

A Question to Society: “Whether the Art of Medicine as it Has Been Usually Practiced Has Contributed to the Advancement of Mankind”

Kayla Wiles | Furman University

Prior to the medical and public health revolutions of the nineteenth century, Scotland’s rudimentary health-care system consisted of little more than corrupted physicians, overcrowded hospitals, and ineffective treatments for a small percentage of the population. In his written abstract to the Aberdeen Philosophical Society, Dr. John Gregory attributes these problems to a flawed Scottish medical education. This abstract formed the basis of Gregory’s larger publications which introduced the concept of bioethics to Britain. My study analyzes how Gregory uses a rhetoric of sensibility to characterize the proponents and barriers to medical advancement. Analyzing Gregory’s abstract contributes to our understanding of how the Scottish Enlightenment provided venues for medical professionals to critique society and define rhetoric of the era.

It is November 8, 1763. John Gregory rises from his seat at the Red Lion¹ and gazes casually at a handful of colleagues, all of whom have put their drinks aside so as to give their undivided attention to the speaker. Gregory then voices a question to be considered just for that meeting of Aberdeen’s Philosophical Society: “Whether the art of medicine as it has been usually practiced has contributed to the advancement of mankind.”

As a former medical student within the Royal Infirmary teaching ward and then “Professor of the Practice of Physic” at King’s College in Aberdeen, Gregory had witnessed the flaws of a Scottish physician’s education and how they related to Scotland’s medical issues of the time (McCullough, *Writings*, 3). He expressed these thoughts as to “Whether the art of medicine as it has been usually practiced has contributed to the advancement of mankind,” known as “Question 59,” in his written abstract to the Aberdeen Philosophical Society. Gregory had proposed

this question to the Society on July 12, 1762, but would not present his written response until almost a year and a half later (Ulman 119, 193).

Whether anyone spoke after Gregory on November 8 is unclear in the Society’s minutes, which only note that Gregory inserted his abstract in the “Question Book” on December 13, 1763 (Ulman, Table A-7). That abstract, though incomplete, survives as a reprinted copy in Laurence McCullough’s *John Gregory’s Writings on Medical Ethics and Philosophy of Medicine*. Throughout this paper I will analyze Question 59 as presented in McCullough’s book.

Even though the Question 59 abstract remained sealed in the Society’s Question Book until salvaged by the Aberdeen University Library in 1892,² the content found its way almost entirely into Gregory’s *A Comparative View of the State and Faculties of Man with those of the Animal World* (1764), *Observations on the Duties and Offices of a Physician and on the Method of Prosecuting*

Enquiries in Philosophy (1770), and *Lectures on the Duties and Qualifications of a Physician* (1772) (McCullough, *Invention*, 103). *Lectures*, based on the classes Gregory taught at the University of Edinburgh following his membership in the Society, was translated into German, French, and Italian within 20 years of its publication (Maio 182). Scholars have therefore analyzed Gregory's writing within the context of these three larger publications, rather than as the Question 59 abstract presented to the Aberdeen Philosophical Society.

This paper analyzes the Question 59 abstract as a currently unpopular precursor to the works which later deemed Gregory as “the father of bioethics in the English language” (McCullough, *Writings*, 1). Question 59 not only serves as a foundation for Gregory's more prominent publications, but also exemplifies a “rhetoric of sensibility” used by scientists in eighteenth-century Britain. A rhetoric of sensibility, based in a culture of bodily communication and growing discoveries in human physiology, can be applied to bioethics and patient-physician relationships. This study contributes to analyses of how the Scottish Enlightenment provided venues for medical professionals to critique society and help define the rhetoric of the era. I specifically discuss how Gregory uses a rhetoric of sensibility to compare and personify medicinal practice in the eighteenth century and how his critique of the profession applies to other Western nations.

Historical Context

The Aberdeen Philosophical Society

As Gregory posed Question 59, Aberdeen was in the midst of the Scottish Enlightenment and would continue to be for another 27 years (Daiches 1). At the heart of the

Scottish Enlightenment were societies in which men and women would openly discuss issues of the time and propose solutions. The Aberdeen Philosophical Society was one such environment, leading to “the compositions of some of the most influential philosophical works published in Scotland during the latter half of the eighteenth century” (Ulman 12). John Gregory's fellow members of the Aberdeen Philosophical Society included Thomas Reid (*An Inquiry into the Human Mind, On the Principles of Common Sense*, 1764), James Beattie (*An Essay on the Nature and Immutability of the Truth*, 1770), Alexander Gerald (*Essay on Genius*, 1774), and James Dunbar (*Essays on the History of Mankind in Rude and Cultivated Ages*, 1780), to name a few.

According to Lewis Ulman's *The Minutes of the Aberdeen Philosophical Society, 1758–1773*, question proposals, discussions, and the insertions of abstracts in response to those questions followed a very specific format. The Society member who proposed the question for discussion would speak first, “then each member in his turn, with no one allowed to speak to that question more than twice without permission from the president” (Ulman 47). The Aberdeen Philosophical Society met on the second and fourth Wednesdays of each month for approximately five hours in the evening, with some of that time devoted to “entertainment” (Ulman 45). Despite its seemingly rigid structure, the Society only had two officers (a secretary and a president) and conducted meetings fairly informally. Members were encouraged to be inquisitive and collaborative—analyzing the world creatively and presenting discourse in a way that would encourage discussion (Ulman 44–45). This environment might have been determined by Gregory, who along with Thomas

Reid is considered the founder of the Aberdeen Philosophical Society (Ulman 44).

Medical and Public Health Issues of the Eighteenth Century

Gregory is credited as the founder of bioethics in the English language. The need for bioethics arose out of the nonexistent healthcare system of Gregory's time and the consequently corrupted physicians who would pursue self-interest at the patient's expense and often abuse patient confidentiality (Bastron et al. 20). Physicians were also guilty of leaving dying, "incurable" patients to the clergy, who would then help the patient to achieve eternal salvation (McCullough, *Writings*, 22).

Those who mistrusted physicians would often resort to "self-physicking"—a method that failed in more severe cases and demonstrated the need for a more permanent establishment, which arrived in 1726: the Royal Infirmary (Buchan 277; Lobban 10). While the Infirmary improved physician-patient relationships, the facilities only treated the narrow "working poor" demographic (McCullough, *Writings*, 23). The mortality rate also increased within 30 years of the Infirmary's construction, and physical examinations consisted of little more than taking a patient's pulse and temperature (Buchan 284).³ These flaws were a disappointing and ironic testament to Scottish medicine, known for its superior "close clinical observation, hands-on diagnosis, and thinking of...the human body as a system" (Herman 309). Gregory's Question 59 abstract identifies some faults in the Scottish medical education system which might have contributed to the nation's public health shortcomings.

A Culture of Sensibility

One characteristic of eighteenth-century British culture is an emphasis on the human body—how it both communicates with others and functions as a network of systems. This "bodily rhetoric," or a rhetoric of sensibility, arose out of three main contributors to British society during the eighteenth century: the growing bourgeoisie class, the Romantic movement, and scientists' improving understanding of human physiology (Goring ix; Menely 120; Gaukroger 390).

Following the Glorious Revolution of 1688, power in Britain shifted from the courts and landed aristocrats to the urban bourgeoisie (Goring 22). Members of the bourgeoisie often congregated in salons, clubs, or coffee houses to discuss current events and issues. Out of these meeting places grew an expectation for the British gentleman to demonstrate good oratory (Goring 10). This "language of politeness" emerged as a "social currency" which involved cohesiveness between words and bodily expression (Goring 21). Soon a gentleman's "social body"—one that is defined by status and mannerisms—modified his "physical body" into a particular view that is compatible, or "sensible," with society's expectations (Goring 19–20).

The Romantic movement's emphasis on emotion and individualism heightened Britain's fascination with the human body. Romanticism encouraged dramatic expression through words, music, painting, and gestures to establish identity (Menely 120–121). A stronger sense of identity further engrained the British gentleman's connection to society through oratory.

During the eighteenth century, members of the British bourgeoisie who were doctors or professors of science were beginning to

understand the human body in terms of its functional parts. Prior centuries had viewed fundamental processes mechanically, determining that chemical reactants balance with chemical products, but not apprehending why muscles contract “with a force much greater than the original cause,” or “insensibly” (Gaukroger 394). Human physiology required a much less mechanical thinking, as homeostasis occurs in bodily systems that are not necessarily stable and some regulatory mechanisms operate independently of one another (Gaukroger 394–6). Eighteenth-century scientists eventually came to the conclusion that while organs sometimes work against each other (exhibiting “irritability”), they collectively contribute to the life of the organisms, demonstrating “sensibility” (Gaukroger 399–400). This understanding of compatibility in human physiology made bodily rhetoric especially appealing to scientists as they conversed in philosophical societies.

Rhetorical Analysis

Rhetoric of Sensibility

Wayne Wild characterizes Gregory as not only a starting point for modern medical ethics, but also as a “practitioner of sensibility” (48). According to Wild, the rhetoric of sensibility made popular by Britain’s bourgeoisie derives from a combination of Protestant natural law theory, Common Sense philosophy, and Moral Sense philosophy (52–53). Protestant natural law theory states that a “man” is in charge of his own morals—he does not need an “external code from guild, professional college, or higher divine authority” (Wild 52). He should, however, be cognizant of a moral responsibility to whom his profession serves. Common Sense philosophy (also known as Scottish Common Sense Realism) states

that every person is aware of self-existence, other tangible objects, and sound moral or religious beliefs (Krolkowski 145). Wild explains that this philosophy feeds into physician-patient relationships, with the patient expecting the doctor to do his job well and the doctor expecting the patient to follow through with treatments (53). Moral Sense philosophy teaches that one’s sense of morals should be considered just as intuitive as the other five physical senses, contributing to a desire for harmony (Wild 53).

Wild hypothesizes that these “various philosophical strands” made sense to doctors such as Gregory because they collectively emphasize “sensibility” and “sympathy”—both of which are characteristics of the nervous system (54). The nervous system is “sensible” because it sends signals that help “man” survive and accommodate varying physical and social environments. These neurons are “sympathetic” because they regulate communication between solid organs in the body to generate specific responses. The blend of Christian theories and classical philosophies therefore produced a rhetoric of sensibility understood by eighteenth century medical professionals in terms of human physiology. In this study, I explore how Gregory uses rhetoric of sensibility as an overarching strategy to compare and personify the most important components of a medical advancement.

Influence of Bacon, Hume, and Smith on Question 59

Gregory’s approach to Question 59 and his later essays was inspired by more than Scotland’s healthcare issues. McCullough and several other scholars have observed that John Gregory melded the ideas of Francis Bacon,⁴ David Hume,⁵ and Adam Smith⁶ in almost all of his publications.

According to McCullough, “Gregory had learned very well indeed all of the major lessons of the Baconian experimental method and its chief implication for medicine: medicine must be improved and Baconian method provides the means for doing so” (*Writings* 27). Hume and Smith’s philosophies influenced Gregory’s support of sympathy for a successful physician-patient relationship (Bastron et al. 20; Wild 50). Some scholars have noted Gregory’s tendency to use imagery in his arguments.

The Critical Review wrote in its July 1801 issue that Gregory’s work “in reality, [was] just a series of independent essays, connected by very slight links. If there be any band which unites the whole, it is an inquiry how far the boasted superiority of man, and his more extensive powers, contribute to his happiness” (318). Question 59 ponders if “man” has really advanced medicine for the sake of well-being. If he has not done so up until the eighteenth century, then why not yet?

Comparisons

Gregory uses comparisons to exemplify the “art of medicine” that Scotland’s physicians have not yet perfected. The first comparison made in the Question 59 abstract is “between an animal and an inanimate machine” (Gregory 60). Gregory explains that unlike a machine, an animal (or human) has the inherent mechanisms to fight disease. “There is a certain internal process carried on by nature, the principles of which we are in a great measure strangers to, by which they endeavour to remove the disorder or to suppress any want occasioned by it,” he says. “We have instances of this in the cases of fractured bones, the incarnation of wounds, and the enlargement of one kidney when the other is destroyed—in a common

machine there is no power analogous to this” (60). (All of Gregory’s quotations are spelled as they appear in McCullough’s *John Gregory’s Writings on Medical Ethics and Philosophy of Medicine*.) Because humans are not machines, doctors should not be diagnosing or treating them as such.

Gregory next compares “synthetic” education with “analytical” education. He gives Scottish medical education a particularly harsh critique: “Universities, where medicine is usually taught, seem not to be well calculated for the advancement of any kind of science” (61). Gregory claims that universities encourage students to think synthetically, or deductively, “for the convenience of teaching.” He believes that in order for medicine to advance, students should be taught how to think analytically, or inductively, “where the mind proceeds from particular facts to established general principles.” Gregory concludes this comparison with the comment that it might not matter how universities teach students if they assume that there is nothing else to learn about medicine as physicians (61–62).

The previous comment leads Gregory to discuss his third comparison between an “assuming & dogmatical” physician and a “modest & sceptical” one. The first type of physician is the one who graduates from a medical school complacent with all the knowledge he has learned. “His mind is at ease in having allways sure and fixed principles to rest upon—in the mean time the art [of medicine] can receive no improvement from him, as he does not imagine it stands in need of any,” Gregory explains. His next thought in this syllogism is particularly foreboding for Scottish medicine:

If a patient dies [the physician] is quite satisfied everything was done for him,

that art could do—It is difficult for men to give up favourite opinions, the children of our youth, to sink from a state of security & confidence, into one of suspense and scepticism—Accordingly, few physicians change their principles and very seldom their practice—These vary like other fashions and like them are universally adopted, while they do prevail (62).

The danger of an all-assuming physician is no desire to find other ways to cure patients because he has too much faith in the dominant “fashion” of other physicians. With this attitude, medicine does not advance at all. The “modest & scpetical” physician, on the other hand, “never loses a patient but he secretly laments his ignorance of the proper means of having saved him, which he blames rather than the disease being incurable in itself.” This physician’s love of science, humility, and good conscience, says Gregory, are what naturally stimulate the “improvement of knowledge” (62).

Personification

Gregory has three major instances of personification in his abstract to Question 59. He utilizes personification to characterize the proponents and barriers of medical advancement. The first instance is nature:

But the efforts of nature to *cure* a disease or relieve a patient may in some cases without the assistance of Art, be inefficient and in some cases pernicious... The efforts of nature are sometimes *so violent as a require a check & sometimes so feeble* as to stand in need of cordials & an additional stimulus—In some cases nature *makes no sensible effort for her*

relief—These facts which cannot be disguised lay the foundation for the art of medicine. (60, emphasis added)

This simultaneous parallelism and personified description (italicized above) communicates that humans cannot rely on nature to treat themselves. While nature is not entirely a barrier to medical advancement, it is too fickle and unreliable for most injuries or illnesses. Gregory gives the example of a broken bone—would anyone really leave a dislocated arm to nature without seeing a doctor for help? “We have not one instance of a nation where the art is not practiced,” he answers.

Gregory next personifies the medical profession—a group of people who should be proponents of medical advancement but have instead been barriers:

We find no profession which has watched with so *jealous an eye* over intruders or which has treated them with so much abuse & ridicule even when it was apparent the intrusion was only owed to motives of humanity... Enlarged knowledge produces a liberal & unsuspicious spirit & there is no profession that can boast of more men of learning, ingenuity, & genteel education than physic – There is however some reason to suspect that the way in which Physic has been practiced has not been so beneficial to mankind nor contributed so much to the advance of art, as if it had been left more open & not confined to a particular set of men who lived by it as a profession. (61, emphasis added)

The italicized words indicate that the medical profession is proud and exclusive.

While Gregory believes that medicine would not advance without the medical profession to practice the art, the “system” has defined a rigid way to diagnose and treat patients. Any proposals for new diagnoses or treatments do not generally pass through this system very well, which is Gregory’s third instance of personification:

A physician, when he sets out in life, quickly perceives that the knowledge most necessary to procure him a subsistence, is not the knowledge of his profession, what he finds most essential to that purpose are the arts of deceiving mankind...views very different from the pursuit of genius & science—He can expect no patrons to his real merit, because none are judges of it, but a few of his profession, whose interest it is to have it concealed—If he attempts to *show the weakness of the fashionable system* or to introduce an alternative in the practice, the whole faculty are alarmed, their *vanity is piqued* in having their opinions, which they thought perfectly well established, brought into question & exposed by a young man & their interest is evidently concerned to crush him as fast as possible (63).

The system—a network of other doctors and medical school professors—allows no new medical discoveries to challenge its authority. Gregory explains that if the young physician continues to press for different medical practices to treat his patients or alternative remedies, the system will find ways to blackmail him through “his prescriptions in the apothecarys file” and every “miscarriage the outcry is raised” (63). “A man does not hate another because he is engaged in the same race but let him only

keep his proper distance behind & he will wish him very well,” says Gregory. Medical school professors and doctors want to see their students succeed, but only if their success does not surpass their own. The system is therefore a barrier to medical advancement, as well.

Who, then, is a true proponent of scientific progress?

An Incomplete Abstract

Gregory sits back down after reading his abstract, waiting for the next member to comment on the importance of medicine to “mankind.” His discussion might have continued beyond stating that human life is too short to understand every branch of science, but the surviving manuscript of Question 59 ends midsentence with a mysterious, bracketed “13r” (McCullough, *Writings*, 66). No surviving manuscript tells the twenty-first century exactly what Gregory’s colleagues said on that day, either, but the books published beyond the Aberdeen Philosophical Society indicate a mutual consent for the improvement of medical practice. Gregory later wrote in his book *A Comparative View of the State and Faculties of Man with those of the Animal World* that the physician who learns science through observation and understands the human heart is one who advances medicine:

There are, indeed, many obstacles of different kinds, which concur to render any improvement in the practice of Physic a matter of the utmost difficulty, at least while the profession rests on its present narrow foundation. Almost all physicians who have been Men of ingenuity, have amused themselves in forming theories, which gave exercise to their invention, and at the same time

contributed to their reputation. Instead of being at the trouble of making observations themselves, they culled out of the promiscuous multitude already made, such as best suited their purpose, and dressed them up in the way their system required. In consequence of this, the history of medicine does not so much exhibit the history of a progressive art, as a history of opinions, which prevailed perhaps for twenty or thirty years, and then sunk in to contempt and oblivion...Nothing is required, but assiduous and accurate observation, and a good understanding to direct the proper application of such observation. But to cure the diseases of the Mind, there is required that intimate knowledge of the Human Heart, which must be drawn from life itself, and which books can never teach. (269–71)

Monthly Review explains the significance of Gregory's work in its August 1789 issue:

Dr. Gregory's chief view, in his various writings, was not confined to the mere improvement of his readers in scientific knowledge. In some of his compositions, he [1] points out the proper use of philosophy, by shewing its application to the duties of common life; in others, he [2] has successfully endeavoured to inculcate virtuous principles; in one work he [3] has delineated that propriety of conduct which is necessary in the practice of the noblest art; and in another he [4] has exhibited the elementary principles of science which he possessed. (162, bracketed numbers added)

Gregory's response to Question 59 contains the basis for each of these four areas

and serves as a precursor to medical advancements and public health initiatives taken throughout Scottish cities in the nineteenth century (Lobban 31–32). The Edinburgh Medical School, a university Gregory had critiqued in his Question 59 abstract for teaching “synthetically,” eventually expanded its curriculum to include a wider array of courses (Lobban 42). These courses included pathology (due to a growing concern with the causes of disease) and hygiene and public health (to provide medical evidence to law courts about how to reduce disease transmission in cities). The British Medical Association (BMA), established in 1832, pressed for proper regulations and more effective training of doctors so that they would be more adequately qualified to practice medicine (Lobban 42). British doctors and professors also eventually either adopted medical advancements from other countries or made their own, such as using chloroform to put patients to sleep during long operations and carbolic acid to sterilize wounds (Lobban 20–24).

Like Britain, the U.S. incorporated other ideals of the Western world into medical education and practice. The medical field, however, still does not completely satisfy Gregory's criteria for the advancement of “mankind.” Gregory had called for an education that would encourage physicians to think analytically so that they would be more open to alternative diagnoses and treatment for their patients. Since the Scottish Enlightenment, both Europe and the U.S. developed Continuing Medical Education (CME) programs to keep physicians informed on scientific advancements and how these discoveries impact patients. Even though its development is evidence-based, CME lacks “scientifically based methodology for educating patients,...

meeting the regulatory requirements for licensure, but not on practice improvement or enhancement of patient outcomes” (Nissen 1813). CME is also poorly funded in Europe and the U.S., even though sponsored by pharmaceutical companies and government agencies (Sandars 680). Because pharmaceutical companies fund CME programs, course objectives have been colored by commercial interests in the past—motivating the U.S. Senate Finance Committee to develop new guidelines that relieve CME of bias (Partin 156). Until these guidelines go into effect and the CME curriculum incorporates more “practice-based learning” than “didactic-based learning” in a variety of healthcare settings, physicians are still advancing medicine at a slow rate (Nissen 1813).

In comparison to Gregory’s time, pharmaceuticals and government regulations play a much larger role in the medical profession “system.” Most U.S. states, for example, have prescription databases that enable physicians to better understand their patients’ medical history but also be held accountable for improperly prescribing medications. In recent years, the system has identified physicians overprescribing painkillers that contributed to the opioid epidemic (Calvert and Campo-Flores). While government regulations have a more symbiotic relationship with the medical profession than during the Scottish Enlightenment, commercial interests and physician pride still do interfere with a patient receiving the best possible diagnosis or treatment. In 2013, Johnson & Johnson halted sales of a laparoscopic power morcellator used for hysterectomies. The morcellator, a tool used to cut up and remove a uterus, left behind malignant tissue in several female patients, resulting in

cancer (Levitz and Kamp). Even though the U.S. Food and Drug Administration had issued a warning about the morcellators, some doctors thought that the FDA had “overreached,” had faith in the company that produced them, and continued to use the device on their patients (Levitz and Kamp). The Western medical profession therefore still has blind spots in the “system” described by Gregory.

Despite the gaps in physician oversight, most Western countries have developed codes of ethics and malpractice laws that incorporate Gregory’s ideals. The American Medical Association (AMA), for example, outlines standards of conduct for physicians, asking them to “continue to study, apply, and advance scientific knowledge” along with “maintaining a commitment to medical education” (AMA 1). Because these standards are not laws, however, many physicians are not held accountable for their actions until a malpractice suit ensues (Bal 339). Medical school bioethics courses and CME programs should better include real-life scenarios to prevent incidents of malpractice.

Conclusions

The twenty-first century is still approaching what Gregory claimed in his later books would advance medicine: the physician who is not only curious and open-minded, but also well-mannered and concerned for the well-being of his patients (Maio 184). Gregory uses a rhetoric of sensibility in his Question 59 abstract to explain why the different players of a medical advancement must be compatible. He first defines the art of medicine by making comparisons: medicine treats humans rather than machines; analytical education better prepares doctors for treating patients than a synthetic education; and the modest physician is more

likely to care about improving medicine than the dogmatic physician. Gregory next personifies the protagonists and antagonists of medical advancement. The antagonists, says Gregory, should be proponents of scientific progress but have instead served as barriers. These include the medical profession and the overall “system” which defines how medicine should be practiced. Gregory also personifies nature, which is neither a

protagonist nor an antagonist but should serve as a reason why human beings need the existence of medicine. The surviving Question 59 abstract ends before Gregory can explain the true protagonist of medical advancement, but within the following 100 years Scotland achieves the mindset for progress and reform for which he had advocated. The Western world continues to build on this progress.

Acknowledgments

I conducted this study while studying abroad in Edinburgh, UK through Furman University during the Spring 2016 semester. I thank my then-professor, Dr. Sean O'Rourke, for accepting me into this program, encouraging his students to produce publication-quality papers, and helping me find the grave of Dr. John Gregory (right next to Adam Smith's!). I appreciate the time and effort undertaken by the National Library of Scotland and the Aberdeen University Library to track down Gregory's unfinished manuscript in a form I could analyze, and faculty at the University of Edinburgh for answering my questions about Gregory's student days at the Royal Infirmary. I also thank my YSW faculty advising editor, Dr. David Elder, for helping me shape the paper into its final product.

Notes

¹The Red Lion is a tavern located in Fochabers, a town close by to Old Aberdeen. Gregory had taught at King's College in Old Aberdeen before the campus joined the University of Aberdeen. According to Laurence McCullough, this tavern might have been one of the Aberdeen Philosophical Society's meeting locations (*Writings*, 10).

²The Aberdeen University Library obtained manuscripts of the Aberdeen Philosophical Society's minutes and question book (MS 145, MS 539/1, and MS 539/2) between 1892 and 1957. The library's records indicate that MS 539/1, the formal minute book for the Society, had multiple owners until donated to the University of Aberdeen in 1892. The son of the last owner stated that his father, Dr. John Webster of Edgehill, had bought the Society's minutes at a book auction. The Aberdeen University Library has been unsuccessful in tracing the ownership of MS 145 and MS 539/2, only determining that the university's Special Collections possessed all three manuscript sets before 1957 (*Minutes of the Aberdeen Philosophical Society*; University of Aberdeen).

³Nurses were known to measure body temperature with inaccurate equipment.

⁴Francis Bacon is credited for the invention of the scientific method in Britain (Walzer 15).

⁵David Hume, a British philosopher and historian, is known for works such as *A Treatise of Human Nature: Being an Attempt to Introduce the Experimental Method of Reasoning into Moral Subjects* (Buchan 76-78).

⁶Adam Smith is known as the founder of modern economics through published works such as *The Wealth of Nations* (Buchan 122-26).

Works Cited

- American Medical Association (AMA). *AMA Code of Ethics*. American Medical Association, 2016.
- "Art. IX. - Literary and Characteristical Lives of John Gregory, M.D., Henry Home, Lord Kames, David Hume, Esq. and Adam Smith, LL.D." *The Critical Review*, July 1801, 32nd ed., Smellie's Literary Lives sec., pp. 317–22.
- "Art. XVII. - The Works of the Late John Gregory, M.D." *Monthly Review*, Aug. 1789, 81st ed., Dr. Gregory's Works sec., pp. 162–65.
- Bal, Sonny. "An Introduction to Medical Malpractice in the United States." *Clinical Orthopaedics and Related Research*, vol 467, 2009, pp. 339–47.
- Bastron, Dennis, and Laurence McCullough. "What Goes Around, Comes Around: John Gregory, MD, and the Profession of Medicine." *Proceedings (Baylor University: Medical Center)*, vol 20, no. 1, 2007, pp. 18–21.
- Buchan, James. *Capital of the Mind: How Edinburgh Changed the World*. Birlinn Limited, 2007.
- Calvert, Scott and Arian Campo-Flores. "States Fight Opioid Epidemic with Prescription Databases." *The Wall Street Journal*, 2 Sept. 2016. www.wsj.com/articles/states-fight-opioid-epidemic-with-prescription-databases-1472854536
- Daiches, David. *The Scottish Enlightenment, 1730–1730: A Hotbed of Genius*. U of Edinburgh Press, 1986.
- Gaukroger, Stephen. "The Realm of Sensibility." *The Collapse of Mechanism and the Rise of Sensibility: Science and Shaping of Modernity, 1680–1760*. Oxford UP, 2015.
- Goring, Paul. *The Rhetoric of Sensibility in Eighteenth-Century Culture*. Cambridge UP, 2005.
- Gregory, John. *A Comparative View of the State and Faculties of Man with Those of the Animal World*. T. Cadell, Jun. and W. Davies, Strand, 1798.
- Gregory, John. "Whether the Art of Medicine as It Has Been Usually Practiced Has Contributed to the Advancement of Mankind." Question 59. Aberdeen Philosophical Society, Aberdeen. *John Gregory's Writings on Medical Ethics and Philosophy of Medicine*, Vol. 57, edited by Laurence B. McCullough, Kluwer Academic, 1995, pp. 59–66.
- Herman, Arthur. *The Scottish Enlightenment: The Scots' Invention of the Modern World*. Harper Perennial, 2001.
- Krolikowski, Walter. "The Starting Point in Scottish Common-Sense Realism." *The Modern Schoolman* vol. 33, no. 3, 1956, pp. 139–52.
- Levitz, Jennifer and John Kamp. "Medical Device Sidelined Too Late to Save Someone." *The Wall Street Journal*, 22 Nov. 2014. www.wsj.com/articles/a-medical-device-is-sidelined-but-too-late-for-one-woman-1416600067
- Lobban, Robert. *Edinburgh and the Medical Revolution*. Cambridge UP, 1980.
- Maio, Giovanni. "Is Etiquette Relevant to Medical Ethics? Ethics and Aesthetics in the Works of John Gregory (1724-1773)." *Medicine, Health Care and Philosophy*, vol. 2, 1999, pp. 181–87.
- Menely, Tobias. "Returning to Emotion, via the Age of Sensibility." *Eighteenth-Century Life* vol. 34, no.1, 2010, pp. 114–24.
- McCullough, Laurence, ed. *John Gregory and the Invention of Professional Medical Ethics and the Profession of Medicine*. Philosophy and Medicine. Vol. 56. Kluwer Academic, 1998.

- McCullough, Laurence, ed. *John Gregory's Writings on Medical Ethics and Philosophy of Medicine*. Philosophy and Medicine. Vol. 57. Kluwer Academic, 1998.
- Minutes of the Aberdeen Philosophical Society*. 1773. MS 145; 539, GB 0231 University of Aberdeen, Special Collections. University of Aberdeen, Aberdeen.
- Nissen, Steven. "Reforming the Continuing Medical Education System." *Journal of the American Medical Association (JAMA)*, vol. 313, no. 18, 12 May 2015, pp. 1813–14.
- Partin, Clyde, Howard Kushner, and Mary E. Kollmer Horton. "A Tale of Congress, Continuing Medical Education, and the History of Medicine." *Proceedings (Baylor University Medical Center)*, vol. 27, no. 2, 2014, pp. 156–60.
- Sanders, John. "Continuing Medical Education Across Europe: Demonstrating Cost Effectiveness and Impact on Patient Care May Be Difficult." *British Medical Journal (BMJ)*, vol 341, 24 Sept. 2010, pp. 680–81.
- Ulman, Lewis, ed. *The Minutes of the Aberdeen Philosophical Society, 1758–1773*. Aberdeen UP, 1990. University of Aberdeen. "Aberdeen Philosophical Society Records." *Primo.abdn.ac.uk*. n.d.
- Walzer, Arthur. *George Campbell: Rhetoric in the Age of Enlightenment*. SUNY Press, 2002.
- Wild, Wayne. "The Origins of a Modern Medical Ethics in Enlightenment Scotland: Cheyne, Gregory and Cullen as Practitioners of Sensibility." *Scottish Medicine and Literary Culture, 1726–1832*, edited by Megan J. Coyer and David E. Shuttleton, Brill, 2014, pp. 48–73.
- Wood, P. B. "The Natural History of Man in the Scottish Enlightenment." *History of Science*, vol. 28, no. 1, 1990, pp. 89–123.