



36th Annual Reynolds-Finley Lecture

Review, Assess and Discuss Historical Aspects of the Health Care Sciences

Louis Pasteur and the Pleasures of Art

presented by

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March 6, 2015

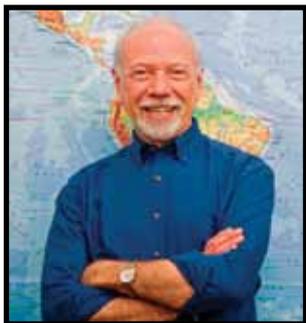
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Cover art: *This original, painted illustration comes from the handwritten manuscript of Louis Pasteur's studies on wine, ETUDES SUR LE VIN (1873), held at the Reynolds-Finley Historical Library.*

As a souvenir of the
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we are pleased to offer
our guests
this reprint of one of
Bert Hansen's
illustrated presentations on
Louis Pasteur.





Bert Hansen has been teaching history at Baruch College of CUNY since 1994, following appointments at Binghamton University (SUNY), New York University, and the University of Toronto. He holds degrees in chemistry (Columbia) and history of science (Princeton). Trained as a medievalist, Hansen's first book was *Nicole Oresme and the Marvels of Nature: A Critical Edition and Translation of "De causis mirabilium"* (1985). Articles have examined obstetrics teaching in the 1860s, the new medical categorization of homosexuals in the 1890s, the advocacy for public health and sanitation in political cartoons from 1860 to 1900, and the popularity of medical history heroes in children's comic books in the United States (1940s) and in Mexico (1960s and 1970s). His second book, *Picturing Medical Progress from Pasteur to Polio: A History of Mass Media Images and Popular Attitudes in America* was honored with an award from the Popular Culture Association and named to "2010 Best of the Best" for Public and Secondary School Libraries by the American Library Association.

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UAB HISTORICAL COLLECTIONS GRATEFULLY ACKNOWLEDGES PERMISSION OF THE AMERICAN OSLER SOCIETY TO REPRINT THIS JOHN P. MCGOVERN LECTURE, *Louis Pasteur: Exploring His Life in Art*, DELIVERED BY BERT HANSEN, PHD ON APRIL 8, 2013 AT THE 43RD MEETING OF THE SOCIETY HELD IN TUCSON, ARIZONA. ANY FURTHER REPRODUCTION AND REDISTRIBUTION OF THIS PUBLICATION IN ANY FORM WITHOUT THE EXPRESSED WRITTEN CONSENT OF BERT HANSEN AND THE AMERICAN OSLER SOCIETY IS STRICTLY PROHIBITED.

Thank you, Dr. Moss, for such a warm welcome. It is an honor to be addressing the American Osler Society as a McGovern lecturer and a pleasure to share with you the first public presentation of my current research on Louis Pasteur and the art world of the nineteenth century.¹ Today's talk offers early sketches from a rapidly expanding research project. Yet even a preliminary view will suggest, I hope, the fascination of looking at Louis Pasteur's lifetime involvement with art and artists. I look forward to being able to present additional research in further publications.²

Given William Osler's passion for the humanities, I probably need not justify speaking to Oslerians about the great French chemist Louis Pasteur. But if I did, I might call on Dr. Osler himself, who signaled the importance both of Pasteur and of a biographical approach to history by writing a special introduction for several printings of the English version of the authorized *Life of Pasteur*, starting in 1911.³ The book had been published first in French in 1900, with the English translation appearing shortly thereafter. The author, René Vallery-Radot, a writer and the son of a librarian at the Louvre, was married to Pasteur's daughter. Eventually he gave up other projects and became the official biographer and custodian of Pasteur's public legacy. Vallery-Radot's long and intimate relationship with his father-in-law gives this early account of Pasteur enduring value.⁴

¹For assistance in research and in preparing this lecture for publication, I extend my gratitude to Boaz Adler, Kathryn Annette Clark, Caitlin Hawke, Helene Lipstadt, Harvey L. Mendelsohn, Sandra Moss, Blossom Appel Sanger, Carol A. Warren, and Renee Ziemer. My research, including travel to France and Finland, has received generous support from the George and Mildred Weissman School of Arts and Sciences of Baruch College, from Jeffrey M. Peck, Dean of the Weissman School, and from the PSC-CUNY Research Awards Program of the City University of New York.

²The study of a singular episode in Pasteur's life-long relationship with art, namely his close friendship with the Finnish painter Albert Edelfelt, is under review at a scholarly journal for publication as Richard E. Weisberg and Bert Hansen, "Collaboration of Art and Science in Albert Edelfelt's Portrait of Louis Pasteur: The Making of an Enduring Medical Icon."

³Osler provided the following annotation for a copy of the 1911 London edition in his personal library: "A privately printed edition. My friend Mr. Henry Phipps was so impressed with Pasteur's 'Life' and the value of its lessons that he offered to have a special edition printed if I would write an introduction. This I did with pleasure, and copies of the work were sent to the colleges, medical schools, and technical schools of the English-speaking world." See *Bibliotheca Osleriana* (Oxford: Clarendon Press, 1929), p. 154. For more on his relation to the book, see Harvey Cushing, *The Life of Sir William Osler*, 2 vols. (Oxford: Clarendon Press, 1926), at II: 241, II: 261, II: 294, II: 311, and II: 321.

⁴The first edition is René Vallery-Radot, *La vie de Pasteur* (Paris: Librairie Hachette, 1900). The English translation by Mrs. R. L. Devonshire appeared soon thereafter in England and the United States. Both versions were often reprinted.

Three books from the mid- and late-twentieth century substantially enlarged scholarly and popular understanding of Pasteur's career, and I owe them much, even though none of them paid serious attention to the artistic side of Pasteur's life. The first two were biographies written by active scientists. René Dubos was not only a leading biologist, but a cultivated European intellectual who wrote a number of successful books explaining science to a general audience. While his *Louis Pasteur: Free Lance of Science* (1950) was based on extensive research, it included no reference notes, even for quotations; in compensation, the writing was elegant, the explanations lucid, and his understanding of the French context of Pasteur's work exemplary.⁵ Patrice Debré's substantial and comprehensive biography, entitled simply *Louis Pasteur*, appeared in French in 1994 and in English in 1998. Debré adopted a strictly chronological approach, as had Vallery-Radot nearly a century earlier, but he drew on modern historical scholarship and leavened it with especially good explanations of the science, grounded in his own work as an immunologist.⁶ While the title of historian Gerald L. Geison's *The Private Science of Louis Pasteur* might seem to promise an examination of only a selection of Pasteur's experiments, it is both wide-ranging and perceptive, and for many of the major discoveries it offers the best analysis of Pasteur's research. It is based on Pasteur's laboratory notebooks, which had not been available to earlier scholars.⁷ Still useful, too, is Geison's "Louis Pasteur" entry in the *Dictionary of Scientific Biography* published in 1974, a remarkably comprehensive account. Richly detailed and well balanced, this sixty-six-page, double-column article is virtually the length of a book.⁸

My title phrase referring to Pasteur's "life in art" is intentionally ambiguous. This morning we will look not only at examples of how artists portrayed the great chemist, but also at some of his personal experiences inside the world of art. This second, little-known aspect

⁵ René J. Dubos, *Louis Pasteur: Free Lance of Science* (Boston: Little, Brown, and Co., 1950).

⁶ Patrice Debré, *Louis Pasteur* (Paris: Flammarion, 1994), and Patrice Debré, *Louis Pasteur*, trans. by Elborg Forster (Baltimore and London: Johns Hopkins University Press, 1998).

⁷ Gerald L. Geison, *The Private Science of Louis Pasteur* (Princeton: Princeton University Press, 1995).

⁸ Gerald L. Geison, "Louis Pasteur," in *Dictionary of Scientific Biography* Vol. 10 (New York: Charles Scribner's Sons, 1974), pp. 350-416.

of his biography embraces drawings and lithographs made by Pasteur himself, his deep friendships with artists, his teaching in an art school, and his patronage of painters and sculptors. Once Pasteur became famous, many artists made portraits of him. To take just one example of Pasteur in art, and also to honor Dr. McGovern for whom this lectureship is named, I start with a group of twelve high-relief panel sculptures made by Doris Appel about seventy-five years ago. Today these sculptures are on display in the John P. McGovern Hall of Medical History at the University of Texas Medical Branch at Galveston. (Another set is found at Boston University.) An early photo shows them as they were first publicly exhibited in the Medical Museum of the Armed Forces Institute of Pathology in Washington, D.C. (Figure 1). Pasteur holding a rabbit is the fourth figure from the right, behind Marie Curie, Wilhelm Roentgen, and Joseph Lister. This array reminds us of the chemist Pasteur's place in medical history, though today I do not have time to recount his scientific achievements. His science, along with its applications in medicine and public health, is of course the basis for why we might care about his personal life or about his life in art. Today my aim, rather, is to illustrate another facet of the personality of the stony-faced, authoritarian, dour workaholic we know from the published literature and from the depictions of many artists. Here we see the familiar Galveston building, where Doris Appel's large sculpture panels are housed (Figure 2), along with two different busts of Pasteur made by Appel (Figure 3).



Before approaching Pasteur's life, I want to say a little about how I took up this project after working for many years on medical imagery in American popular culture.⁹ A few years ago, I began research

⁹ Bert Hansen, *Picturing Medical Progress from Pasteur to Polio: A History of Mass Media Images and Popular Attitudes in America* (New Brunswick, N.J.: Rutgers University Press, 2009); also "La réponse américaine à la victoire de Pasteur contra la rage: Quand la médecine fait pour la première fois la 'une'," in *L'Institut Pasteur: Contributions à son histoire* ed. Michel Morange (Paris: La Découverte, 1991), pp. 89-102; "The Image and Advocacy of Public Health in American Caricature and Cartoons from 1860 to 1900," *American Journal of Public Health* 87:11 (November 1997), 1798-1807; "America's First Medical Breakthrough: How Popular Excitement about a French Rabies Cure in 1885 Raised New Expectations of Medical Progress," *American Historical Review* 103:2 (April 1998), 373-418; and "Five Centuries of Medicine in Art from the Collection of Bruce and Lois Fye, Rochester Art Center (Rochester, MN)," special exhibit review with cover illustration in *Bulletin of the History of Medicine* 84:4 (December 2010), 674-677.

on Pasteur's art-world friendships in collaboration with Richard E. Weisberg, a former graduate student of mine, who had written a term paper (1987) and then a full dissertation (1995) about medical portraiture in France around the 1880s.¹⁰ Richard had finished his dissertation in 1995, but the demands of being a teacher, administrator, and principal never allowed him time to publish any of it. In 2010, I proposed we undertake a joint project, and Richard welcomed the chance to return to active scholarship alongside his other responsibilities. Unfortunately, he died unexpectedly a year later, in May 2011, and I have carried on alone. In order to share his valuable research with other scholars, I created a website and posted his entire dissertation for use by readers worldwide. The site has had over 900 visits, from 41 countries. Almost half have come from outside the US, with France leading the other countries. Spain and China are in third and fourth place¹¹ (Figure 4).



Louis Pasteur was only thirteen years old when he took up drawing, the start of a long-term engagement with the fine arts. He studied drawing formally with two teachers, Étienne-Charles Pointurier in Arbois and Charles-Antoine Flajoulot in Besançon, becoming especially skilled in the relatively new medium of pastels. We do not know how many works he created before putting his pencils aside at age nineteen, but about thirty examples have survived, most of them elegant and convincing presentations of the faces of friends, family members, and local residents.¹² Pastels of his mother drawn in 1836 and of his father in 1842 reveal his eye for detail and a balanced composition (Figure 5 and Figure 6).

¹⁰ Richard E. Weisberg, "The Representation of Doctors at Work in Salon Art of the Early Third Republic in France" (New York University dissertation, 1995)

¹¹ The URL for "The Scholarly Legacy of Richard E. Weisberg (1943-2011): Medicine in Art in Nineteenth-Century France" is <http://faculty.baruch.cuny.edu/bhansen/weisberg.home.htm>.

¹² Two books reproduce many of Pasteur's early artworks. The first was published in a large-format edition limited to 100 copies: René Valléry-Radot, *Pasteur: dessinateur et pastelliste, 1836-1842* (Paris: Emile Paul Frères, 1912). It was reprinted much later in a large-format portfolio edition of 1000 copies, edited by Maurice Valléry-Radot, to benefit the fight against AIDS (Paris: Hervas, 1986), and then in reduced format as a book (Paris: Hervas, 1987). A PDF version with modern color photographs of some of the works is now available on the internet, edited by Annick Perrot, then Conservateur du Musée Pasteur, at <http://www.pasteur.fr/ip/resource/filecenter/document/01s-000039-037/pasteur-dessinateur-et-pastelliste-2.pdf>. Maurice Valléry-Radot's later book, *Pasteur savant et artiste* (Paris: Editions Hervas, 1995), is—despite its having a general title—primarily about the works of art done by Pasteur, many of which are reproduced in color.

The young man who was able to see and capture these features so successfully grew into a scientific observer of nature *par excellence* and a laboratory worker whose characteristic discoveries were often made by acute visual inspection of physical objects. Pasteur often saw things that others overlooked, whether they were facets of crystals, particles in the bodies of diseased silkworms, or micro-organisms cultured in murky broth (rather than in the solid culture media that came into use later).

After Pasteur finished graduate study in Paris at the École Normale, where he defended doctoral theses in both physics and chemistry at the age of twenty-five, he held a succession of teaching positions of increasing status. He went first at age twenty-six to the university in Strasbourg in January 1849, and he married the Rector's daughter the following spring. After six years there, he moved with a growing family to Lille. After another three years outside the metropolis, he returned to the École Normale in Paris at the age of thirty-six in 1858. He then remained in the capital city until he died nearly forty years later, except for vacations at his family home in Arbois, travel to scientific conferences abroad, and research expeditions on yellow fever, silk-worm diseases, and anthrax.

As a young man of twenty-nine, while teaching at Strasbourg, he made an important research trip to vinegar factories in Zwickau, Vienna, and Prague. While abroad, he made a special effort to visit museums and other artistic sites. In Vienna, for example, Pasteur specifically sought out the funerary monument for Marie Christine of Habsbourg-Lorraine, done by the great Italian sculptor Antonio Canova about 1805. In a letter to his wife, Pasteur declared it “the most beautiful of Canova’s masterpieces,” writing her that “you cannot imagine anything more touching and more remarkable as a work of art.” (Figure 7) Pasteur told her that as sculpture this monument surpassed even the “magnificent tomb” of the Marshall of Saxony by the Parisian sculptor Jean-Baptiste Pigalle.¹³ This ensemble of dramatic figures may still be seen in the St. Thomas church in Strasbourg, the city in which the Pasteurs were then living

¹³ Louis Pasteur, *Correspondance 1840-1895*, ed. Pasteur Vallery-Radot, 4 vols. (Paris: B. Grasset, 1940-51, Vol. I, p. 224 (September 27, 1852, to Madame Pasteur).

(Figure 8). We may assume they had seen it together, perhaps even discussing its beauty.

In another letter to his wife, he wrote about the art he had seen in Dresden, “I can assure you that I saw some admirable things. There is a most beautiful museum containing pictures by the first masters of every school.” In the same letter, he wrote, “I spent over four hours in the galleries, noting in my little catalogue the pictures I most enjoyed. Those that drew my attention I marked with a cross; but soon I was putting two or three crosses, according to the degree of my enthusiasm. I even went as far as four.” His letter continued, “I also visited what they call the Green Vault [named for the columns painted green with malachite pigment], an absolutely unique collection of works of art, jewelry, and precious stones collected at great expense by a prince.”¹⁴



But art was not something Pasteur reserved only for travel to other cities. At home in Paris, Pasteur was an enthusiastic visitor to the annual exhibitions known as the Salons, which he often attended with artist friends, as well as with Madame Pasteur and, on occasion, with their married children and their spouses. Each spring, and sometimes in the fall as well, Paris was home to enormous art exhibits, first at the Louvre, but later in newer exhibition halls. The May first opening day was an event for the whole city, marked by crowds, newspaper reviews, special editions of magazines, the publication of official catalogues listing the works, and magazine reviews, sometimes running to hundreds of pages in several installments. In characteristic “Salon style,” the pictures were hung all up and down the crowded walls, making the ones that were “skied” very hard to see.

The purpose of these government-sponsored exhibits was two-fold: to showcase the best works by contemporary artists and to publicly uphold standards by awarding medals and making purchases for the State. Among the numerous submissions, those to be shown had to be selected by a jury of artists. There was an exception for works by

¹⁴ *Correspondance I*: 218-219 (September 23, 1852, to Madame Pasteur.)

a limited number of established artists who were allowed to submit outside of the competitive process (*hors concours*). First-, second-, and third-class medals gave publicity and status to those honored with them. The shows were enormous: the total of number of paintings, sculptures, drawings, and engravings often ran as high as 5,000. During the six- to eight-week run, attendance might exceed half a million visitors in some years.

Alongside the Salons, a second major institution of the art establishment was the National School of Fine Arts, or *École des Beaux-Arts*. In 1863, just as he was turning forty-one, Pasteur added an entirely new set of teaching responsibilities at this school, in addition to his on-going work at the *École Normale*. He gave lectures and demonstrations at the *École des Beaux-Arts* as their very first professor of geology, physics, and chemistry. For nearly four years, he offered courses about ventilation in buildings, pigments, varnishes, factors affecting the way oil paint dries, and other physico-chemical aspects of the fine arts. The lectures were not published at the time, but some are now available in his *Oeuvres*, where scholars can follow his teaching in these areas.¹⁵ I have not yet found much direct evidence about his interaction with students, but it is clear that he developed close and lasting friendships with several of his fellow teachers.

In the mid-1870s, when Pasteur was in his early fifties and becoming renowned for his new understanding of fermentation and for key improvements in the production of wine and beer, his friend Paul Dubois was France's leading sculptor of portrait busts. Both Keeper of the Luxembourg Palace collection and director of the *École des Beaux-Arts*, Dubois was at the top of the profession. Not surprisingly, Dubois was the artist from whom J. C. Jacobsen, the founder of Carlsberg Brewery in Copenhagen and a great patron

¹⁵ Louis Pasteur, *Oeuvres*, ed. Pasteur Vallery-Radot, 7 vols. (Paris: Masson, 1922-1939), at VII: 223-262. On the content of his teaching, see Denise Wrotnowska, "Pasteur et l'art," *Médecine de France* 66 (July 1955), 9-16. Despite its brevity, this study offers valuable insights concerning all periods of Pasteur's life, and it is well grounded in archival research. Unfortunately, its potential for enriching the modern picture of Pasteur went unrealized, and it has been largely ignored even by those scholars who cited it. See also Wrotnowska, "Lettre inédite de Pasteur, professeur à l'école des Beaux-Arts," *Bulletin de la société de l'histoire de l'art français* (1954), pp. 134-142; Wrotnowska, "Pasteur, artiste et professeur à l'école des Beaux-Arts, précurseur des laboratoires auprès des musées," *Bulletin du laboratoire du musée du Louvre* 4 (September 1959), 46-61; and Maurice Vallery-Radot *Pasteur savant et artiste* (1995), pp. 34-40.

of the arts, commissioned a marble bust of Pasteur for the research laboratory he established there. Jacobsen felt his commercial success was heavily indebted to Pasteur's studies on beer, and he wanted to show his appreciation to Pasteur. Jacobsen, in fact, was the first brewer anywhere to establish a research laboratory on site, and the bust was prominently displayed there (Figure 9).



About 1881, Pasteur was introduced by his son Jean-Baptiste to a young Finnish painter living in Paris, Albert Edelfelt. Pasteur took a strong liking to Edelfelt, and the art produced by this friendship would have major impact on the careers of both men.¹⁶ Edelfelt's portrait of Pasteur at the Salon of 1886—which offered an exceedingly favorable image of the man of science—was a great success; it made the artist famous and provided Pasteur with new visibility among the general public. Edelfelt became close with the other family members, too. Pasteur enjoyed conversing with Edelfelt about art and had him do portraits of other family members. Over the course of many years Edelfelt painted portraits of Pasteur's son, his daughter-in-law, his daughter, his son-in-law, his granddaughter and his grandson; and some years after Pasteur's death, Madame Pasteur also agreed to sit for a portrait.

Edelfelt painted this great and justly famous portrait of Pasteur in the spring of 1885, when the latter was sixty-two years old. It may be familiar to some of you as it has been quite often reproduced. For clarity, I show it here in a photogravure distributed in 1894 in *Great Men and Famous Women* (Figure 10). The painting now hangs in the Orsay Museum in Paris, and a full-size copy made by Edelfelt himself is in the Pasteur Museum at the Pasteur Institute in Paris. This image of Pasteur working in his laboratory, seemingly oblivious to the painter or to the viewer, is different from the much more common “studio portrait,” which is painted in an artist's workshop to which the subject comes for repeated sittings. In most such portraits the subject is posed in a way that acknowledges the painting's viewers. Untypically for this reserved scientist, yet perhaps

¹⁶ Richard Weisberg and I have examined the personal relationship between the French chemist and the Finnish painter in an article cited above.

because he knew first-hand the needs of a portrait artist, the busy and generally very private chemist acceded to Edelfelt's request to paint him right in the middle of the laboratory among the animals, experiments, and scurrying assistants. Edelfelt worked on the painting during the spring of 1885 and finished it before summer vacation, but it was not exhibited in Paris until the following spring's Salon, which opened on May 1, 1886. While the portrait was being painted, rabies was still a minor disease with little public interest; and Pasteur's experiments were still being conducted only on rabbits and dogs. He had not treated a human dog-bite victim, nor even tested his vaccine in humans for safety, let alone efficacy. Edelfelt composed a powerful image of the chemist alone in his laboratory, holding a drying bottle with the powerful reagent, the virus-laden spinal cord of a rabbit that died of rabies. When painted in early 1885, this was not an image of a miraculous cure or of a medical hero. But events would shortly endow it with those new meanings.

By the Salon's opening in May 1886, a medical revolution had taken place. The cord hanging in the drying bottle in Edelfelt's contemplative portrait had become a life-saving cure, and Pasteur, a chemist, was being celebrated around the world as a medical hero. Since he was not a physician, all the injections were given by medical doctors, but Pasteur had become a savior of mankind because his treatment seemed to rescue dog-bite victims from the often fatal consequences they would otherwise have suffered. Unlike Jenner's vaccine (which was preventive), this new rabies vaccine acted as a cure since it was given after a person was bitten. The world was thrilled. Pasteur's first successful treatment of a dog-bite victim (named Joseph Meister) had been undertaken in July of 1885 and announced to the scientific world in late October. Soon thereafter Pasteur reported on his second case, Jean-Baptiste Jupille, a fifteen-year-old shepherd from Villers-Farlay, a village not far from Pasteur's family home in Arbois, who had been badly bitten as he tried to subdue a mad dog attacking several younger children. In a well-known engraving Jupille received treatment from Dr. Joseph Grancher under Pasteur's watchful eye (Figure 11). When Pasteur reported on the incident to the Academy of Sciences, he proposed that Jupille receive the French Academy's

Montyon Prize, which was established to reward exceptional bravery on the part of an ordinary French citizen. The press loved the story of the boy's heroism, and he received the remarkable gift of one thousand francs. Several illustrators and artists depicted Jupille's struggle with the vicious dog, thereby giving Pasteur additional press attention. The rabies vaccine brought Pasteur an unprecedented level of popular appreciation, and when he appealed to the world to contribute to the creation of a permanent institution for providing rabies shots, the donations were immediate and substantial, ranging from pennies sent by children to huge donations received from bankers, entrepreneurs, and royalty. An attractive building was quickly erected, and the Pasteur Institute was formally inaugurated in November 1888, when Pasteur was nearly sixty-six (Figure 12).

The anecdote of Jupille's shepherd-boy heroism was so popular that in the Salon of 1887 two artists, Athanase Fossé and Émile Louis Truffot, exhibited sculptures of Jupille with the dog. Pasteur commissioned a bronze replica of Truffot's work for the future Pasteur Institute. After the Institute opened in late 1888, this piece could be seen near the entrance on a pedestal in the garden. Jean-Baptiste Jupille later came to work as a guard at the Institute, and he often posed for photographs with the sculpture, as in this one from 1913 (Figure 13). This image confirms that Pasteur actively cultivated his reputation—and ultimately his legacy—not only through his science, but through painting and other works of public art. In the twentieth century, a bronze portrait bust of Pasteur by Naoum Aronson was placed near the entrance, and the Jupille bronze was moved to the side of the building, where it still stands. The latter sculpture gained much wider currency during the later twentieth century, when it was reproduced on France's five-franc note, in use from the nineteen sixties until the introduction of the Euro (Figure 14).



In 1892, France's government and its institutions of higher education jointly sponsored an enormous jubilee celebration in honor of Pasteur's seventieth birthday. The ceremony took place in the Sorbonne's new building, which had opened just three years before. That building encompassed a huge program of art,

including many statues and quite a few murals depicting scenes from the history of science and medicine. Among all the accolades from the leaders of government and science, two were especially moving to Pasteur himself. The British surgeon Joseph Lister had early recognized the significance for surgery of Pasteur's demonstration that germs are carried on tiny particles in the air. Lister's techniques had revolutionized surgery and made him world famous, but he always insisted on acknowledging his debt to Pasteur. Lister's personal appearance at the ceremony was a great tribute and an emotional moment for Pasteur. For the celebration, the sculptor and medalist Oscar Roty, a pioneer of the Art Nouveau style, created a silvered bronze plaquette for presentation to Pasteur (Figure 15). Pasteur was given the medal in advance, and he mentioned it in his remarks that day. Those remarks, incidentally, were read to the assembly by Jean-Baptiste Pasteur as his father was too weak to deliver them himself.

When Pasteur died three years later, his funeral was declared a state occasion—only the second time a scientist had been so honored. High officials and ordinary Parisians turned out for the procession to the Cathedral of Notre Dame. Many had expected that Pasteur would be interred in the Pantheon, with other French heroes like Voltaire, Rousseau, Hugo, Zola, and later Marie Curie. But Madame Pasteur refused that honor for her husband, perhaps because the Pantheon was a symbol of secularism. Instead, Pasteur was buried in a chapel-like crypt within the very Institute that had been built to extend his scientific legacy.

Soon after Pasteur died, a public outdoor monument was planned for the Place de Breteuil, a small park within a traffic circle, a ten-minute walk from the Pasteur Institute. The sculptures were completed by 1901, but the monument was erected only a few years later. Here Pasteur sits high in the open air, and life-sized sculptures of people, animals, and plants, along with a figure of Death surround the monument's thick base (Figure 16). It is fitting that a man who devoted much time and energy to the appreciation and support of artists, especially those working in the academic-

realist tradition, was honored with a composition that includes naturalistic representations of people and animals, meant to remind later generations of Pasteur's humanitarian achievements. A female figure celebrates the successful grape harvest and wines preserved by pasteurization. A cowherd tending his cattle heralds the anthrax vaccine. Also present is a shepherd whose flock is likewise protected from anthrax. An allegorical figure of Health supports a woman holding a child, and the figure of Death has been vanquished by Pasteur's efforts against infectious diseases.

Parisians and tourists alike encounter Pasteur memorials with regularity. Not just on the Boulevard Pasteur with its Pasteur Metro stop, or on the smaller rue Pasteur, or near the Pasteur Institute with its outdoor sculptures, or within the quadrangles of the École Normale, but also seated stoically in his chair at the top of this weathered monument. Perhaps his most impressive appearance, however, is reserved for one of the city's most popular museums. In the Musée d'Orsay, the Edelfelt painting of Louis Pasteur intently concentrating on his work is permanently displayed for multitudes of art lovers, very few if any of whom, we must assume, realize that this sober chemist was himself a passionate lover of art, artists, and art museums.

AS OF MARCH 2015, THREE SCHOLARLY ARTICLES EXPANDING UPON
THE LECTURE PRINTED HERE ARE IN PRESS:

Weisberg, Richard E., and Bert Hansen, "Collaboration of Art and Science in Albert Edelfelt's Portrait of Louis Pasteur: The Making of an Enduring Medical Icon," *Bulletin of the History of Medicine* 89:1 (Spring 2015).

Hansen, Bert, and Richard E. Weisberg, "Louis Pasteur's Three Artist Compatriots—Henner, Pointelin, and Perraud: A Story of Friendship, Science, and Art in the 1870s and 1880s," *Journal of Medical Biography* (Royal Society of Medicine, London), forthcoming 2015.

Hansen, Bert, and Richard E. Weisberg, "Louis Pasteur (1822-95), His Friendships with the Artists Max Claudet (1840-1893) and Paul Dubois (1829-1905), and His Public Image in the 1870s and 1880s," *Journal of Medical Biography* (Royal Society of Medicine, London), forthcoming 2015.



Figure 1. The twelve figures of the Hall of Medicine series by sculptor and medical historian Doris Appel on exhibit in Washington, D.C., in the Medical Museum of the Armed Forces Institute of Pathology (undated photograph, ca. 1940). Today the entire Hall of Medicine is on display in the University of Texas Medical Branch at Galveston. (Photograph provided by the Appel family. For more information, see www.dorisappel.com.)



Figure 2. Exterior of “Old Red,” the Ashbel Smith Building of the University of Texas Medical Branch at Galveston. (Photograph, 2010, courtesy of Carol A. Warren, photographer and photo editor, La Marque, Texas. For a color version, see http://inspireme.blogs.com/carols_images/2010/02/just-random-shots.html.)



Figure 3. Two busts of Louis Pasteur by Doris Appel. (Author's collection.)

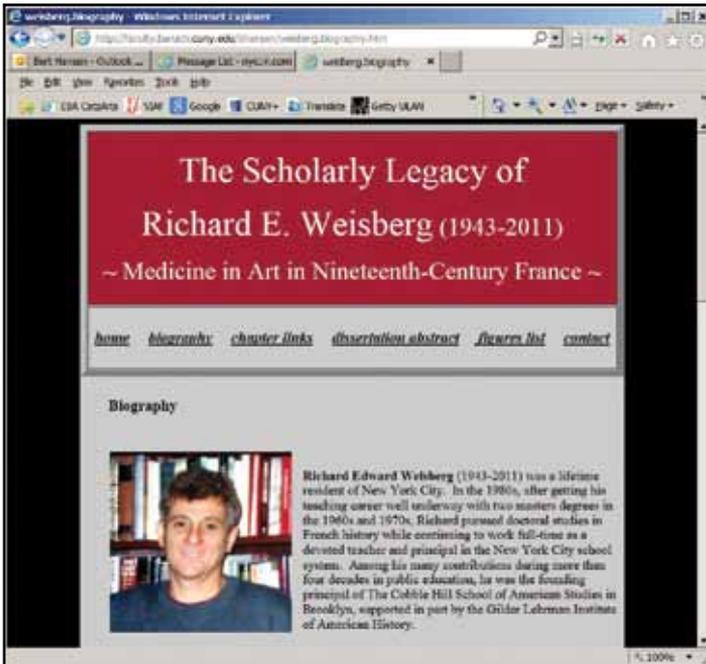


Figure 4. The home page of the author's website, celebrating the work of the late Richard E. Weisberg and providing links to his complete dissertation, at <http://faculty.baruch.cuny.edu/bhansen/weisberg.home.htm> (Courtesy of Baruch College of The City University of New York.)



Figure 5 and Figure 6. Pasteur's own pastels of his mother (1836) and his father (1842). Reproduced from René Valléry-Radot, ed., *Pasteur, dessinateur et pastelliste* (Paris, 1912).



Figure 7. Monument to Marie Christine of Habsbourg-Lorraine by Antonio Canova (ca. 1805) in the Church of the Augustines, Vienna. (Nineteenth-century photograph by Francis Firth, courtesy of Wikimedia Commons at [http://en.wikipedia.org/wiki/File:Frith,_Francis_\(1822-1898\)_-_n._2340_-_Tomb_of_Marie_Christine_by_Canova_-_Vienna.jpg](http://en.wikipedia.org/wiki/File:Frith,_Francis_(1822-1898)_-_n._2340_-_Tomb_of_Marie_Christine_by_Canova_-_Vienna.jpg).)



Figure 8. Tomb of Maurice, Marshall of Saxony, by Jean-Baptiste Pigalle (1777) in the St. Thomas Church in Strasbourg. (Author's photograph, 2013.)

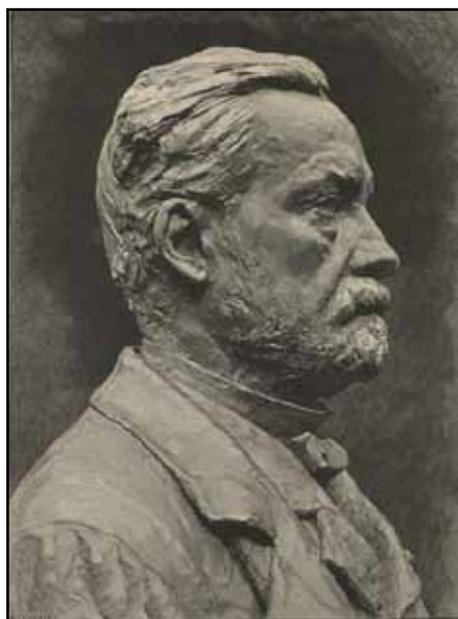


Figure 9. Bust of Pasteur by Paul Dubois in an engraving by A. Leveillé published in *The Magazine of Art* (1888).



Figure 10. Albert Edelfelt, *Louis Pasteur* (1885). The painting is in the Musée d'Orsay (Paris) and a copy made by the artist himself is in the Musée Pasteur (Paris). For clarity, we reproduce an early photogravure made by the prestigious Paris art publishing firm Goupil & Co. that was included in *Great Men and Famous Women* ed. Charles F. Horne (New York: Selmar Hess, 1894). (Author's collection.)



Figure 11. Jean-Baptiste Jupille receiving treatment from Dr. Joseph Grancher under Pasteur's watchful eye. "An Inoculation for Hydrophobia—From *L'Illustration*," *Harper's Weekly* 29:1513 (December 19, 1885). (Author's collection.)



Figure 12. Early postcard photograph of the Pasteur Institute, Paris.
(Author's collection.)



Figure 13. Jean-Baptiste Jupille, the second person to receive the Pasteur treatment for rabies, working as a guard at the Pasteur Institute and posing in the Institute's garden with the sculpture by Émile Louis Truffot (1887) that commemorates his heroic struggle with a mad dog. (Public domain press photograph by Agence Rol, 1913, courtesy of Bibliothèque nationale de France at <http://gallica.bnf.fr/ark:/12148/btv1b6927775q>.)



Figure 14. France's five-franc note, in use from the nineteen sixties until the introduction of the Euro. (Author's collection.)



Figure 15. Silvered bronze plaquette by Oscar Roty (6.7 x 4.8 cm.) presented to Pasteur in 1892. (Photograph by Roi Dagobert courtesy of Wikimedia Commons at http://commons.wikimedia.org/wiki/File:M%C3%A9daille_Jubil%C3%A9_Pasteur.jpg.)

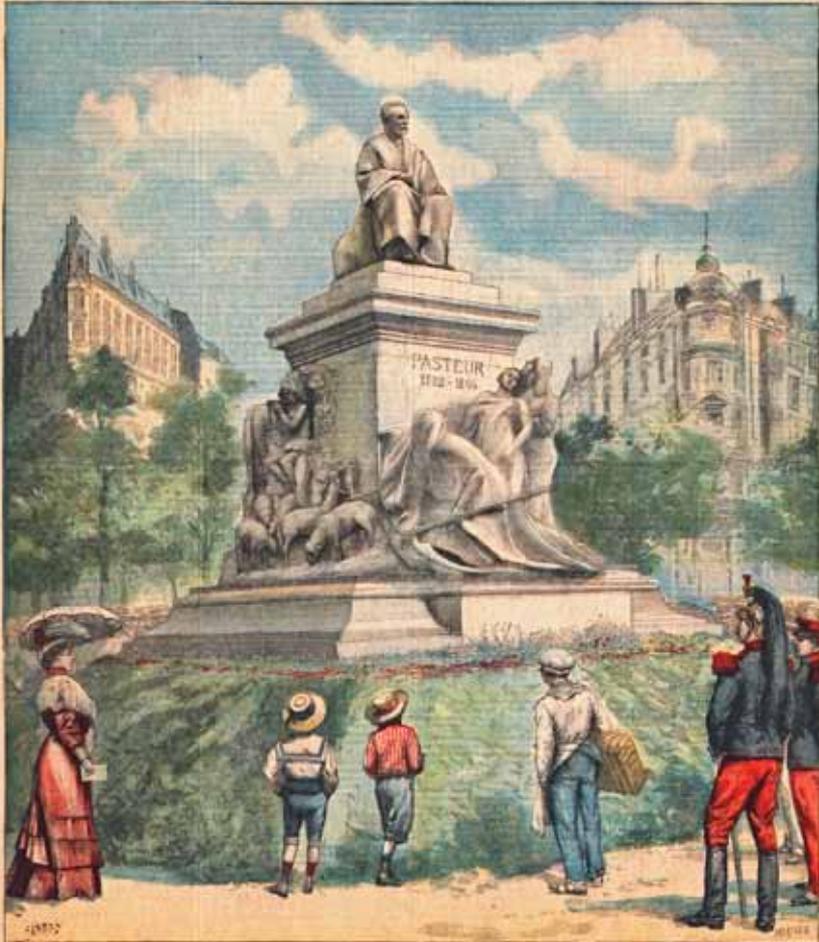
Le Petit Parisien

FOUNDEUR
Le Petit Parisien
1844
5, rue de Valenciennes
PARIS
LE SUPPLÉMENT LITTÉRAIRE
5 centimes

SUPPLÉMENT LITTÉRAIRE ILLUSTRÉ

DIRECTION: 18, rue d'Enghien (10^e). PARIS

ABONNEMENTS
PARIS ET DÉPARTEMENTS
12 francs, 6 mois, 6 francs, 3 mois
UN AN, 12 francs
EN VENTE PARTOUT



LE MONUMENT DE PASTEUR PLACE DE BRETEUIL.

Figure 16. Parisians visiting the Pasteur Monument in the Place de Breteuil, Paris, as illustrated on the cover of *Le Petit Parisien*, Supplement of July 31, 1904. (Author's collection.)

John P. McGovern Award Lectureships

- 1986 *Our Lords, The Sick* presented by Albert R. Jonsen, PhD
- 1987 *To Humane Medicine: Back Door or Front Door?* presented by Edward J. Huth, MD
- 1988 *Medicine and the Comic Spirit* presented by Joanne Trautmann Banks
- 1989 *The 'Open Arms' Reviving: Can We Rekindle the Osler Flame?* presented by Lord Walton
- 1990 *Rx: Hope* presented by E. A. Vastyan
- 1991 *Osler's Gamble and Ours: The Meanings of Contemporary History* presented by Daniel M. Fox
- 1992 *From Doctor to Nurse with Love In a Molecular Age* presented by William C. Beck
- 1993 *The Heroic Physician In Literature: Can The Tradition Continue?* presented by Anne Hudson Jones
- 1994 "The Leaven of Science": *Osler and Medical Research* presented by David Hamilton
- 1995 *A Body of Knowledge: Knowledge of the Body* presented by Sherwin B. Nuland
- 1996 *Other People's Bodies: Human Experimentation on the 50th Anniversary of the Nuremberg Code* presented by David J. Rothman
- 1997 *The Coming of Compassion* presented by Roger J. Bulger
- 1998 *Why We Go Back to Hippocrates* presented by Paul Potter
- 1999 *Health Care in the Next Millennium* presented by John D. Stobo, MD
- 2000 "Writ Large": *Medical History, Medical Anthropology, and Medicine and Literature* presented by Gert H. Brieger, MD, PhD
- 2001 *Reflections on American Medical Education* presented by Kenneth M. Ludmerer, MD
- 2002 *John Shaw Billings as a Historian* presented by James H. Cassidy, PhD
- 2003 *The Evolution of the Controlled Trial* presented by Sir Richard Doll
- 2004 *Practising on Principles: Medical Textbooks in 19th Century Britain* presented by W.F. Bynum, MD, PhD, FRCP
- 2005 *Just Call Us Children: The Impact of Tsunamis, AIDS and Conflict on Children* presented by Karen Hein, MD
- 2006 *A Leg to Stand On: Sir William Osler & Wilder Penfield's Neuroethics* presented by Joseph J. Fins, MD, FACP
- 2007 *Touching Where It Hurts: The Role of Bedside Examination* presented by Abraham Verghese, MD, MACP, DSc (Hon)

- 2008 *Managed Fear: Contemplating Sickness in an Era of Bureaucracy and Chronic Disease* presented by Charles Rosenberg
- 2009 *Is Scholarship Declining in Medical Education?* presented by Patrick A. McKee, MD
- 2010 *Selling Our Souls: The Commercialization of Medicine and Commodification of Care as Challenges to Professionalism* presented by Nuala P. Kenny, MD
- 2011 *"The Back Forty": American Medicine and the Public Interest Revisited* presented by Rosemary A. Stevens, PhD
- 2012 *"Osler and the Enduring Narrative of Clinical Medicine"* presented by C. David Naylor, MD
- 2013 *Louis Pasteur: Exploring His Life in Art* presented by Bert Hansen, PhD
- 2014 *Patients, Their Doctors and the Politics of Medical Professionalism* presented by Sir Donald Irvine, CBE, MD

Annual Reynolds-Finley Lectures

- 1980 *Medicine and Dentistry in the Colonies* presented by Joseph F. Volker, DDS, PhD
- 1981 *Nomination and Selection Procedures for the Nobel Prize in Physiology or Medicine* presented by Bengt E. Gustafsson, MD
- 1982 *'Royal Confinements; 'An Obstetrical History of the British Monarchy* presented by Sir John Dewhurst, MD
- 1983 *Highlights in the History of Medicine in Alabama* presented by Howard L. Holley, MD
- 1984 *Perspectives on Old Words and the History of Anesthesia* presented by Joachim S. Gravenstein, MD
- 1985 *Lessons from the History of the Mayo Clinic* presented by John W. Kirklin, MD
- 1986 *The Space Program and Medicine* presented by Charles A. Berry, MD
- 1987 *Dominique Jean Larrey: Surgeon to Napoleon's Guard* presented by Colonel Robert J. T. Joy, MD
- 1988 *The Historical Description of Acromegaly One Hundred Years Ago: The Life and Times of Pierre Marie* presented by Roger Guillemin, MD, PhD
- 1989 *A Perspective on William Osler* presented by Victor A. McKusick, MD
- 1990 *The Development of Cardiovascular Surgery* presented by Michael E. DeBakey, MD
- 1991 *Camelot-in-Bethesda: The Roots of the Magic Kingdom* presented by Donald S. Fredrickson, MD
- 1992 *The Impact of World War II on U.S. Medicine* presented by Eli Ginzberg, PhD
- 1993 *Health Reforms of the 1840s Cast Long Shadows* presented by Harriet P. Dustan, MD

- 1994 *Iodine and Iodination for One Billion People* presented by Constance S. Pittman, MD
- 1995 *A Brief and Biased History of Regional Medical Programs* presented by Donald A. B. Lindberg, MD
- 1996 *From a Three-Headed Bit to the Nation's Largest Philanthropy: Howard Hughes, HHMI, and Biomedical Research* presented by Purnell W. Choppin, MD
- 1997 *The Origins of the Peer Review Process and How it Works at J.A.M.A.* presented by George D. Lundberg, MD
- 1998 *New and Emergent Epidemic Disease: The Past and the Future* presented by Donald A. Henderson, MD
- 1999 *Academic Medicine at the Millennium* presented by Samuel O. Thier, MD
- 2000 *Early Experience in Renal Transplantation: David, Joe, Roy and Tom* presented by Arnold G. Diethelm, MD
- 2001 *The Use of Antiretrovirals for the Prevention of HIV Transmission: Past and Future* presented by Jay Brooks Jackson, MD
- 2002 *Development of Antimicrobial Agents in the Era of New and Reemerging Infectious Diseases and Increasing Antibiotic Resistance* presented by Gail H. Cassell, PhD
- 2003 *The Origin of the Immune System* presented by Max D. Cooper, MD
- 2004 *Scientific Reductionism and 21st Century Radiology* presented by James H. Thrall, MD
- 2005 *Viral Hemorrhagic Fevers: From Yellow Jack to Ebola - and Beyond* presented by Karl M. Johnson, MD
- 2006 *Neural Stem Cells May Be Well Suited for CNS Repair* presented by Evan Y. Snyder, MD
- 2007 *50 Years of Flexible Endoscopy* presented by Basil I. Hirschowitz, MD
- 2008 *Real Books: What They Are and Why We Still Need Them* presented by Stephen J. Greenberg, PhD
- 2009 *William Osler Leaves Johns Hopkins for Oxford: A Case Study of Physician Burnout a Century Ago* presented by W. Bruce Fye, MD
- 2010 *When the Famous Get Sick and the Sick Get Famous: What We Do and Do Not Learn from Celebrity Patients* presented by Barron H. Lerner, MD, PhD
- 2011 *The History of Heart Transplantation and Mechanical Circulatory Support: A Revolution in Evolution* presented by James K. Kirklin, MD
- 2012 *The Assassination of Abraham Lincoln* presented by Carl R. Boyd, MD
- 2013 *Thirty Years of AIDS* presented by Michael S. Saag, MD
- 2014 *America's Eugenic Legacy: 'A Peculiar and Lasting Appeal'* presented by Paul Lombardo, JD, PhD

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