Felix Platter
A sixteenth-century medical student

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Early on a Monday morning in October 1552, young Felix Platter set out to enroll in a distant medical school. His trip of some 370 miles took nearly three weeks. He journeyed through a foreign, dangerous land, whose language he did not yet know. He traveled in the company of strangers with whom he could communicate only in Latin. Several times he and his companions narrowly avoided being robbed or murdered. Felix was only 16 years old when he left Basel, Switzerland, to study medicine at Montpellier in the southwest of France.

Nearly half a millennium later, we know much about Felix, his family, his travels, and his medical school experiences because of a journal he kept.[1] Forty years after Felix's sojourn in France, his half brother, Thomas Jr., also attended medical school in Montpellier and also kept a journal.[2] Even their father, Thomas Sr., wrote an extensive history of his life. All three works have been summarized by Emmanuel Le Roy Ladurie in a book now translated and titled *The Beggar and the Professor*.[3]

Felix became one of the most distinguished physicians of Switzerland and led a celebrated academic career at the University of Basel. He served as the city physician until his death. During five epidemics of bubonic plague in the city, when many doctors fled, Felix remained to treat the sick. One of the epidemics (from 1563 to 1564) killed a quarter of the city's population.

Felix performed over 300 human dissections in Basel. In 1583, he wrote an anatomy book intended primarily for students.[4] Its plates were copied from Vesalius's *Fabrica*,[5] but re-engraved for a quarto size format and thus were less expensive than Vesalius's ponderous folio edition. The text is in outline form and is more reader-friendly than that written by Vesalius.

Felix's other medical book, published in 1614, is a small octavo of over 800 pages. It gives vivid clinical pictures of many diseases and has extensive sections on skin disorders (e.g., cutaneous anthrax) and on fever (detailing six outbreaks of plague in Basel).[6] This text begins with 100 pages on mental illnesses. Felix believed that most psychoses are caused by physiological changes in the brain rather than by supernatural forces, the then prevailing view. Here, too, are found the first descriptions concerning infant death from hypertrophy of the thymus, Dupuytren's contracture (thickening of the palmar fascia), and a meningioma. Felix classified diseases according to their natural history and postmortem findings. Thus, he practiced pathological anatomy over a century before Giovanni Battista Morgagni, who is commonly called its founder.[7]

An impoverished family tree

Felix Platter rose from a family background of poverty. His paternal grandfather, Anthony Platter, was a destitute peasant who fathered one child, abandoned his new family, and died soon afterwards from bubonic plague. The infant son, Thomas (born in 1499), Felix's father, was passed from one relative to another. As a boy he herded goats, eventually advancing to cows. As a teenager Thomas joined a band of youths who roamed around the Swiss-German cantons, keeping

themselves from starvation by singing, begging, and stealing.

At about age 20, Thomas was befriended by a teacher who taught him to read and write German. The youth worked at various jobs, including one as a rope maker, a task that allowed him to read surreptitiously while his hands were subconsciously twisting fibers into rope. Most astonishing of all is that over the next decade Thomas mastered Latin, Greek, and even some Hebrew. He began to teach, and years later became the headmaster of a school in Basel, equivalent to an American high school today.

Thomas's mastery of Latin and Greek also enabled him to work as a proofreader for a Basel printer. In time, he borrowed money to buy his own presses, and for several years he printed and published books, including in 1536 the first religious work by Jean Calvin.[8] Thomas invested his money in property while borrowing even more, acquiring houses, farmland, and an envied financial reputation.

His first marriage produced three daughters (who all died of bubonic plague in childhood) and one son, Felix, born in 1536. The boy was protected from the periodic outbreaks of plague in Basel by being sent to live with relatives in nearby towns untouched by the pestilence. No such concern seems to have been given to the daughters. Thomas was widowed at age 72, but soon remarried and had a second family, including Thomas Jr., born in 1574.

The lives of Thomas Sr. and Felix span the sixteenth century, which was both rich in promise and brutal in reality. European political history in the sixteenth century encompassed the reigns of Henry VIII and Elizabeth I in England, of Francis I and Henri IV in France, and of Charles V and Ferdinand I in the Holy Roman Empire (Spain, Austria, and the Low Countries). This century is celebrated for the invention of the printing press, Copernicus, Galileo, and Vesalius. But during this period, Europe was convulsed by the Inquisition's spread into France, by Luther's Reformation in Germany, by Calvin's religious autocracy in Geneva, and later by the Wars of Religion in France. Syphilis spread across Europe in a malignant form, while leprosy mysteriously disappeared. Epidemics of bubonic plague, smallpox, typhus, and the "English sweating sickness" ravaged the population, sending to their graves wealthy burghers as well as poor peasants.

The plague made room at the top

Historians have suggested that the upward social mobility in sixteenth-century Europe was due to two factors: the bubonic plague and the Reformation. The demise from the plague of so many rich and prominent citizens of many towns opened the top of the social ladder for those below. In addition, the Reformation erased old social barriers fostered by the Catholic Church. Hence Thomas Sr. could rise from being the son of a destitute peasant, to become a respected, prosperous Basel citizen, who in turn could offer his son the path to even greater prestige as a physician and professor.

Felix Platter's early education began in the local secondary school directed by his father. The curriculum included Latin, the common language of commerce and travel. At age 15, Felix attended courses on Greek and Roman history, and Hippocratic medicine at the University of Basel. The medical school at Montpellier had been chosen for Felix by his ambitious father, for it was then the most respected medical school north of the Alps.

However, before Felix could depart, several matters had to be arranged. First, a small horse was purchased for seven crowns. Then merchants were sought out who traveled between Basel and Geneva, and who could guide and protect young Felix on his initial journey. Their role was expected to be taken on by others for the latter part of the trip through France. Finally, there was the matter of Felix's living accommodations while away from home. Thomas provided room and board to foreign students attending the University of Basel, and arrangements were made for the university-bound son of a pharmacist in Montpellier to stay with the Platter family while Felix lived with Monsieur Catalan, the pharmacist, in Montpellier.

On the Sunday before his departure, Felix's mother sewed into his jacket four gold coins; she slipped another one into his hand. The next morning, October 10, 1552, Felix set out on his little horse, heading south with two older traveling companions. His father accompanied the trio to the first village on the way to Berne. Upon returning home, Thomas found one of the family maids sick with the plague; other cases soon developed in nearby houses.

After passing Berne, Felix and his companions lost their way in a rain-drenched forest. They found shelter in a small, seedy inn housing a rowdy band of drunks. Fearful of being waylaid in the morning, the trio left three hours before sunrise and safely reached Lausanne that afternoon. Later, Felix learned that several of the men at the inn had subsequently been caught for some crime and hanged, but not before confessing that they had planned to rob and murder Felix's group.

The group arrived at Geneva on Sunday, October 16, having taken a week to cover the 120 miles from Basel. Felix's two companions were now due to leave him. Pondering the problem of replacement companions, Felix had his long hair cut, then delivered a letter from his father to Jean Calvin, the leader of Geneva's theocratic government. Calvin and Thomas Sr. were acquaintances; Thomas had printed Calvin's *Institutes of the Christian Religion* in 1536.[8] This was a fortunate encounter for Felix, since Calvin knew of a surgeon who was about to depart for the south of France and who could guide

the youth to Montpellier. Later that day, Felix attended the Cathédral St.-Pierre but did not understand a word of Calvin's sermon in French.

With his new traveling companion, Felix crossed the border into France and arrived in Lyon on Thursday, October 20. On entering the city, they saw a man with straw tied to his back being led out in chains. The unfortunate fellow had been judged to be a heretic of some sort and was destined to be burned at the stake.

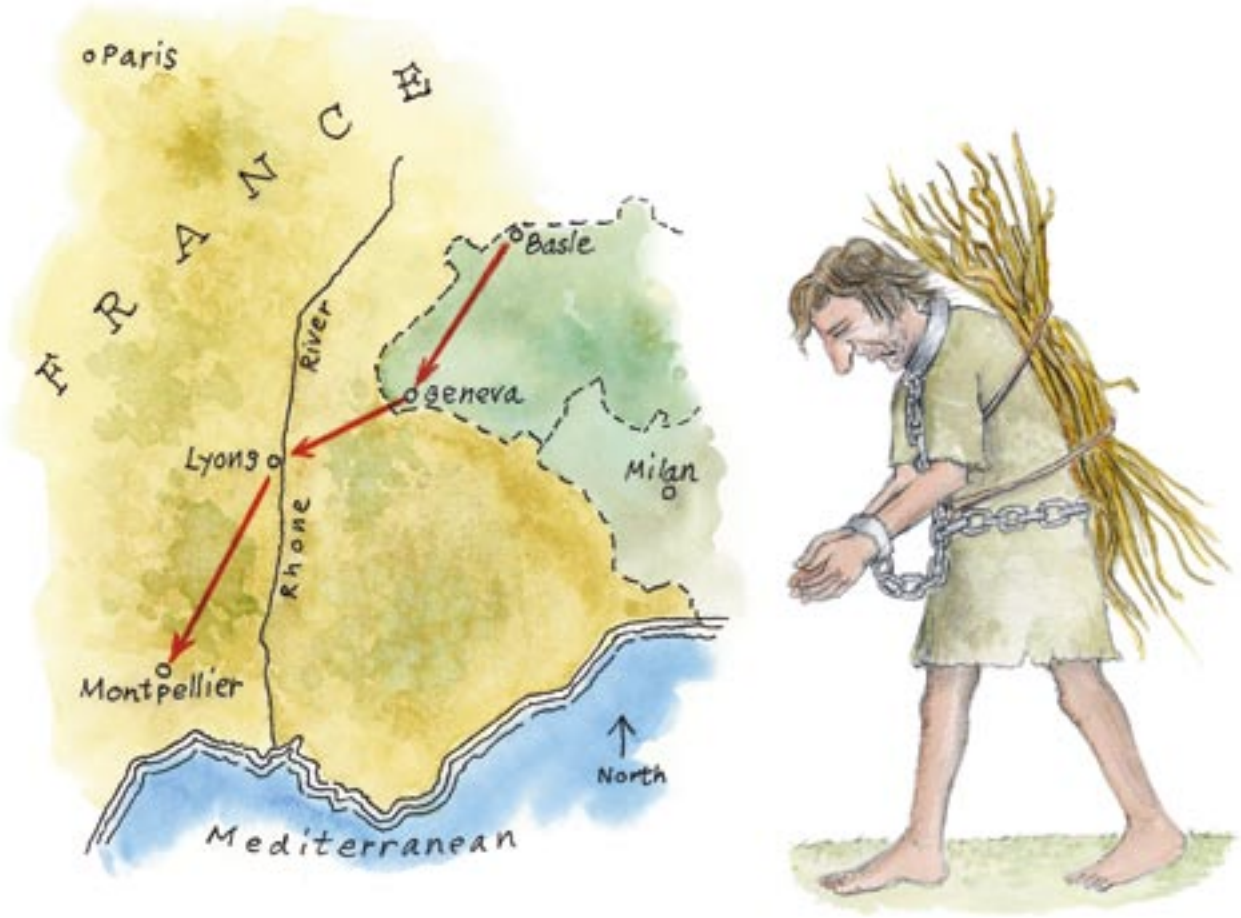
Felix journeyed south along the Rhône River in the company of an everchanging group, including a nobleman from the court of King Henri II. Felix could only converse in Latin with them. Finally, on Sunday, October 30, 1552, day 20 of his journey, Felix reached Montpellier. He soon located the pharmacy of Monsieur Catalan and settled in with his new family. He sold his little horse for eight crowns and purchased a warm blanket and some garments.

The next day, Felix applied for admission to the medical school. After passing an oral examination in Latin, he was admitted to study for a baccalaureate degree in medicine. He chose a sponsor from among the medical professors and immediately began attending lectures. While most lectures were presented in Latin, some instruction was given in French, the language of the townspeople he dealt with daily. Felix worked hard to gain mastery of the French dialect spoken in Montpellier.

Medical school curriculum—still based on Galen

At Montpellier in the 1550s, formal instruction ran from late October to Easter in March or April. Students were free on Sundays, holidays, and Wednesdays, the last being designated as Hippocrates's Day. The first lecture of the day began at 6:00 in the morning, the second at 9:00, and a third after lunch. Medical lectures focused on the works of several famous physicians:

- Hippocrates, the most celebrated physician of all time
- Galen, the Greek physician who lived in Rome in the second century, and who dictated over a million words on medical matters
- Paul of Aegena, a seventh-century Byzantine surgeon and obstetrician



• Rhazes and Avicenna, two tenth- and eleventh-century Persian physicians whose medical works in Arabic had first been translated into Latin in the twelfth and thirteenth centuries.

In the mid-to-late sixteenth century, anatomy had became a major subject in European medical schools, largely as a result of a magnificently illustrated anatomy book published in Basel in 1543.[5] This work was by Andreas Vesalius, a Belgian, and was based on his many meticulous human dissections. During the previous thousand or so years, knowledge of human anatomy had rested largely on what Galen had written in the second century. His descriptions of bones and muscles were accurate, but not the descriptions of the internal organs of human beings. Galen never dissected a human corpse; he only used animals such as small apes and pigs. Consequently, he often extrapolated incorrectly to the human body. Medical historians now date the beginning of modern medicine to Vesalius's revolutionary anatomy with its 277 detailed wood cuts.

As a boy, Felix Platter had dissected small animals and had once attended the dissection of the corpse of a beheaded criminal provided to the University of Basel's doctors. In his journal Felix recorded that he witnessed 16 public dissections at Montpellier; public executions provided most of the cadavers.

Executions at that time in Europe were performed by one of three methods. The most horrific was burning at the stake, after which there was nothing for the students to study except ashes. If the judge was merciful, the victim was first strangled while being tied to the stake.

A second method of execution was decapitation. This was often followed by the body being "quartered," i.e., the arms and legs being cut off and the six body parts left lying on the scaffold overnight before being hung from trees outside the city.

There the parts remained until they fell to the ground after the flesh had been eaten by scavengers. A dedicated student could examine these severed body parts to learn some gross anatomy, or even assemble an entire human skeleton from them. Felix recorded that he witnessed 11 such public executions. On one occasion, a professor provided him with a ticket for a choice seat overlooking the scaffold in the public square, but most executions occurred outside the city walls.

The third method of execution was by hanging. This was particularly prevalent during the religious purges of that period, when mass hangings were done of Protestants in Catholic countries, of Catholics in Protestant countries, and of Jews in both. In addition, highway robbers were summarily hanged from a convenient tree. In his travels on horseback, Felix frequently saw bodies swaying from trees in the countryside. On more than one occasion he brushed by a dangling corpse at night as he rode down a darkened path.

Hanged criminals or heretics were sometimes cut down illegally by students for dissection after class hours. Vesalius himself recorded that he built human skeletons from bones he collected clandestinely from the gibbets in his home town, Louvain. A skeleton prepared by Vesalius at a later time is preserved in the University Museum in Basel. Like Vesalius, Felix and his classmates carried corpses from the scaffold outside the city to their rooms for dissection.

Yet another source of dissecting material was recently buried bodies. This grave robbing, sometimes called resurrection, was practiced occasionally by medical students up through the nineteenth century. At Montpellier, a monk sometimes provided the students with a cadaver for a price. One night, Felix and his colleagues dug up a freshly buried woman from a local cemetery and sneaked the body into the city after successfully diverting the gatekeeper's attention. Felix noted that he never knowingly dissected a Protestant corpse, only those of Papists.

Felix spent four and a half years at Montpellier. Records show that during the sixteenth century 3366 students were enrolled in the university. The majority of students were French, but 692 were foreign, including 270 from Spain, 75 from Italy, and 315 from Central Europe. Most of those from Central Europe were Protestant, and thus came to Catholic France at some risk.

Don't ask, don't tell—the basis of religious tolerance

The religious strife in Western Europe during the sixteenth century varied from decade to decade and country to country. In southern France during Felix's years at Montpellier,

religious animosity was not pronounced and only outspoken heretics were burned at the stake. Many Jews had fled to this area to escape persecution in Spain, and some taught at universities. They generally escaped notice by pretending to be Catholic, while secretly observing their traditions. Protestants in Montpellier during Felix's time kept their religious convictions to themselves. It was a tolerant period of "don't ask and don't tell."

A few years after Felix left Montpellier, however, religious hatred flared again in France. The decades of 1560 to 1590 saw the terrible Wars of Religion, in which Protestant Huguenots were slaughtered throughout France, beginning with the Massacre of St. Bartholomew in Paris in 1572. Montpellier was also the scene of much fighting. The handsome gothic buildings Felix knew so well were largely destroyed and replaced by half-timber framed houses. Peace did not return to France until Henry IV became king in 1589. By 1595, it was safe for Felix's brother, Thomas Jr., to come to Montpellier, also to study medicine.

As would be expected, Felix was friends of other Swiss-German students in Montpellier and occasionally he vacationed in nearby cities with them. Since he spoke German, he often identified himself as German, but because France had signed a treaty of sorts with Switzerland it was sometimes more prudent for Felix to declare himself Swiss. The issue of nationality came up whenever bubonic plague appeared because cities were then cautious about travelers who might be carrying the pestilence. Questions were asked and clearance often depended on possession of a certificate of health issued by the city previously visited, or simply on the nationality of the person seeking entrance. In France, a Swiss citizenship opened more gates than a German one.

Triumphant return of the newly trained doctor

Although 370 miles separated Montpellier from Basel, Felix maintained a regular correspondence with his family. Letters and presents were carried between the two cities by travelers or hired messengers. In late 1556, his father began to urge him to return home. Even before Felix had departed for France four years before, the daughter of a prominent Basel surgeon had been tentatively selected as his wife. The prospective father-in-law was becoming anxious and was pressing for a firm betrothal. Thomas Sr. was eager to have Felix admitted to the tightly controlled medical guild in Basel. Other young medical graduates were settling in Basel and represented potential rivals for young Doctor Platter.

Felix passed a three hour-long oral examination in May 1556 and was awarded his baccalaureate degree in medicine. In January 1557, another letter from Thomas Sr. urged him to hurry home. Soon Felix began his return, this time by way of Paris. As before, he was almost waylaid by bandits twice and soon learned to detour around reported places of danger. Along the way he was adopted by a dog he named Pocles, who accompanied him all the way to Basel. The two spent nearly a week touring Paris, then a vast city of 350,000.

Felix reached home in May 1557, and was reunited with his family. To become fully qualified to practice medicine in Basel he needed to obtain a medical degree from the University of Basel. He began the process of sitting for oral examinations and satisfying other requirements. The good auspices of his future father-in-law may have helped, and shortly after earning his license, he married Magdalena. They had no children of their own, although, when Thomas Sr. died, eight-year-old Thomas Jr. was raised by the couple.

Over the following decades Felix's medical reputation grew. He became a popular and respected professor at the University of Basel, and ultimately its rector. For medical historians, Felix Platter is remembered because of his anatomy book and his medical text. But for medical students his legacy may be found in his journal[1] and Ladurie's history of the Platter family, *The Beggar and the Professor*.[3]

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