

KEEN MINDS
to Explore the
DARK CONTINENTS
of Disease



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A HISTORY OF THE PATHOLOGY SERVICES AT
THE MASSACHUSETTS GENERAL HOSPITAL

EDITED BY

DAVID N. LOUIS AND ROBERT H. YOUNG

MASSACHUSETTS GENERAL HOSPITAL AND
HARVARD MEDICAL SCHOOL

Boston

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Department of Pathology

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Contributors

Atul K. Bhan, M.B.B.S., M.D.

Pathologist, Massachusetts General Hospital
Professor of Pathology, Harvard Medical School

Robert B. Colvin, M.D.

Former Pathologist-in-Chief, Massachusetts General Hospital
Benjamin Castleman Distinguished Professor of Pathology, Harvard Medical School

Umberto De Girolami, M.D.

Pathologist, Brigham and Women's Hospital
Professor of Pathology, Harvard Medical School

Lyn M. Duncan, M.D.

Associate Pathologist, Massachusetts General Hospital
Associate Professor of Pathology, Harvard Medical School

Harold F. Dvorak, M.D.

Former Chairman of Pathology, Beth Israel Deaconess Medical Center
Mallinckrodt Distinguished Professor of Pathology, Harvard Medical School

Mary Jane Ferraro, Ph.D.

Pathologist, Massachusetts General Hospital
Professor of Pathology and Professor of Medicine, Harvard Medical School

Matthew P. Frosch, M.D., Ph.D.

Associate Pathologist, Massachusetts General Hospital
Lawrence J. Henderson Associate Professor of Pathology and Health Sciences &
Technology, Harvard Medical School

Nancy L. Harris, M.D.

Pathologist, Massachusetts General Hospital
Austin L. Vickery, Jr. Professor of Pathology, Harvard Medical School

E. Tessa Hedley-Whyte, M.D.

Neuropathologist, Massachusetts General Hospital
Professor of Pathology, Harvard Medical School

Robert E. Lee, M.D.

Professor of Pathology emeritus, University of Pittsburgh, Pittsburgh

Kent B. Lewandrowski, M.D.

Pathologist, Massachusetts General Hospital
Associate Professor of Pathology, Harvard Medical School

David N. Louis, M.D.

Pathologist-in-Chief, Massachusetts General Hospital
Benjamin Castleman Professor of Pathology, Harvard Medical School

Donna MacMillan, B.S.M.T.(ASCP), M.B.A.

Director of Clinical Operations, Pathology Service, Massachusetts General Hospital

Kenneth Mallory, B.A.

Eugene J. Mark, M.D.

Pathologist, Massachusetts General Hospital
Professor of Pathology, Harvard Medical School

Martin C. Mihm Jr., M.D., F.A.C.P.

Pathologist, Massachusetts General Hospital
Dermatologist, Brigham and Women's Hospital
Clinical Professor of Pathology and Dermatology, Harvard Medical School

Robert C. Moellering Jr., M.D.

Former Chairman of Medicine, Beth Israel Deaconess Medical Center
Shields Warren-Mallinckrodt Professor of Medical Research, Harvard Medical School

Donald J. Ortner, Ph.D.

Department of Anthropology, National Museum of Natural History, Smithsonian
Institution, Washington, D.C.
Department of Archaeological Sciences, University of Bradford, Bradford, West
Yorkshire, U.K.

Bruce D. Ragsdale, M.D.

Department of Anthropology, National Museum of Natural History, Smithsonian
Institution, Washington, D.C.
School of Human Evolution and Social Change, Arizona State University, Tempe
Central Coast Pathology Consultants, San Luis Obispo, California

Andrew E. Rosenberg, M.D.

Pathologist, Massachusetts General Hospital
Professor of Pathology, Harvard Medical School

Robert E. Scully, M.D.

Pathologist emeritus, Massachusetts General Hospital
Professor of Pathology emeritus, Harvard Medical School

Christopher P. Stowell, M.D., Ph.D.

Associate Pathologist, Massachusetts General Hospital
Associate Professor of Pathology, Harvard Medical School

Joel Umlas, M.D.

Pathologist, Mount Auburn Hospital, Cambridge, Massachusetts
Consultant Pathologist, Massachusetts General Hospital
Associate Clinical Professor of Pathology, Harvard Medical School

David C. Wilbur, M.D.

Pathologist, Massachusetts General Hospital
Professor of Pathology, Harvard Medical School

Robert H. Young, M.D., F.R.C.Path.

Pathologist, Massachusetts General Hospital
Robert E. Scully Professor of Pathology, Harvard Medical School

It is without the shadow of a doubt that . . . it is my two periods in the Pathology Department of the Massachusetts General Hospital . . . which honed, crafted and for some aspects really built the qualities and standards of professional practice and behaviour which I have aspired to in myself and have tried, in turn, to extol for my own protégés.

—*Dr. John Blennerhassett (1996), from letter to Dr. R. B. Colvin on the occasion of the 100th anniversary of the MGH Pathology department*

For David, MGH Pathology was not just a place that he had spent time. It was part of who he was for the rest of his career.

—*Ruth Freiman (2009), in a conversation with Dr. D. N. Louis; Dr. David Freiman, her husband, was in MGH Pathology in the 1940s*

Preface

THE YEAR 2011 MARKS the bicentennial of the Massachusetts General Hospital (MGH). To celebrate this occasion, we have undertaken a history of pathology at the MGH, thus committing notable events, discoveries, and individuals to print in one place. The resulting history provides information on the clinical and academic accomplishments of the MGH Pathology department, on important milestones in its development, on many of its pathologists and trainees and some of its employees, and on those from other MGH departments who practiced the discipline of pathology over the years.

Fifty years ago, in ending his brief history of the MGH commissioned for the hospital's sesquicentennial, Joseph Garland wrote that the "productive partnership" between the MGH and Harvard Medical School had led to success in the three missions of clinical service, education, and research. He concluded: "The partnership has been productive in three respects: it has given patients care of the highest quality; in the Hippocratic tradition it has helped to renew continuously the life blood of medicine in Boston, in America and throughout the world; and it has created an atmosphere that excites keen minds to explore the dark continents of disease" (1).

We have chosen the concluding phrase of Garland's book—"keen minds to explore the dark continents of disease"—as our title since it encapsulates the essence of the story told in these pages: many "keen minds" have worked toward a better understanding of disease to enable improved diagnosis and treatment. Indeed, the history of pathology at the MGH has witnessed many events, discoveries, and remarkable individuals.

We have tried to be as comprehensive as the

records, as well as space and time, allowed; we nonetheless realize that we must have mistakenly left out some events and people of note, for which we apologize in advance. The history as told is a rich one; the history as it occurred was no doubt even richer.

The creation of this book has been a labor of love for the two editors, and it has uncovered wonderful stories about the history of the department as well as collections of pictures that have now been preserved in digital archives. The research has confirmed our beliefs that MGH Pathology has been a remarkable place for a long time, and that the department has made a deep impression on all who have been associated with it over the decades.

The book is organized around six eras: one before the formal establishment of the Pathology department; four conforming to the tenures of the first four Chiefs of Pathology; and a final one covering the past 20 years. These six chapters are supplemented by an additional nine chapters that address major individuals (Drs. Reginald H. Fitz, James Homer Wright, Tracy B. Mallory, Benjamin Castleman, Austin L. Vickery Jr., Robert E. Scully, Edward Peirson Richardson Jr., Walter G. J. Putschar, and Robert T. McCluskey) and a further ten chapters that cover specific subspecialty units and activities (Autopsy, Surgical Pathology, Neuropathology, Dermatopathology, Cytopathology, the Clinical Laboratories, Microbiology, the Blood Transfusion Service, Immunopathology, and the Clinicopathological Conferences, or Case Records). Less extensive biographies and unit histories are

included within the individual chapters. Brief synopses of the six eras are provided below:

1. The Early Years, from the beginning of the hospital to the founding of the department in 1896. Pathology was practiced part-time by physicians specializing primarily in medical or surgical disciplines. This involved mostly post-mortem work and the collection of diseased organs to be used for medical school teaching purposes—although examination of surgical specimens became more common toward the end of this era. Recognizing the growing importance of clinical chemistry and microscopy, the hospital appointed a Chemist and Microscopist in 1851 and established a dedicated department in 1896 that would oversee clinical chemistry, microscopy, and bacteriology. The era witnessed the construction of the Allen Street House in 1874, which housed the main parts of the Pathology department through 1956.
2. The Wright Years (1896–1926). The pathologists—at least two full-time pathologists engaged in clinical work—focused on autopsies and a growing number of surgical specimens as well as bacteriology, while a small Chemistry unit was directed by a physician or clinical chemist working entirely in clinical chemistry. Teaching was directed primarily toward medical students, although graduate trainees did spend time in the department, and the Case Records were started. The department served as the research laboratory for the hospital, and many clinicians spent one or more years in the department engaged in a research project.
3. The Mallory Years (1926–1951). A massive growth in surgical material, bacteriological work, and clinical chemistry was accompanied by an increase in the number of pathologists and support staff, although increasing volume and diversity in clinical chemistry and hematology testing resulted in the development of many separate subspecialty clinical laboratories, most directed by internists. Programs began in neuropathology and cytopathology, and a residency training program was established, which helped provide junior faculty pathologists. Research continued in a similar manner, although clinical research driven by pathologists became the norm as the faculty increased in size.
4. The Castleman Years (1952–1974). The department centered exclusively on anatomic pathology, as the Bacteriology Laboratory moved to Medicine. Anatomic Pathology grew substantially, both autopsy and surgical, and the cytology laboratory moved from Gynecology into Pathology. Subspecialization within Anatomic Pathology began; the department acquired particular expertise in the pathology of most endocrine organs. Teaching blossomed, its focus on the residency program, the beginning of post-sophomore year medical student fellowships, post-residency fellowships in certain subspecialties, the offering of Continuing Medical Education courses, and the flourishing of the Case Records. Research also grew, paralleling the national growth of research, as many pathologists engaged in funded investigations and dedicated research laboratories began to emerge. The era saw the construction of the Warren Building, completed in 1956, which to this day houses a large component of the Pathology Service.
5. The McCluskey Years (1974–1991). Anatomic Pathology continued to grow, and several subspecialty services were formed. The various disciplines of Clinical Pathology that had been dispersed among different hospital departments (e.g., Chemistry, Hematology, Microbiology, Blood Bank) began their migration back into Pathology, and most joined the department in the late 1980s and early 1990s. Postgraduate teaching continued to expand as the numbers and sizes of residency and fellowship programs increased; this was

accompanied, however, by less direct involvement in preclinical medical school teaching. Research continued to grow, its focus on immunopathology.

6. The Later Years, from 1991 to the present day, representing the tenures of Robert B. Colvin (1991–2006) and David N. Louis (2006–) as chiefs. This era saw the consolidation of Clinical Pathology into the department, the complete subspecialization of Anatomic Pathology, and the joining of Clinical and Anatomical Pathology into a single clinical services group. New groups in molecular diagnostics and pathology informatics developed and rapidly expanded their clinical, educational, and research activities. Basic research also grew further, shifting its emphasis to cancer-oriented molecular pathology research in the last 10 years.

A brief note on terminology is warranted, since the name of the department changed over time. Initially, the department was designated either the Pathological Laboratory or the Clinico-Pathological Laboratory. By 1911 the surgical pathology laboratories were officially incorporated, and the department was renamed the Pathology Department. By the time Tracy Mallory became chief in 1926, however, the department was known as the Department of Pathology and Bacteriology. With the movement of the Bacteriology laboratory to Medicine in the early 1950s, the department changed its name back to Pathology. Subsequently, departments at MGH became known as services, and the official designation today is the Pathology Service.

The editors and authors (see figure AP.1 in the Appendix) were fortunate to have access to a variety of historical sources for their chapters. Much of the material for the chapters on the Wright, Mallory, Castleman, and McCluskey eras comes from the Annual Reports that the Chiefs of Pathology issued from 1898 through 1992. Until

1979 these were yearly; after 1980 they were more sporadic. Unless otherwise indicated, quotes and information attributed to specific years are derived from these sources. Some of the biographical chapters are taken from commemorative and memorial essays written by the authors on these individuals.

There are many individuals to acknowledge for their assistance in the preparation of this book. The editors were able to discuss particular periods with a number of alumni, who provided valuable information and insights, including Drs. Fairfield Goodale, Albert Keller, Irwin Roth, Wilbur Thomas, and Ronald Weinstein. It has been a particular pleasure to spend time with Mrs. Anna Castleman (widow of Benjamin Castleman) (see figure AP.2, Appendix), and our special thanks go to her for sharing treasured recollections with us. We thank Mrs. Ruth Freiman (widow of David Freiman) for telling us her stories as well. For individual chapters, the authors are indebted to input from Mr. Paul Castleman (son of Benjamin Castleman) (chapter 8); Mrs. Margaret (“Peggy”) E. Richardson (chapter 11); Drs. Alan Schiller and Karoly Balogh (chapter 12); Mrs. Jean McCluskey (widow of Robert McCluskey) (chapter 14); Mrs. Elizabeth Buckley Kubik and Mr. James Kubik (chapter 17); Dr. George Murphy (chapter 18); Dr. Maury Fremont-Smith and Mrs. Jean Buchanan (chapter 19); Dr. Arnold Weinberg (chapter 21); Drs. Thomas Fuller, Joan Kumar, Katherine Kosinski, Jettie Hunt, and Robert Kenney, and Ms. Cherie Haitz (Librarian, Mount Auburn Hospital), Ms. Rebecca Britten Loprete (daughter of Tony and Sue Britten), Ms. Elizabeth Reiser (daughter of Charles Huggins) and Ms. Laurel V. Munk (Director of Publications, AABB) (chapter 22).

Direct access to the MGH Archives was facilitated by Mr. Jeff Mifflin, the MGH Archivist, and his input is greatly appreciated. We are also indebted to Stephen Conley and Michelle Forrestall Lee of the MGH Path Photography/Media Laboratory for extraordinary help with

the illustrations, to Susan Smith for editorial assistance, to Nancy Stark and Karen Graham for guiding us through the old departmental files, and additionally to Karen Graham for her miraculous ability to schedule meeting after meeting. For specific chapters, we also benefited from the help of Dominic Hall (Warren Anatomical Museum, Center for the History of Medicine, Countway Library of Medicine, Harvard Medical School), Jack Eckert (Center for the History of Medicine, Countway Library of Medicine, Harvard Medical School), Martha Stone (Treadwell Library, MGH), and Kathy Grady (MGH Photography Laboratory).

The chapters comment on only a few of the nonphysician employees of the hospital, but we would here like to record our debt to the literally hundreds of Pathology employees who have worked so hard over the generations and without whose efforts the hospital's missions could not have been met.

The editors extend their most heartfelt thanks to Dr. Robert E. Scully, who has played a key role in the completion of this book, both by writing a number of chapters himself and by informing so many of the authors with his profound knowledge of the department and its history. Research that he undertook with the late Dr. Austin L. Vickery Jr. for an essay on the history of pathology at the hospitals of Harvard Medical School was of significant help for several chapters (2).

Last and most certainly not least, we thank our colleagues for listening to countless historical stories and for contributing excellent chapters to this book, as well as our families for their forbearance as many evenings and weekends disappeared into the misty past of MGH Pathology.

We close with a humorous yet true story that occurred about 10 years ago outside of the Autopsy Suite in the basement of the Warren Building at MGH. Michelle Forrestall Lee, one of the departmental photographers, walked out of the Pathology Photography Laboratory and saw a patient in a hospital gown sitting calmly in a wheelchair outside the Autopsy Suite. Suspecting strongly that the patient was in the wrong place (in fact, a new hospital transporter had thought this was Radiology!), she asked him if he needed help. "No, thanks," he responded, "I am just waiting my turn." After suitable philosophical reflection, Michelle had him redirected to his correct destination.

We have been "waiting our turn" to tell the story of the Pathology Services at the MGH. We are glad that the time has come.

David N. Louis

Robert H. Young

*James Homer Wright Pathology Laboratories
Massachusetts General Hospital and Harvard
Medical School*

Boston, Massachusetts

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NOTES

1. Garland JE. *Every Man Our Neighbor: A Brief History of the Massachusetts General Hospital, 1811–1961*. Boston: Little, Brown, 1961 (repr. Boston: Massachusetts General Hospital, 2008).
2. Scully RE, Vickery AL Jr. Surgical pathology at the hospitals of Harvard Medical School. In *Guiding the Surgeon's Hand; The History of American Surgical Pathology*. Rosai J, ed. Washington, D.C.: American Registry of Pathology, 1997.

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