

Chapter 12 Dna Technology Ppt

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We suggest that you download the Pdf files from the address we provide before or from Google Books and read them. Our Website for Journeys of Discovery Risale-i Nur (Treatise of Light) Training Program <http://www.kesifyolculuklari.com> <http://www.risaleinuregitimprogrami.com> Alternative Website: <http://www.risaleinuregitimprogramidotcom.wordpress.com> Web address of our YouTube Video Channel: <http://www.youtube.com/c/EdizSözüer> BOOK PRESENTATION: A Journey of Discovery for an Extraordinary Treasure Risale-i Nur (The Treatise of Light) Training Program (Text Version) Basic/Resource and Academic Course Curriculum An Imaginary and Mental Journey of Discovery You are Invited to the Adventure Discovering the high truths about the humanity, life, universe and religion... Advancing along the way of progress for mind, soul and heart... Making sense of the world in which we exist... Obtaining an awareness that is more amazing than ever before... Understanding the working mechanisms of the divine technology... A Wonderful Mental journey... Amazing Facts... All These and Even More are Waiting for You! Come With Us for This Extraordinary Journey of Discovery! Let's Get Acquainted With the Books Discovering the Secret of the Universe! This book is penned down in order to introduce you a piece of work, that is so unbelievably and astonishingly perfect that it will surprise you with the high truths and grand scientific discoveries contained therein and will make some of you say “How come I have never heard of it until now!” (Or could not really discover it). The main subject of study of these books is the following: To give correct answers to three basic questions of existence, which have remained as the unknown secrets of the universe that have been always wondered by the humanity. The discovery of the right answers in these areas has been possible not only with the use of the mind/intellect which is incapable of reaching to the truth on its own but rather with the common guidance of divine revelation and the mind. Nevertheless, the answers to the questions that were asked have been discovered solely with rational inferences and logical evidences. These three questions are: “Where did this universe and those within it come from? Where will they go? And Why are they here, what is their mission? That is to ask “What are we doing here?” High truths, which the whole humanity needs and which are appealing to all those who look for the explanation of the basic reality of existence and which is more interesting for the world of science and the scientists and which is brought by divine revelation, are discovered once again and proved with rational methods in these works. Especially today, while quantum physics, astronomy and astrophysics have reached to such advanced levels, common answers are looked for these three questions on matter, universe and human being; the science and these works study the same subjects and share a common ground of work. Here you are: The work, which contains in itself a spiritual/immaterial treasury for people who have an irresistible interest and passion for science and learning, is called RISALE-I NUR (TREATISE OF LIGHT). The content of the book is composed of 19 basic epistles selected from the Collection of Risale-i Nur. Some selected parts related to the subject from 23rd Word Epistle of Nature, Epistle of Resurrection, first eight Words and some other epistles are included in our book. The main texts from Risale-i Nur are placed in the beginning, the words and concepts are explained in the footnotes and the explanatory texts are provided afterwards. In addition, occasionally, as the need arises, explanatory texts are included within the text of the book in the form of an intermediary note. The first part of our book, which consists of two main sections is entitled as “Discovering the Value of the Treasure of Faith.” In this section, the following is presented: the meaning and the importance of the faith and worship, which are proposed by the Religion to the man; how the hidden secret of the universe is solved by the religion; the beauty of faith and how the true value of man comes to light with faith, and the levels of Qur'an and philosophy in terms of understanding the Secret of the Universe. Finally, we are trying to look closely at the great good news and the remedy for death brought by the religion through prophets and we are looking for the answer to this question: “What are the characteristics of true faith that will enable us to earn the eternal life?” We can regard this first part as the understanding of how great and precious a treasure is. The second part of the book is entitled as “Proving the Existence of the Treasure of Faith with Evidences”. In this section, six pillars of faith are proved with detailed evidences. In other words, in the second section, the existence of the treasure sought to be achieved, whose value is understood/appreciated in the first section, is proved; its place is discovered, and this great and magnificent treasure is acquired. Primarily understanding that faith is such a great blessing and a treasure with a great value would determine the importance that we would give to that treasure and its evidences. Nevertheless, you will also observe that in the first part, a serious effort has also been made to search for the truth and evidences. Once you complete the book, you will have completed an important reading that could be considered as a brief summary of the Risale-i Nur collection and taken a serious step in studying the high knowledge of faith that is taught by these works. In “The Journeys of Discovery Risale-i Nur Training Program”, you are invited for an adventure of looking for and finding out the truth. We have a very strong reason to begin this journey: to witness the magnificent details of the divine technology and uniqueness of the artful creation and hence, to take a big step on the way of achieving the true faith that was demanded from us by Allah. We would like you to accompany us in this imaginary and mental journey of discovery. There is only one fixed price for a ticket of the Journey: A strong sense of wonder in the search for truth. BOOK INDEX * Journeys of Discovery Risale-i Nur (Treatise

of Light) Training Program, Based on Academic Work and Supported by Visuals * Declaration on Copyright All Kinds of Free Usage, the Right to Print and Publish * Let's Get Acquainted with the Books Discovering The Secret of The Universe! A Journey of Discovery for an Extraordinary Treasure: Risale-i Nur (The Treatise of Light) Training Program

FIRST MAIN SECTION: DISCOVERING THE VALUE OF THE TREASURE OF FAITH

1.Discovery: Discovering the High Truth of Belief, Worship and Salaat (Prayer) * Telling and Remembering the name of Allah (1. Word) * The Universe is a Place of Festivity (2. Word) * Discovering the High Truth of Worship (3. Word) * Exploring the Truth of Salaah/Prayer (4. Word) * Irresponsible Doctor, Mentally Ill Soldier (5. Word) * The World's Most Profitable Trade Agreement (6.Word) 2.Discovery: The Insight into the Covered Truth of the Religion and the Universe * The Insight into the Covered Hidden Truth of Religion and the Universe (7.Word) * Down the Rabbit Hole! (8.Word) Sub Headings: A Critical Assessment of the Law of Attraction and Quantum Thinking Technique Down the Rabbit Hole! 3.Discovery: Man's High Value That Becomes Apparent with Faith And the Beauties of the Being Faithfull - Picasso's Painting -The Real Truth, Which Is Brilliant and Beautiful, of the Universe - The Source of An Amazing Feeling of Confidence - The Difference of the Man - Discovery of the Subtle Secret of Supplication/Prayer -'On the Concept of "Self Confidence/Reliance" - Small Targets, Low Tastes - Big Target, High Tastes - Being Suspicious of Our Lifestyle - A Tremendous Truth Worth Being Discovered - For Those Who Wonder About the Secret of the Universe 4.Discovery: The comparison of Qur'an, Philosophy and Modern Science in Understanding the Secret of the Universe * The Story of the Creation of Our Universe (11. Word) * A Gift Package (12. Word-First Principle) * To Graduate from the Academy of Universe (A chapter taken from the Thirteenth Word) 5.Discovery: The Solution for Death * Looking at Death and Life Under a Different Kind of Light (Introductory Text) * The Gallows and the Lottery Office (From 11th Ray - The Treatise of Fruits) * Being Sentenced to Death * The Difference that A Muslim Makes (The Second Station of the Thirteenth Word) * How Do We Deceive Ourselves? * The Concept of Saving the Faith

SECOND MAIN SECTION: PROVING THE EXISTENCE OF THE TREASURE OF FAITH WITH EVIDENCES

1.Truth: The Proof of The Truth of Faith in Allah (New Perspectives of The Treatise of Nature) * Looking at the Matters of Faith from the Right Side (Introduction to New Perspectives of The Treatise of Nature) * The Effort to Make Sense out of This World and Magnificent Skies * An Imaginary and Mental Journey of Discovery in The Depths of Divine Technology (23rd Flash, Treatise of Nature) Subheadings : -Thoughts over Existence -What is Nature? -What are Laws of Nature? -Intelligent Design -Coincidence and Material Reasons -A Fantastic Science-Fiction Story -Amazing Discoveries on The Existence of The Universe -What Happens when There Are Multiple-Universes? -Grand Design and Theory of Everything - A Different Perspective on Big Bang -The Impossible Scenarios of the Formation of the Matter/Objects, Formation Due to Causes and Self-creation -The Miracle of a Fly -Production of Living Beings from a Single Centre -Miracle of the Eye -The Thousand-Domed Palace The Concept of Irreducible Complexity -No Production Is Possible without Moulds! (Alternatives for Production of Living Things) -Journey to the Land of Miracles -Fantastic Data Stores: Brain and DNA -Looking at the Reality from a Blind-Spot -A Question That Will Open The Mysterious Door of The Universe -Interwoven Spiral Order -Getting Wet in The Ocean of the Cosmos -The Laws of Nature and Quantum Universe -Law of Atraction and A Critical Evaluation of Quantum Thinking -Design Signature over The Matter/Objects -Looking at Allah from the Right Side -Our World: A spaceship in the Sea of Sky -How Is Everything Taking Place with Divine Power -Is the Movement of Particles an Explanation for Everything? Additional Sections * Discussion Notes from Our Seminars on "The New Perspectives from The Treatise of Nature" - Scientific Findings about Evolution and the Miracles of Quran - About Quantum Approach and Divine Truths - Important Points on Evolution, Atheism and Creation 2.Truth: (Believing in Angels) Proof of the Existence of Angels * We Are Not Alone! (Introductory Text) * Why Does Life Exist? * What is the Meaning and Value of the Existence without Life? * Angels' Truth * The Roles Shared in a Perfect Ecosystem 3.Truth: (Faith in the Divine Books) The Truth of Revelation and the Proof of the Coming of Qur'an from Allah It is Completely Different Word! (The Truth of Revelation and the Proof of the Coming of Qur'an from Allah) Sub Headings: * Extraordinary Spiritual Mastery of a Wonderful Book * An Unprecedented Challenge * Understanding the Environment in Which and the Persons against whom The Quran Made This Unprecedented Challenge * Uniqueness of Quran's Style * A Spiritual Transformation Beyond Every Imagination * Quran's Amazing Influence * Good News from the Holly Books * Quran: A Miracle Beyond the Capabilities of The Human Being * Scientific Miracles of Quran 4.Truth: (Belief in Prophets) Proof of the Truth of Prophethood and Proof of Prophethood of Muhammad (PBUH) Spiritual Sun of the Universe Sub Headings: * Spiritual Sun of the Universe * How Could It Be Understood That A person Is A (Real) Prophet? * The Most Brilliant Evidence of the Existence of Allah 5.Truth: Evidence for the Existence of Resurrection after Death * An Invaluable Truth: Eternal Life (Introductory Text) Sub Headings: - Rehearsal Scene - Banquet Table for Tasting - Magnificent Cinema House - Divine Information Repository - Dominoes - Great Show Centre, the Universe and the Cosmic Calendar - Union of Opposites - Missing Part of the Puzzle - Babies in Their Mother's Womb - Drawing Conclusions Coherent with Most Basic Truths - Learning the Truth from Its Source - The Gate to Eternity Opened for the Human Being - Divine Causes Connected to the Human Being - Unknown Breakfast - Film without A Final - Privileged Planet - The Prayer Opening the Gate of Eternal Life - The Way to Salvation from A Paradoxical Situation - An Illogical Fiction - He will Do it if He Promised - Reviving Earth - Would the One Doing the Difficult, Be Unable To Do the Thing Which Is Easier? - The Truest News in the World - Secret Plan - Desolate Festival - A Truth As Unshakable As the Existence of the Earth - An Eternal Life Where Death Is Killed 6.Truth: The Truth of the Divine Determining and Free Will (Belief in Fate, Qadar) Sub Headings: * A Healthy Approach to the Matters of Qadar and Free Will * How can We Reconcile Divine Determining with Free Will? * Nature of Free Will * What is the Meaning of Everything Being Determined by Allah's Will? * What Does It Mean If Everything about Divine Determining is Good and Beautiful? SPECIAL SECTIONS * The Life of Bediuzzaman Said Nursi and Risale-i Nur * An Attempt to Make Risale-i Nur the Property of Humanity: Explanatory Works Sub Headings: * Why and How of Risale-i Nur Explanatory Works * A Realistic and Alternative Model in Risale-i Nur Works, That Meets the Needs

* An Attempt to Make Risale-i Nur the Property of Humanity: Explanatory Works * Our Responsibilities in the Service of Risale-i Nur * Quran, Risale-i Nur and the Place of the Explanation of Risale-i Nur From the Perspective of Religious Sciences * How shall the dream of Medresetüzzehra be realized? * How Could It Be Possible To Teach Risale-i Nur As A Textbook? * Applied Model of Medresetüzzehra * Analysis of Methods for Introduction of Risale-i Nur and Its Integration into Education System * The Analysis of Religion Lesson's Text Book Which is Based on Risale-i Nur * Could Loyalty to Islam and to the Science Ever Be Considered As Betrayal to Risale-i Nur? * For A Positive Transformation in Education, Which Method Is Realistic and of Top Priority? * A Style of Explanatory Lecturing For Risale-i Nur, Which is Not Either Exaggerated nor Understated * Risale-i Nur, Civilization of Islam/Quran and Philosophy of Science * How will the Civilization of Islam/Quran be built? What does the Dream of Medresetüzzehra Express? * Your Journey Just Begins Now! THE COMPANIES OF ROAD FOR YOUR PERSONAL VOYAGE * Seminar Texts, Presentations and Videos* Our Website for The Journeys of Discovery * Our Books on Explanatory Notes for Risale-i Nur (Texts and Visuals/Interactive) * Our Video Channel for The Journeys of Discovery * Suggested Websites * The Opportunity to Read and Listen Risale-i Nur Round The Clock Wherever You Are * Locations Where You Can Participate in Risale-i Nur Conversations and Classes * Other Academic Training Activities * Author's Contact Address

Since the first transgenic plants were produced back in the early 1980s, there have been substantial developments towards the genetic engineering of most crops of our world. Initial studies using isolated plant cells and removing their cell walls to form protoplasts, offered the possibility of transferring genetic material by Agrobacterium-mediated gene transfer, chemical agents or electrical charges. However, in those cases where isolated protoplasts could be transformed, often, a shoot regeneration system was not available to induce the production of transgenic plants and any such regenerated plants were subject to mutation or chromosomal of cultured plant organs, such as leaf abnormalities. By the mid-1980s, the use of Agrobacterium-mediated gene transfer, offered the convenience of combining gene transfer, plant regeneration and selection of transformants in a single system. This approach, enabled the production of stable, phenotypically-normal, transgenic potato and tomato plants in culture. By the late 1980s, the use of biolistics offered a means of inserting foreign genes into plant cells which were inaccessible to Agrobacterium infection. Even today, this technology is now standard practice for the production of some transgenic plants.

Learn all you need to know about seven key innovations disrupting business analytics today. These innovations—the open source business model, cloud analytics, the Hadoop ecosystem, Spark and in-memory analytics, streaming analytics, Deep Learning, and self-service analytics—are radically changing how businesses use data for competitive advantage. Taken together, they are disrupting the business analytics value chain, creating new opportunities. Enterprises who seize the opportunity will thrive and prosper, while others struggle and decline: disrupt or be disrupted. Disruptive Business Analytics provides strategies to profit from disruption. It shows you how to organize for insight, build and provision an open source stack, how to practice lean data warehousing, and how to assimilate disruptive innovations into an organization. Through a short history of business analytics and a detailed survey of products and services, analytics authority Thomas W. Dinsmore provides a practical explanation of the most compelling innovations available today. What You'll Learn Discover how the open source business model works and how to make it work for you See how cloud computing completely changes the economics of analytics Harness the power of Hadoop and its ecosystem Find out why Apache Spark is everywhere Discover the potential of streaming and real-time analytics Learn what Deep Learning can do and why it matters See how self-service analytics can change the way organizations do business Who This Book Is For Corporate actors at all levels of responsibility for analytics: analysts, CIOs, CTOs, strategic decision makers, managers, systems architects, technical marketers, product developers, IT personnel, and consultants.

Turn unstructured data into valuable business insight Unstructured Data Analytics provides an accessible, non-technical introduction to the analysis of unstructured data. Written by global experts in the analytics space, this book presents unstructured data analysis (UDA) concepts in a practical way, highlighting the broad scope of applications across industries, companies, and business functions. The discussion covers key aspects of UDA implementation, beginning with an explanation of the data and the information it provides, then moving into a holistic framework for implementation. Case studies show how real-world companies are leveraging UDA in security and customer management, and provide clear examples of both traditional business applications and newer, more innovative practices. Roughly 80 percent of today's data is unstructured in the form of emails, chats, social media, audio, and video. These data assets contain a wealth of valuable information that can be used to great advantage, but accessing that data in a meaningful way remains a challenge for many companies. This book provides the baseline knowledge and the practical understanding companies need to put this data to work. Supported by research with several industry leaders and packed with frontline stories from leading organizations such as Google, Amazon, Spotify, LinkedIn, Pfizer, Manulife, AXA, Monster Worldwide, Under Armour, the Houston Rockets, DELL, IBM, and SAS Institute, this book provides a framework for building and implementing a successful UDA center of excellence. You will learn: How to increase Customer Acquisition and Customer Retention with UDA The Power of UDA for Fraud Detection and Prevention The Power of UDA in Human Capital Management & Human Resource The Power of UDA in Health Care and Medical Research The Power of UDA in National Security The Power of UDA in Legal Services The Power of UDA for product development The Power of UDA in Sports The future of UDA From small businesses to large multinational organizations, unstructured data provides the opportunity to gain consumer information straight from the source. Data is only as valuable as it is useful, and a robust, effective UDA strategy is the first step toward gaining the full advantage. Unstructured Data Analytics lays this space open for examination, and provides a solid framework for beginning meaningful analysis.

Easy to read and well-organized, CRIMINAL INVESTIGATION, 11th Edition delivers a field-based approach to modern investigative principles and practices that is strongly grounded in current research. Demonstrating techniques and practical applications, the book introduces long-standing tools, practices, and policies alongside the latest innovations in technology and science to give readers and future criminal justice professionals a broad perspective of criminal investigations today. Topics covered include D.N.A. evidence, terrorism and homeland security, the increasing standard of proof for stop vs. search/arrest vs. conviction, cybercrime, crimes against children, forensics and physical evidence, investigative photography and sketching, identity theft, white-collar crime, and ethics, among many others. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

Why an organization's response to digital disruption should focus on people and processes and not necessarily on technology. Digital technologies are disrupting organizations of every size and shape, leaving managers scrambling to find a technology fix that will help their organizations compete. This book offers managers and business leaders a guide for surviving digital disruptions—but it is not a book about technology. It is about the organizational changes required to harness the power of technology. The authors argue that digital disruption is primarily about people and that effective digital transformation involves changes to organizational dynamics and how work gets done. A focus only on selecting and implementing the right digital technologies is not likely to lead to success. The best way to respond to digital disruption is by changing the company culture to be more agile, risk tolerant, and experimental. The authors draw on four years of research, conducted in partnership with MIT Sloan Management Review and Deloitte, surveying more than 16,000 people and conducting interviews with managers at such companies as Walmart, Google, and Salesforce. They introduce the concept of digital maturity—the ability to take advantage of opportunities offered by the new technology—and address the specifics of digital transformation, including cultivating a digital environment, enabling intentional collaboration, and fostering an experimental mindset. Every organization needs to understand its “digital DNA” in order to stop “doing digital” and start “being digital.” Digital disruption won't end anytime soon; the average worker will probably experience numerous waves of disruption during the course of a career. The insights offered by *The Technology Fallacy* will hold true through them all. A book in the Management on the Cutting Edge series, published in cooperation with MIT Sloan Management Review.

Op onnavolgbare wijze beschrijft Yuval Noah Harari in zijn bestseller *Sapiens* 70.000 jaar menselijke evolutie, maar met *Homo Deus* richt hij zich op de toekomst. Met zijn kenmerkende vermenging van wetenschap, geschiedenis en filosofie onderzoekt Harari de dromen en nachtmerries van de eenentwintigste eeuw - van onsterfelijkheid tot kunstmatig leven. Hij stelt fundamentele vragen: Waar gaan we naartoe? Hoe beschermen we onze kwetsbare wereld tegen onze eigen verwoestende krachten? En als we in staat zijn door technologische vooruitgang ons lichaam en onze geest te verbeteren, wat gebeurt er dan met de mensen die zich niet laten upgraden? Wat voor sociale gevolgen zal deze tweedeling hebben? Volgens Harari is het essentieel om meer te begrijpen van de technologische revoluties om ons heen, anders hebben we geen invloed op de koers van onze toekomst. Dit is de volgende stap in onze evolutie. Dit is *Homo Deus*.

This anatomy and physiology textbook for veterinary technicians features vocabulary fundamentals, hundreds of full-color illustrations, clinical application boxes, and test yourself questions.

Instructors will find this Seventh Edition of HUMAN HEREDITY current, clear, and complemented by an amazing array of technology for students and instructors. In addition, the latter chapters (12-19) have been reorganized for greater ease of use. There is also more coverage of hot topics like recombinant DNA technology, genetic engineering, cloning, stem cell research, and HIV. In support of this, "How Would You Vote?" questions appear at the beginning and end of each chapter. Chapters begin with an opening story—focusing on a controversial issue. After the story, the "How Would You Vote?" box directs students to the website to voice their opinion. On the website the issue is summarized, an InfoTrac activity with questions involving the issue is provided, and students cast their vote and see tallied results of the voting. Additional student support includes Human GeneticsNOW, a password-protected website integrated with the Seventh Edition that provides students with access to diagnostic Pre-Tests and Post-Tests for each chapter. It automatically generates customized learning plans for students, directing them to text information and ancillaries that help them master specific concepts. Active Figures in the text, indicated by a media icon, have corresponding narrated animations on the Human GeneticsNOW site that are included in the customized Learning Plan along with additional animations and media assets. For instructors, a Multimedia Manager provides the all of the art and photos from the text in PowerPoint form, and, lectures can be further enhanced by using animations and CNN videos on human heredity topics.

Tomorrow's nanoscientist will have a truly interdisciplinary and nano-centric education, rather than, for example, a degree in chemistry with a specialization in nanoscience. For this to happen, the field needs a truly focused and dedicated textbook. This full-color masterwork is such a textbook. It introduces the nanoscale along with the societal impacts of nanoscience, then presents an overview of characterization and fabrication methods. The authors systematically discuss the chemistry, physics, and biology aspects of nanoscience, providing a complete picture of the challenges, opportunities, and inspirations posed by each facet before giving a brief glimpse at nanoscience in action: nanotechnology. This book is written to provide a companion volume to *Fundamentals of Nanotechnology*. The two companion volumes are also available bound together in the single volume, *Introduction to Nanoscience and Nanotechnology*. Qualifying instructors who purchase either of these volumes (or the combined set) are given online access to a wealth of instructional materials. These include detailed lecture notes, review summaries, slides, exercises, and more. The authors provide enough material for both one- and two-semester courses.

All too often, the weakest link in the chain of criminal justice is the crime scene investigation. Improper collection of evidence blocks the finding of truth. Now in its second edition, Practical Crime Scene Processing and Investigation presents practical, proven methods to be used at any crime scene to ensure that evidence is admissible and persuasive. Accompanied by more than 300 color photographs, topics discussed include: Understanding the nature of physical evidence, including fingerprint, biological, trace, hair and fiber, and other forms of evidence Actions of the responding officer, from documenting and securing the initial information to providing emergency care Assessing the scene, including search considerations and dealing with chemical and bioterror hazards Crime scene photography, sketching, mapping, and notes and reports Light technology and preserving fingerprint and impression evidence Shooting scene documentation and reconstruction Bloodstain pattern analysis and the body as a crime scene Special scene considerations, including fire, buried bodies, and entomological evidence The role of crime scene analysis and reconstruction, with step-by-step procedures Two appendices provide additional information on crime scene equipment and risk management, and each chapter is enhanced by a succinct summary, suggested readings, and a series of questions to test assimilation of the material. Using this book in your investigations will help you find out what happened and who is responsible.

From Heidi Neck, one of the most influential thinkers in entrepreneurship education today, Chris Neck, an award-winning professor, and Emma Murray, business consultant and author, comes this ground-breaking new text. Entrepreneurship: The Practice and Mindset catapults students beyond the classroom by helping them develop an entrepreneurial mindset so they can create opportunities and take action in uncertain environments. Based on the world-renowned Babson Entrepreneurship program, this new text emphasizes practice and learning through action. Students learn entrepreneurship by taking small actions and interacting with stakeholders in order to get feedback, experiment, and move ideas forward. Students walk away from this text with the entrepreneurial mindset, skillset, and toolset that can be applied to startups as well as organizations of all kinds.

Whether your students have backgrounds in business, liberal arts, engineering, or the sciences, this text will take them on a transformative journey.

Important Information and Presentation: Our book is free. The whole book can be read in "Free Sample" section. It is not necessary to give your credit card information. You can download our book in word or pdf format from the following web addresses: goo.gl/hNIUou or yadi.sk/d/09r41tL9ecYUA You can download the text of our book and its visual/interactive versions from the folder of "Basic-Resource Book" in "English Books and Risale-i Nur Training Program Presentations/English Books-Risale-i Nur Training Program" section in this address. Besides, you can view or download the files of all of our books, and videos, texts and PowerPoint presentations of our seminars altogether or one by one, from these storage spaces where all of our work on Risale-i Nur (Treatise of Light) are uploaded. In Google Books and Google Play, it is not possible to open and view the links and videos just by clicking them. We suggest that you download the Pdf files from the address we provide before or from Google Books and read them. Our Website for Journeys of Discovery Risale-i Nur (Treatise of Light) Training Program <http://www.kesifyolculuklari.com> <http://www.risaleinuregitimprogrami.com> Alternative Website: <http://www.risaleinuregitimprogramidotcom.wordpress.com> Web address of our YouTube Video Channel: <http://www.youtube.com/c/EdizSözüer>

BOOK PRESENTATION: A Journey of Discovery for an Extraordinary Treasure Risale-i Nur (The Treatise of Light) Training Program Basic/Resource and Academic Course Curriculum Visual/Interactive Book An Imaginary and Mental Journey of Discovery You are Invited to the Adventure We are inviting you for an utterly DIFFERENT EXPERIENCE, an interactive book full of INCREDIBLE DISCOVERIES, where you will come to AN IMPRESSIVE VISUAL JOURNEY. READING THE BOOK OF UNIVERSE AND RISALE-I NUR HAS NEVER BEEN SO PLEASANT. In total, there are 2000 visuals and 170 videos utilized (rate of visuality is 50%) in this enormous study, where interactive visuals are also used. It is a first attempt in its area worldwide. Discovering the high truths about the humanity, life, universe and religion... Advancing along the way of progress for mind, soul and heart... Making sense of the world in which we exist... Obtaining an awareness that is more amazing than ever before... Understanding the working mechanisms of the divine technology... A Wonderful Mental journey... A Visual Festival... Amazing Facts... Stunning Images and Videos... All These and Even More are Waiting for You! Come With Us for This Extraord?nary Journey of Discovery! Let's Get Acquainted With the Books Discover?ng the Secret of the Universe! This book is penned down in order to introduce you a piece of work, that is so unbelievably and astonishingly perfect that it will surprise you with the high truths and grand scientific discoveries contained therein and will make some of you say "How come I have never heard of it until now!" (Or could not really discover it). The main subject of study of these books is the following: To give correct answers to three basic questions of existence, which have remained as the unknown secrets of the universe that have been always wondered by the humanity. The discovery of the right answers in these areas has been possible not only with the use of the mind/intellect which is incapable of reaching to the truth on its own but rather with the common guidance of divine revelation and the mind. Nevertheless, the answers to the questions that were asked have been discovered solely with rational inferences and logical evidences. These three questions are:

"Where did this universe and those within it come from? Where will they go? And Why are they here, what is their mission? That is to ask "What are we doing here?" High truths, which the whole humanity needs and which are appealing to all those who look for the explanation of the basic reality of existence and which is more interesting for the world of science and the scientists and which is brought by divine revelation, are discovered once again and proved with rational methods in these works. Especially today, while quantum physics, astronomy and astrophysics have reached to such advanced levels, common answers are looked for these three questions on matter, universe and human being; the science and these works study the same subjects and share a common ground of work. Here you are: The work, which contains in itself a spiritual/immaterial treasury for people who have an irresistible interest and passion for science and learning, is called RISALE-I NUR (TREATISE OF LIGHT). The content of the book is composed of 19 basic epistles selected from the Collection of Risale-i Nur. Some selected parts related to the subject from 23rd Word Epistle of Nature, Epistle of Resurrection, first eight Words and some

other epistles are included in our book. The main texts from Risale-i Nur are placed in the beginning, the words and concepts are explained in the footnotes and the explanatory texts are provided afterwards. In addition, occasionally, as the need arises, explanatory texts are included within the text of the book in the form of an intermediary note. The first part of our book, which consists of two main sections is entitled as “Discovering the Value of the Treasure of Faith.” In this section, the following is presented: the meaning and the importance of the faith and worship, which are proposed by the Religion to the man; how the hidden secret of the universe is solved by the religion; the beauty of faith and how the true value of man comes to light with faith, and the levels of Qur’an and philosophy in terms of understanding the Secret of the Universe. Finally, we are trying to look closely at the great good news and the remedy for death brought by the religion through prophets and we are looking for the answer to this question: “What are the characteristics of true faith that will enable us to earn the eternal life?” We can regard this first part as the understanding of how great and precious a treasure is. The second part of the book is entitled as ” Proving the Existence of the Treasure of Faith with Evidences”. In this section, six pillars of faith are proved with detailed evidences. In other words, in the second section, the existence of the treasure sought to be achieved, whose value is understood/appreciated in the first section, is proved; its place is discovered, and this great and magnificent treasure is acquired. Primarily understanding that faith is such a great blessing and a treasure with a great value would determine the importance that we would give to that treasure and its evidences. Nevertheless, you will also observe that in the first part, a serious effort has also been made to search for the truth and evidences. Once you complete the book, you will have completed an important reading that could be considered as a brief summary of the Risale-i Nur collection and taken a serious step in studying the high knowledge of faith that is taught by these works. In “The Journeys of Discovery Risale-i Nur Training Program”, you are invited for an adventure of looking for and finding out the truth. We have a very strong reason to begin this journey: to witness the magnificent details of the divine technology and uniqueness of the artful creation and hence, to take a big step on the way of achieving the true faith that was demanded from us by Allah. We would like you to accompany us in this imaginary and mental journey of discovery. There is only one fixed price for a ticket of the Journey: A strong sense of wonder in the search for truth. BOOK INDEX * Journeys of Discovery Risale-i Nur (Treatise of Light) Training Program, Based on Academic Work and Supported by Visuals * Declaration on Copyright All Kinds of Free Usage, the Right to Print and Publish * Let’s Get Acquainted with the Books Discovering The Secret of The Universe! A Journey of Discovery for an Extraordinary Treasure: Risale-i Nur (The Treatise of Light) Training Program

FIRST MAIN SECTION: DISCOVERING THE VALUE OF THE TREASURE OF FAITH

1.Discovery: Discovering the High Truth of Belief, Worship and Salaat (Prayer) * Telling and Remembering the name of Allah (1. Word) * The Universe is a Place of Festivity (2. Word) * Discovering the High Truth of Worship (3. Word) * Exploring the Truth of Salaah/Prayer (4. Word) * Irresponsible Doctor, Mentally Ill Soldier (5. Word) * The World's Most Profitable Trade Agreement (6.Word) 2.Discovery: The Insight into the Covered Truth of the Religion and the Universe * The Insight into the Covered Hidden Truth of Religion and the Universe (7.Word) * Down the Rabbit Hole! (8.Word) Sub Headings: A Critical Assessment of the Law of Attraction and Quantum Thinking Technique Down the Rabbit Hole! 3.Discovery: Man’s High Value That Becomes Apparent with Faith And the Beauties of the Being Faithfull - Picasso’s Painting -The Real Truth, Which Is Brilliant and Beautiful, of the Universe - The Source of An Amazing Feeling of Confidence - The Difference of the Man - Discovery of the Subtle Secret of Supplication/Prayer -‘On the Concept of “Self Confidence/Reliance” - Small Targets, Low Tastes - Big Target, High Tastes - Being Suspicious of Our Lifestyle - A Tremendous Truth Worth Being Discovered - For Those Who Wonder About the Secret of the Universe 4.Discovery: The comparison of Qur'an, Philosophy and Modern Science in Understanding the Secret of the Universe * The Story of the Creation of Our Universe (11. Word) * A Gift Package (12. Word-First Principle) * To Graduate from the Academy of Universe (A chapter taken from the Thirteenth Word) 5.Discovery: The Solution for Death * Looking at Death and Life Under a Different Kind of Light (Introductory Text) * The Gallows and the Lottery Office (From 11th Ray - The Treatise of Fruits) * Being Sentenced to Death * The Difference that A Muslim Makes (The Second Station of the Thirteenth Word) * How Do We Deceive Ourselves? * The Concept of Saving the Faith

SECOND MAIN SECTION: PROVING THE EXISTENCE OF THE TREASURE OF FAITH WITH EVIDENCES

1.Truth: The Proof of The Truth of Faith in Allah (New Perspectives of The Treatise of Nature) * Looking at the Matters of Faith from the Right Side (Introduction to New Perspectives of The Treatise of Nature) * The Effort to Make Sense out of This World and Magnificent Skies * An Imaginary and Mental Journey of Discovery in The Depths of Divine Technology (23rd Flash, Treatise of Nature) Subheadings : -Thoughts over Existence -What is Nature? -What are Laws of Nature? -Intelligent Design -Coincidence and Material Reasons -A Fantastic Science-Fiction Story -Amazing Discoveries on The Existence of The Universe -What Happens when There Are Multiple-Universes? -Grand Design and Theory of Everything - A Different Perspective on Big Bang -The Impossible Scenarios of the Formation of the Matter/Objects, Formation Due to Causes and Self-creation -The Miracle of a Fly -Production of Living Beings from a Single Centre -Miracle of the Eye -The Thousand-Domed Palace The Concept of Irreducible Complexity -No Production Is Possible without Moulds! (Alternatives for Production of Living Things) -Journey to the Land of Miracles -Fantastic Data Stores: Brain and DNA -Looking at the Reality from a Blind-Spot -A Question That Will Open The Mysterious Door of The Universe -Interwoven Spiral Order -Getting Wet in The Ocean of the Cosmos -The Laws of Nature and Quantum Universe -Law of Atraction and A Critical Evaluation of Quantum Thinking -Design Signature over The Matter/Objects -Looking at Allah from the Right Side -Our World: A spaceship in the Sea of Sky -How Is Everything Taking Place with Divine Power -Is the Movement of Particles an Explanation for Everything? Additional Sections * Discussion Notes from Our Seminars on “The New Perspectives from The Treatise of Nature” - Scientific Findings about Evolution and the Miracles of Quran - About Quantum Approach and Divine Truths - Important Points on Evolution, Atheism and Creation 2.Truth: (Believing in Angels) Proof of the Existence of Angels * We Are Not Alone! (Introductory Text) * Why Does Life Exist? * What is the Meaning and Value of the Existence without Life? * Angels’ Truth *

The Roles Shared in a Perfect Ecosystem 3.Truth: (Faith in the Divine Books) The Truth of Revelation and the Proof of the Coming of Qur'an from Allah It is Completely Different Word! (The Truth of Revelation and the Proof of the Coming of Qur'an from Allah) Sub Headings: * Extraordinary Spiritual Mastery of a Wonderful Book * An Unprecedented Challenge * Understanding the Environment in Which and the Persons against whom The Quran Made This Unprecedented Challenge * Uniqueness of Quran's Style * A Spiritual Transformation Beyond Every Imagination * Quran's Amazing Influence * Good News from the Holly Books * Quran: A Miracle Beyond the Capabilities of The Human Being * Scientific Miracles of Quran 4.Truth: (Belief in Prophets) Proof of the Truth of Prophethood and Proof of Prophethood of Muhammad (PBUH) Spiritual Sun of the Universe Sub Headings: * Spiritual Sun of the Universe * How Could It Be Understood That A person Is A (Real) Prophet? * The Most Brilliant Evidence of the Existence of Allah 5.Truth: Evidence for the Existence of Resurrection after Death * An Invaluable Truth: Eternal Life (Introductory Text) Sub Headings: - Rehearsal Scene - Banquet Table for Tasting - Magnificent Cinema House - Divine Information Repository - Dominoes - Great Show Centre, the Universe and the Cosmic Calendar - Union of Opposites - Missing Part of the Puzzle - Babies in Their Mother's Womb - Drawing Conclusions Coherent with Most Basic Truths - Learning the Truth from Its Source - The Gate to Eternity Opened for the Human Being - Divine Causes Connected to the Human Being - Unknown Breakfast - Film without A Final - Privileged Planet - The Prayer Opening the Gate of Eternal Life - The Way to Salvation from A Paradoxical Situation - An Illogical Fiction - He will Do it if He Promised - Reviving Earth - Would the One Doing the Difficult, Be Unable To Do the Thing Which Is Easier? - The Truest News in the World - Secret Plan - Desolate Festival - A Truth As Unshakable As the Existence of the Earth - An Eternal Life Where Death Is Killed 6.Truth: The Truth of the Divine Determining and Free Will (Belief in Fate, Qadar) Sub Headings: * A Healthy Approach to the Matters of Qadar and Free Will * How can We Reconcile Divine Determining with Free Will? * Nature of Free Will * What is the Meaning of Everything Being Determined by Allah's Will? * What Does It Mean If Everything about Divine Determining is Good and Beautiful? SPECIAL SECTIONS * The Life of Bediuzzaman Said Nursi and Risale-i Nur * An Attempt to Make Risale-i Nur the Property of Humanity: Explanatory Works Sub Headings: * Why and How of Risale-i Nur Explanatory Works * A Realistic and Alternative Model in Risale-i Nur Works, That Meets the Needs * An Attempt to Make Risale-i Nur the Property of Humanity: Explanatory Works * Our Responsibilities in the Service of Risale-i Nur * Quran, Risale-i Nur and the Place of the Explanation of Risale-i Nur From the Perspective of Religious Sciences * How shall the dream of Medresetüzzehra be realized? * How Could It Be Possible To Teach Risale-i Nur As A Textbook? * Applied Model of Medresetüzzehra * Analysis of Methods for Introduction of Risale-i Nur and Its Integration into Education System * The Analysis of Religion Lesson's Text Book Which is Based on Risale-i Nur * Could Loyalty to Islam and to the Science Ever Be Considered As Betrayal to Risale-i Nur? * For A Positive Transformation in Education, Which Method Is Realistic and of Top Priority? * A Style of Explanatory Lecturing For Risale-i Nur, Which is Not Either Exaggerated nor Understated * Risale-i Nur, Civilization of Islam/Quran and Philosophy of Science * How will the Civilization of Islam/Quran be built? What does the Dream of Medresetüzzehra Express? * Your Journey Just Begins Now! THE COMPANIES OF ROAD FOR YOUR PERSONAL VOYAGE * Seminar Texts, Presentations and Videos* Our Website for The Journeys of Discovery * Our Books on Explanatory Notes for Risale-i Nur (Texts and Visuals/Interactive) * Our Video Channel for The Journeys of Discovery * Suggested Websites * The Opportunity to Read and Listen Risale-i Nur Round The Clock Wherever You Are * Locations Where You Can Participate in Risale-i Nur Conversations and Classes * Other Academic Training Activities * Author's Contact Address

The book that set the standard for robots interacting with humans in science fiction. A classic in any genre.

Over the last decade or so, the field of science and technology studies (STS) has become an intellectually dynamic interdisciplinary arena. Concepts, methods, and theoretical perspectives are being drawn both from long-established and relatively young disciplines. From its origins in philosophical and political debates about the creation and use of scientific knowledge, STS has become a wide and deep space for the consideration of the place of science and technology in the world, past and present. The Routledge Handbook of Science, Technology and Society seeks to capture the dynamism and breadth of the field by presenting work that pushes the reader to think about science and technology and their intersections with social life in new ways. The interdisciplinary contributions by international experts in this handbook are organized around six topic areas: embodiment consuming technoscience digitization environments science as work rules and standards This volume highlights a range of theoretical and empirical approaches to some of the persistent – and new – questions in the field. It will be useful for students and scholars throughout the social sciences and humanities, including in science and technology studies, history, geography, critical race studies, sociology, communications, women's and gender studies, anthropology, and political science.

It's not enough to say that the CIO is the geek who wears the suit, IT leaders must, now more than ever, take a seat at the table. In A Seat at the Table, CIO Mark Schwartz explores the role of IT leadership as it is now and opens the door to reveal IT leadership as it should be—an integral part of the value creation engine. With wit and an easy style, Schwartz reveals that the only way to become an Agile IT leader is to be courageous—to throw off the attitude and assumptions that have kept CIOs from taking their rightful seat at the table. CIOs, step on up, your seat at the table is waiting for you.

Applications of Multi-Criteria Decision-Making Theories in Healthcare and Biomedical Engineering contains several practical applications on how decision-making theory could be used in solving problems relating to the selection of best alternatives. The book focuses on assisting decision-makers (government, organizations, companies, general public, etc.) in making the best and most appropriate decision when confronted with multiple alternatives. The purpose of the analytical MCDM techniques is to support decision makers under uncertainty and conflicting criteria while making logical decisions. The knowledge of the alternatives of the real-life problems, properties of their parameters, and the priority given to the parameters have a great effect on

consequences in decision-making. In this book, the application of MCDM has been provided for the real-life problems in health and biomedical engineering issues. Provides a comprehensive analysis and application multi-criteria decision-making methods Presents detail information about MCDM and their usage Covers state-of-the-art MCDM methods and offers applications of MCDM for health and biomedical engineering purposes

The whole range of biocatalysis, from a firm grounding in theoretical concepts to in-depth coverage of practical applications and future perspectives. The book not only covers reactions, products and processes with and from biological catalysts, but also the process of designing and improving such biocatalysts. One unique feature is that the fields of chemistry, biology and bioengineering receive equal attention, thus addressing practitioners and students from all three areas.

In de zomer van 1991 was ik een gewoon kind. Ik deed gewone dingen. Ik had vriendjes en vriendinnetjes, en een moeder die van me hield. Ik was net als jij. Tot de dag dat mijn leven werd gestolen. Achttien jaar lang was ik een gevangene. Ik was iemands bezit, om te gebruiken en misbruiken. Achttien jaar lang mocht ik mijn eigen naam niet uitspreken. Ik werd moeder en werd gedwongen een zus te zijn. Achttien jaar lang heb ik een onmogelijke situatie overleefd. Op 26 augustus 2009 eiste ik mijn naam weer op. Mijn naam is Jaycee Lee Dugard. Ik zie mezelf niet als slachtoffer. Ik heb het overleefd. Mijn gestolen leven is mijn verhaal; in mijn eigen woorden, verteld op mijn manier, precies zoals ik het me herinner. De dennenappel staat voor mij symbool voor het zaad van een nieuw begin. De JAYC Foundation helpt mensen opnieuw te beginnen met behulp van therapie met dieren. Ze biedt ondersteuning en faciliteiten om gezinnen die te maken hebben gehad met ontvoering en de traumatische ervaringen die daarmee samenhangen, tijdig te kunnen helpen gezinnen die moeten leren hoe ze er weer bovenop kunnen komen, zoals mijn eigen gezin. Daarbij wil de JAYC Foundation schoolkinderen ervan bewust maken hoe belangrijk het is om op elkaar te letten.

Accompanying CD-ROM contains ... "figures from text--in PowerPoint and JPEG formats; supplementary sidebars; mini-lectures; movies."--CD-ROM label.

Why do I need a teacher when I've got Google? is just one of the challenging, controversial and thought-provoking questions Ian Gilbert poses in this urgent and invigorating book.

Questioning the unquestionable, this fully updated new edition will make you re-consider everything you thought you knew about teaching and learning, such as: • Are you simply preparing the next generation of unemployed accountants? • What do you do for the 'sweetcorn kids' who come out of the education system in pretty much the same state as when they went in? • What's the real point of school? • Exams – So whose bright idea was that? • Why 'EQ' is fast becoming the new 'IQ'. • What will your school policy be on brain-enhancing technologies? • Which is the odd one out between a hamster and a caravan? With his customary combination of hard-hitting truths, practical classroom ideas and irreverent sense of humour, Ian Gilbert takes the reader on a breathless rollercoaster ride through burning issues of the twenty-first century, considering everything from the threats facing the world and the challenge of the BRIC economies to the link between eugenics and the 11+. As wide-ranging and exhaustively-researched as it is entertaining and accessible, this book is designed to challenge teachers and inform them – as well as encourage them – as they strive to design a twenty-first century learning experience that really does bring the best out of all young people. After all, the future of the world may just depend on it

The last quarter of the 20th century saw major scientific revolutions in genetics and computer technology. This book reflects this massive surge in our understanding of the molecular foundations of genetics. In order to understand where these technological advances are heading, there needs to be a basic understanding of how living organisms function at a molecular level. Molecular Biology, 2e, effectively introduces basic concepts followed by more specific applications as the text evolves. With the addition of Cell Press articles, the content is tied to current topics in the scientific community. NEW: "Focus On Relevant Research" sections integrate primary literature from Cell Press and focus on helping the student learn how to read and understand research to prepare them for the scientific world. NEW: Academic Cell Study Guide features all articles from the text with concurrent case studies to help students build foundations in the content while allowing them to make the appropriate connections to the text. NEW: Animations provided include topics in protein purification, transcription, splicing reactions, cell division and DNA replication and SDS-PAGE Updated chapters on Genomics and Systems Biology, Proteomics, Bacterial Genetics and Molecular Evolution and RNA Updated ancillary package includes flashcards, online self quizzing, references with links to outside content and PowerPoint slides with images. Fully revised art program

Textbook for Cell and Molecular Biology.

Written for health professionals, the Second Edition of Health Professional as Educator: Principles of Teaching and Learning focuses on the daily education of patients, clients, fellow colleagues, and students in both clinical and classroom settings. Written by renowned educators and authors from a wide range of health backgrounds, this comprehensive text not only covers teaching and learning techniques, but reinforces concepts with strategies, learning styles, and teaching plans. The Second Edition focuses on a range of audiences making it an excellent resource for those in all healthcare professions, regardless of level of educational program. Comprehensive in its scope and depth of information, students will learn to effectively educate patients, students, and colleagues throughout the course of their careers.

Essential Biology Chapter 12Molecular BiologyElsevier

From the author of The Little Black Book of Innovation, a new guide for using the power of habit to build a culture of innovation Leaders have experimented with open innovation programs, corporate accelerators, venture capital arms, skunkworks, and innovation contests. They've trekked to Silicon Valley, Shenzhen, and Tel Aviv to learn from today's hottest, most successful tech companies. Yet most would admit they've failed to create truly innovative cultures. There's a better way. And it all starts with the power of habit. In Eat, Sleep, Innovate, innovation expert Scott Anthony and his impressive team of coauthors use groundbreaking research in behavioral science to provide a first-of-its-kind playbook for empowering individuals and teams to be their most curious and creative—every single day. Throughout the book, the authors reveal a collection of BEANs—behavior enablers, artifacts, and nudges—they've collected from workplaces across the globe that will unleash the natural innovator inside everyone. In addition to case studies of "normal organizations doing extraordinary things," they provide readers with the tools to create their own hacks and habits, which they can then use to build and sustain their own models

of a culture of innovation. Fun, lively, and utterly unique, *Eat, Sleep, Innovate* is the book you need to make innovation a natural and habitual act within your team or organization. As a plant pathologist, I am interested in exploring new technologies to study plant-microbe interactions as well as improving crop disease management. Recently, the CRISPR/Cas (clustered regularly interspaced short palindromic repeats/CRISPR-associated protein) system has emerged as a powerful technology with versatile applications in basic and applied research in medicine and agriculture. The goal of my dissertation project has been focused on improving and applying the CRISPR/Cas toolkit to facilitate efficient genome editing of fungal plant pathogens as well as sensitive and reliable diagnosis of plant diseases. The success of CRISPR/Cas9-based multiplex genome editing in the rice blast fungus and development of Cas12a-based diagnostics for citrus greening pathogen and phytoplasmas highlighted in my study demonstrate the utility and broad application of CRISPR/Cas technologies in plant pathology and disease management. The first objective of my research was to generate an online tool to aid in the design and selection of specific guide RNA (gRNA) spacers for genome editing of plant pathogens. The use of highly specific gRNAs is required to prevent unintended off-targeting effects. The CRISPR-PLANT v2 gRNA prediction pipeline was used for the genome-wide prediction of highly specific gRNA spacers for fifteen genomes of bacterial, oomycete, and fungal plant pathogens. Of the gRNAs predicted across these genomes, over 90% of the gRNA spacers belong to the highly specific classes of gRNA spacers and exhibit genome-wide targetability. The resulting gRNA spacer database and CRISPR-Pathogen webtool will be available to the plant pathology and microbiology research communities to facilitate the design of specific gRNAs and application of CRISPR/Cas9 genome editing in microbial plant pathogens. My second objective was to utilize the CRISPR/Cas9 system to improve the efficiency of single and multiplex genome editing in fungal plant pathogens. *Magnaporthe oryzae* is the causal agent of rice and wheat blast diseases and poses a major threat to rice and wheat production worldwide. As described in Chapter 3, CRISPR/Cas9-mediated multiplex genome editing in *M. oryzae* was successfully achieved using the polycistronic tRNA-gRNA (PTG) strategy. Upon creation of double stranded breaks (DSBs) by Cas9, targeted gene mutation in *M. oryzae* was created via either non-homologous end joining (NHEJ) or homology-directed repair (HDR) depending on the targeted loci. In absence of donor templates, Cas9-induced DSBs frequently triggered genomic rearrangement, leading to the loss of PCR-based amplification of target sites. By providing donor templates, however, HDR-mediated precise genome editing was achieved at the efficiency up to 100% when targeting a single locus. The PTG-based multiplex genome editing via HDR also successfully generated double and triple gene mutants. Interestingly, the HDR and NHEJ editing frequencies in *M. oryzae* appear to be dependent on genomic location of target sites and are likely influenced by flanking repetitive sequences and transposable elements. The resulting CRISPR/Cas9 tools and strategies from this study are expected to aid in the efficient genome editing and functional genomics analysis for *M. oryzae* and other fungal species. My third objective was to adapt the Cas12a-based method to enable highly sensitive and specific detection of pathogen nucleic acids for rapid and accurate diagnosis. As illustrated in Chapters 4 and 5, the citrus greening pathogen (*Candidatus Liberibacter asiaticus*) and purple potato top (PPT) phytoplasma were selected as target pathogens. The Cas12a-based DETECTR (DNA endonuclease-targeted CRISPR trans reporter) assay enabled highly specific and sensitive detection of CLAs and Group VI phytoplasmas known to cause PPT from the infected samples. The DETECTR assay couples isothermal amplification and Cas12a trans-cleavage of fluorescent reporter oligos and enables detection of pathogen nucleic acids at the attomolar level. The DETECTR assay was able to accurately detect the presence of pathogen nucleic acids across all infected samples and was shown to be highly specific across closely related species. The improvement in detection sensitivity and flexibility of the DETECTR technology, positions the DETECTR assay as a suitable tool for early detection of pathogen nucleic acids. Furthermore, the DETECTR strategy allows flexibility to capture assay outputs with fluorescent microplate reader or lateral flow assay for potentially high-throughput and/or field-deployable disease diagnostics.

An essential guide to the future of work in Australia. For many Australians, rapid progress in artificial intelligence, robotics and automation is a growing anxiety. What will it mean for jobs? What will it mean for their kids' futures? More broadly, what will it mean for equality in this country? Jim Chalmers and Mike Quigley believe that bursts in technology need not result in bursts of inequality, that we can combine technological change with the fair go. But first we need to understand what's happening to work, and what's likely to happen. This is a timely, informative and authoritative book about the changing face of work, and how best to approach it – at both a personal and a political level. Jim Chalmers is a Labor MP and Shadow Minister for Finance. Before being elected to parliament, Jim was the chief of staff to the Deputy Prime Minister and Treasurer. He has a PhD in political science and international relations and is the author of *Glory Daze* (2013). Mike Quigley spent 36 years with the major global telecommunications company Alcatel, including three years as its president and COO. He was the first employee of the Australian NBN company and its CEO for four years. He is now adjunct professor in the School of Computing and Communications at UTS.

Hoogsensitieve personen bevat heldere tips en adviezen voor het omgaan met hoogsensitiviteit, hoe van je onzekerheid af kunt komen en hoe je een nieuwe sociale balans kunt vinden. Een op de vijf mensen wordt geboren met een verhoogde gevoeligheid, en vele grote kunstenaars en denkers die de wereld heeft voortgebracht waren hoogsensitief. Hoogsensitieve personen zijn vaak uiterst consciëntieus en intuïtief. Maar de eigenschap heeft ook lastige kanten: hoogsensitiviteit wordt gelinkt met de neiging om snel overweldigd te raken door gezelschap, het werk of een drukke omgeving, waardoor ze, als reactie, in hun schulp kruipen. Ook hebben zij vaak last van onzekerheid en van sociale belemmeringen. Elaine Aron, psychotherapeut en zelf een hoogsensitief persoon, combineerde wetenschappelijk onderzoek met haar ervaringen als therapeut en schreef een toegankelijk en bruikbaar boek voor hoogsensitieve personen én voor de mensen in hun omgeving. Dit boek is al voor velen een eyeopener geweest. Het bevat heldere tips en adviezen voor het omgaan met hoogsensitiviteit, hoe van je onzekerheid af kunt komen en hoe je een nieuwe sociale balans kunt vinden.

Honderdduizend jaar geleden leefde de Homo sapiens nog een tamelijk onbekommerd bestaan in een uithoek van het Afrikaanse continent en deelde hij de planeet met ten minste vijf andere menssoorten. Maar op een zeker moment onderging het brein van deze mens een ingrijpende verandering: nu kon hij zich plots verbeelden dat het gras elders wel eens groener zou kunnen zijn, en dus maakte hij zich op om de wereld te veroveren. In Sapiens neemt Yuval Noah Harari ons mee op een fascinerende reis door de geschiedenis van de mensheid. Wie zijn we? Waar komen we vandaan? En hoe zijn we zo geworden als we nu zijn? In zijn aanstekelijke relaas laat Harari ons kennismaken met het meest dominante wezen op aarde: de mens.

Why the next Steve Jobs is just as likely to come from Lagos, Acapulco, Lahore, or Mumbai as from Silicon Valley. Elmira Bayrasli's colorful narrative brings readers inside the world of high-growth entrepreneurs as they overcome vexing obstacles to build businesses that create jobs and economic growth and -- perhaps most important -- shift mindsets. Here are the people who personify the transformative force of entrepreneurship from parts of the world that will be the source of the overwhelming amount of economic growth over the next twenty-five years. BüÄ?lebi applies creative genius as he searches for the talent needed to roll out a wireless mesh technology, convincing skeptics from Europe and America that a breakthrough like this could be developed in Turkey. Tayo Oviolu grapples with the poor infrastructure and political chaos to bring financial services to the vast majority of Nigerians who lack access to banks and other financial institutions. Bayrasli takes us on an extraordinary journey, with fascinating eyewitness accounts of courage, endurance, and ingenuity, as people in some of the world's most challenging societies build globally competitive products and services that garner international praise and investment. As these extraordinary entrepreneurs create new economic possibilities in their countries, it becomes clear that the same game-changing creative development that happened in Silicon Valley in the 1960s is occurring right now in unexpected places on "the other side of the world."

An in-depth study of humanity's Anunnaki origins and the Anunnaki battle for an intelligent versus enslaved humanity • Explains the genetic engineering of humanity by an Anunnaki scientist Ninmah • Shows how the concepts of sin and the inferiority of women arose from Enlil's will to keep humanity underdeveloped, clashing with Enki's and Ninmah's plan to make us equal in intelligence • Reveals how humanity's long history of conflict was shaped by the battle between Enki and his brother Enlil Further developing the revolutionary work of Zecharia Sitchin, Chris Hardy shows that the "gods" of ancient myth, visitors from the planet Nibiru, created us using their own "divine" DNA--first through DNA extraction from their own ribs' marrow and later by direct relations with early human females. Drawing upon multiple sacred texts, Hardy details the genetic engineering of humanity by Anunnaki scientist Ninmah, with the help of Enki and Hermes. She reveals how Ninmah's first female human creation, Tiamat/Eve, contained more alien DNA than the earlier male one, Adamu, and how the biblical Noah represents the perfection of her work. Examining the war between Anunnaki brothers Enki and Enlil, Hardy reveals how the concepts of sin and the inferiority of women were born out of Enlil's attempts to enslave and then wipe out humanity, repeatedly thwarted by Enki and Ninmah. The author further explains how the sacred sexuality taught to humans--still seen in Tantric practice--became suppressed millennia later by the patriarchal concept of original sin and how innocent Eve took the blame for the expulsion from Eden and fall from Grace. Showing that the god who created us was not the same god who expelled us from Eden, Hardy explains that there will be no apocalypse because the Good/Evil duality has never truly existed--it has been only enemy gods fighting and implicating humanity in the wake of their own competition for power. With a full psychological understanding of how the ancient "gods" have shaped humanity's ongoing history of conflict, we can move beyond the framework of "(my) Good versus (your) Evil" imposed by Enlil and begin to steer our own planetary destiny.

"Leading Digital makes the provocative argument that the next imminent phase of digital technology adoption - driven by the convergence of mobility, analytics, social media, cloud computing, and embedded devices - will make everything that's happened so far look like a prelude. The authors, a trio of highly regarded thought leaders on corporate digital transformation, say changes in the digital realm so far have focused on high tech and media companies - but there's still a whopping 94% of the business economy that needs to change. This book will show them how. George Westerman of MIT, Didier Bonnet of Capgemini Consulting, and Andrew McAfee, also at MIT, say there is opportunity for these businesses to learn from those that have already mastered the digital landscape. Based on a study of more than 400 large, mainstream firms in every industry around the globe, the authors usefully break down how these organizations have used their own digital transformation to gain strategic, competitive advantage. Readers will learn how these digital leaders have transformed their businesses through smart and rigorous digital investments, and through smart and effective leadership of the change. Leading Digital offers practical, real-life tested frameworks that can be instantly applied. Case studies include Nike, Caesars, Burberry, Asian Paints, Pages Jaunes, Codelco, and more"--

Where Criminal Justice and Forensic Science Come TogetherA crime has occurred. Now what? From the crime scene to the courtroom, Criminal Investigation walks students through the entire investigative process and the roles involved, including police officers, investigators, forensic personnel, defense lawyers, and prosecutors. This integrated approach paints a realistic picture of how crimes are actually solved with fascinating real-world examples. Featuring a new, full-color interior design, the Fifth Edition incorporates modern investigative methods and procedures for multiple crime types, including homicide, assault, robbery, theft, burglary, arson, terrorism, cybercrime, and a new chapter dedicated to underwater investigations. New sections discussing digital evidence, including cell phones and GPS, tracking technology, and social media keep students on the cutting-edge of investigative techniques and forensic science developments. The cohesive and accessible approach combined with practical applications make Criminal Investigation, Fifth Edition the easy choice for students pursuing careers in law enforcement and the criminal justice system.

Written by the world's leading scientists and spanning over 400 articles in three volumes, the Encyclopedia of Food Microbiology, Second Edition is a complete, highly structured guide to current knowledge in the field. Fully revised and updated, this encyclopedia reflects the key advances in the field since the first edition was published in 1999 The articles in this key work, heavily illustrated and fully revised since the first edition in 1999, highlight advances in areas such as genomics and food safety to bring users up-to-date on microorganisms in foods. Topics such as DNA sequencing and E. coli are particularly well covered. With lists of further reading to help users explore topics in depth, this resource will enrich scientists at every level in academia and industry, providing fundamental information as well as explaining state-of-the-art scientific discoveries. This book is designed to allow disparate approaches (from farmers to processors to food handlers and consumers) and interests to access accurate and objective

information about the microbiology of foods Microbiology impacts the safe presentation of food. From harvest and storage to determination of shelf-life, to presentation and consumption. This work highlights the risks of microbial contamination and is an invaluable go-to guide for anyone working in Food Health and Safety Has a two-fold industry appeal (1) those developing new functional food products and (2) to all corporations concerned about the potential hazards of microbes in their food products

The maturation of nanotechnology has revealed it to be a unique and distinct discipline rather than a specialization within a larger field. Its textbook cannot afford to be a chemistry, physics, or engineering text focused on nano. It must be an integrated, multidisciplinary, and specifically nano textbook. The archetype of the modern nano textbook, Introduction to Nanoscience and Nanotechnology builds a solid background in characterization and fabrication methods while integrating the physics, chemistry, and biology facets. The remainder of this color text focuses on applications, examining engineering aspects as well as nanomaterials and industry-specific applications in such areas as energy, electronics, and biotechnology. Also available in two course-specific volumes: Introduction to Nanoscience elucidates the nanoscale along with the societal impacts of nanoscience, then presents an overview of characterization and fabrication methods. The authors systematically discuss the chemistry, physics, and biology aspects of nanoscience, providing a complete picture of the challenges, opportunities, and inspirations posed by each facet before giving a brief glimpse at nanoscience in action: nanotechnology.

Fundamentals of Nanotechnology surveys the field's broad landscape, exploring the physical basics such as nanorheology, nanofluidics, and nanomechanics as well as industrial concerns such as manufacturing, reliability, and safety. The authors then explore the vast range of nanomaterials and systematically outline devices and applications in various industrial sectors. Qualifying instructors who purchase either of these volumes (or the combined set) are given online access to a wealth of instructional materials. These include detailed lecture notes, review summaries, slides, exercises, and more. The authors provide enough material for both one- and two-semester courses.

The fourth edition of Krasner's Microbial Challenge focuses on human-microbe interactions and considers bacterial, viral, prion, protozoan, fungal and helminthic (worm) diseases and is the ideal resource for non-majors, nursing programs, and public health programs.

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