

# Gray's Anatomy

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*Gray's Anatomy* is an English-language textbook of human anatomy originally written by Henry Gray and illustrated by Henry Vandyke Carter. Earlier editions were called *Anatomy: Descriptive and Surgical* and *Gray's Anatomy: Descriptive and Applied*, but the book's name is commonly shortened to, and later editions are titled, *Gray's Anatomy*. The book is widely regarded as an extremely influential work on the subject, and has continued to be revised and republished from its initial publication in 1858 to the present day. The latest edition of the book, the 41st, was published in September 2015.<sup>[1]</sup>

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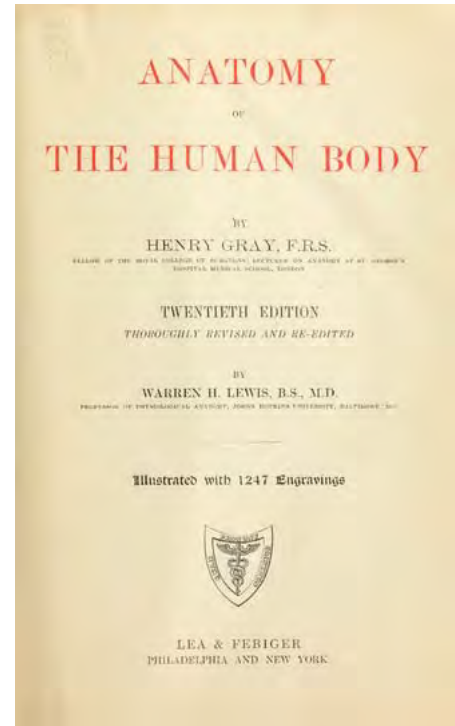
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## Publication history

### Origins

The English anatomist Henry Gray was born in 1827. He studied the development of the endocrine glands and spleen and in 1853 was appointed Lecturer on Anatomy at St George's Hospital Medical School in London. In 1855, he approached his colleague Henry Vandyke Carter with his idea to produce an inexpensive and accessible anatomy textbook for medical students. Dissecting unclaimed bodies from workhouse and hospital mortuaries through the Anatomy Act of 1832, the two worked for 18 months on what would form the basis of the book. Their work was first published in 1858 by John William Parker in London.<sup>[2]</sup> It was dedicated by Gray to Sir Benjamin Collins Brodie, 1st Baronet. An imprint of this English first edition was published in the United States in 1859, with slight alterations.<sup>[3][4]</sup> Gray prepared a second, revised edition, which was published in the United Kingdom in 1860, also by J.W. Parker.<sup>[5][6]</sup> However, Gray died the following year, at the age of 34,

### Henry Gray's Anatomy of the Human Body



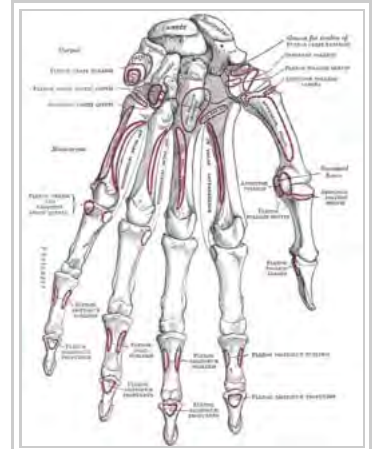
Title page of American 20th edition (1918)

<b>Author</b>	Henry Gray
<b>Original title</b>	<i>Anatomy: Descriptive and Surgical</i>
<b>Illustrator</b>	Henry Vandyke Carter
<b>Country</b>	England
<b>Language</b>	English
<b>Subject</b>	Human anatomy
<b>Publication date</b>	1858



Henry Gray

having contracted smallpox<sup>[5]</sup> while treating his nephew (who survived). His death had come just three years after the initial publication of his *Anatomy Descriptive and Surgical*. Even so, the work on his much-praised book was continued by others.<sup>[7]</sup> Longman's publication reportedly began in 1863, after their acquisition of the J.W. Parker publishing business.<sup>[8]</sup> This coincided with the publication date of the third British edition of *Gray's Anatomy*.<sup>[9]</sup> Successive British editions of *Gray's Anatomy* continued to be published under the Longman, and more recently Churchill Livingstone/Elsevier imprints, reflecting further changes in ownership of the publishing companies over the years.



An illustration from the American 1918 edition

## American editions

The full American rights were purchased by Blanchard and Lea, who published the first of twenty-five<sup>[a]</sup> distinct American editions of *Gray's Anatomy* in 1862, and whose company became Lea & Febiger in 1908. Lea & Febiger continued publishing the American editions until the company was sold in 1990.<sup>[10]</sup>

The first American publication was edited by Richard James Dunglison, whose father Robley Dunglison was physician to Thomas Jefferson.<sup>[11]</sup> Dunglison edited the next four editions. These were: the *Second American Edition* (February 1862); the *New Third American from the Fifth English Edition* (May 1870); the *New American from the Eighth English Edition* (July 1878); and the *New American from the Tenth English Edition* (August 1883). W. W. Keen edited the next two editions, namely: the *New American from the Eleventh English Edition* (September 1887); and the *New American from the Thirteenth English Edition* (September 1893).

In September 1896, reference to the English edition was dropped and it was published as the *Fourteenth Edition*, edited by Bern B. Gallaudet, F. J. Brockway, and J. P. McMurrich, who also edited the *Fifteenth Edition* (October 1901). There is also an edition dated 1896 which does still reference the English edition stating it is "A New Edition, Thoroughly Revised by American Authorities, from the thirteenth English Edition" and edited by T. Pickering Pick, F.R.C.S. and published by Lea Brothers & Co., Philadelphia and New York.<sup>[12]</sup>

The *Sixteenth Edition* (October 1905) was edited by J. C. DaCosta, and the *Seventeenth* (September 1908) by DaCosta and E. A. Spitzka. Spitzka edited the *Eighteenth* (Oct. 1910) and *Nineteenth* (July 1913) editions, and in October 1913, R. Howden edited the *New American from the Eighteenth English Edition*. The "American" editions then continued with consecutive numbering from the Twentieth onwards, with W. H. Lewis editing the 20th (September. 1918), 21st (August 1924), 22nd (August 1930), 23rd (July 1936), and 24th (May 1942). C. M. Gross edited the 25th (August 1948), 26th (July 1954), 27th (August 1959), 28th (August 1966), and 29th (January 1973). Carmine D. Clemente edited and extensively revised the 30th edition (October 1984).<sup>[13]</sup> With the sale of Lea & Febiger in 1990, the 30th edition was the last American Edition.

## Discrepancies in numbering of American and British editions

Sometimes separate editing efforts with mismatches between British and American edition numbering led to the existence, for many years, of two main "flavors" or "branches" of *Gray's Anatomy*: the U.S. and the British one. This can easily cause misunderstandings and confusion, especially when quoting from or trying to purchase a certain edition. For example, a comparison of publishing histories shows that the American numbering kept roughly apace with the British up until the 16th editions in 1905, with the American editions either acknowledging the English edition, or simply matching the numbering in the 14th, 15th and 16th editions. Then the American numbering crept ahead, with the 17th American edition published in 1908, while the 17th British edition was published in 1909. This increased to a three-year gap for the 18th and 19th editions, leading to the 1913 publication of the *New American from the Eighteenth English*, which brought the numbering back into line. Both 20th editions were then published in the same year (1918). Thereafter, it was the British numbering that pushed ahead, with the 21st British edition in 1920, and the 21st American edition in 1924. This discrepancy continued to increase, so that the 30th British edition was published in 1949, while the 30th and last American edition was published in 1984.<sup>[9][14]</sup>

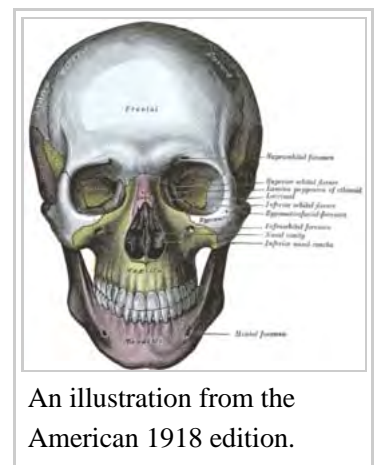
## Currently available editions

The newest, 41st edition of *Gray's Anatomy* was published on 25 September 2015 by Elsevier in both print and on-line versions, and is the first edition to have enhanced on-line content including anatomical videos and a bonus *Gray's* imaging library. The latest edition also has 24 specially invited on-line commentaries on controversial anatomical topics as diverse as advances in electron microscopy and fluorescence microscopy; the neurovascular bundles of the prostate; stem cells in regenerative medicine; the anatomy of facial ageing; and technical aspects and applications of diagnostic radiology.

The senior editor of this book and accompanying website on ExpertConsult <sup>[15]</sup> is Professor Susan Standring, who is Emeritus Professor of Anatomy at King's College London.<sup>[16]</sup> The three most recent editions differ from all previous editions in an important respect: they present anatomical structures by their regional anatomy (i.e. ordered according to what part of the body the structures are located in – e.g. the anatomy of the bones, blood vessels and nerves, etc. of the upper extremity is described in one place). All previous editions of *Gray's Anatomy* were organized by systemic anatomy (i.e. there were separate sections for the body's entire skeletal system, entire circulatory system and entire nervous system, etc.). The editors of the 39th edition acknowledged the validity of both approaches but switched to regional anatomy by popular demand.<sup>[17]</sup>

Older, out-of-copyright editions of the book continue to be reprinted and sold. On the internet in particular, there are numerous offers for older editions. However it is not always clear which (British or American) edition these books are republications of. Many seem to be reprints of the 1901 (probably U.S.) edition. Also on the internet, there are several sites where various older versions can be read online.<sup>[18][19][20]</sup> Although older editions may serve historic and artistic uses because their companion illustrations and anatomical cross sections are renowned for their rustic and often haunting presentation, they no longer represent an up-to-date anatomical understanding.<sup>[b]</sup>

Henry Gray wrote the original version of *Gray's Anatomy* with an audience of medical students and physicians in mind, especially surgeons. For many decades however, precisely because Gray's textbook became such a classic, successive editors made major efforts to preserve its position as possibly the most authoritative text on the subject in English. Toward this end, a long-term strategy appears to have been to make each edition come



An illustration from the American 1918 edition.

close to containing a *fully comprehensive* account of the anatomical medical understanding available at the time of publication. Given the explosion of medical knowledge in the 20th century, it is easily appreciated that this led to a vast expansion of the book, which threatened to collapse under its own weight in a metaphorical and physical sense. From the 35th edition onward, increased efforts were made to reverse this trend and keep the book readable by students. Nevertheless, the 38th edition contained 2,092 pages in large format<sup>[21]</sup> – the highest page count of any and an increase from the 35th edition, which had 1,471 pages.<sup>[22]</sup> The current 41st edition has 1,584 pages. Newer editions of *Gray's Anatomy* –and even several recent older ones– are still considered to be the most comprehensive and detailed textbooks on the subject.<sup>[23]</sup> Despite the aforementioned efforts to keep *Gray's Anatomy* readable by students, when the 39th edition was published, students were identified as a secondary market for the book,<sup>[24]</sup> and companion publications such as *Gray's Anatomy for Students*,<sup>[c]</sup> *Gray's Atlas of Anatomy* and *Gray's Anatomy Review* have also been published in recent years.<sup>[25]</sup>

## Cultural influence

The American medical drama *Grey's Anatomy* takes its name from the textbook.

The 1996 Steven Soderbergh film *Gray's Anatomy*, featuring monologist Spalding Gray, also takes its name from the title of the book, as does *Gray's Anatomy: Selected Writings*, a 2009 book by British political philosopher John N. Gray.

In Philip Roth's novel *The Anatomy Lesson*, the main character Nathan Zuckerman wishes to study medicine. He hopes to get rid of his terrible pains in this way. In this context, Gray's textbook is briefly mentioned.

In Ian McEwan's *Atonement*, the work is studied by the character Robbie Turner.

In Mark Twain's *The Adventures of Tom Sawyer*, the book that Tom catches Becky Thatcher looking at, and of which she tears a page, is implied to be *Gray's Anatomy*.

In John Irving's 1985 novel *The Cider House Rules*, Dr. Larch orders his apprentice gynecologist Homer Wells to read *Gray's Anatomy*.

In Abraham Verghese's novel *Cutting for Stone*, Shiva reads it.

In the episode Episode 6 "Wasiyat" of the Doordarshan TV series *Byomkesh Bakshi*, one of the murder suspects is reading the book.

Alasdair Gray uses pictures of the first edition of *Gray's Anatomy* as illustrations in his 1992 novel, *Poor Things*.

*Gray's Anatomy* makes a brief appearance in the 1991 film, *The Addams Family*. Granny is seen to make new recipes by combining *Gray's Anatomy* with "normal" cookbooks.

In the 1995 film *The Young Poisoner's Handbook*, the protagonist pores over *Gray's Anatomy* as well as other medical textbooks during his research on the effects and proper techniques of poisoning.

*Gray's Anatomy* also makes a brief appearance in the fourth episode of the third season of TNT television series *Rizzoli & Isles* when Dr. Isles (played by Sasha Alexander) takes the book off of a drawer and makes Angela (played by Lorraine Bracco) swear not to tell Jane (Angie Harmon) a secret.

*Gray's Anatomy* also makes a brief appearance in the 18th episode of the 2nd season of medical drama *House*

(*TV series*) when Dr. House appears to be lying on the floor sleeping, and Dr. Wilson comes to talk to him about a dispute between Dr. Cameron and Dr. Foreman about writing journal articles on the same subject.

The interior illustrations were adapted by Isaac Marion in his *Warm Bodies* series from *Gray's Anatomy*. Also in the text of the books, one of the main characters refers to it when they see zombies in various states of decay.

In Dan Brown's novel *Inferno*, Sienna Brooks, as a child, reads all the 1,600 pages of *Gray's Anatomy* in ten days.

In the *Star Trek: Voyager* episode "Message in a Bottle", Harry Kim attempts to create a new Emergency Medical Hologram, but it is only able to recite the entire text of *Gray's Anatomy* instead of actually helping patients.

In *The Walking Dead* episode "Now", the book is seen in the hands of Denise Cloyd who is desperately trying to save the life of Scott, a fellow resident in the Alexandria Safe Zone.

In the movie *The Apprenticeship of Duddy Kravitz* Duddy is caught sneaking a peek at the female anatomy section of a medical student's copy of *Gray's Anatomy* as Duddy unloads the student's luggage at the resort.

In Amitav Ghosh's novel, *The Hungry Tide*, a type of dolphin is determined as being named by Henry Gray, of *Gray's Anatomy* on page 190.

In the 2013 movie "Diana", starring Naomi Watts who portrays Princess Diana, she receives a copy of *Gray's Anatomy*.

The play by Jim Leonard Jr. "Anatomy of Gray" which stars a doctor literally blown into small town Indiana, takes its title as a play on "Grey's Anatomy"

## Notes

- This count excludes the previously mentioned 1859 US publication of the English first edition.
- Depending on the version at hand, even the suitability of reprints and online versions for artistic purposes may be compromised due to limitations in resolution and reproduction quality.
- Written by Richard L. Drake, Wayne Vogl and Adam W. M. Mitchell

## References

- "Gray's Anatomy – The Anatomical Basis of Clinical Practice 41st edition". 26 September 2015. Retrieved 18 November 2015.
- Gray, Henry; Carter, Henry Vandyke (1858), *Anatomy Descriptive and Surgical*, London: John W. Parker and Son, retrieved 16 October 2011
- Richardson, Ruth (2005), "A Historical Introduction to Gray's Anatomy" (PDF), in Susan Standring, *Gray's Anatomy: The Anatomical Basis of Clinical Practice* (39th (electronic version) ed.), Edinburgh: Elsevier Churchill Livingstone, p. 4, retrieved 16 October 2011
- Gray, Henry; Carter, H.V (1859), *Anatomy, descriptive and surgical*, Philadelphia: Blanchard and Lea, retrieved 16 October 2011 (Per National Library of Medicine holdings). Note: This is not the 'American' edition. American rights had yet to be purchased. It is an American publication of the English edition.
- Moore, Wendy (30 March 2008), "Gray's Anatomy celebrates 150th anniversary", *The Telegraph*, Telegraph Media Group, retrieved 16 October 2011
- A brief history of Gray's Anatomy* (PDF), Elsevier, retrieved 16 October 2011 External link in |publisher= (help)

7. Poynter, F. N. L. (6 September 1958). "Gray's Anatomy: The First Hundred Years" (PDF). *British Medical Journal*: 610–611.
8. "Longman's 1863 publication of *Gray's Anatomy*", *Pearson Education: History*, Pearson Education, retrieved 16 October 2011
9. Roger Warwick & Peter L. Williams, eds. (1973), *Gray's Anatomy* (35th ed.), London: Longman p.iv (Previous Editions and Editors - listings)
10. Lea & Febiger (<http://www.tehistory.org/hqda/html/v37/v37n2p063.html#LEA>) in Tredyffrin East Town Historical Society *History Quarterly* Digital Archives, pp. 68-70 (Source: April 1999, Vol. 37, No.2, pp. 63-70)
11. "Gray's Anatomy: The Jefferson Years" (<http://jeffline.jefferson.edu/AISR/Forum/03/09/articles/grays.html>) in *Jeffline Forum*, September 2003
12. Gray, Henry Gray's Anatomy Descriptive and Surgical, 1896 13th edition
13. Carmine D. Clemente, ed. (1985), *Gray's Anatomy* (30th ed.), Philadelphia: Lea & Febiger, ISBN 0-8121-0644-X pp. vi–ix
14. Carmine D. Clemente (1985) p.vi (American Editions of Gray's Anatomy - listings)
15. <https://expertconsult.inkling.com/store/book/grays-anatomy-anatomical-basis-clinical-practice-41/>
16. *Elsevier: Gray's Anatomy, 41st Edition*
17. *Gray's Anatomy vol.39e Introduction* (PDF), 2004, ISBN 0-443-06676-0, retrieved 21 March 2012 See page 9, bottom
18. Henry Gray. "Anatomy, descriptive and surgical". Open Library. Retrieved 2012-09-27.
19. "Gray, Henry. 1918. Anatomy of the Human Body". Bartleby.com. Retrieved 2012-09-27.
20. "Gray's Anatomy". Education.yahoo.com. Archived from the original on 12 Oct 2012. Retrieved 2012-09-27.
21. Gray's Anatomy: The Anatomical Basis of Medicine and Surgery (British Edition. 38th Ed) (Hardcover) (<http://www.amazon.co.uk/dp/0443045607>) Amazon
22. Description of 35th Edition (1973) at WorldCat (<http://www.worldcat.org/title/grays-anatomy/oclc/2973401>) Retrieved 21 March 2012
23. 'Gray's Anatomy' is back after major surgery ([http://www.usatoday.com/news/health/2005-04-10-gray%27s-new-look\\_x.htm](http://www.usatoday.com/news/health/2005-04-10-gray%27s-new-look_x.htm)), By Glenn O'Neal, Posted 4/10/2005, USATODAY.com
24. cf. page 11: <http://www.graysanatomyonline.com/content/0443066760/supfiles/HistoricalIntro.pdf>
25. List of publications, including companion publications to Gray's Anatomy ([http://www.us.elsevierhealth.com/dsresults.jsp?lid=1&sid=959&orderby=copyright\\_desc&searchtype=quicksearch&pageid=55](http://www.us.elsevierhealth.com/dsresults.jsp?lid=1&sid=959&orderby=copyright_desc&searchtype=quicksearch&pageid=55))

## Bibliography

- Gray, Henry (1858), *Anatomy: Descriptive and Surgical*, London: John W. Parker and Son, retrieved 16 October 2011 Online- and PDF versions of the 1st edition at Open Library/Internet Archive. Several other editions are also available at this site.
- *Gray's Anatomy: The Anatomical Basis of Clinical Practice* (40th ed.), Churchill-Livingstone, Elsevier, 2008, ISBN 978-0-443-06684-9
- Richardson, Ruth (2005), "A Historical Introduction to Gray's Anatomy" (PDF), in Susan Standing, *Gray's Anatomy: The Anatomical Basis of Clinical Practice* (39th (electronic version) ed.), Edinburgh: Elsevier Churchill Livingstone, retrieved 16 October 2011, A brief history of the British Edition of the book.
- Richardson, Ruth (2008), *The Making of Mr. Gray's Anatomy*, Oxford University Press, ISBN 0-19-955299-1
- Hayes, Bill (2007), *The Anatomist: a True story of Gray's Anatomy*, Ballantine, ISBN 978-0-345-45689-2

## External links

- Online version of *Gray's Anatomy* (<http://www.bartleby.com/107/>) — The complete 20th U.S. edition of *Gray's Anatomy of the Human Body*, published in 1918. NB: This is the most recent American version that is in the public domain.
- Last's anatomy (<https://allmedbooks.com/download-lasts-anatomy-pdf/>) By All medical books (<https://allmedbooks.com/download-lasts-anatomy-pdf/>).
  - Online audio recording of the text of the same edition in five parts: 1 (<http://librivox.org/anatomy-of-the-human-body-part-1-by-henry-gray/>)2 (<http://librivox.org/anatomy-of-the-human-body-part-2-by-henry-gray/>)



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- First edition of *Gray's Anatomy* ([https://openlibrary.org/books/OL24780759M/Anatomy\\_descriptive\\_and\\_surgical](https://openlibrary.org/books/OL24780759M/Anatomy_descriptive_and_surgical)), 1858 (direct PDF link (<https://archive.org/download/anatomydescripti1858gray/anatomydescripti1858gray.pdf>))
- *Gray's Anatomy* (<http://www.bbc.co.uk/programmes/b04gvbdt>). 2014. Episode 5 of the BBC TV series *The Beauty of Anatomy*.
- Video of @Google Talk by Bill Hayes on *Gray's Anatomy* (<https://www.youtube.com/watch?v=AKUIxaLEGhc>)
- Selected images from the 1st edition of *Gray's Anatomy* ([http://www.cppdigitallibrary.org/items/browse?advanced%5B0%5D%5Belement\\_id%5D=48&advanced%5B0%5D%5Btype%5D=contains&advanced%5B0%5D%5Bterms%5D=Gray%2C+Henry%2C+1825-1861.+Anatomy](http://www.cppdigitallibrary.org/items/browse?advanced%5B0%5D%5Belement_id%5D=48&advanced%5B0%5D%5Btype%5D=contains&advanced%5B0%5D%5Bterms%5D=Gray%2C+Henry%2C+1825-1861.+Anatomy)) From The College of Physicians of Philadelphia Digital Library
- *Gray's Anatomy* for students (<https://www.worldcat.org/oclc/265657274>) in libraries (WorldCat catalog)

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