“Essentials of Neurosurgery” edited by Drs. Kato, Matsuyama, Dechambenoit, and Kalangu will be the immediate answer to the educational and daily problems of neurosurgeons working in developing regions of the World.

In those Countries the practice of neurosurgery is disorganized and bad remunerated with a lacks of the necessary resources for a modern neurosurgical practice.

The equipment is always limited and old, and even the one provided by Foundations or International Organs is usually in a disrepair state because they don’t have the maintenance they require due to insufficient funds or technicians to take care of that.

This is the stage where the neurosurgeon has to act within the “Third World”

Consequently the provision of an educational instrument, modern up to day, and written by the most experienced neurosurgeons in the world will help enormously to our colleagues working in difficult conditions.

I congratulate this initiative of the Editors, this book represent a real service not only to young neurosurgeon but mainly to thousand of patients who need our help.

On behalf of the WFNS Foundation I wish the best for the future of “Essentials of Neurosurgery”

Armando Basso, MD, PhD
President of the WFNS Foundation
Director of Neurosciences Institute
Buenos Aires University
The best investment for a better and peaceful world is education for young people. The power and quality of all societies are depending on the intellectual level of growing young people who are trying their best for an optimal education.

As President of the WFNS I decided to create the Forum of young Neurosurgeons and inaugurated a WFNS Foundation through which I could support the education of young Neurosurgeons from developing countries.

I am really very happy to see that both the Forum of Young neurosurgeons and the WFNS Foundation are successful and have already contributed a lot to a better training of young students in Neurosurgery.

I would like to congratulate Professor Kazadi Kalangu and Professor Yoko Kato for their initiative to publish the book Essential Practice of Neurosurgery which is for the young Neurosurgeons from developing countries who will participate in WFNS educational courses. I am thankful to the editors in chief as well as to the contributors for realizing this very important project.

I am sure and convinced that this textbook will be well received by our young Neurosurgeons. I am honored to have been asked to write a short introductory comment for this textbook.

Madjid Samii, M.D., Ph.D.
The International Neuroscience Institute (INI)
at Otto-von-Guericke-University
Chairman (Retired) of Neurosurgical Departments
Medical School Hannover and Nordstadt Hospital Hannover
Honorary President of the World Federation of Neurosurgical Societies
Congratulations and many thanks to Professors Kazadi Kalangu and Yoko Kato for their publication of “Essential Practice of Neurosurgery” being distributed to young neurosurgeons from developing countries who will participate in WFNS courses. The brain and nervous system are the crown jewel of creation and evolution. It is a great privilege to be a neurosurgeon and to be entrusted with the body of knowledge that can make the delicate, fateful, awesome surgical experience of our patients more accurate, gentle, and safe. Professors Kalangu and Kato deserve our sincere appreciation for making the “essential pearls of neurological surgery,” with which they have been entrusted, available to young neurosurgeons participating from around the world in WFNS educational courses.

Albert L. Rhoton, Jr., M.D.
R.D. Keene Family Professor and Chairman Emeritus
Department of Neurosurgery University of Florida
Member Honorary Editorial Board
I would like to sincerely thank the initiators - K. Kalangu, Y. Kato and G. Dechambenoit - for the book "ESSENTIAL PRACTICE OF NEUROSURGERY" which is undoubtedly very useful for young neurosurgeons.

Neurosurgery is a fast developing specialty that allows to successfully treat the most dangerous diseases. Many operations which were earlier considered as unreal or impossible started to be performed not only in the countries with long-standing neurosurgical traditions but in developing countries as well.

The way of assimilating and mastering new technologies became easier and shorter in time mainly due to publications summarizing experience of specialists who devoted their life to development and perfection of different methods of treatment of the nervous system pathology.

There is no doubt that the “Essentials” belongs to those editions which allow to solve not a simple problem - the problem of acquiring modern methods of diagnosis and treatment of brain tumors, consequences of head injury, cerebral vascular diseases and many others.

I hope that publishing of analogous editions will become a good tradition.

Prof. Alexander Konovalov
Director of the Burdenko Neurosurgery Institute
Neurosurgery is one of the most exciting and important fields in medicine today. Incredible advances in technology and understanding of the diseases we treat have revolutionized the field many times over in the last two decades. Moreover, the problems that neurosurgeons deal with—head and spine trauma, brain infections, stroke, degenerative brain and spine disease, brain tumors, hydrocephalus, movement disorders, pain, peripheral nerve injuries—are important public health problems as well as significant causes of morbidity in productive citizens everywhere.

The World Federation of Neurosurgical Societies is dedicated to enhancing neurosurgery everywhere in the world. It does this by educational courses, training centers of excellence, fellowship programs, world congresses and other international meetings, provision of instruments and other equipment to those in need, and the general support of neurosurgeons politically, scientifically, and socially. It attempts to create a world family of neurosurgeons for mutual support and edification.

An important aspect of any attempt to broaden the scope and significance of neurosurgery is to collect the accumulated wisdom of the last decade into one central source. For this reason, Dr Kalangu, Dr Kato, Dr DeChambenoit should be congratulated for Essentials of Neurosurgery. It is a remarkable compilation of the contemporary understanding of neurosurgical disorders and their management with an outstanding international group of authors. For the young neurosurgeon in whatever country, it provides a roadmap of information and treatment options. With it as a foundation, and with the internet, continuing education courses, and general experience, neurosurgeons everywhere can come to the same level of understanding of our common challenges and treatment options.

We hope you will use this textbook well, that you may read, mark, learn, and inwardly digest its contents. In so doing, you will add yourself to the long line of outstanding men and women who have called themselves neurosurgeons. All of us in neurosurgery over the world wish you the very best in this endeavor.

Peter Black
President,
World Federation of Neurosurgical Societies
Department of Neurosurgery
Brigham and Women's Hospital, Harvard Medical School, Boston, MA
Thanks to the development of new imaging and new surgical tools, neurosurgery may be considered as a contemporary main medical field. If so in most high developed countries, we are aware that those countries represent one quarter of the world only. Elsewhere, neurosurgeons have to face challenging situations related to economical difficulties. We, neurosurgeons, should continuously remind ourselves that, in the developing world, a million brain and spinal cord accidents happen every year and leave patients dead or heavily handicapped for the rest of their lives. Furthermore, non-diagnosed and non-treated brain tumours account for several hundred thousands of new cases every year. The number of disabled children resulting from a neurosurgical illness, account for forty percent of the population in the developing countries.

Therefore, the book “Essentials of Neurosurgery” edited by Drs. Kato, Matsuyama, Dechambenoit, and Kalangu brings to all neurosurgeons, mainly from the developing world the essentials they should know. I congratulate them very warmly.

Education and training is the main concern and activity of the WFNS, in which a lot of time and money is being invested, mainly in the developing countries. Through education, we can bring together many people of different nationalities, backgrounds and beliefs and we can fight against exclusion. Through education and training, we can easily transmit to the younger generation our knowledge, experience, skills and our wishes for the future of neurosurgery in their hands.

“Essentials of Neurosurgery” is going in the right way.

Jacques Brotchi, MD, PhD, FACS,
Past-President of the World Federation of Neurosurgical Societies (WFNS)
Emeritus Professor & Honorary Chairman
Department of Neurosurgery,
Erasme Hospital-Université libre de Bruxelles
Yet another book on Neurosurgery! That could be the first thought when we receive in 2010 such a large volume dedicated on neurosurgery. This impression needs to be corrected. First at all this book is dedicated to all the young neurosurgeons around the world with a particular attention to those coming from the “economically challenged countries” following the nice expression of one of the Editor Kazadi Kalangu, mainly from Africa. Consequently, the message of “Essential in Neurosurgery” is clear. It allows a neurosurgeon even isolated or practising independently to have the ESSENTIAL, without the necessity to buy more specialized or expensive books. It was always the main goal of the WFNS to promote, beside educational courses, economical tools to develop neurosurgery in developing countries, as set of instruments, technology, material, like shunts for example. A book like that, of over 1000 pages, with 100 chapters and more than 50 authors, represents a very sophisticated and valuable tool, with the joined CD.

We have to congratulate, Kazadi Kalangu, Yoko Kato and Gilbert Dechambenoit, who initiated such a challenging project and worked so hardly during years in accomplishing it. The message of such a wonderful project is to present the essential of worldwide neurosurgery from the most famous experts around the world, focusing their presentation to the most practical details of their own experience.

The main recent changes in the field of neurosurgery relate to modern radiological investigations, molecular biology, high sophisticated intra-operative technology, anaesthesiology, oncological techniques, and post-operative care, are at the disposal of all young neurosurgeons in a new textbook. We have to thank all the authors and the editors for achieving such a valuable and indispensable contribution in the development of neurosurgery especially in developing countries.

Maurice Choux
Department of Pediatric Neurosurgery
Hopital La Timone
Marseille, France
This book on Essentials in Neurosurgery, written by experts in the field, provides an excellent overview of the field and should represent a resource that will be used again and again by neurosurgeons at every stage in their training. It goes hand in hand with the many active training courses that have been developed in many regions of the world. Together these resources should improve the standards of neurosurgical care and the outcomes for our neurosurgical patients.

Edward R. Laws, MD, FACS
Department of Neurosurgery
Brigham & Women’s Hospital, PBB3
Being a member of the WFNS Education and Training Committee for 16 years, and its Chairman for the past 4 years, has given me the chance to closely and clearly see how publications like the present one can be valuable to young neurosurgeons, mainly in needy countries. Therefore, it is a pleasure and an honor to end my chairmanship being a part of this “Essentials in Neurosurgery”, which I am sure will be of great use to many.

Atos Alves de Sousa, M.D., Ph.D.
Chairman of the Education and Training Committee of the WFNS
Professor and Chairman of Neurosurgery
Faculdade de Ciências Médicas de Minas Gerais
Santa Casa and Life Center Hospital
Yoko Kato, who has demonstrated enormous enthusiasm and dedication also in participating actively in the WFNS Education Courses held all over the world, had the laudable idea of organizing a volume on essentials of the practice of neurosurgery with the objective of spreading and updating neurosurgical techniques prevalently for young colleagues in developing countries. This volume covers the diagnosis, the treatment and the complications of neurosurgical pathologies, and results as an easy and rapid consultation and is therefore useful in daily practice. Kato managed to involve in this operation many experts in their individual fields and in doing so obtained a true synthesis of the problems and solutions encountered in neurosurgery today.

This book is inspiring to those with little practice and is a good reminder to those with greater experience.

This volume is neurosurgery in a nutshell.

Albino Bricolo, M.D.
Past President WANS
Vice-President WFNS
Professor
Department of Neurosurgery
University Hospital of Verona
It has always been a great privilege to pass on the torch of knowledge to the young generation of Neurosurgeons, especially in the developing countries. I consider this as a wonderful opportunity to be associated with a project to bring out a textbook that deals with the practical aspects of day to day Neurosurgery.

I congratulate Prof. Kazadi Kalangu, Prof. Yoko Kato and Dr. Gilbert Dechambenoit for publishing a textbook of neurosurgery titled “Essential Practice of Neurosurgery”. I understand that this book has been made mainly for young neurosurgeons in the developing countries. I believe, it would contribute immensely to improve the level of neurosurgery in these countries.

And also, as one of the Asian neurosurgeons, I really wish that this book will be a bridge between Asian neurosurgeons and African young neurosurgeons.

Sincerely Yours,

Tetsuo Kanno
Founder of ACNS
Vice President of WFNS
Member of the Director of Fujita Health Univ.
Emeritus professor of Fujita Health Univ.
I will begin by heartily congratulating Professors Kalangu and Kato for undertaking this project which is truly a labor of love. They set out on the conception of this book with the purpose of developing a comprehensive, single volume text in neurosurgery that would be particularly useful to young neurosurgeons from the developing countries. They have clearly accomplished their mission.

Each chapter in this book has been written by a carefully chosen world recognized expert in the field. The authors have been carefully instructed to direct their comments to young neurosurgeons and to emphasize well recognized protocols of diagnosis and management introducing in each chapter the basic knowledge necessary to approach each of the clinical neurosurgical problems covered. The authors have also been specifically advised to illustrate richly the anatomical principles essential for the safe performance of all basic neurosurgical procedures.

As President of the XIV World Congress of Neurological Surgery, I am very proud of the WFNS commitment to the education of young neurosurgeons, particularly from the developing world. This book is an outstanding example of that commitment.

Sincerely,

Roberto C. Heros, MD
President, XIV World Congress of Neurological Surgery of the World Federation of Neurosurgical Societies
Lois pope Life Cente
Professor and Director
Department of Neurosurgery
University of Miami
The editors of this volume, Drs. Kazadi Kalangu, Yoko Kato, Gilbert Dechambenoit, all have distinguished themselves in the cause of organized neurosurgery on an international level. Dr. Kalangu from the Department of Neurosurgery at the University of Zimbabwe, serves as Second Vice President—Africa of the World Federation of Neurological Societies (WFNS). He, in conjunction with Dr. Dechambenoit from the Université d’Abidjan in Cote d’Ivoire, were principals in the foundation of the Association of Neurological Societies of Africa (ANSA). Both have been fierce and eloquent proponents of advancing neurosurgical care in developing countries hampered by the lack of resources often taken for granted at major neurosurgical centers. Dr. Kato from the Department of Neurosurgery at Fujita Health University in Nagoya, Japan, serves as Chair of the WFNS Committee of Women in Neurosurgery. She also founded the Japanese Women Neurosurgical Society and the Asian Women Neurosurgical Societies.

In keeping with the mission of the WFNS to improve and promote standards of neurosurgical care and training worldwide have, this illustrious trio of dedicated neurosurgeons has worked tirelessly to assemble this text, Essentials in Neurosurgery, with chapters contributed by eminent practitioners around the globe. Dr. Kalangu’s original intent of compiling a text for the education of young neurosurgeons in developing countries is now happily fulfilled to the benefit of neurosurgical trainees everywhere.

Robert Spetzler, M.D., Ph.D.
Director, Barrow Neurological Institute
J.N. Harber Chair, Division of Neurological Surgery
Barrow Neurological Institute
Phoenix, Arizona
RE: Foreward for Textbook of Neurosurgery for Young Neurosurgeons

Dear Colleagues,

I am pleased to provide you with this letter of encouragement and welcome for this very important textbook initiative for neurosurgeons in developing countries. As President-Elect of the American Association of Neurological Surgeons, it gives me great pride to know that all of us around the world strive to achieve the best for our patients in neurosurgery. I also know that while neurosurgery is a technically driven sub-specialty in many corners of the world, there are regions where such technical advancements and modern day equipment are either unavailable, or malfunctioning. Still, I know that outstanding neurosurgery can be done with the very basics, and you can be proud of your good outcomes in these circumstances.

Please allow me to convey my best wishes to all of you on behalf of the AANS, and hope that this highly informative book will help mold your practice of neurosurgery long into the future.

Best wishes,

Sincerely,

James T. Rutka, MD, PhD, FRCSC, FACS, FAAP,
Dan Family Chair in Neurosurgery,
Professor and Chairman,
Division of Neurosurgery,
The University of Toronto
Is there a need for yet another comprehensive multi-authored textbook of neurosurgery? This book is a publication of the World Federation of Neurosurgical Societies (WFNS). Dr Kalangu, the Editor-in-Chief and the Professor and Head of the Department of Neurosurgery at the University of Zimbabwe and the Second Vice-President of the WFNS, writes in the Foreword to the book that this is an ‘affordable and practical tool’ ‘pointed to young neurosurgeons in general and to those studying the specialty in economically challenged countries in particular’. It is an impressively compact paperback of almost 1500 pages measuring 21x15x7 centimetres, containing a thorough, comprehensive and well illustrated overview of the current practice of the entire field of neurosurgery with a practical emphasis. I believe it admirably succeeds in its aims and is suitable for the education of young neurosurgeons all over the world particularly in the developing countries.

One could argue that the neurosurgeons of the developing world do not need to learn about conditions they are unable to operate on and treat because of their poor circumstances and ‘deficient’ training. But this is both an elitist and defeatist attitude to which I take exception. Resources and conditions are gradually improving in the developing world and the citizens of these countries are demanding more of their physicians and impoverished health systems. The WFNS through the leadership of Prof Madjid Samii (who has written a preface and authored several chapters in this book) has certainly made it much easier for neurosurgeons to practise neurosurgery in developing countries by providing low cost operating microscopes and surgical instrument sets to the hospitals in which neurosurgical services are evolving. The WFNS through this publication has now dramatically improved the printed educational resources for these neurosurgeons and it will complement the many excellent educational courses the WFNS conducts in many countries.

The authors are all experts in their respective subspecialties and comprise a very broad spread of nationalities. I believe therefore that this is the first truly global textbook of neurosurgery. It is particularly pleasing to note that the Editor-in-Chief, one of the Deputy Editors and a number of the chapter authors practise neurosurgery in Africa. The book encompasses general principles (including the characteristics of the ‘excellent’ and the ‘great’ neurosurgeon, the neurological examination, coma, and neuroanaesthesia), neuro-oncology, vascular, spine, peripheral nerve, functional neurosurgery, and more importantly for the developing world: neurotrauma, pediatric neurosurgery (including spinal dysraphism and encephaloceles), parasitosis and infection including excellent chapters on cysticercosis and hydatidosis. Finally, there is a miscellaneous section including hydrocephalus, another common problem in the developing world, which covers shunting and third ventriculostomy. The book thus succeeds in covering the diagnosis and
management of conditions commonly encountered in the developing world but also covers the full range of neurosurgery.

In the next edition I would like to see a chapter included on the ethics of neurosurgery including end-of-life decisions, a chapter on penetrating missile head and spine injury including bomb blast trauma, more detail on the operative surgery of intracranial suppuration, especially when it arises from the frontal sinuses or middle ear/mastoid, and a chapter on the CNS manifestations of HIV/AIDS as this scourge is on the rise in the developing world. This is a landmark textbook which I warmly and enthusiastically recommend to all neurosurgeons.