

# Preface

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The last decades have witnessed groundbreaking advances in the area of biotechnology and biomedicine, from genetically engineered crops to stem cell research and genome editing. These developments call for regulatory responses on national and international levels. ‘Test tube’ babies, genetically modified organisms (GMOs) and cloning have fuelled intense ethical controversies. As to the impact of biotechnological products and processes on human health and the environment, the perception of risk in our societies varies considerably, depending on geographical, historical, cultural and religious factors. These differences inspire different regulatory choices and preferences. Scientific standards present a ‘rational’ basis for risk assessment and risk management, but remaining uncertainties leave a corridor for subjective preferences.

Treaties and other international instruments provide parameters for regulatory approaches and seek to strike a balance between conflicting interests and values. Biotechnology raises many issues under international law. Accordingly, biotechnological processes and products are subject to intense international debate. Controversies about reproductive medicine involve complex human rights issues, such as the personhood of embryos and the beginning of human life. International trade law provides a normative framework for situations where risk aversion crystallizes in trade-restrictive measures. As a rule, international trade agreements require an objective, empirically sound risk assessment. The coexistence of organic, conventional and GM agriculture poses new challenges to international environmental law. In the context of the protection of biodiversity, international agreements establish equitable access to genetic resources and respond to concerns about ‘biopiracy’. Intellectual property law addresses a broad range of problems associated with biotechnological inventions, such as patents on living organisms or compulsory licences.

This book seeks to provide students, practitioners and academics with a comprehensive overview of the international law of biotechnology. Its object is to serve as an introduction to current debates on the subject and as a guide through the rapidly growing web of international legal materials which address issues of biotechnology. It is meant to stimulate further, intense studies in this complex, dynamic and intricate area of international law.

This book benefits greatly from year-long research and teaching at German and American universities, including NYU School of Law and SMU Dedman

School of Law. I am grateful for a most fruitful stay at the Stellenbosch Institute for Advanced Study. My term at the Käte Hamburger Center for Advanced Study in the Humanities 'Law as Culture' also provided a stimulating environment for my work on this book. Both research stays fostered an inspiring interdisciplinary dialogue with my co-fellows. The Institute of Science and Ethics of the University of Bonn and the Stem Cell Network of North Rhine Westphalia hosted many forums on issues discussed in this book.

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M.H.