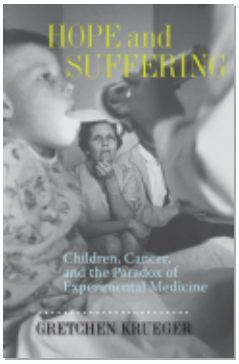
Hope and Suffering

Krueger, Gretchen



Published by Johns Hopkins University Press

Introduction

1. Will Bradbury, "The All-Out Assault on Leukemia," *Life* 61/21 (18 Nov. 1966): 88–107.

2. On 26 Sept. 1942, a notice in the *Journal of the American Medical Association* announced that the Texas State Cancer Hospital project—a facility for cancer research and treatment—was underway with a $500,000 appropriation from the state legislature and a matching grant from the Anderson Foundation. By the time of Mike Parker's referral, M. D. Anderson had become a major cancer research center like Memorial Sloan Kettering in New York City. N. Don Macon, *Clark and The Anderson* (Houston: Texas Medical Center, 1976).

3. Bradbury, 94.

4. Bradbury, 106.

5. Alfred Rosenfeld, "A Superplan to Cut Years off the War," *Life* 61/21 (18 Nov. 1966): 108. The research program was designed to make hundreds of separate projects converge toward a single goal—the control and cure of leukemia.

6. Harold W. Dargeon, ed., *Cancer in Childhood and A Discussion of Certain Benign Tumors* (St. Louis: C. V. Mosby, 1940), 21–30. Although Dargeon persuasively argued for establishing a narrow, age-based definition of childhood cancer, I have expanded his range in order to capture the voices of children older than age fourteen who also suffered from common childhood cancers, although more rarely. Adolescents serve as valuable historical voices based on their ability to record their words, thoughts, and emotions in interviews, letters, and diary entries. I have attempted to consistently indicate children's ages or developmental stages with descriptive terms such as "infant," "child," or "adolescent" in order to highlight differences between age groups. It has also been my intent to highlight acute leukemia (a common cancer of the blood-forming tissues), but to also include the stories of children and families coping with the various types of common pediatric cancers. Finally, although available historical sources underscored the stories of children treated at specialized cancer centers, I have expanded this narrow story whenever possible in order to encompass the diverse experiences of families affected by childhood cancer.

7. Helen Hughes Evans, "Hospital Waifs: The Hospital Care of Children in Boston, 1860–1920" (Ph.D. diss., Harvard University, 1995).

8. Sydney A. Halpern, *American Pediatrics: The Social Dynamics of Professionalism, 1880–*

1980 (Berkeley: University of California Press, 1988), 57–59. See also Thomas E. Cone, Jr., *History of American Pediatrics* (Boston: Little, Brown, 1979).

9. Rima D. Apple, "Constructing Mothers: Scientific Motherhood in the Nineteenth and Twentieth Centuries." In Rima Apple and Janet Golden, eds., *Mothers and Motherhood: Readings in American History* (Columbus: Ohio State University Press, 1997), 90–110, and Julia Grant, *Raising Baby by the Book: The Education of American Mothers, 1800–1960* (New Haven, Conn.: Yale University Press, 1998).

10. Heather Prescott, *A Doctor of Their Own: The History of Adolescent Medicine* (Cambridge, Mass.: Harvard University Press, 1998).

11. Richard Meckel, *"Save the Babies": American Public Health Reform and the Prevention of Infant Mortality, 1850–1929* (Baltimore: Johns Hopkins University Press, 1990); Molly Ladd Taylor, *Raising a Baby the Government Way* (New Brunswick, N.J.: Rutgers University Press, 1986); Kriste Lindenmeyer, *A Right to Childhood: The U.S. Children's Bureau and Child Welfare, 1912–1946* (Urbana: University of Illinois Press, 1997).

12. James T. Patterson, *The Dread Disease: Cancer and Modern American Culture* (Cambridge, Mass.: Harvard University Press, 1987). See Walter Ross, *Crusade: The Official History of the American Cancer Society* (New York: Arbor House, 1987), for an institutional history of the organization.

13. Stephen P. Strickland, *Politics, Science, and Dread Disease: A Short History of United States Medical Research Policy* (Cambridge, Mass.: Harvard University Press, 1972), and Richard A. Rettig, *Cancer Crusade: The Story of the National Cancer Act of 1971* (Princeton, N.J.: Princeton University Press, 1977).

14. Scholars affiliated with the Centre for the History of Science, Technology, and Medicine at the University of Manchester have begun to focus on cancer efforts in Britain through a cancer-specific perspective. Under the direction of John Pickstone, Carsten Timmermann has explored lung cancer and other intractable tumors, Elizabeth Toon considered breast cancer and related education efforts, Helen Valier focused on the leukemias, and Emm Barnes studied childhood cancers. Together with David Cantor, they have formed an international community focused on the history and sociology of cancer. See *Special Issue: Cancer in the Twentieth Century, Bulletin of the History of Medicine* 81/1 (spring 2007), esp. John V. Pickstone, "Contested Cumulations: Configurations of Cancer Treatments through the Twentieth Century," 164–196, for an example of these efforts.

15. For example, some of the best work on the organization and activities of cooperative cancer groups has been written by sociologists Alberto Cambrosio and Peter Keating, "From Screening to Clinical Research: The Cure of Leukemia and the Early Development of the Cooperative Oncology Groups, 1955–1966," *Bulletin of the History of Medicine* 76 (2002): 299–334, and Ilana Löwy, *Between Bench and Bedside: Science, Healing, and Interleukin-2 in a Cancer Ward* (Cambridge, Mass.: Harvard University Press, 1996).

16. See Emm Barnes, "Caring and Curing: Paediatric Cancer Services since 1960," *European Journal of Cancer Care* 14/4 (Sept. 2005): 373–380.

17. Robert William Kirk, *Earning Their Stripes: The Mobilization of American Children in the Second World War* (New York: P. Lang, 1994). Other historians of childhood such as Steven Mintz, *Huck's Raft: A History of American Childhood* (Cambridge, Mass.: Harvard University Press, 2004); Paula S. Fass and Mary Ann Mason, *Childhood in America* (New York: New York

University Press, 2000); Harvey J. Graff, ed., *Growing Up in America: Historical Experiences* (Detroit: Wayne State University Press, 1987), and N. Ray Hiner and Joseph M. Hawes, *Growing Up in America: Children in Historical Perspective* (Urbana: University of Illinois Press, 1985), have also documented children's role in shaping American culture.

18. Russell Viner and Janet Golden, "Children's Experiences of Illness." In Roger Cooter and John Pickstone, eds., *Medicine in the Twentieth Century* (Amsterdam: Harwood, 2000), 575–587.

19. Physicians have written two notable books on the history of pediatric cancers. For the perspectives of scientific pioneers working in the field, see John Laszlo, *The Cure of Childhood Leukemia: Into the Age of Miracles* (New Brunswick, N.J.: Rutgers University Press, 1995), and Emil J. Freireich and Noreen A. Lemak, *Milestones in Leukemia Research and Therapy* (Baltimore: Johns Hopkins University Press, 1991). Childhood cancer sufferers and survivors—a small, yet exceptional fraction of cancer victims—have, however, remained virtually invisible in the historical record.

20. For insightful studies of these two other related groups, see Barron H. Lerner, *Breast Cancer Wars: Hope, Fear, and the Pursuit of a Cure in Twentieth-Century America* (Oxford: Oxford University Press, 2001), and *When Illness Goes Public: Celebrity Patients and How We Look at Medicine* (Baltimore: Johns Hopkins University Press, 2006). Also see *Bittersweet: Diabetes, Insulin, and the Transformation of Illness* (Chapel Hill: University of North Carolina Press, 2003), a recent history of juvenile diabetes, in which Chris Feudtner used a rich collection of patient records and letters from the Joslin Clinic in Boston to examine the changing experience of these young patients and their families as insulin therapy and diet regulation transformed diabetes from an acute to a chronic disease that required extended medical management.

21. Susan Resnick, a public health expert formerly affiliated with the National Hemophilia Foundation, divided the history of hemophilia into the following eras: the Dismal Era, before 1948, the Years of Hope, 1948–1965, the Golden Era, 1965–1982, and the AIDS Era, 1982–1988, in *Blood Saga: Hemophilia, AIDS, and the Survival of a Community* (Berkeley: University of California Press, 1999), 2. It is useful to characterize the history of acute leukemia by similar time periods and titles, although the last should be renamed to reflect the new realization that long-term survivors sometimes suffered from developmental delays and secondary tumors from their treatment.

22. John Gunther, *Death Be Not Proud: A Memoir* (New York: Harper and Brothers, 1949).

23. Angela Burns to John Gunther, 29 Jan. 1949, Box 45, Folder 2, John Gunther Collection, Special Collections, Joseph Regenstein Library, University of Chicago, Illinois.

24. Peter De Vries, *The Blood of the Lamb* (Boston: Little, Brown, 1961).

Chapter One • "Glioma Babies," Families, and Cancer in Children in the 1930s

1. Helaine Judith Colan, another child diagnosed with glioma, was called "America's most famous baby of the moment" and the "death or blindness" child in "History of the Making," *Los Angeles Times,* 15 May 1938, A5.

2. Patrice Pinell, "Cancer." In Roger Cooter and John Pickstone, eds., *Companion to Medicine in the Twentieth Century* (London: Routledge, 2003), 673.

3. The two French theses were C. J. Duzan, "Du Cancer chez les Enfants," *Thèse de Paris* (1876), and C. Picot, "Les Tumeurs malignes des Enfants," *Rev. Méd. De la Suisse romande* (1883).

See L. Haynes Fowler, "Malignant Epithelial Neoplasms, Carcinoma and Epithelioma, Occurring in Persons under Twenty-Six Years of Age," *Surgery, Gynecology, and Obstetrics* 43 (1926): 73, for a review of the Mayo Clinic cases.

4. Roger Williams, *The Natural History of Cancer* (New York: W. Wood, 1908.)

5. Physicians observed cancers in many of the same locations as common adult cancers, though the incidence was low. For example, these physicians reported isolated cases of ovarian cancer. Thomas H. Lanman, "Ovarian Tumors in Childhood with Report of Five Cases," *New England Journal of Medicine* 201 (1929): 555–562; Alexander A. Levi, "Malignant Tumor of the Ovary Occurring in a Thirteen-Year-Old Girl," *New England Journal of Medicine* 217 (1937): 595–597.

6. Ernest Scott, Marguerite G. Oliver, and Mary H. Oliver, "Sympathetic Tumors of the Adrenal Medulla: With Report of Four Cases," *American Journal of Cancer* 17 (1933): 396–433; John L. Redman, H. A. Agerty, O. F. Barthmaier, and H. Russell Fisher, "Adrenal Neuroblastoma: Report of a Case and Review of the Literature," *American Journal of Diseases of Children* 56 (1938): 1097–1112.

7. George Pack and Robert LeFevre. "The Age and Sex Distribution and Incidence of Neoplastic Diseases at the Memorial Hospital," *Journal of Cancer Research* 14 (1930): 167–294.

8. Ibid., 171.

9. Ibid., 216. Neoplasm was an early word for cancer that meant a benign or malignant new growth.

10. Harold Dargeon, "Pediatrics at Memorial Hospital for Cancer and Allied Diseases," Sloan Kettering Cancer Center papers, Rockefeller Archive Center, Pocantico Hills, New York, (hereafter referred to as SKCC papers, RAC).

11. Ibid.

12. Harold Dargeon, ed., *Cancer in Childhood and a Discussion of Certain Benign Tumors* (St. Louis: C. V. Mosby, 1940), 17.

13. Ibid., 14.

14. "Doomed Baby Is Barricaded in Home, Parents Bar Physicians as Jurists Act," *Herald Statesman,* 13 April 1933, 1.

15. Ibid., 2, "Father Leaves Baby's Fate to Court," *Herald Statesman,* 14 April 1933, 1; "Father Gives Fate of Child to Court," *New York Times,* 15 April 1933, 15.

16. See Emily K. Abel, *Hearts of Wisdom: American Women Caring for Kin, 1850–1940* (Cambridge, Mass.: Harvard University Press, 2000), and Charles E. Rosenberg, *The Care of Strangers: The Rise of America's Hospital System* (New York: Basic Books, 1987), to see the transition in the location of care.

17. Judith Walzer Leavitt, *Typhoid Mary: Captive to the Public's Health* (Boston: Beacon Press, 1996).

18. Berthold Lowenfeld, former superintendent of the California School for the Blind in Berkeley, California, described the changing social status of the blind in *The Changing Status of the Blind: From Separation To Integration* (Springfield, Ill.: Charles C Thomas, 1975). Legislation began to address the particular needs of the blind in the 1930s. In 1935, Title X of the Social Security Act included special provisions for assistance to the needy blind. The passage of other acts of legislation gave the blind preference for operating government-supported vending stands and provided funds for the Library of Congress to provide books for this population. In

1940, the National Federation of the Blind organized to represent the needs of the blind to legislators in order to establish the rights of the blind and to promote their equal status with those with sight; however, it was the recognition of retrolental fibroplasia in premature infants caused by oxygen therapy and the outbreak of rubella epidemics that stimulated a comprehensive set of educational services for blind children in the 1940s, 1950s, and 1960s.

19. S. Finestone, *The First Thirty Years: A History of the National Federation of the Blind* (Des Moines, Iowa: National Federation of the Blind, 1971), 12–13

20. LeRoy Ashby, *Endangered Children: Dependency, Neglect, and Abuse in American History* (New York: Twayne, 1997).

21. The first Society for the Prevention of Cruelty to Children was organized in New York in 1875 to press for the reform of the criminal law surrounding the social regulation of parent-child relations and to develop an agency that could investigate cases of suspected cruelty to children. See John Macnicol, "Welfare, Wages, and the Family: Child Endowment in Comparative Perspective, 1900–1950." In Roger Cooter, ed., *In the Name of the Child: Health and Welfare, 1880–1940* (London: Routledge, 1992), 147, and E. Marguerite Gane, "A Decade of Child Protection," *Annals of the American Academy of Political and Social Science* 212 (Nov. 1940): 153–158, for a discussion of the primary principle of the welfare program—the right of protection from neglect and abuse.

22. W. L. Benedict, "Retinoblastoma in Homologous Eyes of Identical Twins," *Archives of Ophthalmology* 2 (1929): 545. Articles discussed two possible causes of retinoblastoma: heredity or spontaneous growth. Parents who had lost children from the disease frequently asked whether they should have more children, and those whose children survived questioned whether their children should have offspring.

23. Reese began his training in the pathology of the eye in Boston and then completed a two-year residency at the New York Eye and Ear Infirmary before moving to Vienna to spend a year studying with the eminent ophthalmologist Ernst Fuchs. Upon returning to the United States, he organized a department of ocular pathology at the Institute of Ophthalmology at Presbyterian Hospital in New York. See Algernon B. Reese, "Extension of Glioma (Retinoblastoma) into the Optic Nerve," *Archives of Ophthalmology* 5/2 (Feb. 1931): 269–271. See also Alan C. Wood, "Algernon Beverly Reese: An Appreciation," *American Journal of Ophthalmology* 71/1 (Jan. 1971): 137–142, and, secondarily, Ira Snow Jones, "Algernon Beverly Reese," *American Journal of Ophthalmology* 71/1 (Jan. 1971): 143–150. While tumors were recognized as a rare yet serious threat to sight, much more attention was devoted to widespread medical and public health problems such as trachoma, congenital cataracts, the harmful results of vitamin deficiencies, and the importance of systematically preventing ophthalmia neonatorum by administering drops of silver nitrate at birth. See Philip A. Halper, "The Challenge of Ophthalmologic Problems: Do We Meet Them?" *The Sight-Saving Review* 3/1 (March 1933): 15.

24. It was later shown that the tumor did not move from one eye to the other through the optic nerve; each tumor originated separately. Also, autopsy results reported in the literature and conducted at the Institute of Ophthalmology, Memorial Center for Cancer and Allied Diseases demonstrated that the tumor was not fatal only by extension into the intracranial space. In more than 50 percent of the cases death was due to metastasis to the viscera and distal bones. Algernon B. Reese, *Tumors of the Eyes* (London: Cassell, 1951), 85.

25. In *Tumors of the Eyes,* Reese wrote that when both eyes were affected and the child had

already lost his or her sight, he allowed parents to choose whether the eyes should be removed. Nevertheless, he still thought that surgery was the best course. He stated, "Leaving the eyes in place until their removal is obligatory accomplishes no useful purpose, and only permits the certain wide dissemination of the growth, whereas life might be saved by immediate bilateral enucleation" (108).

26. "Father Leaves Fate of Baby up to Court," *Herald Statesman,* 14 April 1933, 13.

27. "Vasko Family with Sick Child Disappear," *Evening Star,* 15 April 1933, 1.

28. See Nancy Tomes, "Epidemic Entertainments: Disease and Popular Culture in Early Twentieth-Century America," *American Literary History* 14/4 (2002): 628, and Bert Hansen, "America's First Medical Breakthrough: How Popular Excitement about a French Rabies Cure in 1885 Raised New Expectations for Medical Progress," *American Historical Review* 103/2 (April 1998): 373–418, for insightful analysis of the relationship between newspapers, sufferers, and disease. For a more modern account of patients in the public eye, see Barron H. Lerner, *When Illness Goes Public: Celebrity Patients and How We Look at Medicine* (Baltimore: Johns Hopkins University Press, 2006).

29. "Doomed Baby Is Barricaded in Home," 1.

30. "Vaskos Hide Baby in Secret Refuge; Vanished Family Leaves No Trace, Thwarting Pursuit," *Herald Statesman,* 17 April 1933, 16.

31. "Doomed Baby Goes Blind As Family Flees," *Herald Statesman,* 19 April 1933, 3.

32. "Parents Flee with Ill Child," *Los Angeles Times,* 16 April 1933, 3.

33. The transcript of the decision was summarized in "Court Decrees Knife for Baby; Appellate Judges Uphold Order to Save Vasko Child," *Herald Statesman,* 18 April 1933, 1, and printed in full in "Vaskos Disappear as Baby Goes Blind," *Herald Statesman,* 19 April 1933, 3, and "Operation on Baby Ordered on Appeal," *New York Times,* 19 April 1933, 36.

34. Ibid.

35. Editorial, "Wise Daniels Come to Judgment," *Herald Statesman,* 20 April 1933, 10.

36. "Mother Yields Baby to Knife Today," *Herald Statesman,* 25 April 1933, 3.

37. "Vasko Child's Eye Is Removed Here," *New York Times,* 26 April 1933, 17.

38. Ibid.

39. "Eye Operation Performed on Vasko Baby; Condition Is Called Satisfactory," *Evening Star,* 26 April 1933, 1, 5; "Vasko Baby Gains, Plays with Dolls," *Herald Statesman,* 27 April 1933, 1.

40. In an earlier case, *The People of the State of New York v. Pierson* (1903), the court of appeals held that a parent or guardian may be convicted who, when a child under his care is dangerously ill, willfully neglects to summon to its aid a physician, that is, a person who is duly admitted to practice medicine under the laws of the state. Section 288 of the New York Penal Code provided that a person who "willfully omits, without lawful excuse, to perform a duty by law imposed upon him, to furnish food, clothing, shelter or medical attendance to a minor . . . is guilty of a misdemeanor." A law review points to this case as the first case in which such a question was raised in the U.S. in a court of higher resort, though other commentaries point to cases from the late nineteenth century. See "Failure to Furnish Medical Attendance to a Minor," *Columbia Law Review* 3/8 (Dec. 1903): 574–576. The Vasko case (*In re Vasko,* 263 N.Y.S. 552 [App. Div. 1933]) has often been cited as the earliest example of the state legally compelling parents to allow a recommended surgical procedure. Other key decisions that followed included *In re*

Rotkowitz, 25 N.Y.S. 2d 624 (Dom. Rel. Ct. 1941), ordering operation to correct child's foot deformity; *State v. Perricone,* 181 A.2d 751 (N.J. 1962), upholding guardian's authority to consent to blood transfusion for infant over parents' religious objections; *Jehovah's Witnesses v. King County Hosp.,* 278 F. Supp. 488 (W.D. Wash. 1967), holding that the state may intervene in parents' religiously motivated decision to refuse a medically necessary blood transfusion for their child); *In re Sampson,* 317 N.Y.S.2d 641 (Fam Ct. 1970), ordering surgery against parents' wishes to correct facial deformity; *Custody of a Minor,* 379 N.E.2d 1053 (Mass. 1978), ordering chemotherapy despite parents' pessimism and concerns about child's discomfort; *Petra B. v. Eric B.,* 265 Cal. Rptr.342 (Ct. App. 1989), ordering medical treatment for child's serious burns despite parents' desire to treat with herbal remedies; *In re Doe,* 418 s.E.2d 3, 7 n.6 (Ga. 1992), commenting that parents do not have an "absolute right to make medical decisions for their children"; and *A.D.H. v. State Dep't of Human Res.,* 640So. 2d 969 (Ala. Civ. App. 1994), ordering AZT treatment for HIV despite mother's insistence that her child was not infected with HIV).

41. "Vasko Baby Returns Home in Arms of Joyful Mother; New Case Up in Brooklyn," *The Herald Statesman* (Yonkers, N.Y.), 6 May 1933, 2.

42. Raymond S. Duff and A. G. M. Campbell, "Moral and Ethical Dilemmas in the Special-Care Nursery," *New England Journal of Medicine* 289 (1973): 885, and "On Deciding the Care of Severely Handicapped or Dying Persons: With Particular Reference to Infants," *Pediatrics* 57 (1976): 487.

43. For two recent examples, see Hazel Glenn Beh and Milton Diamond, "An Emerging Ethical and Medical Dilemma: Should Physicians Perform Sex Assignment on Infants with Ambiguous Genitalia?" *Michigan Journal of Gender and Law* 7/1 (2000): 1–63, and Alyssa Connell Lareau, "Who Decides? Genital Normalizing Surgery on Intersexed Infants," *Georgetown Law Review* (2003): 129–151.

44. "Battle to Save Life of Baby," *Chicago Daily Tribune,* 7 May 1938, 1.

45. Ibid. See also "Parents Prefer Baby's Death to Lifetime of Blindness," *Los Angeles Times,* 7 May 1938, 1; "Baby's Death or Loss of Sight is 'Left to God' by Its Parents," *Washington Post,* 7 May 1938, XI; and "Parents Debate Dooming of Baby," *New York Times,* 7 May 1938, 32.

46. Martin S. Pernick, *The Black Stork: Eugenics and the Death of "Defective" Babies in American Medicine and Motion Pictures since 1915* (New York: Oxford University Press, 1996). Pernick noted the reappearance of the Bollinger case in the 1938 coverage.

47. "Blindness Is Lesser Evil than Letting Baby Die, Voters Say," *Washington Post,* 19 June 1938. Although 63 percent of those polled were in favor of the operation, opinions varied according to religious affiliation. Seventy-three percent of Roman Catholics said they would choose to operate, 63 percent of Protestants agreed, while only 58 percent of nonmembers made the same decision.

48. "Surgeons Hopeful of Saving Baby from Total Blindness," *Los Angeles Times,* 11 May 1938, 1.

49. "Doctors to Fix Baby's Fate," *Chicago Sunday Tribune,* 8 May 1938, 1.

50. For the Canadian context, see Charles Hayter, *Element of Hope: Radium and the Response to Cancer in Canada, 1900–1940* (Montreal: McGill-Queen's University Press, 2005). See also Patrice Pinell, *The Fight against Cancer: France, 1890–1940* (London: Routledge, 2002), and Caroline Murphy, "A History of Radiotherapy to 1950: Cancer and Radiotherapy in Britain 1850–1950 (Ph.D. diss., University of Manchester, 1986). For a broad, comparative review, see John V.

Pickstone, "Contested Cumulations: Configurations of Cancer Treatments through the Twentieth Century," *Bulletin of the History of Medicine* 81/1 (spring 2007): 164–196.

51. "Doctors Strive to Save Baby's Sight; Eye Removal Halts Tumor's Fatal Spread," *Chicago Daily Tribune,* 10 May 1938, 1.

52. "Surgeons Remove Left Eye of Baby," *New York Times,* 10 May 1938, 3.

53. "Mother Talks: I Pleaded for My Baby's Life," *Chicago Daily Tribune,* 12 May 1938, 8.

54. "Colan Baby's Eye May Keep Sight," *New York Times,* 13 Aug. 1938, 15.

55. "Parents Prohibit Operation on Baby, Court Decree Sought," *Herald Statesman,* 12 April 1933, 2.

56. "Issues Stirred by Vasko Case," *Los Angeles Times,* 30 April 1933, 24.

Chapter Two • "Cancer, The Child Killer"

1. A recording of the original broadcast can be found on the Jimmy Fund website at www.jimmyfund.org/abo/broad/jimmybroadcast.asp. See also Saul Wisnia, *Images of America: The Jimmy Fund of the Dana-Farber Cancer Institute* (Charleston, S.C.: Arcadia, 2002), 18–19, for a rough transcript.

2. Wisnia, *Images of America,* 19.

3. George E. Foley, ed., *The Children's Cancer Foundation: The House that "Jimmy" Built, The First Quarter-Century* (Boston: Dana-Farber Cancer Institute, n.d.), 43.

4. Statistics from Memorial Hospital showed that only 18 of 218 patients with childhood cancers at the institution had survived at least five years from the date of admission. Harold Dargeon, ed., *Cancer in Childhood and a Discussion of Certain Benign Tumors* (St. Louis: C. V. Mosby, 1940), 17.

5. Ibid., 25.

6. U.S. Bureau of Vital Statistics, 1947.

7. Harold Dargeon, "Pediatrics at Memorial Hospital for Cancer and Allied Diseases" (1967), SKCC papers, RAC. In the years after the Registry's inception, its records showed rising rates of childhood cancer mortality. Dargeon attributed the trend to greater accuracy in diagnosis, reporting, and record keeping.

8. *The Bridge League Bulletin* (Nov. 1939), 1939–1940 Scrapbook, SKCC papers, RAC; "First Child-Cancer Ward Functioning in New York," *Newsweek* (15 Jan. 1940), 1939–1940 Scrapbook, SKCC papers, RAC.

9. For example, see *[Bloomfield, New Jersey] Independent Press,* 1939–1940 Scrapbook, SKCC papers, RAC, and photo, no date, RG 400.1, Series 4, Box 1 Public Affairs—Photos Department, Folder 45, SKCC papers, RAC.

10. Halloween–Children's Ward, stamped as Feb. 1949, RG 400.1, Series 4, Box 1, Folder 43, MSKCC Archives, RAC; Christmas–Children's Ward, 1949, RG 400.1, Series 4, Box 1, Folder 36, MSKCC archives, RAC; Christmas party, 1945, RG 400.1, Series 4, Box 1, Folder 31, RAC; Christmas–Children's Ward, no date, RG 400.1, Series 4, Box 1, Folder 31, RAC.

11. Easter Day party, 1949, RG 400.1, Series 4, Box 1, Folder 40, RAC.

12. Memorial Center for Cancer and Allied Diseases, *Quadrennial Report, 1947–51* (New York, 1951), 67.

13. Ibid.

14. Harold Dargeon, "Cancer in Children from Birth to Fourteen Years of Age," *Journal of the American Medical Association* (14 Feb. 1948): 459. The American Medical Association and the American Cancer Society jointly published this piece as part of a nine-part series on cancer.

15. "Children in Danger," *Newsweek* 29 (10 March 1947): 54,

16. "Tower of Hope," *Reader's Digest* (Sept. 1949): 13. This article was condensed from the 27 June 1949 issue of *Time.*

17. "Tower of Hope," *Time* (27 June 1949).

18. For a description of the growth of medical knowledge about leukemia, see Frederick W. Grant, "The Dread Leukemias and the Lymphomas: Their Nature and Prospects." In Maxwell Wintrobe, ed., *Blood, Pure and Eloquent: A Story of Discovery, of People, and of Ideas* (New York: McGraw-Hill, 1980), 511–546.

19. L. Emmett Holt, *The Diseases of Infancy and Childhood: For the Use of Students and Practitioners of Medicine* (New York: D. Appleton, 1897).

20. Ibid., 14.

21. Memorial Center for Cancer and Allied Diseases, *Quadrennial Report, 1947–51* (New York, 1951).

22. Despite Memorial's assurances, the desperation of cancer patients and the enthusiasm of scientists to apply new therapies to human cancers resulted in a transparency between treatment and research at Memorial and other similar cancer research centers. As in messages about adult cancers, dual messages about dread and hope frequently coexisted in discussions of children's cancers and justification for controversial research and treatment methods. Experimental cancer treatment and trials in children will be discussed further in subsequent chapters.

23. See Walter Ross, *Crusade: The Official History of the American Cancer Society* (New York: Arbor House, 1987), for an institutional history of the organization.

24. See James T. Patterson, *The Dread Disease: Cancer and Modern American Culture* (Cambridge, Mass.: Harvard University Press, 1986), for the best general account of the history of cancer in the United States. Patterson did not discuss children and cancer at length, but included chemotherapy and its successful use in acute leukemia in his chapter "The Research Explosion."

25. Bernard Behrend, "Do You Fear Cancer?" *Hygeia* 19/9 (Sept. 1941): 712–713, 752.

26. Surveys of the *Reader's Guide to Periodical Literature* and the *New York Times Index* reveal a steadily growing number of general articles about cancer in the 1940s and 1950s, but few writings on children's cancers were published. See Patterson, *The Dread Disease,* for figures from the 1940s and 1950s: "Between 1943 and 1945 the *Reader's Guide* contained 53 articles on cancer. By 1945–1947 the number had risen to 113, and by 1955–1957 to a peak of 273. Similar increases in the number of stories about cancer—from 54 in 1940 to 144 in 1955—occurred in the *New York Times.* Not even polio attracted so much special attention in the press at the time" (97, 143).

27. Frank Rector, "Cancer Kills Children Too!" *Women's Home Companion* (March 1947): 36–37, and Lawrence Galton, "Cancer, the Child Killer," *Colliers* (15 May 1948): 64–66.

28. Galton, 66.

29. Emily K. Abel, *Hearts of Wisdom: American Women Caring for Kin, 1850–1940* (Cambridge, Mass.: Harvard University Press, 2000). Also see Rima Apple, *Mothers and Medicine: A Social History of Infant Feeding* (Madison: University of Wisconsin Press, 1987), and Judith Walzer Leavitt, *Brought to Bed: Childbearing in America, 1750–1950* (New York: Oxford University Press, 1986).

30. In *American Pediatrics: The Social Dynamics of Professionalism, 1880–1980* (Berkeley: University of California Press, 1988), Sydney Halpern examined how pediatrics developed into an organized professional unit within American medicine between the 1880s and 1940s and then splintered into subspecialties after World War II. Other general accounts include Heather Munro Prescott, *A Doctor of Their Own: The History of Adolescent Medicine* (Cambridge, Mass.: Harvard University Press, 1998); Thomas E. Cone, Jr., *History of American Pediatrics* (Boston: Little, Brown, 1979); and Jeff Baker, "Women and the Invention of Well Child Care," *Pediatrics* 94 (1994): 527–531.

31. Nancy Tomes, *The Gospel of Germs: Men, Women, and the Microbe in American Life* (Cambridge, Mass.: Harvard University Press, 1998).

32. In *Generation of Vipers* (New York: Farrar and Rinehart, 1942), Philip Wylie coined the term "momism" to link mothers and psychological problems of youth, esp. boys. See Molly Ladd-Taylor and Lauri Umansky, *"Bad" Mothers: The Politics of Blame in Twentieth-Century America* (New York: New York University Press, 1998).

33. See Kathleen W. Jones, *Taming the Troublesome Child: American Families, Child Guidance, and the Limits of Psychiatric Authority* (Cambridge, Mass.: Harvard University Press, 1999).

34. Ladd-Taylor and Umansky, 4.

35. See "Navy Is Santa to Sick Child," *New York Times* (24 Dec. 1944): 21, "Victim of Leukemia Dies: Jersey Girl, 2, Won Sympathy of Many in Her Plight," *New York Times* (17 Nov. 1945): 32.

36. Stephanie Coontz, *The Way We Never Were: American Families and the Nostalgia Trap* (New York: Basic Books, 1992), 24.

37. "President Heeds Appeal: Refers to Army Case of Soldier Whose Baby Is Ill," *New York Times* (6 April 1944): 25; "Sergeant Truax on Way Home," *New York Times* (28 April 1944); "Soldier at Sickbed: Sergeant Home From Pacific Hopes for Child's Recovery," *New York Times* (30 April 1944): 28.

38. "Death Claims Baby of Sergeant Truax: Child Dies of Leukemia 6 Days after Father Returns on Leave," *New York Times* (5 May 1944): 21.

39. Galton, 64.

40. "Officer in from Germany Sees Son First Time—in Cancer Ward," *Herald Tribune* (19 Jan. 1946), Memorial Hospital 1946 Scrapbook, SKCC papers, RAC.

41. Galton, 65.

42. "Too Much to Bear," *Time* (15 Jan. 1951), 40. The Purcells faced a similar decision to the Vaskos and Colans. Their young daughter, Carolyn, had been diagnosed with retinoblastoma. Their home in Alpharetta, Georgia (population 647), was described as "small" and "dingy," and the article reported that Carolyn's father was an unemployed stonemason. The Purcells were offered surgery at Mayo Clinic in Minnesota, but it is unclear whether they made the trip.

43. "Annual Report" (Leukemia Society, 1955), Lymphoma and Leukemia Society of America, White Plains, New York.

44. Dargeon, *Cancer in Childhood,* 40.

45. William Dameshek, "Leukemia," *Hygeia* 24/12 (Dec. 1946): 908.

46. Ibid.

47. Ibid., 958.

48. See "Leukemia Studies: Foundation to Award a Prize for Best Paper on the Disease," *New York Times* (9 April 1950): 9, for an announcement for the first prize competition. Later, it ex-

panded its awards contest into a grant-in-aid program designated for outstanding research projects by young investigators and a fellowship source for physicians training in the specialized field of leukemia and related diseases.

49. Ibid.

50. Sidney Farber, Louis K. Diamond, Robert D. Mercer, Robert F. Sylvester, Jr., and James A. Wolff, "Temporary Remissions in Acute Leukemia in Children Produced by Folic Acid Antagonist 4-Aminopteroyl-Glutamic Acid (Aminopterin)," *New England Journal of Medicine* 238 (1948): 787–793.

51. "Hope for Leukemia," *Newsweek* 31 (April 26, 1948): 48.

52. Farber also coordinated exchanges between the pharmaceutical company and his colleague Louis Diamond who was researching anemia. A letter from November 1943 stated, "I made arrangements with Dr. Diamond for trying the 80 per cent extract on suitable cases of anemia. We shall begin when the capsules arrive." Correspondence, Sidney Farber to Dr. Y. Subbarow, 28 Nov. 1943, Dana-Farber Cancer Institute Library, Boston, Massachusetts (hereafter referred to as DFCI).

53. Correspondence, Sidney Farber to Dr. Y. Subbarow, 29 March 1944, DFCI. Unfortunately, this small collection only contains a portion of one side of the correspondence between Farber and Subbarow.

54. Correspondence, Sidney Farber to Dr. Y. Subbarow, 30 June 1944, DFCI. Gaps in correspondence between 1944–1945 and 1945–1948 make it difficult to reconstruct the scientific investigations on diet, vitamins, and disease at Lederle and Boston Children's Hospital during these periods. Later, in a memorial for Subbarow, Farber claimed that his colleague had made aminopterin for Farber at his request.

55. Correspondence, Sidney Farber to Dr. Y. Subbarow, 15 April 1948, DFCI.

56. No written record was kept of this conference.

57. Remarks among Farber's colleagues suggested that this discrepancy raised questions whether Farber was completely truthful when reporting his experimental design, methods, and results.

58. Correspondence, Sidney Farber to Dr. Y. Subbarow, 2 February 1948, DFCI.

59. Wisnia presents a chronological review of the Jimmy Fund's fundraising activities.

60. "The House that Jimmy Built," Program, Sidney Farber, Dedication Ceremony, 7 Jan. 1952, DFCI, 16.

61. Ibid., 8. The previous historical background on the Jimmy Fund is also from speakers participating in the program.

Chapter Three • Death Be Not Proud

1. John Gunther, *Death Be Not Proud: A Memoir* (New York: Harper and Brothers, 1949), 3.

2. Ibid.

3. John Gunther, *A Fragment of Autobiography: The Fun of Writing the Inside Books* (New York: Harper and Row, 1962), 9.

4. Gunther, *A Fragment of Autobiography,* 6.

5. Ibid., 39.

6. Ibid., 60.

7. Ibid.

8. Ibid., 45.

9. John Hayward and Geoffrey Keynes, eds., *The Complete Poetry and Selected Prose of John Donne and the Complete Poetry of William Blake* (New York: Random House, 1941), 239.

10. The book's dust jacket stated that neither the publisher nor the author was profiting from the account and that the proceeds would be donated to cancer research for children. A letter from John to Frances in 1949 concerned the funds. John proposed that they share part of the proceeds from the *Ladies' Home Journal* article and the book. "I thought of dividing the rest," he wrote, "between Deerfield, Memorial, or some other hospital (in the form of a specific endowment in Johnny's name for tumor research, if the sum is considerable enough)." He also considered giving a portion of the money to Gerson or keeping some as reimbursement for their medical expenses. John Gunther to Frances Gunther, [1949], Box 4, Folder 175, Frances Fineman Gunther Papers, 1915–1963, Schlesinger Library, Radcliffe Institute, Harvard University, Cambridge, Massachusetts (hereafter referred to as FGP). Unfortunately, I was unable to determine the final distribution of the profits.

11. L. Emmett Holt to Frances Gunther, 7 June 1929, Carton 2, Folder 46, FGP. Another physician termed Judy's death "an unavoidable accident." Julius A. Miller to Frances Gunther, 28 February 1929, Carton 2, Folder 46, FGP.

12. Frances Gunther, 1 Jan. 1947, Box 1, Folder 15, FGP.

13. Frances Gunther, 8 May 1948, Box 1, Folder 15, FGP.

14. Marginal notes, Draft of "A Word from Frances," n.d., Box 44, Folder 18, John Gunther Collection, Special Collections, Joseph Regenstein Library, University of Chicago, Illinois (hereafter referred to as JGC).

15. Notes labeled "Diary," n.d., Box 44, Folder 18, JGC.

16. Ibid.

17. Gunther, *Death Be Not Proud,* 32.

18. It is unclear what Johnny knew about his illness. After his first surgery, John recorded a brief exchange between Putnam and Johnny in which Putnam stated, "Johnny, what we operated for was a brain tumor" (5). Later in *Death Be Not Proud,* Gunther wrote that Johnny did not know the extent of his condition. He said, "We had to shield him from definite, explicit knowledge" (50). He hid the encyclopedia volume that contained information on his son's tumor. Later, after leaving an x-ray appointment, Johnny asked, "Does this mean I have cancer?" (61). The Gunthers also noted that Johnny's personal writings revealed that he knew more about his tumor than they had realized. Physicians often concealed cancer diagnoses from patients. In some instances, spouses or family members were told the truth about the victim's diagnosis and prognosis so that they could manage the patient's affairs. See Samuel Standard and Helmuth Nathan, *Should the Patient Know the Truth?: A Response of Physicians, Nurses, Clergymen, and Lawyers* (New York: Springer, 1955), for specific sections on children and truth telling. For a description of truth telling practices, see Susan E. Lederer, "Medical Ethics and the Media: Oaths, Codes, and Popular Culture." In Robert G. Baker, Arthur L. Caplan, Linda Emanuel, and Stephen S. Latham, eds., *The American Medical Ethics Revolution* (Baltimore: Johns Hopkins University Press, 1999), 91–103.

19. Gunther, *Death Be Not Proud,* 254.

20. For a comprehensive overview of the field, see two recent collections on child health and

welfare: Alexandra Minna Stern and Howard Markel, eds., *Formative Years: Children's Health in the United States, 1880–2000* (Ann Arbor: University of Michigan Press, 2002), and Roger Cooter, ed., *In the Name of the Child: Health and Welfare, 1880–1940* (London: Routledge, 1992). The first provides a concise overview of the field, including medical specialties, technologies, adolescent health, and changing definitions of childhood diseases. The contributors to the latter volume examined topics such as children's bodies, childhood diseases, child abuse, child labor, and child guidance in comparative articles that crossed geographical boundaries.

21. See Arthur Kleinman, *Illness Narratives: Suffering, Healing, and the Human Condition* (New York: Basic Books, 1988); Howard Brody, *Stories of Sickness* (New Haven, Conn.: Yale University Press, 1987); and Anne Hunsaker Hawkins, *Reconstructing Illness* (West Lafayette, Ind.: Purdue University Press, 1993), for analyses of this literary genre. Other major works on illness narratives include Arthur W. Frank, "The Rhetoric of Self-Change: Illness Experience as Narrative," *Sociology Quarterly* 34 (1993): 39–52; Thomas Couser, *Recovering Bodies: Illness, Disability, and Life Writing* (Madison: University of Wisconsin Press, 1997); and *a/b Auto/Biography Studies: Special Issue: Illness, Disability, and Lifewriting* 6/1 (spring 1991). For a summary of the literature on illness narratives, see Amy Fairchild, "The Polio Narratives: Dialogues with FDR," *Bulletin of the History of Medicine* 75/3 (fall 2001): 491–497.

22. Daniel J. Wilson, *Living with Polio: The Epidemic and Its Survivors* (Chicago: University of Chicago Press, 2005); "A Crippling Fear: Experiencing Polio in the Era of FDR," *Bulletin of the History of Medicine* 72 (1998): 464–495; Daniel J. Wilson, "Covenants of Work and Grace: Themes of Recovery and Redemption in Polio Narratives," *Literature & Medicine* 13 (1994): 22–41; and Fairchild, "The Polio Narratives," 491.

23. Kathryn Black, *In the Shadow of Polio: A Personal and Social History* (Reading, Mass.: Addison-Wesley, 1996). One boy referred to his room as a "way station for death" and then recounted how the patients knew that someone had died on the ward. "For those in iron lungs," he recalled, "the death signal was the passing of a nurse down the row of tanks, turning each mirror so the patients couldn't watch while a body was wheeled out in a now silent machine" (64).

24. Gunther, *Death Be Not Proud,* 26.

25. Ibid., 41.

26. Ibid., 42.

27. Ibid., 54. The pathological diagnosis was also recorded in the Medical Record, Roentgentherapy Sheet, Box 44, Folder 7, JGC.

28. Related work on the postwar dynamic includes Angela N. H. Creager, "Tracing the Politics of Changing Postwar Research Practices: The Export of 'American' Radioisotopes to European Biologists," *Studies in History and Philosophy of Science. Part C: Biological and Biomedical Sciences* 33 (2002): 367–388; and Stuart M. Feffer, "Atoms, Cancer, and Politics: Supporting Atomic Science at the University of Chicago, 1944–1950," *Historical Studies in the Physical and Biological Sciences* 22 (1992): 233–261. Note that John Gunther later wrote to researchers at the school looking for therapeutic alternatives.

29. Medical record, Box 44, Folder 7, JGC.

30. Gunther, *Death Be Not Proud,* 57.

31. Ibid., 58.

32. Lester A. Mount, Medical Report, Examination of John Gunther, 20 July 1946, Box 44, Folder 7, JGC.

33. Clement B. Masson to Cornelius Traeger, 16 July 1946, Box 44, Folder 7, JGC. Masson replaced Putnam after he moved to California.

34. Gunther, *Death Be Not Proud,* 74.

35. Ibid. Also see Report of Dr. Penfield, 27 July 1946, Box 44, Folder 8, JGC.

36. Gunther, *Death Be Not Proud,* 71.

37. Ibid., 76.

38. John Gunther to Ernest O. Lawrence, 30 July 1946, Box 44, Folder 8, JGC. The identical letters sent to Lawrence, Evans, and Hutchins were dated 30 July 1946. Notes from John Gunther's archival collection suggest that he may have contacted at least a dozen other scientists and experts over the course of his son's illness.

39. Ibid.

40. Ibid.

41. Gunther, *Death Be Not Proud,* 81–82.

42. Ibid., 32.

43. Ibid., 171–172.

44. Vannevar Bush, *Science: The Endless Frontier: A Report to the President on a Program for Postwar Scientific Research* (Washington, D.C.: Government Printing Office, 1945).

45. Paul Starr, *The Social Transformation of American Medicine: The Rise of a Sovereign Profession and the Making of a Vast Industry* (New York: Basic Books, 1982), 335–336. See Allan M. Brandt and Martha Gardner, "The Golden Age of Medicine." In Roger Cooter and John Pickstone, eds., *The History of Twentieth-Century Medicine* (Amsterdam: Harwood, 2000), 21–37.

46. John C. Burnham, "American Medicine's Golden Age: What Happened to It?" *Science* 215 (19 March 182): 1474–1479.

47. Gunther, *Death Be Not Proud,* 89.

48. Max Gerson, *A Cancer Therapy: Results of Fifty Cases* (New York: Whittier Books, 1958).

49. Gunther, *Death Be Not Proud,* 117.

50. Max Gerson to John and Frances Gunther, 28 Dec. 1946, Box 44, Folder 8, JGC.

51. Tracy Putnam to John Gunther, 15 Jan. 1947, Box 44, Folder 8, JGC.

52. The Gunthers' use of Gerson's diet therapy both supports and contradicts the conclusions of David M. Eisenberg, Ronald C. Kessler, Cindy Foster, Frances E. Norlock, David R. Calkins, and Thomas L. Delbanco, "Unconventional Medicine in the United States—Prevalence, Costs, and Patterns of Use," *New England Journal of Medicine* 328/4 (28 Jan. 1993): 246–252. In this study, Eisenberg and his colleagues found that nonblack persons 25–49 years of age with advanced education and higher incomes were the most common users of alternative therapies. Most users, however, sought unconventional therapies for chronic, not life-threatening conditions. They also commonly enlisted the aid of both unconventional healers and medical doctors simultaneously, but did not disclose this information to their physician.

53. Gunther, *Death Be Not Proud,* 144.

54. Ibid., 151.

55. Ibid., 168.

56. Ibid., 189.

57. New York City newspapers such as the *New York Times, New York Herald Tribune, New York Sun,* and *New York World Telegram* published Johnny's obituary on 1 and 2 July 1947. It was

also picked up by the Associated Press and printed in over forty newspapers from San Francisco, California to Des Moines, Iowa.

58. Gunther, *Death Be Not Proud,* 194.

59. Finding guide, JGC. John Gunther, "Death Be Not Proud," *Ladies' Home Journal* (February 1949): 38–39, 87–116. John Gunther, "Death Be Not Proud," *Reader's Digest* (March 1949): 129–146.

60. The finding aid for the section of the John Gunther Papers devoted to *Death Be Not Proud* states, "The correspondence is the most extensive part of the material on this work. There are two folders of personal correspondence, all post-publication, from friends of Gunther commenting on the book. There are also four boxes, containing approximately four thousand letters from the general public" (Finding aid, JGC).

61. Walter Duranty, *New York Herald Tribune Weekly Book Review* (6 February 1949). Other reviews included: Lewis Gannett, *New York Tribune* (3 February 1949); [Review], *New Yorker* (26 February 1949): 98; Pamela Taylor, "Johnny Gunther's Gallant Battle," *Saturday Review of Books* (5 March 1949): 27; M.C. Scoggin, "Outlook Tower," *Horn Books* 25 (May 1949): 241; and [Review], *Time* 53 (7 February 1949): 92, 94.

62. Nathaniel M. Guptill to John Gunther, 5 April 1949, Box 46, Folder 2, JGC.

63. E. Burdette Backus, 5 April 1953, Box 45, Folder 4, JGC.

64. Niels Nelson to John Gunther, n.d., Box 47, Folder 5, JGC. Niels Nielsen, "More Than Any Sermon," *Ladies' Home Journal* (April 1949): 6.

65. Paul B. Hoeber to John Gunther, 17 May 1949, Box 48, Folder 11, JGC.

66. Walter L. Palmer to John Gunther, 9 February 1949, Box 44, Folder 23, JGC.

67. Ibid.

68. Charles Huggins to John Gunther, 7 July 1952, Box 48, Folder 11, JGC.

69. Yvette Fay Francis to John Gunther, 24 Sept. 1949, Box 45, Folder 10, JGC.

70. Ibid.

71. Mary L. Davis to John Gunther, 25 July 1962, Box 33, Folder "Fan Mail," JGC.

72. Jean Kuffner to John Gunther, 7 March 1949, Box 46, Folder 8, JGC.

73. Lois Payne to John Gunther, 5 March 1949, Box, 47, Folder 6, JGC.

74. Mrs. D. B. Hopkins to John Gunther, n.d., Box 46, Folder 5, JGC.

75. Betty Jane Sheffler to John Gunther, 8 March 1949, Box 48, Folder 1, JGC.

76. Mary Reilly to John Gunther, 22 April 1958, Box 47, Folder 10, JGC.

77. Beverly Goodell to John Gunther, 5 Nov. 1958, Box 46, Folder 2, JGC.

78. Mary A. Dotterer to John and Frances Gunther, 10 March 1949, Box 45, Folder 7, JGC.

79. [Unreadable] Baasch to John and Frances Gunther, Box 45, Folder 3, JGC.

80. Gunther, *Death Be Not Proud,* 251.

81. Jane Raborg to John Gunther, 15 February 1949, Box, 47, Folder 8, JGC.

82. Marianne Peters to Frances Gunther, 13 February 1949, Carton 2, Folder 58, FGP.

83. Elizabeth V. Guthrie to John and Frances Gunther, 18 Dec. 1949, Box 46, Folder 1, JGC.

84. Ibid.

85. Elizabeth V. Guthrie to John and Frances Gunther, 25 June 1951, Box 46, Folder 1, JGC.

86. Elizabeth V. Guthrie to John and Frances Gunther, 31 July 1951, Box 46, Folder 1, JGC.

87. Mrs. Martin H. Byrd to John Gunther, n.d., Box 45, Folder 2, JGC.

88. Mrs. T. H. R. to John Gunther, 23 February 1949, Box 47, Folder 9, JGC.

89. See Robert N. Proctor, *Cancer Wars: What We Know and Don't Know about Cancer* (New York: Basic Books, 1995) for an examination of the major theories of cancer causation (behavioral, environmental, and hereditary) within the larger political history of the disease. Proctor analyzes the way in which various groups promoted or suppressed particular causes in their pursuit of research funding, consumer support, or political power.

90. Frustrated parents asked why physicians and scientists did not know more about the origins of tumors or about their swift growth.

91. Mrs. Lewis Orrell, Jr., to John Gunther (n.d), Box 48, Folder 11, JGC.

92. Ibid.

93. Mrs. Cramer to Frances Gunther, February 1949, Carton 2, Folder 58, FGP.

94. Mrs. Raymond Kaplan to Frances Gunther, 7 February 1949, Carton 2, Folder 58, FGP.

95. Ibid.

96. J. Davis to John Gunther, 25 March 1949, JGC.

97. Limited archival documentation suggests that Gunther neither explicitly endorsed Max Gerson's healing method nor sent contact information to readers.

98. Jean D. Roessler to John Gunther, 18 February 1949, Box 47, Folder 10, JGC.

99. Genevieve Christianson to John and Frances Gunther, 13 March 1950, Box 45, Folder 6, JGC.

100. Ibid.

101. Viviana Zelizer, *Pricing the Priceless Child: The Changing Social Value of Children* (New York: Basic Books, 1985); Elaine Tyler May, *Homeward Bound: American Families in the Cold War Era* (New York: Basic Books, 1988), xiv; and Susan Hartmann, *The Homefront and Beyond: American Women in the 1940s* (Boston: Twayne, 1982).

102. Landon Jones, *Great Expectations: America and the Baby Boom Generation* (New York: Coward, McCann and Geoghegan, 1980).

103. Wendy Kozol, *Life's America: Family and Nation in Postwar Photojournalism* (Philadelphia: Temple University Press, 1994).

104. Hieda N. Janovak to John Gunther, 22 Jan. 1959, Box 46, Folder 6, JGC.

105. William Rodgers to John Gunther, 24 Jan. 1949, Box 47, Folder 9, JGC.

106. Sociologists have mined literary sources to examine how expressions of maternal grief over infant death changed over time. They found that only one magazine, *True Stories,* a publication for working-class women, featured stories of maternal grief in the mid-twentieth century. Wendy Simonds and Barbara Katz Rothman, *Centuries of Solace: Expressions of Maternal Grief in Popular Literature* (Philadelphia: Temple University Press, 1992).

107. Mrs. A. J. Hummel to John Gunther, 22 March 1949, Box 46, Folder 5, JGC.

108. Loretta Maxwell to John Gunther, 23 Aug. 1952, Box 46, Folder 7, JGC.

109. Helen L. Kaufmann to John Gunther, 7 March 1949, Box 46, Folder 8, JGC.

110. Margaret J. Oberfelder to John Gunther, 1 February 1949, Box 47, Folder 6, JGC.

111. Susan Sontag, *Illness as Metaphor* (New York: Farrar, Straus and Giroux, 1978). Sontag wrote that such metaphors "are responses to a disease thought to be intractable and capricious—that is, a disease not understood—in an era in which medicine's central premise is that all diseases can be cured. Such a disease is, by definition, mysterious" (5). Sontag carefully traced

the changing, varied uses of tuberculosis and cancer metaphors but ultimately derided their use as simplistic.

112. Mrs. G. Clifford to John Gunther, 16 March 1949, Box 45, Folder 5, JGC.

113. Lucy P. Gregg to John Gunther, 1 February 1949, Box 46, Folder 1, JGC.

114. Ibid.

115. Chuck Gordon to John and Frances Gunther, 14 March 1949, Box 46, Folder 2, JGC.

116. Gertrude Hepworth to John and Frances Gunther, Box 46, Folder 5, JGC.

117. Mildred Mize to John Gunther, 1 February 1949, Box 47, Folder 4, JGC.

118. After first appearing in hardcover in 1949, later editions of the book were published in 1953, 1966, 1971, 1992, and 1998. In 1975, *Death Be Not Proud* was aired as a television movie. More recently, lines from *Death Be Not Proud* reappeared in *Wit,* a Pulitzer Prize–winning play adapted into a television movie. The play's protagonist, Vivian Bearing, a British professor and scholar of Donne's Holy Sonnets, reflected upon her analysis of *Death Be Not Proud* when faced with her own imminent death from metastatic ovarian cancer. Through performances of *Wit* and the slogan "Death Be Not Ovarian Cancer," cancer organizations have used the play to promote gynecological cancer screenings and to raise cancer awareness in women.

119. Radio script, North Carolina Division of the American Cancer Society, Box 48, Folder 13, JGC.

120. Russell M. Viner, and Janet Golden, "Children's Experiences of Illness." In Roger Cooter and John Pickstone, eds., *The History of Twentieth-Century Medicine* (Amsterdam: Harwood, 2000), 576.

Chapter Four • "Against All Odds"

1. Angela Burns to John Gunther, 29 Jan. 1949, Box 45, Folder 2, John Gunther Collection, Special Collections, Joseph Regenstein Library, University of Chicago, Illinois.

2. Ibid.

3. Allan M. Brandt and Martha Gardner, "The Golden Age of Medicine." In Roger Cooter and John Pickstone, eds., *The History of Twentieth Century Medicine* (Amsterdam: Harwood, 2000), 21–37.

4. Emil J. Freireich and Noreen A. Lemak, *Milestones in Leukemia Research and Therapy* (Baltimore: Johns Hopkins University Press, 1991), and John Laszlo, *The Cure of Childhood Leukemia: Into the Age of Miracles* (New Brunswick, N.J.: Rutgers University Press, 1995). Freireich, Lemak, and Laszlo have written historical accounts that characterized the field of acute leukemia research in the 1950s and 1960s as a history of scientific progress or "medical milestones" that led to temporary remissions in children suffering from the disease and treatments for other types of cancer. Other physicians, primarily from the National Cancer Institute, have also recorded this series of events as they related to institutional achievements and challenges. C. Gordon Zubrod, "The Cure of Cancer by Chemotherapy: Reflections on How It Happened," *Medical and Pediatric Oncology* 8/2 (1980): 107–114, and Emil Frei III, "Intramural Therapeutic Research at the National Cancer Institute, Department of Medicine: 1955–1965," *Cancer Treatment Reports* 68/1 (Jan. 1984): 21–30, are only a few examples of the retrospective accounts.

5. See Chris Feudtner, *Bittersweet: Diabetes, Insulin, and the Transformation of Illness* (Chapel Hill: University of North Carolina Press, 2003), for another "patient-centered" disease history. Feudtner found that the revolution of insulin therapy during 1921–1922 not only transformed diabetes from an acute to a chronic disease but also caused short- and long-term complications that impacted doctors, nurses, and the family and patient.

6. Institute of Medicine, *Veterans at Risk: The Health Effects of Mustard Gas and Lewisite* (Washington, D.C.: Institute of Medicine, 1993), 44–45.

7. James Phinney Baxter III, *Scientists against Time* (Boston: Little, Brown, 1946), 266. See part 3—Chemistry and War, chapter 18, "Why Not Gas?" for the most detailed section on this topic. For a discussion of chemical development and the important intersections between national defense and insect control from World War I to the post–Cold War era, see Edmund Russell, *War and Nature: Fighting Humans and Insects with Chemicals from World War I to* Silent Spring (Cambridge: Cambridge University Press, 2001).

8. E. B. Krumbhaar, "Role of the Blood and the Bone Marrow in Certain Forms of Gas Poisoning. I. Peripheral Blood Changes and Their Significance," *Journal of the American Medical Association* 72 (1919): 39–41, and E. B. Krumbhaar and H. D. Krumbaar, "The Blood and Bone Marrow in Yellow Cross Gas (Mustard Gas) Poisoning: Changes Produced in the Bone Marrow of Fatal Cases," *Journal of Medical Research* 40 (1919): 497–558.

9. Louis S. Goodman, Maxwell W. Wintrobe, William Dameshek, Morton J. Goodman, Alfred Gilman, and Margaret T. McLennan "Nitrogen Mustard Therapy: Use of Methyl-Bis(Beta-Chloroethyl)amine Hydrochloride and Tris(Beta-Chloroethyl)amine Hydrochloride for Hodgkin's Disease, Lymphosarcoma, Leukemia and Certain Allied and Miscellaneous Disorders," *Journal of the American Medical Association* (21 Sept. 1946): 126. Although the initial clinical trial was held in May 1942, the results were held until 1946 because of wartime secrecy. Facets of the work were published as A. Gilman, "Symposium on Advances in Pharmacology Resulting from War Research: Therapeutic Applications of Chemical Warfare Agents," *Federation Proceedings* 5 (1946): 285–292; A. Gilman and F. S. Philips, "The Biological Actions and Therapeutic Application of the b-Choroethylamines and Sulfides," *Science* 103 (1946): 409–415; C. P. Rhoads, "Work of Chemical Warfare Service, esp. on Nitrogen Mustards," *Journal of Mt. Sinai Hospital* 13 (1947): 299–309, and "Nitrogen Mustards in the Treatment of Neoplastic Disease: Official Statement," *Journal of the American Medical Association* 131 (1946): 656–658; and A. Gilman and M. Cattell, "Systemic Agents: Action and Treatment." In E. C. Andrus, D. W. Bronk, G. A. Carden, Jr., C. S. Keefer, J. S. Lockwood, J. T. Wearn, and M. C. Winternitz, *Advances in Military Medicine: Science in World War II: Office of Scientific Research and Development* (Boston: Little, Brown, 1948), 546–564.

10. Goodman et al., 131.

11. Rhoads, "Nitrogen Mustards in the Treatment of Neoplastic Disease."

12. S. Farber, Louis K. Diamond, Robert D. Mercer, Robert F. Sylvester, Jr., and James A. Wolff, "Temporary Remissions in Acute Leukemia in Children Produced by Folic Acid Antagonist 4-Aminopteroyl-Glutamic Acid (Aminopterin)," *New England Journal of Medicine* 238 (1948): 787. Aminopterin was modified into an equally effective but less toxic form called amethoperin (methotrexate). Like Farber, M. C. Li at the National Cancer Center stimulated disbelief and curiosity after utilizing methotrexate to cure a woman with choriocarcinoma, a rare reproductive cancer.

13. Angela Burns to John Gunther, 29 Jan. 1949, Box 45, Folder 2, JGC.

14. Ibid.

15. "Leukemia in Children and Adults," *CA: A Bulletin of Cancer Progress* 7/2 (March 1957): 54. Photos were supplied courtesy of J. H. Burchenal, R. R. Ellison, M. L. Murphy, and T. C. Tan, Division of Clinical Chemotherapy, Sloan-Kettering Institute, and Departments of Medicine and Pediatrics, Memorial Center for Cancer and Allied Diseases.

16. Angela Burns to John Gunther, 29 Jan. 1949, Box 45, Folder 2, JGC.

17. Ibid.

18. Ibid.

19. "The House That Jimmy Built," Program, Sidney Farber, Dedication Ceremonies (7 Jan. 1952). In George E. Foley, *The Children's Cancer Research Foundation: The House That "Jimmy" Built, The First Quarter-Century* (privately published, held at Dana-Farber Research Institute Library), 17. Farber later articulated an expanded definition in Farber, "Management of the Acute Leukemia Patient and Family," *CA: Cancer Journal for Clinicians* 15/1 (Jan.–Feb. 1965): 14–17.

20. See Richard Cabot, *Social Service and the Art of Healing* (New York: Moffat, Yard, 1909), for a description of his concept.

21. Richard Cabot, *Social Work: Essays on the Meeting Ground of Doctor and Social Worker* (Boston: Houghton Mifflin, 1919), vii, xxv.

22. See Janet Golden, ed., *Infant Asylums and Children's Hospitals: Medical Dilemmas and Developments, 1850–1920* (New York: Garland, 1989) for a collection of relevant primary sources. For a case study, see Helen Hughes Evans, "Hospital Waifs: The Hospital Care of Children in Boston, 1860–1920" (Ph.D. diss., Harvard University, 1995).

23. Foley, *The Children's Cancer Research Foundation,* 17.

24. Ibid.

25. In *Strangers at the Bedside: A History of How Law and Bioethics Transformed Medical Decision Making* (New York: Basic Books, 1991), David Rothman argues that the urgency of wartime research continued into the postwar decades, encouraging the physician investigator to blur the lines between research subject and patient.

26. "Tower of Hope," *Reader's Digest* (Sept. 1949): 13. This article was condensed from the 27 June 1949 issue of *Time.*

27. "Tower of Hope," *Reader's Digest.*

28. Mary A. MacRostie, "What Nurses Are Doing for Children with Leukemia," *R.N.: A Journal for Nurses* 20/10 (Oct. 1957): 50.

29. Mary Stone Brodish, "The Nurse's Role in the Care of Children with Acute Leukemia," *American Journal of Nursing* 58/11 (Nov. 1958): 1573. Brodish wrote the article after periods of observation in the pediatric outpatient clinic of the Grace–New Haven Hospital, the homes of several families being followed by the clinic, Memorial Hospital, and the Jimmy Fund Building.

30. Ibid., 1574.

31. Ibid.

32. See James Robertson, *Young Children in Hospitals* (New York: Basic Books, 1958) for a criticism of British care.

33. Josephine Sever, *Johnny Goes to the Hospital* (Boston: Houghton Mifflin, 1953). See also Nancy Dudley, *Linda Goes to the Hospital* (New York: Coward-McCann, 1953).

34. See David W. Adams, *Childhood Malignancy: The Psychosocial Care of the Child and His Family* (Springfield, Ill.: Charles C Thomas, 1979), 4–16, for a comprehensive review of psychological studies of pediatric cancer sufferers and their families beginning in 1950.

35. Mary F. Bozeman, Charles E. Orbach, and Arthur M. Sutherland, "Psychological Impact of Cancer and Its Treatment. III. The Adaptation of Mothers to the Threatened Loss of Their Children through Leukemia. Part I," *Cancer* 8/1 (Jan.–Feb. 1955): 1.

36. Beatrix Cobb, "Psychological Impact of Long Illness and Death of a Child on the Family Circle," *Journal of Pediatrics* 49 (1956): 746–751.

37. Ibid, 746.

38. Julius B. Richmond and Harry A. Waisman, "Psychological Aspects of Management of Children with Malignant Diseases," *American Journal of Diseases of Children* 89 (1955): 42–47.

39. Ibid., 45.

40. Harry M. Marks, "Cortisone, 1949: A Year in the Political Life of a Drug," *Bulletin of the History of Medicine* 66 (1992): 419–439. Marks documented the efforts to ration the limited but coveted cortisone supply.

41. S. Farber, V. Downing, H. Shwachman, R. Toch, R. Appleton, F. Heald, J. P. King, and D. Feriozi, "The Effect of ACTH in Acute Leukemia in Childhood." In J. R. Mote, ed., *Proceedings of the First Clinical ACTH Conference* (Philadelphia: Blakiston, 1950), 226–234.

42. S. Farber, H. Schwachman, R. Toch, V. Downing, B. H. Kennedy, and J. Hyde, "The Action of ACTH and Cortisone in Acute Leukemia." In J. R. Mote, ed. *Proceedings of the Second Clinical ACTH Conference* (New York: Blakiston, 1951), 251.

43. Ibid., 287.

44. "Cortisone and ACTH Prolong Leukemia Victims' Lives," *Science News Letter* 61/13 (29 March 1952): 200. See Elizabeth M. Kingsley Pillers, Joseph H. Burchenal, Leonard P. Eliel, and Olaf H. Pearson, "Resistance to Corticotropin, Cortisone, and Folic Acid Antagonists in Leukemia," *Journal of the American Medical Association* (22 March 1952): 987–994.

45. Newsletter, *CA: A Bulletin of Cancer Progress* 4/2 (March 1954).

46. "2 Leukemia Victims Freed at Bellevue," *New York Times* (22 March 1950): 6.

47. Ibid.

48. Ibid.

49. Ibid.

50. "Leukemia Poster Girl Dies," *New York Times* (7 May 1950): 96.

51. For a report of a limited clinical trial of 6-MP in advanced acute leukemia in children, see Joseph H. Burchenal, David Karnofsky, M. Lois Murphy, Ruth Ellison, and C. P. Rhoads, "Effects of 6-Mercaptopurine in Man," *Proceedings of the American Association of Cancer Research* 1 (1953): 7. See J. H. Burchenal, M. L. Murphy, R. R. Ellison, M. P. Sykes, T. C. Tan, L. A. Leone, D. A Karnofsky, L. F. Craver, H. W. Dargcon, and C. P. Rhodes, "Clinical Evaluation of a New Antimetabolite, 6-Mercaptopurine, in the Treatment of Leukemia and Allied Diseases," *Blood* 8 (1953): 965–999, for a set of conference papers on the toxic effects, mechanism, action on tumors, and clinical experience with 6-MP on leukemia and other cancers at varied research institutions.

52. Hitchings and Elion shared the Nobel Prize in Medicine or Physiology in 1988 for their development of antimetabolite compounds and their elucidation of the basic principles of DNA synthesis inhibition.

53. J. H. Burchenal, D. A. Karnofsky, M. L. Murphy, R. R. Ellison, M. P. Sykes, C. T. Tan, A. C. Mermann, M. Yuceoglu, and C. P. Rhoads, "Clinical Evaluation of 6-Mercaptopurine in the Treatment of Leukemia," *American Journal of Medical Science* 228 (Oct. 1954): 372. On 30 April and 1 May 1954, a 6-MP conference was held at the New York Academy of Sciences and co-chaired by George H. Hitchings and C. P. Rhoads. The papers were published in the *Annals of the New York Academy of Sciences* 60/2 (6 Dec. 1954): 183–508.

54. Burchenal, 377.

55. Ibid.

56. "Toward Chemical Cures for Cancer," *New York Times* (11 July 1954): 9.

57. "Temporary Leukemic Relief," *Science News Letter* 65/1 (2 Jan. 1954): 5.

58. C. Gordon Zubrod, "History of the Cancer Chemotherapy Program," *Cancer Chemotherapy Reports* 50/7 (Oct. 1966): 351. For a history of the application of industrial research methods to screening programs at Sloan-Kettering Institute and the Institute for Cancer Research in Philadelphia, see R. F. Bud, "Strategy in American Cancer Research after World War II: A Case Study," *Social Studies of Science* 8/4 (Nov. 1978): 425–459.

59. Peter Keating and Alberto Cambrosio, "From Screening to Clinical Research: The Cure of Leukemia and the Early Development of the Cooperative Oncology Groups, 1955–1966," *Bulletin of the History of Medicine* 76 (2002): 299–334. Keating and Cambrosio trace the events of this eleven-year period—from the establishment of a new screening system to the 1966 reorganization under C. Gordon Zubrod that created a fissure between the two activities. See also Ilana Löwy, *Between Bench and Bedside: Science, Healing, and Interleukin-2 in a Cancer Ward* (Cambridge, Mass.: Harvard University Press, 1996), 42–59.

60. Zubrod, 353.

61. Shimkin wrote, "A stimulating factor, as so often is the case, is that a neighborhood child of a staff member of an influential Congressman had died of leukemia." Michael B. Shimkin, "As Memory Serves: An Informal History of the National Cancer Institute, 1937–57," *Journal of the National Cancer Institute* 59/2 (Aug. 1977): 591.

62. "Cancer Cure Search: 'Crash' Program to Win Fight against Cancer Inaugurated under Direction of a Committee Combining Government, Public and Industry Representatives," *Science News Letter* (11 June 1955), 371.

63. "Cancer Cure Search," 371.

64. "Humans Test Cancer Drugs," *Science News Letter* (18 April 1959): 246.

65. Kenneth Endicott, "The Chemotherapy Program," *Journal of the National Cancer Institute* 19/2 (Aug. 1957): 275–277.

66. Criticism of the massive empirical screening program and the rodent tumor system abounded. Murray Shear, a researcher in the Laboratory of Chemical Pharmacology at the National Cancer Center, wrote, "Time and again these 'pure' science colleagues of ours have warned us that we are wasting our own time and our institutions' money by fumbling empirically in the dark, without rational bases for our chemotherapy experiments." Other critics questioned the merit of testing possible agents in mice, rabbits, and dogs, saying that their activity in animals was unrelated to their benefits to humans. Murray J. Shear, "Role of the Chemotherapy Research Laboratory in Clinical Cancer Research," *Journal of the National Cancer Institute* 12 (1951–1952): 574.

67. In 1953, the National Cancer Center had established a clinical center for cancer patients and James Holland initiated a clinical leukemia program at the institute.

68. K. M. Endicott, "The National Chemotherapy Program," *Journal of Chronic Diseases* 8 (1958): 171–178. In the late 1940s and 1950s physicians compiled information about the childhood cancers treated within their own institution or state. Physicians attempted to identify trends within their limited samples, but noted that the small number of cases, the variety of departments treating cancer, and the diversity of cases presented hindered their efforts to comprehensively, accurately analyze childhood cancers. Frustrated physicians called for a "pooling of experience" to gain a "composite experience." See Dorothy H. Andersen, "Tumors of Infancy and Childhood. I. A Survey of Those Seen in the Pathology Laboratory of the Babies Hospital during the Years 1935–1950," *Cancer* 4/4 (July 1951): 890–906; Ralph E. Knutti, "Malignant Tumors of Childhood," *California Medicine* 76/1(Jan. 1952): 27–29; Vincent H. Handy, "The Occurrence of Malignancies in Children," *New York State Medical Journal* 56/2 (15 Jan. 1956): 258–260; and James B. Arey, "Cancer in Infancy and Childhood," *Pennsylvania Medical Journal* 55/6 (June 1952): 553–557.

69. Researchers at Memorial under Burchenal initially resisted strict biometric controls in their studies and those affiliated with Farber rejected the use of controls. Emil Frei III, "Intramural Therapeutic Research at the National Cancer Institute, Department of Medicine: 1955–1965," *Cancer Treatment Reports* 68/1 (Jan. 1984): 21. See Hugh L. Davis, John R. Durant, and James F. Holland, "Interrelationships: The Groups, the NCI, and Other Governmental Agencies." In Barth Hoogstraten, ed., *Cancer Research: Impact of the Cooperative Groups* (New York: Masson, 1980), 371–390. For a history of clinical trials and the relationship between rigorous experimentation and statistics in the late twentieth century, see Harry M. Marks, *The Progress of Experiment: Science and Therapeutic Reform in the United States, 1900–1990* (Cambridge: Cambridge University Press, 1997).

70. "NIH Center Applies Team Approach to Research in Cancer of Children," *Scope Weekly* 3/1 (1 Jan. 1958): 1—a publication of the Upjohn Company by Physicians News Service.

71. Ibid.

72. Ibid., 6.

73. Ibid.

74. Henry F. Bisel, "Clinical Aspects of the Cancer Chemotherapy Program," *Current Research in Cancer Chemotherapy* 5 (1956): 7. See also Henry F. Bisel, "Criteria for the Evaluation of Response to Treatment in Acute Leukemia," *Blood* 11/7 (1956): 676–677.

75. Angela Burns to John Gunther, 29 Jan. 1949, Box 45, Folder 2, JGC.

76. Ibid.

77. Ibid.

78. Berger, Meyer, "About New York: Skipper Jackson's Story Disproves the Legend That City People Are Cold and Hard," *New York Times* (17 June 1955): 25.

79. "Leukemia Victim, 3, Succumbs in Sleep," *New York Times* (23 June 1955): 15.

80. Jonathan Engel, *Doctors and Reformers: Discussion and Debate Over Health Policy, 1925–1950* (Columbia: University of South Carolina Press, 2002); Daniel M. Fox, *Health Policies, Health Politics: The British and American Experience, 1911–1965* (Princeton, N.J.: Princeton University Press, 1986); Ronald L. Numbers, "The Specter of Socialized Medicine: American Physicians and Compulsory Health Insurance." In Ronald L. Numbers, ed., *Compulsory Health Insurance: The Continuing American Debate* (Westport, Conn.: Greenwood Press, 1982), 3–24.

81. "Chemotherapy of Leukemia," *CA: A Bulletin of Cancer Progress* 5/5 (Sept. 1955): 154.

82. Barbara Bush, *Barbara Bush: A Memoir* (New York: Scribner and Sons, 1994), 42–52.

83. Ibid, 43.

84. Ibid., 47. The idea that childhood cancers were contagious was expressed in few narratives or other publications from the time, but it is clear from this quote that this isolation or perceived stigmatization was a painful part of the Bush family's experience.

85. Ibid., 48

86. See Nancy Tomes, *The Gospel of Germs: Men, Women, and the Microbe in American Life* (Cambridge, Mass.: Harvard University Press, 1998), and Eileen Margerum, "The Child in American Advertising, 1890–1960: Reflections of a Changing Society." In Harry Eiss, ed., *Images of the Child* (Bowling Green, Ohio: Bowling Green State University Popular Press, 1994), 337, for analysis of how companies incorporated depictions of children in their advertisements to promote a wide array of consumer goods including foods, personal hygiene products, and household cleaning supplies. Anne Higonnet, *Pictures of Innocence: The History and Crisis of Ideal Childhood* (New York: Thames and Hudson, 1998), 116, discusses how photographers captured realistic images of the "child in peril" on film and persuade middle-class viewers to support health and welfare reforms.

87. For examples of the National Foundation for Infantile Paralysis's posters and a critical discussion of their use of children as a fundraising tool, see Jane S. Smith, *Patenting the Sun: Polio and the Salk Vaccine* (New York: William Morrow, 1990), 82–83. Smith, wrote, "Cute little kids on crutches, kids from your hometown, were what opened the wallets and the coin purses" (83). For an extended analysis of poster children and the myths told through promotional images, the complex goals of the modern hospitals and health organizations, and the exploitation of young patients through cancer advocacy and marketing, see Gretchen Krueger, "'For Jimmy and the Boys and Girls of America': Publicizing Childhood Cancers in Twentieth Century America," *Bulletin of the History of Medicine: Special Issue: Cancer in the Twentieth Century* 8/1 (spring 2007): 70–93.

88. There is an extensive body of scholarship on various aspects of polio, including research, treatment, popular responses to polio, the experiences of polio patients, and the ongoing struggle of post-polio patients. See John R. Paul, *A History of Poliomyelitis* (New Haven, Conn.: Yale University Press, 1971); Jane S. Smith, *Patenting the Sun: Polio and the Salk Vaccine* (New York: William Morrow, 1990); Naomi Rogers, *Dirt and Disease: Polio before FDR* (New Brunswick, N.J.: Rutgers University Press, 1996); and Tony Gould, *A Summer Plague: Polio and Its Survivors* (New Haven, Conn.: Yale University Press, 1995).

89. Smith, 35.

90. "The President's Birthday Address," *New York Times* (30 Jan. 1944): 33.

91. Tony Gould, *A Summer Plague: Polio and Its Survivors* (New Haven, Conn.: Yale University Press, 1995), 112.

92. Susan Lederer, "Orphans as Guinea Pigs: American Children and Medical Experimenters, 1890–1930." In Roger Cooter, ed., *In the Name of the Child: Health and Welfare: 1880–1940* (London: Routledge, 1992), 96–123. Lederer argued that from the late nineteenth century until the 1930s, physicians used children as research subjects more frequently than claimed in medical journal reviews. By drawing from two case studies involving diagnostic tests for tuberculosis and syphilis, she demonstrated the close link between antivivisectionist protests and the views regarding the submission of children to research studies. For an extended discussion of

experimentation using child subjects, see Susan Lederer, *Subjected to Science: Human Experimentation in America before the Second World War* (Baltimore: Johns Hopkins University Press, 1995).

93. "A Story-Editorial: Jennifer and the Sword," *ACS Bulletin* 2/14 (6 April 1953): 1.

94. "National Meeting Spurs Enthusiasm for April Crusade," *ACS Bulletin* 4/11 (28 February 1955): 1.

95. "Prize Story Depicts Fight for Survival: Quick Action Meant Life to Doomed Boy," *ACS Bulletin* 2/23 (13 July 1953): 4.

96. "White House Ceremony Opens Cancer Crusade," *ACS Bulletin* 4/16 (11 April 1955): 1.

97. "Leroy Curtis on New York Visit Wins Attention for Crusade," *ACS Bulletin* 4/17 (18 April 1955): 4.

98. "Ed Sullivan Has Whirlwind Day at Cincinnati," *ACS Bulletin* 5/9 (5 March 1956): 3.

99. "Dramatic Radio Program Features Parents of Young Leukemia Patient," *ACS Bulletin* 3/18 (3 May 1954): 1.

100. J. Robert Moskin, "Cancer the Child Killer," *Limelight* (published by *Look*) 2/6 (1955): 2.

101. Ibid., 3–4.

102. Ibid.

103. Ibid., 7.

104. Angela Burns to John Gunther, 29 Jan. 1949, Box 45, Folder 2, JGC.

105. For a comparative analysis of the modern decision between experimental therapy and palliative care for an advanced, incurable cancer, see Ilana Löwy, "'Nothing More to Be Done': Palliative Care versus Experimental Therapy in Advanced Cancer," *Science in Context* 8 (1995): 209–229.

106. "Million-to-One Blow," *New York Times* (25 February 1956): 21.

107. "Twin Dies of Leukemia," *New York Times* (27 February 1956): 21, and "2d Twin Dies of Leukemia," *New York Times* (11 April 1956): 31.

108. This figure was given in "Convict Joins Own Blood Stream to That of Girl Dying of Cancer," *New York Times* (4 June 1949): 1. Other sources estimated that as many as thirty-six pints of blood had been shared.

109. "Convict's Blood Gift Fails to Save Girl," *New York Times* (15 June 1949): 31.

110. "Life from a Lifer," *Time* 53 (13 June 1949): 65.

111. "Terrible Transfusion," *Newsweek* 33 (13 June 1949): 49.

112. Jon M. Harkness, "Research Behind Bars: History of Nontherapeutic Medical Research" (Ph.D. diss., University of Wisconsin); see also Allen M. Hornblum, *Acres of Skin: Human Experiments at Holmesburg Prison* (New York: Routledge, 1998), a history of prisoners and medical experimentation.

113. Letter to the editor, Ludwig Gross, "Leukemic Blood Transfusion," *New York Times* (8 June 1949): 28.

114. "No Harm Results in Leukemia Test," *New York Times* (4 June 1950): 76. In *Acres of Skin,* Hornblum termed the Slater-Boy case a rarity based on the national attention it captured; however, it was only one of a number of "human interest" stories written about human guinea pigs during this period. For example, syphilis, atabrine, influenza, and arthritis experiments conducted on other Sing Sing inmates appeared in the *American Mercury* article

in 1954. Don Wharton, "Prisoners Who Volunteer Blood, Flesh, and Their Lives," *American Mercury* 79 (1954): 51–55.

115. Susan Lederer and Michael Grodin, "Historical Overview." In Michael A. Grodin and Leonard H. Glantz, eds., *Children as Research Subjects: Science, Ethics, and Law* (New York: Oxford University Press, 1994), 6.

116. In *Subjected to Science,* Lederer described the enormous outcry over children as research subjects. Animal protectionists organized the first societies for the prevention of cruelty to children, arguing that unrestricted animal testing would lead to similar practices on humans. The antivivisectionists feared that children would become "guinea pigs" for physicians and scientists engaged in nontherapeutic experiments.

117. Ruth R. Faden, Susan E. Lederer, and Jonathan D. Moreno, "US Medical Researchers, the Nuremberg Doctors Trial, and the Nuremberg Code: A Review of Findings of the Advisory Committee on Human Radiation Experiments," *Journal of the American Medical Association* 20/276 (27 Nov. 1996): 1668. Members of the Advisory Committee on Human Radiation Experiments determined that few physicians kept abreast of the Nuremberg doctors trial or applied the code to their own practices.

118. J. Stafford, "Reprieves Not Cures," *Science News Letter* (19 April 1952): 246.

119. Sidney Farber, "The Treatment of Acute Leukemia," [editorial] *Journal of Chronic Diseases* (April 1956): 455.

120. H. W. Dargeon, "Leukemia in Childhood: Current Therapeutic Considerations," *New York State Journal of Medicine* 56 (1 July 1956): 2079.

121. "Drug Lengthens Lives," *Science News Letter* (31 May 1952): 349.

Chapter Five • "*Who's Afraid of Death on the Leukemia Ward?*"

1. Peter De Vries, *The Blood of the Lamb* (Boston: Little, Brown, 1961).

2. W. J. Smith, [Book review], *Commonweal* 76 (20 April 1962): 93.

3. [Book review], *Times Literary Supplement* (18 May 1962): 353.

4. Raised by parents who had emigrated from the Netherlands, author Peter De Vries grew up in a Dutch-American, Calvinist community in the middle of Chicago. After graduating from Calvin College in Grand Rapids, Michigan, in 1931, he began working odd jobs and publishing his poetry and short stories. In the late 1930s, he became an associate editor and then coeditor of *Poetry.* He then moved to the *New Yorker* at the invitation of James Thurber, who had read his work and been interviewed by him at a lecture sponsored by *Poetry.* In 1943, he married Katinka Loeser, and the couple had four children between 1945 and 1952. Emily was born on 26 Oct. 1949. The family lived in Westport, Connecticut, and five novels published in the 1950s and early 1960s mocked the town's ways of life. This autobiographical sketch is based on the description of J. H. Bowden, *Peter De Vries* (Boston: Twayne, 1983), one of the few biographical sources on De Vries and his work.

5. Bowden, *Peter De Vries,* 75. Emily was the only child in the family honored by a dust jacket photograph.

6. Ibid., 9.

7. Ibid., 75.

8. Harold Dargeon, "Pediatrics at Memorial Hospital for Cancer and Allied Diseases," Record Group 160.7, Series 2, Box 1, Memorial Sloan Kettering Cancer Center Archives, Rockefeller Archive Center, New York.

9. Bowden, *Peter De Vries,* 75. In later years, he was invited to give academic lecture series, and he was elected to the National Institute of Arts and Letters in 1969 and the American Academy of Arts and Letters in 1983. (J. H. Bowden, 8). Edwin T. Bowden, the author of the definitive bibliography of De Vries's work, compared his best novels to those of other famed twentieth-century writers such as Evelyn Waugh and James Thurber. See Edwin T. Bowden, *Peter De Vries: A Bibliography, 1934–1977* (Austin: Humanities Research Center, University of Texas at Austin, 1978), 9.

10. Bowden, *Peter De Vries,* 20.

11. Tom and Alice Fleming, "Special Report: Cancer in Children," *Cosmopolitan* (Aug. 1963): 52–57; James C. G. Conniff, "The Brightening Outlook in Child Cancer," *Family Circle* (April 1962); "Children and Cancer," *Good Housekeeping* (February 1964): 40. The articles did not specify whether the American Cancer Society or another health organization had edited the pieces, but this seems likely based on the striking similarities between the articles.

12. Natcher Stewart, "Cancer in Children," *Health* 11/2 (Oct. 1965): 4.

13. Ibid.

14. Algernon B. Reese, "Heredity and Retinoblastoma," *Archives of Ophthalmology* 42 (Aug. 1949): 119–122. Reese studied 150 cases of sporadic retinoblastoma (both parents were healthy) and their siblings in order to determine its pattern of incidence. He determined that siblings only had a 4 percent chance of suffering from the disease, but seven of eight children of parents who had survived the disease had retinoblastoma.

15. Walter S. Ross, "What Parents Should Know about Childhood Cancer," *Reader's Digest* (March 1967): 6. According to a conference presentation by leading retinoblastoma researchers, the estimated cure rate for children in Group I, the earliest stage of disease, was 90 percent. Cured children were expected to have their vision completely restored and be free of cataracts. Survival decreased as the disease progressed and cure in Group V, the final stage, decreased to 20 percent. Algernon B. Reese and Robert M. Ellsworth, "Management of Retinoblastoma," *CA: A Cancer Journal for Clinicians* 14/1 (Jan.–Feb. 1964): 9, provided an abstract of their contribution to the 1964 ACS Scientific Session.

16. See Amy Swerdlow, *Women Strike for Peace: Traditional Motherhood and Radical Politics in the 1960s* (Chicago: University of Chicago Press, 1993), and Milton S. Katz, *Ban the Bomb: A History of SANE, the Committee for a Sane Nuclear Policy, 1957–1985* (New York: Greenwood Press, 1986), for detailed descriptions of these events and their imprint on American families. For a broader review of the atomic age, radiation, and health, see Susan M. Lindee, *Suffering Made Real: American Science and the Sufferers at Hiroshima* (Chicago: University of Chicago Press, 1994), and Paul Boyer, *By the Bomb's Early Light: American Thought and Culture at the Dawn of the Atomic Age* (New York: Pantheon Books, 1985).

17. Tom and Alice Fleming, "Special Report: Cancer in Children," *Cosmopolitan* (Aug. 1963): 53.

18. Ibid.

19. Ibid.

20. Ibid.

21. Charles Cameron, *The Truth about Cancer* (Englewood Cliffs, N.J.: Prentice-Hall, 1956), 232.

22. Ibid.

23. Ibid.

24. De Vries, *The Blood of the Lamb,* 169.

25. Ibid.

26. Ibid., 170.

27. Ibid., 174.

28. See Ilana Löwy, *Between Bench and Bedside: Science, Healing, and Interleukin-2 in a Cancer Ward* (Cambridge, Mass.: Harvard University Press, 1996), 57, for a concise review of the evolution of cooperative clinical groups in pediatric oncology. Two institutional histories are invaluable sources for this narrative: Kenneth M. Endicott, "The Chemotherapy Program," *Journal of the National Cancer Institute* 19 (1957): 283, and C. Gordon Zubrod, "Historic Milestones in Curative Chemotherapy," *Seminars in Oncology* 6 (1979): 490–505.

29. Stephen P. Strickland, *Politics, Science, and Dread Disease: A Short History of United States Medical Research Policy* (Cambridge, Mass.: Harvard University Press, 1972), 200.

30. Löwy, 58.

31. Joseph H. Burchenal, "Recent Advances and Perspectives in the Chemotherapy of Acute Leukemia." In *Proceedings of the 5th National Cancer Conference* (Philadelphia: J. B. Lippincott Co., 1965), 651–657; an updated and revised version of the article was published as Joseph H. Burchenal, "Treatment of the Leukemias," *Seminars in Hematology* 3/2 (April 1966): 122–131.

32. Charlotte Tan, Hideko Tasaka, Kou-Ping Yu, M. Lois Murphy, and David A. Karnofsky, "Daunomycin: An Antitumor Antibiotic in Treatment of Neoplastic Disease: Clinical Evaluation with Special Reference to Childhood Leukemia," *Cancer* 120/3 (1967): 333–353.

33. A. Goldin, J. M. Venditti, S. R. Humphreys, and N. Mantel, "Modification of Treatment Schedules in the Management of Advanced Mouse Leukemia with Amethopterin," *Journal of the National Cancer Institute* 17 (1956): 203–212.

34. Emil J. Freireich, Edmund Gehan, Emil Frie III, Leslie Schroeder, Irving J. Wolman, Rachad Anbari, E. Omar Burgert, Stephen D. Mills, Donald Pinkel, Oleg S. Selawry, John H. Moon, B. R. Gendel, Charles L. Spurr, Robert Storrs, Farid Haurani, Barth Hoogstraten, and Stanley Lee, "The Effect of 6-Mercaptopurine on the Duration of Steroid-Induced Remissions in Acute Leukemia: A Model for Evaluation of Other Potentially Useful Therapy," *Blood* 21 (1963): 699–716.

35. See Emil Frei III, "Intramural Therapeutic Research at the National Center Institute, Department of Medicine: 1955–1965," *Cancer Treatment Reports* 68/1 (Jan. 1984): 21–30.

36. See Emil Frei III and Emil J. Freireich, "Progress and Perspectives in the Chemotherapy of Acute Leukemia," *Advances in Chemotherapy* 2 (1965): 269–289, and O. Selawry, "New Treatment Schedule with Improved Survival in Childhood Leukemia," *Journal of the American Medical Association* 194 (1965): 75–81.

37. Vincristine was an alkaloid derived from the Madagascar periwinkle. It attacked rapidly proliferating cells like cancer cells, intestinal epithelium, and bone marrow. Thus, it was an effective agent with life-threatening side effects.

38. Frei and Freireich, "Progress and Perspectives in the Chemotherapy of Acute Leukemia";

Emil J. Friereich, Myron Karon, and Emil Frei III, "Quadruple Combination Therapy (VAMP) for Acute Lymphocytic Leukemia of Childhood," *Proceedings of the American Association for Cancer Research* 5 (1964): 20; and James F. Holland, "Formal Discussion: The Clinical Pharmacology of Anti-Leukemia Agents," *Cancer Research* 25 (1965): 1639–1641. Freireich recalled that the other research groups participating in the cooperative trials organized by the National Cancer Center were already involved with other protocols and unwilling to transfer their patients to the VAMP study, but he believed it had so much promise that he withdrew from the cooperative group and enrolled all newly admitted National Cancer Center patients into VAMP.

39. The VAMP protocol cured three patients. In December 1985, the cover of *Cancer Research* featured a family photograph alongside a graph displaying ALL survival in children younger than twenty treated by Cancer and Leukemia Group B. J.C.G., the initials of the woman in the family portrait, had been treated with VAMP at the Clinical Center of the National Cancer Center when she was seven years old. Twenty-three years later, she remained cancer-free and had three young children of her own.

40. Oncovin and Purinethol are the trademarked names of these drugs and were used in the regimen acronyms.

41. De Vries, *The Blood of the Lamb,* 175.

42. Ibid., 177.

43. Ibid., 179.

44. Ibid., 193.

45. See James A. Whiteside, Fred S. Philips, Harold W. Dargeon, and Joseph H. Burchenal, "Intrathecal Aminopterin in the Neurological Manifestations of Leukemia," *Archives of Internal Medicine* 101 (1958): 280, and Emil J. Frei, "The Effectiveness of Combinations of Anti-Leukemic Agents in Inducing and Maintaining Remission in Children with Acute Leukemia," *Blood* 26 (1965): 642–656. It was later demonstrated that, if intrathecal methotrexate injections were given earlier, they significantly reduced the risk of meningeal leukemia. In the 1970s, low-dose irradiation coupled with methotrexate injections reduced its incidence to less than 10 percent.

46. In 1960, a syndicated medical advice columnist offered information on finding treatment for leukemia. The physician wrote that many mothers of leukemic children asked him whether they should scour the country for the latest therapeutic innovation. The physician recommended readers from small cities to travel to a larger city with a university hospital, Mayo Clinic, or Memorial Hospital to get advice and advised those residing in large cities to find a hematologist. Walter C. Alvarez, "Advice Offered on Searches for Treatment of Leukemia," *Houston Post* (27 June 1960).

47. Abraham B. Bergman and Charles J. A. Schulte, eds., "Care of the Child with Cancer," *Pediatrics* 40 (Sept. 1967) (Supplement): 487–546.

48. John R. Hartmann, Panel Discussion, "Care of the Child with Cancer," *Pediatrics* 40 (Sept. 1967) (Supplement): 546.

49. Charles Q. McClelland, Panel Discussion, "Care of the Child with Cancer," *Pediatrics* 40 (Sept. 1967) (Supplement): 543.

50. Mila Pierce, Panel Discussion, "Care of the Child with Cancer," *Pediatrics* 40 (Sept. 1967) (Supplement): 545

51. Charles J. A. Schulte III, "Programs of the Cancer Control Program: U.S. Public Health Service," *Pediatrics* 40 (Sept. 1967) (Supplement): 527.

52. Charles Q. McClelland, "Relationship of the Physician in Practice to a Children's Cancer Clinic," *Pediatrics* 40 (Sept. 1967) (Supplement): 537.

53. Michael B. Rothenberg, "Reactions of Those Who Treat Children with Cancer," *Pediatrics* 40 (Sept. 1967) (Supplement): 510.

54. John R. Hartmann, "The Physician and the Children's Cancer Center," *Pediatrics* 40 (Sept. 1967) (Supplement): 523.

55. For a history of the professionalization of hematology and oncology and the contested relationship between the two specialties, see Keith Wailoo, *Drawing Blood: Technology and Disease Identity in Twentieth-Century America* (Baltimore: Johns Hopkins University Press, 1997); and Gretchen Krueger, "'Where Does Hematology End and Oncology Begin?': Questions of Professional Boundaries and Medical Authority," *Journal of Clinical Oncology,* 24/16 (1 June 2006): 2583–2588, and "The Formation of the American Society of Clinical Oncology and the Development of a Medical Specialty, 1964–1973," *Perspectives in Biology and Medicine* (fall 2004): 537–551.

56. Denman Hammond, "Panel Discussion," *Pediatrics* 40 (Sept. 1967) (Supplement): 541.

57. Farber also urged parents to use large research centers rather than local doctors for the coordination of their child's cancer care. He instructed patients to visit a research center for an initial consultation in order to make a plan of treatment to be continued at home under the local physician's supervision. He noted, "It is doubtful whether more than ten thousand (of 260,000 cancer patients who will die during the year) of these will be systematically treated and studied by doctors skilled in cancer chemotherapy" (56). Another specialist in childhood cancer (unnamed in the article) agreed with Farber's advice, saying, "I do not mean to slight the skill and compassion of the local doctor, but he cannot possibly maintain a general practice and keep up with the latest developments in such a rapidly growing field as chemotherapy." Tom and Alice Fleming, "Special Report: Cancer in Children," *Cosmopolitan* (Aug. 1963): 58.

58. John R. Hartmann, "The Physician and the Children's Cancer Center," *Pediatrics* 40 (Sept. 1967) (Supplement): 526.

59. Ibid.

60. Angela B. Tonyan, "Role of the Nurse in a Children's Cancer Clinic," *Pediatrics* 40 (Sept. 1967) (Supplement): 532.

61. John Laszlo, *The Cure of Childhood Leukemia: Into the Age of Miracles* (New Brunswick, N.J.: Rutgers University Press, 1995), 143.

62. Ibid.

63. Hartmann, "The Physician and the Children's Cancer Center," 524.

64. Ibid.

65. De Vries, *The Blood of the Lamb,* 170.

66. Ibid., 173.

67. After Carol's death, at the end of the novel, Wanderhope found an audiocassette on which Carol revealed, "I might as well say that I know what's doing on." Despite her father's efforts, she had learned of the identity and prognosis of her illness. Ibid., 241.

68. Ibid., 202.

69. For a glimpse of both sides of the debate in 1962, see Victor A. Gilbertsen and Owen H. Wangensteen, "Should the Doctor Tell the Patient That the Disease Is Cancer?" *CA: Cancer Journal for Clinicians* 12/3 (May–June 1962): 82–86, and Lemuel Bowden, "Editor's Interview: The

Patient with Incurable Cancer," *CA: Cancer Journal for Clinicians* 12/3 (May–June 1962): 104–106.

70. D. Oken, "What to Tell Cancer Patients: A Study of Medical Attitudes," *Journal of the American Medical Association* 175 (1961): 1120–1128, and Howard Witzkin and John D. Stoeckle, "The Communication of Information about Illness," *Advances in Psychosomatic Medicine* 8 (1972): 185–189, illustrated this dramatic shift.

71. Albert J. Solnit and Morris Green, "Psychological Considerations in the Management of Deaths on Pediatric Hospital Services. 1. The Doctor and the Child's Family," *Pediatrics* 24 (1959): 106–112. In 1962, George T. Pack ("Counseling the Cancer Patient: Surgeon's Counsel," *CA: Cancer Journal for Clinicians* 12/6 [Nov.–Dec. 1962]: 211–212) wrote that he preferred not to discuss the nature of surgery or consequent disabilities with his child patients. This was in stark disagreement with children's books designed to prepare children for doctor's appointments and hospitalization that were published beginning in the 1950s. Pack recommended that surgeons comfort the young patient after the recovery from anesthetic and encourage him to be "brave" and "courageous" for his parents.

72. Morris Green, "Care of the Dying Child," *Pediatrics* 40 (Sept. 1967) (Supplement): 495.

73. See M. Lois Murphy, "Acute Leukemia." In Sydney S. Gellis and Benjamin M. Kagan, eds., *Current Pediatric Therapy* (Philadelphia: W. B. Saunders, 1964), 275–279.

74. Joel Vernick and Myron Karon, "Who's Afraid of Death on a Leukemia Ward?" *American Journal of the Diseases of Children* 109 (May 1965): 393.

75. Ibid.

76. Ibid., 395.

77. Ibid., 396.

78. Editorial, "What Should the Child With Leukemia Be Told?" *American Journal of the Diseases of Children* 110 (Sept. 1965): 231.

79. Vernick and Karon, "Who's Afraid of Death on a Leukemia Ward?" 394.

80. Editorial: "What Should the Child With Leukemia Be Told?" *American Journal of the Diseases of Children* 110 (Sept. 1965): 231.

81. Response: Joel Vernick and Myron Karon, "What Should the Child with Leukemia Be Told?" *American Journal of the Diseases of Children* 110 (Sept. 1965): 335.

82. Response: Henry F. Lee, "What Should the Child With Leukemia Be Told?" *American Journal of the Diseases of Children* 110 (Dec. 1965): 704.

83. Ibid.

84. Response: Alfred Hamady, "What Should the Child with Leukemia Be Told?" *American Journal of the Diseases of Children* 110 (Dec. 1965): 704.

85. Martin Pernick explored these classic arguments in the history of truth telling in "Childhood Death and Medical Ethics: A Historical Perspective on Truth Telling in Pediatrics," *Progress in Clinical Biological Research* 139 (1983): 173–188.

86. Doris A. Howell, "A Child Dies," *Journal of Pediatric Surgery* 1/1 (February 1966): 2–7 (first issue), and reprinted in *Seminars in Hematology* 3/2 (April 1966): 168–173. Howell discussed the role of the physician specifically during each phase of acute leukemia from telling diagnosis until after death.

87. Paul Chodoff, Stanford B. Friedman, and David A Hamburg, "Stress, Defenses and Cop-

ing Behavior: Observations in Parents of Children with Malignant Disease," *American Journal of Psychiatry* 120 (February 1964): 743–749.

88. Stanford B. Friedman, "Care of the Family of the Child with Cancer," *Pediatrics* 40 (Sept. 1967) (Supplement): 499.

89. Ibid.

90. De Vries, *The Blood of the Lamb,* 226.

91. Ibid., 222.

92. Ibid., 219.

93. Ibid., 184.

94. Ibid., 183.

95. Ibid., 206.

96. Ibid., 225.

97. "An American Mother Moves Next to Sainthood," *Life* 54 (29 March 1963): 38–39. Seton's story was covered widely in the press through articles in *U.S. News and World Report, Newsweek, Time,* and the *Saturday Evening Post.* Before Mother Seton could be designated a saint, two more miracles needed to be performed in her name and authenticated by the Vatican Congregation of Rites.

98. Ibid., 38.

99. Chester M. Southam, Lloyd F. Craver, Harold W. Dargeon, and Joseph H. Burchenal, "A Study of the National History of Acute Leukemia with Special Reference to the Duration of the Disease and the Occurrence of Remissions," *Cancer* 4 (1951): 39–59.

100. Joseph H. Burchenal and M. Lois Murphy, "Long-Term Survivors in Acute Leukemia," *Cancer Research* 25 (1965): 1491–1494. He presented the data and addressed criticisms of the data at a symposium on the clinical aspects of acute leukemia and Burkitt's tumor in Boston, Massachusetts, on 20 September 1967. The talk was published as Joseph H. Burchenal, "Long-Term Survivors in Acute Leukemia and Burkitt's Lymphoma," *Cancer* 21/4 (April 1968): 595–599. By carefully tracking the patients in this cohort, Burchenal also tentatively made suggestions regarding when it was appropriate to discontinue treatment, an issue debated at the time.

101. Ibid.

Chapter Six • "The Truly Cured Child"

1. Amy Louise Timmons, "Is It So Awful?" *American Journal of Nursing* 75/6 (June 1975): 988, and Amy Louise Timmons, "Is It So Awful?" *Journal of Pediatrics* 88/1 (Jan. 1976): 147–148.

2. Remissions were now indicated by less than 5 percent abnormal cells in the peripheral blood and bone marrow and the restoration of normal marrow function as demonstrated by adequate numbers of white blood cells, red blood cells, and platelets.

3. See R. J. Amin Aur, J. V. Simone, H. O. Husto, M. S. Verzosa, and D. Pinkel "Cessation of Therapy during Complete Remission of Childhood Acute Lymphocytic Leukemia," *New England Journal of Medicine* 291 (5 Dec. 1974): 1230–1234, for an assessment of the proper length of treatment to prevent relapse. Aur and his colleagues at St. Jude Children's Research Hospital regarded aggressive chemotherapy, central nervous system irradiation, and two to three years of

complete remission as the optimum treatment schedule. Other research groups continued therapy for as long as five years.

4. Researchers at St. Jude pioneered the addition of craniospinal irradiation to combination chemotherapy regimens in their "total therapy" studies. Donald Pinkel, "Five-Year Follow-Up of 'Total Therapy' of Childhood Lymphocytic Leukemia," *Journal of the American Medical Association* 216 (1971): 648–652, and Joseph Simone, "Total Therapy Studies of Acute Lymphocytic Leukemia in Children: Current Results and Prospects for Cure," *Cancer* 30 (1972): 1488–1494.

5. For a review of the microbial agents that cause disease in patients with hematologic malignancy and the prevention or treatment of the complications, see Arthur S. Levine, Robert G. Graw, and Robert C. Young, "Management of Infections in Patients with Leukemia and Lymphoma: Current Concepts and Experimental Approaches," *Seminars in Hematology* 9/2 (April 1972): 141–179.

6. Emil J. Freireich, "The Best Medical Care for the 'Hopeless' Patient," *Medical Opinion* 8/2 (February 1972): 55.

7. "Cancer Remains Major Killer of School Children," *Journal of the American Medical Association* 234/2 (13 Oct. 1975): 140.

8. Ibid., 140.

9. J. L. Young, H. W. Heisis, E. Siberverg, and M. H. Myers, "Cancer Incidence, Survival and Mortality for Children under 15 Years of Age," archives, American Cancer Society, Atlanta, Georgia, 1976.

10. Ibid. Other five-year rates were as follows: 40 percent for brain tumors, 27 percent for both medulloblastoma and neuroblastoma, 63 percent for lymphoma, 59 percent for kidney tumors, 24 percent for osteogenic sarcoma, 17 percent for Ewing's sarcoma, 89 percent for eye cancer, and 39 percent for connective tissue cancers.

11. Joseph Simone, "Acute Lymphocytic Leukemia in Childhood," *Seminars in Hematology* 11 (Jan. 1974): 26–27.

12. "Children Winning More Cancer Battles, But War Isn't Won," *News American* (11 Sept. 1978), Archives, American Cancer Society.

13. Emil J. Freireich, "The Best Medical Care for the 'Hopeless' Patient," *Medical Opinion* 8/2 (February 1972), 54.

14. Ibid.

15. Ibid., 55.

16. George J. Annas, *Rights of Hospital Patients: The Basic ACLU Guide to Hospital Patient's Rights* (New York: Avon Press, 1975), and George J. Annas, Leonard H. Glantz, and Barbara F. Katz, *Informed Consent to Human Experimentation* (Cambridge, Mass.: Ballinger, 1974). Also see Renèe C. Fox, *Experiment Perilous: Physicians and Patients Facing the Unknown* (Glencoe, Ill.: Free Press, 1959), for a landmark sociological study of a metabolic investigation. Fox observed "the talented, young, academically-inclined physicians who undertook the experiment and the articulate, relatively young patients, ill with serious, chronic, and often unusual conditions who underwent it" (24).

17. Ilana Löwy, *Between Bench and Bedside: Science, Healing and Interleukin-2 in a Cancer Ward* (Cambridge, Mass.: Harvard University Press, 1996), 280. I have modified the factors that she applied to oncology generally to encompass the close relationship between pediatric cancer care and clinical experimentation.

18. See Ruth R. Faden and Tom L. Beauchamp, in collaboration with Nancy M. P. King, *History and Theory of Informed Consent* (New York: Oxford University Press, 1986), for a discussion of medical experiments involving children and the requirements of informed consent for minors.

19. Paul Ramsey, *The Patient as Person: Explorations in Medical Ethics* (New Haven, Conn.: Yale University Press, 1970), 11–12. Informed consent required that patients had adequate information, comprehend the information, and make a voluntary decision about their care or participation in a clinical trial. Ramsey referred to the use of children in research by proxy consent as a "prismatic case" to clearly define the meaning of the consent requirement (35).

20. For examples of improper research conduct with children, see M. H. Pappworth, *Human Guinea Pigs* (Boston: Beacon Press, 1968), and William J. Curran and Henry K. Beecher, "Experimentation in Children," *Journal of the American Medical Association* 210 (6 Oct. 1969): 77–83.

21. Melvin J. Krant, Joseph L. Cohen, and Charles Rosenbaum, "Moral Dilemmas in Clinical Cancer Experimentation," *Medical and Pediatric Oncology* 3 (1977): 146.

22. Ibid., 142–143.

23. Harold Y. Vanderpool, "The Ethics of Experimentation with Anticancer Drugs." In Steven C. Gross and Solomon Garb, eds., *Cancer Treatment and Research in Humanistic Perspective* (New York: Springer, 1985), 16–46. See also T. L. Beauchamp and J. F. Childress, *Principles of Biomedical Ethics* (New York: Oxford University Press, 1979).

24. Ida Marie Martinson, *Home Care for the Dying Child: Professional and Family Perspectives* (New York: Appleton-Century-Crofts, 1976), 25.

25. The Cancer Centers Program, Our History, *www.cancer.gov.*

26. Robin Frames, "Cancer Centers Help Families with Children," *Logan, Utah Herald Journal* (2 July 1975). Robin Frames, "At Cancer Centers for Kids, Total Care Dispensed," *Florida Times-Union* (10 July 1975), Archives, American Cancer Society.

27. Susan Spence Moe, "For Children with Cancer, There's Hope," *News and Observer* [Raleigh, North Carolina] (4 April 1976), Archives, American Cancer Society.

28. Dave Anderson, "Kim's Houses," *New York Times* (11 Nov. 1979), 3.

29. James O. Clifford, "Hospital Involves Family in Cancer Fight," Archives, American Cancer Society.

30. K. Forte, "Pediatric Oncology Nursing: Providing Care through Decades of Change," *Journal of Pediatric Oncology Nursing* 18/4 (July–Aug. 2001): 154–163; S. P. Hiney and F. M. Wiley, "Historical Beginnings of a Professional Nursing Organization Dedicated to the Care of Children with Cancer and Their Families: The Association of Pediatric Oncology Nursing from 1974–1993," *Journal of Pediatric Oncology Nursing* 13/4 (Oct. 1996): 196–203; Patricia Greene, "Acute Leukemia in Children," *American Journal of Nursing* 75/10 (Oct. 1975): 1711.

31. Victoria Graham, "The Sad Wait at Ricky's House," *San Jose Mercury News* (5 Jan. 1975), Archives, American Cancer Society.

32. Ibid.

33. "Leukemia Strains Emotional Ties," *Medical World News* (6 April 1973): 23. The study was conducted from 1967 to 1972.

34. Ibid. As of 2008, there are twenty-four National Cancer Center–designated cancer centers and thirty-nine National Cancer Center–designated comprehensive cancer centers across the country.

35. Wilbur acknowledged that the "traditional" treatment was "probably characteristic of most centers providing care for severe childhood illness today." Thus, Kaplan's results did apply to a significant number of patients and families receiving treatment in the early 1970s.

36. Graham, "The Sad Wait at Ricky's House."

37. John J. Spinetta, David Rigler, and Myron Karon, "Anxiety in the Dying Child," *Pediatrics* 52/6 (Dec. 1973): 841–844.

38. Myra Bluebond-Langner, *The Private Worlds of Dying Children* (Princeton, N.J.: Princeton University Press, 1978). In the book, Bluebond-Langner constructed a five-act play titled "The World of Jeffrey Andrews" to present a summary of her observations in a format that highlighted children, the primary actors in her research.

39. In his inflammatory work, Illich called for a revolutionary change in health care delivery. Ivan Illich, *Medical Nemesis: The Expropriation of Health* (London: Calder and Boyars, 1975).

40. Boston Women's Health Book Collective, *Our Bodies, Our Selves: A Course By and For Women* (Boston Women's Health Book Collective and the New England Free Press, 1971). To embed *Our Bodies, Our Selves* in its broader historical context of activism and women's health, see Sandra Morgen, *Into Our Own Hands: The Women's Health Movement in the United States, 1969–1990* (New Brunswick, N.J.: Rutgers University Press, 2002).

41. For an account of earlier challenges regarding the use of alternative medicines in cancer therapy, see Barbara N. Clow, *Negotiating Disease: Power and Cancer Care, 1900–1950* (Montreal: McGill-Queen's University Press, 2001). As in the case of Johnny Gunther's diet therapy, some parents of young cancer sufferers welcomed alternative therapies because they provided a less expensive, milder option, they could be administered at home, or they served as a last resort when standard chemotherapy or medical procedures had failed. In the 1970s, laetrile, a derivative of apricot pits, was a popular therapy. John A. Richardson and Patricia Griffin, *Laetrile Case Histories: The Richard Cancer Clinic Experience* (Westlake Village, Calif.: American Media, 1977), is a tract written by the therapy's leading proponents. The laetrile debate intensified when the parents of Chad Green, a young acute leukemia sufferer, demanded to administer laetrile as their son's primary treatment, not as a complementary therapy or as a palliative agent during the terminal stage of cancer. See Marion Steinman, "A Child's Fight for Life: Parents vs. Doctors," *New York Times Magazine* (Dec. 10, 1978): 160, for an extended discussion of the legal fight. For contemporary studies of alternative medicine and pediatric cancer patients, see Cathy Faw, Ron Ballentine, Lois Ballentine, and Jan van Eys, "Unproved Cancer Remedies: A Survey of Use in Pediatric Outpatients," *Journal of the American Medical Association* 238/14 (3 Oct. 1977): 1536–1538; and Thomas W. Pendergrass and Scott Davis, "Knowledge and Use of 'Alternative' Cancer Therapies in Children," *American Journal of Pediatric Hematology/Oncology* 3/4 (winter 1981): 339–345.

42. Elisabeth Kübler-Ross, *On Death and Dying: What the Dying Have to Teach Doctors, Nurses, Clergy, and Their Own Families* (New York: MacMillan, 1969), preface.

43. Ibid., 11.

44. Elisabeth Kübler-Ross, *On Children and Death* (New York: Macmillan, 1983).

45. L. Wainwright, "Profound Lesson for the Living," *Life* (21 Nov. 1969): 36–43. Also see Barney G. Glaser and Anselm L. Strauss, *Awareness of Dying* (Chicago: Aldine, 1965); David Sudnow, *Passing On: The Social Organization of Dying* (Englewood Cliffs, N.J.: Prentice-Hall, 1967); Philippe Ariès, *Western Attitudes toward Death: From the Middle Ages to the Present* (Baltimore:

Johns Hopkins University Press, 1974); and Renée Fox, *Essays in Medical Sociology* (New York: John Wiley and Sons, 1979), for further contemporary discussion of the denial of death and the construction of medical environments that isolated the dying and dehumanized the dying process. Refer to Peter G. Filene, *In the Arms of Others: A Cultural History of the Right-to-Die in America* (Chicago: Ivan R. Dee, 1998), for a recent analysis of changing practices around death and dying.

46. Kenneth L. Woodward, "Living with Dying," *Newsweek* 91/18 (1 May 1978): 52–63. Robert Kastenbaum labeled the surge in attention to death and dying as the death-awareness movement. See Jessica Mitford, *The American Way of Death* (New York: Simon and Schuster, 1963).

47. "A Better Way of Dying," *Time* 111/23 (5 June 1978): 66.

48. J. Fishhoff and N. O'Brien, "After the Child Dies," *Journal of Pediatrics* 88/1 (Jan. 1976): 140–146.

49. Cicely Saunders and Mary Baines, *Living with Dying: The Management of Terminal Disease* (New York: Oxford University Press, 1983); Sandol Stoddard, *The Hospice Movement: A Better Way of Caring for the Dying* (New York: Stein and Day, 1978); and a more modern evaluation and criticism of hospice and its changing goals, Cathy Siebold, *The Hospice Movement: Easing Death's Pains* (New York: Twayne, 1992).

50. Ida Marie Martinson, *Home Care for the Dying Child: Professional and Family Perspectives* (New York: Appleton-Century-Crofts, 1976), 5.

51. Ida M. Martinson, "Why Don't We Let Them Die at Home? *RN* (Jan. 1976): 58.

52. Martinson, *Home Care for the Dying Child,* 9.

53. Emily Kulenkamp and Ida M. Martinson, *Eric* (Minneapolis: University of Minnesota School of Nursing, 1974), 2. Martinson's interactions with two young patients and their families were published in two slim pamphlets. The second was David N. Wetzel and Ida M. Martinson, *Meri* (Minneapolis: University of Minnesota School of Nursing, 1975).

54. *Journal of Allied Health* (1976), 26

55. Wetzel and Martinson, *Meri,* 29.

56. Martinson, *Home Care for the Dying Child,* 37.

57. Barbara Etzel, "The Role of Advocacy in the Rite of Passage." In Ida Marie Martinson, *Home Care for the Dying Child,* 55.

58. Ida M. Martinson, "The Child with Leukemia: Parents Help Each Other," *American Journal of Nursing* 76/7 (July 1976): 1121. Participants shared their experiences in pamphlet form as well as in a parental support groups. The article described another group at Babies Hospital, Children's Medical and Surgical Center, Columbia-Presbyterian Medical Center, New York.

59. I. M. Martinson, D. Geis, M. A. Anglim, E. Peterson, M. Nesbit, J. Kersey, "When the Patient Is Dying: Home Care for the Child," *American Journal of Nursing* 77/11 (1977): 1815–1817.

60. I. M. Martinson, M. Palta, and N. Rude, "Death and Dying: Selected Attitudes and Experiences of Minnesota's Registered Nurses," *Nursing Research* 9 (April 1977): 197–206.

61. Kathy Forte, "Pediatric Oncology Nursing: Providing Care through Decades of Change," *Journal of Pediatric Oncology Nursing* 18/4 (July–Aug.): 154–163.

62. D. Pinkel, "Treatment of Acute Leukemia," *Pediatric Clinics of North America* (February 1976): 128.

63. I. H. Krakoff, "The Case for Active Treatment in Patients with Advanced Cancer: Not Everyone Needs a Hospice" *CA: Cancer Journal for Clinicians* 29/2 (1979): 108–111.

64. Robert W. Buckingham, *The Complete Hospice Guide* (New York: Harper, 1983), 85.

65. In 2002, the Institute of Medicine recommended a new model of care in its groundbreaking report *When Children Die: Improving Palliative and End-of-Life Care for Children and Their Families* (Washington, D.C: National Academies Press, 2002). This integrated system ensured that children had access to a hospice team and eliminated the need for a six-month prognosis. Under this plan, hospices could be reimbursed when providing palliative care to children who were continuing to receive treatment intended to cure their disease or prolong their lives. This plan may succeed because it combines key elements from Martinson's early efforts yet also acknowledges the unique meanings of children and the aggressive orientation that characterizes pediatric oncology in the United States.

66. Stephen Hess, "Letter of Transmittal," White House Conference on Children, 1970, *Report to the President, White House Conference on Children* (Washington, D.C., 1971), 10.

67. Beatrice Gross and Ronald Gross, *The Children's Rights Movement: Overcoming the Oppression of Young People* (Garden City, New York: Anchor Press/Doubleday, 1977). The authors also promoted organizations such as the Children's Defense Fund and documents such as the United Nations Declaration of the Rights of the Child as methods for expanding the rights of a child. The Grosses were regarded as leaders in educational change in the 1970s, and they combined their academic interests with a devotion to social change by publishing widely both in their fields and for the public.

68. Robert and Suzanne Massie, *Journey* (New York: Alfred A. Knopf, 1975). The Massies published this description of their son Bobby's struggle with hemophilia and the family's battle to provide care once their son turned eighteen. At the time of his diagnosis, the prognosis was grim—54 percent of sufferers died before the age of five and only 11 percent lived to age twenty-one. Refer to Jacquie Gordon, *Give Me One Wish* (New York: W. W. Norton, 1988), for cystic fibrosis. The average life expectancy of a child with cystic fibrosis was only five years when Christine was born in 1961 and had risen to nineteen years when she died at age twenty-one in 1983. Like the Massies, Gordon included critiques as well as praise for aspects of her child's care.

69. Jonathan B. Tucker, *Ellie: A Child's Fight against Leukemia* (New York: Holt, Rinehart, and Winston, 1982). The volume was actually a composite of three different case histories. The author also used sources from Candlelighters, the National Cancer Center, the American Cancer Society, the Leukemia Society of America, the Children's Hospital of Philadelphia, and many individual physicians to construct the single narrative. Eric Lax, *Life and Death on 10 West* (New York: Times Books, 1984), was based on the young patients treated in the new bone marrow transplantation unit at the UCLA Medical Center.

70. Ilana Löwy, *Between Bench and Bedside: Science, Healing and Interleukin-2 in a Cancer Ward* (Cambridge, Mass.: Harvard University Press, 1996), 73–83.

71. Carol Kruckenberg, *What Was Good about Today* (Seattle: Madrona, 1984). Kruckenberg was a mother of an eight-year-old suffering from acute myelobrastic leukemia, a cancer that killed 95 percent of its sufferers within a year. The reader gains a complete knowledge about the features of a children's hospital and its response to the needs of parents. In Ray Erbol Fox, *Angela Ambrosia* (New York: Alfred A. Knopf, 1979), Angela's father discusses how their personal preferences were considered and valued during her treatment at Sloan-Kettering.

72. Barron H. Lerner, *The Breast Cancer Wars: Hope, Fear, and the Pursuit of a Cure in Twentieth-Century America* (New York: Oxford University Press, 2001), esp. 141–169.

73. Joan E. Fretwell, "A Child Dies," *Nursing Times* 69/27 (5 July 1973): 867–871, is an exception. Fretwell criticizes the uncaring attitudes displayed by physicians and other associated health personnel involved in her thirteen-year-old daughter's case. Marcia Friedman, *The Story of Josh* (New York: Praeger, 1974), focuses on the oral record of the sufferer himself but also addresses the high cost of medical care and the problems of hospital bureaucracy.

74. Doris Lund, *Eric* (Philadelphia: J. B. Lippincott, 1974). A comprehensive list of illness narratives specific to childhood cancers can be found in Hazel B. Benson, ed., *The Dying Child: An Annotated Bibliography* (Westport, Conn.: Greenwood Press, 1988). Benson separated narratives published between 1960 and 1987 into those written by mothers, fathers, and siblings.

75. Lund, *Eric,* 15.

76. Ibid.

77. Ibid., 58.

78. Ibid., 106.

79. Elaine Ipswitch, *Scott Was Here* (New York: Delacorte, 1979). The story of fifteen-year-old Scott's experiences with Hodgkin's disease was also excerpted in Elaine Ipswitch, "Maybe My Time Is Up," *Reader's Digest* 115/689 (Sept. 1979): 147–151. The book and article describe Scott's and the family's daily struggles to cope with the disease and their discovery (in journal entries read after his death) that he was aware of his condition and impending death. Also see Mary Winfrey Trautmann, "The Absence of the Dead," *Parents Magazine* 60/2 (February 1985): 83, 160, 162, 164, 166–68; Terry Pringle, *This Is the Child* (New York: Alfred A. Knopf, 1983); Rose Levit, *Ellen: A Short Life Long Remembered* (San Francisco: Chronicle Books, 1974); Nancy Roach, *The Last Day of April* (New York: American Cancer Society, 1974); and Owenita Sanderlin, *Johnny* (Cranbury, N.J.: Barnes, 1968), for examples of this style and content.

80. Refer to Mari Brady, *Please Remember Me: A Young Woman's Story of Her Friendship with an Unforgettable Fifteen-Year-Old Boy* (Garden City, N.Y.: Doubleday, 1977), for another narrative that highlighted the concerns of adolescents. The collection of illness narratives published during this period includes infants through eighteen-year-olds. Many narratives about older children include the words of the young patient as captured in diary entries, letters, or recordings.

81. Lund, *Eric,* 32.

82. Rachel Carson, *Silent Spring* (Boston: Houghton Mifflin, 1962). In *Before Silent Spring: Pesticides and Public Health in pre-DDT America* (Princeton, N.J.: Princeton University Press, 1974), James Whorton describes criticisms of hazardous chemical contaminants prior to publication of Carson's classic work and examines why they did not incite the same level of fervor.

83. The childhood cancer clusters were also reported in popular literature such as Natcher Stewart, "Cancer in Children" *Health* 11/2 (published by the American Osteopathic Association) (Oct. 1965): 4–10.

84. A viral agent was suspected in the Niles case because of contemporary research on a new type of lymphoma identified by researcher Denis Burkitt, an Irish government surgeon working in Uganda. After Burkitt discovered that the cancer cases spanned Africa, he sought an explanation for this narrow band of disease. Striking similarities between yellow fever maps and the new tumor map suggested that an insect vector such as the anopheles mosquito was responsible for transmitting a lymphoma virus. Cooperative work between Burkitt and investigators at Memorial Hospital held promising implications for members of the leukemia and can-

cer research community for two reasons; it suggested that a direct link existed between viruses and human cancers and demonstrated that therapy with low doses of existing chemotherapeutic agents could stimulate tumor regression and even cure advanced tumors. For an overview of this joint work, see Joseph H. Burchenal and Denis P. Burkitt, eds. *Treatment of Burkitt's Tumor: Proceedings of a Conference Organized by the Chemotherapy Panel of the International Union against Cancer* (Berlin: Springer-Verlag, 1966), and J. H. Burchenal, "Geographic Chemotherapy: Burkitt's Tumor as a Stalking Horse for Leukemia: Presidential Address" *Cancer Research* 26/12 (Dec. 1966): 2393–2405.

85. Paula DiPerna, *Cluster Mystery: Epidemic and the Children of Woburn, Mass.* (St. Louis: C. V. Mosby, 1985), 30.

86. In 1978, Michael Brown of the *Niagara Gazette* wrote an investigative report on Hooker Chemical Company dumping into the Love Canal area near Buffalo, New York. Gibbs continues to coordinate a campaign against environmental contaminants called the Citizens Clearinghouse for Hazardous Waste.

87. Paula DiPerna, *Cluster Mystery: Epidemic and the Children of Woburn, Massachusetts* (St. Louis: C. V. Mosby, 1985). Phil Brown and Edwin J. Mikkelsen, *No Safe Place: Toxic Waste, Leukemia and Community Action* (Berkeley: University of California Press, 1990), focuses on the important role of community members in moving the case into a national forum.

88. DiPerna, *Cluster Mystery,* 66.

89. Ibid., 114.

90. The legal disputes in the Woburn case were described in Jonathan Harr's best-selling book *A Civil Action* (New York: Random House, 1995).

91. DiPerna, *Cluster Mystery,* 182.

92. James Kloss, "Brain Tumor: Disease without Early Warning," *Chicago Daily News* (13 Jan. 1975).

93. See two institutional histories for a chronology of St. Jude's establishment and activities: *A Dream Come True: The Story of St. Jude Children's Research Hospital and ALSAC* (Dallas: Taylor, 1983) and *From His Promise: The Story of St. Jude Children's Research Hospital and American Lebanese Syrian Associated Charities* (Memphis: Guild Bindery Press, 1996).

94. "Maintaining a Normal Life." In *Proceedings of the First National Conference for Parents of Children with Cancer, 23–25 June 1978.* U.S. Department of Health and Human Services, National Cancer Institute, NIH Publication No. 80-2176 (June 1980): 1.

95. Ibid.

96. Jordan R. Wilbur, "Parent as Part of the Treatment Process." In *Proceedings of the First National Conference for Parents of Children with Cancer,* 155–162.

97. Sister Margaret Weeke (moderator), "Coping: Teenage Panel Discussion," In *Proceedings of the First National Conference for Parents of Children with Cancer,* 51–88.

98. J. V. Simone, R. J. A. Aur, H. O. Hustu, M. S. Verzosa, and D. Pinkel, "Three to Ten Years after Cessation of Therapy in Children with Leukemia," *Cancer* 42 (1978): 839.

99. G. J. D'Angio, "Complications of Treatment Encountered in Lymphoma-Leukemia Long-Term Survivors," *Cancer* 42 (1978): 1022.

Conclusion

1. "Girl Fights Bone Cancer. Father Hoped to Save Her From Being Crippled," *Brooklyn Eagle* (27 Sept. 1939), Memorial Hospital 1939–1940 Scrapbook, SKCC, RAC.

2. Ibid.

3. No title, Jamaica (New York) Long Island Press (20 Sept. 1939), Memorial Hospital 1939–1940 Scrapbook, SKCC, RAC. The story was also distributed by the Associated Press and appeared in newspapers from Baltimore to West Virginia and Pennsylvania. Dorothy's mother died not long before the girl's diagnosis, so the decision to allow the operation was left solely to her father.

4. "Valiant Is the Word," *New York Journal American* (11 Oct. 1939): 6–7, Memorial Hospital 1939–1940 Scrapbook, SKCC, RAC.

5. Edward Kennedy case was described in "Teddy's Ordeal," *Time* (3 Dec. 1973): 86.

6. Unlike osteogenic sarcoma (cancer of the bone) that often rapidly spread to the lung and had only a five-year survival rate of 5–23 percent when an immediate amputation had successfully removed the primary tumor, chondrosarcoma had a 70 percent survival rate. It is unclear why Kennedy was included in the study. Perhaps his exact diagnosis was uncertain at the time.

7. N. Jaffe, E. Frei III, D. Traggis, and Y. Bishop, "Adjuvant Methotrexate and Citrovorum-Factor Treatment of Osteogenic Sarcoma," *New England Journal of Medicine* 291 (1974): 994–997. In the second study, the Acute Leukemia Group B had tested the efficacy of adriamycin in osteosarcoma in patients without detectable metastases. Preliminary data had demonstrated that adriamycin was active in a wide spectrum of neoplastic diseases including patients with pulmonary metastases from osteosarcoma. Researchers decided to conduct a larger study in which they would administer the drug during a period when the patient's body burden of tumor cells was the lowest. Thus, children were given the drug two weeks after the surgical amputation of the primary lesion. The drug delayed gross metastases. See Engracio P. Cortes, James F. Holland, Jaw J. Wang, Lucius F. Sinks, Johannes Blom, Hanjurg Senn, Arthur Bank, and Oliver Glidewell, "Amputation and Adriamycin in Primary Osteosarcoma," *New England Journal of Medicine* 291 (1974): 998–1000.

8. In the late 1970s, a study published by Gerald Rosen of Memorial Sloan-Kettering in 1978 found that administering drug therapy before surgery caused bone tumors to shrink and killed cancer cells that could have spread throughout the body. Rosen reported that the preoperative chemotherapy increased four-year survival time from 50 to 70 percent. See "Treating Bone Cancer in Children," *San Francisco Chronicle* (12 Sept. 1978) for a summary.

9. "Valiant Is the Word," *N.Y. Journal American* (11 Oct. 1939): 6, Memorial Hospital 1939–1940 Scrapbook, SKCC papers, RAC.

10. National Cancer Center–supported Cancer Clinical Trials, www.cancer.gov/clinicaltrials/facts-and-figures/page2.

11. Robert and Suzanne Massie, *Journey* (New York: Alfred A. Knopf, 1975), xi.

12. Ibid., 76.

13. See John E. O'Malley, "Psychiatric Sequelae of Surviving Childhood Cancer," *American Journal of Orthopsychiatry* 49/4 (Oct. 1979): 608–616; Judith W. Ross, "Social Work Intervention with Families of Children with Cancer: The Changing Critical Phases," *Social Work in Health*

Care 3/3 (spring 1978): 257–272; Lynn Kagen-Goodheart, "Reentry: Living with Childhood Cancer," *American Journal of Orthopsychiatry* 47/4 (Oct. 1977): 651–658.

14. Stories of negotiation between physicians, parents, and the courts over the refusal of treatment or the use of alternative treatments for childhood cancers are regularly in the news. Such contests have flourished with the growth of consumer-oriented medicine, the greater involvement of parents in daily cancer care, and the persistence of aggressive, multiphase therapy. For a recent case, see Bernadine Healy, "The Tyranny of Experts," *U.S News and World Report* (27 June 2005). The blog http://prayforkatie.blogspot.com/ includes links to court documents, fundraising events, and media coverage from the case as well as regular postings from Katie Wernecke, the thirteen-year-old girl with lymphoma who is at the center of the debate.

15. See www.alexslemonade.com/aboutthestand.php.

16. "Girl Who Sold Lemonade for Cancer Research Dies at 8," *Seattle Times* (online version), 3 Aug. 2004.

17. For history and critical commentary on telethons, see Paul Longmore, "The Cultural Framing of Disease: Telethons as Case Study," *PMLA* 120/2 (March 2005): 502–508. Longmore points to a telethon aired in New York in 1949 by the Damon Runyon Cancer Fund as the first program produced by a private, voluntary health charity designed to reach the growing audience now accessible through broadcast television.

18. Lisa Belkin, "Charity Begins at . . . The Marketing Meeting, The Gala Event, The Product Tie-In: How Breast Cancer Became This Year's Cause," *New York Times Magazine* (22 Dec. 1996): 42.