

ERIK PEARSON and **GAVIN FALK**
 examine the life of one of RCSI's
 most distinguished alumni,
 Abraham Colles.

THE COMPLETE DOCTOR: Abraham Colles

"Be assured, that no man can know his profession perfectly, who knows nothing else; and that he who aspires to eminence in any particular science must first acquire the habit of philosophising on matters of science in general."

Abraham Colles, *A Treatise on Surgical Anatomy*, 1811.

The RCSI has been a leading institution in medical education throughout the last two and a half centuries. Its humble beginnings lie in the dissolution of the barber–surgeon relationship, the formation of the Dublin Society of Surgeons, and the subsequent charter granted by King George III, giving the College the name by which we know it today.¹

Many names that have echoed through the centuries of medical history belong to students or professors who have walked through

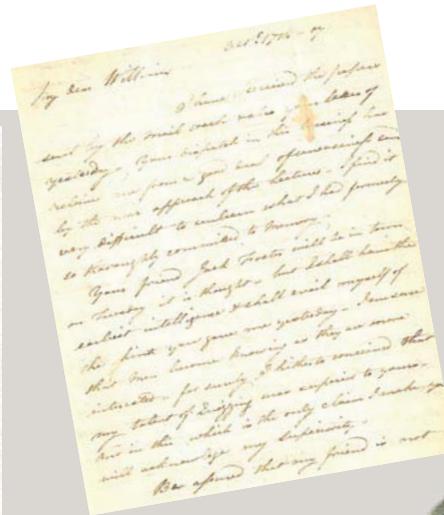
the doors of RCSI, including William Dease, William Stokes, and Abraham Colles.

Professor Abraham Colles was born in Millmount, Co. Kilkenny on July 23, 1773, and died in his St Stephen's Green home in Dublin on December 1, 1843. During his 70 years, he made significant advances in surgery and medicine, published papers on anatomy, orthopaedics and gynaecology, and became famous among students and doctors for his eponymous associations.

The young Colles

Referred to by his father at birth as "a fine little thing", Abraham Colles was born into a family of significant wealth and social standing in an Ireland struggling for independence. Colles lost his father at the age of five, but grew up in close companionship with





Left: Colles etching.
 Above: Letter from Colles to his brother William.
 Right: Colles as a young boy.
 Opposite page: Colles' Letters Testimonial of the RCSI, which he received in September 1795.

his brothers and devoted mother.² Perhaps his first step towards a career in medicine – a stark contrast from the Colles family marble estate – was his discovery of an anatomic text floating in the River Nore. Inspired by this text, and following the path of his great grandfather William Colles of Kilcollen (a famous Kilkenny surgeon), Colles moved to Dublin in pursuit of a career in surgery. Accompanied by his brother William, he matriculated to the School of Arts at Trinity College in 1790. In addition, within weeks of his arrival in Dublin, Colles became indentured as an apprentice to Philip Woodroffe at Dr Steevens' Hospital, and a student of the RCSI. Over the next five years Colles continued his apprenticeship, sleeping in dark corners of the hospital when not carrying out duties demanded by his master and patients.

As a student, Colles had an insatiable appetite for learning, attending five courses for instruction in anatomy, physiology and surgery under William Dease, William Hartigan, William Lawless, and Samuel Halahan. Though Colles' primary concentrations were his duties as an apprentice surgeon and pursuit of a classical education, he was a familiar face in the debating halls of Trinity. In 1794 he became part of the 'Extern' Society, whose members abandoned their dormitories and took up quarters in Dublin City to support the United Irishmen and Irish independence. After five years of study in the company of his contemporaries Thomas Moore and Robert Emmet, Colles graduated from Trinity College in February 1795 with a Bachelor of Arts degree. Later, in September 1795, Colles received his Letters Testimonial of the RCSI, which survive to this day.

Leaving Dublin

After receiving his Letters Testimonial, Colles travelled to Edinburgh to train under Alexander Monro (of the foramen) as a graduate student, a medical school appointment said to be unrivalled at that time. Living at Dorrell's Land, Colles again immersed himself in study, keeping out of the public eye so often that his landlady would visit to prevent Colles from "reading himself into a coffin". He graduated from Edinburgh on June 24, 1797, and travelled to London. Though rumoured to have walked the entire distance on foot – the reverse of the well-documented journey of his brother William one year earlier – the truth of this legend has been debated by authors over the decades. While in London, Colles befriended a young Astley Cooper and aided in dissections for Cooper's famous paper *On Hernia*; future generations of surgeons and students are well acquainted with his named ligament.

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Colles the teacher

A turning point for Colles was his appointment to replace his former master, Philip Woodroffe, as resident surgeon at Dr Steevens' Hospital in 1799. This was a tumultuous time, both in Irish history and for Colles personally. After the collapse of the United Irishmen

and the failed rebellion, Colles witnessed the sudden death of his mentor William Dease, the 'father of Irish surgery'. Colles took his appointment at £60 per annum and was subsequently elected as a member of the Royal College of Surgeons. In 1800 he received his first apprentices.

As a professional, Colles' career had firm beginnings: a Bachelor of Arts from Trinity College, Letters from a young and ambitious RCSI, and a graduate degree from the University of Edinburgh, one of the most prestigious medical schools in Europe. He was now to accelerate his standing as an academic surgeon. Elected in 1802 as President of the RCSI at just 29 years of age, Colles was appointed surgeon to Cork Street Fever Hospital, and many others, before being elected Professor of Anatomy, Physiology, and Surgery in 1804. Colles was said to be a zealous and painstaking teacher, a lecturer indulging in puns and witticisms who attracted crowds of more than 300 people. The education of surgeons during this time focused on classical dissection, an art that depended on a fresh supply of bodies to dissect. With only a few bodies of executed murderers being granted to the College for dissection, there was but one way of obtaining cadavers – grave robbing. Though he advised students to use caution, Colles did not prevent the theft of 1,500 bodies from Kilmainham's Bully's Acre cemetery, and their subsequent storage by the 'resurrectionists' at the College. Dublin's medical students were well supplied.

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Colles the academic

During his years as Professor, Colles published three books and over a dozen surgical papers. His first paper, *A Treatise on Surgical Anatomy* (1811), signalled a paradigm shift in surgical knowledge, from the systemic anatomy of the Hunterian era to the topographic anatomy encountered at the operating table. In this paper, Colles sought to change the teaching of anatomy from "a catalogue of barbarous and unmeaning terms" towards showing the student "the connection between anatomical structures of each part and the surgical diseases and operations to which it is subject", such as to fix "in his memory the indelible impression of the structure of the parts". Colles stressed to his pupils the importance of a classical education, and of intellectual inquiry, remarking that "it requires but little to prove that to form a good surgeon, a good education is the first and most essential requisite...it enables the student to take more clear and comprehensive views of the facts which occur to his observation".

In 1814, Colles published the paper for which he is known worldwide in the minds of every first-year medical student: *On the Fracture of the Carpal Extremity of the Radius*, a manuscript describing the infamous Colles' fracture. Many will never forget the dinner-fork

deformity occurring after a fall on an outstretched hand. Several other lesser known but significant papers were to follow. In 1818, Colles published *A Disease of the Lymphatic Glands of the Groin attended with Peculiar Symptoms*, for which he is credited with the discovery and description of lymphogranuloma inguinale (now known to be caused by *Chlamydia Trachomatis*). During his research on venereal disease, Colles followed and advanced John Hunter's practice of utilising mercury for its wonderful therapeutic properties. Throughout his papers and books, Colles identifies and describes novel anatomical structures and diseases. The eponyms associated with Colles range from Colles' fracture to Colles' fascia ("at the point where the saphena dips deep to gain the femoral vein"), Colles' Law (on the mode of syphilitic infection), and Colles' pustules, cinnebar candles and 'copper' retractors. It was later said of Colles in the February 15, 1824, issue of the *Lancet* that "without many books, and paying less attention to their contents, he is still the laborious, shrewd, observing, matter-of-fact and practical surgeon. As an operator he has many equals and some superiors; but in advice, from long experience and a peculiar tact of discovering the hidden causes of disease, he has scarcely a rival". Professor Abraham Colles revolutionised the medical world of the early 19th century. Advancing in experience and wisdom, he was again elected President of the RCSI in 1830, prior to receiving a master's degree from the University of Dublin. After 23 years, Colles resigned his chair of anatomy at RCSI in 1827, but held the chair in surgery until 1836, when he was succeeded by William Henry Porter. He continued to research and publish through his later years, and his final, posthumous publication was 1845's *Lectures on the Theory and Practice of Surgery*.

Suffering from chronic respiratory disease, gout and heart trouble, and sensing his death, Colles wrote to Robert Smith, of Smith's fracture, requesting his expertise in Colles' own post-mortem examination: "My Dear Robert, I think it may be of some benefit, not only to my own family, but to society at large, to ascertain by examination the exact seat and nature of my last disease". An investigator until the end, this is described by Dr Martin Fallon as the "last great act of Colles' medical career, the last evidence of unchanging devotion".³

Acknowledgements

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