

Rasmussen's view, was what amounted to increasing deregulation throughout the 1980s and 1990s in US intellectual property rights and drug-trialling regimes. Even so, with Amgen, the rot set in, and an overall ambience of crass commercialism from which the historian must now rescue the likes of Genentech, Biogen, the Genetics Institute and other first-generation biotech firms.

What did they achieve, and what should we learn? Rasmussen reckons that recombinant insulin and the rest would have come to market anyway, though less quickly, since protein drugs had long been at the centre of the biology-industry nexus, and recombinant versions were so obviously the next step for pharmaceutically directed genetic engineering. They were the easy pickings, and early biotech's success is inseparable from their availability. So it is misguided, Rasmussen suggests, to try to replicate that (in any case exaggerated) success by recreating the biology-and-business friendly conditions that led to the founding and flourishing of those first firms. To do so, as he writes in conclusion, 'would be as futile as capturing a breaking wave in a bottle' (p. 191).

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Bjørn Okholm Skaarup, *Anatomy and Anatomists in Early Modern Spain* (Farnham: Ashgate, 2015), pp. 298, £70.00, hardback, ISBN: 978-1-4724-4828-6. The History of Medicine in Context.

In this well-researched and engaging text, Bjørn Skaarup offers the first full-length study of Renaissance anatomy in early modern Spain. Skaarup explores the state of anatomical knowledge, the role of dissections, the institutionalisation of Vesalian practices and the role of anatomical publications in the major universities of the kingdoms of Castile and Aragon between 1550 and 1600. He also traces the influence of the new anatomy on developments in medical and surgical training in the universities and the practice of medicine in numerous hospitals linked to those institutions. Spanish medical history, and anatomy in particular, remains conspicuously absent in a growing body of scholarship on Renaissance anatomy across Europe in spite of a recent burst of English-language publications on the subject. Skaarup's monograph brings to light Spanish developments in Renaissance anatomy and provides a foundation for comparative work. It also contributes in some rather unexpected ways to a growing conversation about Spanish-Italian medical connections during the era. Additionally, Skaarup thoughtfully probes the historiography of notable 'giants' in the field of early modern Spanish medicine, like Lopez Piñero, and suggests a number of alternative interpretations and factual corrections.

The rise and fall of anatomy studies in late sixteenth-century Spain is explored through a wide range of sources including university records, royal decrees, letters, art and literature, municipal documents, anatomy books, and other medical treatises. Skaarup points out that the institutionalisation of Vesalian anatomy at the universities of Castile and Aragon is clear evidence of the integration of a novel scientific paradigm; its subsequent decline is more difficult to explain. Yet, anatomical studies did decline, and, Skaarup argues, some of the most renowned anatomists of the era, like Matías García, contributed significantly to that decline.

The book is organised by region and university, and chronologically from the first to the last Spanish universities to establish anatomical studies. Valencia was the forerunner, introducing anatomical studies at its university in the first decades of the sixteenth century. 118 Book Reviews

It served as the model for anatomical studies established in the second half of the century at the Universities of Barcelona and Zaragoza. Vesalian-trained Valencian anatomists (primarily Luis Collado and Pedro Jimeno) and their first generation of students then introduced the new anatomy to the Castilian Universities of Salamanca, Valladolid and Alcalá de Henares. Skaarup draws on a number of studies that chart the history of medical studies in these Aragonese and Castilian universities. One advantage of Skaarup's comprehensive study is the successful integration of scholarship that typically focuses on *either* Aragon *or* Castile. He offers an examination of anatomical studies in both regions that allows him to identify patterns of similarity and difference.

The establishment of anatomical studies in the Castilian universities was the result of outside pressure from the crown and regional municipalities. This influence has been well documented in some recent English scholarship and his conclusion comes as little surprise. Similarly, the lack of royal control over the Aragonese universities created spaces for other institutions, such as municipalities and medical colleges, to influence the trajectory of anatomical studies. Explaining the rise of anatomical study is relatively straight forward; making sense of its decline proves much more challenging a task for Skaarup. The end of the story for each of these institutions is a decline in Vesalian anatomy and a resurgence of traditional, Galenic medicine. Skaarup carefully documents these moments of decline, yet often leaves the reader pondering exactly why the approach fell out of favour. He tentatively suggests there were a number of competing interests from physicians and surgeons, as well as outside forces, that probably served as the agents of change. One might consider if the early seventeenth-century professional battle between experiential and university-trained surgeons contributed to the decline of Vesalian anatomy.

While Skaarup does not offer a definitive explanation for the decline of Vesalian anatomy, his meticulous cross-examination of numerous medical treatises and anatomical textbooks reveals important connections between Vesalian epistemology and other fields of study. For example, Skaarup argues convincingly that Pedro Jimeno's work on the muscular-skeletal system and his discovery of the third auricular bone, was the result of his 'prioritising direct observation over written authority,' (p. 44). A number of such cases emerge through Skaarup's diligent research and close reading of numerous medical texts. Skaarup challenges the accepted interpretation of the relationship between the Spanish medical community and Vesalius as one born of hostility, jealousy and Spanish fear of innovation. First, Skaarup documents the pre-existing commitment to the new anatomy in Castile before Vesalius's arrival. Then drawing from new evidence detailing the medical treatment of Don Carlos, Skaarup identifies a co-operative atmosphere between some of the Spanish physicians and Vesalius. Moreover, a number of Spanish physicians, surgeons and anatomists demonstrated in print their appreciation of Vesalius's anatomy and his epistemological approach, and some even defended Vesalius's conclusions against his detractors. Given such clear evidence of support for the new anatomy, its sudden decline is even more striking and perplexing.

The final chapters explore the spread of Vesalian anatomy beyond the universities to the renowned medical institution at the Monastery of Guadalupe and to Mexico. As in the universities, the influence of Vesalian anatomy on medical practice beyond the university was short-lived and fragmented. A final chapter explores the relationship between art and anatomy, with artists' encounters with the new anatomy proving to be an important source of information about anatomical practices and dissections.

The book has much to offer and certainly makes important contributions to early modern Spanish medical history and the history of Renaissance anatomy. Skaarup's impressive Book Reviews 119

research skills are on full display and should be commended. A final point to ponder: in our rush to fill the gaps in our understanding of early modern Spanish medicine, have we forgotten to question our own 'traditional authorities'? Skaarup's careful historiographic work suggests to me that it is time to revisit the broader narrative of early modern Spanish medicine, to better integrate regional studies in the field, and to provide a Spanish story that is in conversation with the rest of early modern Europe. *Anatomy and Anatomists in Early Modern Spain* provides a welcome starting point for such endeavours.

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Kara W. Swanson, *Banking on the Body: The Market in Blood, Milk, and Sperm in Modern America* (Cambridge: Harvard University Press, 2014), pp. i, 333, \$35.00, hardback, ISBN: 978-0674281431.

In Banking on the Body: The Market in Blood, Milk, and Sperm in Modern America, Kara Swanson takes 'a new look at an old problem' (p. 2) – the scarcity, rationing and allocation of human body products. Tracing the history of the development of blood, breast milk, and semen banks 'from the nineteenth-century experiments that made such therapeutics possible to the twenty-first century websites that facilitate body product exchanges' (p. 5), she provides a compelling analysis of how American society has commodified the human body via banks, which are a double metaphor in this context: a place where human body products are deposited, stored and withdrawn, but also bought and sold as part of the capitalist market forces of medical supply and demand.

Weaving the history of American medicine, technology, science and politics with developments in health care delivery, the legal system (eg. commercial, property and product liability law), and professional codes of conduct (of medical societies, for example), Swanson traces the emergence of the human body as 'property' or 'therapeutic merchandise' (p. 5). Specifically, she delineates how we came to the point of 'using a part of one person to treat another person' (p. 7) and the social, cultural, ethical and legal ramifications of such therapeutics. She cogently argues that in the United States, the story of human body products cannot be separated from race, class, gender and the various power hierarchies that dominate American social institutions. Moreover, Swanson problematises both sides of the human body product coin – the gift/commodity dichotomy – by elucidating its limitations and inaccuracies. She excavates the roots of ongoing debates, such as the sale of body products online, and capping compensation for some donations (eggs) but not others (sperm), which creates a gendered hierarchy of value.

Swanson adds to the existing scholarship in the history of breastfeeding (eg. by Janet Golden, Valerie Fildes, Rima Apple, Richard Meckel and Jacqueline Wolf), with her analysis of the development of breast milk banks – with 'professional donors' – out of the occupation of wet nursing. At the turn of the twentieth century, American Progressives advocated 'scientific motherhood,' which disconnected breast milk, and nursing infants, from the breast. The best source of milk became an anonymous, sterile bottle of breast milk (donated by women at regulated 'milking stations') that could be tested, measured, monitored, bought, sold and controlled by the (mostly male) medical profession. However, after the Second World War, breast milk lost its economic value as breastfeeding fell out of favour with the medical profession, which advocated baby formula as part of the 'modern' hospital birth. As Swanson conveys, laywomen, such as Jeanne Feagans of Evanston,