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Preface to the Fourth Edition

Same name, new edition, new authors, new text, new publisher, new and old photos, and a lot more information. In the 12 years since the third edition of *Tumors in Domestic Animals* there has been an enormous expansion of our knowledge about the molecular mechanisms of tumor development and the ancillary aids used to diagnose neoplasms. The information about molecular events in oncology, application of diagnostic techniques, recognition of new tumors, creation of subtypes, new acronyms, new epidemiologic data, paraneoplastic syndromes, treatment regimens, and classification schemes is overwhelming and is a credit to the researchers who generated this information. It was our task to condense this new body of information and present it in a way that is useful to diagnostic pathologists, residents, veterinarians, and oncologists.

In the first three editions of *Tumors in Domestic Animals*, Dr. Moulton and his authors produced one of the landmark textbooks for veterinary pathology. I believe we can maintain that subjective ranking and gather some new readers as well. In deference to all of us, I will not sum our total years of experience with diagnostic material and research; suffice it to say that the blend of these two characteristics in the authors is outstanding, and this is reflected in the quality of each of the chapters.

The format of the previous editions has been maintained, but the text and illustrations are substantially changed or entirely different. Each chapter has a section on relevant clinical pathology. Readers will be able to find salient clinical information, prevalence data, biological behavior, and most importantly, accurate information about gross and microscopic lesions to help diagnostic pathologists establish an accurate morphological diagnosis.

Histopathologic diagnoses are now often supplemented by ancillary diagnostic tests such as immunohistochemistry. This information is provided in an applicable fashion and with the knowledge that it is only one step in the process of establishing a diagnosis—a step that is constantly evolving as more cases and newer techniques are evaluated. For most veterinarians and in most of our diagnostic settings, the morphological diagnosis from H&E stained material is still the gold standard. The clear need for accurate morphological diagnoses in veterinary patient care is even more apparent today with the numerous treatment modalities that are available to oncologists and owners. It is our responsibility to provide as accurate a diagnosis as our capabilities permit and to provide the type of information that clinicians need to make decisions. An excellent example of this is the grading schemes used in the evaluation of connective tissue tumors of the subcutis. It is apparent that the morphological diagnosis is not as predictive of survival or as useful in the selection of treatments as are specific microscopic assessments such as a mitotic index. This has made our job easier and more fulfilling in that we do not have to struggle over the separation of hemangiopericytoma, Schwannoma, neurofibroma, and peripheral nerve sheath tumors to establish a prognosis. Yet we provide applicable information (e.g., grade of connective tissue tumor) that clinical veterinarians need and want to make their decisions. Research projects correlating morphological features of cancer, which a pathologist can provide, with outcome analyses of survival, metastasis, and treatments that clinicians can provide, require a team approach to a much needed area of veterinary oncology. The algorithms that flow from this approach need to be accurate, reproducible, predictive, and simple.

I was delighted when Dr. Moulton asked me to be the next editor of his book. The delight waned about 3 years ago as the enormity of this undertaking became fully apparent, but my enthusiasm is high again as the completion of this project nears. I developed a love-hate relationship with the authors. They loved me when I said their contribution was terrific, and they hated the suggestion of a change. We are a dangerously well informed and opinionated group who need little input from various types of editors. The quality of the authors of this text is such that input was rarely needed; however, to keep us on course and to keep the book a manageable size I asked for modifications. I thank the authors for considering different ideas.

I am deeply indebted to the contributors for their hard work with few rewards, and I take full responsibility for any errors in the text. I thank Dr. Moulton for trusting me with the care of this project and hope he is pleased that his book continues to be a cornerstone of veterinary pathology.

—Don Meuten