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DNA-Programmed Nanomaterials and Exploration of Their Chemical Activities The Double Helix The DNA Detectives Molecular Biology of the Cell *The Innovator's DNA* DNA Structure and Function *Dream Play Build* Exploring meteorite mysteries a teacher's guide with activities for earth and space sciences. Strengthening Forensic Science in the United States DNA and RNA *Get Out of Your Mind and Into Your Life for Teens* Before the Brand Space Forces Essentials of Glycobiology The Human Body Exploration of Novel Architectures for Aromatic Electronic Donor-acceptor Hetero-duplexes Explorations Explore Everything Molecular Structure of Nucleic Acids *Pale Blue Dot Perl for Exploring DNA* Ethics, Conflict and Medical Treatment for Children E-Book A Handbook for DNA-Encoded Chemistry Annales Societatis Mathematicae Polonae *The Modern Yogi's Guide To Self-Exploration: A Creative Journey Through The 7 Chakra System* Sequence — Evolution — Function Rosalind Franklin Global Trends 2040 *How People Learn* The Queer and Transgender Resilience Workbook A New Perspective of Cultural DNA Is Your Ancestor a Monkey? Biomolecular Simulations in Structure-Based Drug Discovery Cultural DNA Exploring Greenland Exploring Leadership Business Law in Canada *The Gene Exploring Science Communication* New Monasticism as Fresh Expressions of Church

The Human Body: Linking Structure and Function provides knowledge on the human body's unique structure and how it works. Each chapter is designed to be easily understood, making the reading interesting and approachable. Organized by organ system, this succinct publication presents the functional relevance of developmental studies and integrates anatomical function with structure. Focuses on bodily functions and the human body's unique structure Offers insights into disease and disorders and their likely anatomical origin Explains how developmental lineage influences the integration of organ systems Publisher description Plotting adventures from London, Paris, Eastern Europe, Detroit, Chicago and Las vegas, uncovering the tunnels below the city as well as scaling the highest skyscrapers, Bradley Garrett has evaded urban security in order to experience the city in new ways

beyond the conventional boundaries of everyday life. Explore Everything is both an account of his escapades with the London Consolidation Crew as well as an urbanist manifesto on rights to the city and new ways of belonging in and understanding the metropolis. It is a passionate declaration to "explore everything," combining philosophy, politics and adventure. First released in the Spring of 1999, How People Learn has been expanded to show how the theories and insights from the original book can translate into actions and practice, now making a real connection between classroom activities and learning behavior. This edition includes far-reaching suggestions for research that could increase the impact that classroom teaching has on actual learning. Like the original edition, this book offers exciting new research about the mind and the brain that provides answers to a number of compelling questions. When do infants begin to learn? How do experts learn and how is this different from non-experts? What can teachers and schools do-with curricula, classroom settings, and teaching methods--to help children learn most effectively? New evidence from many branches of science has significantly added to our understanding of what it means to know, from the neural processes that occur during learning to the influence of culture on what people see and absorb. How People Learn examines these findings and their implications for what we teach, how we teach it, and how we assess what our children learn. The book uses exemplary teaching to illustrate how approaches based on what we now know result in in-depth learning. This new knowledge calls into question concepts and practices firmly entrenched in our current education system. Topics include: How learning actually changes the physical structure of the brain. How existing knowledge affects what people notice and how they learn. What the thought processes of experts tell us about how to teach. The amazing learning potential of infants. The relationship of classroom learning and everyday settings of community and workplace. Learning needs and opportunities for teachers. A realistic look at the role of technology in education. A guide to applying the power of modern simulation tools to better drug design Biomolecular Simulations in Structure-based Drug Discovery offers an up-to-date and comprehensive review of modern simulation tools and their applications in real-life drug discovery, for better and quicker results in structure-based drug design. The authors describe common tools used in the biomolecular simulation of drugs and their targets and offer an analysis of the accuracy of the predictions. They also show how to integrate modeling with other experimental data. Filled with numerous case studies from different

therapeutic fields, the book helps professionals to quickly adopt these new methods for their current projects. Experts from the pharmaceutical industry and academic institutions present real-life examples for important target classes such as GPCRs, ion channels and amyloids as well as for common challenges in structure-based drug discovery. Biomolecular Simulations in Structure-based Drug Discovery is an important resource that: -Contains a review of the current generation of biomolecular simulation tools that have the robustness and speed that allows them to be used as routine tools by non-specialists -Includes information on the novel methods and strategies for the modeling of drug-target interactions within the framework of real-life drug discovery and development -Offers numerous illustrative case studies from a wide-range of therapeutic fields -Presents an application-oriented reference that is ideal for those working in the various fields Written for medicinal chemists, professionals in the pharmaceutical industry, and pharmaceutical chemists, Biomolecular Simulations in Structure-based Drug Discovery is a comprehensive resource to modern simulation tools that complement and have the potential to complement or replace laboratory assays for better results in drug design. "Fascinating . . . memorable . . . revealing . . . perhaps the best of Carl Sagan's books."—The Washington Post Book World (front page review) In Cosmos, the late astronomer Carl Sagan cast his gaze over the magnificent mystery of the Universe and made it accessible to millions of people around the world. Now in this stunning sequel, Carl Sagan completes his revolutionary journey through space and time. Future generations will look back on our epoch as the time when the human race finally broke into a radically new frontier—space. In Pale Blue Dot, Sagan traces the spellbinding history of our launch into the cosmos and assesses the future that looms before us as we move out into our own solar system and on to distant galaxies beyond. The exploration and eventual settlement of other worlds is neither a fantasy nor luxury, insists Sagan, but rather a necessary condition for the survival of the human race. "Takes readers far beyond Cosmos . . . Sagan sees humanity's future in the stars."—Chicago Tribune The classic personal account of Watson and Crick's groundbreaking discovery of the structure of DNA, now with an introduction by Sylvia Nasar, author of A Beautiful Mind. By identifying the structure of DNA, the molecule of life, Francis Crick and James Watson revolutionized biochemistry and won themselves a Nobel Prize. At the time, Watson was only twenty-four, a young scientist hungry to make his mark. His uncompromisingly honest account of the heady days of their thrilling sprint

against other world-class researchers to solve one of science's greatest mysteries gives a dazzlingly clear picture of a world of brilliant scientists with great gifts, very human ambitions, and bitter rivalries. With humility unspoiled by false modesty, Watson relates his and Crick's desperate efforts to beat Linus Pauling to the Holy Grail of life sciences, the identification of the basic building block of life. Never has a scientist been so truthful in capturing in words the flavor of his work. Exploring Science Communication demonstrates how science and technology studies approaches can be explicitly integrated into effective, powerful science communication research. Through a range of case studies, from climate change and public parks to Facebook, museums, and media coverage, it helps you to understand and analyse the complex and diverse ways science and society relate in today's knowledge intensive environments. Notable features include: A focus on showing how to bring academic STS theory into your own science communication research Coverage of a range of topics and case studies illustrating different analyses and approaches Speaks to disciplines across Media & Communication, Science & Technology Studies, Health Sciences, Environmental Sciences and related areas. With this book you will learn how science communication can be more than just about disseminating facts to the public, but actually generative, leading to new understanding, research, and practices. A new classic, cited by leaders and media around the globe as a highly recommended read for anyone interested in innovation. In The Innovator's DNA, authors Jeffrey Dyer, Hal Gregersen, and bestselling author Clayton Christensen (The Innovator's Dilemma, The Innovator's Solution, How Will You Measure Your Life?) build on what we know about disruptive innovation to show how individuals can develop the skills necessary to move progressively from idea to impact. By identifying behaviors of the world's best innovators—from leaders at Amazon and Apple to those at Google, Skype, and Virgin Group—the authors outline five discovery skills that distinguish innovative entrepreneurs and executives from ordinary managers: Associating, Questioning, Observing, Networking, and Experimenting. Once you master these competencies (the authors provide a self-assessment for rating your own innovator's DNA), the authors explain how to generate ideas, collaborate to implement them, and build innovation skills throughout the organization to result in a competitive edge. This innovation advantage will translate into a premium in your company's stock price—an innovation premium—which is possible only by building the code for innovation right into your organization's people, processes, and guiding

philosophies. Practical and provocative, The Innovator's DNA is an essential resource for individuals and teams who want to strengthen their innovative prowess. The room is dim, the chairs are in perfectly lined rows. The city planner puts up a color-coded diagram of the street improvement project, dreading the inevitable angry responses. Jana loves her community and is glad to be able to attend the evening meeting, and she has a lot of ideas for community change. But she has a hard time hearing, and can't see the diagrams clearly. She leaves early. It's time to imagine a different type of community engagement – one that inspires connection, creativity, and fun. People love their communities and want them to become safer, healthier, more prosperous places. But the standard approach to public meetings somehow makes everyone miserable. Conversations that should be inspiring can become shouting matches. So what would it look like to facilitate truly meaningful discussions between citizens and planners? What if they could be fun? For twenty years, James Rojas and John Kamp have been looking to art, creative expression, and storytelling to shake up the classic community meeting. In Dream Play Build, they share their insights into building common ground and inviting active participation among diverse groups. Their approach, "Place It!," draws on three methods: the interactive model-building workshop, the pop-up, and site exploration using our senses. Using our hands to build and create is central to what makes us human, helping spark ideas without relying on words to communicate. Deceptively playful, this method is remarkably effective at teasing out community dreams and desires from hands-on activities. Dream Play Build offers wisdom distilled from workshops held around the world, and a deep dive into the transformational approach and results from the South Colton community in southern California. While much of the process was developed through in-person meetings, the book also translates the experience to online engagement--how to make people remember their connections beyond the computer screen. Inspirational and fun, Dream Play Build celebrates the value of engaging with the dreams we have for our communities. Readers will find themselves weaving these artful, playful lessons and methods into their own efforts for making change within the landscape around them. Sugar chains (glycans) are often attached to proteins and lipids and have multiple roles in the organization and function of all organisms. "Essentials of Glycobiology" describes their biogenesis and function and offers a useful gateway to the understanding of glycans. Sequence - Evolution - Function is an introduction to the computational approaches that

play a critical role in the emerging new branch of biology known as functional genomics. The book provides the reader with an understanding of the principles and approaches of functional genomics and of the potential and limitations of computational and experimental approaches to genome analysis. Sequence - Evolution - Function should help bridge the "digital divide" between biologists and computer scientists, allowing biologists to better grasp the peculiarities of the emerging field of Genome Biology and to learn how to benefit from the enormous amount of sequence data available in the public databases. The book is non-technical with respect to the computer methods for genome analysis and discusses these methods from the user's viewpoint, without addressing mathematical and algorithmic details. Prior practical familiarity with the basic methods for sequence analysis is a major advantage, but a reader without such experience will be able to use the book as an introduction to these methods. This book is perfect for introductory level courses in computational methods for comparative and functional genomics. DNA and RNA work together to create proteins that do the work of every cell in the body. This exploration shares numerous details about these important building blocks of life, from their discovery to their possible future benefits. What should happen when doctors and parents disagree about what would be best for a child? When should courts become involved? Should life support be stopped against parents' wishes? The case of Charlie Gard, reached global attention in 2017. It led to widespread debate about the ethics of disagreements between doctors and parents, about the place of the law in such disputes, and about the variation in approach between different parts of the world. In this book, medical ethicists Dominic Wilkinson and Julian Savulescu critically examine the ethical questions at the heart of disputes about medical treatment for children. They use the Gard case as a springboard to a wider discussion about the rights of parents, the harms of treatment, and the vital issue of limited resources. They discuss other prominent UK and international cases of disagreement and conflict. From opposite sides of the debate Wilkinson and Savulescu provocatively outline the strongest arguments in favour of and against treatment. They analyse some of the distinctive and challenging features of treatment disputes in the 21st century and argue that disagreement about controversial ethical questions is both inevitable and desirable. They outline a series of lessons from the Gard case and propose a radical new 'dissensus' framework for future cases of disagreement. This new book critically examines the core ethical questions at the heart of disputes about

medical treatment for children. The contents review prominent cases of disagreement from the UK and internationally and analyse some of the distinctive and challenging features around treatment disputes in the 21st century. The book proposes a radical new framework for future cases of disagreement around the care of gravely ill people. In 1962, Maurice Wilkins, Francis Crick, and James Watson received the Nobel Prize, but it was Rosalind Franklin's data and photographs of DNA that led to their discovery. Brenda Maddox tells a powerful story of a remarkably single-minded, forthright, and tempestuous young woman who, at the age of fifteen, decided she was going to be a scientist, but who was airbrushed out of the greatest scientific discovery of the twentieth century. This title explores the emergence of monastic spirituality - not just as a resource for personal formation, but for building fresh expressions of church.Leaders of traditional religious communities and emerging 'new monastic' communities tell their stories,reflecting on how an ancient expression of being church is inspiring and shaping a new one "The ongoing COVID-19 pandemic marks the most significant, singular global disruption since World War II, with health, economic, political, and security implications that will ripple for years to come." -Global Trends 2040 (2021) Global Trends 2040-A More Contested World (2021), released by the US National Intelligence Council, is the latest report in its series of reports starting in 1997 about megatrends and the world's future. This report, strongly influenced by the COVID-19 pandemic, paints a bleak picture of the future and describes a contested, fragmented and turbulent world. It specifically discusses the four main trends that will shape tomorrow's world: - Demographics-by 2040, 1.4 billion people will be added mostly in Africa and South Asia. - Economics-increased government debt and concentrated economic power will escalate problems for the poor and middleclass. - Climate-a hotter world will increase water, food, and health insecurity. - Technology-the emergence of new technologies could both solve and cause problems for human life. Students of trends, policymakers, entrepreneurs, academics, journalists and anyone eager for a glimpse into the next decades, will find this report, with colored graphs, essential reading. Some contend we are the product of purely material forces, explained under the umbrella of evolution. Others contend there is a force outside our material world that created us. There are key issues in this evolution and creation debate, and this book examines some of the more important ones. Written by an expert in the field, The DNA Detectives describes the intricate processes

used in DNA testing to solve crimes and puzzles across the globe, as well as the fascinating history of the discovery that DNA was the fundamental building block of all life on this planet. Through the ages mankind has always been curious about the way in which characteristics are passed from one generation of another, but this had always been guesswork, often based on incorrect premises and inadequate observations. As time went by, science gradually moved closer to unlocking the secrets, thanks to the intrepid explorers of the human genome. Starting with a short history of personal identification, including fingerprints, the author goes on to describe the various methods of creating a DNA profile. The very first use of DNA to track down a rapist and murderer in the UK is examined. The author also looks at some of the most intriguing identification puzzles from the past, such as the story of the Romanovs and that of Thomas Jefferson who was accused of fathering children with his slave, Sally Hemmings. The ethical questions and long-term implications surrounding the use of DNA are also examined. should insurance companies really have access to the results, particularly when the person may never actually develop the disease? There is also the dichotomy that even if we could remove all defective genes we might well, as a result, be causing more long-term problems for ourselves than we would solve. The DNA Detectives is a unique exploration of the use of this most powerful tool, which can reach back long into the past and has helped to provide forensic scientists and the law courts with a new and exciting edge in the fight against crime. The #1 NEW YORK TIMES Bestseller The basis for the PBS Ken Burns Documentary The Gene: An Intimate History Now includes an excerpt from Siddhartha Mukherjee's new book Song of the Cell! From the Pulitzer Prize–winning author of The Emperor of All Maladies—a fascinating history of the gene and "a magisterial account of how human minds have laboriously, ingeniously picked apart what makes us tick" (Elle). "Sid Mukherjee has the uncanny ability to bring together science, history, and the future in a way that is understandable and riveting, guiding us through both time and the mystery of life itself." —Ken Burns "Dr. Siddhartha Mukherjee dazzled readers with his Pulitzer Prize-winning The Emperor of All Maladies in 2010. That achievement was evidently just a warm-up for his virtuoso performance in The Gene: An Intimate History, in which he braids science, history, and memoir into an epic with all the range and biblical thunder of Paradise Lost" (The New York Times). In this biography Mukherjee brings to life the quest to understand human heredity and its surprising influence on our lives,

personalities, identities, fates, and choices. “Mukherjee expresses abstract intellectual ideas through emotional stories…[and] swaddles his medical rigor with rhapsodic tenderness, surprising vulnerability, and occasional flashes of pure poetry” (The Washington Post). Throughout, the story of Mukherjee’s own family—with its tragic and bewildering history of mental illness—reminds us of the questions that hang over our ability to translate the science of genetics from the laboratory to the real world. In riveting and dramatic prose, he describes the centuries of research and experimentation—from Aristotle and Pythagoras to Mendel and Darwin, from Boveri and Morgan to Crick, Watson and Franklin, all the way through the revolutionary twenty-first century innovators who mapped the human genome. “A fascinating and often sobering history of how humans came to understand the roles of genes in making us who we are—and what our manipulation of those genes might mean for our future” (Milwaukee Journal-Sentinel), The Gene is the revelatory and magisterial history of a scientific idea coming to life, the most crucial science of our time, intimately explained by a master. “The Gene is a book we all should read” (USA TODAY). Welcome to Explorations and biological anthropology! An electronic version of this textbook is available free of charge at the Society for Anthropology in Community Colleges' webpage here: www.explorations.americananthro.org This book is a collection of reflections, prompts, tools, and practical exercises to support your self-discovery, mental, emotional, physical well-being and healing in a sustainable way. What You'll Find Inside: ? An introduction to the myths in our modern understanding of the chakra system and alternative ways of thinking ? 7 chapters based on the ancient wisdom of the chakras to anchor your reflections and healing in various topics like emotional awareness, confidence, or belonging ? Everyday challenges & exercises to widen your understanding of your yoga practice and integrate seamlessly into your daily life ? Illustrations by artist Katya Uspenkaya Author's Note From a very early age, I’ve felt like the world was spinning too fast. I was always playing catchup and going against my inner, natural pace. Yoga for me became a way to connect with my intuitive rhythm. It has taught me again and again about what it means to simply be, with myself and with the world around me. After a while, I started wondering if I could stay as present in everyday challenges and happenings as I was when I was moving and breathing in my asana practice. I’d started on a yoga mat but my practice never felt quite powerful enough to infiltrate all areas of my life. Why was it so difficult to say no to things I didn’t want to do when I’d been

learning about that in my physical practice? Why would I not let myself "flow" in my creative projects as much as my breath during meditation? This book is part of my journey of discovering how yoga can truly be a practice of every day, every hour, every minute. It is a collection of my attempts at putting together building blocks of awareness, so I always find pockets of connection whether I'm sitting on a loud train, cooking a meal, or deep into my email inbox. I hope you find comfort and ways to cultivate confidence through these pages. May the reflections and practice build the freedom and intuition you need to let the wonderful practice of yoga take the shape it needs to serve you and your communities. With love and curiosity, Ely How can you build unshakable confidence and resilience in a world still filled with ignorance, inequality, and discrimination? The Queer and Transgender Resilience Workbook will teach you how to challenge internalized negative messages, handle stress, build a community of support, and embrace your true self. Resilience is a key ingredient for psychological health and wellness. It's what gives people the psychological strength to cope with everyday stress, as well as major setbacks. For many people, stressful events may include job loss, financial problems, illness, natural disasters, medical emergencies, divorce, or the death of a loved one. But if you are queer or gender non-conforming, life stresses may also include discrimination in housing and health care, employment barriers, homelessness, family rejection, physical attacks or threats, and general unfair treatment and oppression—all of which lead to overwhelming feelings of hopelessness and powerlessness. So, how can you gain resilience in a society that is so often toxic and unwelcoming? In this important workbook, you'll discover how to cultivate the key components of resilience: holding a positive view of yourself and your abilities; knowing your worth and cultivating a strong sense of self-esteem; effectively utilizing resources; being assertive and creating a support community; fostering hope and growth within yourself, and finding the strength to help others. Once you know how to tap into your personal resilience, you'll have an unlimited well you can draw from to navigate everyday challenges. By learning to challenge internalized negative messages and remove obstacles from your life, you can build the resilience you need to embrace your truest self in an imperfect world. Bridging two worlds, multiple cultural heritages, values, norms and language, Nicole's writing conveys the confusion, contradictions and complications inherent in recognizing our basic need to be seen for who we are, even when we don't really know the answer. More than a "coming of age" story, Cultural

DNA - Discovering and Uncovering is an exploration of thoughts, feelings, and experiences of intersectionality. From childhood innocence to adolescent questioning, to the edge of adulthood, Cultural DNA - Discovering and Uncovering shares an intimate glimpse into how we learn, grow, and change while navigating the world beyond our control. Book Reviews: "Nicole's book gives a powerful glimpse into the life and experiences of a Chinese-American immigrant youth, living between vastly different worlds. Through a series of poignant stories, Nicole opens a window into the struggle of never quite "fitting in" or being able to get it "right", as she navigates conflicting beliefs, expectations, and customs wherever she lives. Nicole's insight, wisdom, and commitment to grow through challenging herself provides a rare opportunity for the reader to participate in self-reflection and a broader perspective. Written in an engaging and refreshingly honest manner, every reader will resonate with some portion of her story, demonstrating our universal desire to be seen, heard and accepted for who we are as a person, and not for who we "should" be." - Kristina Hallett, Ph.D., ABPP, Board Certified Clinical Psychologist, Author, Keynote Speaker, TEDx Speaker, Associate Professor "Nicole's book is realistic, authentic, and thought-provoking. Her vignettes prompted self-reflection beyond understanding and empathy for her experiences. I can honestly say I have a better grasp of the experience of growing up between different cultures and the impact on development and identity from reading this book. Highly recommend! " - Jill Donelan, Clinical Supervisor/Clinical Psychologist - Building Resilience for Young Children, Assistant Professor - University of Massachusetts Chan Medical School. The radical history of space exploration from the Russian Cosmists to Elon Musk Many societies have imagined going to live in space. What they want to do once they get up there - whether conquering the unknown, establishing space "colonies," privatising the moon's resources - reveals more than expected. In this fascinating radical history of space exploration, Fred Scharmen shows that often science and fiction have combined in the imagined dreams of life in outer space, but these visions have real implications for life back on earth. For the Russian Cosmists of the 1890s space was a place to pursue human perfection away from the Earth. For others, such as Wernher Von Braun, it was an engineering task that combined, in the Space Race, the Cold War, and during World War II, with destructive geopolitics. Arthur C. Clark in his speculative books offered an alternative vision of wonder that is indifferent to human interaction. Meanwhile NASA planned and managed the space station

like an earthbound corporation. Today, the market has arrived into outer space and exploration is the plaything of superrich technology billionaires, who plan to privatise the mineral wealth for themselves. Are other worlds really possible? Bringing these figures and ideas together reveals a completely different story of our relationship with outer space, as well as the dangers of our current direction of extractive capitalism and colonisation. This book comprehensively describes the development and practice of DNA-encoded library synthesis technology. Together, the chapters detail an approach to drug discovery that offers an attractive addition to the portfolio of existing hit generation technologies such as high-throughput screening, structure-based drug discovery and fragment-based screening. The book: Provides a valuable guide for understanding and applying DNA-encoded combinatorial chemistry Helps chemists generate and screen novel chemical libraries of large size and quality Bridges interdisciplinary areas of DNA-encoded combinatorial chemistry – synthetic and analytical chemistry, molecular biology, informatics, and biochemistry Shows medicinal and pharmaceutical chemists how to efficiently broaden available "chemical space" for drug discovery Provides expert and up-to-date summary of reported literature for DNA-encoded and DNA-directed chemistry technology and methods Using newly declassified documents, this book explores why U.S. military leaders after World War II sought to monitor the far north and understand the physical environment of Greenland, a crucial territory of Denmark. It reveals a fascinating yet little-known realm of Cold War intrigue and a delicate diplomatic duet between a smaller state and a superpower amid a time of intense global pressures. Written by scholars in Denmark and the United States, this book explores many compelling topics. What led to the creation of the U.S. Thule Air Base in Greenland, one of the world's largest, and why did the U.S. build a nuclear-powered city under Greenland's ice cap? How did Danish concern about sovereignty shape scientific research programs in Greenland? Also explored here: why did Denmark's most famous scientist, Inge Lehmann, became involved in research in Greenland, and what international reverberations resulted from the crash of a U.S. B-52 bomber carrying four nuclear weapons near Thule in January 1968? Scores of talented and dedicated people serve the forensic science community, performing vitally important work. However, they are often constrained by lack of adequate resources, sound policies, and national support. It is clear that change and advancements, both systematic and scientific, are needed in a number of forensic science disciplines to ensure

the reliability of work, establish enforceable standards, and promote best practices with consistent application. Strengthening Forensic Science in the United States: A Path Forward provides a detailed plan for addressing these needs and suggests the creation of a new government entity, the National Institute of Forensic Science, to establish and enforce standards within the forensic science community. The benefits of improving and regulating the forensic science disciplines are clear: assisting law enforcement officials, enhancing homeland security, and reducing the risk of wrongful conviction and exoneration. Strengthening Forensic Science in the United States gives a full account of what is needed to advance the forensic science disciplines, including upgrading of systems and organizational structures, better training, widespread adoption of uniform and enforceable best practices, and mandatory certification and accreditation programs. While this book provides an essential call-to-action for congress and policy makers, it also serves as a vital tool for law enforcement agencies, criminal prosecutors and attorneys, and forensic science educators. How to create a relevant, distinctive brand identity Before you start building a brand through advertising, marketing, and public relations, you had better know the difference between identity and image in order to establish an effective, enduring brand identity--a verbal, visual, and experiential formula that bestows credibility and attracts attention. "Before the Brand "is a crash course in brand identity basics that describes successful long-term strategies for creating and refocusing brand identities for all types of companies, products, services, and technologies. Knowing one's true identity makes it easier to speak the right message to intended audiences and allows for a strong, consistent, relevant, "and" differentiated brand. This persuasive primer is packed with case studies that glance into the identities of such premier brands as Nutrasweet, Intel, Gatorade, FedEx, and many more. It introduces the controllable elements of brand identity--positioning strategy, brand name, nomenclature, tag line, logo, and more--and shows marketers how to: Develop simple, flexible positioning strategies Create a brand name that hits home with your market Create a dynamic, visual brand personality Reinforce the brand identity through messaging Leverage identity opportunities through cobranding and other formulas DNA Structure and Function, a timely and comprehensive resource, is intended for any student or scientist interested in DNA structure and its biological implications. The book provides a simple yet comprehensive introduction to nearly all aspects of DNA structure. It also explains current ideas on the biological significance of classic

and alternative DNA conformations. Suitable for graduate courses on DNA structure and nucleic acids, the text is also excellent supplemental reading for courses in general biochemistry, molecular biology, and genetics. Explains basic DNA Structure and function clearly and simply Contains up-to-date coverage of cruciforms, Z-DNA, triplex DNA, and other DNA conformations Discusses DNA-protein interactions, chromosomal organization, and biological implications of structure Highlights key experiments and ideas within boxed sections Illustrated with 150 diagrams and figures that convey structural and experimental concepts Appropriate for one-semester courses in Administrative Law at both college and university levels. Legal concepts and Canadian business applications are introduced in a concise, one-semester format. The text is structured so that five chapters on contracts form the nucleus of the course, and the balance provides stand-alone sections that the instructor may choose to cover in any order. We've made the design more reader-friendly, using a visually-appealing four-colour format and enlivening the solid text with case snippets and extracts. The result is a book that maintains the strong legal content of previous editions while introducing more real-life examples of business law in practice. Global, multi-faceted, and applied: the most contemporary introduction to leadership, which considers individual, organizational, and societal perspectives.Providing a robust and engaging overview of the leadership field, Exploring Leadership is a highly practical and insightful guide that supports the personal and professional development of both aspiring and experienced leaders. Investigating the complex dynamics of power, identity and purpose in organizations and wider society, this essential resource critically examines significant global issues such as diversity and inclusion, the environmental crisis, and recent Covid-19pandemic to reveal the systemic nature of leadership in a complex and ever-changing world. Fascinating topics are brought to life through a variety of international examples and case studies, such as ancestral leadership in Maori communities; consideration of Ukrainian president Volodymyr Zelensky as a transformational leader; and leadership paradoxes in the Singaporean Civil Service. Individual and group exercises will also stimulate you as an emerging leader, as you consider how you may apply the key theoretical concepts in your future careers. The following additional resources are also available to students: Visual matrix mapping the key theories and themes explored in the text. Skills development guidance. Links to further videos for each chapter (students). Template for reflective activities. Adopting lecturers will have

access to the following teaching support resources: Tutorial suggestions for in-class activities PowerPoint presentations Links to further videos for each chapter (lecturers).Selling Points:- A range of original exercises, activities and resources (for both face-to-face and online courses), that support the development of practical skills as well a critical understanding of leadership.- Examples will be complemented by a range of mini case studies authored by invited contributors from around the world, in order to increase diversity and international relevance and appeal.- Exploration of a range of significant global issues, such as the environmental crisis, Covid-19, inequality and Brexit that extend beyond organisational boundaries to reveal the systemic nature of leadership in a complex and changing world and which will be explored from a variety of perspectives.- Illustrates the importance of critical reflection on the intersection of personal and professional identities, subsequently developing the capacity of readers to reframe their understanding of what it means to be an ethical, inclusive, and effective leader.New to this edition:- Now vastly enriched with a range of pedagogical features throughout, which develop a reader's capacity for critical thinking and reflection in relation to leadership theory and practice across a range of contexts.- Carefully-curated digital learning resources - including videos introductions to each chapter, multiple-choice questions, and a flashcard glossary - have been designed to further stimulate, assess and consolidate learning. - Available as an e-book with links to the bespoke digital resources, providing a more engaging and flexible learning experience. - Widely updated to reflect the very latest research and coverage of important topics such as diversity and inclusion; ethical leadership; leading movements of protests and rebellion; and leadership traits and competencies.Digital formats and resources:The second edition is available for students and institutions to purchase in a variety of formats, and is supported by online resources.The e-book gives students the flexibility to support their learning in ways that work best for them; resources include links to author videos which offer pithy introductions to each chapter, multiple-choice questions, a flashcard glossary and more. This book presents selected papers from the 3rd Cultural DNA Workshop. Contributed by prominent computational design experts in the fields of mechanical engineering and architectural design, they mainly focus on the design process; shape grammars as a valuable tool; and the analysis of cultural values. The book offers readers fresh viewpoints on computational design. and helps researchers in academy and practitioners in industry to learn more evolved cultural DNA knowledge

which is newly interpreted and conceptually reinforced in areas of mechanical engineering and architectural engineering. If you could only get past feelings of embarrassment, fear, self-criticism, and self-doubt, how would your life be different? You might take more chances and make more mistakes, but you'd also be able to live more freely and confidently than ever before. Get Out of Your Mind and Into Your Life for Teens is a workbook that provides you with essential skills for coping with the difficult and sometimes overwhelming emotions that stress you out and cause you pain. The emotions aren't going anywhere, but you can find out how to deal with them. Once you do, you will become a mindful warrior—a strong person who handles tough emotions with grace and dignity—and gain many more friends and accomplishments along the way. Based in proven-effective acceptance and commitment therapy (ACT), this book will arm you with powerful skills to help you use the power of mindfulness in everyday situations, stop finding faults in yourself and start solving your problems, how to be kinder to yourself so you feel confident and have a greater sense of self-worth, and how to identify the values that will help you create the life of your dreams. DNA-based self-assembly has been developed as an ideal means to create precisely controllable and hierarchical materials from the bottom up due to DNA's regularity, programmability and addressability. This dissertation demonstrates utilization of the powerful molecular tool to construct 0D, 1D, 2D, and 3D nanomaterials. In the first part of the dissertation, I overview the significance of anisotropic building blocks and discuss how to engineer them in a programmable manner (Chapter 1). I establish a general approach to pattern nanoparticles where DNA nanostructure is employed as a template to transfer prescribed molecular linkers onto an isotropic nanoparticle surface, generating so-called patchy nanoparticle (Chapter 2). I then show the manipulation of nanoscale patches constituted by DNA molecules to fabricate nano-polymeric assemblies (Chapters 3-4). Furthermore, I design sized-confined 2D DNA screens to display discrete nanoparticle patterns and manage dynamic switches of these patterns (Chapter 5). Research within the Iverson group has been primarily focused around the investigation of aromatic donor-acceptor interactions between an electron-rich 1,5-dialkoyxnaphthalene (DAN) molecule and the electron-deficient 1,4,5,8-naphthalenetetracarboxylic diimide (NDI) species. The complementary electrostatics within this aromatic system is responsible for the powerful associative properties of these two molecules when placed in aqueous environments, leading to highly ordered, discrete face-centered modes

of stacking upon complexation. The exploitation of these interactions has lead to the formation of novel molecules, called aedamers, which achieve a variety of directed folded topologies and extended hydrogel networks, oligomers which form distinct intermolecular hetero-duplex assemblies, and unique crystalline materials with novel tunable liquid crystalline properties. This dissertation describes the use of DAN-NDI aromatic donor-acceptor interactions in the design and construction of new oligomer architectures, with the aim of driving intermolecular hetero-duplex formation with higher fidelity and increased binding affinities. Chapter 2 describes efforts towards the design and construction of an amino acid based oliogmer with a highly rigidified molecular framework. A structurally rigidified scaffold would enhance the intermolecular association observed in our aromatic donor-acceptor hetero-duplexes allowing access to highly intricate and well-ordered networks in aqueous environments. Chapter 3 describes the design and synthesis of a novel DNA based architecture with the intention of creating aromatic donor-acceptor nucleoside analogs of the ubiquitous DNA building blocks. Fabrication of this novel subunit would facilitate the modular construction of larger, extended donor-acceptor oligomers enabling the formation of more expansive hetero-duplex assemblies hopefully exhibiting increased binding affinities. As a whole, these projects seek to probe the specific elements necessary for the selective intermolecular association of DAN-NDI donor-acceptor oligomers. Fine tuning of the non-covalent interactions of this class of molecules can increase the level of control we see in the directed self-assembly of these aromatic hetero-duplexes in aqueous environments. With this in hand, these systems can now potentially be utilized in a variety of applications ranging from surface immobilization techniques, to novel water-soluble polymeric materials and biologically compatible non-natural peptide based artificial proteins.