See discussions, stats, and author profiles for this publication at: https://www.researchgate.net/publication/265207566

Scots in London Medicine in the Early Eighteenth Century

Chapter · January 2010

	READS		
	120		
rrini			
ate University			
ATIONS 752 CITATIONS			
EII E			
rs of this publication are also working on these related projects.			
ossils, and nationalism in Early Modern Europe View project			
F		Trini ate University ATIONS 752 CITATIONS THE s of this publication are also working on these related projects:	120 rrini ate University ations 752 citations rLE s of this publication are also working on these related projects:

Skeletons and anatomy in early modern Europe View project

Scots in London in the Eighteenth Century

Edited by Stana Nenadic



Lewisburg Bucknell University Press

© 2010 by Rosemont Publishing & Printing Corp.

All rights reserved. Authorization to photocopy items for internal or personal use, or the internal or personal use of specific clients, is granted by the copyright owner, provided that a base fee of \$10.00, plus eight cents per page, per copy is paid directly to the Copyright Clearance Center, 222 Rosewood Drive, Danvers, Massachusetts 01923. [0-8387-5653-9/10 \$10.00 + 8¢ pp, pc.]

> Associated University Presses 2010 Eastpark Boulevard Cranbury, NJ 08512

The paper used in this publication meets the requirements of the American National Standard for Permanence of Paper for Printed Library Materials Z39.48-1984.

Library of Congress Cataloging-in-Publication Data

Scots in London in the eighteenth century / edited by Stana Nenadic. p. cm.-(Studies in eighteenth-century Scotland)

Includes bibliographical references and index.

ISBN 978-0-8387-5653-9 (alk. paper)

1. Scots—England—London—History—18th century. 2. Scots— England-London-Intellectual life. 3. London (England)-Emigration and immigration. 4. Scotland-Emigration and immigration. 5. England—Civilization—Scottish influences. I. Nenadic, Stana. II. Title. III. Series.

DA676.9.S36S36 2010 305.891'63042109033-dc22

2009020442

PRINTED IN THE UNITED STATES OF AMERICA

Scots in London Medicine in the Early Eighteenth Century Anita Guerrini

I dined today with Dr Cockburn, but will not do so again in haste, he has generally such a parcel of Scots with him. (Swift to Stella, 16 January 1710/11)¹

When william hunter moved to london in 1740, he followed a lengthening line of Scots medical men. Between the Restoration and that date, many physicians and surgeons left Scotland for the south, and the vast majority never returned. Their motives for emigration varied. Earlier in the period, religion was high on the list, but it became less important in the eighteenth century. Money and patronage, and the lack of these in Scotland, were the main motivations. Many of these medical men landed in the provinces, but the most ambitious went to London, aiming to succeed in its competitive medical marketplace. Yet while they sought to merge into the London medical world, their social networks and even their patrons continued to be largely Scottish, with intersecting circles around religion, politics, and kinship. Indeed, as time went on and more Scots came to London, their identity as Scots continued to supersede all other connections. This was the social capital they developed and which William Hunter, for example, used to such effect.

This essay traces the careers of some of these men, with particular attention to the three Douglas brothers, James, John, and George, whose careers stretched from the 1690s to the 1740s, forming a bridge between the earlier émigrés and William Hunter, James Douglas's protégé, as well as between physicians and surgeons. Much emigration occurred in the 1690s and early 1700s, with another wave in the 1720s and 30s. While the Scots relied on social networks, their circumstances, as well as their lack of training in classical medical theory, also led both physicians and surgeons to develop a distinctively entrepreneurial and empirical style of medical practice.

The political and social consequences of the Restoration and the Glorious Revolution in Scotland motivated certain groups to leave. Presbyterians lost official status as the Church of Scotland in 1660, but regained this status in 1689 and imposed severe political and religious restrictions on the Scottish Episcopalians, judging them, probably correctly, to be largely Jacobites. In the 1690s, the disenfranchisement of Episcopalian intellectuals led many of them to migrate south; although Scottish Episcopalians were not identical in beliefs to Anglicans, they were not actively persecuted in England. The economy provided additional motivation: Scotland's cities, particularly Edinburgh, blossomed culturally at the end of the seventeenth century, but the nation remained poor and economically backward.² The outbreak of famine in the 1690s only confirmed this backwardness, and the failure of the Darien scheme at the end of the decade bankrupted many, for investors came from all levels of society. This failure also underlined Scotland's dependence on England.³ The union of parliaments in 1707 prompted additional medical men to follow their political patrons to London. Although physicians and surgeons followed somewhat different paths, the boundaries between Scots practitioners were less fixed than in England, and, like James Douglas, many a surgeon became, or at least took the title of, "doctor."

Physicians certainly constituted the most visible group of emigrants. A burgeoning confidence among Scots physicians in their cultural status as well as their professional identity came to fruition in the foundation of the Royal College of Physicians of Edinburgh in 1681. At long last, its founders declared, Edinburgh physicians could proclaim themselves the equals in every way of their colleagues in London.⁴ The nucleus of the college was a scientific discussion group organized by the Scottish virtuoso Robert Sibbald and modeled on the Royal Society.⁵ Since Scotland had no medical faculty worthy of the name, these men had studied on the continent, where medical students meandered through universities in the Netherlands, France, and Italy, often not enrolling anywhere but sampling courses in Leiden, Utrecht, Paris, and Padua, among other towns. Over half of the original fellows of the College had studied at the University of Leiden, a haven of the new natural philosophy. This peripatetic education gave the Scots excellent training in anatomy and natural philosophy but less exposure to the classical medical theory of an Oxford or Cambridge MD. In their social origins, these "middling men"—sons of clergymen or merchants, or younger scions of the gentry—closely resembled their English counternarts.⁶

But the Edinburgh College of Physicians remained a small and exclusive group and London retained its allure for those who sought a wider stage. A few migrant Scots had earned fame earlier in the seventeenth century: John Craig (d. ?1620), first physician to James VI, followed him to England and became the first Scots fellow of the London College of Physicians, and the physician-chemist William Davisson (ca. 1593-1669) lectured at the Jardin du Roi in Paris in the 1640s, and became a physician to Louis XIII.7 Two physicians who migrated to London in the 1680s, however, opened the door for many others and marked out the particular paths available to Scots. A certain mythology grew up around them, emphasizing their superior skills or wisdom over other practitioners, but much of their success was owed to chance or circumstance. John Hutton (d. 1712) rose from herd-boy to royal physician. He had been educated at the University of Padua through the good graces of the Episcopalian minister of his native Caerlaverock in Dumfriesshire. In the Netherlands by the 1680s, he gained the attention of William of Orange when he helped his wife, the Princess Mary Stuart, after a fall from her horse. William employed him as a spy and then in 1688 named him Physician-General to the army of invasion. Thereafter his career was closely associated with the army and the value of the military to a medical career was not lost on his fellow Scots. Hutton also accrued the other titles of a successful London physician, including Fellow of the Royal College of Physicians of London, Fellow of the Royal Society, and MD from Oxford, and died in 1712 a wealthy man.8

David Hamilton (1663–1721) followed another path, which was equally emulated, that of the man-midwife, an emerging specialization. Hamilton, born in Lanarkshire, was the youngest son of the Laird of Boggs and Dalzell. Philip Roberts, the editor of his diary, describes Hamilton as a "dissenter," but it's not clear what this means. In a letter of 1711, Hamilton complained he was "paying a hundred pound a year for 2 to preach in my own house," but his 1701 work *The Inward Testimony of the Spirit*

of Christ to his Outward Revelation described the kind of "inward religion" that was much emphasized by Scots Episcopalians such as Henry Scougal.9 Hamilton matriculated at the University of Leiden in 1683 but took his MD from the University of Reims in France in 1686. His thesis, "De passione hysterica," indicates his early interest in female maladies.¹⁰ Reims was one of several French universities that offered different classes of degrees, depending on where one intended to practice. The "external" degree required a minimal residence, the submission of a thesis, and the payment of a fee, and many who studied elsewhere came to Reims to get their degrees.11 Hamilton chose not to return to Scotland, but instead moved to London and took the examination for the license of the Royal College of Physicians. The license allowed non-Oxbridge MDs and others with medical training to practice under the aegis of the college, that is, within a seven-mile radius of London. The examination for the college's license was usually in Latin, assuming, therefore, a certain level of education.12 After several attempts, Hamilton was admitted as a licentiate in April 1688 and established a practice as a man-midwife, at a period when upper-class women increasingly turned to physicians rather than (or along with) traditional female midwives for obstetrical care.

Hamilton enjoyed great success in the 1690s and became quite wealthy; his religious beliefs seem not to have been an issue. In view of Princess (later Queen) Anne's well-known obstetrical problems, it is not surprising that Hamilton came to her attention and he administered to her many unsuccessful attempts to bear an heir. Anne named him her third Physician-in-Ordinary in 1703 and knighted him, which the London College of Physicians acknowledged with a fellowship. Even after Anne's childbearing years ended, Hamilton remained her medical adviser and confidante. He did not forget his Scottish origins, and he became an important patron for many of his younger countrymen. Hamilton appears to have been politically neutral, leaning toward the Whigs, but his patronage did not discriminate on the basis of politics.¹³

A wave of migrants followed Hutton and Hamilton. Episcopalians had disproportionately led the cultural renaissance of the 1680s and now flocked to the south and elsewhere. Among the leaders of the Edinburgh College of Physicians was the Jacobite Archibald Pitcairne (1650–1713), another graduate of Reims, who assumed a chair in medicine at the University of Leiden in 1692, at the same time that his close friend and fellow Episcopalian David Gregory (1659–1708), mathematics professor at the University of Edinburgh, assumed the Savilian Chair of Astronomy at Oxford (where he also practiced medicine). Their students were prominent among those who migrated to England over the next decade. To the military and man-midwifery, Gregory and Pitcairne's students added expertise in natural philosophy (and particularly the new Newtonian natural philosophy) as a selling point, and the Royal Society of London, of which Gregory was a fellow, played an increasingly important role in the establishment of medical careers. It provided a crucial entrée for Scots into the community of natural philosophers, a community much less concerned than the physicians or surgeons with formal qualifications or rank.

To Oxford came Gregory's Edinburgh student John Keill, a mathematician, along with Keill's physician brother James (who eventually established a practice in Northampton), and Pitcairne's brother David, another physician. John Arbuthnot, son of an ejected Episcopalian minister, moved to London in 1692 and then to Oxford and into Gregory's orbit two years later. Pitcairne's student William Cockburn moved to London in 1693, and Arbuthnot, having meanwhile obtained a medical degree, returned there in 1696. Around 1700, several more Scottish physicians made the journey south: Charles Oliphant (David Gregory's brother-in-law), James Keith (another son of an Episcopalian divine), and Pitcairne's students George Hepburn and George Cheyne.

Arbuthnot (1667–1735), the eldest son of an Episcopalian minister in Kincardineshire, graduated from Marischal College, Aberdeen. Although at least one of his brothers was active in the Jacobite cause, Arbuthnot remained home to witness his father's ejection from his parish, leaving for London only after his father's death in 1691. He may have spent some time in Edinburgh before this journey, studying with both Pitcairne and Gregory.¹⁴ After working for a time as a mathematics tutor, Arbuthnot enrolled as a fellow commoner at University College, Oxford, acting as a companion and tutor to a wealthy undergraduate. There he again encountered Gregory, and met Arthur Charlett, the master of University College, and the physician John Radcliffe. Arbuthnot frequently returned to London during this time and his letters to Charlett are full of gossip and political news; Gregory too spent most of his time in London.¹⁵

By 1696, inspired by Radcliffe, Arbuthnot decided to take up medicine. Like many others, he relied on Charlett's patronage

and Gregory's as well. In a single day he enrolled as a medical student at the University of St. Andrews, defended seven theses on animal secretion, and was granted an MD. Returning to London, Arbuthnot continued to tutor while establishing his name with several publications in natural philosophy; he was elected a fellow of the Royal Society in 1704. A year earlier, he had entered the throng of physicians surrounding Queen Anne, and in 1705 he secured his medical standing when his chance cure of Prince George of Denmark, the queen's consort, brought an appointment as one of the Royal Physicians Extraordinary.¹⁶ He met Swift around 1710 and began his literary career, while continuing to practice medicine and write works on natural philosophy and antiquities.

William Cockburn (1669-1739), later Swift's physician, left Leiden in 1693 without a degree and journeyed to London. where, like Hamilton, he took the examination for the London College's license. He then took a leaf from Hutton's book and gained an appointment as a ship's physician. In an early publication Cockburn alluded to connections with the dowager Countess of Roxburghe, and he may have owed his naval appointment, a sought-after position, to the patronage of her father, the Earl (later Marquess) of Tweeddale. Cockburn spent several years with the navy, and during his service developed his "electuary," claiming remarkable success in the treatment of the symptoms of dysentery, which was rampant among sailors. He obtained an exclusive contract with the Admiralty to provide it to the fleet. Keeping the formula a secret. Cockburn earned a vast fortune as well as an extensive medical practice over the next forty years.17 Having been elected to the Royal Society in 1696, Cockburn published on topics that linked medicine and mechanistic natural philosophy. As Swift's comment at the start of this essay indicates, Cockburn kept close ties with his fellow Scots.

Charles Oliphant (d. 1719) took an MD from Reims in 1691 and gained election to the Edinburgh College of Physicians in 1693. He was associated with Pitcairne's faction at the college, and was ejected with him in 1695 in the course of a debate about fevers. But in 1699 he published an anti-Pitcairne pamphlet in the ongoing debate, and engaged in the next four years in a fierce pamphlet war with Pitcairne's supporters, particularly George Cheyne.¹⁸ His motivation for such a change of allegiance is not clear, but probably had to do with his professional aspirations, which would not, in Edinburgh, be well served by

an association with Pitcairne. Oliphant's sister Elizabeth married David Gregory in 1695 and another sister, Barbara, married Gregory's younger brother James; Gregory and Pitcairne remained close nonetheless.

Oliphant complained to a friend in 1702 that a union with England would lead to a draining of Scots talent to the south. But by 1707 he had definitively shed the last vestiges of Jacobitism and came under the patronage of the Duke of Argyll and his brother Lord Ilay, both promoters of the Union. A year later Oliphant followed his patrons to London. With such backing, he entered fashionable practice with ease, although he never became a member of the London College of Physicians, and was elected to the House of Commons as part of the Argyll faction in 1710.¹⁹

While Oliphant repudiated Jacobitism, Arbuthnot and others retained vestiges of it in their High Church Tory leanings. Many of Pitcairne's students were, like him, Episcopalians and, if not fully Jacobites, not averse to toasting the king across the water, and they helped each other in the sometimes merciless London scene. George Cheyne (?1671-1743) was the son of a tenant farmer from near Aberdeen and had met Pitcairne when he moved to Edinburgh in the 1690s to seek work as a tutor. Pitcairne mentored Cheyne in medicine and helped him to secure various tutoring positions, latterly with William Ker, youngest son of the dowager Countess of Roxburghe (patron of William Cockburn). Pitcairne helped Cheyne obtain a medical degree from King's College, Aberdeen (like St. Andrews, this involved a very minimal residency) and provided him with introductions when he moved to London in 1701. Although he had already gained a certain reputation from his pamphlets supporting Pitcairne in the fever debate, Cheyne continued to be employed by the Kers for some time. His fellow combatant in Pitcairne's pamphlet wars, George Hepburn, came south at about the same time but established a practice in King's Lynn, Norfolk, where he numbered the Walpoles among his patients.20 Pitcairne, Gregory, and Arbuthnot all knew Isaac Newton and promoted Cheyne to him, paving the way for his election to the Royal Society in 1702.21

Cheyne and James Keith (d. 1726) had been deeply involved in mystical circles around Aberdeen, and these associations continued when they moved to London. Keith's father had been the minister at Old Machar, the cathedral of Aberdeen, and James Keith may have been the "Jacobus Kiets" recorded as matriculating at Leiden in 1696. Like Cheyne, Keith obtained a medical degree from King's College, Aberdeen, and by 1706 he is found in London as a licentiate of the London College of Physicians. His friends included James Keill and the surgeon Charles Maitland, and he competed with Arbuthnot for the position of physician to Chelsea Hospital in 1712. Cheyne moved to Bath in 1718, but Keith remained in London, where he served as a distribution point for mystical literature.²² Keith's and Cheyne's correspondence reveals a wide network stretching from London to Scotland to the Continent.

Outside the circle of Pitcairne and Gregory were the Douglas brothers, physicians James and George and surgeon John. Although these men went to London with few connections, they followed much the same pattern as other Scots, displaying the distinctive entrepreneurial spirit of their countrymen. The Douglas brothers originated in West Calder, near Edinburgh, where their family owned an estate known as Baads, perhaps because of its infertile soil. James Douglas (1675–1742) was the third (and second son) of thirteen children. John and George were younger; John (d. 1743) was half of a pair of twins, and George (d. 1737), the youngest of the brothers, was born around 1693. The eldest brother, Walter, began his career in the army and followed William of Orange from the Netherlands to England. Unlike many Scots who migrated south in this period, the Douglases were no Jacobites.

James Douglas is immortalized in medical textbooks as the discoverer of "Douglas's pouch" a fold in the peritoneum. His early career followed Hamilton's path. James left Scotland in the mid-1690s, studying in Paris and Utrecht and taking a medical degree at Reims in 1699. By 1700 he was in London, and found employment as an assistant to Paul Chamberlen, of the famous family of man-midwives, who still held a monopoly on the use of forceps. If James did not obtain this post with the help of David Hamilton, the elder physician became his friend and patron shortly thereafter. By his own account, James was practicing independently as a man-midwife by 1701. Nonetheless he soon took other measures to supplement his income or satisfy his curiosity or both. In 1706, the year he was elected a fellow of the Royal Society, he advertised a public course of anatomyamong the first to be offered in London-in the back matter of his treatise on muscles. There were few lecturers in anatomy in comparison to those in natural philosophy, indicating that the authority of the Barber-Surgeons' company was still strong. Unlike the lecturers at Surgeons' Hall, James emphasized comparative anatomy, resembling the increasingly popular natural philosophy lecturers who advertised in the new daily newspapers. James's entrepreneurial course quickly gained imitators.²³

By the next year he had obtained an appointment as anatomical demonstrator to the Royal Society, and his correspondence with Hamilton, Hans Sloane, and dozens of others reveals intersecting circles of Scots, medical men, and natural philosophers. His case notes show continuous consultation with Hamilton, and they joined to further the careers of the surgeons Alexander Stuart and Patrick Blair, about whom more below. The final object of James's patronage was William Hunter, who lived in his household for several months before James Douglas's death in 1742.

James Douglas's success in medicine undoubtedly inspired two of his brothers to follow him. John Douglas's hand may be the second one that transcribed the lectures of the Paris anatomist Duverney that James attended in the winter of 1698. John trained as a surgeon and followed his eldest brother Walter to the colonies before settling in London; he will appear again below. The youngest Douglas brother, George, also obtained a medical degree from Reims in the 1720s and worked for James as his assistant and amanuensis for several years before leaving for the colonies in the early 1730s. George, too, published books: his translation of the anatomy text of the French anatomist Winslow was much used in the eighteenth century.

Even Scots who were not related by blood retained close connections in London. While Pitcairne extended his patronage from afar, James Douglas, Hamilton, and others were very much on the scene, and their correspondence with each other and with Hans Sloane, the leading patronage broker of the day, indicates constant social and medical interaction. For example, Hamilton consulted with Arbuthnot and Cheyne for his ills, and in his diary, Gregory described a dissection by James Douglas, a recipe he gave to Arbuthnot, and one he received from Cockburn. Hamilton consulted with Douglas and recommended patients—many of them Scots—to Cheyne and later to Alexander Stuart, and Cheyne received additional references from his kinsman Gilbert Burnet.²⁴ Ideology and religion, so important at home, were trumped by national identity in London.

Identity as a Scot did not seem to hinder the careers of these men. Rather, the Scots developed a social capital that traded on this identity as part of their medical expertise, long before the Edinburgh Medical School established its reputation. Although Cheyne's Aberdeen accent was lampooned, it had little impact on his popularity in Bath, which was based on his empirical medical practice and his extensive publications. Indeed, the generation that followed Hamilton and Hutton made their names first with publication. Arbuthnot, Cockburn, Cheyne, Oliphant, and James Douglas (as well as James Keill and George Hepburn, who ended up in provincial practice) all published works on natural philosophy or medicine or both before 1710, and all of these were at the cutting edge of current ideas. Cockburn and Cheyne followed Pitcairne in introducing Newtonian ideas to medicine, and James Douglas, like Keill, claimed expertise as an anatomist gained in the European centers of Leiden and Paris. Cockburn's works on fevers in the 1690s helped to promote his "electuary"; Arbuthnot's writings on probability and mathematics helped to put him in the orbit of the Royal Society, as did Cheyne's writings on the calculus and his contributions to the Edinburgh fevers debate. James Douglas's work on anatomy also made him known to the Royal Society, which hired him as a demonstrator. Oliphant, with a powerful political patron, did not continue along the path of the others to the Royal Society, and James Keith, alone among this group, did not publish at all. subjected an intersedire transferred and a state

books his translation of the anatoris size of the Books aparos and a state was a state of the second state of the state

has every who were not related by how how were and Patronage and expertise, then, along with an entrepreneurial character, were essential to the success of the Scots physicians in London. These elements also contributed to the success of Scots surgeons, who dominated military medicine in the early eighteenth century. Here the influence of Hans Sloane was central. Although not a Scot, Sloane's role as a correspondent, patron, and broker of patronage formed another intersecting circle to the Scots in London. Sloane was himself an outsider; an Irishman (in ancestry, an Ulster Scot) with a French medical degree (from Orange, an even less rigorous institution than Reims), and possibly his attention to Scotsmen was an implicit acknowledgment of his own status.25 Certainly he had enjoyed the patronage of powerful men early in his career, and knew its value.

Surgeons and apothecaries in this period covered the range of medical care. This was particularly true in the provinces, where the local medical practitioner was, more often than not, a sur-

geon or an apothecary rather than a physician, and many of the surgeons Sloane sponsored ended up in English provincial towns. However, a few landed in London. The correspondence of Sloane and his client, the botanist and apothecary James Petiver (ca. 1665–1718), with successive directors of the Edinburgh Botanic Garden gives an example of the options young surgeons faced.

Rosalie Stott and Helen Dingwall have shown that from the 1690s onward the surgeon-apothecaries of Edinburgh were well organized, with high professional standards. While surgeons and apothecaries were formally separate, most members of their joint incorporation had training in botany and pharmacy as well as the surgical arts.²⁶ The masters of the Edinburgh Incorporation of Surgeons limited the number of apprentices they took to one every three years, but this meant that one hundred or more apprentices were training in Edinburgh at any one time, and Edinburgh was not the only site where this training occurred. All of these apprentices could not hope to attain a position in Scotland, with fewer than a million people and few large towns. The required five years of apprenticeship was usually followed by three years of "studie and traveling" before examination as masters. Many apprentices left Scotland at this time and most of them did not return.²⁷ Apprentices and freemen indeed constituted the largest group of migrants into London at this time.28

Substantial numbers of these young men entered military service, particularly the Royal Navy, where they served as ship's surgeons or surgeon's mates. As early as 1685 the Edinburgh surgeons claimed that his Majesty's navy preferred their apprentices "to any other of their trade." A 1739 pamphlet claimed that Edinburgh had long enjoyed a "great Reputation for educating Youth in the Art of Surgery; the Army, the Royal Navy, the Merchant Ships, our Colonies abroad, and many Places in Britain and Ireland, are in a great Measure supplied with Gentlemen of that Employment educated here."²⁹ The surgeons' incorporation even took steps to ensure their continued reputation by requiring "testification" of apprentices before they went abroad, although not all of them complied; the minutes of the Incorporation for 1696 noted that "severall young men are gone abroad in a disorderly and clandestine way without tryall of the time of yr service."30 In England, a committee of the London Barber Surgeons' Company and the physician to Greenwich Hospital examined applicants for naval posts in both surgery

ANITA GUERRINI

and materia medica. Because Scots surgeon-apothecaries were trained in both areas, many found their way onto ships.³¹ The continued state of war between 1689 and 1713, as well as commercial and colonial ventures, ensured a constant demand for medical men. Hutton and Cockburn offered proof of the impact of military service on a medical career. Harold Cook has argued that military medical practice called for empirical responses such as those afforded by surgeons, rather than the learned therapies of a physician. Cockburn's electuary, for example, was an empirical remedy, even though he claimed the status of an elite physician.³² The entrepreneurial Scots were good practitioners of the kind of empirical medicine that military practice required.

Sloane and Petiver corresponded between 1700 and 1711 with two successive curators of Edinburgh's botanic garden, James Sutherland and Charles Preston.³³ The curators trained apprentices in medical botany, a central aspect of the pharma-copoeia, and the young men attended lectures in the garden from mid-May to September 1 between the hours of 5 to 7 AM (full daylight in this northern latitude). Sutherland and Preston sent many of these apprentices on to careers in London.³⁴

In their relationships with the Edinburgh curators and trainee surgeons, Sloane and Petiver reveal a reciprocal relationship between patron and client, for they attained positions for the Scots apprentices on naval and trading ships with the stipulation that these young men collect plants for them. Trained in botany, the apprentices were well equipped for this task. Sutherland wrote, "I shall always when any of my Schollars design to go Sea Surgeons abroad from London, recommend them to your Advice."³⁵ Typical was the bearer of a letter from Sutherland to Petiver in 1701: he "has served his apprenticeship to a Chirurgeon-Apothecary here and has been some time a Scholar at the Physick Garden, he goes to London to await ane Occasion of going Surgeons Mate in some good Ship." Petiver would teach the apprentice how to collect before finding him a place on a ship.³⁶

In another letter, Sutherland outlined the course of a surgeonapothecary's career: "All the Surgeons and Apothecaries apprentices in this place are usually my Schollars at the Physick Garden and after they have served in a Shop five years they seek Occasions of going Surgeons in Ships to the East or West Indies, or any other forrain place that offers, and so spend their time abroad for the space of six or seven years before they return and

176

SCOTS IN LONDON MEDICINE IN THE EARLY EIGHTEENTH CENTURY 177

set up a shop of their own."³⁷ Some of these men remained at sea, or in the colonies. "Mr. Lindsay" bore a note from Preston to Sloane in 1707: "He goes to accomplish himself in what can be learned in London particularly Anatomy and ye practice of ye Hospitalls you'l please to give him yor advice & recommend him in his studies. Next spring he intends to travel farder if he can find convenient passage where he may be usefull to us." A few months later "Dr Fountain" who has been "long abroad and accomplished himself pretty well in all the pairts of medicine... designs I believe to reside att London."³⁸

Whether Dr. Fountain succeeded or not is unknown; but those who returned from abroad, rather than making a career in the navy, were more likely to set up shop in England than in Scotland, where there were few positions. Service in the armed forces meant that a surgeon could afterwards practice his trade freely, even in guild towns, without reference to English licensing requirements. He would, however, be more likely to settle in the English provinces rather than in London. By the 1680s, the increasing expense of setting up business in London led many journeymen to the provinces.³⁹

James Douglas's brother John followed their eldest brother Walter in 1712 to the Leeward Islands, where the latter was governor. Walter appointed John surgeon-general, but both brothers seem to have shared a vicious temper and had difficult relationships with locals. Walter referred to the governing assembly as "a parcell of idle wretches and Miserable dogs," and not surprisingly, Walter, along with John, was recalled in 1714. The same temper later embroiled John in protracted pamphlet wars. In London by 1717, John was admitted to the Company of Barber-Surgeons, even though he had not been trained in London, and established a surgical practice with the help of James, with whom he devised his "high method" of cutting for the stone. Like James, John also developed an anatomy course. which he taught for several years beginning in 1719. He was appointed surgeon to the Westminster Hospital in 1721; the prominence of Scots in the new London hospitals (where, as we shall see, Stuart and Ross also held positions) indicated the value of the Scots' empirical training. Elected to the Royal Society in 1725, John published several works on surgery.⁴⁰

Another surgeon abroad was Charles Maitland (1677–1748).⁴¹ A native of Aberdeen, Maitland was a cousin to George Cheyne and possibly also a kinsman of James Keith, with whom he was closely associated. Little is known of his background. He

178 ANITA GUERRINI

emerged in 1718 as a surgeon attached to the British embassy in Constantinople. The ambassador's wife, Lady Mary Wortley Montagu, enlisted Maitland to inoculate her son for smallpox. Inoculation was a well-known practice in Turkey, and an account of it had appeared in the Philosophical Transactions a few years earlier. Back in England in 1721, Lady Mary had Maitland (also by this time in London) inoculate her young daughter, the first time the procedure was carried out in England. Sloane and other physicians were impressed with the new technique, and Sloane recruited Maitland to perform an experimental proof of the efficacy of inoculation on six prisoners from Newgate. The experiment was successful, and Maitland went on to inoculate several members of the royal family as well as many others. James Keith named Maitland one of the executors of his will.42

Some of these men aspired beyond surgical practice and went on to get medical degrees. Charles Preston introduced Patrick Blair (1666?-1728), a surgeon-apothecary from Dundee, to Sloane and Petiver in 1705, and they corresponded frequently; later Blair also corresponded with James Douglas on botanical matters. Blair published an account of his dissection of an elephant in the Philosophical Transactions in 1710, and two years later he was elected a fellow of the Royal Society and granted an MD from King's College, Aberdeen. Blair's only period of residence in London was in Newgate prison after the Fifteen, where he had served as a surgeon in Lord Nairn's battalion. He managed to gain a pardon with Sloane's help, and remained in England, though not in London, finally settling in Boston, Lincolnshire.43

Alexander Stuart (1673?-1742) thanked Sloane for his "manyfold favours" when he set sail for the East Indies in 1702, and promised to report on anything "remarkeable or curious."44 Stuart's background is obscure; a native of the northeast, he may have been the Alexander Stuart who received a degree from Marischal College, Aberdeen, in 1691 but it is impossible to be certain. Sloane may have been responsible for his positions as ship's surgeon on two successive trading voyages between 1701 and 1707. Stuart repaid the favor with several reports in the Philosophical Transactions on various phenomena he observed and kept detailed notebooks of his cases and observations. Upon his return he briefly practiced surgery in London, during which he participated in anatomical demonstrations with James Douglas, but then left in 1709 for Leiden to attend medical school, sponsored by Sloane and Hamilton. Unlike many, he actually com-

SCOTS IN LONDON MEDICINE IN THE EARLY EIGHTEENTH CENTURY 179

pleted his MD degree there eighteen months later, dedicating his thesis to his patrons. From Leiden he made "a tollerably handsom Livelyhood" as an army physician on the battlefield of Flanders.45 However, he soon returned to London and established a medical practice; his case notes show a preponderance of military men and Scots surnames.46 Elected a fellow of the Royal Society in 1714, he later won the Copley medal (in 1740) and published many papers on his physiological research in the Philosophical Transactions. Unlike other Scots, his scientific publications came after he had attained success as a practitioner. Named a physician to the new Westminster Hospital in 1719, he led the secession of physicians from the Westminster in 1733 to found St. George's Hospital. His circle included James Douglas, Arbuthnot, and Hamilton, and he promoted smallpox inoculation, initiated by Maitland and a favored cause of Sloane, engaging in a pamphlet debate on the practice with yet another Scot, William Douglass of New England. By many measures Stuart was highly successful, including appointment as one of the physicians to Queen Caroline. But he was apparently a terrible manager of his money and was continually in debt; like Hamilton, who lost £80,000, he invested heavily in the South Sea Bubble. Unlike Hamilton, Stuart invested with borrowed funds, and he was still in debt when he died in 1742, having outlived all of his friends and patrons except Sloane.47 London to study with Smellie and briefly resided with him. Smellie soon established an individual practice as a man-mun

wife and, more imperiantly is III enther. A maniphlet descripted

By the 1720s, another wave of migration added to the Scottish ranks in London. Maitland was among these, soon joined by William Graeme, David Ross, and George Douglas. In the next decade came the man-midwife William Smellie and soon-to-be novelist Tobias Smollett, followed by the brothers John and George Armstrong. William Hunter followed in 1740 to study with Smellie. Colin Mackenzie, later Smellie's assistant, may also have made the journey to London around this time.⁴⁸

David Ross (1705–59), another native of the Aberdeen region, accompanied Stuart to St. George's in 1734. Ross had graduated with an MA from King's College, Aberdeen, in 1720 and matriculated at the University of Leiden but received an M.D., as did so many others, from Reims in 1726. Stuart mentioned him in his will, requesting that he edit his papers for publication by subscription to relieve some of his debts. In the event, William

Hunter eventually purchased most of Stuart's papers (including his case notebooks) from his widow, rescuing her from Stuart's debts.

Little more is known of Ross or of another Scots graduate of Reims, William Graeme (1701–45). Following the example of the Douglas brothers, Graeme lectured on medicine in both London and Edinburgh. His 1729 pamphlet, *An Essay on the Method of Acquiring Knowledge in Physick*, defended his notion that medicine could be taught by lectures. He argued that while experience with patients "is the true Way to render a Physician perfect," it was not the only source of medical knowledge. He suggested that medicine was a science that could be taught like other sciences, tying it firmly to natural philosophy. On the last page of his pamphlet he advertised his course, to begin in November 1729 at his lodgings in Jermyn Street and in the following year, he published a pamphlet describing a case history.⁴⁹

When William Smellie (1697-1763) migrated to London in 1739, he combined what had become well-worn paths for Scotsmen: the military, man-midwifery, and lecturing. Having apprenticed with an apothecary in his native Lanarkshire, Smellie served as a naval surgeon in the early 1720s before setting up shop in Lanark. By the late 1730s, he had established a reputation as a man-midwife and decided to move to London, both to learn more and to set up a practice. William Hunter came to London to study with Smellie and briefly resided with him. Smellie soon established an individual practice as a man-midwife and, more importantly, as a teacher. A pamphlet describing his course of lectures appeared in 1742, and both the course and his practice flourished. His 1752 Treatise of the Theory and Practice of Midwifery established him as the authority in the field. Smellie retired back to Lanark in 1759.50 His assistant, Colin Mackenzie, another former naval surgeon, came to London around the same time as Smellie and by 1754 had established his own course in midwifery.51

At the same time as Smellie moved to London—and possibly with him—came the young surgical apprentice Tobias Smollett (1721–1771). Originating in Dumbartonshire, Smollett studied briefly at Glasgow University before beginning his apprenticeship to the surgeon John Gordon, with whom Smellie had also studied. Smollett left Glasgow for London before completing his apprenticeship and soon found himself aboard a ship as a surgeon's mate when war with Spain broke out. He returned to London early in 1744 to establish himself as a surgeon, and as-

SCOTS IN LONDON MEDICINE IN THE EARLY EIGHTEENTH CENTURY 181

sociated with Smellie, Hunter, and other Scots as he began his writing career. Another Scot who found his vocation in literature was John Armstrong (1708/9-79), who attended the University of Edinburgh with the poet James Thomson and dedicated his MD thesis in 1732 to Sloane. While Armstrong may have been barred from taking the license of the London College of Physicians because he possessed a Scottish degree, he practiced without hindrance for thirty years.52 Like many other Scots, Armstrong immediately began to publish works on natural philosophy and medical theory, although he became better known for his "glowingly explicit sex manual in blank verse," the Oeconomy of Love, first published in 1736. His best-known work was the much-praised blank verse Art of Preserving Health (1741). His younger brother George (1718/19-89) followed John to London sometime after 1745 and became a pioneer in pediatrics.53

By the 1740s, Smellie and Smollett found a well-established circle of Scots medical men in London. Ambition and money overtook religion and ideology as motives for migration. But the Scots retained their identity; they were not English. Even if they never returned, they kept their ties with home via correspondence and association with other exiles. Smollett expressed a heartfelt nationalism in his ode "The Tears of Scotland," composed after Culloden:

> While the warm blood bedews my veins, And unimpair'd remembrance reigns, Resentment of my country's fate, Within my filial breast shall beat; And, spite of her insulting foe, My sympathising verse shall flow: Mourn, hapless Caledonia! mourn Thy banish'd peace, thy laurels torn!⁵⁴

William Hunter arrived in London in 1740 with the example of many predecessors. As a man-midwife, he continued the tradition begun by Hamilton and continued by Douglas and Smellie, and in establishing a lecture course in 1746, he followed a long line of entrepreneurial Scots dating back forty years. His brother John, who followed William to London in 1748, included a stint in military service with his own career as a lecturer and served for a time as a hospital surgeon. Douglas and Smellie introduced William to the circle of Scots in London. and William and John continued to look after their country-men. As William benefited from the patronage of Douglas—he continued to live in Douglas's household after his mentor died—so he dispensed his patronage to others. As we have seen, William purchased the manuscripts of Alexander Stuart from his widow, and he later supported William Cruickshank and his nephew Matthew Baillie.⁵⁵ In the second half of the eighteenth century, Scottish graduates of Edinburgh and Glasgow would be instrumental in the establishment of medical training in Lon-don. Thus Scots continued to form a unique group in London don. Thus Scots continued to form a unique group in London medicine, and helped to change medical practice.

NOTES

1. Jonathan Swift, Journal to Stella, ed. Harold Williams (Oxford: Clarendon Press, 1948), 171.

2. Hugh Ouston, "York in Edinburgh: James VII and the Patronage of Learning in Scotland, 1679-1688," in New Perspectives on the Politics and Culture of Early Modern Scotland, ed. John Dwyer, Roger A. Mason, and Alexander Murdoch (Edinburgh: John Donald, n.d. [1982]), 133-55; Bruce Lenman, "Physicians and Politics in the Jacobite Era," in The Jacobite Challenge, ed. Eveline Cruickshanks and Jeremy Black (Edinburgh: John Donald, 1988), 76.

3. A succinct account of the politics of the period 1690-1707 is Geoffrey Holmes, The Making of a Great Power ((London: Longman, 1993), chapter 20.

4. J. R. Peel Ritchie, The Early Days of the Royall Colledge of Physitians, Edinburgh (Edinburgh: G. P. Johnston, 1899); W. S. Craig, The History of the Royal College of Physicians of Edinburgh (Oxford: Blackwell, 1976); Andrew Cunningham, "Sydenham versus Newton: The Edinburgh Fever Dispute of the 1690s between Andrew Brown and Archibald Pitcairne," Medical History, suppl. 1 (1981): 72. On the London College, see Harold J. Cook, The Decline of the Old Medical Regime in Stuart London (Ithaca, NY: Cornell University Press, 1986), ch. 4-5, 133-209; see also R. J. J. Martin, "Explaining John Freind's History of Physick," Studies in the History and Philosophy of Science, 19 (1988): 399-418.

5. See Roger L. Emerson, "Sir Robert Sibbald, Kt, the Royal Society of Scotland and the Origins of the Scottish Enlightenment," Annals of Science 45 (1988): 41-72.

6. W. S. Craig, The History of the Royal College of Physicians of Edinburgh (Oxford: Blackwell, 1976), appendix 1.

7. See their biographies in Oxford Dictionary of National Biography, hereafter ODNB.

8. ODNB, s.v. Hutton, John (d. 1712); H. J. Cook, "Practical Medicine and the British Armed Forces after the 'Glorious Revolution,'" Medical History 34 (1990): 1-26.

9. The Diary of David Hamilton 1709-1714, ed. Philip Roberts (Oxford: Clarendon Press, 1975), introduction, xxxi. [David Hamilton], The inward testimony of the spirit of Christ to his outward revelation, in opposition to the deist, socinian and prophane . . . and to the enthusiast, . . . By the author of, The private

Christian's witness (London: John Lawrence, 1701). On Scougal and Scottish Episcopalianism, see Anita Guerrini, *Obesity and Depression in the Enlightenment: the Life and Times of George Cheyne* (Norman: University of Oklahoma Press, 2000), 12–15.

10. Biographical details from Roberts, ed. *Diary*, introduction; *ODNB* s.v. Hamilton, David, (1663–1721), adds little to Roberts's account. I have not been able to ascertain where Hamilton received his obstetrical skills, which were not part of university training.

11. Lawrence Brockliss and Colin Jones, *The Medical World of Early Modern France* (Oxford: Clarendon Press, 1997), 482 n8, 493–94, 518 table 8b. Other French universities with similar arrangements included Angers, Orange, and Valence, all of which graduated British physicians.

12. Cook, The Decline of the Old Medical Regime, 73-74.

13. Roberts, ed., Diary, xxxi-xxxii.

14. Surmised by Angus Ross, ODNB s.v. Arbuthnot [Arbuthnott], John.

15. George Aitken, *The life and works of John Arbuthnot M.D., fellow of the Royal College of Physicians* (Oxford: Clarendon Press, 1892) includes transcripts of many of these letters. See also David Shuttleton, "A Modest Examination': John Arbuthnot and the Scottish Newtonians," *British Journal for Eighteenth-Century Studies* 18 (1995): 47–62.

16. Aitken, Arbuthnot, 17-19, 24-26; ODNB.

17. Cook, "Practical Medicine and the British Armed Forces," 21–25; *ODNB*, s.v. Cockburn, William. See also J. J. Keevil, *Medicine and the Navy*, vol. 2 (Edinburgh and London: E. & S. Livingstone, 1958), 286–92; Munk, *Roll* 1:507–9.

18. R. W. Innes Smith, *English-speaking Students of Medicine at the University of Leiden* (London: Oliver and Boyd, 1932) 173; on the pamphlet dispute, see Anita Guerrini, "'A Club of Little Villains': Rhetoric, Professional Identity and Medical Pamphlet Wars," in *Literature and Medicine During the Eighteenth Century*, ed. M. M. Roberts and R. Porter (London: Routledge, 1993), 226–44.

19. Charles Oliphant to William Bennet of Grubet, 11 December 1702, 11 December 1708, National Archives of Scotland, Ogilvy MSS, GD 205/34/4, ff. 3,8. On Oliphant's political career, see Geoffrey Holmes, *British Politics in the Age of Anne* (London: Macmillan, 1967), 23; Romney Sedgwick, ed., *The House of Commons 1715–1754*, 2 vols. (New York: Oxford University Press, History of Parliament series, 1970), 2:306–7.

20. On Cheyne see Guerrini, Obesity and Depression. For Hepburn see Innes Smith, English-speaking Graduates, 115–116.

21. Guerrini, Obesity and Depression, 68-71.

22. G. D. Henderson, *Mystics of the North-east* (Aberdeen: Third Spalding Club, 1934), 56–61 and passim. This volume includes the letters of Keith to Lord Deskford. See also Munk, *Roll*, vol. 2, 18.

23. K. Bryn Thomas, James Douglas of the Pouch and his Pupil William Hunter (London: Pitman, 1964), 2–9; ODNB, s.v. Douglas, James (1675–1742); C. H. Brock, Dr James Douglas's Papers and Drawings in the Hunterian Collection, Glasgow University Library. A Handlist (Glasgow: Wellcome Unit for the History of Medicine, University of Glasgow, 1994).

24. Roberts, ed., *Diary*, xxiv-xxv; Hamilton to Sloane (n.d.), BL Sloane MS 4059, ff. 100–101; Guerrini, *Obesity and Depression*, 91; David Gregory, "Medical Prescriptions 1694–1708," BL Add. MS 29,243, ff. 1, 55, 61; Alexander Stuart papers, Glasgow University Library, MS Hunter 534, 537; James Douglas papers, Glasgow University Library, MS Hunter D187.

184 ANITA GUERRINI

25. Arthur MacGregor's article in ODNB provides an excellent survey of Sloane's life. A definitive and comprehensive biography has yet to appear.

26. Rosalie Stott, "The Incorporation of Surgeons and Medical Education and Practice in Edinburgh, 1696-1755" (PhD diss., University of Edinburgh, 1984), 90-91; Helen Dingwall, Physicians, Surgeons, and Apothecaries: Medicine in Seventeenth-Century Edinburgh (East Linton: Tuckwell, 1995), chapter 2.

27. Stott, "Incorporation of Surgeons," 17-18, 102; Irvine Loudon, Medical Care and the General Practitioner, 1750-1850 (Oxford: Clarendon Press, 1986), 112-13 notes that Scotland "was notorious for the poverty of medical practice."

28. M. J. Kitch, "Capital and Kingdom: Migration to Later Stuart London," in London 1500-1700. The Making of the Metropolis, ed. A. L. Beier and Roger Finlay (London: Longman, 1986), 224-251.

29. Quoted by Stott, "Incorporation of Surgeons," 102; A Letter from A Gentleman in Town, To his Friend in the Country; Relating to the Royal Infirmary Of Edinburgh (Edinburgh, 1739), 3; the writer went on to note that about 200 apprentices currently were in training.

30. Stott, "Incorporation of Surgeons," 102, notes that such certification began in 1679; Royal College of Surgeons, Edinburgh, record book for 1695-1708, f. 32, dated 24 May 1696.

31. Geoffrey Holmes, Augustan England: Professions, State and Society, 1680-1730 (London: G. Allen & Unwin, 1982), 202-3.

32. Cook, "Practical Medicine," 1, 21-24.

33. This correspondence is among the Sloane MSS at the British Library; photocopies of many of the letters exist in the library of the Royal Botanical Garden, Edinburgh, and were excerpted in John Macqueen Cowan, "The History of the Royal Botanical Garden, Edinburgh," Notes from the Royal Botanical Garden, Edinburgh 19, no. 91 (1933): 36-49; idem, "The History of the Royal Botanical Garden, Edinburgh: the Prestons," Notes from the Royal Botanical Garden, Edinburgh 19, no. 92 (1935): 63-134. I am grateful to Roger L. Emerson for initially directing me to these letters.

34. Royal College of Surgeons of Edinburgh, minute book, 1708-1737, f. 119 (May 1712); Stott notes hours of 4-7 AM: "Incorporation of Surgeons," 90-92.

35. Sutherland to Petiver, 24 June 1700, British Library Sloane MS 4063, f. 32.

36. Sutherland to Petiver, 24 June 1701, BL Sloane MS 4063, f.101.

37. Sutherland to Petiver, 25 March 1700, BL Sloane MS 4063, f. 9, also cited in Joan R. Butterton, "The Education, Naval Service, and Early Career of William Smellie," Bulletin of the History of Medicine 60 (1986): 7.

38. Preston to Sloane, 5 August 1707, BL Sloane MS 4041 f. 8; Preston to Sloane, 6 November 1707, BL Sloane MS 4041 f. 56.

39. Holmes, Augustan England, 197-98; Cook, "Practical Medicine," 8; Lloyd G. Stevenson, "A Note on the Relation of Military Service to Licensing in the History of British Surgery," Bulletin of the History of Medicine 27 (1953): 420-27; Peter Earle, The Making of the English Middle Class (London: Methuen, 1989), 26-27.

40. ODNB s.v. Douglas, John (d. 1744); Thomas, James Douglas of the Pouch, 2-9.

41. Maitland is a candidate for the most important figure not to appear in the ODNB.

42. Anita Guerrini, *Experimenting with Humans and Animals: From Galen to Animal Rights* (Baltimore: Johns Hopkins University Press, 2003), 50–54; Henderson, *Mystics of the North-east*, 59.

43. *ODNB*, s.v. Blair, Patrick; Joseph Kett gives several other examples of surgeon-apothecaries (both English and Scottish) who availed themselves of Scottish medical degrees: Joseph Kett, "Provincial Medical Practice in England 1730–1815," *Journal of the History of Medicine and Allied Sciences* 29 (1964): 23–29.

44. Alexander Stuart to Sloane, 24 July 1702, BL Sloane MS 4039, f. 11.

45. Stuart to Sloane, 7 November 1711, BL Sloane MS 4045, f. 62.

46. Stuart's case books are among the Hunterian MSS at Glasgow University Library.

47. For biographical details, see *ODNB*, s.v. Stuart, Alexander, (1673?-1742); Anita Guerrini, "'A Scotsman on the Make': The Career of Alexander Stuart," in *The Scottish Enlightenment: Essays in Reinterpretation*, ed. Paul Wood (Rochester, NY: University of Rochester Press, 2000), 157–176.

48. This list, which is by no means exhaustive, was obtained through a survey of several sources, including William Munk, *Roll of the Royal College of Physicians* [London], vols. 1–2 (2nd ed., London, 1878); R. W. Innes Smith, *English-speaking Students of Medicine at the University of Leyden* (Edinburgh: Oliver and Boyd, 1932); P. J. and R. V. Wallis, *Eighteenth-Century Medics* (Newcastle upon Tyne: Project for Historical Biobibliography, 1988); George Peachey, *A Memoir of William and John Hunter* (Plymouth: Brendon, 1924); and the correspondence of Hans Sloane, particularly with James Sutherland and Charles and George Preston (British Library, Sloane MS.) Few of these individuals are in the *ODNB*.

49. William Graeme, An Essay on the Method of Acquiring Knowledge in Physick (London: Lawton Gulliver, 1729); idem, Historia morbi, quo nuper mortuus est Thomas Hurdman, Londinensis (London: T. Warner, 1730).

50. ODNB s.v. Smellie, William (1697–1763); William Smellie, Course of Lectures upon Midwifery (?London, 1742).

51. Peachey, William and John Hunter, 176-80.

52. *ODNB* s.v Armstrong, John (1708/9–79); the London College of Physicians finally prosecuted Armstrong for practicing without a license in 1765. See also *ODNB* s.v. Armstrong, George (1719/20–89).

53. ODNB.

54. Tobias Smollett, "The Tears of Scotland," in *The Poetical Works of Tobias Smollett*, http://etext.library.adelaide.edu.au/s/smollett/tobias/poems/compl ete.html

55. Roy Porter, "William Hunter: A Surgeon and a Gentleman," in *William Hunter and the Eighteenth-Century Medical World*, ed. W. F. Bynum and Roy Porter (Cambridge: Cambridge University Press, 1985), 7–34, at 32–34.