

## Library Adventures in a Digital Age: *Observations and Questions*

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LIBRARIES HAVE BEEN ESSENTIAL to my role as a physician-historian working for twenty-six years in an academic health sciences center. They are the repositories of thousands of years of medical evidence, even if it comes in forms that are increasingly disparaged: paper and anecdote. While writing my dissertation in Paris, I fell in love with old books and manuscripts. Reading, holding, and touching those beautiful—if barely legible—papers instilled a joyful and durable eagerness to work with them and to expose my students to their power.

The university librarians and archivists are my closest colleagues. Always grateful for their help and the remarkable benefits and increasing speed of interlibrary loan, I gladly serve on their committees in preserving books and papers that are sometimes not quite old enough to count as “rare.” We especially strive to maintain Canadian collections and occasionally find ourselves investigating our own history, as we did recently when confronted with an unidentified, old bookplate that I will describe below. I take medical students to visit libraries as the highlight of our annual history of medicine field trips. But over the course of my three decades in the field, medical libraries have shifted from busy places filled with students to underfunded, threatened spaces where students rarely go; even history students tend to avoid them. Books, journals, and papers are being “weeded” in favor of computers. As a historian in a medical school, I want future doctors to know that medical historians still write books and to be aware that the specialized databases on which they rely, such as *PubMed* and *Medline*, do not index books. If they want to learn about the past, they must remember to look for books.

In what follows, I will describe my involvement with libraries as a scholar and as a teacher, beginning with two research projects about books, both of which origi-

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1. This essay was initially delivered as the Samuel X Radbill Lecture at The College of Physicians of Philadelphia. Dr. Radbill was a pediatrician, a medical historian, and a collector of rare books and bookplates. It was a pleasure to meet Dr. Radbill’s daughter, Gloria Hamilton, who explained that the “X” in her father’s name was an adopted initial, which, he liked to claim, stood for “Ex Libris.” I would like to thank The College of Physicians of Philadelphia for the honor of delivering the Samuel X Radbill Lecture, Michelle DiMeo and Jeffrey Reznick for excellent editorial advice, field-tripping students of the Queen’s University School of Medicine, and the editors of the *Journal of the History of Medicine and Allied Sciences* and the *Canadian Bulletin of Medical History* for permission to refer to work previously published in their journals.

nated and ended in libraries with digital detours en route. Then, I will return to the subject of medical students.

### The *Observations* of Jodocus Lommius, 1560 to 1792

For my dissertation and the book that eventually resulted from it, I worked with the publications, manuscript clinical records, and lecture notes of the inventor of the stethoscope, René Théophile Hyacinthe Laennec (1781–1826).<sup>2</sup> His papers are held in libraries in Paris and Nantes, France and were indexed in a remarkable catalogue published by Mirko Grmek, my thesis advisor, in 1982 when I was beginning my research.<sup>3</sup> To handle more than 10,000 pages of Laennec’s handwritten, point-form lecture notes and patient records, I created a database for topics with lecture titles, dates, and names of cited authors. In entering the information, I began to notice a recurring name that I could not place: Jodocus Lommius.<sup>4</sup>

Investigation quickly led to Lommius’s three books, especially the many editions of his *Observationum medicinalium libri tres* (originally *Medicinalium observationum*; hereinafter *Observations*).<sup>5</sup> First published in 1560, this plain, small volume, 300 pages in length, had been printed in at least thirty pocket-sized, European editions over two centuries until 1792. The *Observations* was a manual of diagnosis based on physical signs. Most editions were in Latin, but the eighteenth century saw two English translations, two French, and one German. Close examination resulted in several discoveries about the book that seemed to have been overlooked by other scholars.

First, the principal sources of the *Observations* had been the first-century author, Celsus (although he was not cited by name) and, to a lesser extent, Aretaeus (also unnamed). That “discovery” was inspired by the fact that Lommius’s first book had been a commentary on Celsus.<sup>6</sup> It was consolidated by the undeniable similarity of topics and prose in multiple passages of his *Observations*. Here the electronic editions of Celsus available on the Internet made it remarkably easy to search on fragments of Lommius’s prose to find exactly the same text in Celsus on topics as diverse as elephantiasis, empyema, hyrdops, tenesmos, impending death, the seasons, and so on.

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2. Jacalyn Duffin, *To See with a Better Eye: A Life of R.T.H. Laennec* (Princeton: Princeton University Press, 1998).

3. For an Index to Laennec’s papers, see Lydie Boule, Mirko D. Grmek, Catherine Lupovici, and Janine Samion-Contet, *Laennec: catalogue des manuscrits scientifiques* (Paris: Masson, 1982).

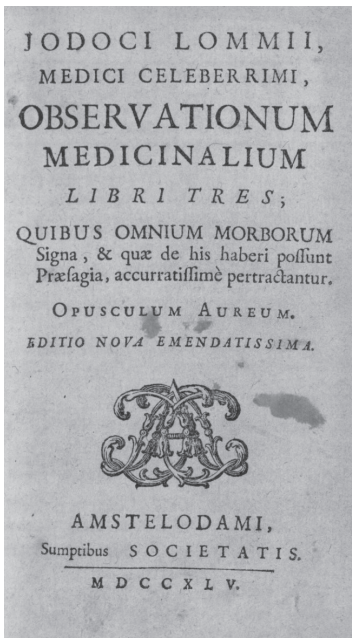
4. Lommius was cited in an unpublished essay: René Théophile Hyacinthe Laennec, “Etudes sur l’entérite,” undated manuscript, ca. 1805, fols. 36v, 46v, 50r. Musée Laennec, Nantes, France.

5. Jodocus Lommius, *Medicinalium observationum libri tres. Quibus notae morborum omnium, et quae de his possint haberi praesagia, judiciaque, proponuntur* (Antwerp: Christophori Plantini, 1560).

6. Jodocus Lommius, *Commentarii de Sanitate tuenda in primum librum de Re Medica Aurel. Cornelii Celsi medicorum romanorum longè principis* (Lovanii: Antonium Maria Bergagne, 1558).

The second revelation was that Lommius had anticipated many of the anatomical techniques and disease concepts traditionally ascribed to a much later era, such as percussion, auscultation, and tissue-based diagnosis. Assuming his book had been known to the nineteenth-century inventors—Auenbrugger, J.C. Smyth, Bichat, Pinel, Laennec—then their contributions seem somewhat less spectacular and original than the master narrative would have us believe.

Finally, the *Observations* had been widely read and used in teaching throughout the seventeenth and eighteenth centuries, although now its author is scarcely known. By 1643, it had been subtitled “opusculum aureum” (“little golden book”), an epithet that stuck.



**Figure 1.** Title page of an edition featuring the “opusculum aureum” epithet. Jodocus Lommius, *Observationum medicinalium libri tres*. 1745. Courtesy of The College of Physicians of Philadelphia.

In his preface to the tiny (15 cm) 1688 edition, Georg Wolfgang Wedel of Jena described semiotics as the “thread of Ariadne” that guided successful clinicians through the maze of medical practice. Lommius was cited in the works of many more famous writers on disease and its diagnosis, such as Juncker, Boerhaave, Von Haller, and Tissot. Some called him the “celebrated” founder of physical diagnosis. Many referred to the eighteenth-century Amsterdam editions, believing them to be the originals. Until the 1880s, historians described Lommius as a progenitor of semeiology. Beyond that time, however, he slipped beneath notice. The only accounts from the twentieth century were a 1929 scholarly article in German and a 1930 patriotic reprinting of a small portion of the *Observations* as a sample of Netherlands wisdom.<sup>7</sup> Aside from his service as a municipal physician in Tournai and later Brussels, little is known of the author’s life, and documents attesting to those activities were destroyed in a fire in 1940.<sup>8</sup>

7. E.D. Baumann, “Jodocus Lommius Buranus,” *Sudhoff’s Archiv*. 22 (1929): 60–71; F.M.G. de Feijfer, Preface to Jodocus Lommius, “*Observationum Medicinalium, Liber I*,” *Opuscula Selecta Neerlandicorum de Arte Medica, VIII. Vesalius, Lommius, Forestus* (Amsterdam: Sumptibus Societatis 1930), xxxvi–xlix.

8. Desmaele, Bernard, Conservateur, Archives de l’État à Tournai, letter to Jacalyn Duffin, 8 August 2002.

Why was Lommius once so famous, and why did he vanish? It was libraries—not just one, but many—that helped to answer both those questions. A WorldCat inquiry revealed that copies of the various editions of Lommius abounded. They had been printed in huge numbers, widely distributed, and well used. For example, nineteen different editions can be found in the National Library of Medicine. The 1732 and 1747 English translations are found in 119 and 115 libraries respectively, while the 1752 Latin edition published in Edinburgh is held by at least ninety-eight libraries. Moreover, this census exercise showed that *Observations* resides not only in academic centers but also in municipal public libraries of many towns in France, England, Italy, and the United States—some large, such as Cleveland, Cincinnati, Houston, Kansas City, Toulouse, and Rotterdam—some small, such as Angers, Chalons, Nîmes, and Valognes, France; Yverdon-les Bains, Switzerland; Arco Italy; and Mainz, Germany, to name just a few.

The ubiquity of the *Observations* stood in sharp contrast to the obscurity of its author. Its wide distribution in many nonacademic libraries suggested that it had been a reliable *vademecum* for students and ordinary practitioners who were daunted by the weightier and more expensive tomes of illustrious professors. Its diagnostic categories served the symptom-based frame of the seventeenth and eighteenth centuries. But when anatomical diagnosis moved to the fore in the early nineteenth century, the diagnostic entities to which Lommius pointed no longer “worked”; editions ceased.

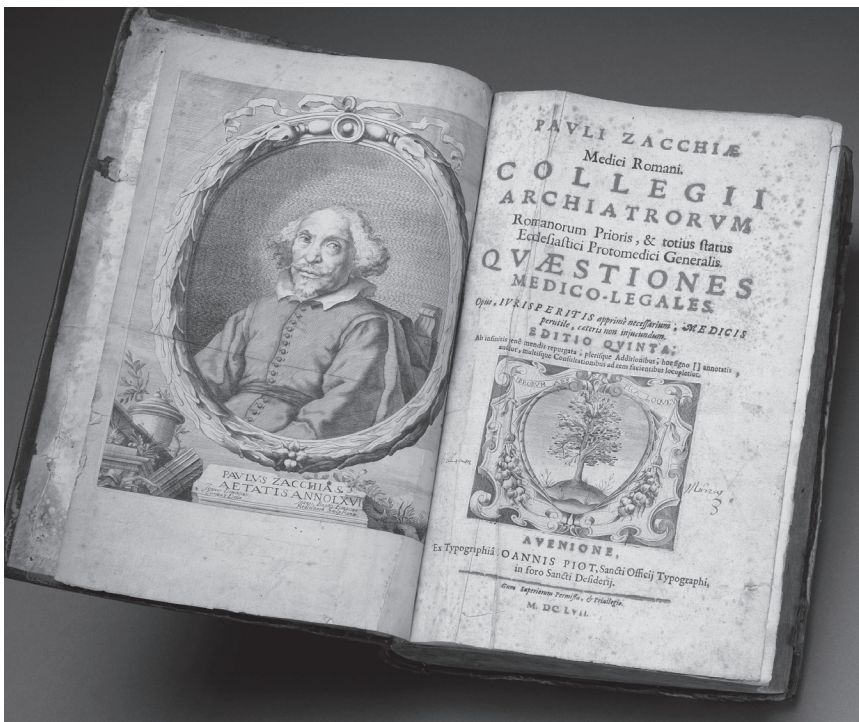
Furthermore, the impulse to celebrate writers of the past comes from respect for their originality and authority. As a modest, reliable handbook distilling the practical wisdom of others, Lommius’s *Observations* could not claim those virtues. Indeed, his readers may have been unwilling to acknowledge their reliance on his words. In our time, authors of *Cliffsnotes*, *Coles Notes*, *Je Sais Tout*, the *Washington* and *Merck Manuals* are virtually unknown, even if their books are widely used. Moreover, the later French editions of Lommius were deliberately aimed at intelligent lay people “not of the Art” for charitable work in hospitals. Never the subject of laudatory biography and with his *Observations* no longer in print, Lommius vanished. Partly and perversely, his obscurity stemmed from his having once been so popular.<sup>9</sup>

### **The Questions of Paolo Zacchia, 1621 to 1774**

The second book is completely different, although it too enjoyed considerable fame in the past and obscurity in the present. While researching manuscripts in the Vatican archives for my book on canonization miracles, I noticed frequent reference

9. Jacalyn Duffin, “Jodocus Lommius’s Little Golden Book and the History of Diagnostic Semeiology,” *Journal of the History of Medicine and Allied Sciences* 61.3 (2006): 249–87.

to another author whose name was unfamiliar: Paolo Zacchia (1584–1659).<sup>10</sup> Like Lommius, Zacchia had published three books, one of which had been reprinted multiple times: *Quaestiones medico-legales* (also *Quaestionum medicolegalium*; hereinafter *Questions*). Unlike Lommius, whose book of *Observations* is small and plain, Zacchia's *Questions*, in its complete editions, is a massive, folio compendium of more than 1,000 pages. Some editions were handsomely bound in red leather with gold tooling and a frontispiece portrait.<sup>11</sup> Also unlike Lommius, many biographical details about the author are known. Trained in both medicine and law, Zacchia served as the chief physician to two popes: Innocent X and Alexander VII. He studied in Rome, lived in the via del Gesu, and his last will resides in the Archivio di Stato di Roma together with a priest's description of his splendid funeral at the Chiesa Nuova in May 1659.<sup>12</sup>



**Figure 2.** Paolo Zacchia, *Quaestiones medico-legales*. 1657. Courtesy of the U.S. National Library of Medicine.

10. Jacalyn Duffin, *Medical Miracles: Doctors, Saints, and Healing in the Modern World* (New York: Oxford University Press, 2009).

11. Paolo Zacchia, *Quaestiones medico-Legales* (Avenione: Joannes Piot, 1657).

12. Paulus Zacchias, "Testamento," in *Archivio di Stato* (S. Ivo), Notaio Antonio Franciscus Maria Simi, Cura del Vicario, Officio 32, Rome, March 1659, p. 662–65v and 683–84v.

Initially, Zacchia's *Questions* had been released in installments from 1621. The first complete edition with an appendix of eighty-five consilia, or case consultations, appeared two years after his death in 1661. With roots in antiquity, consilia originated as a genre in medicine, theology, and law, between the thirteenth and fifteenth centuries. They featured the reasoning of learned physicians on specific cases, combining theory and practice for use in teaching.<sup>13</sup> *Questions* was republished in at least thirteen European editions, always in Latin, the most recent in 1774. Although the author's name had been unfamiliar to me and was rarely mentioned in English-language histories, it was well known in Italy, Germany, and other Catholic countries where Zacchia is considered the founder of forensic medicine. The journal of *Società di medicina legale* of Rome and its university institute for legal medicine—published in Rome, founded in 1921, and still running—is called *Zacchia*. A conference was held on his contributions in 2008 and his practice formed part of Silvia De Renzi's study of Santo Spirito hospital.<sup>14</sup>

A WorldCat search demonstrated that editions of Zacchia's *Questions* are well represented in European and North American university libraries, especially in Germany. The U.S. National Library of Medicine owns twelve editions. But again unlike Lommius, none appear in public libraries.

Trying to understand the scope of the huge *Questions* was daunting. Various dissertations have been written on certain chapters and even thinner slices of its pages. I wondered why it had never been translated. Of course, if its applications came solely within the sphere of the Roman Catholicism, Zacchia's Latin prose may have sufficed for these readers. Nevertheless, the absence of a modern language translation served to further obscure its importance as a representative of the social, cultural, medical, and legal tenets of its era.

At least thirteen of the Vatican manuscripts that I had been studying cited Zacchia for his opinions on miracles, and indeed fifteen of his eighty-five consilia addressed miracles of would-be saints. The remaining seventy consilia examined a host of topics of great medico-legal import: paternity, marriage, sex, divorce, inheritance, property, and causes of death, including homicide, suicide, poison, and plague. Some entailed autopsy evidence. Each consilium referred to one or more specific chapters in the much larger remainder of the book; almost every section of the book contained at least one reference in the consilia. In other words, the consilia,

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13. Nancy G. Siraisi, *Medicine and the Italian Universities, 1250–1600* (Leiden: Brill, 2001), 70–76.

14. Paolo Zacchia, *1584–1659: alle origini della medicina legale*, eds. Alessandro Pastore and Giovanni Rossi (Milan: FrancoAngeli, 2008); Silvia De Renzi, "A Fountain for the Thirsty' and a Bank for the Pope: Charity, Conflicts and Medical Careers at the Hospital of Santo Spirito in Seventeenth-Century Rome," in *Health Care and Poor Relief in Counter-Reformation Europe*, eds. Ole Peter Grell, Andrew Cunningham, and Jon Arrizabalaga (London: Routledge, 1999), 102–31.

taken together, could exemplify the practical applications of the entire work. Therefore, translating Zacchia's consilia could be a key to unlocking the entire *Questions*. But what publisher would be interested in such an endeavor, especially when Zacchia rarely appeared in medico-historical works of our time? It was almost as if the translation would need to be completed, published, and used before it could convince others of its worth financially and intellectually.

I read the consilia and could understand the topics and follow the general arguments and main conclusions of the consilia, but my Latin is not good enough to reliably translate them. At the annual meeting of the American Association for the History of Medicine in 2008, I summarized the consilia and announced the "Collaborative Online Translation Project of the Consilia of Paolo Zacchia."<sup>15</sup> It was surprisingly easy to launch the website on my own web pages through Queen's University.<sup>16</sup> I had no idea of whether or not the plan would "work," or how long it might take. Several people in that first audience volunteered to "adopt" a consilium, usually selecting on the basis of its subject matter or length. I mailed a photocopy of each adopted consilium to the would-be translator and indicated on the website that it had been adopted. Soon after, some of the adoptees changed their minds and released their consilia for someone else to adopt. Others sent the URL link to friends, until a total of thirteen potential translators had been identified, only three of whom I have ever met in person.

Slowly, this digital collaboration is resulting in the translation of the consilia of Paolo Zacchia. One translator is Amanda Lepp, a medical student with a doctorate in medieval studies; she has already completed three translations and published an article on the collaboration.<sup>17</sup> I live in hope that Latin teachers will recognize that translating a consilium would constitute a wonderful class project, in which each student works on a single sentence; however, the emphasis on sex and death may detract from the attractiveness of the idea for schools. Twenty-eight consilia (33%) have been adopted for translation, of which eight (9.5%) are now complete and available in open access. E-mail conversations ensue between the intrepid Latinist volunteers about the nuances of their task and the endearing habits of their author. Most exciting of all, scholars are slowly beginning to use these translations; for example, using our translations, Brian E. McKnight has compared Zacchia's ideas to similar medico-legal concerns in China.<sup>18</sup>

15. Jacalyn Duffin, "Questioning Medicine in Seventeenth-Century Rome: The Consultations of Paolo Zacchia," *Canadian Bulletin of Medical History* 28.1 (2011): 149–70.

16. The Collaborative Translation Project of the Consilia of Paolo Zacchia, available online at <http://meds.queensu.ca/medicine/histm/zacchia%20home.html> [accessed March 28, 2014].

17. Amanda Lepp, "Translating Zacchia: A Novel Way to Use the Internet to Make Medico-Historical Sources Accessible," *QMR—Queen's Medical Review* 6.2 (Apr. 2013): 11–12, available online at <http://qmr.qmed.ca/archives/1849> [accessed March 28, 2014].

18. Brian E. McKnight, "Holes in the Spider's Web—What the Chinese Forensic System Did Not Do, and Why," paper read at Workshop "Global Perspectives on Chinese Legal Medicine," University of Michigan, October 2011.

### **Questions and Observations in the Twenty-First Century**

The digital world is making one other impact on both Lommius and Zacchia. For my birthday in 2004, my brother, music historian Ross Duffin, gave me a copy of Thomas Dale's 1732 English translation of Lommius's *Observations*. He joked that when my article was published, his gift would greatly increase in value. From time to time, we check the online, used-book dealers, and so far, his prediction is wrong; prices are stable. But imagine our amazement in 2009 when we logged on to check the value of Lommius and discovered that prices had crashed. An edition of *Observations* was selling for a mere \$20. But it was not an eighteenth-century Lommius; it was an entirely new edition. This moment marked the advent of the digitized, print-on-demand publishers, such as Nabu, Gale Ecco, and Kessinger, whose editions are becoming available for even the most obscure works. WorldCat shows that printed versions of some of these publications have found their ways into libraries. Far from enhancing the monetary value of the *Observations*, the publication of my article in 2006 may have drawn the attention of scanners to the long-neglected manual.

The same is true for Zacchia's *Questions*, although the print-on-demand publishers divide the massive tome into parts, not all of which are available at the same time. These affordable publications deliver just the words—often with scanning errors while erasing the typeface, the texture, the size, and the pagination of the originals. Sometimes they are cavalier about revealing the identity and location of source editions used in their preparation. Accessible though they are, these twenty-first century editions have obliterated the differences between my two books, turning low-culture Lommius and high-culture Zacchia into equal objects: same size; same appearance; same price.

### **History of Medicine Field Trips**

As part of my teaching, I have been leading busloads of medical students on annual field trips of medico-historical note to Montreal, Quebec City, Ottawa, Boston, Philadelphia, Washington, or New York City. They began in 1996 when the National Gallery in Ottawa mounted a wonderful exhibit on anatomical art. I thought it would be an exciting-but-once-only exercise to take 100 medical students to see it on a long day trip. Students just kept asking for more. Over the past eighteen years, we have made sixteen trips with fifty-five students in each bus (sometimes two buses), meaning that at least 800 future physicians have gone traveling in search of the medical past; that is almost half the student body that passed through our school over the same time.

Although I have been given credit and even a few teaching awards for enhancing our core curriculum with these adventures, my role is small; their success relies

mostly on others. Students themselves always provide the impetus and mentorship, as senior schoolmates remind newcomers to ask for the trip and propose a destination. Also, friends and colleagues at our destinations generously open normally closed spaces on weekends. The highlight is always a visit to a library, where our hosts display their favorite items—some tiny, some huge—taking the group past the chosen treasures with brief explanations for why they are special. After our visits, a few of our hosts have dared to emulate the exercise as tours (minus the long road trips) with their own students.

These journeys are exhausting for an aging professor—up to nine hours on a bus each way—but they seem to answer to a demand and hold a pedagogical value that extends well beyond the undeniable, peer-bonding fun of exploring a great city together. In preparing this paper, I polled students who had been on the five most recent trips via their class leaders to allow for anonymity. Their replies were surprising: they emphasize perspective, context about their other scientific and clinical learning, and inspiration for the future. Here are a few examples of their replies.

Four years after their 2010 trip to Boston, a young doctor from the class of 2013 recalled the adventure in these words:

I went on the History of Medicine trip to Boston during my first year of medical school, and it still ranks as one of the best memories from my time at Queen's. I will never forget our visit to the Ether Dome, where anesthesia was administered for the first time. I remember an immense feeling of pride and amazement as I realized that I was standing in the exact same place as those physicians who revolutionized medicine. It gave me perspective on how far medicine has progressed, and the deep and rich history of our profession. It was inspiring!

Another 2013 graduate wrote:

The History of Medicine trips allowed us to see milestone landmarks, texts, artwork, and specimens from our profession. It provided insight into the rich history our colleagues have left behind and the future that medicine holds. It gave us context of how far we have progressed and a sense of responsibility to continue with discovery and innovation in medicine.

A third-year student in the class of 2015 had joined the November 2011 trip to Washington, where she went behind the scenes at the Smithsonian Museum and

visited the National Library of Medicine. She wrote:

I cannot be certain that... I can recall a lot of “facts” that I [heard] while I was there. That said, I certainly have fond memories of the trip.... Most specifically, I enjoyed [seeing and] learning about artefacts [and books] in a small group with... museum curators [and librarians].... Given that the trip was in [my] first year, it provided some sort of historical context for the career we were being thrust into.

A first-year student in the class of 2017 went on a trip to Boston in November 2013. He wrote:

Some highlights for me included: walking through the halls of MGH, sitting in the Ether Dome, checking out the Harvard Medical Library and seeing all of the old and fascinating original prints of medical history. It's a humbling experience to see where the roots of medicine begin and to see how far we've come and how far we still have to go. And really, I think that's where [history's] value really lies. To learn about today and tomorrow, we really do need a picture of what yesterday was like. That perspective is not only helpful in giving young trainees a better understanding of the evolution of medicine and the people involved but almost gives you a sense of clairvoyance with regards to the future of medicine.... So please, please, please continue the [history] trips! They're far more valuable than you think and can make lasting impressions on students.

With such boundless exuberance from the students, the medical Dean has been making generous contributions to defray the costs each year. In addition, the school curriculum leaders make sure to avoid scheduling exams around the trip dates and the student government has built planning for the history of medicine field trip into the permanent portfolios of some positions.

The best feature for me is watching students encounter the magic of libraries and their precious contents. It helps that the host librarians adore the special works selected and explain their choices with infectious joy. But the atmosphere of the quiet, elegant spaces of the libraries counts for almost as much. The students marvel at touching the still supple but nearly 500-year-old pages of Vesalius's *Fabrica*, or in contemplating the revolution in “information technologies” of manuscript, woodcuts, and moveable type. Their wonder makes these journeys worthwhile. And I learn things too.



**Figure 3.** Queen’s University medical students examining the anatomy of *Bernhard Siegfried Albinus* (1747) with librarian Christopher Lyons, at the Osler Library, McGill University, November 4, 2012. Photo by J. Duffin.

A recent field trip resolved the mystery of a mysterious bookplate from our university that I had been researching for a few months.<sup>19</sup> It had been affixed to books purchased for the Queen’s University medical library in the 1920s from the “John Franklin Kidd Fund.” The University Archivist told us that Dr. Kidd was a medical alumnus from the class of 1883 who had given \$2,000 for the purchase of medical books in 1924, a timely donation because a fire in August had severely damaged the library. In gratitude, Queen’s awarded Dr. Kidd an honorary doctor of laws.

The mystery of the bookplate was its image: an apparent woodcut showing a group of people in bonnets and robes, set in a garden, and clustered around a scholar with an open book. In March 2012, I wanted to use it on the library home page—using playful digital technology to replace the faces with those of the chief librarian and staff. They quite rightly demurred, insisting that its origin must be identified and copyright respected. It looked oddly familiar, but I could not place it. I went to the rare book room and examined every page of our facsimile of Hartmann Schedel’s *Liber Chronicarum* (Nuremberg, 1493), with its many woodcuts of similar, big-headed bodies, hats, and robes. I sent a photograph to several friends who specialized in the early modern period and to my daughter, studying book history. The excellent Ione

19. The story of our Queen’s bookplate was fitting to the occasion of this named lecture given that Dr. Radbill had a deep special interest in collecting them.

K. Wiechel bookplate collection at Kent State University—with its online catalog of more than 2,000 items—holds a copy of our bookplate,<sup>20</sup> however, the curators had no records to permit identification of the image. I pored over the online resources of images at the Wellcome Library and the National Library of Medicine. I even wondered if it was a fake—a mocked-up parody of Schedel or some other contemporary work. I tried uploading it for an image-search on the Internet. No luck.



**Figure 4.** The John Franklin Kidd Memorial Fund bookplate. Used with permission of Bracken Health Sciences Library, Queen's University.

In November 2013, we were once again on a field trip to Boston. At the Countway Library of Harvard Medical School, Jack Eckert and Joan Thomas had kindly laid out their favorite treasures. The medical students were slowly circling the tables, carefully examining the rare books, when I glanced down and there was our mystery image: the hand-colored frontispiece of the famous *Hortus Sanitatis* (Mainz, 1491). Shocked at my outburst, students and librarians gathered round to understand the fuss. The explanation merely left them perplexed. When I reported back to friends and colleagues, many said “Of course!” and confessed embarrassment for failing to recognize it straight away. Several others chided me for not having asked their advice in the first place.

What if we had not chosen Boston? What if Eckert had selected something else? What if I had not bothered to look at the books laid out for the students? What if there were no libraries? We would still be searching and perhaps that would be fine.

## Conclusion

The Internet and digitization have utterly changed the way we work and communicate, and they are powerful research tools that I use daily, as I hope this paper has shown. But I am not convinced that the Internet and digital publishing will make libraries obsolete, even for those who would, like Noah, strive to preserve representatives of the endangered paper species. A single repository library promising to preserve at least one copy of every book would inevitably eradicate some of the evidence that informed the research described in this paper.

20. Dyani Scheurman, “Finding Aid for the Ione K. Wiechel Bookplate Collection,” Special Collections and Archives, Kent State University, available online at <http://speccoll.library.kent.edu/printing/wiechel.html> [accessed March 28, 2014].

Without the numerous editions of Lommius's *Observations* in the many libraries great and small, an important clue to its former purpose and utility would have been lost. True, the Internet made it possible to assess these holdings, and quickly; however, finding all the editions in only one or two libraries would have obliterated the meaning and applications of the book. The small municipal libraries were just as important as the grand ones.

By the same token, the more restricted pattern of distribution of extant copies of Zacchia's *Questions* was a useful clue to its past, as was its impressive size. Would it suffice to have one copy in the Vatican library, while everyone else looked at it on Kindle? Would having the words be enough?

Similarly, online and print-on-demand editions have vastly enhanced access to content of both *Observations* and *Questions*, but they unintentionally equalize the two books as objects, diminishing their significance as material culture and erasing testimony of their character and readership. A modest handbook and a lavish folio speak of their significance and their history through their physicality as well as their words.

Perhaps my medical students will never seek out libraries for their own future research. The vast majority of their assigned readings are digital items, made available electronically through their personal computers. Some students say that they never go to the library, nor do they ever buy books. But they will remember their field-trip journeys through the sacred beauty and astonishing, unpredictable, giving moments in libraries. I hope too that they realize a repository is not a library. The library collection process—with its reasoned acquisition, classification, cataloguing, and interpretation—is essential to our being able to grasp the past and understand change. Whether or not physical books will be replaced by digital entities, we will still need librarians for those essential tasks. Information without analysis is not knowledge.

Libraries furnish observations—evidence—in answer to our questions. Because questions emerge from the present and observations are as often accidental as they are deliberate, we cannot begin to imagine the potential uses of libraries in the future. I worry that we might not realize what libraries can do until they are gone. Therefore, we need to keep the medical library, not as a static museum, but as a familiar, living, breathing space that preserves the legacy of the profession, respects the venerable tradition of inquiry, portrays the ever-changing modalities of communication, tracks the reasons for present practice, and—above all—generates context and inspiration for the physicians of tomorrow.