

CHAPTER 6

Tracy B. Mallory (1896–1951)

ROBERT H. YOUNG, KENNETH MALLORY,
AND ROBERT E. SCULLY

TRACY BURR MALLORY (figure 6.1) was born on October 26, 1896, the son of Dr. Frank Burr Mallory and Persis McClain Tracy. The elder Mallory (1862–1941) was born in Cleveland, Ohio, and moved to Boston in 1882 to attend Harvard College and Harvard Medical School (HMS). He became Chief of Pathology at Boston City Hospital (BCH) in 1908. One of the giants of pathology of his era, he introduced many microscopical staining techniques and wrote a superb textbook (*The Principles of Pathological Histology*) containing accurate descriptions of many tumors and infectious diseases, and numerous illustrations, some of them in color. In 1933 the pathology laboratories at BCH were named the Mallory Institute of Pathology in honor of F. B. Mallory, and for many years the institute was affiliated with HMS and the Thorndike Laboratories and was a source of much original research. With his friend Dr. James Homer Wright (chapter 4), F. B. Mallory wrote *Pathological Technique: A Practical Manual for Workers in Pathological Histology and Bacteriology Laboratories*. That book and its eight revisions were widely used by American and British pathologists and bacteriologists for many decades.

Tracy Mallory's younger brother, G. Kenneth, also became a pathologist, training at BCH and becoming Chief of Pathology there from 1951 to 1966. He wrote many important papers in both anatomical and clinical pathology. Among his

contributions, he is best known for being the Mallory of the Mallory-Weiss syndrome (rupture of gastroesophageal veins with hematemesis or melena after repeated vomiting).

Tracy and Kenneth Mallory were born when the family home was on Newbury Street in downtown Boston; they received their early education in the public school system. A year after the family moved to a Victorian mansion on Longwood Avenue near HMS, the boys transferred to the private Country Day School for Boys. There, Tracy was a good student, an excellent speaker, and an able athlete, participating in track and tennis. Although not enthusiastic about contact sports, he felt compelled to join the football team; after he broke his nose in his first game, he returned to the team to play with a nose guard. In sum, Tracy strove to be a leader in all the activities of student life.

At the age of 15, Tracy decided to become a pathologist, inspired to do so by the loving care bestowed on him and Kenneth by their father (and childhood exposure to pathology in the family home) after the recent death of their mother, which was caused by a complication of breast cancer. Tracy entered Harvard College in 1914. A good student, he also found time to play the piano and read widely. Regarded as shy and gentle by most of his classmates, he often met with small groups of friends, to whom he would talk effusively about many subjects of interest,



Figure 6.1 Tracy Burr Mallory

entertaining them with his wit. During summer vacations their father would drive the boys and their favorite friends to the family summer home on Mount Desert Island, off the coast of Maine, where they held lively discussions and played indoor and outdoor games, including cribbage, table tennis, badminton, and tennis. The games were played under the critical eye of "Coach" Frank B. Mallory, who demanded the same excellence that he required in his laboratory.

With America's entry into World War I, Tracy and some of his classmates left Harvard College after three years to enter HMS because of a perceived urgent need for doctors. During two summer vacations Tracy was a volunteer in his father's laboratory at BCH, a profitable learning experience, especially for a highly intelligent student with an excellent memory. In 1921 Tracy graduated from HMS, magna cum laude, first in his class. He spent his last six months at HMS in his father's laboratory before starting an 18-month medical internship at Peter Bent

Brigham Hospital under Dr. Henry A. Christian (who had spent a year of training under Frank B. Mallory as well as time at MGH). In 1923 Tracy trained at HMS under the renowned bacteriologist Dr. Hans Zinsser, whose career had featured experiences as a general practitioner, investigator of infectious diseases, and author of medical history, including his autobiography. Dr. Mallory's first paper was written with Zinsser (1).

In 1924 Dr. James Howard Means, Jackson Professor of Clinical Medicine at the MGH and HMS, persuaded the MGH Board of Trustees to ask for the resignation of Dr. James Homer Wright as Chief of Pathology. Dr. Frank Mallory, having trained the great majority of young pathologists in the Boston area, was the logical choice to select Dr. Wright's successor. Dr. Mallory did not select his elder son, whom he considered inadequately trained for the position. Instead, he offered Dr. Shields Warren (later to become a world-famous radiation pathologist) the choice of becoming chief at MGH or at New England Deaconess Hospital, where an opening for a pathology chief also existed. Dr. Warren selected Deaconess because of his great admiration for the eminent diabetologist Dr. Elliott P. Joslin and his opinion that Dr. Frank H. Lahey (founder of the Lahey Clinic) was the best surgeon in Boston. After Dr. Warren made his decision, the position of chief at MGH was offered to Dr. Robert N. Nye, a bacteriologist at BCH (later to become Editor of the *New England Journal of Medicine*); the position of associate chief was offered to Dr. Frederic C. Parker Jr. The latter (figure 6.2) was a superb pathologist (who would later succeed Frank Mallory as chief at BCH), but he was a recluse, and he was unwilling to leave his position at BCH. The proposal was then withdrawn.

The final decision to appoint Tracy Mallory as chief at MGH was made at the Woods Hole Oceanographic Institute, on Cape Cod. In the summer of 1925 Tracy had very recently married Edith Brandt of Philadelphia, a graduate of Wellesley College, a beautiful and brilliant

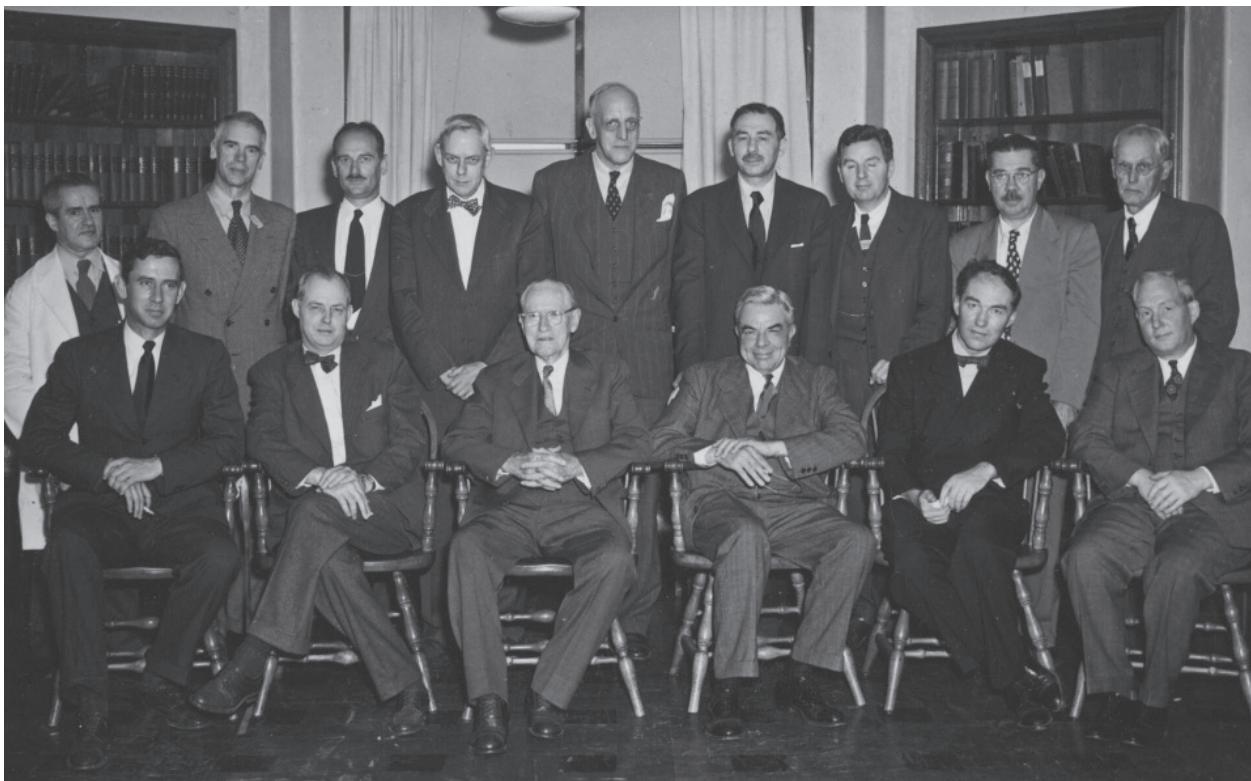


Figure 6.2 Tracy Mallory (back row, fourth from left) and his brother Kenneth (front row, second from left) and other distinguished physicians and pathologists pictured at the Mallory Institute of Pathology, 1940s.

Others who can be identified at this time are Maxwell Finland (back row, extreme left), Shields Warren (back row, second from left), William Castle (back row, fifth from left), Sidney Farber (back row, fourth from right), Harold MacMahon (back row, third from right), Richard Ford (front row, extreme left), Frederic Parker (front row, third from right), Raymond Adams (front row, second from right), and Arthur T. Hertig (front row, extreme right). (Photo courtesy of the Harvard Medical Library in the Francis A. Countway Library of Medicine)

woman, later to become Professor of Psychology there. Both of them journeyed to Woods Hole to visit Dr. James H. Means. He had greatly admired Tracy's performance on MGH ward rounds as a medical student. He persuaded Tracy to take the position at the MGH, promising to obtain for him an HMS Moseley Traveling Fellowship to visit pathology centers in Austria, Germany, and England before returning to MGH as chief. One can assume that both Frank B. and Edith Mallory approved of the decision. Edith and Tracy had a long honeymoon in Europe.

Dr. Tracy B. Mallory began his term as Chief of Pathology and Bacteriology (as the department was then known) at the MGH in 1926. In

his early years, he was helped by Dr. Wright, to whom he was appreciative for valuable counsel. In 1928 Dr. Wright, the close friend and collaborator of Tracy's father, died of pneumonia after a visit to members of his family in Pittsburgh. Dr. Mallory was aided by Dr. Harry F. Hartwell, a surgeon-pathologist, and in bacteriology by Dr. Louis L. Dienes (chapter 22).

Dr. Mallory was greatly interested in the effect of diagnosis on the treatment of the patient and was a most careful microscopist (figure 6.3). He was a shining example of what Sir William Osler called a *clinical* pathologist. Clinicians often sought Dr. Mallory's advice on therapy. Whether he commented on treatment during

a private consultation or at a clinicopathological conference, he maintained a passion for the truth. His reply might be “Remove the mass,” “I guess it should be removed,” or “I don’t know the answer.” He set a sterling example for his trainees and his successors.

By the time Dr. Mallory became the Editor of the Case Records of the MGH (clinicopathological conferences, or CPCs) in the *New England Journal of Medicine* in 1935, he was a master of pathology and bacteriology, ready to transform these exercises in a major manner. No longer would the same few individuals informally discuss all the cases. The clinical discussers instead were selected from the group of bright young physicians and surgeons who had been recently trained at the MGH. During his tenure as Chief of Pathology, he accepted many invitations from medical schools and societies in the United States and Canada as well as several Caribbean countries to demonstrate use of the CPC as a teaching method.

To staff and students at the MGH, Dr. Mallory’s door was always open—for scientific consultation or even personal advice. He often entered the residents’ room, where he would circulate among them, or teach small groups of students,

discussing pathology and medicine. The HMS students were so impressed by his unique sessions with them, which were enriched by references to his father’s and his brother’s contributions to pathology, that they selected him for a four-year term as President of the Boylston Medical Society, a student honor society.

During summer months, when their wives were on vacation, Dr. Mallory and his circle of friends would hold their “Bachelors Club” meetings, competing in indoor and outdoor games, at which Dr. Mallory was almost always the champion, and have discussions about numerous subjects, mostly nonmedical. In these settings he was again the leader, smoking furiously and talking continually, periodically showing flashes of his mischievous humor. Unfortunately, there is only one recorded example of the latter, which comes to us courtesy of Dr. Austin L. Vickery Jr. A salesman entered Dr. Mallory’s office in an attempt to sell him a microscope with a “greatly improved” mechanical stage. After enthusiastically boasting about it, the salesman expectantly asked Dr. Mallory if he had any questions about the new contraption. Dr. Mallory replied, “Yes. I have one question. Does it come off?”

On entering the U.S. Army in 1943, Captain Mallory became the Executive Officer of Professional Work and Chief of Pathology of the 5th Medical General Laboratory. Stories abound about his physical feats and courage as a soldier. Despite his frail physical appearance, he withstood three-mile hikes with a full pack and a 100-yard dash uphill, fitted with a gas mask, at the Army Service School in Carlisle, Pennsylvania, and crawling through the infiltration course (practicing infiltrating enemy lines) at Fort Sam Houston in Texas.

In Oran in North Africa, the site of his first assignment, he was observed calmly playing cribbage with a fellow officer in a tent, despite teeming rain and a floor of mud. When the unit moved to Naples, he engaged in many additional activities—playing badminton and table tennis

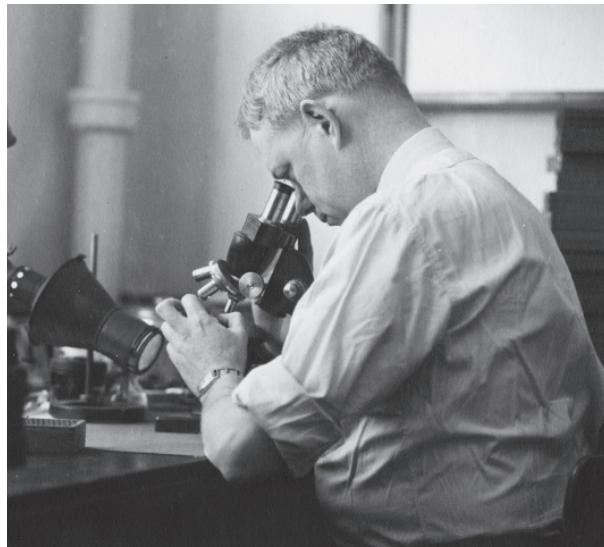


Figure 6.3 Tracy Burr Mallory, hard at work

and reading "whodunits," the only reading material available. When he was asked to work with Dr. Henry K. Beecher (an eminent anesthesiologist and Anesthetist-in-Chief at MGH) on the pathophysiology of shock during combat, Dr. Mallory enthusiastically joined him at the front; on one occasion he had to be evacuated to a safer area because of heavy enemy artillery fire. In December 1945 Dr. Mallory was discharged from the Army as a lieutenant colonel with a Legion of Merit decoration for his superb performance.

Upon his return to MGH, Dr. Mallory continued his prewar activities in addition to assuming many new responsibilities. He became a Visiting Consultant in Pathology to the Armed Forces Institute of Pathology, as well as Chief of Pathology at a Veterans Administration hospital. He was promoted to Professor of Pathology in 1947 and became Chairman and Acting (Interim) Head of the entire Pathology Department of HMS from 1946 to 1949.

Dr. Mallory published important scholarly papers (1-22), which can be divided into three categories for purposes of discussion: (1) five medical progress reports in the *New England Journal of Medicine*; (2) original contributions unrelated to military service; and (3) war-related medical papers. His medical progress reports covered the entire field of pathology except for neuropathology and a few other specialties. The reviews are thorough and perceptive and must have been a boon to both clinicians and pathologists of that time.

Of his original nonmilitary papers, a number stand out. For example, his 1935 publication with his pupil and successor, Dr. Benjamin Castleman, was the first major paper on primary hyperparathyroidism (5). It begins with a thorough review of the literature (156 references) and is embellished by a 12-page tabulation of various features of the reported cases. The paper also contains detailed clinical and pathological data on 25 cases of primary hyperplasia and neoplasia of the parathyroid gland, grouping both lesions

into multiple subtypes. A 1937 paper (6) on parathyroid hyperplasia in chronic renal insufficiency offers further classification of so-called primary hyperplasia, including correction of some aspects of the 1935 publication.

Dr. Mallory's paper on malignant lymphoma classification (13), written with Dr. Edward A. Gall, was a seminal contribution—the first paper to describe the pathology of a large number of cases (618) collected over a period of 20 years. Lymphomas were divided into seven categories: stem cell; clasmacytic; lymphoblastic; lymphocytic; Hodgkin's; Hodgkin's sarcoma; follicular. The Gall-Mallory classification, as it came to be called, was used in the United States and elsewhere for many years, until a new classification by Henry Rappaport of the Armed Forces Institute of Pathology appeared in his tumor fascicle of 1956. Its main differences from the Gall-Mallory classification were the division of lymphomas of all types into follicular and diffuse forms, and change of the term *clasmacytic* to *histiocytic* (Nancy Lee Harris, personal communication). Although the classification of lymphomas has been transformed over the years, the Gall and Mallory paper laid a solid foundation for this current understanding.

Dr. Mallory published a number of papers on hepatitis. In "The Pathology of Epidemic Hepatitis" (17), he included a microscopical description of the formation of hyaline eosinophilic bodies. Although they were clearly described initially by H. Axenfeld and K. Brass in the German literature in 1942, a few chauvinistic Bostonians have been willing to award an eponym for them to Tracy Mallory to distinguish them from (Frank) Mallory reticular bodies and (William) Councilman bodies, from which they differ in appearance. In another paper, Dr. Balduin Lucké of the Armed Forces Institute of Pathology and Dr. Mallory investigated 178 cases of fatal epidemic hepatitis (16), establishing that it is by far the major cause of what was previously inaccurately called "acute yellow atrophy" of the liver.

Dr. Mallory also performed detailed analyses of conditions of the stomach, such as the relation of benign gastric ulcers to gastric carcinomas, relying on radiologic as well as pathological evidence (9), and concluded that carcinoma *in situ* may undergo peptic ulceration—a finding that continues to have relevance to understanding the genesis of gastric cancers. He teamed up with Dr. Edward B. Benedict, a surgeon who became a full-time endoscopist at MGH, to write the first painstakingly executed study of the normal and abnormal gross and microscopical appearances of gastric mucosa (14), and with Dr. G. M. Lawson to describe the chronic cholecystitis in typhoid fever carriers (2). He also worked with Dr. Louis Dienes on investigations of the influence of allergy on the development of early tuberculous lesions (7).

Dr. Mallory described and illustrated three soft-tissue bone-and-cartilage-containing tumor-like lesions (4) that are currently grouped in the category of myositis ossificans, and he contrasted them with two soft-tissue sarcomas that invaded adjacent tissue and contained malignant-appearing cells. His admonition to pathologists not to overdiagnose myositis ossificans lesions as sarcoma is as necessary today as it was in 1933.

Another of Dr. Mallory's papers (15) concerns patients caught in the deadly 1942 Cocoanut Grove nightclub fire. The patients who were dead on arrival at hospitals had acute hemorrhagic tracheobronchitis that was too short in duration to have stimulated a polymorphonuclear cell response, and marked pulmonary edema, which was attributed to anoxemia along with "some irritant" (which might have been related to burning of plastic drapes). The patients who lived for 40 to 62 hours after admission had much more advanced lesions of the tracheobronchial tree, such as organizing "diphtheritic" membranes,



Figure 6.4 The Board for the Study of the Severely Wounded: Lt. Colonel Tracy B. Mallory (extreme right) with (from left) Fiorindo A. Simeone, Charles H. Burnett, Louis D. Smith, Seymour L. Shapiro, Henry K. Beecher, and Eugene R. Sullivan. Monghidoro, Italy, 1944

laryngeal stenosis, and extension of the process into the smallest bronchioles.

Dr. Mallory wrote a number of papers based on his wartime experiences (figure 6.4). One addresses the subtype of "lower nephron nephrosis" that he refers to as "hemoglobinuric nephrosis" in soldiers who had experienced traumatic shock (18). A later paper continues discussion of pigment mobilization in severely wounded soldiers (20). In a third contribution he determined the pathological findings that appear to be specifically associated with shock as defined by his clinical coauthors: these are fat vacuolization of the heart, the centrolobular liver cells, and the ascending limbs of Henle's loop in the kidney; and lipid depletion occurs in the adrenal cortex (22).

In addition to his scholarly writings, Dr. Mallory was influential on national and international scenes. He became President of the International Association of Medical Museums, later renamed the International Academy of Pathology, in 1941, and President of the American Association of Pathologists and Bacteriologists in 1951, which gave him its Ward Burdick medal for distinguished service the same year. He also was



*Figure 6.5 Unveiling of the portrait of Tracy Mallory that hangs in the Mallory Library.
Left to right: J. H. Means (Chief of Medicine), Benjamin Castleman, Edith Mallory,
Pietro Pezzati (the artist), Arthur W. Allen (representing the Board of Trustees)*

Assistant Editor, and subsequently on the Editorial Board, of the *American Journal of Pathology*.

In August 1951 Dr. Mallory was diagnosed with lung cancer, and an operation by Dr. Edward P. Churchill was followed by a stroke with left-sided hemiplegia. Another complication of the stroke was a personality change; his gentle demeanor was transformed to a brusque manner. He continued to use his microscope, but he was slower in making a diagnosis and even slower in communicating it to others.

Despite his hemiplegia and diminution in mental agility, Dr. Mallory courageously flew to Cleveland to preside successfully at the American Association of Pathologists and Bacteriologists meeting in March 1951, eight months before his death at his home in Needham, Massachusetts.

During that interval, he finished proofreading the pathology section of a comprehensive group of papers on the physiologic effects of wounds in the North African–Mediterranean Theater of Operations. One of the last happy events of Mallory's life was seeing his daughter married in the family home in Needham in June 1951.

Dr. Mallory was survived by his wife, Edith; a son, Kenneth, who later became a professor of physics at Stanford University and worked on the linear accelerator there; and a daughter, Jean, who married Dr. William Childs, a physicist who spent his career doing research at Argonne Laboratory in Lemont, Illinois.

In conclusion, like all who follow the same career as an illustrious parent, Dr. Tracy Mallory was in a somewhat unenviable position but

performed admirably. Indeed, when one considers the combined contributions of the senior Mallory and his two sons to the discipline of pathology, a strong argument can be made that they are unmatched. On the basis of his service to MGH and HMS and his original contributions, Tracy Burr Mallory's legacy is secure. His name is memorialized in the department in the form of a Fellowship in Surgical Pathology, and in the mid-1950s the department library was named the Tracy Burr Mallory Memorial Library, and his portrait (figure 6.5) hangs there to this day.

Note: The second author of this essay is a son of Dr. G. Kenneth Mallory and thus a nephew of Dr. Tracy B. Mallory. Some of the information here is drawn from a tribute to Dr. Mallory published in the *Harvard Gazette*, March 29, 1952, and coauthored by Drs. Arthur T. Hertig, S. Burt Wolbach, and Edward D. Churchill.

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