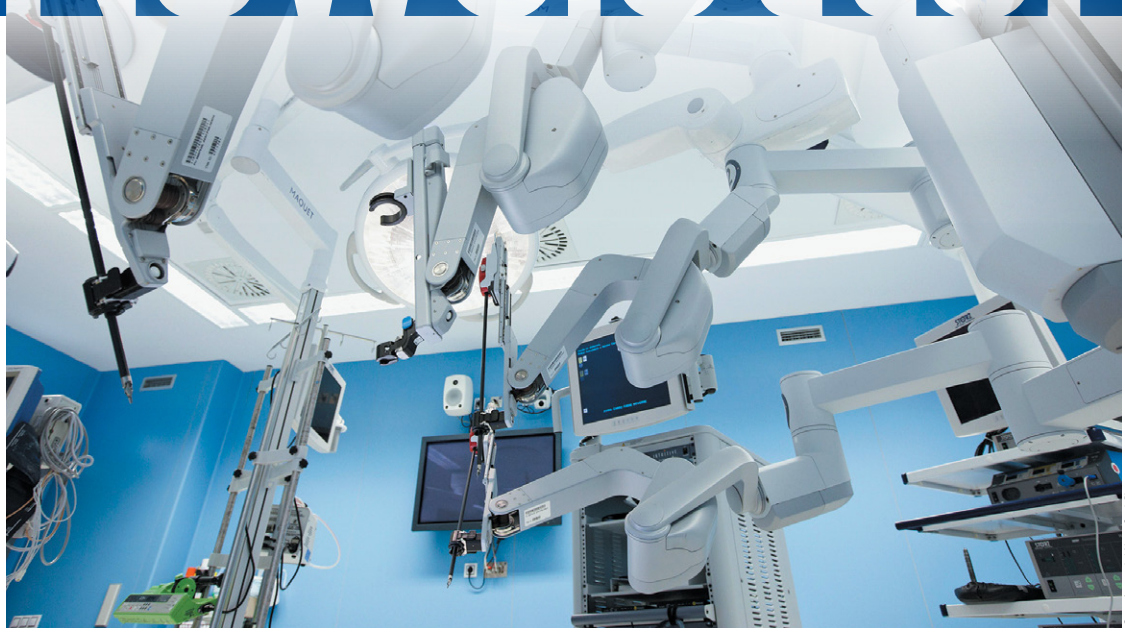
SEPTEMBER 2018 VOL. 14 NO. 3

Newsletter

This issue



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Robots and AI and 3D printing, Oh My!

You have likely heard the concept of robots, artificial intelligence, and 3D printing being discussed in a medical context. The upcoming SIU Congress in Seoul, South Korea features a number of sessions on these and other emerging technologies, from *Innovations in MIS Technology* to the *Joint SIU-SURS Symposium: Robotic Innovations in Urology,* the *SIU Innovators' Symposium,* and others. As new technologies become embedded in the fabric of urology and its subspecialties, what evidence do we have that supports our increased investment in it? On one hand, figures such as Prof. Daniel Yachia, chair of the *Best Affordable New Technologies in Urology Competition* at the SIU Congress, argue that the advent of the latest laparoscopic and robotic technologies contribute to a fantasy of equal access that is out of touch with the reality faced by countless low-income nations, in which this modern equipment would benefit only a small fraction of those in need. This combined with the costly upkeep and facilities required to properly maintain the machines makes for a precarious situation. Cost, indeed, is the biggest obstacle in the adoption and expansion of robotics and other technologies in operating rooms around the world. But if the history of technology serves as a guide, cost trends downward over time when innovation and demand intersect.

The robotic surgery market has been a monopoly since the new millennium, but as key intellectual property patents expire next year, the market is expected to become significantly more competitive. Robotic-assisted surgery is likely to expand into more regions as costs are driven down. Upcoming innovations include open consoles that are more ergonomical, which we should see in the *Telelap Alf-X* and the *Revo-I* machines. The former uses 3D eye-tracking glasses, while the latter makes use of an HD monitor. The *Telelap Alf-X* is also the first to feature haptic feedback, which allows increased tactile efficiency for surgeons. Robotic technologies such as the emerging laparo-endoscopic single-site surgery (LESS) systems are praised for their minimal invasiveness; when opting for an umbilical incision, the operation is virtually scar-free. This contrasts to the open surgical techniques commonly used in low-income countries, which leave room for infection and longer recovery times. As outlined in this month's article about our multilateral endeavors in Haiti, doctors in developing countries are eager to learn new skills

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Message from the Publications Chair


Dr. Mototsugu Oya

SIU Around the World in Kyoto

What type of renal disease is most significant to you or the patients in your country? Recently I found myself impressed by the fact that so many of these diseases were not familiar to me. For instance, genitourinary tuberculosis is not common in Japan, but we should still understand and diagnose it. Indeed, there was much to be learned at the 16th Urological Association of Asia Congress, held in Kyoto from April 17–21. President Ogawa from Kyoto University gave us the great opportunity to have the symposium "SIU Around the World - Renal Update" chaired by Drs. Jean de la Rosette and Simon Tanguay. Nine presenters talked about various types of renal diseases including trauma, tuberculosis, congenital anomaly, upper tract urothelial cancer (UTUC), renal cell carcinoma (RCC) and urolithiasis.

I specialized in urologic oncology and was very happy to give a talk on metastatic RCC. I discussed the novel concept of the immune microenvironment playing a role in the prognosis of RCC (Mizuno R et al. Cancer Sci. 2017). The lecture about tuberculosis by Dr. Rajeev Kumar provided us with important information for the diagnosis of the disease based on his extensive experience.

The latest updates on improving UTUC diagnostics were delivered by Dr. Pilar Laguna. Diagnosing UTUC is challenging - how should it be done? The Japanese Urological Association (JUA) created guidelines in 2014 for which I served as editor (Oya M and Kikuchi E. Int. J. Urol. 2015). We emphasized that CT urography should be the standard radiological modality. Following that, depending on the case, ureterorenoscopy combined biopsy should be performed. However, evaluation of the staging is still challenging, because precisely diagnosing whether the tumor is muscle invasive or not is difficult. Diagnostic tools to visualize equivocal tumors or otherwise assist in pathological diagnosis are necessary. For this, Dr. Laguna talked about promising modalities including Fluorescent In Situ Hybridization (FISH), Photodynamic diagnosis (PDD) using 5-ALA, and confocal laser endomicroscopy (CLE). Surprisingly, umbrella cells, low grade urothelial cancer cells, and high grade cancer cells with distorted microarchitecture and tortuous vessels are all made visible through CLE. I hope these new modalities are introduced in future guidelines.

SIU Around the World provided new information that you might not be able to absorb in regional conventions. For that reason, I invite you to join us next time. ●

Newsletter

SIU Publications Committee Chairman
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5 PM EST, SEPTEMBER 14, 2018

Editor's Note

Dear Readers,

What does urology look like to you? The answers we would get if we asked all our readers this question would vary wildly. As an international society, the SIU strives to maintain a keen awareness of these differences as it relates to the needs of our members. In these pages you'll discover first-hand how your peers around the world experience urology. You'll understand the dire situation in Haiti and appreciate our coordinated, multilateral effort aimed at the sustainable advancement of urological care in the region. You'll step into the shoes of Australia's first female urologist and realize the additional sacrifices many women must make as they juggle motherhood and medicine. You'll be among the first to see the progress we have made with uCARE, which aims to connect urological research around the world. We also check in with Dr. Gueye to examine what can be done about the obstetric fistula crisis in Sub-Saharan Africa and Southeast Asia.

Why do you practice urology? The answers to this question would be undeniably more uniform than the previous ones. For no matter where you are in the world, and what resources you have at your disposal, you practice urology to improve the health of your patients. This common thread is as old as the Hippocratic Oath itself, and will always remain a key focus of this and all medical disciplines. As we all marvel at the revolutionary technology that appears in this issue's cover story, which was unimaginable in the time of Hippocrates, we should never lose sight of the patient's wellbeing. This is a sentiment echoed by the tech-savvy Congress participants we interviewed, whose opinions on the future of urology are well worth a read. Take note of which sessions they are involved with in Seoul and be sure to join them!

We'd like to thank all our contributors for sharing their rich and diverse perspectives. As always, if you'd like to share your unique perspective in our newsletter, don't hesitate to send your ideas to communications@siu-urology.org. We can't wait to see you all this October in South Korea! Be on the lookout for our December SIU Newsletter for a complete recap of this event, which is guaranteed to be extraordinary! ●

Robots and AI and 3D Printing, Oh My!

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and provide the best care for their patients. The key to success with high tech in low-income countries is to work tirelessly and collaboratively to ensure that the regulatory systems and infrastructures in place are sound, and to guarantee sustainability through proper training and maintenance.

Besides robotics, many other exciting technological advances are set to make their mark in urology. Artificial intelligence (AI) is one of them. When machines make use of AI, they run complex mathematical models based on human thinking, not on traditional regression statistics. As a result, they can improve the diagnosis, staging and prognostic prediction of urological cancers. They can also analyze large data cohorts with ease and increase their accuracy over time. In fact, big data seems to be the way of the future in many sectors. Machines can begin to read scans and diagnose better than humans, and supercomputers like IBM's Watson can guide cancer treatment and conduct genomic analysis. Finally, 3D printing is poised to revolutionize surgical rehearsal today, and the world of prostheses, implants, and tissue bioengineering tomorrow. 3D printed organs are highly accurate models, relatively cheap and quick to produce. They allow surgeons and trainees to visualize complex organs and their surrounding tissue so that they can be more precise during surgery. Some models come equipped with electronic feedback for even more sophisticated training. 3D printing is currently being applied to create implantable devices such as ureteral stents, and it's not unreasonable to imagine 3D-printed testicular implants, penile and labial prostheses, and more.

Futurism is never an exact science, but we can agree that emerging technologies have great potential to improve the practice of urology overall. By staying informed and ahead of the curve, we can have agency over how new technology is best implemented and used in diverse situations.

Insights from our SIU 2018 Community

Ashish Patil, India

Session: SIU Innovators' Symposium
Indigenous Innovations: Making PCNL Simulation Affordable
October 4th, 0821-0828

Q: What is your vision of the future of urology?
A: The future of urology rests on innovation, which will make treatment both more affordable and minimally invasive.

Q: What are the pros and cons of robotics in surgery; do the benefits justify the cost?
A: Robotics have a lot of pros and few cons. Cost effectivity is corporate-driven, mainly due to the patent situation and subsequent monopoly of the *Da Vinci Surgical System*. Once competitors arrive on the scene, costs would be driven down and allow for affordable treatment.

Q: What is the doctor's role in this shifting landscape from man to machine-based operations?
A: Artificial intelligence cannot replace human diagnostic skills, treatment tailoring skills, and ultimately the holistic role of the doctor in patient healing. Also, if history serves as a guide, humans will never allow artificial intelligence to become an overpowering force.

Q: What is your opinion on 3D printing?
A: 3D printing represents the future of simulation. We should look forward to printing with different biodegradable materials. This would allow printing tissue replicas with different consistencies and haptics. These artificial organs would then be assembled into a practice model. Once the training session is over, the simulator would be disposed of/recycled in an environmentally friendly way.

Henry Ho, Singapore

Sessions: Innovations in MIS Technology
MIS Technology in BPH Treatment
SIU Innovators' Symposium
Partial Nephrectomy
All October 4th

Q: What is your vision of the future of urology?
A: The future of urology will involve data-driven individualized care.

What are the pros and cons of robotics in surgery; do the benefits justify the cost?
Robotic surgery levels the skillset needed to deliver high-quality urological care. While the current high cost limits its widespread adoption, its future will be different as options are made available. When cost is less of a prohibitive factor, the benefits of robotic surgery will increase rapidly.

Q: What is the doctor's role in this shifting landscape from man to machine-based operations?
A: The doctor plays the central role in deciding which part of a patient's journey MUST have the human interface. With the increasing push for automation in all aspects of the medicine, the human touch remains key. Thus, in this changing landscape, the ability and awareness to seek these touchpoints with patients will be the differentiating factor in care quality. The doctor can improve his/her efficiency with automation to also improve professional satisfaction.

Q: What is your opinion on AI?
A: AI is important, and it's good that the building blocks are now being laid down. However, AI is useless if the findings don't translate to change in urological care.

Sherif Mehralivand, United States

Session: SIU Innovators' Symposium
A Real-Time Support System for Robotic-assisted Radical Prostatectomy using MRI-based Virtual Reality Models
October 4th, 0814–0821

Q: What is your vision of the future of urology?
A: The more outcome-based data we generate, the more we will be able to tailor treatment options to individual patient parameters and circumstances. In the era of big data and machine learning, in conjunction with easily-available applications (e.g. smartphone apps), doctors will be able to choose the most optimal diagnostic and therapeutic options for every individual situation.

Q: What are the pros and cons of robotics in surgery; do the benefits justify the cost?
A: This is a very controversial discussion. The fact is that robotic surgery has been accepted very quickly in the urologic community when compared to other medical fields. Although outcome-based research could not prove a benefit in "hard" outcomes like cure and survival, there is growing evidence that there are certain benefits in "soft" outcomes like blood loss, postoperative pain, and in-patient duration.

Q: What is the doctor's role in this shifting landscape from man to machine-based operations?
A: The doctor's role in machine-based medicine will be a crucial one. At this current stage I don't see any indications that automated medicine will endanger the doctor's role in patient care, but the way they interact with patients will change dramatically. In my opinion, radiology and pathology

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SIU Academy will Introduce **ERAS** to Users Worldwide

The ERAS® (Enhanced Recovery after Surgery) Care System was developed by the ERAS Society to formalize and standardize pathways and protocols.

These programmes have shown to improve patient care and provide faster, safer recoveries following surgical procedures. Under the leadership of Dr. Stephen B. Williams, SIU Academy is launching a special eLearning project designed to introduce ERAS to a wider audience, particularly those in resource-constrained settings. This programme will help equip SIU members with educational resources to apply the highest standards of urological care to their patients.

Because ERAS protocols involve surgeons, nurses, and anesthetists, the recently-formed steering committee comprises urologists, as well as a nurse and an anesthetist. This interdisciplinary approach helps guarantee that the materials developed are suitable for a range of audiences.

INTERESTED IN LEARNING MORE?

Log into SIU Academy siu-urology.org/academy and find the SIU-ERAS Programme banner where you can view uTalks on ERAS around radical cystectomy from experts such as Peter Black, Ashish Kamat and Sia Daneshmand, as well as valuable documents outlining important ERAS processes and procedures.

Looking to contribute or have specific content you would like to see developed?

Contact scientific.programme@siu-urology.org and let us know.

SIU ERAS® PROGRAMME

Chair:
Stephen B. Williams (Urologist)
The University of Texas Medical Branch
United States

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Lucy Fairchild (Nurse)
Southampton University Hospital, United Kingdom

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James Douglas (Urologist)
Southampton General Hospital, United Kingdom

Julian Smith (Urologist)
Southampton General Hospital, United Kingdom

Justin Collins (Urologist)
Karolinska Institutet, Sweden

Kelly Mayson (Anesthetist),
Vancouver General Hospital, Canada

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will be the first medical fields which will face dramatic changes, since AI-based decision support systems can handle a large amount of imaging data in a short period of time: with appropriate training sets, they can make very accurate predictions. For doctors in those two fields there will be a shift from the actual reading of images (and pathology slices) to managing and decision-making.

Q: What is your opinion on 3D printing?

A: 3D printing is another important pillar in patient-tailored medicine. With 3D printing we can generate tools for procedures, surgeries, and more in a short period of time at acceptable costs. At our institution we use 3D printing regularly in our workflow by generating patient-specific prostate molds for radical prostatectomy specimens. Our results are very promising and we believe that there are many other potential indications to be explored, like patient-tailored retractors for pen surgeries for example. ●

B2B BENCH TO BEDSIDE

Upcoming B2B Events

B2B – Prostate Cancer
October 11, 2018
Athens, Greece

B2B: Minimally Invasive Surgery Course: Adrenal and Kidney
February 1-2, 2019
Porto, Portugal

uCARE Launches With a Bang

By: Dr. Andre van der Merwe

uCARE Council member, Head of the Department of Surgical Sciences and Division of Urology, Stellenbosch University, South Africa

About the Author

Dr. Andre van der Merwe is Associate Professor and Head of the Department of Surgical Sciences and the Division of Urology, Stellenbosch University, and Tygerberg Academic Hospital, Cape Town, South Africa. He leads the renal and composite tissue transplant program. His main interests are genital reconstruction surgery and percutaneous nephrolithotomy (PCNL). His unit has an advanced postgraduate training program for PCNL.

Prof. Jean de la Rosette had another great idea. Drawing from his previous experience in successfully building a multi-institutional research platform, he envisioned the creation of a Research Office for the Société Internationale d'Urologie (SIU), where he currently holds the position of General Secretary.

The SIU continues to invest and drive innovation in urology to promote medical education and research that will benefit patients worldwide. Building on the success of the SIU Academy eLearning platform, and the *SIU@U* virtual Congress platform, the creation of a global research platform seemed like the logical next step.

What is uCARE?

uCARE is the Société Internationale d'Urologie's official Office of Research, created in the fall of 2017. uCARE uses an intuitive, web-based platform for global clinical research in urology. The first of its kind in the field of urological clinical research, uCARE connects urologists and patients to clinical studies and registries being conducted around the world.

uCARE is a high-level international research platform where ethical research studies are multiplied in many countries and centres by creating audited central study protocols. Institutional review board (IRB) clearance at each institution is facilitated by supplying a copy of the protocol and a generic informed consent template that can be adapted to local standards.

How would this work in practice?

Say Dr. A., an SIU member, would like to carry out a research project on the effect on sexuality after curative treatment for prostate cancer. Dr. A. approaches the uCARE council with the study research question and a protocol synopsis. If the study is accepted and funding is secured, Dr. A. remains principal investigator of the study permanently. At the same time, uCARE helps Dr. A. to develop a brilliant protocol with the help of experts at the SIU central office. Once the protocol is ready, it can be used by Dr. A. and all other interested approved centres Data are collected on a secure electronic case report form and is available to Dr. A. and the uCARE office for analysis. Many centres can participate, and each centre will have access to, and be able to present, their own data. However, as principal investigator, Dr. A. has access to and may publish the entire data set. Authorship rules follow the uCARE authorship guidelines; for instance, Dr. A. is still bound by the International Committee of Medical Journal Editors (ICMJE) authorship guidelines, as adopted in the uCARE document.

Back row, from left: Patrick Mburugu, Lukman Hakim, Athanasios Papatsoris, Raed Azhar, Paul Villanti (Movember Foundation), André van der Merwe, Rui Chen, Teng Aik Ong. *Front row, from left:* Jae Young Park, Aydýn Mungan, Joyce Baard, Mihir Desai, Jean de la Rosette, Yasser Farahat, Yeong-Shiau Pu, Mohammad Hadi Radfar.

What effect does this have on study enrolments needed to reach statistical significance?

Say Dr. A.'s study needs 250 study participants to reach statistically significant *p* values. As Dr. A. sees only 50 such cases at his centre per year, it would take five years to conclude this local study. However, if four other similar centres worldwide join him, it will take only one year! In fact, it may even take much less time, as one may reach statistical significance within months. In the end, the protocol would be so well designed that less criticism from reviewers at publication would mean quicker publication.

What progress has been made?

Council members from every corner of the world, led by Dr. Mihir Desai and Dr. Joyce Baard, convened in Lisbon at the 2017 SIU Congress during various Webex meetings and at the EAU and AUA meetings in 2018. Various legally-correct guidelines—regarding authorship and publishing, for example—had to be created from scratch. After many study topics were considered for a first study, it was decided to test the waters with the pilot study, "*Ureteral Stenting After Ureteroscopy for Stone Treatment, A Global Perspective on Indications and Outcomes*", developed by Dr. Joyce Baard, the lead principal investigator of this study and Chair of the Applied Research Committee.

The commitment and dedication of our uCARE Council members, who found time in their busy schedules to assist in this project, paid off. There are now close to 100 participating centres for this study. The uCARE guidelines and data transfer agreement have been finalized and sent to all participating centres to be reviewed and signed in preparation for the study launch. The Council members tested the data collection system. After completion of the testing/validation phase and pre-live technical checks, the pilot study was launched in early June 2018 as scheduled, with the first patients enrolled by Dr. Selçuk Güven from Istanbul Medipol University in Turkey.

Who benefits most from uCARE?

While uCARE will tremendously benefit researchers regarding research output, the primary beneficiary is in line with SIU's mission and practice from the very beginning: the urology patient. ●

Interested in participating in our registry studies?

Contact Christine Albino, Research Manager of uCARE, at christine.albino@siu-urology.org, who will put you in touch with our Research Council.

Iraklis Poulias
President, HUA
Co-Chair, 39th Congress of the SIU
Athens 2019

A challenging *invitation*

Dear Colleagues,

Two years ago, the Executive Board of the Hellenic Urological Association (HUA) decided to seek closer cooperation with SIU, the largest global society for urologists. In turn, the HUA is one of the largest, most active and best organized urological societies in the EU.

The SIU's motto—We Bring Urologists Together—is perfectly aligned with the vision of HUA. The first result of this cooperation was the 39th Congress of the SIU to be hosted by Athens in October 2019!

Greek urologists are well trained, possess a sound research background, and play an active and collegial role in the international urological community. The awarding of the the 39th SIU Congress to Greece is definitely a great reward to all of them, who despite the financial crisis of the last decade, have strived to maintain their level of scientific excellence at its highest level.

Dear Friends,

Greece is a land of culture, arts and the birthplace of science. The combination of science, outstanding natural beauty, and infrastructure creates the ideal environment for a successful SIU Congress. Athens has a unique geographical position at the very heart of the Mediterranean, offering easy access for delegates from Europe, Middle East, Asia and Africa. The Athens International Airport, one of the world's most modern, contributes to ease of travel and excellent airlift capacities. Indeed, medical meetings held in Athens give participants from around the world the opportunity to experience the "cradle of civilization".

We warmly invite you to make the Athens SIU Congress your starting or ending scientific point for October 2019. We suspect you may wish to spend a few days before or after the Congress to explore our magnificent and beautiful country. With 3000 years of history, 15000 km of coastline, 2000 islands, and over 250 days of sunshine, your stay will be memorable!

We look forward to welcoming you to Athens in October 2019!

With our warmest regards on behalf of the HUA.

Australia's First Female Urologist Speaks Out

Professor Helen E. O'Connell discusses the sacrifices she endured and the fulfillment she currently draws from her life as a urologist and a mother.

Thank you for the invitation for some reflection on my career and experiences as a female urologist. When I started training in 1991 in Australia, there was a certain curiosity about how things would pan out. As a urology aspirant, at about 5 years post graduate, I recall an anaesthetist telling me that I would "starve" trying to become a urologist. I tucked it away knowing deep down that he was wrong, but it was interesting just how passionate his comment seemed when he bestowed it from his great height. I completed advanced training in urology in early 1994, becoming the first female in Australia to do so. The first female urologist from New Zealand rapidly followed two years later, Dr Sharon English.

I was blessed with great training in all aspects of urology. The volume of surgery in oncology and endourology was enviable. This was complemented by an extraordinary Fellowship with Emeritus Professor Ed McGuire in Houston in 1994-5. I returned to Australia in late 1995 to start my practice, an academic private and public position. Australia's system has elements of the US and UK systems from which it has shared history. We have universal healthcare – a system called Medicare and a private system where people choose to pay more and receive tax deductions to incentivise use. Private insurance generally provides access to private hospitals and a doctor of choice. There have been various efforts to create a managed care environment which have been resisted. Having a fair and high quality system is something highly valued by most Australians even as costs rise.

There are opportunities in urology to develop improvements in models of care and research in its every facet. The profession has been relatively underdone in academia. The US model of academic positions in the private sector has served as a notable example. Most urologists in Australia do research either as a trainee or in an honorary capacity. Collaborating with full-time researchers in our busy lives as surgeons appears to be a way to contribute academically within the structure of all of our other responsibilities. Maintaining and developing surgical skills at the highest level takes some doing and the public and health authorities are often quick to find fault, increasing the stress on surgeons.

Women in their training positions often feel the added burden of the time ticking on their fertility or partner-finding with a view to optimal timing of fertility. My personal attitude was to prioritise optimal training, which I viewed as incredibly important to the long-term success of my career. I had faith that the conceiving, bearing and rearing of children would simply find their place. People are keen to help if asked, which I am grateful for: getting my kids through high school and now university has taken a vast amount of help. My role model for motherhood remains my own mother, who never tried to be perfect. Like her, I have simply tried to do my best!

The notion that women should avoid becoming urologists, or would "starve" if they tried to, is silly. The world has changed from an entrenched position of misogyny as a necessary requirement for surgical culture. We know that patient care is about putting patients' interests ahead of our own. That a fair fee is intrinsically a good thing also underpins sustainability. ●

What's New at SIU Academy

academy.siu-urology.org

NOW AVAILABLE ON SIU ACADEMY

Evolution of Treatment Pathways in the Advanced Prostate Cancer Continuum

A multi-modular educational activity on the latest evidence and updates to clinical practice guidelines in the optimal care of patients with advanced prostate cancer.

Learning Objectives

- Compare and contrast the results of the docetaxel studies from the GETUG, CHAARTED, and STAMPEDE trials
- Describe the efficacy and safety outcomes of the LATITUDE and STAMPEDE trials in patients with high-risk M0 PCa and those with newly diagnosed high-risk hormone-sensitive advanced PCa starting long-term ADT
- Discuss the expanding role of abiraterone acetate plus prednisolone/prednisone in the standard of care for advanced PCa based on the LATITUDE and STAMPEDE trial results

FACULTY:

Chair

Karim Fizazi, MD, PhD
France

Members

Christopher P. Evans, MD, FACS
United States

Nicholas James, MBBS, PhD
United Kingdom

This program was submitted to the European Accreditation Council for Continuing Medical Education (EACCME) and is awaiting CME approval.

This educational activity has been funded by SIU's Corporate Sponsor, Janssen Oncology.

www.siu-urology.org/academy

Shining a Light on Blue Light Cystoscopy with Hexvix®/Cysview®: What You Need to Know

Module 1: Blue Light vs White Light in the Management of Bladder Cancer – an *SIU@U* Studio Session

This engaging and challenging conversation focuses primarily on the pros and cons of blue light cystoscopy (BLC™) versus white light cystoscopy (WLC) in the evaluation and management of bladder cancer.

Module 2: NMBIC: A Patient's Journey: Introduction to Blue Light Cystoscopy with Hexvix® and Cysview® with Tips and Tricks an eSeries

Chair

Badrinath Konety, MD, FACS, MBA-BCAN
United States

Members

Sia Daneshmand, MD
United States

Per-Uno Malmström, MD, PhD
Sweden

> This educational activity has been funded by Photocure Inc.

eSERIES

Management of Complex Ureteric Strictures with the DETOUR™ Ureteral Bypass By Dr. Ioannis Kartalas Goumas, Italy.

After viewing this presentation, the participant will be able to discuss:

- Ureteral bypass indications in the management of complex ureteric strictures
- How the DETOUR™ system functions
- Step-by-step technique of implant of an ureteral bypass
- Complications and management of ureteral bypass implant

This educational activity has been funded by SIU's Corporate Sponsor, Coloplast.

SIU Training Program on Evaluation and Management of Male LUTS

Module 4: Man with voiding symptoms under medical treatment who requires surgical management

Learning Objectives:

- Explain the rationale and follow the key steps for the initial assessment of patients with multifactorial LUTS
- Identify men at risk for clinical progression of BPO
- Identify patients' expectations and priorities for treatment
- Understand the multifactorial etiology of LUTS
- Recognize patients with symptoms related to LUTS/BPO
- Identify patients requiring surgical management
- Prioritize the available surgical options within the urological armamentarium based on findings from patient evaluation
- Understand the risks associated with the available surgical options

This case study is accredited by the European Accreditation Council for Continuing Medical Education (EACCME) for 1 European CME credit (ECMEC).

Chair

Stavros Gravas MD, PhD, FEBU
Greece

Members

Jaspreet S. Sandhu, MD
United States

Mauro Gacci, MD
Italy

This educational activity has been funded by SIU's Corporate Sponsor, GlaxoSmithKline. All contents of this educational activity have been developed by the faculty appointed by SIU.

GrandRounds

Surgical eGrand Rounds—Webcasts Now Available

January 25, 2018 in Porto, Portugal

This educational activity was funded by SIU's Corporate Sponsor, Karl Storz

April 13, 2018 in Hong Kong, China

This educational activity was funded by SIU's Corporate Sponsor, Olympus

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Collaborating to Provide Hope for Haiti

An update on GASHU; our coordinated effort to offer long-term stability for urology in Haiti.

In a country plagued by catastrophic natural disasters and unstable socioeconomic conditions, the over 10 million residents of Haiti have been challenged. From a medical perspective, the situation has reached a point of crisis. Training the next generation of doctors has been made difficult by the lack of active participation by trainees, lack of a standardized training curriculum, limited numbers of advanced urology cases, and the absence of a credible process for board certification. In 2013, there were only 26 urologists in Haiti – not nearly enough to serve the needs of communities suffering from prostatic diseases, stone diseases, urethral stenosis, among numerous other conditions. While volunteers from the U.S. and around the world have visited the country with the goal of providing patient care or conducting educational seminars, what has been lacking is a more coordinated effort led by international organizations. That's exactly what the **Global Association for the Support of Haitian Urology** (GASHU) has set out to address. This partnership between the AUA, IVUmed, Project Haiti, the SIU, and other groups seeks to improve academic urological training in Haiti by working with the residents, as well as to better coordinate the efforts of non-Haitian urologists looking to donate their resources. This, combined with increasing public awareness on the importance of urological disorders, will ultimately improve access and quality of urological care in Haiti.

While endoscopic procedures are now seen as standard throughout much of the developed world, this is not so in Haiti. Open surgery is all too common, as few institutions are equipped to perform basic procedures like TURP, ureteroscopy, and JJ stent placement. Dr. Jean Géto Dubé from the Justinien University Hospital at Cap-Haïtien, Haiti, sees this as a positive: "Many recognize that Haitian urologists have a great mastery of open surgery, even when complicated. The lack of resources sharpens their technical skills, creativity, and clinical acumen." Dr. Angelo Gousse from the Herbert Wertheim College of Medicine in Florida echoes this, noting that "Haitian urologists are eager to learn and acquire new surgical skills."

GASHU seeks to marry the great potential of the medical professionals in Haiti with modern equipment so that they can work to their full potential. To that end, GASHU has secured the following:

- The donation, installation, and training of an EWSL unit valued at $400,000 thanks to the collaboration of NextMed, Dornier, and Translational Analytics and Statistics
- Endoscopic equipment worth more than $350,000 donated by Karl Storz through GPC
- Three ultrasound and endoscopic units donated to the Hôpital de l'Université d'Haïti by Drs Lanctin (Project Haiti), Gousse (AUA liaison to Haiti), McCammon (President of IVUMed) and Badlani (former Secretary General of the AUA)
- A dedicated urology nurse, Ms Japhare Joseph, who oversees the care of the instruments and helps with medical staff training and coordination of workshops.

More work continues to be done! If you are interested in getting involved or staying informed, visit UroHaiti.org and help support the advancement of urological care in Haiti. ●

News from the Executive

By: Prof. Jean de la Rosette

In recent years, our members have witnessed many changes and advances in the SIU. It has evolved from a traditional society with an annual meeting that shares global urological knowledge and insights, into a society that offers innovative platforms in education and research. These changes are a consequence of our rapidly changing environment, which the SIU was quick to adapt to in order to meet the different needs of its members.

Five years ago, the role of technology in education became very apparent, as our members wanted instant access to the best educational tools available. As a result, the SIU created a premier educational eLearning platform called SIU Academy. A highly intuitive design and versatile search engine make it a one-of-a-kind portal. The SIU Academy is continuously updated thanks to the various committees that contribute content covering all the different sub-specialties in urology.

More recently, a new online platform for global clinical research in urology was created. uCARE (Collaborative Applied Research) connects urologists and patients to clinical studies and registries conducted around the world. It offers members the chance to take part in research, present outcomes, and publish their findings.

Also, SIU leadership recognized the importance of having urologists around the world play an active role in the Society's various activities. While members of the Board of Directors have a global representation, it was felt that a more active role from many was vital to incorporate the mission of the society within its structure. Moreover, the SIU has established an opportunity for societies that support the SIU Group Membership programme to propose one of their members to SIU's Education and Research Councils. Through these newly-established structures, group members have direct input in these activities and help shape the SIU's future research and educational programmes.

What other developments can SIU members expect from their Society? We like to embrace young talent by welcoming them in our activities and inviting them to guide us in our endeavors to strengthen our position through partnerships with other societies. We will surely be moving towards e-health and virtual communications. Our BPH-App project is an example of this, and we will soon have updates to share.

Finally, I would like to quote Charles Darwin, who said "It is not the strongest of the species that survives, nor the most intelligent that survives. It is the one that is the most adaptable to change." The SIU will continue to take this principle to heart.

The time is now: Join SIU (http://bit.ly/2L9v3Jx)! ●

Tips, Tricks and Strategies for Elimination of Obstetric Fistula in Sub-Saharan Africa

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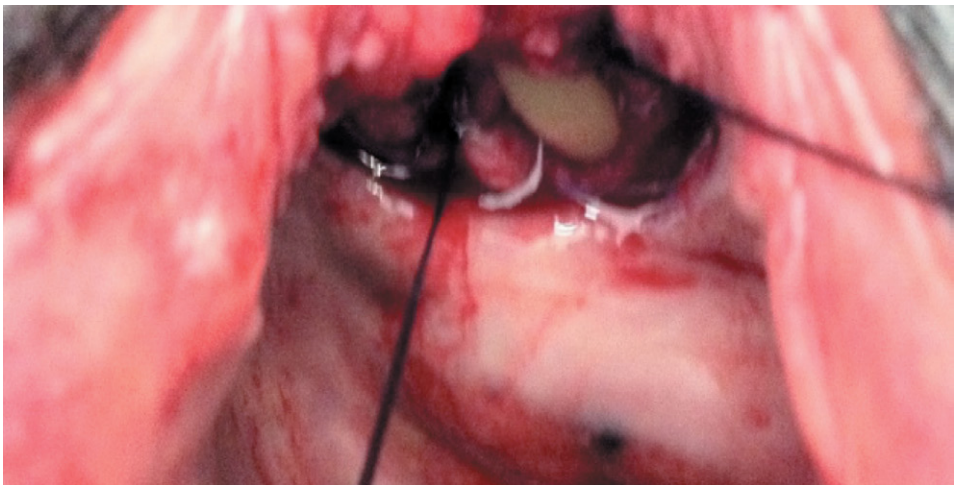
Obstetric fistula is one of the most harmful conditions to women in developing countries. It's a major public health issue, especially in Sub-Saharan Africa and Southeast Asia. It's a childbirth injury that has been largely neglected, despite the devastating impact it has on the lives of affected women and girls. It is usually caused by prolonged, obstructed labor without timely medical intervention - typically emergency Caesarean section. In Africa, the exact prevalence rate of obstetric fistula is unknown. A recent study (2015) undertaken in 19 countries in Sub-Saharan Africa estimated that the incidence of obstructed labor was 6 per 100 live births. In Nigeria alone, it is estimated that between 400,000 to 800,000 women are waiting for repair while 20,000 new cases appear every year. The current backlog is estimated to be between 600,000 and 1,000,000 cases. If the pace of repairs remained unchanged, it will take centuries to eliminate fistula in West and Central Africa.

The many classification systems currently in place remain controversial; they are diverse with no consensus on terminology used. Thus, it's difficult to set training standards and assessment criteria, and it is impossible to compare series. There needs to be a consensus on a classification system, which would impact training, research and surgical outcome. The holistic approach includes efficient prevention measures, surgical repair, reduction of the backlog, and socio-economic reintegration.

Surgical repair is exciting but sometime challenging. It aims for closure of the fistula, restoration of urinary continence, sexual and reproduction function, management of complications and prevention of recurrence.

Some fistula cases are deemed incurable due to the magnitude of tissue loss, extensive vaginal scarring and associated lesions, or history of multiple previous surgical interventions. These cases require uro-genital reconstruction and/or urinary diversion. The options in these situations are psycho-social support, economic and social reintegration support, and management of sexual and reproductive health issues. The surgical options should be bladder augmentation, urinary diversion, and vaginal reconstruction.

In order to tackle the issue of obstetric fistula and meet the demands of women and girls who suffer from this devastating injury, accurate data is paramount to inform regional and national initiatives aimed at preventing, treating and mitigating the social impact of this disability. Finally, prevention through safe labour is the only way towards the elimination of obstetric fistula. ●



Featured **New SIU Member**

Name: Alexandre Nyirimodoka, MD
Location: Kigali, Rwanda
Position: Senior Resident in Urology, University of Rwanda

I completed medical school at the National University of Rwanda in 2013 and worked at Kibagabaga District Hospital in Kigali City, Rwanda for 1 year before embarking on a urology residency in 2014 at the University of Rwanda. I have currently completed my 3rd year in urology.

Training a urologist in Sub-Saharan Africa where there are few urologists requires strong partnerships with other regional and international societies. My mentors and teachers, whom I would call pioneers of urology in Rwanda, also agreed that becoming an SIU member shows a strong commitment to advancing professional development through quality training.

One might be hard-pressed to believe that such an international society lead by several experts could accept me as a member. However, due to SIU's diverse membership offerings I have been accepted as a Trainee Member, a tier of membership that waves annual dues. I am honored to be a member of the SIU, a terrific organization that helps me build a solid network, providing me with countless opportunities to exchange with experts in urology. I especially enjoy how the SIU Academy platform is tailored to my needs. The educational programs thoroughly present and discuss a variety of challenging issues. Furthermore, the SIU is unique in assuring the training of its members by sponsoring urology residents from low income countries to receive training in integrated urology centers every year.

I am looking forward to becoming a full member of the SIU after completion of my training in 2019, when I will contribute more to the development of this esteemed organization. ●

SIU Takes GrandRounds to Hong Kong for a Full-Day Educational Affair

The SIU team and the eGrand Round Faculty

While Hong Kong has long been famous for its efficiency as an international financial hub, it also has an enthusiastic and exciting urological community. SIU brought its surgical GrandRounds in Endourology to this metropolitan city on April 13, 2018, featuring 4 cases of retrograde intrarenal surgery (RIRS), bipolar enucleation of prostate, laparoscopic partial nephrectomy and mini-percutaneous nephrolithotomy (mini-PCNL). The event was in collaboration with The Chinese University of Hong Kong S.H. Ho Urology Centre, taking place in Prince of Wales Hospital.

To kick off the surgical GrandRounds, Prof. Jean de la Rosette led our panellists in the studio to discuss the different surgical approaches and options for the cases being presented in the GrandRound. On that day we had 4 pairs of excellent panellists with quite a diverse expertise and background, including Dr. Berry Fung, Dr. Richard Lo, Dr. Lap-Yin Ho, Dr. Eddie Chan, Dr. Chak-Lam Cho, Dr. Ka-Lun Chui, Dr. Brian Ho and Dr. Peter Chiu. Each of them brought a unique perspective and gave a lively panel discussion. At the same time, Prof. Pilar Laguna made the surgery an interactive one by being present in the operating room, having a first-hand conversation with the surgeons. Prof. Anthony Ng and Dr. Mandy Tam neatly demonstrated the execution of RIRS for a lower pole renal stone. Dr. Joseph Wong finished a laparoscopic partial nephrectomy by using indocyanine green (ICG) and the selective artery clamping technique, with an ischaemic time of just 10 minutes. Dr. Ka-Lun Lo tackled an 80-gram prostate with ease through bipolar enucleation. Dr. Siu-King Mak revealed how he had integrated CT navigation into his PCNL puncture. With this highly concentrated sequence of live surgery cases from 8 a.m. to 4 p.m., the SIU provided the audience with a veritable feast of endourological education.

Stay tuned for future SIU eGrandRounds, a web-based, easily-accessible platform provided by SIU Academy to enhance knowledge exchange and surgical advancement in different corners of the world. ●

Dr. Joseph Wong executing a laparoscopic partial nephrectomy with Dr. Peter Chiu and Dr. Chi-Kwok Chan.

Prof. Anthony Ng and Dr. Mandy Tam at a case of RIRS.

Dr. Siu-King Mak introducing his PCNL technique with Dr. Joseph Li.

SIU Around the WORLD

The Society's mission is to enable urologists in all nations, through international cooperation in education and research, to apply the highest standards of urological care to their patients. To help fulfill its mission, the SIU continues to drive new programmes and initiatives, such as the Bench-to-Bedside (B2B) meetings, surgical GrandRounds, and the newly introduced session, SIU Around the World. The B2B programmes have a thematic focus, including urinary stones, BPH, Bladder Cancer, Renal Cancer and Prostate Cancer. GrandRounds courses offer an educational opportunity through live surgery demonstrations that are streamed across the globe. Expert surgeons demonstrate state of the art surgeries on the latest procedures in urology.

More recently the SIU added SIU Around the World programmes to its educational portfolio. The philosophy behind SIU Around the World Programmes is straightforward—improving education through collaboration. The first session took place on April 19th in Kyoto during the JUA-UAA meeting, a 'Renal Update' including lectures from JUA, UAA and SIU faculty. Dr Patrick Coloby presented on renal trauma, Dr Rajeev Kumar addressed a forgotten condition: renal infection caused by tuberculosis. Renal malignancies on RCC and UTUC were presented by doctors Pilar Laguna, Seiji Naito, Mototsuga Oya, and Masatoshi Eto. The session was concluded by doctors Takahiro Yasui and Damien Bolton with presentations on the epidemiology and treatment of urinary stones.

This first SIU Around the World session was a great success with many enthusiastic responses from participants, encouraging the SIU to expand these programmes in the future. ●