



BRILLIANT!

25

CATHOLIC SCIENTISTS, MATHEMATICIANS,
AND SUPERSMART PEOPLE

Written by David Michael Warren

Illustrated by Jaclyn Warren





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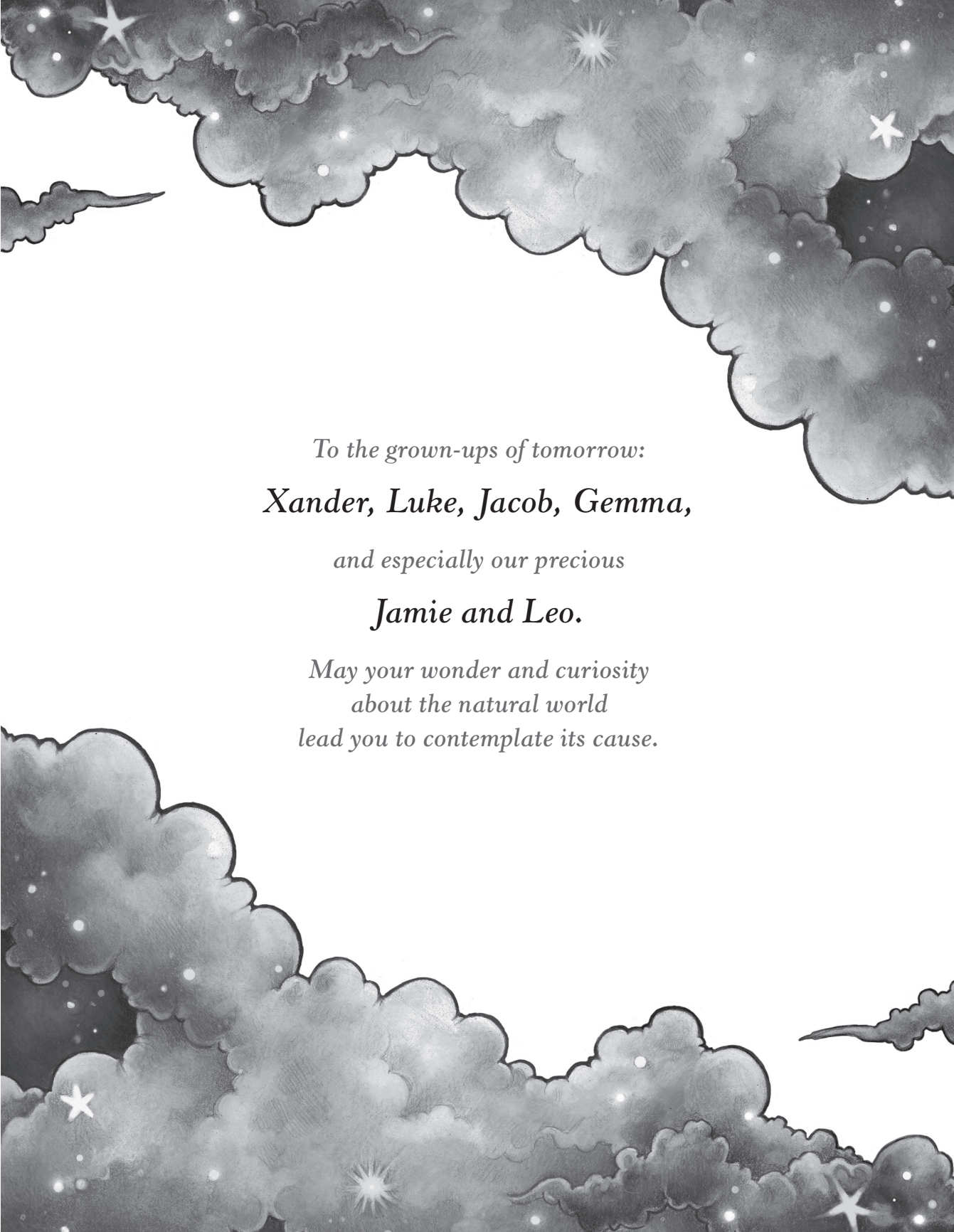
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*To the grown-ups of tomorrow:
Xander, Luke, Jacob, Gemma,
and especially our precious
Jamie and Leo.*

*May your wonder and curiosity
about the natural world
lead you to contemplate its cause.*

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Foreword

The book you are about to read is an amazing account of some of the most intelligent and gifted people who ever lived. Some are scientists or doctors. All of them cared about humanity and about nature. They made new and groundbreaking discoveries. They combined scientific genius with an eagerness to help others. In short, they were *Brilliant!* They were also Catholic. In fact, some of them are recognized by the Church as saints. They are examples for us not only because of their ingenuity, but also because of their faith, hope, and love.

If an invisible hand wiped their names from the pages of history, it would wipe out a great deal of our knowledge. We would not understand the age and formation of the Earth and the entire universe. We would not know the laws of plant and animal life, how stars form, or how our planet moves. Gone would be our modern calendar, our understanding of genetics, and many cures for horrible diseases. No one can turn back the clock and see what would have happened. Perhaps pioneers other than those you will read about in these pages would have made those discoveries. We will never know. But we do know that the contributions these twenty-five people made to human knowledge are irreplaceable. Their stories show us that intelligence and faith, science and holiness, do go together. In fact, they are made for each other.

In the pages to come, you will meet great Catholic scientists who believed in God. The work of Saint Albert the Great on plants and animals is known today as a groundbreaking masterpiece. The devout Frenchman Louis Pasteur founded microbiology and paved the way for modern medicine. The Belgian priest who saw Einstein's equations in a new way learned that the universe has been expanding from the moment of the Big Bang.

This book tells the truth. It is also illustrated with love and creativity. Each of the images tells a part of the story, capturing some unique aspect of that person. We can feel a bit of the awe, wonder, and joy of discovery that they must have felt as they set out to understand God's creation.

—Chris Baglow, PhD, director of the Science and Religion Initiative of the McGrath Institute for Church Life at the University of Notre Dame

Introduction

Have you heard these lies? You cannot be a true scientist and believe in God. Science proves that Christianity is outdated and mistaken. Certain parts of the Bible do not line up with modern science, so the whole thing is false and worthless. Not one of these statements is true.

A few years ago, my wife Jaclyn took her middle-school art class on a field trip to study mural paintings. One of her students saw a painting of Jesus and asked, “Why are we looking at paintings of God when he isn’t even real?” Jaclyn responded with her own question, “Why do you think God isn’t real?” His answer was short: “Because, science.” This view is fairly common. Recent studies show that many people today—even many Christians—believe that religion and science are opposites. Sadly, people feel forced to choose between the two. Some even leave their faith behind because they think they have to “choose” science. But it doesn’t have to be this way!

Students of science, math, philosophy, and religion are all searching for the same thing: truth! The same God who made the universe and all of creation also gave us logical minds so that we could use science and math. Scientific theories like the Big Bang and evolution don’t threaten the Christian faith at all. Some of the greatest scientists, mathematicians, and inventors of all time believed in God and lived out their Catholicism. There were popes who encouraged and even paid for cutting-edge scientific research. You’ll read about many of these supersmart innovators in this book.

Every biography and illustration in the following pages tells the story of a man or woman who was both devoted to God and influential in an intellectual field. Every one of them stands as proof that intelligence and faith can work together in a kind of harmony that leads to new discoveries that benefit the whole world. It’s worth noting that there are many, many more brilliant Catholic people than this book can contain. I bet you are one of them! So, don’t believe the lies. Don’t settle for any faith that tells you to turn off your brain. Ask the biggest questions you can so that you may find and know the Truth!

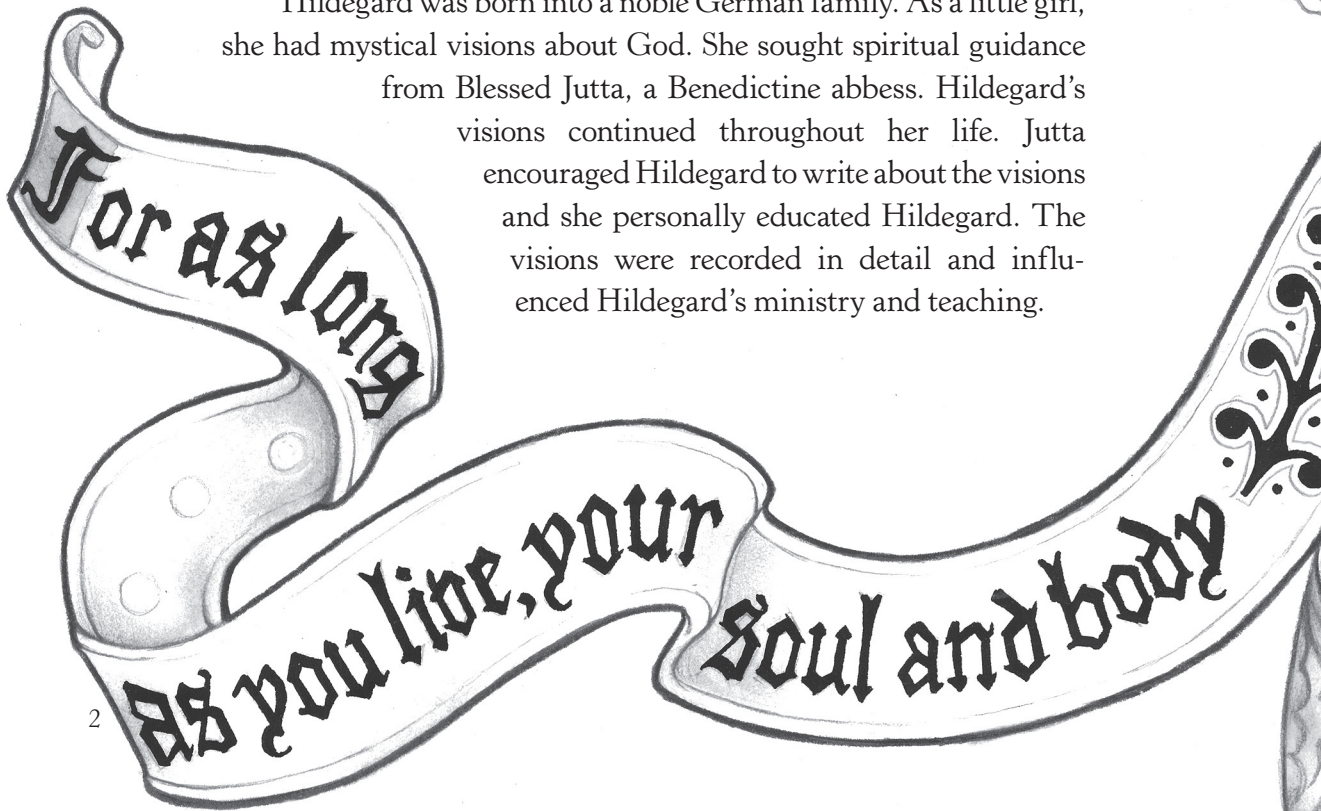
Saint Hildegard of Bingen

Philosopher, Pharmacist, Playwright, Musician, Botanist, Doctor of the Church

(1098–September 17, 1179)

How would people react if you claimed to see things that they could not? What if you spent countless hours staring at plants or writing in your own language? Would people think you were crazy? Hildegard did all these things, but she was not crazy—she was a visionary woman of immense talent and religious insight. She became the **abbess** of two monasteries, composed music, and practiced the art of herbal medicine. She also wrote much about God and the Bible. Eventually, she became a world-famous scientist, saint, and a **Doctor of the Church**!

Hildegard was born into a noble German family. As a little girl, she had mystical visions about God. She sought spiritual guidance from Blessed Jutta, a Benedictine abbess. Hildegard's visions continued throughout her life. Jutta encouraged Hildegard to write about the visions and she personally educated Hildegard. The visions were recorded in detail and influenced Hildegard's ministry and teaching.





By the age of fifteen, Hildegard entered the monastery at Disibodenberg, Germany. There, she devoted her life to God. She prayed and worked together with other nuns. For Hildegard, this commitment meant using study, art, and other creative outlets as tools to grow closer to God. Hildegard studied the Psalms carefully. She wrote at least sixty-nine pieces of music based on them. Today, these songs make up one of the largest collections of music from the Middle Ages. Hildegard also wrote the first-known morality play, *Ordo Virtutum*. This kind of play teaches a valuable lesson. She developed a secret language, *lingua ignota*, with its own vocabulary and rules of grammar.

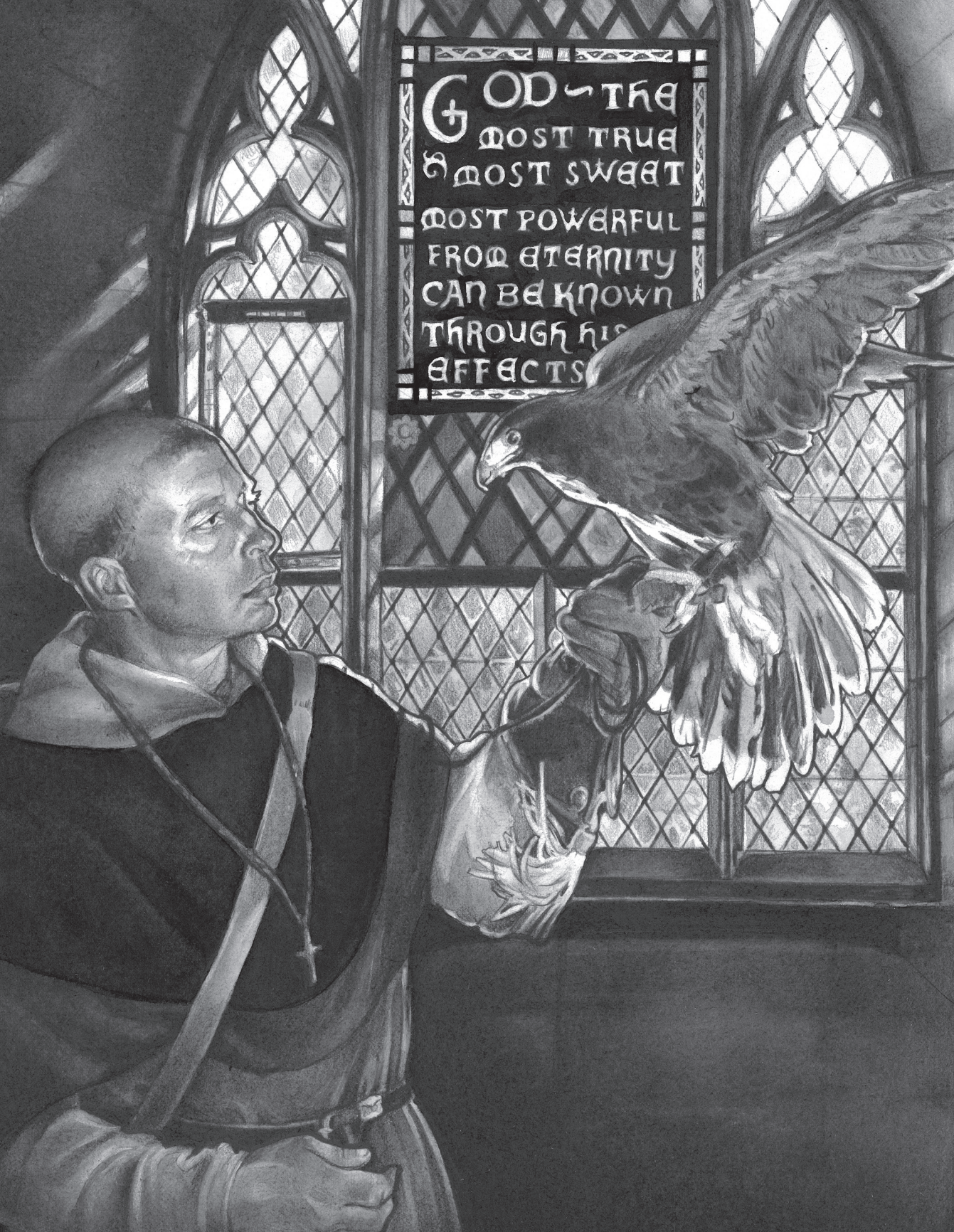


Hildegard was gifted in science. She knew medicine and **botany**. She studied herbs and their medicinal effects. Skilled at treating illnesses, Hildegard helped sick patients in the monastery's hospital. She wrote two long books about medicine: *Physica* and *Causae et Curae*. She also stressed the importance of spiritual healing.

Hildegard understood that both females and males have the same human dignity. Both are made in the image and likeness of God. This is different than what most people believed at the time. She also wrote about God's love, the relationship between soul and body, and the Eucharist.

By the time of her death in 1179, Hildegard had done several notable things. At the age of thirty-eight, she became the **prioress** of the Disibodenberg monastery. Later she founded a new monastery at Bingen. She stood up to an anti-Catholic emperor named Frederick Barbarossa. She also stood up to a group who taught false information about Christianity. Hildegard left behind a collection of mystical writings that are still valuable to read today. For her great scientific gifts, many Germans call Saint Hildegard the founder of scientific natural history. In 2012, Pope Benedict XVI canonized Hildegard a saint and declared her a Doctor of the Church. We celebrate her feast day on September 17.





GOD - THE
MOST TRUE
MOST SWEET
MOST POWERFUL
FROM ETERNITY
CAN BE KNOWN
THROUGH HIS
EFFECTS