On September 12, 1973, Dr. Landrum Shettles placed a test tube in an incubator. To some, that test tube signified a health threat; to others, a monstrous affront to nature. But to Doris and John Del-Zio, the contents of that test tube meant one thing: their baby. Thus begins Pandora’s Baby: How the First Test Tube Babies Sparked the Reproductive Revolution, Robin Marantz Henig’s dramatic, engaging account of the history, science, and ethics of in vitro fertilization (IVF).

The fate of that test tube containing reproductive material from the Del-Zios—and the firestorm of controversy it ignited—are but one thread in Henig’s complex narrative. Henig divides her story into four major parts, covering such topics as early scientific proponents of IVF and their religious opponents, the triumphant birth in England of the first test tube baby, burgeoning biotechnology in the United States, the inevitable mainstreaming of IVF, and parallels with the current debates over cloning and stem cell research. Along the way, Henig not only conjures a vivid sense of the cultural chaos of the seventies, but conveys the visceral intensity of science as an enterprise driven not only by rational thought but by professional rivalry, pursuit of power, and an entrepreneurial urge to meet market demand.

A case in point is the book’s centerpiece, the case of Del-Zio v. Vande Wiele et al. Henig presents “oddball” IVF pioneer Landrum Shettles and his “courtly” supervisor at Columbia Presbyterian Hospital, Raymond Vande Wiele, as a study in clashing personalities. As Henig explains, Vande Wiele was not opposed to IVF; he just believed “it had to be done by the right individuals following the right procedures at the right time.” Having a long history of power struggles and personal animosity with Shettles, Vande Wiele believed that Shettles was “most definitely not the right individual.” When Vande Wiele got wind of Shettles’ plan to implant the murky reproductive material from the test tube into Doris Del-Zio’s womb, he terminated the “rogue” experiment by putting the test tube in a deep freeze. The Del-Zios sued, and Henig provides a nail-biting account of the so-called “Test Tube Death Trial,” the timing of which happened to coincide with the cavalcade of publicity surrounding the birth in England of “Baby of the Century” Louise Brown, the world’s first test-tube baby.

One of the great strengths of Pandora’s Baby is the way Henig manages to merge the personal and specific stories involved in the history of IVF with universal questions regarding reproductive freedom, and the risks, rewards, and repercussions of manipulating life in the lab. Pandora’s Baby leaves the reader with not only a deeper understanding of a historic episode in biomedicine, but with a broader framework of ideas from which to ponder current scientific debates.

Monsters. Genetic defectives. Chromosomally damaged beasts erupting from an unnatural egg-and-sperm tango in a Petri dish. The prospect of abnormal babies was, without question, the scariest and most titillating thing about in vitro fertilization.