness and the capabilities of our Outreach services, some of which are highlighted herein. These include continued expansion of our advanced Molecular Diagnostics and Tumor Genotyping programs, with extension of our capabilities to full-exon sequencing of over 400 cancer-related genes. Continuing advancements allow unprecedented capabilities for predictive testing of therapeutic options in patients with cancer. We have also continued to improve patient safety by real-time monitoring and work-flow optimization of patient specimen tracking within the laboratory, a system developed by Yale Pathology and representing perhaps the most advanced of such systems in the country. Our national reference laboratory for non-malignant hematological disorders continues to thrive, and has expanded the repertoire of genetic hematologic disorders that we analyze. The Oral Pathology Program we introduced last year has grown and is providing specialized expertise to oral surgeons and their patients throughout southern Connecticut. Overall, our subspecialty teams in Yale Pathology diagnosed over 5,000 new cases of cancer last year, and confirmed or refined the diagnosis in more than 2,000 additional cases that we saw in consultation.

These advances and robust clinical focus on quality and patient safety continue our long tradition at Yale of introducing leading technologies for the benefit of patient care. Indeed, Pathology was one of the first departments organized at Yale School of Medicine (in 1867), and has contributed in many ways to Yale's tradition of scientific research, teaching, and patient care. Early Yale pathologists were among the first to document the ravages of the 1918 flu pandemic; they also led the investigation of pathologies associated with radiation and burn injuries in atomic bomb victims, and later established Yale as the leading center for research into environmental lung disease. Recent advances include basic discoveries in mapping the epigenetic basis of tumor progression; novel genetic and epigenetic screening methodologies that promise new methods of detecting occult tumors in the pancreas and colon; new insights into the many ways that tumors achieve their aggressive growth; gene-detection methodologies that have revolutionized our assessment of lymphoproliferative disorders; novel concepts of breast cancer initiation, progression, and diagnosis that are central to guiding therapy for patients with breast cancer; widespread institution of advanced molecular techniques for cervical cancer risk detection, the detection of sexually transmitted infections; and the development of innovative and promising approaches to vaccine development for viral diseases. Yale Pathology is also a critical partner with Yale's Comprehensive Cancer Center and the Smilow Cancer Hospital, working as part of a multidisciplinary team to advance an era of truly personalized medicine and cancer therapy.

The good news is that Yale's exceptional diagnostic clinical programs offer patients the most accurate, most advanced, safest, and most cost-effective pathology and laboratory evaluations available. We make these easily accessible to all physicians and patients. With a worldwide consultative program, with practice sites at both the Yale–New Haven Hospital York Street and Saint Raphael campuses, at Bridgeport Hospital, and Yale University Health Services, coupled with our robust outreach program designed to serve physicians in their offices, our physicians and services are easily reached. Details of how this is done are presented in this publication, designed to inform and enjoy.

Sincerely,

Jon S. Morrow, M.D., Ph.D.  
Raymond Yesner Professor of Pathology  
Chair, Department of Pathology  
Yale School of Medicine  
Chief of Pathology, Yale–New Haven Hospital



**Faculty of the Department of Pathology**