



February 2017

## Nanomedicine Book Offer

Michael Hehenberger's 400-page book "Nanomedicine: Science, Business, and Impact" was published in 2015 and has received excellent reviews by a number of experts with both academic and business backgrounds, including Gerd Binnig (Nobel Laureate), Chris McLeod (Roche 454), Huanming Yang (BGI), Manfred Baier (Roche Diagnostics), Beat Loeffler (CLINAM), Jan Mollenhauer (NanoCAN), Roland Lindh (Uppsala Univ.), Ajay Royyuru (IBM Research), Lew Pell (Angel Investor), and Gerd Schmitz (Univ. Hospital Regensburg). A Chinese translation of the book will become available in 2017.

The book covers the atoms and molecules of life, including a detailed overview of DNA chemistry, and an introduction into the world of proteins. It then moves to Molecular Genetics, a description of DNA Sequencing technologies, a discussion of Bioethics, and an analysis of current and future Genomics and other '-omics' business opportunities. After an overview of bio-pharmaceutical R&D, along with associated business aspects and a history of industry mergers and acquisitions, the author discusses the emerging role of 'Nanoparticles' in drug delivery, medical diagnostics, and regenerative medicine.

The next chapter is dedicated to the Impact of Nanomedicine across various existing and emerging medical areas of importance, such as the Gut Microbiome, the Central Nervous System (Brain and Spinal Cord), Cancer and Immunology, Cardiovascular Disease, Diabetes, Infectious Disease, and Tissue / Organ transplantation.

Finally, the author analyzes the state of global biomedical research funding with a special mention of the new trend to complement government funding of big projects (such as the Human Genome and the Brain) with resources provided by charitable organizations, sometimes led by patient advocates. The closing chapter on public health and global health economics also includes health statistics data.

Friends of CLINAM can acquire the book with a significant 30% discount including free regular shipping, by ordering from CRC Press (Taylor & Francis)

<https://www.crcpress.com/Nanomedicine-Science-Business-and-Impact/Hehenberger/p/book/9789814613767>

*with the discount code STA01.*

Michael Hehenberger  
HM NanoMed

## Quotes by Reviewers of 'Nanomedicine: Science, Business, and Impact'

" This is an exceptional book. It is not only written very intelligently and intelligible but also most impressively in a form where all the important aspects in modern medicine are brought into play and are connected in an extremely comprehensive fashion. This is an excellent book about Nanomedicine but at the same time about medicine in general."

*Gerd Binnig, Nobel Laureate (Scanning Tunneling Microscope, 1986) and Founder, Definiens, Munich, Germany*

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"Michael Hehenberger is a master chef, blending clear explanations of scientific concepts with historical accounts of discovery and commercialization efforts, spiced with observations on the political and economic environment in which this is occurring, to create an informative, interesting and thought-provoking book. 'Nanomedicine: Science, Business and Impact' will appeal to a wide range of readers, including scientists, investors, politicians ...in short, anyone interested in the impact that emerging nano-technologies will have on the practice of medicine."

*Christopher K. McLeod, Angel Investor, retired President and Chief Executive Officer of 454 Life Sciences, Branford, CT, USA*

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"NanoMed by Michael Hehenberger is an amazing book which should be read again and again: Just like a Genome, (well) organized and (very) accurate, beautiful and meaningful."

*Prof. Huanming (Henry) Yang, Chairman and Co-Founder, BGI, Shenzhen, China*

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"A fascinating pageturner like the latest thriller - and one of the very few books in science and technology that cover equally well all three aspects of progress: scientific invention, science developed into new technology, and business as the result of creating customer (patient) benefit. A very remarkable piece of work that will get a preferred place in my library, because it is easy to read, yet always solid and correct."

*Dr. Manfred Baier, retired General Manager of Roche Applied Science, Penzberg near Munich, Germany*

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"I am grateful and amazed that the book goes beyond science and business by also covering societal, ethical and regulatory aspects. Dr. Hehenberger deserves commendation for capturing the unique interdisciplinary character of Nanomedicine. I can strongly recommend the book to both experts and non-experts, who will get new and broader insights into this field."

*Dr. Beat Löffler, CEO of the European Foundation for Clinical Nanomedicine, Basel, Switzerland*

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"The author gives investors the tools they need to understand science as an investment. His incisiveness into medical technologies within a business modality makes this a fascinating read."

*Lewis C. Pell, Medical Technology Entrepreneur and Angel Investor, New York City, USA*

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“Michael Hehenberger provides a comprehensive encyclopedia of nanomedicine and its sites of intersection with novel cutting-edge technologies, major diseases and applications as well as with business, ethical, regulatory, and societal aspects. I am particularly thrilled that the book covers the connections between nanomedicine, next generation sequencing, and genomics, the key elements on the road to precision (personalized) medicine.”

*Prof. Jan Mollenhauer, Molecular Oncology, Director NanoCAN, Editor-in-Chief European Journal of Nanomedicine, Denmark*

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"This is an interesting attempt by the author to view the development of Nanomedicine Science from a different angle and give us the bigger picture. The book, written for non-specialists, takes us, in some detail, through the basics of various fields of science, which through interdisciplinary interaction, form the complex network which today is the basis of state-of-the-art medicine. Additionally, it lets us understand how research projects evolve in the presence of federal and private funding, and how the business aspects interact to form a successful outcome. This subject is of interest to the layperson, the scientist, the business people, and the politicians, if you like to understand the context in which 21<sup>st</sup> century medicine operates. If we are to be successful in our quest to cure the diseases of modern society, this understanding is instrumental for efficient progress. Personally, I found it to be enjoyable reading and it taught me a lot about aspects which I, as a scientist, normally would not consider."

*Prof. Roland Lindh, Theoretical Chemistry, Ångström Laboratory, Uppsala University, Sweden (successor to the Uppsala University Quantum Chemistry chair previously held by Prof. Per-Olov Loewdin)*

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“Michael Hehenberger has written a comprehensive and very readable description covering the science, business and impact of nanotechnology's intersection with chemistry, biology, and healthcare. He tackles a scope that is staggering and almost beyond the reach of any individual practitioner of these disciplines. Therefore, the synthesis achieved in this book is remarkably lucid and useful. Particularly unique and enjoyable is the blend of science and business. The section on biopharmaceutical R&D is a comprehensive walk through the traditional aspects of drug discovery & drug development and blends insightful commentary on business aspects. For example, the business pressures of biopharmaceutical industry are wonderfully narrated with Sanofi as a case study. Another in-depth and enjoyable treatment is of the spectrum of companies in the area of regenerative medicine. To scientists and students of these scientific disciplines this book provides a very useful and comprehensive extension into the business impact of their domain. To business students and business executives, this book provides an interesting and deep connection to the science and history that drives these industries.”

*Ajay K. Royyuru, PhD, Director, Computational Biology Center, IBM Thomas J. Watson Research Center, Yorktown, NY, USA*

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“The book describes the history, the developments, the frontiers and the future of nanomedicine and is highly recommended for scientists, medical professionals, politicians, investors, drug and medical device developers, regulatory authorities and bioethicists interested in translational issues in medicine.”

*Prof. Dr.med. Gerd Schmitz, University Hospital Regensburg, Germany*

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