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*For the first time in history, humankind can read its genome—its Book of Life. This book is unlike any other for, in reading it, we will uncover an ever-expanding view of ourselves (Francis S. Collins, M.D., Ph.D., former director of the National Human Genome Research Institute (NHGRI) from 1993–2008. See: <https://www.genome.gov/10001018/fermar-nhgrl-director-francis-collins-biography/>.)*

DNA is the code of life. Comprehension of the structure and function is vital to understanding when things go wrong, leading to the reason for this book. This Chapter gives an overall basic understanding of the structure and function of how the information within the DNA molecule is translated into the protein products that allow life to begin and continue.

We all derive from a fertilised egg to become who we are. This means that the information necessary for development must be available within the fertilised egg—the embryo. The information comes from our biological parents—the source of the egg and sperm. This information is then passed on to our progeny (should we have any). During our lifespan, we grow, develop new characteristics and sometimes develop illnesses such as cancer.

Humans evolved from a common ancestor that lived approximately four billion years ago. As a result, we have in common with almost all living organisms in the world.