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## ©ENTREPRENEURS AND PRIVATE ENTERPRISE: THE DEVELOPMENT OF MEDICAL LECTURING IN LONDON, 1775–1820\*

Susan C. Lawrence

In 1805, Joshua Brookes, an aggressive and ingenious anatomy teacher in London, announced his autumn "Course of Demonstrations and Dissections" at his Theatre of Anatomy on Blenheim Street. In the *Times* advertisement, he described in glowing terms the advantages of his "thoroughly ventilated" rooms, his collection of preparations, and his personal attention at dissections. In 1807, several of the physicians of Guy's Hospital announced in the *Times* their usual series of autumn courses under the new, bold heading "Medical School at Guy's Hospital." Together with their surgical colleagues at St. Thomas's and two non-staff lecturers, the men at Guy's promised London pupils a "complete course of Medical and Chirurgical Instruction," which included clinical lectures on hospital cases, practical anatomy, chemistry, physiology, midwifery, surgery, materia medica, and the theory and practice of medicine.<sup>2</sup>

These advertisements are only two examples of the dozens that crowded the daily newspapers and the medical press each autumn by the early nineteenth century. The increase in the number of such announcements indicates that medical lecturing had become increasingly competitive and widespread. Beginning in the 1730s and 1740s, "market forces" tempered by professional and institutional constraints shaped the growth and organization of medical teaching in London. Gradually, after 1815, the

\*An earlier version of this paper was presented at the American Association for the History of Medicine meeting, Rochester, New York, 11 May 1986. For his help and advice on my dissertation, from which part of this essay is drawn, I wish to thank Toby Gelfand. For their assistance in providing access to the records of hospital pupils, I am grateful to Mr. Bompas, former Secretary of Guy's Hospital Medical School; Mr. Ralph Winterton, Middlesex Hospital Archivist; Mr. Bird, assistant librarian of St. Thomas's Hospital Medical School Library, and Mr. J. A. McGuirk and Mr. Patrick Ryan of St. George's Hospital Medical School Library. Mr. Robert Brewer, of Ball State University, expertly drew the map.

<sup>1</sup>Times, 23 Sept. 1805. See also his notice of 18 Sept. 1807, where Brookes offered: "Surgeons in the Army and Navy may be assisted in renewing their anatomical knowledge, and every possible attention will be paid to their accommodation as well as instruction. Anatomical converzationes [sic] will be held weekly, when the different subjects treated of will be discussed familiarly and the Student's views forwarded. To these none but Pupils can be admitted." Brookes also advertised private dissecting rooms for "Gentlemen established in practice" (Times, 23 Sept. 1805).

<sup>2</sup>Times, 22 Sept. 1807. Drs. William Babington and James Curry offered the course on the practice of medicine; Babington, Dr. Alexander Marcet, and a non-staff man, William Allen, taught chemistry; Allen also offered "Experimental Philosophy," while Curry and Dr. James Cholmely presented lectures in the theory of medicine and materia medica. Together, Babington, Curry, and Marcet gave "Clinical Lectures on Select Medical Cases." John Haighton, the second non-staff man, offered two courses, on physiology and midwifery. Anatomy and surgery, presented at St. Thomas's by Henry Cline and the Guy's surgeon, Astley Cooper, were detailed in an advertisement on 28 September.

growing protectionism of the licensing corporations undercut the private entrepreneur and, by the middle of the nineteenth century, led to the ascendancy of organized medical schools and university-granted medical degrees.

Recent work on eighteenth-century medicine has begun to focus attention on London as a dynamic center for both practical clinical experience and formal lecturing. Such current research has, however, primarily concentrated on a few significant individuals, especially William and John Hunter and their courses on anatomy and surgery, or on the testimony of a handful of students who left accounts of their London training. These limited, albeit welcomed, forays still seriously underrepresent the variety and complexity of the opportunities for medical education available in London.<sup>3</sup> A careful look at the courses offered, the relationships among lecturers, hospitals, and extramural teaching, and the effects of London-wide competition reveals that London developed a medical curriculum as well rounded as that of the universities in Edinburgh and in Paris after the Revolution. By the late eighteenth century, London had become not only a center for surgery, anatomy, firsthand dissection, and hospital experience, but also a training ground in medicine, chemistry, and midwifery. The evidence suggests that many London students pursued an education suitable for general practice without regard to the ostensible professional divisions embodied in the traditional London medical corporations. The very existence of a broad and popular curriculum by the turn of the nineteenth century, furthermore, challenges the common historical assumption that the Apothecaries' Act of 1815 spurred the development of specifically medical lecturing.<sup>4</sup>

The men who came to London to study had a pivotal role in two unregulated markets: medical practice and medical training. The apparent demand by British patients for knowledgeable medical care stimulated many aspiring practitioners voluntarily to pay for medical courses that gave them a competitive advantage in their intended careers. The growing number of pupils coming to the metropolis in turn increased the demand

<sup>&</sup>lt;sup>3</sup> Irvine Loudon, *Medical Care and the General Practitioner, 1750–1850* (Oxford: Clarendon Press, 1986), pp. 48–53. William F. Bynum and Roy Porter, eds., *William Hunter and the Eighteenth-Century Medical World* (Cambridge: Cambridge University Press, 1985). See, in particular, Roy Porter, "William Hunter: A Surgeon and a Gentleman," pp. 7–34; W. F. Bynum, "Physicians, Hospitals, and Career Structures in Eighteenth-Century London," pp. 105–28; Toby Gelfand, "Trwite the Philosopher as Well as the Charitable': Hospital Teaching as Private Enterprise in Hunterian London," pp. 129–51.

<sup>&</sup>lt;sup>4</sup>S. W. F. Holloway, "The Apothecaries' Act, 1815: a reinterpretation," Med. Hist., 1966, 10: 107–29, 221–36; idem, "Medical education in England, 1830–1858: a sociological analysis," History, 1964, 49: 299–324; Frederick N. L. Poynter, "Medical Education in England since 1600," in The History of Medical Education, ed. C. D. O'Malley (Berkeley and Los Angeles: University of California Press, 1970), p. 240; Zachary Cope, "The Private Medical Schools of London (1746–1914)," in Evolution of Medical Education in Britain, ed. Frederick N. L. Poynter (London: Pitman Medical, 1966), p. 97. Loudon, in his Medical Care and the General Practitioner (pp. 171–73), also lays this misconception to rest.

<sup>&</sup>lt;sup>5</sup> Irvine Loudon, "The nature of provincial medical practice in eighteenth-century England," *Med. Hist.*, 1985, 29: 1–32; *idem, Medical Care and the General Practitioner.* See also Lisa Rosner, "Students and Apprentices: Medical Education at Edinburgh University, 1760–1810" (Ph.D. diss., Johns Hopkins University, 1985), chap. 8, for a similar analysis of the numerous students who attended Edinburgh University and took a wide range of courses but who did not bother to acquire the M.D.

for the accessible and flexible "academic" teaching provided by energetic entrepreneurs, who offered courses at reasonable prices in their homes, in private theaters, or in rooms and theaters at several of the general London hospitals.

#### TEACHING AS PRIVATE ENTERPRISE

Until the second decade of the nineteenth century, none of the three London medical corporations, the Society of Apothecaries, the Company (later Royal College) of Surgeons, and the Royal College of Physicians, either required attendance at medical lectures for their licenses or memberships, or developed any systematic courses for their candidates. Apprenticeship and oral examinations were the basic entry requirements for the first two companies; the Royal College of Physicians demanded only a valid M.D. and an oral examination of applicants for the licentiate, generally restricting the Fellowship to those with a Cambridge or an Oxford M.D. All of these bodies officially sanctioned medical practice within London, but unlicensed medical men frequently practiced in the capital. No corporate license, moreover, was necessary for provincial practice in England or Wales until 1815. While the Society of Apothecaries and the Surgeons' Company provided some instruction in botany and anatomy, respectively, for their members' apprentices throughout the eighteenth century, their teaching involved short demonstrations, not lengthy lecture courses. As social and professional expectations about medical education, especially for surgeons and apothecaries, changed over the century, the corporations' instruction was increasingly treated as inadequate or ancillary.6

Licensing, in fact, was largely irrelevant for medical men in the eighteenth century, beyond the obvious cachet that membership in the Surgeons' Company or the Royal College of Physicians offered the relatively small number of elite London surgeons and physicians. Irvine Loudon has aptly characterized medical practitioners in this period as falling into two broad categories, the "irregulars" and the "regulars." These fluid groups were distinguished not simply by formal licensing or having an M.D. for the "regulars," but rather by a vague concatenation of qualifications, including education, type of practice, self-definition, and, usually, a full-time commitment to providing paid medical services. In this constellation, appropriate education assumed increasing importance both in the eyes of "regular"

<sup>&</sup>lt;sup>6</sup>Bernice Hamilton, "The medical professions in the eighteenth century," *Econ. Hist. Rev.*, 1951, 4: 141–69, provides an overview of the licensing requirements. See also Cecil Wall, A *History of the Worshipful Society of Apothecaries of London*, 1617–1815, ed. E. Ashworth Underwood (London: Oxford University Press, 1963); George N. Clark, A *History of the Royal College of Physicians*, 2 vols. (Oxford: Oxford University Press, 1964–66), vol. 2; Cecil Wall, A *History of the Surgeons' Company* (London: Hutchinson, 1937); Susan C. Lawrence, "Science and Medicine at the London Hospitals: The Development of Teaching and Research, 1750–1815" (Ph.D. diss., University of Toronto, 1985), pp. 112–13, 124–31, 240–70, 345–48.

<sup>7</sup>Loudon, *Medical Care and the General Practitioner*, pp. 11–28.

medical men and, by inference, in the choices of patients who preferred them to "irregular" healers in the late 1700s. The added prestige that London hospital experience and course work gave aspiring practitioners more likely developed from lay and professional opinion that such training defined "qualified" medical men than from any significant therapeutic or technical superiority of London's informal "graduates."

London itself, as the pre-eminent cultural, political and economic center of English life in the eighteenth century, probably drew young men anxious to stand out from their provincial peers on their return home, as well as those ambitious for metropolitan careers. 9 By the 1750s, moreover, the capital already teemed with men who had established private schools in which they lectured on a variety of subjects ranging from navigation, applied mathematics, popular science, and law to dancing, foreign languages, and classical literature.<sup>10</sup> These courses provided ways for those students, especially from the lower middle classes, who could not (or would not) attend the university, to acquire the knowledge, skills, and polite accomplishments useful to advance themselves in business and social circles. Medical entrepreneurs followed the lead of these other private teachers and, like them, attracted students responding to broader social and cultural influences. Pupils paid for the extra polish of urban experience and the added display of up-to-date learning to make themselves acceptable medical attendants to the increasing ranks of the respectable middle classes in Georgian England.

A few historians have recently revived the idea that medical lecturing in London, whether on hospital grounds or in extramural rooms, resulted from the efforts of private enterprise in the eighteenth century, although they have not emphasized its probable origins in the broader trend towards open lecture courses in the capital.<sup>11</sup> Like their non-medical counterparts, physicians and surgeons who began to teach shouldered the risks of invest-

<sup>&</sup>lt;sup>8</sup>Loudon, *Medical Care and the General Practitioner*, pp. 31–38, 48–53, 62–65, 100–103, 132–33. Much more detailed work needs to be done on lay attitudes towards medicine and medical practitioners during this period in order to trace how patients chose their medical attendants. For a stimulating introduction, see Roy Porter, ed., *Patients and Practitioners: Lay Perceptions of Medicine in Pre-Industrial Society* (Cambridge: Cambridge University Press, 1985). Also Mary Fissell of the University of Pennsylvania is working on a Ph.D. dissertation titled "The Physic of Charity: Health and Welfare in the West Country, 1690–1834."

<sup>&</sup>lt;sup>9</sup>Roy Porter, English Society in the Eighteenth Century (Harmondsworth, England: Penguin Books, 1982), pp. 51–56; Sheldon Rothblatt, Tradition and Change in English Liberal Education: An Essay in History and Culture (London: Faber and Faber, 1976), pp. 32–39.

<sup>&</sup>lt;sup>10</sup> Nicholas Hans, New Trends in Education in the Eighteenth Century (London: Routledge and Kegan Paul, 1951), pp. 63–69, 99–116, 185–93; A. E. Musson and Eric Robinson, Science and Technology in the Industrial Revolution (Toronto: University of Toronto Press, 1969), pp. 101–38. For a useful discussion of how popular and technical lecturing in science in part coalesced around institutes in the early nineteenth century, see J. N. Hays, "The London Lecturing Empire, 1800–1850," in Metropolis and Province: Science in British Culture, 1780–1850, ed. Ian Inkster and Jack Morrell (Philadelphia: University of Pennsylvania Press, 1983), pp. 91–119.

<sup>&</sup>lt;sup>11</sup> Gelfand, "'Invite the Philosopher,'" pp. 129–31; Gelfand summarizes the principal authors who previously characterized London teaching as "private" in his note 1, p. 129. See also Roy Porter, "Medical Education in England before the Teaching Hospital: Some Recent Revisions," in *The Professional Teacher: Proceedings of the 1985 Annual Conference of the History of Education Society*, ed. John Wilkes (London: History of Education Society, 1986), pp. 29–44.

ing in rented rooms, advertisements, and demonstration materials, yet then had sole claim to the sometimes considerable profits from regularly attended classes. During the first half of the eighteenth century, several medical men, including William Hunter and William Smellie, found that lecturing was a lucrative addition to medical practice. <sup>12</sup>

Separate courses in anatomy, surgery, medicine, or midwifery, along with the fee-based arrangement of ward-walking at the hospitals for a few months or a year, specifically appealed to those students who wished to supplement or to evade traditional training by apprenticeship. As Toby Gelfand has cogently argued, providing unregulated medical lecturing to a paying clientele "represented a penetration of Enlightenment liberal economic values of free competition into medical education."13 Apprenticeship required long-term obligations between master and pupil, and often imposed considerable constraints upon the young man's time and duties. While potentially intensely personal, apprenticeship was also a narrow introduction to medical knowledge and skills, as it centered on the master's practice and expectations.<sup>14</sup> In contrast, the "open" system in London replaced, or broadened, the apprentice's limited opportunities with simple, short-term cash relationships. The student had much more freedom to choose the knowledge he hoped to gain from a variety of self-proclaimed experts. Teachers, in turn, had no responsibility for what their auditors actually learned beyond their obligation to deliver lectures at advertised times and places. From this perspective, "free competition" certainly did not guarantee a pupil's ultimate ability to practice, but the model does suggest that incompetent lecturers or those who gave "irrelevant" courses would not have lasted very long.

With the corporations' limited interest in education, the lack of significance attached to formal licensing, the presumed professional advantages associated with hospital experience and course work, and London's cultural magnetism, private lecturers in the metropolis flourished by the end of the eighteenth century. That the audience for the diverse range of courses offered was an unofficial, transient, voluntary one, limited only by time and financial resources, has caused those who previously have made historical assessments to overlook London's importance as a broad teaching capital before 1815. Concentration on corporation records, retrospective judg-

<sup>&</sup>lt;sup>12</sup> George C. Peachey, A Memoir of William and John Hunter (Plymouth, England: William Brendon for the author, 1924), contains the most extensive list of anatomy and surgery lecturers for the period from 1700 to 1749 available in print. From his survey of advertisements, Peachey determined that forty-nine men offered private courses in anatomy, physic, materia medica, or botany, chemistry, and midwifery at some time during these years (pp. 8, 12, 34, 37, 45–46).

<sup>&</sup>lt;sup>13</sup> Gelfand, "Invite the Philosopher," p. 131. Porter, "William Hunter," pp. 24–26. See also Susan C. Lawrence, "Science and Medicine at the London Hospitals," pp. 77–79, 292–336, 415–17, 427–32.

<sup>&</sup>lt;sup>14</sup> Joan Lane, "The Role of Apprenticeship in Eighteenth-Century Medical Education in England," in Bynum and Porter, eds., William Hunter, pp. 57–104; Loudon, Medical Care and the General Practitioner, pp. 39–48.
<sup>15</sup> Cope, "Private Medical Schools," pp. 89–109; Charles Newman, The Evolution of Medical Education in the Nineteenth Century (London: Oxford University Press, 1957); idem, "The Hospital as a Teaching Center," in

ments centered on certain lecturers' significance for the growth of recognizable hospital schools, and the testimony of a few great eighteenth- and early nineteenth-century medical men regarding education have effectively concealed the masses of students and dozens of teachers. These men re-emerge through an extensive examination of seldom used sources: hospital pupil registers, newspaper advertisements, and the rare extant student diaries and letters.

#### THE TEACHING MARKET: HOSPITAL PUPILS AND COURSE ADVERTISEMENTS

Considering that the Society of Apothecaries, the Company of Surgeons, and the Royal College of Physicians neither required nor particularly encouraged London course work as a prerequisite for licensing, who formed the audiences for the eager entrepreneurs? Data on those who attended lectures are woefully lacking; only a handful of references by individual students and lecturers, together with repeated advertisements, documents that courses were given at all. An indirect source of evidence of the demand for medical courses exists in the number of pupils who attended some of the London hospitals during this period. While it cannot be assumed that all the hospital pupils added one or more courses to their London education, all those whose accounts have survived mention going to lectures as well as walking the wards. 17

Registers for surgeons' pupils and dressers survive for four of the seven general London hospitals: St. Thomas's, St. George's, Guy's, and the Middlesex. Physicians' pupil registers remain only for St. Thomas's, Guy's, and the Middlesex, while data on apothecaries' pupils are available only for two hospitals, St. Thomas's and Guy's. The information on the strictly "medi-

The Evolution of Hospitals in Britain, ed. Frederick N.L. Poynter (London: Pitman Medical, 1964), pp. 187–206. Other works, such as Stewart Craig Thomson's "The Great Windmill Street school," Bull. Hist. Med., 1942, 12: 377–91, are seriously flawed by the presuppositions that only anatomy and surgery were important for London students and led to significant developments in London teaching.

16. To date, no lists of students attending lectures have been discovered for the period before 1815. For an example of a later list, see Francis Henry Ramsbotham, "A List of the names of Gentlemen... entered as Pupils to Dr. Ramsbotham's Lectures with Cases on Midwifery Oct. 1815 at the London Hospital," MS B 118, National Library of Medicine, Bethesda, Maryland. In this account book, Ramsbotham recorded the names of all the pupils and their addresses from October 1815 to October 1834. He clearly began this book when he moved from lecturing at his home to lecturing at the London Hospital. See *Times*, 3 Oct. 1814, 26 Sept. 1815.

17 See, for example, the published accounts provided by Richard Kay, *The Diary of Richard Kay*, 1751–61, of Baldingstone, Near Bury: A Lancaster Doctor, ed. William Brockbank and F. Kenworthy (Manchester: Manchester University Press, 1968); Whitfield J. Bell, Jr., "James Hutchinson (1753–1793): letters from an American student in London," *Trans. Stud. Coll. Phys. Philadelphia*, 1966, 4th ser., 34: 20–25, James J. Abraham, *Lettsom, His Life, Times, Friends, and Descendants* (London: Heinemann, 1933), pp. 44–45; V. Mary Crosse, *A Surgeon in the Early Nineteenth Century* (Edinburgh and London: E & S Livingstone, 1968), pp. 31–57. Manuscript sources support this conclusion. See, for example, Hampton Weekes to his sister, 28 March 1802, in the Hampton Weekes Correspondence, St. Thomas's Hospital Medical School Library, London.

<sup>18</sup> Entry books of Physicians' and Surgeons' Pupils and Dressers, 4 vols., 1778–1845, and General Entry of Pupils, 3 vols, 1805–1846, Secretary's Office, Guy's Hospital Medical School, London; Register of Physicians' Pupils, 1766–1840, and Register of Surgeons' Pupils, 1763–1845, Middlesex Hospital Archives, London; Register of Pupils and House Officers, 1756–1837, St. George's Hospital Medical School Library, London; [Surgeons' and Apothecaries'] Dressers, 1796–1833, Physicians' Pupils, 1729–1832, [Surgeons') Pupils, 1775–1799 and

cal" pupils, that is, those following the physicians or apothecaries on the wards, thus almost certainly underrepresents these students. Other sources confirm that there were surgeons', apothecaries', and physicians' pupils at the other general hospitals: the Westminster, St. George's, St. Bartholomew's, and the London.<sup>19</sup>

Between 1780 and 1820, students primarily sought training on the surgical wards of a large London hospital (see fig. 1). This is consistent with the idea that many young men who came to London had already served an apprenticeship, or a period of time with a country or city practitioner, and thus were familiar with the routine of medical practice. They looked for an intense exposure to the more extreme, diverse, and interesting surgical cases. The outbreak of war with France in 1793 contributed to the demand for medical men with some exposure to the diagnosis and treatment of wounds, broken bones, and associated surgical conditions.<sup>20</sup>

The hospital ward-walking pupils formed a ready audience for lecture courses that supplemented their experience and personal study. Figure 2 shows the number of courses advertised in the basic subjects between 1775 and 1820: anatomy (frequently entitled "anatomy and physiology" or "anatomy, physiology, and surgery"), practical anatomy (dissections with demonstrations), surgery, chemistry, materia medica, the principles and practice of medicine, and midwifery, often including the diseases of women and children. In addition, instructors offered courses in a variety of supplementary subjects, such as botany, experimental philosophy, physiology, diseases of the eyes or teeth, and clinical lectures.<sup>21</sup> The advertisements appeared in the London daily newspapers, principally the *Times*, the *Daily Advertiser*, and the *Morning Chronicle*, during the autumn season in sampled years.<sup>22</sup>

<sup>1799–1833,</sup> Register of [Surgeons' and Apothecaries'] Pupils, 1723–1775, and Dressers, 1750–1796, and Register of Surgeons' Pupils and Dressers Entering to the Medical Practice, 1788–1812, St. Thomas's Hospital Medical School Library, London. The one or two house surgeons resident at some of the hospitals each year have not been included among the surgeons' pupils. The data have been displayed in figure 1 as three-year moving averages, in order to emphasize the general trends, not the annual fluctuations, in enrollments.

<sup>&</sup>lt;sup>19</sup>John L. Thornton, "The Medical College from Its Origins to the End of the Nineteenth Century," in *The Royal Hospital of Saint Bartholomew's*, 1123–1973, ed. Victor C. Medvei and John L. Thornton (London: St. Bartholomew's Hospital, 1974), pp. 44–45; Joseph G. Humble and Peter Hansell, Westminster Hospital, 1716–1966 (London: Pitman Medical, 1966), pp. 27, 66; A. E. Clark-Kennedy, *The London: A Study in the Voluntary Hospital System*, 2 vols. (London: Pitman Medical, 1962), 1: 47, 90–92, 98–99, 103. Samuel Clossey, *The Existing Works*, ed. Morris Saffron (New York: New York Academy of Medicine, 1967), pp. xv, 15–16, 40–41, 62–63; Herbert Campbell Thomson, *The Story of Middlesex Hospital Medical School* (London: J. Murray, 1935), p. 13; William J. Erasmus Wilson, *The History of Middlesex Hospital* (London: John Churchill, 1845), p. 193. Proceedings of the Trustees of the Westminster Hospital, 22 Jan. 1783, 23 Nov. 1803, Greater London Record Office (GLRO) H2/WH/A1/21, 23. In addition to clinical instruction at the general hospitals, outpatient dispensaries and infirmaries offered observation of medical practice. Irvine Loudon, "The origins and growth of the dispensary movement," *Bull. Hist. Med.*, 1981, 55: 322–42.

<sup>&</sup>lt;sup>20</sup> Wall, History of the Surgeons' Company, pp. 108, 118, 124–25; Neal Cantlie, A History of the Army Medical Department, 2 vols. (Edinburgh: Churchill, Livingstone, 1974), 1: 180, 197–200; William N. Boog Watson, "Four monopolies and the surgeons of London and Edinburgh," J. Hist. Med., 1970, 25: 311–22.

<sup>&</sup>lt;sup>21</sup> The number of nonstandard courses ranged irregularly between zero and eight for the autumn season in the sampled years. They have not been included in the figures or tables because their shifting numbers distort the totals used for comparison over time.

<sup>&</sup>lt;sup>22</sup> The years sampled were: 1775, 1778, 1780, 1783, 1785, 1788, 1790, 1791, 1794, 1797, 1798, 1799, 1800, 1803, 1805, 1807, 1810, 1812, 1814, 1815, 1816, 1818, and 1820.

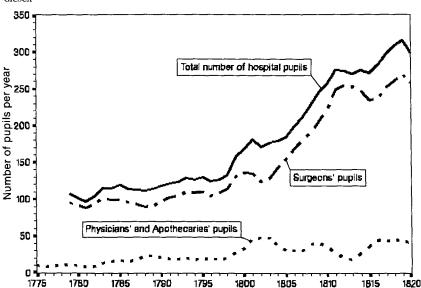


Fig. 1. Hospital Pupils in London, 1775-1820: St. Thomas's, St. George's, Guy's, and the Middlesex

NOTE: The data plotted are three-year moving averages of the annual numbers of pupils registering at the hospitals.

Lecturers published these notices to draw attention to their courses, to announce the specific time and place of the first lecture, and to inform students where they could obtain more information. In 1780, various medical men advertised a total of sixteen courses for the autumn season, fifteen in the standard subjects; in 1812, at the peak of paid course announcements, they offered fifty-seven, of which fifty-two were "core" courses; in 1820, they published notices for fifty-three courses, of which forty-seven were in the basic subjects. That the number of courses more than tripled between 1780 and 1814 demonstrates the success of voluntary education and corresponds to the overall increase in the number of registered pupils attending the hospitals, which rose from 91 in 1780 to 250 in 1814 (170 percent increase), and to 310 in 1820 (240 percent increase).

More significantly, the variety of courses offered reveals that London was not only strong in anatomy and surgery, subjects that gave the capital an international reputation, but was also a center for instruction in medicine, chemistry, and midwifery. The anatomical courses likely drew students to the metropolis, especially in conjunction with the opportunity to view surgical cases on the wards.<sup>23</sup> Yet there were as many (and in some years, more) lectures in medicine, chemistry, and materia medica offered to

<sup>&</sup>lt;sup>23</sup> Gelfand, "'Invite the Philosopher,'" pp. 136–40; Bell, "James Hutchinson, letters from an American student in London," pp. 23–24.

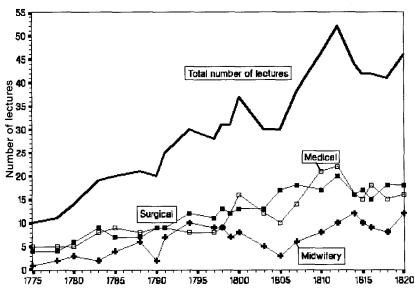


Fig. 2. London Medical, Surgical, and Midwifery Lectures Advertised in Autumn Newspapers, 1775–1820

NOTE: Only the number of lectures in the basic subjects is shown. "Surgical" includes all courses on anatomy, practical anatomy, and surgery; "medical" includes all lectures on chemistry, materia medica, and medicine.

pupils as there were in anatomy and surgery. Midwifery was a staple subject in a period when there was a growing demand for male attendants among middle-class families.<sup>24</sup> In 1800, for example, there were five courses of anatomy advertised, four courses in the principles of surgery, eight courses of midwifery, five courses in chemistry, and seven courses in the theory and practice of medicine. While the enrollments each lecturer attained is unknown, the simple model of open supply and demand suggests that many students coming to London sought a full education suitable for general practice, while usually walking only the surgical wards.

## THE ORGANIZATION: COURSE HOURS, HOSPITAL SCHOOLS, AND PARTNERSHIPS

A further analysis of the lecturers' advertisements reveals that the situation was not one of chaos or cutthroat competition. During the second half of the eighteenth century, a commonly accepted daily schedule evolved, tempering the "open" market. Under this informal and self-regulated scheme,

<sup>&</sup>lt;sup>24</sup>Jean Donnison, *Midwives and Medical Men: A History of Inter-Professional Rivalries and Women's Rights* (New York: Schocken Books, 1977), pp. 21–22, 35, 37, 42; Loudon, *Medical Care and the General Practitioner*, pp. 85–99.

medical men competed with their colleagues in the same field and generally did not trespass on the times allotted for courses in different subjects.

Table 1 offers a reconstruction of the medical lecturing day, including the usual hours devoted to attendance at the hospitals. Nearly all of the advertised courses fell into this pattern between 1790 and 1820. The specific hours were probably related to the traditional hours of busy practice among the specialties: surgeons who operated during the day preferred to offer courses at night, while the physicians' ability to make evening calls (social or professional) was preserved by their morning classes. This commonly accepted "timetable" lends further credence to the thesis that London pupils were taking a wide variety of courses in preparation for general practice. The ambitious but poor student could manage the entire curriculum in one to two years. Individual student accounts, moreover, confirm that pupils often chose a full curriculum. John Green Crosse, for example, who hoped to become a "pure" surgeon, took chemistry, medicine, and midwifery in addition to surgery and anatomy during his London studies from 1811 to 1813.

The numbers and the schedule give only one side of the reaction of London's medical men to market demand. At the same time that lecturers offered more courses in diverse fields, they developed a variety of ways to arrange their new enterprises. The London lecturers can generally be grouped into three categories according to their collaboration with colleagues and the location of their courses: first, men who gave courses alone, either at home or in rented or purchased rooms; second, hospital staff men who appropriated rooms or theaters within their charitable institutions; and third, medical men who formed partnerships, with others either in the same field or in different subjects, and held their courses at a house or private theater. Although there was a slight shift from independent lecturing to more complex hospital and extramural partnerships between 1780 and 1825, these categories existed concurrently (see table 2).26 In all cases, moreover, the physicians, surgeons, men-midwives, chemists, and apothecaries who offered instruction to the growing population of London medical pupils were private entrepreneurs. They organized and owned their lectures and preparations, charged the students directly for their fees, retained the opportunity to stop lecturing when they chose, and competed openly for their audiences.

The most flexible group of lecturers were those who offered courses independently, in their homes or rented rooms. This is the oldest type of

<sup>26</sup> On 1 October 1825, the *Lancet* published a report on *all* the medical schools and lecturers it could discover in London. This report includes a larger group than those who, by 1825, regularly advertised in the daily public newspapers. An analysis of these offerings has been provided for a comparison with those of the earlier years, which are derived from the more limited samples available in the daily newspapers.

<sup>&</sup>lt;sup>25</sup> Advice manuals for prospective students in the early nineteenth century support the assertion that medical men could (and should) take a full slate of courses in one to two years in London. See James Lucas, Candid Inquiry into the Education, Qualifications, and Offices of a Surgeon Apothecary (Bath, 1800), pp. 51–56; James Parkinson, The Hospital Pupil, or an Essay Intended to Facilitate the Study of Medicine and Surgery in Pour Letters (London, 1800), pp. 42–52, 61.

Table 1. The London Timetable, ca. 1800

Hours	Subjects
7:30/8:00-9:00 a.m.	Materia Medica/Practice of Medicine (on alternate days)
9:00-10:00 a.m.	Chemistry
10:00/10:30-11:00 A.M.	Midwifery and the Diseases of Women and Children
11:00 a.m1:00 p.m.	Hospital/Dispensary Rounds
1:00-2:00 P.M. or	Anatomy and Practical Anatomy
2:00-3:00 P.M.	,
[3:00-5:00 P.M.]	[Dissection]
5:00-6:00 P.M.	Midwifery and the Diseases of Women and Children
7:00-8:00 p.m. or	Principles of Surgery
8:00-9:00 P.M.	

lecturer, for the first anatomy teachers in the early decades of the eighteenth century worked by themselves.<sup>27</sup> They provided an accepted model for later men. By the 1780s these "solo" lecturers regularly gave half the courses available in London on anatomy, surgery, medicine, chemistry, and midwifery. While the number of courses given by independent lecturers declined, comprising only a scant one-third of those offered in the autumns of 1820 and 1825, the single lecturer remained a significant source of instruction, especially in midwifery, the theory of medicine, and the principles of surgery. One of the best-known examples of a man working alone is George Fordyce, physician to St. Thomas's Hospital, who lectured on medicine, chemistry, and materia medica at his home for over thirty years, from 1764 to 1802.<sup>28</sup> Many others, however, also sought to capitalize on their education or expertise by selling it to students. Among the more obscure lecturers were Dr. Andrew Marshall, who taught anatomy from 1790 to 1799; Dr. Henry Clough, a regular lecturer on midwifery from 1807 to 1820; Anthony Carlisle, surgeon to the Westminster Hospital, who lectured on surgery at his home from 1806 until at least 1814; and Dr. George Leman Tuthill, physician to the Westminster Hospital from 1813, who began lecturing at his home on physic and chemistry in 1810.<sup>29</sup>

In the mid-eighteenth century, a few surgeons began to give their lectures on anatomy and surgery in rooms within the hospitals where they served as voluntary practitioners. John Girle at St. Thomas's, Samuel Sharp at Guy's, and John Harrison at the London are among the first who are known to have linked the potential audience of hospital pupils with didactic instruction close to the wards.<sup>30</sup> By the mid-1780s, staff physicians and sur-

<sup>&</sup>lt;sup>27</sup> Peachey, *Memoir*; pp. 8, 12, 34, 37.

<sup>&</sup>lt;sup>28</sup> William Munk, comp., *The Roll of the Royal College of Physicians of London*, 2d ed., 3 vols. (London: By the College, 1878), 2: 373–74; Newman, "Hospital as a Teaching Center," p. 196; John K. Crellin, "Chemistry and eighteenth-century British medical education," *Clio Medica*, 1974, 9: 9–21.

<sup>&</sup>lt;sup>28</sup> For examples of notices of these lecturers' courses, see the *Daily Advertiser*, 19 Jan. 1790; *Times*, 16 Sept. 1799, 18 Sept. 1807, 3 Oct. 1814, 28 Sept. 1818, 16 Sept. 1820.

<sup>&</sup>lt;sup>30</sup> Frederick G. Parsons, *The History of St. Thomas's Hospital*, 3 vols. (London: Methuen, 1934), 2: 184; Kay, *Diary*, pp. 69–88; Clark-Kennedy, *The London*, 1: 103.

	1780*	1800*	1814*	1820*	1825**
Hospital lectures	3 (20%)	17 (45%)	17 (39%)	23 (49%)	30 (34%)
Non-hospital partnerships	4 (27%)	5 (13%)	10 (23%)	10 (21%)	30 (34%)
Subtotal	7 (47%)	22 (58%)	27 (61%)	33 (70%)	60 (68%)
Independent lectures	8 (53%)	16 (42%)	17 (39%)	14 (30%)	28 (32%)
Total	15	38	44	47	88

Table 2. Organization of Medical Lectures in London, 1780–1825

NOTE: The data show the number of courses in the basic curriculum (medicine, materia medica, chemistry, anatomy, practical anatomy, surgery, and midwifery) beginning in the autumn session.

geons at Guy's, St. Thomas's, St. Bartholomew's, and the London, many of whom had previously developed extramural courses in a variety of subjects, all managed to obtain the use either of lecture theaters or meeting rooms on hospital grounds.<sup>31</sup>

These permanent facilities clearly offered more stability than lecturing in homes and extramural rooms. More important, by the 1790s the hospital lecturers were the first to offer the attraction of a complete medical curriculum, from anatomy and surgery to medicine, chemistry, and midwifery at one convenient location—only a short walk from the hospitals' wards. That the staff physicians and surgeons crossed paths within the hospitals more than likely contributed to the development of cooperation, among those interested in teaching, to give courses across the medical spectrum at mutually convenient and agreed-upon times. As new men replaced retiring lecturers, the staff members' collaboration encouraged the development of an institutional reputation rather than one dependent upon the lecturers' individual qualities. The Guy's 1807 announcement that the hospital lectures, together with courses at St. Thomas's, formed a "school" illustrates the gradual development of a collective identity, a moving away from the situation characterized by the individual advertisements of Henry Cline (of St. Thomas's), William Saunders (of Guy's), and William Keir (of Guy's) during the early 1780s.<sup>32</sup>

In sharp contrast to the broad curricula that emerged at Guy's, St. Thomas's, St. Bartholomew's, and the London, at the three other general hospitals, the Westminster, St. George's, and the Middlesex, the staff failed to

<sup>\*</sup> Compiled from newspaper advertisements in London daily papers.

<sup>\*\*</sup> Compiled from the report on all known medical schools and lecturers in the *Lancet*, 1 October 1825.

<sup>&</sup>lt;sup>31</sup> Hector C. Cameron, Mr. Guy's Hospital, 1726–1948 (London: Longmans, Green, 1954), pp. 89–90; Norman Moore, The History of St. Bartholomew's Hospital, 2 vols. (London: C. Arthur Pearson, 1918), 2: 376, 380; Clark-Kennedy, The London, 1: 165–67; Parsons, History of St. Thomas's, 3: 39–40; Thornton, "Medical College," pp. 48–50. For examples of advertisements, see Times, 9 Sept. 1791, 12 and 22 Sept. 1794; Daily Advertiser, 7 Sept. 1780, 26 Sept. 1783.

<sup>&</sup>lt;sup>32</sup> See, for example, *Daily Advertiser*, 17 and 21 Sept. 1780; 22 Sept. 1783; 23 and 26 Sept. 1785.

create a tradition of lecturing on the hospital grounds. Occasional lectures were offered at the Middlesex, but until the late 1830s and 1840s, none of these three institutions had formal lecturing theaters or a complete series of medical, surgical, and midwifery courses. The reasons for and consequences of this apparent myopia to medical interests are discussed below. As suggested by the mention, above, of Carlisle and Tuthill, two Westminster staff men who lectured outside the hospital, simple lack of initiative by the charities' physicians and surgeons was not the primary cause.<sup>33</sup> Several hospital men, from the dynamic and increasingly famous John Hunter and his protégé Everard Home (of St. George's) to lesser-known figures such as Dr. George Pearson, Benjamin Brodie (of St. George's), Dr. John Latham (of the Middlesex and later St. Bartholomew's), Dr. William Austin (of St. Bartholomew's), and Dr. Thomas Bradley (of the Westminster), gave lectures on surgical and medical topics at their homes or in extramural rooms while serving their institutions, swelling the ranks of independent teachers.<sup>34</sup>

Between 1780 and 1820, while independent lecturers provided a significant proportion of the courses given in London and staff members at four of the London general hospitals organized nascent "schools," other medical men formed extramural partnerships in order to compete more effectively in the teaching market. Several of these collaborations were between lecturers in the same subjects. Medical men teaching anatomy and midwifery especially tended to share the burden of lecturing in order to provide multiple lecturing sites or hours and to pool their resources of collections of preparations and rented or purchased rooms. The most well known example here, of course, is William Hunter's Theatre of Anatomy on Great Windmill Street, established in 1767–68.35 Hunter owned the premises and lectured with a series of assistants and partners, all of whom taught only anatomy. This tradition continued when the theater passed to William Cruikshank (1783), James Wilson (1800), and Charles Bell (1812). Among midwifery lecturers, Dr. William Osborn and Dr. Thomas Denman collaborated for at least ten years at Denman's home on Queen Street, Golden Square. From about 1798 until 1807, Dr. John Squire advertised extramural courses with Dr. Richard Dennison, who also lectured on midwifery at the London Hospital.<sup>36</sup>

In response to developments at Guy's, St. Thomas's, St. Bartholomew's, and the London, a few independent lecturers sought to cover different subjects at the same extramural location. For example, beginning in 1810 James Wilson and, from 1812, Charles Bell, proprietors of Hunter's Great Windmill

<sup>&</sup>lt;sup>33</sup> For an example of this assumption, in the case of St. George's, see Leo Zimmerman, "Surgeons and the rise of clinical teaching in England," *Bull. Hist. Med.*, 1963, 37: 175.

<sup>&</sup>lt;sup>34</sup> Daily Advertiser, 15 Sept. 1780; New London Med. J., 1792, 1: 422; Times, 29 Sept. 1791; 14 and 15 Sept., 2 Oct. 1797; 2 Oct. 1799; 4 Oct. 1805.

<sup>&</sup>lt;sup>35</sup> Thomson, "Great Windmill Street school," pp. 380–85; Cope, "Private Medical Schools," p. 92.

<sup>\*</sup>London Evening Post, 19–22 Sept. 1772; Public Advertiser, 19 Sept. 1778; Daily Advertiser, 17 Sept. 1780; Morning Chronicle, 17 Sept. 1798; Times, 13 Sept. 1800, 15 Sept. 1807.

Street theater, collaborated with several others, including Benjamin Brodie, Dr. John Cooke, Dr. Peter Mark Roget, and the chemist William Thomas Brande, to expand the scope of their theater from anatomy to all the core medical subjects except midwifery. In 1814, however, the medical group split off to a location at 42 Great Windmill Street, where a series of lecturers created the distinct but compatible "Medical, Chirurgical, and Chemical School."<sup>37</sup> The short-lived enterprise at the Theatre of Anatomy was only one of several similar partnerships, in which men with complementary skills recognized the demand for a cross-disciplinary curriculum.<sup>38</sup>

#### LONDON'S GEOGRAPHY, HOSPITALS, AND MEDICAL LECTURING

Despite their obvious appeal, the hospital schools emerging at Guy's, St. Thomas's, St. Bartholomew's, and the London by no means dominated medical teaching in the metropolis. Many students clearly preferred choosing from among a range of independent lecturers and hospital wards, constructing their own tailored curricula. When mapping the addresses that the lecturers advertised for their courses, furthermore, a significant contrast emerges between the areas of London where successful hospital courses were established by the 1790s and those where no lectures were given within hospital walls. Between the 1790s and the early 1820s, independent and extramural lecturing particularly flourished in the western parishes of greater London, those served by the Westminster, St. George's, and the Middlesex hospitals. (See figure 3 for the location of all the core courses advertised in the autumn of 1814.) In the mid-1820s, however, perhaps partly in response to pressure on overcrowded facilities, especially at Guy's, more independent entrepreneurs offered courses within the neighborhoods of Guy's, St. Thomas's, and St. Bartholomew's.

The geographic distribution of lecturing among the regions associated with the seven general hospitals for the years 1780, 1814, and 1825 is summarized in table 3. In the City, Southwark, and Whitechapel, hospital lecturers cornered the market after 1780, while in the West End, particularly in the region from Soho extending northwest to newly developed squares and residences, extramural teachers maintained more than 90 percent of the courses offered during this period. This disjunction resulted from a complex interaction of professional, social, and institutional concerns: the early success of private theaters, such as William Hunter's, which had arisen in the West End during the 1760s and 1770s; the shift of fashionable society to the

<sup>&</sup>lt;sup>37</sup> Thomson, "Great Windmill Street school," does not mention the medical lecturing developed at Great Windmill Street, while Cope's account in "Private Medical Schools" implies a long-term organization. See the *Times*, 21 and 22 Sept. 1810; 21 Sept. 1812; 7 and 30 Sept. 1814; 15 Sept. 1815.

<sup>&</sup>lt;sup>38</sup> Among these partnerships were, for example, the collaboration of Dr. Robert Hooper and Dr. Joseph Ager with the anatomy lecturer Joshua Brookes (*Times*, 16 Sept. 1814), and Edward Grainger's "Theatre of Anatomy and Medicine" established at Webb Street with Mr. Richard Phillips, Dr. John Armstrong, Dr. John Elliotson, and Dr. David Davis (*Times*, 18 Sept. 1822).

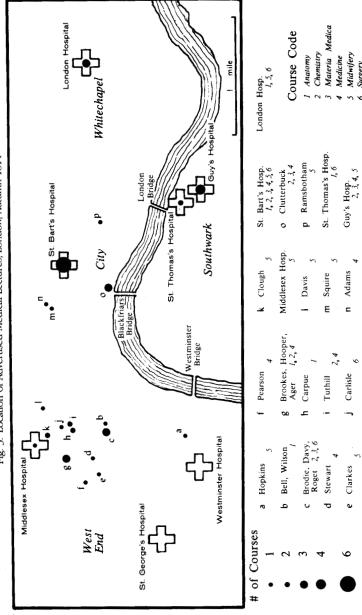


Fig. 3. Location of Advertised Medical Lectures, London, Autumn 1814

Table 3. Geographic Distribution of Medical Lectures, 1780, 1814, 1825

			,		į	
	1	1780*	1	1814*	18	1825**
	Hospital	Nonhospital	Hospital	Nonhospital	Hospital	Nonhospital
Central/Eastern						
City (St. Barts)		ĸ	9	9	7	7
Southwark (Guy's-St. Thomas's)	8	1	7		14	∞
Whitechapel (London)			4	,	7	
Subtotal	3 (33%)	(%29) 9	17 (74%)	6 (26%)	28 (65%)	15 (35%)
Western		(%001)	1 (5%)	20 (95%)	3 (7%)	42 (93%)
Total	3 (20%)	12 (80%)	18 (40%)	26 (60%)	31 (35%)	57 (65%)

Norre: The data show the number of courses in the basic curriculum (medicine, materia medica, chemistry, anatomy, practical anatomy, surgery, and midwifery) beginning in the autumn session.

\*Compiled from newspaper advertisements in London daily papers.
\*\*Compiled from the report on all known medical schools and lecturers in the *Lancet*, 1 October 1825.

West End in the eighteenth century; and internal developments within the London hospitals that fostered or discouraged in-house lectures.

The demographic shift that followed London's expansion in the eighteenth and early nineteenth centuries generally resulted in the homes, townhouses, and shops of the "gentle" middle classes, the gentry, and the urban aristocracy being located in the western parishes. Spreading outward from Westminster, the Houses of Parliament, and royal palaces, the new streets and squares attracted successful professional men away from the City, the docks, and the manufacturing areas, extending London's conurbation eastward. While a strict polarization of wealth and poverty did not result, "respectable" addresses migrated to the West End, followed by upwardly mobile physicians, surgeons, and men-midwives who may have needed to supplement their income from practice with teaching. The concentration of independent lecturers in the western parishes, whether at home or in separate theaters, probably encouraged hospital men to remain extramural and at the same time discouraged, through local competition, those hoping to establish schools at their institutions.

The disparity between the organization of medical education in the eastern end and the western end of London may also be attributed to differences between the various hospitals' administrations, their governors, and their social and economic assumptions, which can as yet be only suggestively outlined. All of these eighteenth-century hospitals were voluntary charities, dependent upon lay governors for administration. St. Thomas's, Guy's, and St. Bartholomew's, however, were endowed, and hence had a relatively secure financial basis, while the London (like the three western hospitals) depended upon annual subscriptions from a very large pool of governors. The administrations of the endowed hospitals were fairly stable, because they were run by a limited number of governors, who elected their successors. In contrast, the West End hospitals drew their committees from the large, shifting pool of those who paid an annual contribution for the privilege of sending the "deserving" poor for care. With the security of their endowed funds, governors at St. Thomas's, Guy's, and St. Bartholo-

<sup>&</sup>lt;sup>39</sup> George Rudé, Hanoverian London, 1714–1808 (London: Secker and Warburg, 1971), chap. 1.

<sup>&</sup>lt;sup>40</sup> For eighteenth-century hospitals in general, see Brian Abel Smith, *The Hospitals*, 1800–1948: A Study of Social Administration in England and Wales (London: Heinemann, 1964); John Woodward, *To Do the Sick No Harm: A Study of the British Voluntary System to 1875* (London: Rouledge and Kegan Paul, 1974); David Edward Owen, English Philanthropy, 1660–1960 (Cambridge, Massachusetts: Belknap Press, Harvard University Press, 1966). For particular studies, see the hospitals' histories previously cited.

<sup>&</sup>lt;sup>41</sup>A preliminary analysis of the governors at St. Thomas's suggests that this charity was dominated by City men, such as merchants, bankers, and manufacturers, several of whom were involved in the City of London's local government. As a group, these governors may well have been more sympathetic to the upgrading of medical training from apprenticeship to an unregulated medical education, complete with "academic" lectures, than those who served the West End hospitals. An initial examination of the governors of St. George's reveals a high proportion of men from the gentry, the aristocracy, professional occupations, and Members of Parliament, who may have held to the importance of the distinction between a proper university education and apprenticeship (Lawrence, "Science and Medicine at the London Hospitals," chap. 2). The social backgrounds of the hospitals' governors and the governors' influence on education within the charities is my ongoing research project.

mew's were distanced from the public pressure that subtly restricted the use of charity facilities for other purposes, particularly the dissection necessary for anatomy teaching, at the West End hospitals. At St. Geroge's, the Westminster, and the Middlesex, both medical and lay governors were probably quite concerned not to endanger the volatile annual income provided by the charitable interests of the West End inhabitants by implementing potentially unpopular practices.<sup>42</sup>

Finally, in an apparent paradox, it was precisely in the hospitals where the staff had the most direct influence that teaching failed to develop. At St. Thomas's, Guy's, St. Bartholomew's, and the London, where ongoing courses were established, none of the physicians and surgeons could simultaneously hold a staff position and serve as a governor. At the three West End hospitals, however, staff physicians and surgeons could be governors, and, as such, were prominent in the committees that actually ran these hospitals, particularly at St. George's and the Westminster. 43 By not allowing current medical staff a direct role in hospital administration, the four eastern hospitals avoided much of the public infighting that occurred at the West End hospitals, as shown in their Boards of Governors minutes. What scant evidence remains suggests that staff at the four eastern institutions obtained permission to lecture at their hospitals through judicious lobbying among the governors.<sup>44</sup> At the West End hospitals, however, the significant number of medical men—especially physicians—at the board meetings appears to have made consensus difficult, with some staff men perhaps jealously protecting their already established extramural courses or deliberately discouraging the proliferation of non-university instruction.<sup>45</sup>

42 See the Minutes of the Board of Governors, St. George's, 11 Nov. 1829, St. George's Hospital Archives, for an explicit reference forbidding dissections at the hospital. Guenter Risse, in his Hospital Life in Enlightenment Scotland: Care and Teaching at the Royal Infirmary of Edinburgh ([Cambridge: Cambridge University Press, 1986], pp. 249–52), has detailed the delicate balance among hospital governors, public image, professors, and "using" patients for clinical instruction.

<sup>43</sup> This point has been generally overlooked for eighteenth-century hospitals. See the manuscript minutes of the hospitals: Proceedings of the Trustees of the Westminster Hospital, 1776–1815 (GLRO H2/WH/A1/19–24); Minutes of the Board of Governors, St. George's Hospital Archives. At the Middlesex, a formal resolution of 1752 stated that the medical officers could no longer act as governors, yet in the 1834 report of the House of Commons Select Committee on Medical Education, it was noted that "all the physicians and surgeons are governors of the hospital, in consequence of being subscribers." When the staff resumed their governors' privileges has not yet been precisely determined, although the records suggest that medical men had an active role in hospital administration throughout the late eighteenth century. Wilson, History of Middlesex Hospital, pp. 16, 30, 53–55, 62, 114.

<sup>44</sup> The best example of dedicated persuasion is that of William Blizard and Dr. James Maddocks of the London Hospital. See their Of the Expediency and Utility of Teaching the Several Branches of Physic and Surgery, By Lectures at the London Hospital (London, 1783); Clark-Kennedy, The London, 1: 165–67.

While too complex to be detailed here, the furor over teaching at St. George's supports this interpretation, particularly in the controversy surrounding John Hunter. See Peachey, *Memoir*, pp. 204–22, 272–303. Board of Governors Minutes, St. George's, 17 April, 29 May, 14 June 1793. At this time, Dr. George Pearson, staff physician, had already established his own lectures on medicine and chemistry at his "Laboratory" on Wilcomb Street (*New London Med. J.*, 1792, 1: 422 (advertisement); Lawrence, "Science and Medicine at the London Hospitals," pp. 369–71). Furthermore, several of the staff physicians and surgeons at the Westminster Hospital attempted, in 1794, to set up a nearly complete curriculum of medical and surgical lectures at the hospital (*Times*, 17 and 24 Sept. 1794). Yet this effort failed, with no mention in the hospital's minutes, and the principal actors (Carlisle, Dr. Bradley, and Dr. Crichton) went on to lecture independently.

Lacking traditions of hospital lectures, unified or cooperative staff, and separation of their physicians and surgeons from their lay administrations, the western hospitals developed only ward-walking for London pupils. Independent, extramural teachers in anatomy, surgery, medicine, chemistry, materia medica, and midwifery, including several members of the medical staffs of these hospitals, provided the "academic" component of a wellrounded medical education sought by the pupils who frequented the western wards. The extramural courses and theaters in the West End provided precisely what was available in the more obviously organized hospital schools at the four eastern hospitals. At the same time, they offered students immense flexibility. The pupils decided which teachers they wished to pay to hear while walking the wards at St. George's, the Westminster, or the Middlesex, and medical men with initiative flocked to compete for the students' pounds and pence. This system, despite its superficial disorganization, was a success for several decades. Only in the 1830s and 1840s were medical lecturers "brought home" to the West End hospitals. Even then, extramural teachers held on until later licensing requirements, hospital competition, and the granting of medical degrees from London University gradually forced them to close their doors.46

#### THE CORPORATIONS, LICENSING, AND MEDICAL TEACHING: 1808-1820

The number of students signing up for ward-walking at the London hospitals, together with the increasing number of courses offered across the capital, provides a significant backdrop to the medical reform movements of the early nineteenth century. In general, the diverse provincial and urban reformers proposing changes in professional organization and standards hoped to improve medical care by upgrading educational requirements, forcing medical men throughout the country to be certified by the licensing corporations, and reducing the competition from unqualified practitioners. The story of the successes and failures of this early movement has been detailed elsewhere.<sup>47</sup> The reformers' outspoken criticism of uneducated practitioners has usually been taken at face value, together with the implication that opportunities for medical education outside an apprenticeship (or

<sup>6</sup> Cope, "Private Medical Schools"; Newman, Evolution of Medical Education: and A. E. Clark-Kennedy, "The London Hospitals and the Rise of the University," in Poynter, ed., Evolution of Medical Education in Britain, pp. 111–20, offer overviews of this change. For the later growth of lectures at the western hospitals, see Humble and Hansell, Westminster Hospital; Thomson, Story of Middlesex Hospital Medical School, J. Blomfield, St. George's, 1733–1933 (London: Medici Society, 1933), pp. 49–51; R. R. James, The School of Anatomy and Medicine Adjoining St. George's Hospital (London: George Pullman and Sons, 1928).

<sup>47</sup> See Holloway, "Apothecaries' Act"; Newman, Evolution of Medical Education, pp. 56–81, 135–93; Clark, History of the Royal College of Physicians, 2: 614–50; Wall, History of the Worshipful Society of Apothecaries, pp. 192–209; M. Jeanne Peterson, The Medical Profession in Mid-Victorian London (Berkeley and Los Angeles: University of California Press, 1978), pp. 16–39. Loudon has recently offered a re-evaluation of the Apothecaries' Act which supports the arguments offered here: Loudon, Medical Care and the General Practitioner, pp. 129–70.

the rarer university degree) were sorely lacking for the common medical man.

From this perspective, the Apothecaries' Act of 1815, albeit a flawed compromise between reformers and the licensing corporations, has appeared as "a turning point in medical education." 48 The Act stipulated that all practitioners who dispensed medicines in England and Wales henceforth had to be certified by the London Society of Apothecaries. More important, the Act allowed the Apothecaries' Court of Examiners to require supplementary educational studies for its applicants, in addition to apprenticeship. The Court, beginning in August 1815, demanded proof that students had observed medical practice at a hospital, infirmary, or dispensary for six months, as well as certificates showing that they had attended two courses of lectures in anatomy and physiology, two in the theory and practice of medicine, one in chemistry, and one in materia medica.<sup>49</sup> Instead of dramatically increasing—a likely response if these criteria were indeed innovative —the number of lectures advertised by London medical men, particularly in medicine, chemistry, and materia medica, remained fairly stable between 1815 and 1820 (see fig. 2).

Furthermore, during the period of war, accusation, and debate before 1815, the new (1800) Royal College of Surgeons of London had also begun to require certificates of lecture and hospital attendance from its applicants. As the corporate body examining entrants to medical positions in the military, as well as to London practice via its diploma, in 1809–10 the College quietly started to establish educational standards that needed to be fulfilled before a young man could be examined. The Surgeons refused to list specific subjects, however, until 1811, when they demanded certificates of courses in anatomy, physiology, and surgery, attendance at dissections, and a period in a hospital. In 1819, the College refined its expectations, demanding two courses in anatomy, two in dissection, and one in surgery, and restricting hospital practice to large institutions in major British cities. The Royal College of Surgeons went on, in the 1820s, to attempt to extend

<sup>&</sup>lt;sup>48</sup> Poynter, "Medical Education," p. 240. See the references listed in n. 4. A telling example of the assumption that medical men simply responded to licensing requirements appears in Cameron, *Mr. Guy's Hospital*, p. 161. Cameron details an 1816 advertisement from Guy's, listing the numerous medical courses offered and commenting: "The date [1816] is interesting; immediately after the Society of Apothecaries had made known its demands under the new Act." The identical advertisement, however, had appeared in 1812 (*Times*, 8 Sept. 1812), when reform was a gleam in radical eyes.

<sup>&</sup>lt;sup>49</sup> Newman, *Evolution of Medical Education*, p. 74; Society of Apothecaries' Court of Examiners' Entry Book, "Qualifications of Candidates," printed notice 31 July 1815, MS 8241, vol. 1 (1815–19), The Guildhall, London.

<sup>&</sup>lt;sup>50</sup> Minutes and Resolutions of the Court of Examiners, vol. 1, 26 Apr. 1809, 7 Dec., 15 June 1810, Royal College of Surgeons, London. Watson, "Four monopolies and the surgeons of London and Edinburgh," pp. 311–22. The accounts of educational requirements given in Zachary Cope, *The Royal College of Surgeons of England: A History* (London: Anthony Blond, 1959), p. 43, and Cecil Wall, *History of the Surgeons' Company*, p. 86, are incomplete. See Lawrence, "Science and Medicine at the London Hospitals," pp. 261–67.

<sup>&</sup>lt;sup>51</sup> Minutes and Resolutions of the Court of Examiners, vol. 1, 4 Oct. 1811, Royal College of Surgeons. Cope, *Royal College of Surgeons*, p. 43. In 1813, the College formally required one year's hospital attendance: Minutes, 15 Jan. 1813.

its influence over surgical education by further limiting the certificates it would accept to "recognized" lecturers, especially those at the hospitals, arousing much controversy and dissension.<sup>52</sup> During this era of increasing regulation, particularly between 1809 and 1820, the number of courses offered in anatomy, practical anatomy, and surgery varied little. Even the numbers of registered surgical pupils in the hospitals reflect modest growth, not the takeoff expected if students were suddenly forced into the wards.

The Apothecaries' and Surgeons' new licensing requirements thus made little immediate impact on the volume or type of medical education in London. While aspiring medical men may have pursued their studies elsewhere, it appears quite likely that London's existing lecturers absorbed any rise in demands for course certificates. More significantly, the Apothecaries' Act and, to a lesser extent, the Royal College of Surgeons' early requirements, both of which touched the majority of general practitioners, clearly transformed what many students had done and were doing voluntarily into universal obligations. These corporations codified the educational expectations and opportunities that had developed in eighteenth-century London. By asking for course certificates, moreover, without attempting (before 1824) to impose regulations and standards on those who lectured, they implicitly supported and encouraged the system that made the implementation of their requirements possible: the open market and private enterprise.

#### CONCLUSION

The success and vitality of medical education in London under an unregulated, decentralized system of private enterprise between 1780 and 1820 shows that London offered what many universities did, without the expense and formality of degree regulations. One of the system's strengths was its flexibility, which appealed to students preparing for a variety of careers, from the young man en route to military practice to the aspiring physician from Oxford or Cambridge looking for practical training and supplementary lectures. The prime candidate for a few years in London, however, was the student aiming for general practice, whether he called himself surgeon, apothecary, or surgeon-apothecary.

Within this pluralistic, competitive atmosphere, a generally accepted timetable emerged for lectures in various fields. This ordered day under-

<sup>&</sup>lt;sup>52</sup> Cope, Royal College of Surgeons, pp. 43–49. Minutes and Resolutions of the Court of Examiners, vol. 1, 25 Feb. 1819, 5 Apr. 1823, 19 Mar. 1824, Royal College of Surgeons. The drastic resolutions of 1824 were the first openly to "certify" lecturers. They limited "suitable" anatomy teachers to professors at the Universities of Dublin, Edinburgh, Glasgow, and Aberdeen or "from Persons teaching in a School recognized by the Medical Establishment of one of the admitted Hospitals; or from Persons being Physicians and Surgeons to any such Hospitals." The outcry over this decision led to its demise between 1826 and 1829.

scores the fact that London was a vital center for medical as well as surgical education from the late eighteenth century. Lecturers at four of London's general hospitals offered convenience to the wards for those pressed for time; others seem to have found the choice among independent teachers, alone or in partnership, a particularly suitable complement to ward-walking at the West End hospitals. The English capital appears, through the murky light of the daily press and scattered institutional records, as a vibrant arena for medical experience and instruction, rivaling the hospitals and universities of Paris and Edinburgh. The courses required by the Royal College of Surgeons from 1809–10 and those demanded by the Examiners at Apothecaries' Hall under the provisions of their 1815 Act built upon what was not only readily available in London but what was also already chosen by students responding to an open market of educational entrepreneurs, a growing demand for educated practitioners, and a thriving and exciting metropolis.