

# Bioethics

## An Introduction

Providing readers with the confidence needed to debate key issues in bioethics, this introductory text clearly explains bioethical theories and their philosophical foundations.

Over 250 activities introduce topics for personal reflection, and discussion points encourage students to think for themselves and build their own arguments. Highlighting the potential pitfalls for those new to bioethics, each chapter features boxes providing factual information and outlining the philosophical background, along with detailed case studies that offer an insight into real-life examples of bioethical problems. Within-chapter essay questions and quizzes, along with end-of-chapter review questions, allow students to check their understanding and to broaden their thinking about the topics discussed.

The accompanying podcasts by the author (two of whose podcasts on iTunesU™ have attracted over 3 million downloads) explain points that might be difficult for beginners. These, along with a range of extra resources for students and instructors, are available at [www.cambridge.org/bioethics](http://www.cambridge.org/bioethics).

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MARIANNE TALBOT

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## PREFACE

If you are reading this you must have at least a passing interest in the ethical and social issues generated by biotechnology. Maybe a newspaper article or television programme has made you worry about cloning, bio-security or human–animal hybrids? Perhaps you have found yourself embroiled in a bioethical problem at work or as the result of needing IVF? Or perhaps you are a student required to do bioethics as part of your course? Or a school teacher, or college or university lecturer charged with teaching bioethics? If you are an instructor there are special notes for you at the end of this section.

I have written this book to help anyone with an interest in the ethical and social problems thrown up by our fastest moving areas of science and technology. The book will help its readers:

- understand the key issues in bioethics and the different positions people take on them;
- appreciate the arguments for and against the differing positions;
- discuss the issues with confidence;
- think productively about the issues that might arise in the future;
- come to their own considered positions on various issues, understanding the arguments for and against those positions.

I am a philosopher not a scientist.<sup>1</sup> This is an advantage because ethics is a philosophical discipline, not a scientific one. Both philosophers and scientists aim to discern truth, but the truths they aim to discern are different, as are the methods they use to discern them.



### Philosophical background: science and philosophy

Scientists rely on observation, reason and empirical experiment to acquire an understanding of how the world is governed by the laws of nature.

Philosophers rely on reason, argument and thought experiment<sup>2</sup> to acquire an understanding of how the world is governed by the laws of logic.

The remit of a philosopher is wider than the remit of the scientist. The scientist is concerned only with:

- empirical possibilities (events consistent with the laws of nature),
- what *is* the case.

Philosophers are also concerned with:

- logical possibilities (events consistent with the laws of logic),
- what *ought* to be the case.

No amount of experimentation in the laboratory, or even in the field, will generate an adequate account of right and wrong. Observation and experiment will only tell us how things *are*, not how things *ought to be*. To determine right and wrong it is necessary to invoke the methodology of the philosopher.

I have been teaching bioethics for many years. I started by writing activities for the Labnotes' series for the Wellcome Trust. I regularly teach bioethics to students of the doctoral training centres funded by the Engineering and Physical Sciences Research Council (EPSRC<sup>3</sup>) at Oxford, Imperial College, London, Sheffield and Manchester Universities. I wrote two of Oxford University's popular online courses on bioethics, one for students of the MSc in bioinformatics and one for the public. I like to think I know the pitfalls that intelligent people can fall into in thinking about ethics, and that reading this book will help you to avoid them.

I have started from the assumption that readers will not have a philosophical background. For this reason I have included a chapter on how to construct, analyse and evaluate arguments. Readers will practise these reasoning skills as they work through the activities in this book. A lot of these activities are discussions. This is because argument – the life-blood of the philosophical method – might best be seen as the *collaborative* pursuit of truth. Although we can engage in solitary argument by playing devil's advocate to ourselves, an activity encouraged in this book, there is no substitute for arguing with others.

I have kept philosophical background to a minimum directing readers to additional resources to follow up anything of particular interest.



### **Factual information: The devil's advocate**

When the Roman Catholic Church is considering a candidate for sainthood, his or her case is made by The Promoter of the Cause, otherwise known as God's Advocate (Advocatus Dei). In 1587 Pope Sixtus V appointed a Devil's Advocate (Advocatus Diaboli), whose job it would be to argue against the canonisation.

The title 'devil's advocate' is used in everyday conversation to mean a person who, irrespective of his own position, argues against a position being considered.

If the devil's advocate's arguments succeed, the argument under consideration is not a good one. If his arguments fail, they will strengthen the argument being considered.<sup>4</sup>

This book is about the ethics of biotechnology. This means we shall not be discussing issues such as patient confidentiality or autonomy, nor those involving scientific misconduct or arising from the pressure to publish. These are issues of medical ethics or the ethics of science more generally. We shall discuss issues common to bioethics



## Preface

and these other disciplines – for example euthanasia, animal rights and open source publishing – but always from a biotechnological perspective.

It is always difficult to decide how to structure a book like this. A field as broad as bioethics does not fall neatly into pigeonholes. Here is a description of the way this book is structured:

**Part I** introduces the reader to biotechnology and bioethics, to ethics in general, ethics in the context of society and the most important ethical theories. It also considers the nature of argument and how to evaluate arguments, and some general arguments that arise with respect to all the issues discussed in the book and that will certainly be familiar to you.

**In Part II** we will consider the ethical decisions we face, collectively and individually, as (and for) potential parents and their children, and those who are aging and dying. These include human cloning, both therapeutic and reproductive, reproductive freedom, the shortage of reproductive resources and how it might be alleviated, embryo selection and its relation to eugenics, the nature of death, the moral acceptability of ‘curing’ it, and finally the moral acceptability of assisted suicide and euthanasia.

**In Part III** we will turn to the issues that, in the midst of life, we have a duty collectively and individually to consider as citizens and subjects with duties to ourselves, each other and to nature. Under *our duties to ourselves* we will consider biological enhancement, bioinformation, ‘garage’ biology and biological warfare. In *our duties to each other* we will discuss food and energy security, bio-ownership, and justice between the developed and developing worlds. Finally we’ll discuss *our duties to nature*, including our duties to non-human animals and the non-living environment.

It might be objected that this structure is anthropomorphic because the focus is on us and the decisions we face. I accept this, but believe it can be justified: it is largely the decisions *we* make that will shape the future, for ourselves and the generations to come, for the environment and for non-human animals. This book aims to make some contribution to ensuring that these decisions are informed by reason and reflection.

That’s it with the preliminaries. I hope you enjoy reading this book as much as I have enjoyed writing it.

## Notes

- 1 [http://www.philosophy.ox.ac.uk/members/marianne\\_talbot](http://www.philosophy.ox.ac.uk/members/marianne_talbot) (the author’s website at the Faculty Of Philosophy, University of Oxford); [www.mariannetalbot.co.uk](http://www.mariannetalbot.co.uk) (the author’s official website).
- 2 <http://www.philosophybites.libsyn.com/category/Julian%20Baggini> (Philosopher Julian Baggini on thought experiments for Philosophy Bites). See also: [http://www.practicaethics.ox.ac.uk/audio/analysis\\_280609.mp3](http://www.practicaethics.ox.ac.uk/audio/analysis_280609.mp3). Janet Radcliffe-Richards on the same topic.
- 3 <http://www.epsrc.ac.uk/Pages/default.aspx>.
- 4 <http://www.newadvent.org/cathen/01168b.htm> (The Catholic Encyclopedia entry on the Devil’s Advocate).

## USING THIS BOOK

Each chapter of this book:

1. Starts with a list of objectives to be met by reading the chapter;
2. Includes boxes containing:



**Activities** to deepen thinking, stimulate discussion, and enhance analytical skills;



**Case studies** to illustrate issues under discussion;



**Factual information** about the issue being discussed;



**Philosophical background** on the issue under discussion;



**Definitions.**

To avoid possible misunderstandings the definition boxes should always be read. The other boxes are not usually necessary for the understanding of the text (it will be made clear when it is necessary), but reading them will take readers just that bit further on matters of particular interest.

3. Ends with:
  - (a) A **summary** of its content;
  - (b) A series of **questions** to stimulate reflection;
  - (c) A list of **additional activities** by which to enhance understanding;
  - (d) A list of **further reading** and **useful websites**.

Ideally the book should be read in the order in which it is presented. If this is too much philosophy too soon, the book can be read in the order that appeals to the reader who will be directed, when necessary, to other parts of the book to glean the background information needed.

The book is accompanied by a dedicated website ([www.cambridge.org/bioethics](http://www.cambridge.org/bioethics)) on which readers will find:

- (a) Links to all the references in the book that are available on the web;
- (b) Updates on issues in bioethics since the writing of the book;
- (c) Short podcasts by the author explaining concepts, distinctions and issues she knows to be particularly difficult for those new to the area.

### Using this book

Much of the additional reading to which readers will be directed is available online. This makes it easier for references regularly to be updated. Many references will be to newspaper articles or television or radio pieces on the issues under discussion.

Some might think this use of the media discredits bioethics as a discipline. I disagree. Most people reading this book will have no intention of becoming professional bioethicists. They do not need scholarly articles or worthy books, nor do they have time to read them, they just need a grasp of the issues in question. They will usually find it easier, quicker and more enjoyable to acquire such a grasp from the sort of references I have included. At the end of the book, and on the website, I have included a list of places to go and books to read for those who do wish to study further.

## NOTE FOR INSTRUCTORS

If you are using this book to teach bioethics to classes at any level you will find the activity boxes, and the boxes of *additional activities* you'll find at the end of every chapter, useful for setting students tasks inside or outside the classroom.

Many of these activities involve discussions for pairs of students, or for groups (small or large). They can be used in different ways, for example:

1. You might allocate students sides in the discussion irrespective of their own views (this is useful to encourage them to consider the side of the argument other than their own);
2. You might use the discussion during class without the students preparing, or ask them to prepare by setting work for them to do outside the classroom;
3. If you have the luxury of time you could ask students to organise a formal debate to which others might be invited.

The 'questions to stimulate reflection', also found at the end of each chapter, will be useful for triggering discussion in class, for setting essays, or just to give students something to think about.

The author's podcasts, available on the website, have been designed to help people acquire difficult and/or unfamiliar concepts, distinctions and ideas. None of them is more than 10 minutes in length, and some instructors may find them useful in the classroom, or for students to watch outside the classroom.

Many of those who teach bioethics are specialists who have been properly trained in bioethics. These people will be able to use this book without any special preparation. I hope they will find the book accessible to their students and enjoyable to use.

Some of those tasked with teaching bioethics, however, are not specialists in this area. Some, indeed, have relatively little experience of the area, but having expressed an interest find themselves teaching it, often without having been given much time to acquire the understanding they need to plan lessons and teach with confidence. There is a special area of the website ([www.cambridge.org/bioethics](http://www.cambridge.org/bioethics)) devoted to those in this position, which is accessible by getting a password from the publisher of this book. In this area of the website you will find:

1. Course and lesson plans for various course lengths and depths;
2. References to help you acquire – as efficiently as possible – a deeper background understanding of the issues discussed in each chapter;
3. Figure files, along with files for the activity and case study boxes and the discussion questions.

Even those most experienced in teaching bioethics, of course, may find themselves short of time for lesson planning and preparation. You might also find this part of the website of interest.

If you have any ideas the implementation of which would make the website more helpful to you as an instructor, I should be grateful if you could let me know by leaving your comments on the website, I appreciate your willingness to help.

## ACKNOWLEDGEMENTS

I should like to thank all the directors and administrators at the Life Sciences Interface Doctoral Training Centre at the University of Oxford, and at the Chemical Biology Doctoral Training Centre at Imperial College London. Thank you also to the people at Technology Assisted Lifelong Learning (TALL) and the Department for Continuing Education at the University of Oxford, especially those who were instrumental in putting together the online courses in bioethics for public programmes and the MSc in bioinformatics. Thank you also to the people at the Engineering and Physical Sciences Research Council: I greatly enjoyed the session I held with you. Katie Fletcher and Reuben Thorley, thank you for reading drafts of the books and for your useful corrections.

In particular though I should like to thank all the students to whom I have taught bioethics, both face to face and online: your questions were brilliant and your disagreements instructive. I am privileged to have taught you.

Thank you also to everyone at Cambridge University Press.