

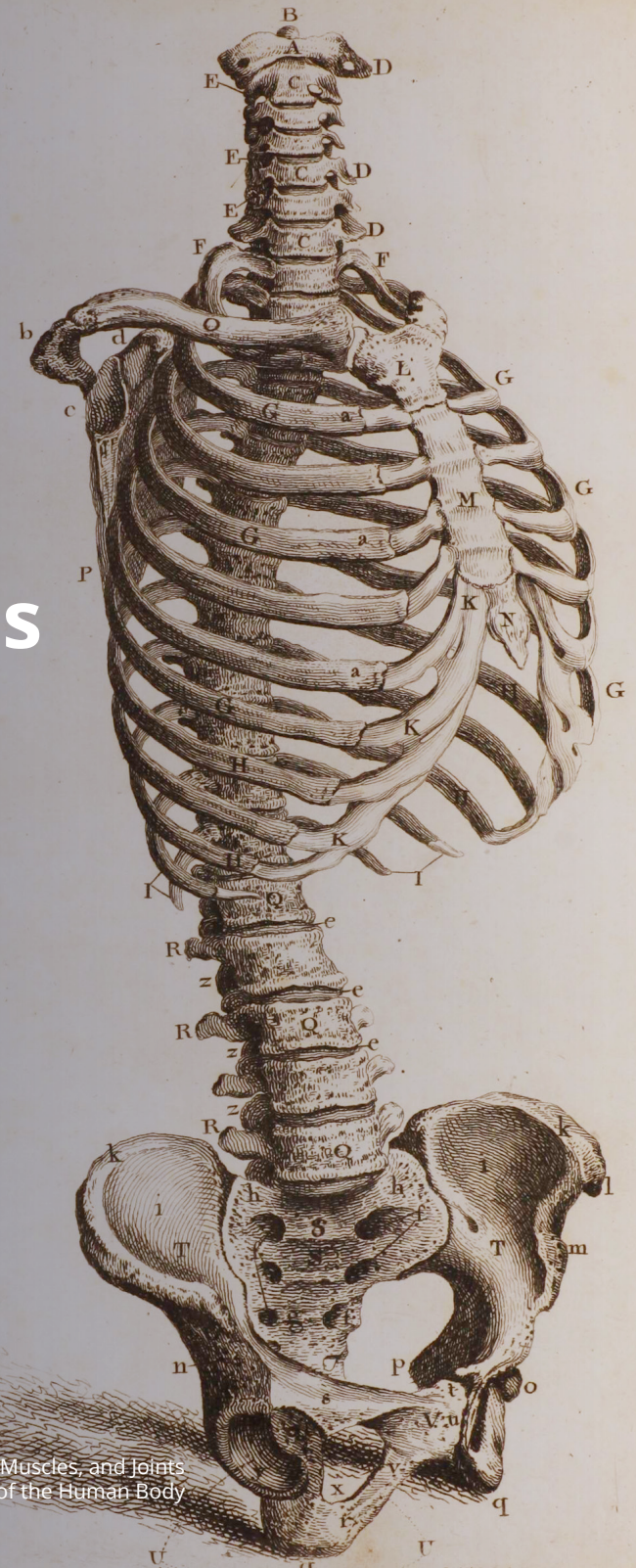
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The Royal College of Physicians

Part I
inside the archive

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RCP Image Archive: Engravings of the Bones, Muscles, and Joints
Illustrating the First Volume of the Anatomy of the Human Body



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| Introduction

The history of medicine is the history of life and death, and we all are connected to it.

– *Royal College of Physicians*

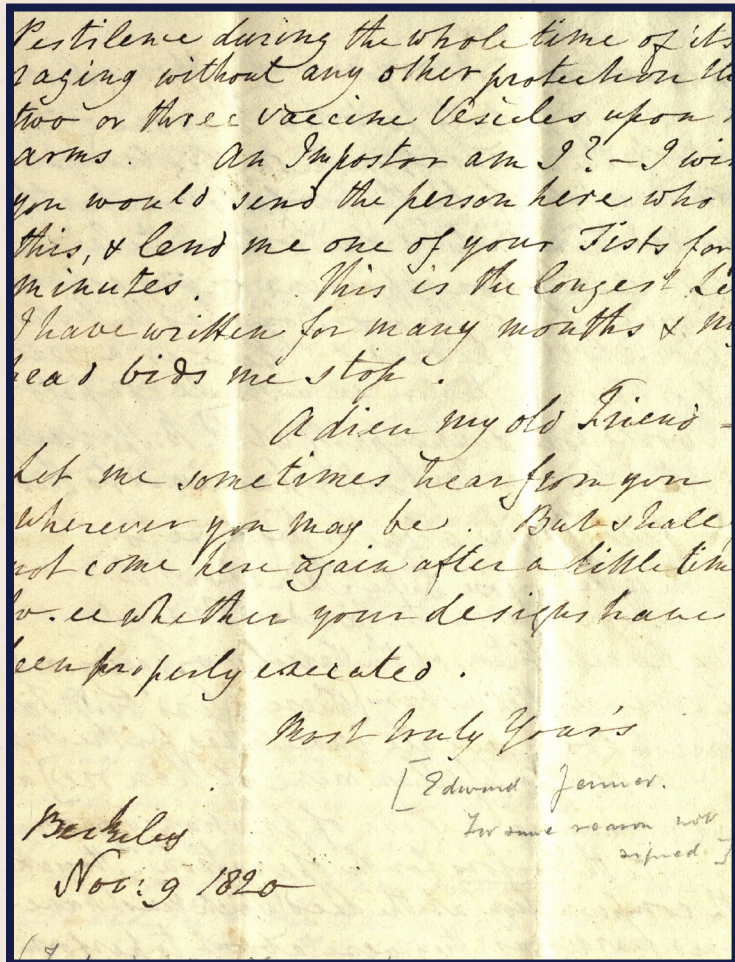
Almost as long as there has been human life, scientists and physicians have worked to preserve it. Every theory, breakthrough, and setback of the past lay the foundation for healthcare and disease prevention as we know them today.

The medical pioneers that came before—John Dee, William Harvey, Edward Jenner, and so many others—changed the face of healthcare, from increasing the understanding of how the human body worked to protecting patients from harm by ensuring that every physician was licensed to practice.

This lookbook provides a window into some of the stories that shaped modern medicine, from the use of astrology in disease diagnosis, to the development of the smallpox vaccine, to the discovery of the circulation of blood. Each shaped history and fundamentally impacted the quality of care—and the quality of life—for all of us who followed.

To learn more about these and other stories in the Royal College of Physicians Part I archive, visit wileydigitalarchives.com/rcp.

The First Vaccine



Autograph Letter from Edward Jenner to Rev. Robert Ferryman, Relating to His Recovery from Lameness, a Letter from Filkin, and Anecdotal Proof of the Efficacy of the Smallpox Vaccination. Autograph Letter Sequence, 9 Nov. 1820. Wiley Digital Archives.



FILE THIS UNDER

Immunology, Biology, Medical Humanities, Non-Traditional Medicine, British History, Public Health, Health Education, History of Science and Medicine, Social Factors in Health, Medical Research, Global Health Policy, General History Research



HISTORICAL CONTEXT

With little to no regulation, medical practice from the 16th century through the 18th century often consisted of “physicians” with no formal training or knowledge. Malpractice in England was rampant and unnecessary deaths abundant as unqualified impersonators took advantage of the wild west of practicing medicine.

According to the World Health Organization, smallpox was one of the world’s most devastating diseases known to humanity. An infectious disease which existed for thousands of years, the illness killed one of every three people infected. In the 17th century, “treatment” for smallpox included procedures such as bloodletting, purging, fresh air and the use of red curtains around the bed.



WHO

Edward Jenner, known as the “Father of Immunology”



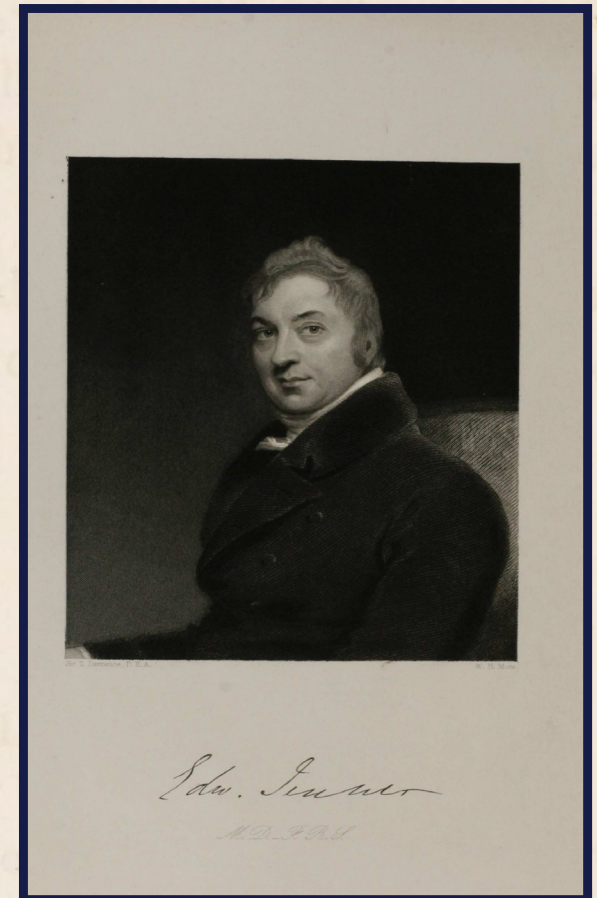
WHY HE'S NOTABLE

Edward Jenner (1749 – 1823), an English physician and scientist, was the pioneer of the smallpox vaccine, the first vaccine in the world. He wasn't, however, the first to suggest that infection with cowpox led to immunity to smallpox, nor the first to try cowpox inoculation. The process was to take puss from a smallpox sufferer and use that to inoculate someone healthy. There was a risk of death, but usually, a mild case of smallpox developed and sometimes led to lifelong immunity.

In the 1700s, there were tales of milkmaids who reported having cowpox, and afterwards being immune to smallpox. In 1796, Jenner brought these two ideas together in an experiment on 8-year-old James Phipps. He took the pus from a cowpox pustule and inserted it into James's arm, and proved that subsequently – the boy was immune to smallpox. Jenner even coined the word vaccine from the Latin 'vacca' for cow.

In 1852, the 'National Vaccine Establishment' produced a report on the benefits of vaccinations, and showed how since the introduction of vaccinations, death rates in London due to smallpox had fallen by two-thirds. It also showed that members of the public were still not convinced about vaccinations, marking the beginning of the anti-vaccination movement that is still prevalent to this day. Even until his death, Jenner continued to advocate on behalf of vaccination, engaging with the public and practitioners to promote the benefits.

Despite these first “anti-vaxxers”, rumors and fears about vaccines, smallpox vaccination was made compulsory in 1853, and as a result the disease was officially eradicated in 1979. However, vaccination still remains a controversial issue today amongst modern-day anti-vaxxers who continue to protest against inoculation due to lingering philosophical or religious beliefs.



Pettigrew, Joseph Thomas. “Medical Portrait Gallery. Biographical Memoirs of the Most Celebrated Physicians, Surgeons, Etc. Etc. Who Have Contributed to the Advancement of Medical Science.” RCP Library, Whittaker & Co., 1852. Wiley Digital Archives.

Related Items & Special Collections in the RCP Archive: Edward Jenner's diary and letters, related reports, papers, minutes and letters concerning inoculation and vaccination by: **Edward Joshua Edwardes**, the National Vaccine Establishment, the **Royal Jennerian Society**, Dr. J.T.A. Reed, Dr. Amian, the R.C.P. Committee on Vaccination and more.

Sources: <http://www.medieval-life-and-times.info/medieval-life/medieval-doctors.htm>

https://www.bbc.co.uk/history/british/empire_seapower/smallpox_01.shtml

Fig. 1.

A B C D E F

Fig. 2.

G H I

Fig. 3.

J K L

Fig. 4.

M N O



Today, the RCP has 34,000 members in 33 specialties, but it continues to remember the accomplishment of its community of medical members throughout history.



WHO

William Harvey, known for the discovery of the circulation of blood



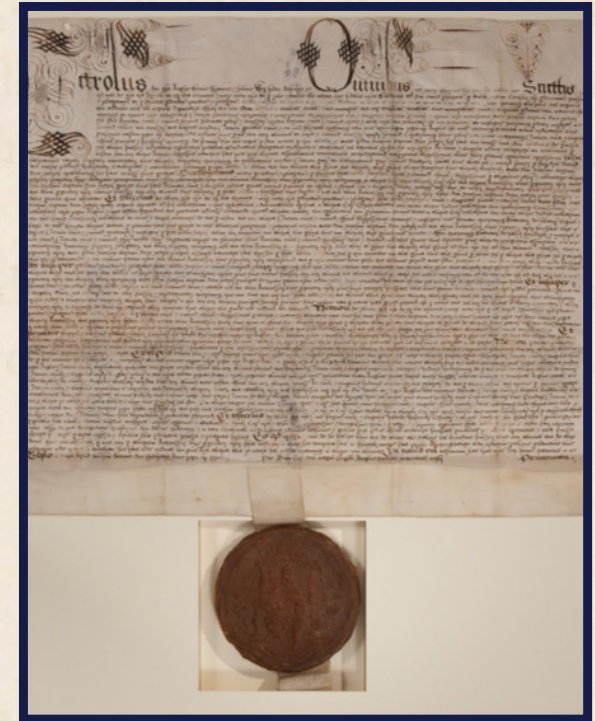
WHY HE'S NOTABLE

One of the most famous fellows of the RCP is William Harvey, a physician most notable for his discovery of the systematic circulation of the blood pumped around the body by the heart and for his propagation of the empirical pillars of observation and experimentation to understand “the secrets of nature.”

William Harvey started delivering the College’s famous anatomy lectures and in 1628 published his groundbreaking theory on the circulation of blood, *De Motu Cordis* ('on the motion of the heart'), controversially challenging over 1,500 years of established scientific and medical belief.

Through a series of experiments, Harvey demonstrated that the heart is a pump, pushing the blood through the body with every beat. The findings were a radical departure from the prevailing belief that the lungs were responsible for blood circulation. At the time, blood was not thought to circulate around the body; it was believed to be consumed by the body at the same rate that it was produced.

Harvey was appointed physician to James I in 1618 and continued as physician to Charles I upon Charles’s accession to the throne in 1625. When rumors began to circulate that James I died because he was poisoned by a medical treatment, Charles I granted a pardon to Harvey, which demonstrated his support for Harvey and his belief that he had no part in the previous monarch’s death.



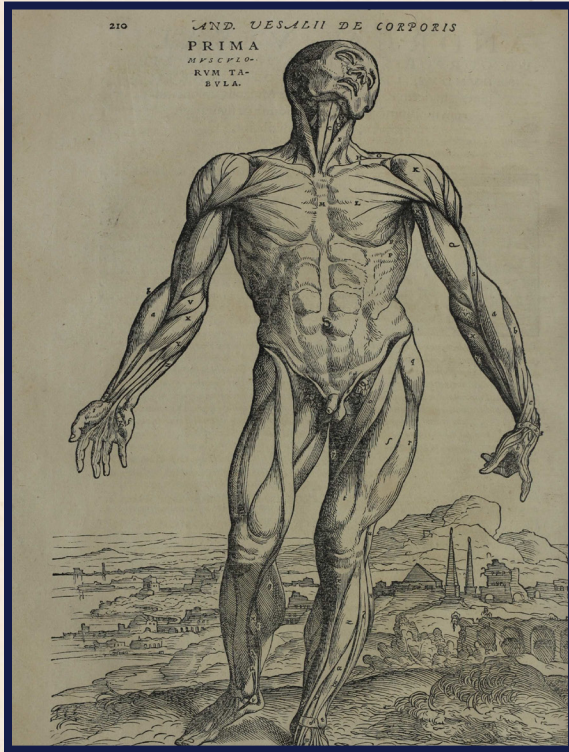
Harvey, William. “Letters Patent of Charles I under the Great Seal Granting a General Pardon to Dr. William Harvey.” Harvey, William, 10 Feb. 1625–10 Feb. 1626. Wiley Digital Archives: The Royal College of Physicians.

Related items & special collections in the RCP

Archive: William Harvey's letters, related reports, monographs, papers, minutes concerning witch trials and blood circulation, histories of the Royal College of Physicians, biography of Michael Servetus, the discoverer of pulmonary circulation and more.

Source: <https://www.britannica.com/biography/William-Harvey>

Human Anatomy



Vesalius, Andreas. "Andreae Vesalii Bruxellensis, Invictissimi Caroli V. Imperatoris Medici, de Humani Corporis Fabrica Libri Septem." RCP Library, Oporinus, Joannes, 1555. Wiley Digital Archives.



FILE THIS UNDER

Biology, Medical Humanities, Anatomy, Ethics in Medicine, British History, Public Health, Health Education, History of Science and Medicine, Social Factors in Health, Medical Research, General History Research



HISTORICAL CONTEXT

Prior to the 16th century, human anatomy was seriously misunderstood. Because human dissection was forbidden in medieval times, discoveries through animal dissection were broadly applied to human anatomy by default.

When it came to expertise in the field during these early centuries, the theories of Galen, the 2nd century Greek physician who wrote books on anatomy, were considered authoritative in medical education, despite that fact that Galen learned primarily by studying pigs and apes.

As the 16th century began, medical topics were taught primarily by reading these classical texts, followed by an animal dissection by a barber-surgeon whose work was directed by a lecturer. Galen's classical texts were generally considered unassailable until the Galenic doctrine was first seriously challenged in the 16th century.



WHO

Andreas Vesalius, known as the Reformer of Anatomy

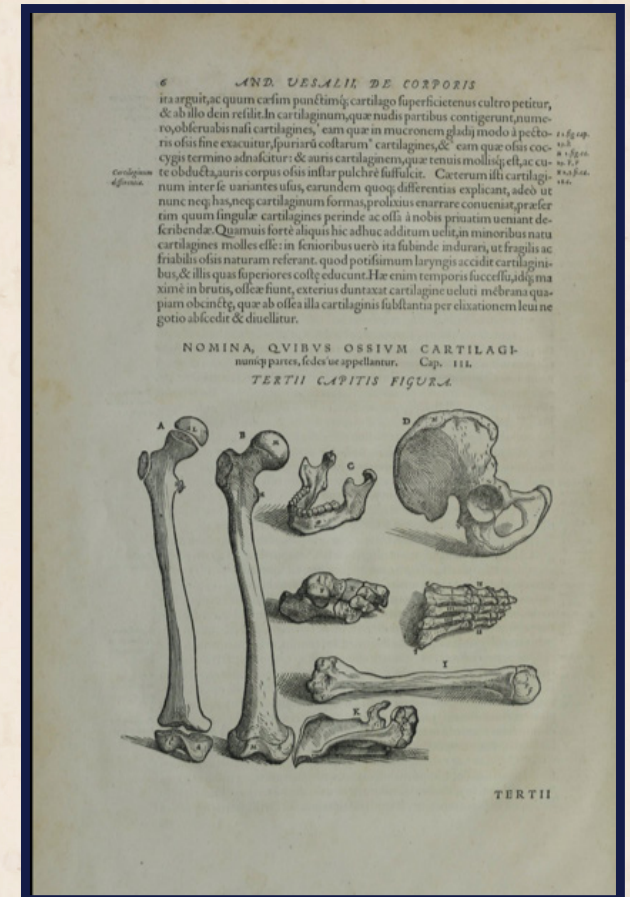


WHY HE'S NOTABLE

Andreas Vesalius was a Renaissance physician who revolutionized the study of biology and the practice of medicine by his careful description of the anatomy of the human body. Basing his observations on human dissections he made himself, he wrote and illustrated the first comprehensive textbook of anatomy.

Openly criticizing Galenic anatomy for its basis in animal dissection, Vesalius demonstrated his own method by performing human dissections himself, learning anatomy from cadavers and critically evaluating ancient texts. He wrote and published his own book, *De humani corporis fabrica libri septem* ("The Seven Books on the Structure of the Human Body") commonly known as the *Fabrica*, which was printed in 1543.

The *Fabrica* was a more extensive and accurate description of the human body than any put forward by his predecessors; it gave anatomy a new language and included the use of illustration, which was not common. Early in 1543, Vesalius left for Mainz, to present his book to the Holy Roman emperor Charles V, who engaged him as regular physician to the household. His prestige was further enhanced when Charles V, on abdication from the Spanish throne in 1556, provided him with a lifetime pension and made him a count.

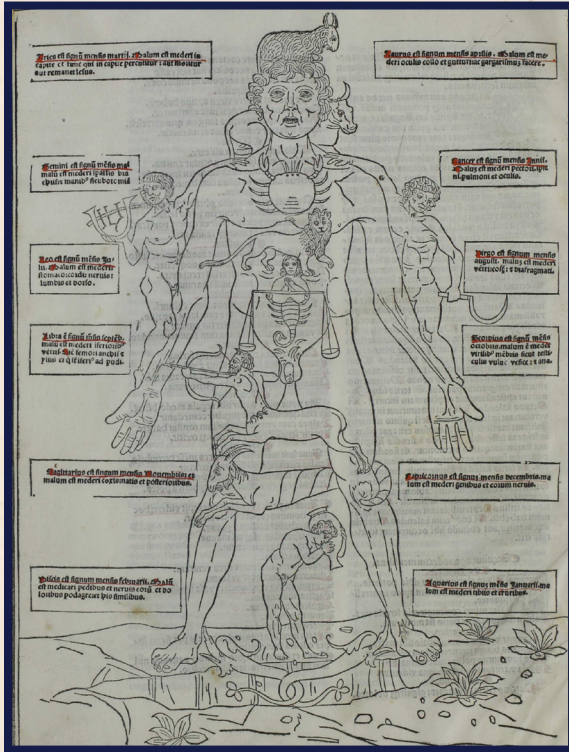


Vesalius, Andreas. "Andreae Vesalii Bruxellensis, Invictissimi Caroli V. Imperatoris Medici, de Humani Corporis Fabrica Libri Septem." RCP Library, Oporinus, Joannes, 1555. Wiley Digital Archives: The Royal College of Physicians.

Related items & special collections in the RCP Archive: Monograph on Andreas Vesalius as the reformer of anatomy, medical notes, meeting meetings, correspondence, lectures on anatomy, histories of anatomy and barber-surgeons, index of Galen's work and more.

Source: https://en.wikipedia.org/wiki/History_of_anatomy#From_ancient_to_medieval

Medieval and Early Modern Scholars



De Ketham, Joannes. "Fasciculus medicine: similitudo complexionum & elementorum." RCP Library, 1500. Wiley Digital Archives.



FILE THIS UNDER

Medieval Studies, Medieval and Early Modern Studies, Biology, Medical Humanities, Ethics in Medicine, British History, Public Health, Health Education, History of Science and Medicine, Social Factors in Health, Medical Research, General History Research



HISTORICAL CONTEXT

In the 1400's, methods of medical practice were basic and medieval doctors had limited knowledge. When it came to tending to patients, doctors paid attention to four bodily fluids, called humors: yellow bile, black bile, blood and phlegm. Medieval doctors tried to ensure that the four humors were properly balanced in order to maintain health. The body of the patient was also viewed as a part of the universe, and medicine was directly influenced by other disciplines of study that were thought to align with the body.

For example, in Renaissance Europe, astrology was actually a part of everyday medical practice. Physicians combined medical knowledge with careful studies of the stars and often carried special almanacs containing star charts which were said to rule each part of the body. In fact, in the books of one of Tudor England's most enigmatic figures, John Dee, a table illustration links the different signs of the zodiac with the four humors of the body.

It wasn't until the 18th century that emergent scientific disciplines led to the breakdown of astrology as part of the medical realm.



WHO

John Dee, a well-known Tudor polymath, scholar, courtier and magician



WHY HE'S NOTABLE

John Dee (1527–1609) was one of Tudor England's most extraordinary and enigmatic figures – a Renaissance polymath, with interests in almost all branches of learning. He served Elizabeth I at court, advised navigators on trade routes to the 'New World', travelled throughout Europe and studied ancient history, astronomy, cryptography and mathematics. He is also known for his passion for mystical subjects, including astrology, alchemy and the world of angels.

Dee built, and lost, one of the greatest private libraries of 16th century England. He claimed to own over 3,000 books and 1,000 manuscripts, which he kept at his home in Mortlake near London, on the River Thames. The authors and subjects of Dee's books are wide-ranging, and reflect his extraordinary breadth of knowledge and expertise. They include diverse topics such as mathematics, natural history, music, astronomy, military history, cryptography, ancient history and alchemy. These books give us an extraordinary insight into Dee's interests and beliefs – often in his own words – through his hand-written illustrations and annotations.

He continues to fascinate and inspire centuries after he entered the court of Elizabeth I.



Introducing Automated Text Recognition (ATR)

ATR is an AI-driven image recognition program that analyzes handwritten documents, runs the images against a variety of datasets to determine the best match, then attempts to recognize words within these handwritten documents. ATR differs from Optical Character Recognition (OCR), which is the standard for most digital archival collections, in that OCR focuses on each individual letter in typeset materials but cannot read handwriting.

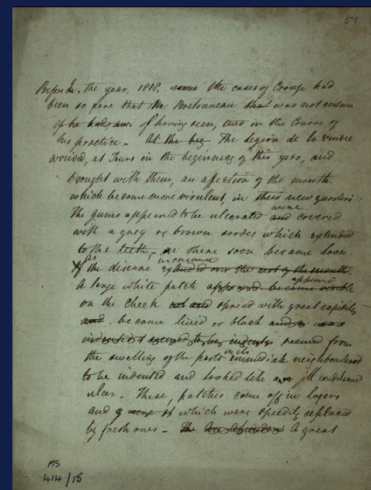
Without ATR, a manuscript page can only be found via top-level metadata. The text isn't searchable, and it can only be analyzed by reading it, which can be a taxing and time-consuming process. Through the introduction of ATR, manuscript pages are converted into typeset, the text is searchable, and it can be translated, cited, and analyzed with textual analysis tools.

There are hundreds of thousands of pages of handwritten text within the Wiley Digital Archives program, spread out across each archive. Through the incorporation of ATR into the WDA program, our analysis results will be different. New connections can be discovered, old paradigms or accepted wisdom can be challenged, and new discoveries will inevitably be made.

The implementation of ATR means that manuscripts and printed materials will come close to parity in their discoverability. ATR at this scale has the potential to change the nature of manuscript research and open the field to new researchers struggling with the requirements and skillset needed for intensive manuscript reading. WDA will be the only commercial archival program to implement ATR across all of our archival offerings.

To learn more about Wiley Digital Archives, request a demo, or start a free trial, visit: <https://www.wileydigitalarchives.com/contact-us/>.

Before



After

Before, the year, 1818, some the cases of Croup had
"been so sore that Mr. Bretonneau that was not certain
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"his practice - At the bee the legion de la vendre
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the swelling of the ports immediate neighbourhood
to be indented and looked like are ill conditioned
uler - These, patches conn off in layers
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by fresh ones - The Cabreaders A great

Ferguson, Robert. "Notes on Croup." Ferguson, Robert, 8 June 1833.
Wiley Digital Archives: The Royal College of Physicians.

About the Royal College of Physicians Part I archive

Wiley Digital Archives' Royal College of Physicians Part I archive showcases the history and development of modern Western medicine, while documenting the interactions of the medical community with monarchies, political systems, and the general public.

This digital archive includes rare, unique materials dating from 1200 through 1862, covering topics ranging from astronomy and anatomical studies to neurology and immunology. Researchers can explore how medical practice standards, medical education, and public health policy evolved over time, as well as gain insight into the how certain medical disciplines expanded into specialty areas of practice.

Content includes archival images of diaries, correspondence, casework, illustrations, photographs, policy statements, and early medical texts.

To learn more about the Royal College of Physicians Part I archive, visit wileydigitalarchives.com/rcp.

