INTRODUCTION

In the dedicatory letter to Pope Leo X that opened his 1521 Polyglot Psalter, Sante Pagnini compared unreliable translations of ancient Greek natural philosophy to unreliable translations of the Bible.[1] Works of natural philosophy, Pagnini stated, were marred by "false interpreters" who were also "blind leaders of the blind" – an expression with clear scriptural allusion.[2] For Pagnini, mistranslations of scientific texts had deleterious effects: they resulted in inaccurate medical prescriptions that poisoned the sick. The damage done from faulty renderings of "sacred literature," however, was worse, since those poor translations lent "evil confirmation to the errors of heretics" and "will be the cause of laughter and contempt."[3]

[1] Sante Pagnini, *Psalterium nuper translatum ex hebraeo, chaldaeo, et graeco* (Rome: n.pr., 1521). On this letter, see Anna Morisi Guerra, "Incontri ebraico-cristiani. Il Salterio poliglotto di Santi Pagnini," in her *Itinerari ebraico-cristiani: società, cultura, mito* (Fasano: Schena, 1987), 9–37, esp. 24–27; Morisi Guerra, "Santi Pagnini traducteur de la Bible," in I. Backus and F. Higman, eds., *Théorie et pratique de l'exégèse* (Geneva: Droz, 1990), 191–98, esp. 196; Paul Grendler, "Italian Biblical Humanism and the Papacy," in Erika Rummel, ed., *Biblical Humanism and Scholasticism in the Age of Erasmus* (Leiden: Brill, 2008), 227–76, 242–43. On Pagnini, see T. M. Centi, "L'attività letteraria di Santi Pagnini (1470–1536) nel campo delle scienze bibliche," *Archivum Fratrum Praedicatorum* 15 (1945): 5–51.

[2] Pagnini, *Psalterium*, sig. *2r: "utinam vero non etiam falsi interpretes fuerint ac caeci caecorum duces, dum in aequivocis dictionibus alienam a re ipsa significationem accipientes, veram relinquunt et de rebus gravissimis contraria quam oporteat ratione decernunt." Cf. Matthew 15:14.

[3] Pagnini, *Psalterium*, sig. *2r–v: "mitto autem quod periculosos humanae vitae errores admiserint, qui nobis graecos medicae facultatis autores male verterunt, dum pro salubri haerba vel pharmaco noxium virus nobis supposuerunt.... Quod autem ad sacrarum literarum pertinet studia, quis non cognoscat tanto periculosius in iis peccatum admitti, quanto sublimiora sunt, quae tractanda suscipiuntur, immortalia scilicet, ac divina? Quae, si quo casu

Pagnini's comparison of scientific and scriptural translation was not merely rhetorical; other scholars of his generation perceived an affiliation between natural philosophy and the study of scripture. Three years before Pagnini published his letter to Leo X, Gianfrancesco Pico della Mirandola wrote to Pagnini in June 1518 to tell him that "aspiring theologians learn natural philosophy." They believe, Pico said, that "many areas of inquiry should be investigated," some of which produce "great anxiety." Nevertheless, according to Pico, these matters "perplexed them not in the least," and they solved them "with relatively little effort."[4] In the century following Pico's observation, a conspicuous number of physicians and naturalists analyzed the Bible from a natural philosophical perspective. They also applied their religious erudition in the service of their scientific pursuits. Many of them lived in central and especially northern Italy. The majority worked in Venice, Bologna, or the Duchy of Mantua. Jews and Christians were equally involved in this endeavor and are equally represented in this book. Whatever their religious faith, they are, for the most part, barely known to modern historians. This project draws from a deep well of writings by Amatus Lusitanus, Melchior Guilandinus, Andrea Bacci, Abraham Yagel, Alessandro Magno, and Giovanni Battista Cavallara. The three primary figures upon whose work it especially relies are only slightly more familiar to modern historians: Ulisse Aldrovandi, David de' Pomi, and Abraham Portaleone. For these sixteenth-century scholars, natural philosophy helped elucidate the Bible. Medical education and natural philosophy provided their recipients and practitioners with the intellectual tools they used to develop a unique approach to the Bible.[5] Scripture, in

male tradita accipiantur, haereticis sinistram erroris occasionem, infidelibus autem risum nostri atque contemptum praebitura sunt."

4 Santi Pagnini, *Biblia: habes in hoc libro prudens lector utriusque instrumenti novam translationem æditum* (Lyon: Antonius du Ry, 1528), "Ioannis Franciscus Picus Mirandulae Dominus Sancti Pagnino Lucensi Praedicatorii ordinis s.p.d.," sig.*diᵛ–diiʳ, sig.*diᵛ: "In philosophia vero naturali et in disputatrici, quae nunc plurimum in usu theologia [*sic*: theologiae] candidati praeter illa et condiscent et admonebuntur tractari multas quaestiones apud se (et anxias quidem plurimum), quas eruditissimi viri vix opere longi subsellii dissolvant; quae quidem quam faciles, quam nullo nexu perplexae sint tua ipsa interpretatione manifestum fiet." The letter is dated (Sig. *diiʳ) Calen. Iunii. A partu virginis, MDXVIII, or 1 June 1518. On Gianfrancesco Pico della Mirandola, see Charles B. Schmitt, *Gianfrancesco Pico della Mirandola (1469–1533) and His Critique of Aristotle* (The Hague: Martinus Nijhoff, 1967).

5 On the close connections between medicine and natural philosophy in Italy at this time, see Giuseppe Olmi, *Inventario del mondo: catalogazione della natura e luoghi del sapere*

turn, helped settle disputes in learned natural philosophy and improve the efficacy of practical medicine.[6]

The Natural Philosophy of the Biblical World explores the reciprocal relationship between biblical interpretation and natural philosophy in sixteenth-century Italy. It investigates people who studied the Bible and pursued natural philosophy with such equal and related ardor that they scarcely perceived a difference between the two. The project describes the fields of study they cultivated, tells the story of how they changed them, and examines the social, educational, and intellectual structures that promoted this extraordinary symbiosis between two ostensibly alien branches of knowledge.

Though the Bible was studied in tandem with natural philosophy in other parts of Europe at this time, Italy presents a unique historical case.[7] In contradistinction to most biblical commentary in early modern Europe, which was colored by confessional polemic, Italian physicians' explorations of the Bible were less dogmatic. Generally, they avoided ideological skirmishes. Natural philosophers, like contemporary theologians, pursued truth.[8] But the truth they sought was of a different kind: they interrogated the precise meaning of natural

nella prima età moderna (Bologna: Il Mulino, 1992), 256, 300; Anthony Grafton and Nancy Siraisi, eds., *Natural Particulars: Nature and the Disciplines in Renaissance Europe* (Cambridge, MA: MIT Press, 1999), 11; Siraisi, "Anatomizing the Past: Physicians and History in Renaissance Culture," *Renaissance Quarterly* 53 (2000): 1–30; Siraisi, "History, Antiquarianism, and Medicine: The Case of Girolamo Mercuriale," *Journal of the History of Ideas* 64 (2003): 231–51; Brian Ogilvie, *The Science of Describing: Natural History in Renaissance Europe* (Chicago: University of Chicago Press, 2006).

6 For mostly Northern European examples of this last point, see Ann Blair, "Mosaic Physics and the Search for a Pious Natural Philosophy in the Late Renaissance," *Isis* 91 (2000): 32–58.

7 For England, see Kevin Killeen, *Biblical Scholarship, Science and Politics in Early Modern England: Thomas Browne and the Thorny Place of Knowledge* (Burlington, VT: Ashgate, 2009); for Spain, see María M. Portuondo, "The Study of Nature, Philosophy, and the Royal Library of San Lorenzo of the Escorial," *Renaissance Quarterly* 63:4 (2010): 1106–50.

8 Claims of arriving at the "truth" or "true meaning" of the biblical texts are commonplace in Italian writings of the sixteenth century. See Abraham Portaleone, *SG*, 86r–v; David de' Pomi, *Tsemaḥ David* (Venice: Giovanni di Gara, 1587), 232; and Andrea Bacci, *L'Alicorno* (Florence: Giorgio Marescotti, 1573) sig. 2Av, all use this language. See also Azariah de' Rossi, *The Light of the Eyes*, trans. and ed. Joanna Weinberg (New Haven: Yale University Press, 2001), 251, 406, and Weinberg, "The Beautiful Soul: Azariah de' Rossi's Search for Truth," in David B. Ruderman and Giuseppe Veltri, eds., *Cultural Intermediaries: Jewish Intellectuals in Early Modern Italy* (Philadelphia: University of Pennsylvania Press, 2004), 109–26.

terminology in the Bible. The quest to find the "true meaning" of biblical language led Italian physicians to compare the Bible's statements about nature to those in pagan texts. They read the Bible in order to solve natural philosophical problems, not theological ones. Historians of early modern history who claim that before the eighteenth century scripture was studied because it revealed "the means to salvation" and that it was only in the Enlightenment that the Bible was to "move beyond theology" miss earlier adumbrations of those eighteenth-century developments.[9] Still, Aldrovandi, Amatus, and their fellow Renaissance naturalists who studied the Bible were more than mere avatars of later periods; they were men of their own time and deserve to be understood as such.

MEDICAL CULTURE IN LATE RENAISSANCE ITALY

Features unique to learned medicine in mid-sixteenth-century Italy facilitated a close scrutiny of passages in the Bible having to do with the natural world. The first was medical education. The education that a young man received at an Italian university in the middle of the sixteenth century retained many traditional features. At the same time it was undergoing significant changes.[10] To begin with, the authority of Galen and Hippocrates was no longer unquestioned.[11] Galenism, which had long dominated the medical curriculum, was becoming increasingly expansive and flexible: by the middle of the sixteenth century doctors added new content to the corpus of Galen's writings.[12] They also

[9] Jonathan Sheehan, *The Enlightenment Bible: Translation, Scholarship, Culture* (Princeton: Princeton University Press, 2005), xiii, 28.

[10] Paul Grendler, *The Universities of the Italian Renaissance* (Baltimore: Johns Hopkins University Press, 2002), 201ff.

[11] I do not mean to conflate these two medical writers or the corpora they left behind. Ian Maclean has introduced a helpful distinction between the two. Whereas students of Hippocratic writings stood for reverence of the past, much as their humanist colleagues did, devotees of Galen believed that knowledge was cumulative. See Ian Maclean, *Logic, Signs, and the Order of Nature in the Renaissance* (Cambridge: Cambridge University Press, 2002), 209. It is perhaps no accident that Abraham Portaleone was critical of the Hippocratic corpus in his medical *consilia*. See herein, Chapter 4.

[12] Between 1490 and 1598, 660 editions of Galen were published. Eighteen of them were *Opera omnia*. See August Buck, "Die Medizin im Verständnis des Renaissancehumanismus," in Rudolf Schmitz and Gundolf Keil, eds., *Humanismus und Medizin* (Weinheim: Acta Humaniora, 1984), 181–98, 187.

criticized him.[13] Medicine's flexible stance toward the authority of tradition, which Ian Maclean has contrasted to the legal profession's tendency to remain faithful to that authority,[14] colored the way Jewish physicians such as David de' Pomi, Abraham Portaleone, and others approached their received Jewish tradition. It similarly altered how Christians such as Ulisse Aldrovandi, Andrea Bacci, and Melchior Guilandinus related to their Christian one.

Another important midcentury shift was that clinical training became more popular and ascended to an unprecedented position in university curricula. At some centers of learning, such as Padua, clinical training – which required bedside visits, pulse measurement, urine sampling, and performance of dissections and autopsies – was so popular that students would matriculate there to receive it after completing the theoretical portion of their studies elsewhere.[15] Anatomy in particular, famously championed by Andreas Vesalius, became after 1525 the defining feature of hands-on, empirical medicine.[16] This emphasis on clinical practice encouraged firsthand observation and attentiveness to natural particulars. When David de' Pomi scrutinized biblical gemstones and Abraham Portaleone studied biblical incense, they applied lessons they had learned as medical students at, respectively, the Universities of Perugia and Pavia to their study of the Bible.[17] One additional aspect of medical education had a strong influence on biblical studies in the late sixteenth century: the emphasis on Greek philology.

In the fifteenth century, scholars learned Greek with private tutors or in small circles.[18] By the beginning of the sixteenth century, Aldus

[13] Nancy Siraisi, "Giovanni Argenterio and Sixteenth-Century Medical Innovation: Between Princely Patronage and Academic Controversy," *Osiris* 6 (1992): 161–80, 178–9. Perhaps the best example of criticism of Galen is Vesalius's *De humani corporis fabrica* (Basel: Johannes Oporinus, 1543). Vesalius criticized some aspects of Galen's work while remaining a committed Galenist.

[14] Maclean, *Logic, Signs, and the Order of Nature*, 231.

[15] Jerome J. Bylebyl, "The School of Padua: Humanistic Medicine in the Sixteenth Century," in Charles Webster, ed., *Health, Medicine and Mortality in the Sixteenth Century* (Cambridge: Cambridge University Press, 1979), 335–70, 351.

[16] Vivian Nutton, "'*Prisci dissectionum professores*': Greek Texts and Renaissance Anatomists," in A. C. Dionisotti, Anthony Graton, and Jill Kraye, eds., *The Uses of Greek and Latin: Historical Essays* (London: Warburg Institute, 1988), 111–26, 115.

[17] For more on Pavia, especially its Greek curriculum, see herein Chapter 3.

[18] N. G. Wilson, *From Byzantium to Italy: Greek Studies in the Italian Renaissance* (Baltimore: Johns Hopkins University Press, 1992), 4.

Manutius had established the Neakademia, a "new academy" devoted to the cultivation of Greek language and literature. Indeed, the members of that group even made a pact not to speak to each other in any language other than classical Greek, and infractions were penalized with a stiff fine. In practice, few members of Aldus's circle truly spoke Greek.[19] The fact that the members of the Neakademia advertised their devotion to that ancient tongue explains their passion more than their skill.[20] Apart from these ephemeral gatherings and ad hoc arrangements dedicated to Greek language and culture, universities played an important role in Greek instruction. In sixteenth-century Europe, medical faculties in Italian universities taught more Greek to a greater number of pupils than any other institution, with the possible exception of the Collège de France.

The sixteenth-century revival of interest in ancient Greek medical texts shaped the study and practice of Renaissance medicine.[21] Even as most medical learning continued to be acquired and disseminated in Latin, sixteenth-century physicians routinely mined ancient Greek texts for nuggets of information about famed cures and rare plants.[22] To the mind of Andrea Mattioli, a famous sixteenth-century naturalist, elite physicians and elite scholars of Greek were indistinguishable from one another.[23] Ulisse Aldrovandi himself invoked an oft-repeated trope when he mused that improved knowledge of Greek was the major reason why medicine had progressed so far in his century.[24]

[19] Ibid., 133.

[20] Martin Lowry, *The World of Aldus Manutius: Business and Scholarship in Renaissance Venice* (Ithaca, NY: Cornell University Press, 1979), 196–99; Martin Davies, *Aldus Manutius: Printer and Publisher of Renaissance Venice* (London: British Library, 1995).

[21] Bylebyl, "The School of Padua," 340. See also Nancy Siraisi, *Avicenna in Renaissance Italy: The Canon and Medical Teaching in Italian Universities after 1500* (Princeton: Princeton University Press, 1987), 65–6, 96–7, and bibliography there.

[22] For a detailed periodization of Greek studies in sixteenth-century medicine, see Vivian Nutton, "Greek Science in the Sixteenth-Century Renaissance," in J. V. Field and Frank A. J. L. James, eds., *Renaissance and Revolution: Humanists, Scholars, Craftsmen, and Natural Philosophers in Early Modern Europe* (Cambridge: Cambridge University Press, 1993), 15–28 and Nutton, "John Caius and the Eton Galen: Medical Philology in the Renaissance," *Medezinhistorisches Journal* 20 (1985): 227–52. On the continued dominance of Latin, particularly until the middle of the sixteenth century, see Nutton, "Hellenism Postponed: Some Aspects of Renaissance Medicine, 1490–1530," *Sudhoffs Archiv* 81:2 (1997): 158–70.

[23] See Pietro Mattioli's letter "agli studiosi lettori," in his *I discorsi di M. Pietro Andrea Matthioli* (Venice: Vincenzo Valgrisi, 1568), sig **5v.

[24] Ulisse Aldrovandi, *Discorso naturale,* BUB Ms. Aldrovandi 91, 530r.

The emphasis on Greek in Renaissance medical education inspired its recipients to deploy their philological skills in different ways. They edited, translated, and commented on classical Greek writers such as Galen, Aristotle, Dioscorides, and Theophrastus. They also sought out Bible translations in Greek that they deemed potentially authoritative, or which, at the very least, could illuminate obscure scriptural passages.[25] Early modern Italian physicians used their knowledge of Greek to investigate alternatives to the Latin text of the Vulgate and the Hebrew text of the Bible.

In sixteenth-century Italian universities conversations about the Bible took place informally. Modern scholars insist that theological studies were marginalized at that time and place.[26] But that argument is based on research that attends to official university records and church pronouncements. The day-to-day realities of life at a university like Bologna or Padua may have been quite different. In midcentury Bologna, for example, Gabriele Paleotti, the future bishop of that city, organized a group of university students united by their interest in spiritual issues.[27] More to the point, at Padua the theology professor Girolamo Vielmi mentioned in his lectures on Genesis a series of "informal conversations" with the botanist Melchior Guilandinus, whom Vielmi credits with helping him understand a difficult verse in that book.[28] Naturalists and theologians helped each other study the Bible. Even if theological study had a limited role in sixteenth-century Italian universities, the scrutiny of sacred texts, most notably the Bible, did not.[29]

The kinds of conversations that Vielmi and Guilandinus were having at Padua intimate a second feature of sixteenth-century medical culture that stimulated a renewed interest in the Bible: the social dynamics of

[25] On interest in Greek Bible texts in the context of diminishing faith in the Vulgate's accuracy, see Hildebrand Höpfl, *Beiträge zur Geschichte der Sixto-Klementinischen Vulgata* (Freiburg im Breisgau: Herder, 1913), 1–43.

[26] Charles B. Schmitt, "Philosophy and Science in Sixteenth-Century Italian Universities," in André Chastel et al., eds., *The Renaissance: Essays in Interpretation* (London: Methuen, 1982), 297–336, 314.

[27] Paolo Prodi, *Il Cardinale Gabriele Paleotti*, 2 vols. (Rome: Edizioni di Storia e Letteratura, 1959–67), 2:217.

[28] Girolamo Vielmi, *De sex diebus conditi orbis liber* (Venice: Giunta, 1575), 335. See herein Chapter 2.

[29] See also Grendler, *The Universities of the Italian Renaissance*, chap. 10.

the medical profession. In the sixteenth century, Italian universities such as Bologna and Padua replaced French and Spanish universities such as Paris, Montpellier, and Salamanca as those that attracted Europe's best and most ambitious students. An international and polyglot group of young men flocked to Italian medical faculties. The University of Padua presented a unique environment in which Jewish students from different ethnic backgrounds forged lifelong friendships.[30] At Padua and other Italian universities, students came into contact with members of different religious communities, too.[31] Relationships manifestly interfaith and not merely intraconfessional flourished. Jews and Catholics alike met students whose unfamiliar perspectives on classical and sacred texts complemented and challenged their own. Dialogues that began at university continued to develop in later years through the international network that Ian Maclean has called the Medical Republic of Letters.[32] Occasionally, conversations between Jews and Christians morphed into epistolary exchanges later in life. For example, Girolamo Mercuriale wrote several letters to Moses Alatino, a Jewish physician from Spoleto, that were published in Mercuriale's printed medical responses and consultations.[33] The letters indicate not only Mercuriale's respect for Alatino's "learning and skill in practicing medicine" but also

[30] David B. Ruderman, *Jewish Thought and Scientific Discovery in Early Modern Europe* (New Haven: Yale University Press, 1995), 100–17; Ruderman, *Early Modern Jewry: A New Cultural History* (Princeton: Princeton University Press, 2010), 127–28.

[31] For examples beyond Padua, see I. Zoller, "I medici ebrei laureati a Siena negli anni 1543–1694," *Rivista Israelitica* 10 (1913): 60–70, 100–10; and A. Franceschini, "Privilegi dottorali concessi ad Ebrei a Ferrara nel secolo XVI," in *Atti e memorie della Deputazione ferrarese di storia patria*, ser. 3, 19 (1975): 173–4. In general, see Vittore Colorni, "Sull'ammissibilità degli ebrei alla laurea anteriormente al secolo XIX," in Colorni, *Judaica minora: saggi sulla storia dell'ebraisimo italiano dall'antichità all'età moderna* (Milan: Giuffrè, 1983), 473–89. Originally published in *Rassegna mensile di Israel* 16 (1950): 202–16.

[32] Ian Maclean, "The Medical Republic of Letters before the Thirty Years War," *Intellectual History Review* 18:1 (2008): 15–30.

[33] *Hieronymi Mercurialis Foroliviensis responsorum, et consultationum medicinalium tomus primus* (Venice: apud Iolitos, 1587), consultatio 16, p. 43: "De uteri tumore, urinae acrimonia, aluique suppressione, Pro nobili iuvene Hebraea, ad Moysem Alatinum Medicum Hebraeum." See also *Hieronymi Mercurialis Foroliviensis responsorum, et consultationum medicinalium tomus tertius* (Venice: apud Franciscum de Franciscis Senensem, 1597), "De vena in pleuritide secanda quaenam ea sit, Moysi Alatino medico," 66v–67v. The responses and consultations are not numbered in this volume. It is not known where Alatino studied medicine. We do know, however, that Alatino visited the University of Padua in 1572, where Mercuriale was teaching at the time. See Cecil Roth, *The Jews in the Renaissance* (Philadelphia: Jewish Publication Society of America, 1977 [1959]), 84.

the affection between the two men.[34] Another of Mercuriale's correspondents was Abraham Portaleone, to whom he wrote, expressing high regard for the Mantuan physician's work and signing off as his "faithful friend."[35] Exchanges between Jews and Christians eventually motivated innovative research in those students' mature writings. Portaleone wrote about the Bible and the Talmud when he corresponded with non-Jewish physicians such as Alessandro Magno and Giovanni Battista Cavallara, whom he may have known from university.

There were several other ways Portaleone may have met and developed relationships with non-Jewish colleagues: colleges of physicians and courts. Those two social, professional, and political settings changed significantly in the sixteenth century, and their occasional admission of Jews tells us much not only about the careers of physicians like David de' Pomi and Abraham Portaleone but also about more general contacts between Jews and Christians in late Renaissance Italy. Mantua is a unique case. While certain academies in that city, such as the Accademia degli Invaghiti, did not admit Jews, the Gonzaga family welcomed them into its court as physicians and entertainers.[36] The city's College of Physicians

[34] Mercuriale, *Responsorum et consultationum medicinalium tomus primus*, 43: "et haec sunt, quae in proposito casu ad te scribenda putavi. Reliquum est, ut me ames ac tuam doctrinam et in medendo peritiam a me plurimum aestimari putes. Bene vale. Patavii." The letter is undated. The phrase "ut me ames" is likely an allusion to Cicero, *Epistulae ad Familiares* 13:47: "tu fac, quod facis, ut me ames, teque amari a me scias."

[35] *Hieronymi Mercurialis Foroliviensis responsorum, et consultationum medicinalium tomus primus* (Venice: apud Iolitos, 1587), Consultatio 8, p. 25, "De mensibus inordinatis atque imminutis ac de sterilitate ad Abrahamum e Portalionis Medicum Hebraeum." "De vivendi ratione, quam in cunctis medicamentis scis esse necessariam, nihil dico, quod mihi persuadeam te nihil quod ad ipsam pertineat esse ullo tempore omissurum. Bene vale, tibique de Mercuriali ea omnia pollicearis, quae a fideli amico expectari possunt" (p. 26). Nancy Siraisi notes this letter in her *Communities of Learned Experience: Epistolary Medicine in the Renaissance* (Baltimore: Johns Hopkins University Press, 2013), 25.

[36] The dramatist Leone de' Sommi was refused membership in the Accademia degli Invaghiti; he was appointed secretary instead. See David Kaufmann, "Leone de' Sommi Portaleone (1527–92): Dramatist and Founder of a Synagogue at Mantua," *JQR* 1 (1898): 445–61. On the Gonzaga family and the Jews, see Shlomo Simonsohn, *History of the Jews in the Duchy of Mantua* (Jerusalem: Kiryath Sepher, 1977); Simonsohn, "The Theater Troupe of the Mantuan Jews" (Hebrew), *Paragod* (1963): 13–17; Don Harrán, "Jewish Dramatists and Musicians in the Renaissance: Separate Activities, Common Aspirations," in Siegried Gmeinwieser et al., eds., *Musicologia Humana: Studies in Honor of Warren and Ursula Kirkendale* (Florence: L. S. Olschki, 1994), 291–304; Daniel Jütte, "Abramo Colorni, jüdischer Hofalchemist Herzog Friedrichs I., und die hebräische Handelskompanie des Maggino Gabrielli in Würtemberg am Ende des 16. Jahrhunderts," *Aschkenaz. Zeitschrift für Geschichte und Kultur der Juden* 15 (2005): 435–98.

had Jewish members.[37] Mantua's court and College of Physicians enabled interconfessional relationships between Catholics and Jews.

The third feature of late Renaissance medical culture that influenced the study of sacred literature was a set of paraprofessional interests that many physicians shared. Of these, two deserve further consideration: collecting and the embrace of alternative sources of knowledge, chiefly empirical. Many early developers of cabinets of curiosity and, later, museums were either pharmacists or physicians.[38] From Francesco Calzolari to Ferrante Imperato, sixteenth-century medical professionals wanted more than to know nature; they wanted to acquire it.[39] The desire to acquire nature led many Renaissance physicians to seek out samples of it. In Mantua, for example, the court physician Marcello Donati owned and operated a museum of curiosities.[40] Some of the

[37] Archivio di stato di Mantova, *Libro dei Decreti* Nr. 46, pp. 24–37. These documents are published in G. Carra and A. Zanca, "Gli statuti del collegio dei medici di Mantova del 1559," in *Atti e memorie dell'accademia virgiliana di Mantova, Classe di scienze fisiche e techniche* 2 (1977). On Jews, see ¶ 21, "De Judeo Phisico," pp. 29–30 and ¶ 28, "De Chirurgo Judeo," 34–35. Italian translations of the Latin text are available in Carra and Zanca, "Gli statuti," 70–1 and 77–8. See also Gianfranco Miletto, *Glauben und Wissen im Zeitalter der Reformation: Der salomonische Tempel bei Abraham Ben David Portaleone (1542–1612)* (Berlin: de Gruyter, 2004), 2–3. Carra and Zanca also published Mantua's "Catalogo o ruolo o matricola del Collegio dei medici (1539–1783)," Part V of which is titled "Magistri Medici Hebrei Admissi per Collegium ad Medendum in Dominio." See Carra and Zanca, "Gli statuti," 114–15. From the list's beginning in 1539 until the sack of Mantua in 1630, six Jewish physicians appear. See also Gianfranco Miletto, "Die Zulassung der jüdischen Ärzte in Italien während der Gegenreform: der Fall Portaleone," *Biblische Notizen* 116 (2003): 48–55. On court physicians more generally, see the contributions of Richard Palmer and Hugh Trevor Roper to Vivian Nutton, ed., *Medicine at the Courts of Europe, 1500–1837* (London: Routledge, 1990).

[38] Paula Findlen, "The Formation of a Scientific Community: Natural History in Sixteenth-Century Italy," in Anthony Grafton and Nancy Siraisi, eds., *Natural Particulars: Nature and the Disciplines in Renaissance Europe* (Cambridge, MA: MIT Press, 1999), 369–400; Findlen, "The Museum: Its Classical Etymology and Renaissance Genealogy," *Journal of the History of Collections* 1 (1989): 59–78; Findlen, *Possessing Nature: Museums, Collecting, and Scientific Culture in Early Modern Italy* (Berkeley: University of California Press, 1994).

[39] Findlen, *Possessing Nature*, 43.

[40] Franco Dotti and Attilio Zanca, "Fatti e figure della medicina mantovana durante il tardo rinascimento," in *Mantova e i Gonzaga nella Civiltà del Rinascimento. Atti del convegno dall'Accademia Nazionale dei Lincei e dall'Accademia Virgiliana con la collaborazione della città di Mantova sotto l'alto patronato del Presidente della Repubblica Italiana Giovanni Leone, Mantova 6–8 ottobre 1974* (Mantua: Accademia Virgiliana, 1977), 393–97, 393. Dotti and Zanca list other museums in Mantua at p. 395. Donati was the author of *De medica historia mirabili libri sex* (Mantua: per Franciscum Osanam, 1586). On Donati, see Attilio Zanca, *Notizie sulla vita e sulle opere di Marcello Donati da Mantova (1538–1602) medico, umanista, uomo di stato* (Pisa: Giardini, 1964).