



Genome Editing: The Next Step in Gene Therapy (Advances in Experimental Medicine and Biology)

From Springer

Download now

Read Online 

Genome Editing: The Next Step in Gene Therapy (Advances in Experimental Medicine and Biology) From Springer

This comprehensive volume explores human genetic engineering its pre-clinical and clinical applications, current developments, and as treatment for hereditary diseases. It presents and evaluates the most recent advances in the understanding of mammalian host DNA repair mechanisms, such as double-strand break induced gene targeting and mutagenesis, the development of zinc-finger nucleases, genome editing for neuromuscular diseases, phase integrases, triplex forming oligonucleotides and peptide nucleic acids, aptamer-guided gene targeting, AAV gene editing via DSB repair, engineered nucleases and trinucleotide repeat diseases, and creation of HIV-resistant cells. The expertly authored chapters contextualize current developments within the history of genome editing while also discussing the current and potential safety concerns of this rapidly growing field.

Genome Editing: The Next Step in Gene Therapy, the latest volume in the *American Society of Gene and Cell Therapy* series, deftly illuminates the potential of genetic engineering technology to eradicate today's deadliest and most prolific diseases. It is ideal reading for clinicians and researchers in genetics and immunology.

 [Download Genome Editing: The Next Step in Gene Therapy \(Adv ...pdf](#)

 [Read Online Genome Editing: The Next Step in Gene Therapy \(A ...pdf](#)

Genome Editing: The Next Step in Gene Therapy (Advances in Experimental Medicine and Biology)

From Springer

Genome Editing: The Next Step in Gene Therapy (Advances in Experimental Medicine and Biology) From Springer

This comprehensive volume explores human genetic engineering its pre-clinical and clinical applications, current developments, and as treatment for hereditary diseases. It presents and evaluates the most recent advances in the understanding of mammalian host DNA repair mechanisms, such as double-strand break induced gene targeting and mutagenesis, the development of zinc-finger nucleases, genome editing for neuromuscular diseases, phase integrases, triplex forming oligonucleotides and peptide nucleic acids, aptamer-guided gene targeting, AAV gene editing via DSB repair, engineered nucleases and trinucleotide repeat diseases, and creation of HIV-resistant cells. The expertly authored chapters contextualize current developments within the history of genome editing while also discussing the current and potential safety concerns of this rapidly growing field.

Genome Editing: The Next Step in Gene Therapy, the latest volume in the *American Society of Gene and Cell Therapy* series, deftly illuminates the potential of genetic engineering technology to eradicate today's deadliest and most prolific diseases. It is ideal reading for clinicians and researchers in genetics and immunology.

Genome Editing: The Next Step in Gene Therapy (Advances in Experimental Medicine and Biology) From Springer Bibliography

- Sales Rank: #1862771 in Books
- Published on: 2016-03-05
- Original language: English
- Number of items: 1
- Dimensions: 9.21" h x .69" w x 6.14" l, .0 pounds
- Binding: Hardcover
- 263 pages

 [Download Genome Editing: The Next Step in Gene Therapy \(Adv ...pdf](#)

 [Read Online Genome Editing: The Next Step in Gene Therapy \(A ...pdf](#)

Download and Read Free Online Genome Editing: The Next Step in Gene Therapy (Advances in Experimental Medicine and Biology) From Springer

Editorial Review

From the Back Cover

This comprehensive volume explores human genetic engineering its pre-clinical and clinical applications, current developments, and as treatment for hereditary diseases. It presents and evaluates the most recent advances in the understanding of mammalian host DNA repair mechanisms, such as double-strand break induced gene targeting and mutagenesis, the development of zinc-finger nucleases, genome editing for neuromuscular diseases, phase integrases, triplex forming oligonucleotides and peptide nucleic acids, aptamer-guided gene targeting, AAV gene editing via DSB repair, engineered nucleases and trinucleotide repeat diseases, and creation of HIV-resistant cells. The expertly authored chapters contextualize current developments within the history of genome editing while also discussing the current and potential safety concerns of this rapidly growing field. *Genome Editing: The Next Step in Gene Therapy*, the latest volume in the *American Society of Gene and Cell Therapy* series, deftly illuminates the potential of genetic engineering technology to eradicate today's deadliest and most prolific diseases. It is ideal reading for clinicians and researchers in genetics and immunology.

About the Author

Matthew Hirsch, PhD is an Assistant Professor of Ophthalmology at the University of North Carolina (UNC) at Chapel Hill in Chapel Hill, North Carolina. He also holds appointments in Microbiology and Immunology and in Genetics and Molecular Biology, as well as in the Gene Therapy Center at UNC. Dr. Hirsch received his PhD from West Virginia University in Morgantown, WV; his studies focused on E.coli and Salmonella genetics. He completed his post-doctoral research at UNC studying both episomal and chromosomal genetic engineering using adeno-associated virus (AAV). Dr. Hirsch continues these basic AAV studies and has several reagents under preclinical evaluation for the treatment of blindness and muscular dystrophies.

Toni Cathomen, PhD is Professor and Director of the Institute for Cell and Gene Therapy at the University Medical Center Freiburg, in Freiburg, Germany. The Institute provides the Medical Center with blood and cell products as well as all transfusion and transplantation related diagnostic services. Dr. Cathomen received his PhD from the University of Zurich, in Zurich, Switzerland. Before his appointment in Freiburg, he was a postdoctoral fellow at the Salk Institute in San Diego, California, USA; Assistant Professor of Molecular Virology at Charité Medical School in Berlin, Germany; and Associate Professor of Experimental Hematology at Hannover Medical School in Hannover, Germany. Dr. Cathomen's main research goals are to further improve safe genome editing tools (including TALENs, CRISPR/Cas9) for therapeutic applications in human stem cells, to develop disease models and cell therapies based on induced pluripotent stem cells (iPSCs), and to translate cell and gene therapy efforts into the clinic.

Dr. Matthew Porteus is an Associate Professor at Stanford Medical School in Stanford, California, and attends clinically at the Lucille Packard Children's Hospital in Palo Alto, California. Dr. Porteus received a combined MD, PhD from Stanford Medical School. After completing a fellowship with the Boston Children's Hospital in conjunction with the Dana Farber Cancer Institute, both in Boston, Massachusetts, he did post-doctoral research at both the Massachusetts Institute of Technology in Cambridge, Massachusetts and the California Institute of Technology in Pasadena, California. Following these, he held an independent faculty position at University of Texas- Southwestern in Dallas, Texas in the Departments of Pediatrics and Biochemistry before assuming his current position. In his research, Dr. Porteus focuses on the development of genome editing by homologous recombination as curative therapy for children with genetic diseases. He is also interested in the clonal dynamics of heterogeneous populations and the use of genome editing to better understand pediatric disease, including infant leukemias and muscular genetic disorders.

Users Review

From reader reviews:

Teresa Sullivan:

This Genome Editing: The Next Step in Gene Therapy (Advances in Experimental Medicine and Biology) is completely new way for you who has attention to look for some information because it relief your hunger of information. Getting deeper you onto it getting knowledge more you know or you who still having little digest in reading this Genome Editing: The Next Step in Gene Therapy (Advances in Experimental Medicine and Biology) can be the light food for you because the information inside this specific book is easy to get through anyone. These books create itself in the form which can be reachable by anyone, that's why I mean in the e-book form. People who think that in publication form make them feel tired even dizzy this book is the answer. So there is absolutely no in reading a book especially this one. You can find what you are looking for. It should be here for a person. So , don't miss it! Just read this e-book kind for your better life in addition to knowledge.

Catherine Estey:

Don't be worry for anyone who is afraid that this book will certainly filled the space in your house, you can have it in e-book approach, more simple and reachable. This particular Genome Editing: The Next Step in Gene Therapy (Advances in Experimental Medicine and Biology) can give you a lot of good friends because by you considering this one book you have point that they don't and make you more like an interesting person. That book can be one of a step for you to get success. This book offer you information that might be your friend doesn't know, by knowing more than different make you to be great men and women. So , why hesitate? Let us have Genome Editing: The Next Step in Gene Therapy (Advances in Experimental Medicine and Biology).

Lisa Mercado:

That guide can make you to feel relax. This book Genome Editing: The Next Step in Gene Therapy (Advances in Experimental Medicine and Biology) was colorful and of course has pictures around. As we know that book Genome Editing: The Next Step in Gene Therapy (Advances in Experimental Medicine and

Biology) has many kinds or category. Start from kids until young adults. For example Naruto or Detective Conan you can read and feel that you are the character on there. Therefore , not at all of book usually are make you bored, any it offers you feel happy, fun and chill out. Try to choose the best book for yourself and try to like reading that will.

Kristy Moore:

As a pupil exactly feel bored for you to reading. If their teacher expected them to go to the library or to make summary for some reserve, they are complained. Just little students that has reading's internal or real their hobby. They just do what the professor want, like asked to the library. They go to generally there but nothing reading significantly. Any students feel that examining is not important, boring as well as can't see colorful images on there. Yeah, it is being complicated. Book is very important for you personally. As we know that on this time, many ways to get whatever we would like. Likewise word says, ways to reach Chinese's country. Therefore , this Genome Editing: The Next Step in Gene Therapy (Advances in Experimental Medicine and Biology) can make you really feel more interested to read.

Download and Read Online Genome Editing: The Next Step in Gene Therapy (Advances in Experimental Medicine and Biology) From Springer #412DQZMSVJF

Read Genome Editing: The Next Step in Gene Therapy (Advances in Experimental Medicine and Biology) From Springer for online ebook

Genome Editing: The Next Step in Gene Therapy (Advances in Experimental Medicine and Biology) From Springer Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Genome Editing: The Next Step in Gene Therapy (Advances in Experimental Medicine and Biology) From Springer books to read online.

Online Genome Editing: The Next Step in Gene Therapy (Advances in Experimental Medicine and Biology) From Springer ebook PDF download

Genome Editing: The Next Step in Gene Therapy (Advances in Experimental Medicine and Biology) From Springer Doc

Genome Editing: The Next Step in Gene Therapy (Advances in Experimental Medicine and Biology) From Springer Mobipocket

Genome Editing: The Next Step in Gene Therapy (Advances in Experimental Medicine and Biology) From Springer EPub

412DQZMSVJF: Genome Editing: The Next Step in Gene Therapy (Advances in Experimental Medicine and Biology) From Springer