

Medical Journals Impact Factor

This is an open access book. The book provides an overview of the state of research in developing countries – Africa, Latin America, and Asia (especially India) and why research and publications are important in these regions. It addresses budding but struggling academics in low and middle-income countries. It is written mainly by senior colleagues who have experienced and recognized the challenges with design, documentation, and publication of health research in the developing world. The book includes short chapters providing insight into planning research at the undergraduate or postgraduate level, issues related to research ethics, and conduct of clinical trials. It also serves as a guide towards establishing a research question and research methodology. It covers important concepts such as writing a paper, the submission process, dealing with rejection and revisions, and covers additional topics such as planning lectures and presentations. The book will be useful for graduates, postgraduates, teachers as well as physicians and practitioners all over the developing world who are interested in academic medicine and wish to do medical research.

Free Radicals in Biology and Medicine has become a classic text in the field of free radical and antioxidant research. Now in its fifth edition, the book has been comprehensively rewritten and updated whilst maintaining the clarity of its predecessors. Two new chapters discuss 'in vivo' and 'dietary' antioxidants, the first emphasising the role of peroxiredoxins and integrated defence mechanisms which allow useful roles for ROS, and the second containing new information on the role of fruits, vegetables, and vitamins in health and disease. This new edition also contains expanded coverage of the mechanisms of oxidative damage to lipids, DNA, and proteins (and the repair of such damage), and the roles played by reactive species in signal transduction, cell survival, death, human reproduction, defence mechanisms of animals and plants against pathogens, and other important biological events. The methodologies available to measure reactive species and oxidative damage (and their potential pitfalls) have been fully updated, as have the topics of phagocyte ROS production, NADPH oxidase enzymes, and toxicology. There is a detailed and critical evaluation of the role of free radicals and other reactive species in human diseases, especially cancer, cardiovascular, chronic inflammatory and neurodegenerative diseases. New aspects of ageing are discussed in the context of the free radical theory of ageing. This book is recommended as a comprehensive introduction to the field for students, educators, clinicians, and researchers. It will also be an invaluable companion to all those interested in the role of free radicals in the life and biomedical sciences.

The publications game can seem tricky: knowing where to start, how to plan and draft a paper, who to pitch it to and how to present it can appear difficult enough. With the advent of e-publishing and ever-tougher regulatory frameworks surrounding research, the picture can seem even more intimidating. In this classic guide, Tim Albert demystifies the process of getting research published in his characteristically clear and engaging style. From the initial brief to final manuscript and beyond, all is explained in jargon-free, no-nonsense and encouraging terms, providing indispensable guidance to clinicians, scientists and academics in giving their research the platform it deserves.

Social Emergency Medicine incorporates consideration of patients' social needs and larger structural context into the practice of emergency care and related research. In doing so, the field explores the interplay of social forces and the emergency care system as they influence the well-being of individual patients and the broader community. Social Emergency Medicine recognizes that in many cases typical fixes such as

prescriptions and follow-up visits are not enough; the need for housing, a safe neighborhood in which to exercise or socialize, or access to healthy food must be identified and addressed before patients' health can be restored. While interest in the subject is growing rapidly, the field of Social Emergency Medicine to date has lacked a foundational text — a gap this book seeks to fill. This book includes foundational chapters on the salience of racism, gender and gender identity, immigration, language and literacy, and neighborhood to emergency care. It provides readers with knowledge and resources to assess and assist emergency department patients with social needs including but not limited to housing, food, economic opportunity, and transportation. Core emergency medicine content areas including violence and substance use are covered uniquely through the lens of Social Emergency Medicine. Each chapter provides background and research, implications and recommendations for practice from the bedside to the hospital/healthcare system and beyond, and case studies for teaching. *Social Emergency Medicine: Principles and Practice* is an essential resource for physicians and physician assistants, residents, medical students, nurses and nurse practitioners, social workers, hospital administrators, and other professionals who recognize that high-quality emergency care extends beyond the ambulance bay.

Clinical Preventive Medicine

Quality of Life

Influence of Industry-supported Trials on the Impact Factor of Major General Medical Journals

Contaminated Sediments

A Practical Guide

A Guide for Clinicians, Educators, and Researchers

London Journal of Medical and Health Research

Issues in Critical and Emergency Medicine / 2013 Edition is a ScholarlyEditions™ book that delivers timely, authoritative, and comprehensive information about Injury Research. The editors have built Issues in Critical and Emergency Medicine: 2013 Edition on the vast information databases of ScholarlyNews.™ You can expect the information about Injury Research in this book to be deeper than what you can access anywhere else, as well as consistently reliable, authoritative, informed, and relevant. The content of Issues in Critical and Emergency Medicine: 2013 Edition has been produced by the world's leading scientists, engineers, analysts, research institutions, and companies. All of the content is from peer-reviewed sources, and all of it is written, assembled, and edited by the editors at ScholarlyEditions™ and available exclusively from us. You now have a source you can cite with authority, confidence, and credibility. More information is available at <http://www.ScholarlyEditions.com/>.

A concise, easy-to-read source of essential tips and skills for writing research papers and career management In order to be truly successful in the biomedical professions, one must have excellent communication skills and networking abilities. Of equal importance is the possession of sufficient clinical knowledge, as well as a proficiency in conducting research and writing scientific papers. This unique and important book provides medical students and residents with the most commonly encountered topics in the academic and professional lifestyle, teaching them all of the practical nuances

that are often only learned through experience. Written by a team of experienced professionals to help guide younger researchers, *A Guide to the Scientific Career: Virtues, Communication, Research and Academic Writing* features ten sections composed of seventy-four chapters that cover: qualities of research scientists; career satisfaction and its determinants; publishing in academic medicine; assessing a researcher's scientific productivity and scholarly impact; manners in academics; communication skills; essence of collaborative research; dealing with manipulative people; writing and scientific misconduct: ethical and legal aspects; plagiarism; research regulations, proposals, grants, and practice; publication and resources; tips on writing every type of paper and report; and much more. An easy-to-read source of essential tips and skills for scientific research Emphasizes good communication skills, sound clinical judgment, knowledge of research methodology, and good writing skills Offers comprehensive guidelines that address every aspect of the medical student/resident academic and professional lifestyle Combines elements of a career-management guide and publication guide in one comprehensive reference source Includes selected personal stories by great researchers, fascinating writers, inspiring mentors, and extraordinary clinicians/scientists *A Guide to the Scientific Career: Virtues, Communication, Research and Academic Writing* is an excellent interdisciplinary text that will appeal to all medical students and scientists who seek to improve their writing and communication skills in order to make the most of their chosen career.

This book explores medical and health periodicals of the nineteenth century: their contemporary significance, their readership, and how historians have approached them as objects of study. From debates about women doctors in lesser-known titles such as the *Medical Mirror*, to the formation of professional medical communities within French and Portuguese periodicals, the contributors to this volume highlight the multi-faceted nature of these publications as well as their uses to the historian. Medical periodicals – far from being the preserve of doctors and nurses – were also read by the general public. Thus, the contributions collected here will be of interest not only to the historian of medicine, but also to those interested in nineteenth-century periodical culture more broadly. The chapters in this book were originally published as a special issue of the journal *Media History*.

"*Why I Became an Occupational Physician*" and *Other Occupational Health Stories* brings together an edited collection of the short articles published in the journal *Occupational Medicine* between 2002 and 2018. The articles originally appeared as 'fillers', commissioned to literally 'fill' the blank spaces at the end of the main scientific papers, but they soon became a feature in their own right. Written by doctors working in occupational medicine and health, the fillers began as a series of pieces exploring the varied and often surprising reasons why the individuals chose to pursue this unique speciality, whether it was a natural career move, triggered by a specific event, or stumbled upon by chance. Over time the articles became much broader in their scope and the journal began to attract pieces from some brilliant writers: Mike Gibson, John Challenor, Nerys Williams, and of course the superlative Anthony Seaton, amongst many others. Each

article offers something different: a peek into history, a humorous adventure, a quiet musing, or a thought-provoking observation, but all are tied together under the umbrella of occupational medicine, a speciality that is often little known or understood in the wider world of medicine. This book brings together over 15 years' worth of fascinating and diverse articles into one volume for the first time, giving a rare insight into the world of the occupational physician.

Common Knowledge?

Clinician's Guide to Medical Writing

Visual Histories of an Enduring Epidemic

Strategic Scientific and Medical Writing

A Complete Guide to Evaluation, Treatment, and Rehabilitation

Winning the Publications Game

London Journal of Medical and Health Research LJMHR is an international journal of medical sciences and health focus to encourage the research in the field of Medicine and Health Sciences. The mission of this medical journal is to promote and publish original high-quality medical research papers and health journal articles in all disciplines of medical and health sciences. It stimulates new research ideas and fosters practical application from the research findings and aims to disseminate the latest outstanding developments in the field of all Medical and Health Sciences.

This new Second Edition delivers the latest scientific information and practical guidelines for daily use by all clinicians. The authors provide the comprehensive, practical resource you need to help your patients maintain health and prevent disease. The text critically examines the most effective preventive strategies and offers proven, practical ways to integrate them into your daily clinical practice.

This book will serve as a key resource for all clinicians working in orthopedics, sports medicine, and rehabilitation for the sport of tennis. It provides clinically useful information on evaluation and treatment of the tennis player, covering the whole body and both general medical and orthopedic musculoskeletal topics. Individual sections focus on tennis-related injuries to the shoulder, the elbow, wrist, and hand, the lower extremities, and the core/spine, explaining treatment and rehabilitation approaches in detail. Furthermore, sufficient sport science information is presented to provide the clinical reader with an extensive knowledge of tennis biomechanics and the physiological aspects of training and rehabilitation. Medical issues for tennis players, such as nutrition and hydration, are also discussed, and a closing section focuses on other key topics such as movement dysfunction, periodization, core training, and strength and conditioning specifics. The expansive list of world-class contributors and experts coupled with the comprehensive and far-reaching chapter provision make this the highest-

tennis medicine book ever published.

A history of the World Health Organization, covering major achievements in its seventy years while also highlighting organization's internal tensions. This account by three leading historians of medicine examines how well the organization pursued its aim of everyone, everywhere attaining the highest possible level of health.

Ljmhr

Issues in Critical and Emergency Medicine: 2013 Edition

Skin Barrier Function

An A-Z of Publication Strategy, Second Edition

Medical and Scientific Publishing

Author, Editor, and Reviewer Perspectives

A Post-Pandemic Philosophy of Medicine

This book is for the clinician who wants to write. It is for the physician, physician assistant, or nurse practitioner who sees patients and who wants to contribute to the medical literature. You may be an assistant professor aspiring to promotion or a clinician in private practice who seeks the personal enrichment that writing can bring. If you are new to medical writing or even if you have been the author of some articles or book chapters and seek to improve your abilities, this book can help you. Who am I that I can make this assertion and write this book, both fairly presumptuous? Here's my reasoning. As a practicing physician, writing has been my avocation; unlike the authors of many other writing books, I am not a journal editor. Over 14 years in private practice and 26 years in academic medicine, I have written all the major models described in this book: review articles, case reports, editorials, letters to the editor, book reviews, book chapters, edited books, authored books, and reports of clinical research studies. Most have been published. Not all. Perhaps my most significant qualification is not that I have managed to produce a lengthy curriculum vitae. In my opinion, what is more important for you, the reader, is that I have made all the errors. That's right, the mistakes.

Issues in Family Medicine Research and Practice: 2011 Edition is a ScholarlyEditions™ eBook that delivers timely, authoritative, and comprehensive information about Family Medicine Research and Practice. The editors have built Issues in Family Medicine Research and Practice: 2011 Edition on the vast information databases of ScholarlyNews.™ You can expect the information about Family Medicine Research and Practice in this eBook to be deeper than what you can access anywhere else, as well as consistently reliable, authoritative, informed, and relevant. The content of Issues in Family Medicine Research and Practice: 2011 Edition has been produced by the world's leading scientists, engineers, analysts, research institutions, and companies. All of the content is from peer-reviewed sources, and all of it is written, assembled, and edited by the editors at ScholarlyEditions™ and available exclusively from us. You now have a source you can cite with authority, confidence, and credibility. More information is available at <http://www.ScholarlyEditions.com/>.

LIFESTYLE MEDICINE Written by an interdisciplinary and multinational team of distinguished medical doctors and authors, Lifestyle Medicine presents a collection of multiple-choice questions (MCQs) designed to help prepare a new generation of clinicians with the necessary knowledge to practice lifestyle medicine safely and confidently. Ideal for anyone preparing for examinations in the new

specialty of lifestyle medicine at the postgraduate level, and especially useful for those studying for the Diploma in Lifestyle Medicine, taking the American Board of Lifestyle Medicine or International Board of Lifestyle Medicine exams, you will find every key aspect of lifestyle medicine in this book. 25 questions covering an introduction to lifestyle medicine, including definitions, the difference between lifestyle medicine and other fields, and Physician's Competencies in the practice of lifestyle medicine 62 questions covering the fundamentals of health behaviour change 47 questions covering key clinical processes in lifestyle medicine, including the classification of different lifestyle-related illnesses, measures of fitness, and fitness testing options 88 questions covering nutrition science, assessment, and prescription, including food labels and prescribing nutrition And much, much more: a total of 531 questions covering all key aspects of lifestyle medicine Perfect for clinicians in virtually any specialty aiming to develop expertise in lifestyle medicine, Lifestyle Medicine will also earn a place on the shelves of nurses and other allied health professionals, including pharmacists, dietitians and nutritionists, health educators, researchers, health coaches, and occupational therapists.

In the past two decades a number of studies have shown that abnormalities in the function and structure of coronary microcirculation can be detected in several cardiovascular diseases. On the basis of the clinical setting in which it occurs, coronary microvascular dysfunction (CMD) can be classified into four types: CMD in the absence of any other cardiac disease; CMD in myocardial diseases; CMD in obstructive epicardial coronary artery disease; and iatrogenic CMD. In some instances CMD represents an epiphenomenon, whereas in others it represents an important marker of risk or may contribute to the pathogenesis of myocardial ischemia, thus becoming a possible therapeutic target. This book provides an update on coronary physiology and a systematic assessment of microvascular abnormalities in cardiovascular diseases, in the hope that it will assist clinicians in prevention, detection and management of CMD in their everyday activity.

Royal Society of Medicine Career Handbook: FY1 - ST2

Health Services Reports

How Medicine Changed the End of Life

Reading the Nineteenth-Century Medical Journal

A History

Medical Writing

Essential MCQs for Certification in Lifestyle Medicine

Explains the process behind science news: an elite few scholarly journals control press coverage through a mechanism known as an embargo. This work surveys 25 daily US newspapers and relates interviews with reporters to examine the inner workings of the embargo and how it structures our understanding of news about science.

Getting research published can be difficult and frustrating. Many authors experience long delays, high rejection rates and journal processes that can seem so opaque and arcane that even those who have successfully published are often unable to say what they did right. Understanding publication strategy can prevent or reduce many of these problems. This revised and updated edition of Liz Wager's popular and highly regarded guide uncovers the ethics, conventions and often unwritten rules of publishing in peer-reviewed journals and at conferences. It gives clear advice on how to choose

the right journal, how to avoid delays, authorship disputes and many other problems associated with being published. The A-Z format makes this a clear, accessible resource relevant to readers with different levels of experience and different backgrounds, including students and healthcare professionals, medical researchers, and people working in drug companies and communications agencies developing publication strategies. 'A very readable and authoritative guide to every aspect of publishing in scientific journals. The book's layout means that readers are both provided with a routemap for publishing but can also find quickly information on the topics that might be bothering them.' Richard Smith in his Foreword From reviews of the first edition: 'Intelligently written, logical and solid.' BMJ CAREER FOCUS 'An essential resource' - NURSING STANDARD 'Subvert the system. Buy the book. Put it with the other reference books on your desk. And use it to get published.' EUROPEAN SCIENCE EDITING 'I would have no hesitation in recommending this book to colleagues. I wish I had had something similar when I started out!' CLINICIAN IN MANAGEMENT

Originally published in 1992 Medical Journals and Medical Knowledge examines both broad developments in print and media and the practice of particular journals such as the British Medical Journal. The book is the first study to address these questions and to examine the impact of regular news on the making of the medical community. The book considers the rise of the medical press, and looks at how it recorded and described principal developments and so promoted medical science and enhanced medical consciousness. This book was a seminal work when first published and was one of the first to consider the importance of the roots of medical journalism, editorial practices and the ways in which the medical journalism altered the world of medicine.

This book eases the task of converting research work into a manuscript, and covers the recent developments in publishing that often stump budding researchers. Few researchers in the biomedical sciences are trained in the essential skills of reporting their results, and they seek help in writing a paper that will be acceptable for publication in the 'right' journal, and in presenting their results 'effectively' at a meeting. As well as covering the basic aspects of preparing manuscripts for publication, the book discusses best practices and issues relating to the publication of biomedical research, including topics such as peer-review, authorship, plagiarism, conflicts of interest, publication misconduct, electronic publishing and open-access journals. With more than two decades of experience in conducting workshops on writing scientific papers, the editors have brought together the expertise of 29 authors from seven countries to produce this one-stop guide to publishing research in biomedical sciences. This book is intended for young researchers who are beginning their careers and wish to hone their skills and understand the rigors of research writing and publishing.

"why I Became an Occupational Physician" and Other Occupational Health Stories

Principles and Practice

A Guide to the Scientific Career

The New-England Journal of Medicine and Surgery

How to plan, publish and present it

The Road to Success

Issues in Family Medicine Research and Practice: 2011 Edition

With an emphasis on peer-produced content and collaboration, Wikipedia exemplifies a departure from traditional management and organizational models. This iconic "project" has been variously characterized as a hive mind and an information revolution, attracting millions of new users even as it has been denigrated as anarchic and plagued by misinformation. Have Wikipedia's structure and inner workings promoted its astonishing growth and enduring public relevance? In *Common Knowledge?*, Dariusz Jemielniak draws on his academic expertise and years of active participation within the Wikipedia community to take readers inside the site, illuminating how it functions and deconstructing its distinctive organization. Against a backdrop of misconceptions about its governance, authenticity, and accessibility, Jemielniak delivers the first ethnography of Wikipedia, revealing that it is not entirely at the mercy of the public: instead, it balances open access and power with a unique bureaucracy that takes a page from traditional organizational forms. Along the way, Jemielniak incorporates fascinating cases that highlight the tug of war among the participants as they forge ahead in this pioneering environment.

It is a distinct pleasure to be invited to prepare a short Foreword to *Biomedical Research: How to plan, publish and present it*, by William F. Whimster. Ninety years have elapsed since T. Clifford Allbutt, the Regius Professor of Physic at the University of Cambridge, published his classic work of 1904 *Notes on the Composition of Scientific Papers*. Small in size, but deep in wisdom, it remains a remarkably useful, if slightly old-fashioned, book, still well worth reading. Since 1904, and particularly in the last 25 years, there has been an avalanche of books on scientific style. Medawar has aptly observed that "most scientists do not know how to write, insofar as style betrays l' homme meme, they write as if they hated writing and wanted nothing more than to have done with it." Whimster's book has a broader objective than most of this genre. Unlike Allbutt, who was addressing in the main those who were writing their theses to obtain the MD, Whimster writes for the young medical scientists who are planning and writing up an account of their research, either for publication in scientific journals, or for presentation of the scientific material at meetings. Whimster, a scientist and an experienced long term science editor, has written an up-to-date version of an earlier and very successful

volume, *Research, How to Plan, Speak and Write About It*, edited by C. Hawkins and M. Sorgi. In this innovative study, Lukas Engelman examines visual traditions in modern medical history through debates about the causes, impact and spread of AIDS. Utilising medical AIDS atlases produced between 1986 and 2008 for a global audience, Engelman argues that these visual textbooks played a significant part in the establishment of AIDS as a medical phenomenon. However, the visualisations risked obscuring the social, cultural and political complexity of AIDS history. Photographs of patients were among the earliest responses to the mysterious syndrome, cropped and framed to deliver a visible characterisation of AIDS to a medical audience. Maps then offered an abstracted image of the regions invaded by the epidemic, while the icon of the virus aspired to capture the essence of AIDS. The epidemic's history is retold through clinical photographs, epidemiological maps and icons of HIV, asking how this devastating epidemic has come to be seen as a controllable chronic condition.

A document may be based on accurate medical and scientific information, follow guidelines precisely, and be well written in clear and correct language, but may still fail to achieve its objectives. The strategic approach described in this book will help you to turn good medical and scientific writing into successful writing. It describes clearly and concisely how to identify the target audience and the desired outcome, and how to construct key messages for a wide spectrum of documents. Irrespective of your level of expertise and your seniority in the pharmaceutical, regulatory, or academic environment, this book is an essential addition to your supporting library. The authors share with you many years of combined experience in the pharmaceutical and academic environment and in the writing of successful outcome-driven documents.?

Virtues, Communication, Research, and Academic Writing

Treatment Planning of High Dose-Rate Brachytherapy - Mathematical Modelling and Optimization

Social Emergency Medicine

Getting Research Published

Tennis Medicine

Historical Essays

An Ethnography of Wikipedia

Publishing Your Medical Research is the second edition of the award-winning book that provides practical information on how to write a publishable paper. This edition includes additional details to help medical

researchers succeed in the competitive “publish or perish” world. Using a direct and highly informative style, it does more than help you write a paper; it presents the technical information, invaluable modern advice, and practical tips you need to get your paper accepted for publication. A singular source for the beginning and experienced researcher alike, *Publishing Your Medical Research* is a must for any physician, fellow, resident, medical scientist, graduate student, or biostatistician seeking to be published.

This book is a clear and comprehensive guide that assists readers in translating observations, ideas, and research into articles, reports, or book chapters ready for publication. For both researchers and practicing physicians, skills in medical writing are essential. Dr. Robert B. Taylor, a distinguished leader in academic medicine, uses a clear, conversational style throughout this book to emphasize the professional and personal enrichment that writing can bring. The text includes in depth instructions for writing and publishing: review articles, case reports, editorials and letters to the editor, book reviews, book chapters, reference books, research protocols, grant proposals, and research reports. This third edition is additionally fully updated to include the intricacies of medical writing and publishing today, with new coverage of: open access, pay to publish and predatory journals, peer review fraud, publication bias, parachute studies, public domain images, and phantom authors. Loaded with practical information, tips to help achieve publication, and real world examples, *Medical Writing* can improve skills for clinicians, educators, and researchers, whether they are new to writing or seasoned authors.

THE ESSENTIAL WORK IN TRAVEL MEDICINE -- NOW COMPLETELY UPDATED FOR 2018 As unprecedented numbers of travelers cross international borders each day, the need for up-to-date, practical information about the health challenges posed by travel has never been greater. For both international travelers and the health professionals who care for them, the *CDC Yellow Book 2018: Health Information for International Travel* is the definitive guide to staying safe and healthy anywhere in the world. The fully revised and updated 2018 edition codifies the U.S. government's most current health guidelines and information for international travelers, including pretravel vaccine recommendations, destination-specific health advice, and easy-to-reference maps, tables, and charts. The 2018 Yellow Book also addresses the needs of specific types of travelers, with dedicated sections on: · Precautions for pregnant travelers, immunocompromised travelers, and travelers with disabilities · Special considerations for newly arrived adoptees, immigrants, and refugees · Practical tips for last-minute or resource-limited travelers · Advice for air crews, humanitarian workers, missionaries, and others who provide care and support overseas Authored by a team of the world's most esteemed travel medicine experts, the Yellow Book is an essential resource for travelers -- and the clinicians overseeing their care -- at home and abroad.

The Future of Medical Journals
In Commemoration of 150 Years of the British Medical Journal
Amer College of Physicians
Skin Barrier Function
Karger Medical and Scientific Publishers

Modern Death

Free Radicals in Biology and Medicine

Medical Journals and Medical Knowledge

Public Health Reports

Publishing Your Medical Research

How to Practice Academic Medicine and Publish from Developing Countries?

The World Health Organization

Although a very fragile structure, the skin barrier is probably one of the most important organs of the body. Inward/out it is responsible for body integrity and outward/in for keeping microbes, chemicals, and allergens from penetrating the skin. Since the role of barrier integrity in atopic dermatitis and the relationship to filaggrin mutations was discovered a decade ago, research focus has been on the skin barrier, and numerous new publications have become available. This book is an interdisciplinary update offering a wide range of information on the subject. It covers new basic research on skin markers, including results on filaggrin and on methods for the assessment of the barrier function. Biological variation and aspects of skin barrier function restoration are discussed as well. Further sections are dedicated to clinical implications of skin barrier integrity, factors influencing the penetration of the skin, influence of wet work, and guidance for prevention and saving the barrier. Distinguished researchers have contributed to this book, providing a comprehensive and thorough overview of the skin barrier function. Researchers in the field, dermatologists, occupational physicians, and related industry will find this publication an essential source of information.

Doctors often lack the skills needed to give them a competitive edge over their colleagues.

Despite being academically gifted they leave medical school after six years ill equipped to attain their own career goals. Management skills that are often the most basic to those working for private companies are left out of their undergraduate training. Some simple tips, strategies and well researched advice will empower doctors to develop their own unique career pathway and help them achieve success in their professional life. This book is for all newly qualified doctors. It systematically and logically examines the entire hospital doctor and GP career process from start to finish, dispelling common myths and advising doctors on how to break down their career into sections and tackle them one at a time. Planning a career should be like sitting an exam. Each chapter is devoted to one aspect of the career pathway from how to choose

the right job for you through to FY1, FY2 and ST jobs, and covering application forms, exams, the interview process, audit and finally publications. This book helps to answer specific questions such as: Should I apply for jobs in multiple deaneries to increase my chances of success? What do those questions on the application form really mean? Exactly what type of questions will come up in my interview? Which postgraduate exam should I choose, how will I get through it and when should I sit it? How can I excel in an audit and make a difference to my department? How do I get published and which journals should I choose? Brimming with sound practical advice, hints, tips with its readily accessible style and approach, this text is an essential purchase for all doctors embarking on their career.

Cancer is a widespread class of diseases that each year affects millions of people. It is mostly treated with chemotherapy, surgery, radiation therapy, or combinations thereof. High dose rate (HDR) brachytherapy (BT) is one modality of radiation therapy, which is used to treat for example prostate cancer and gynecologic cancer. In BT, catheters (i.e., hollow needles) or applicators are used to place a single, small, but highly radioactive source of ionizing radiation close to or within a tumour, at dwell positions. An emerging technique for HDR BT treatment is intensity modulated brachytherapy (IMBT), in which static or dynamic shields are used to further shape the dose distribution, by hindering the radiation in certain directions. The topic of this thesis is the application of mathematical optimization to model and solve the treatment planning problem. The treatment planning includes decisions on catheter placement, that is, how many catheters to use and where to place them, as well as decisions for dwell times. Our focus is on the latter decisions. The primary treatment goals are to give the tumour a sufficiently high radiation dose while limiting the dose to the surrounding healthy organs, to avoid severe side effects. Because these aims are typically in conflict, optimization models of the treatment planning problem are inherently multiobjective. Compared to manual treatment planning, there are several advantages of using mathematical optimization for treatment planning. First, the optimization of treatment plans requires less time, compared to the time-consuming manual planning. Secondly, treatment plan quality can be improved by using optimization models and algorithms. Finally, with the use of sophisticated optimization models and algorithms the requirements of experience and skill level for the planners are lower. The use of optimization for treatment planning of IMBT is especially important because the degrees of freedom are too many for manual planning. The contributions of this thesis include the study

of properties of treatment planning models, suggestions for extensions and improvements of proposed models, and the development of new optimization models that take clinically relevant, but uncustomary aspects, into account in the treatment planning. A common theme is the modelling of constraints on dosimetric indices, each of which is a restriction on the portion of a volume that receives at least a specified dose, or on the lowest dose that is received by a portion of a volume. Modelling dosimetric indices explicitly yields mixed-integer programs which are computationally demanding to solve. We have therefore investigated approximations of dosimetric indices, for example using smooth non-linear functions or convex functions. Contributions of this thesis are also a literature review of proposed treatment planning models for HDR BT, including mathematical analyses and comparisons of models, and a study of treatment planning for IMBT, which shows how robust optimization can be used to mitigate the risks from rotational errors in the shield placement. Cancer är en grupp av sjukdomar som varje år drabbar miljontals människor. De vanligaste behandlingsformerna är cellgifter, kirurgi, strålbehandling eller en kombination av dessa. I denna avhandling studeras högdosrat brachyterapi (HDR BT), vilket är en form av strålbehandling som till exempel används vid behandling av prostatacancer och gynekologisk cancer. Vid brachyterapibehandling används ihåliga nålar eller applikatorer för att placera en millimeterstor strålkälla antingen inuti eller intill en tumör. I varje nål finns det ett antal så kallade dröjpositioner där strålkällan kan stanna en viss tid för att bestråla den omkringliggande vävnaden, i alla riktningar. Genom att välja lämpliga tider för dröjpositionerna kan dosfördelningen formas efter patientens anatomi. Utöver HDR BT studeras också den nya tekniken intensitetsmodulerad brachyterapi (IMBT) vilket är en variation på HDR BT där skärmning används för att minska strålningen i vissa riktningar vilket gör det möjligt att forma dosfördelningen bättre. Planeringen av en behandling med HDR BT omfattar hur många nålar som ska användas, var de ska placeras samt hur länge strålkällan ska stanna i de olika dröjpositionerna. För HDR BT kan dessa vara flera hundra stycken medan det för IMBT snarare handlar om tusentals möjliga kombinationer av dröjpositioner och inställningar av skärmarna. Planeringen resulterar i en dosplan som beskriver hur hög stråldos som tumören och intilliggande frisk vävnad och riskorgan utsätts för. Dosplaneringen kan formuleras som ett matematiskt optimeringsproblem vilket är ämnet för avhandlingen. De övergripande målsättningarna för behandlingen är att ge en tillräckligt hög stråldos till tumören, för att döda alla cancerceller, samt att undvika att bestråla riskorgan eftersom det kan ge allvarliga biverkningar. Då alla målsättningarna inte

samtidigt kan uppnås fullt ut så fås optimeringsproblem där flera målsättningar behöver prioriteras mot varandra. Utöver att dosplanen uppfyller kliniska behandlingsriktlinjer så är också tidsaspekten av planeringen viktig eftersom det är vanligt att den görs medan patienten är bedövad eller sövd. Vid utvärdering av en dosplan används dos-volyymmått. För en tumör anger ett dosvolyymmått hur stor andel av tumören som får en stråldos som är högre än en specificerad nivå. Dos-volyymmått utgör en viktig del av målen för dosplaner som tas upp i kliniska behandlingsriktlinjer och ett exempel på ett sådant mål vid behandling av prostatacancer är att 95% av prostatans volym ska få en stråldos som är minst den föreskrivna dosen. Dos-volyymmått utläses ur de kliniskt betydelsefulla dos-volym histogrammen som för varje stråldosnivå anger motsvarande volym som erhåller den dosen. En fördel med att använda matematisk optimering för dosplanering är att det kan spara tid jämfört med manuell planering. Med väl utvecklade modeller så finns det också möjlighet att skapa bättre dosplaner, till exempel genom att riskorganen nås av en lägre dos men med bibehållen dos till tumören. Vidare så finns det även fördelar med en process som inte är lika personberoende och som inte kräver erfarenhet i lika stor utsträckning som manuell dosplanering i dagsläget gör. Vid IMBT är det dessutom så många frihetsgrader att manuell planering i stort sett blir omöjligt. I avhandlingen ligger fokus på hur dos-volyymmått kan användas och modelleras explicit i optimeringsmodeller, så kallade dos-volyymmodeller. Detta omfattar såväl analys av egenskaper hos befintliga modeller, utvidgningar av tidigare använda modeller samt utveckling av nya optimeringsmodeller. Eftersom dos-volyymmodeller modelleras som heltalsproblem, vilka är beräkningskrävande att lösa, så är det också viktigt att utveckla algoritmer som kan lösa dem tillräckligt snabbt för klinisk användning. Ett annat mål för modellutvecklingen är att kunna ta hänsyn till fler kriterier som är kliniskt relevanta men som inte ingår i dos-volyymmodeller. En sådan kategori av mått är hur dosen är fördelad rumsligt, exempelvis att volymen av sammanhängande områden som får en alldeles för hög dos ska vara liten. Sådana områden går dock inte att undvika helt eftersom det är typiskt för dosplaner för brachyterapi att stråldosen fördelar sig ojämnt, med väldigt höga doser till små volymer precis intill strålkällorna. Vidare studeras hur små fel i inställningarna av skärmningen i IMBT påverkar dosplanens kvalitet och de olika utvärderingsmått som används kliniskt. Robust optimering har använts för att säkerställa att en dosplan tas fram som är robust sett till dessa möjliga fel i hur skärmningen är placerad. Slutligen ges en omfattande översikt över optimeringsmodeller för dosplanering av HDR BT och speciellt hur optimeringsmodellerna hanterar

de motstridiga målsättningarna.

This book constitutes the refereed proceedings of the 17th Conference on Artificial Intelligence in Medicine, AIME 2019, held in Poznan, Poland, in June 2019. The 22 revised full and 31 short papers presented were carefully reviewed and selected from 134 submissions. The papers are organized in the following topical sections: deep learning; simulation; knowledge representation; probabilistic models; behavior monitoring; clustering, natural language processing, and decision support; feature selection; image processing; general machine learning; and unsupervised learning.

17th Conference on Artificial Intelligence in Medicine, AIME 2019, Poznan, Poland, June 26–29, 2019, Proceedings

And Collateral Branches of Science

CDC Yellow Book 2018: Health Information for International Travel

Reporting and Publishing Research in the Biomedical Sciences

The Future of Medical Journals

Embargoed Science

Mapping AIDS

*There is no more universal truth in life than death. No matter who you are, it is certain that one day you will die, but the mechanics and understanding of that experience will differ greatly in today's modern age. Dr. Haider Warraich is a young and brilliant new voice in the conversation about death and dying started by Dr. Sherwin Nuland's classic *How We Die: Reflections on Life's Final Chapter*, and Atul Gawande's recent sensation, *Being Mortal: Medicine and What Matters in the End*. Dr. Warraich takes a broader look at how we die today, from the cellular level up to the very definition of death itself. The most basic aspects of dying—the whys, wheres, whens, and hows—are almost nothing like what they were mere decades ago. Beyond its ecology, epidemiology, and economics, the very ethos of death has changed. *Modern Death*, Dr. Warraich's debut book, will explore the rituals and language of dying that have developed in the last century, and how modern technology has not only changed the hows, whens, and wheres of death, but the what of death. Delving into the vast body of research on the evolving nature of death, *Modern Death* will provide readers with an enriched understanding of how death differs from the past, what our ancestors got right, and how trends and events have transformed this most final of human experiences.*

The Covid-19 pandemic has shown the need for a fresh look at health and health care. This book offers a philosophical critique of medicine as applied science, but more positively it stresses the social causes of disease and argues for greater equity in the distribution of resources and the benefits of a wider evidence-base for medical treatments. The suggested approach requires a new direction for medical

ethics, one which uses the arts and humanities and leads to a revised idea of medical education and medical professionalism. The suggested approach implies a move away from the individualistic philosophy of medicine towards a new aim — community-based quality of life. The achievement of this aim certainly requires an expansion of public health medicine and health promotion but it also requires medical co-operation with the many arts and other community agencies concerned with our health and well-being. Doctors and other health professionals must work through the community rather than on it.

Very few doctors and scientists receive any sort of systematic training in publishing, editing, and reviewing scholarly articles, despite the central importance of that work for scientific research and for their careers. Medical and Scientific Publishing will help fill the gap and help readers to: Understand processes of scientific and medical publishing Understand the role of an academic in medical publishing Become a better scientific communicator Develop skills to effectively serve as the editor of a medical journal Medical and Scientific Publishing is based on a successful course at the University of Michigan Medical School for third and fourth year medical students. The course teaches students not just how to write scientific and medical articles, but addresses key issues surrounding copyright, ethics, open access and much more. Students will build a strong foundation on how to do peer review and how to be authors and editors which are important skills in building a professional career. Covers a full range of essential information – explanation of publishing licenses, copyright and permissions, how to do peer review, how to write effectively, how journal publishing works, and much more Emphasizes rigor, quality, and scientific integrity in writing, editing, and publishing Focuses on authorship and editorial skills by experienced authors and publishers

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