# CARIBBEAN UROLOGICAL ASSOCIATION

## 16TH ANNUAL INTERNATIONAL CONFERENCE

NOVEMBER 7TH & 8TH 2014


*Montego Bay, Jamaica*

# CURA President's Message 2014

CURA is delighted to welcome you to this very special meeting that is combined with the Science of Global Prostate Cancer Disparities Conference and enjoys the considerable support of the Jamaican Urological Society. It is entirely appropriate that the CURA 2014 Honoree is Professor the Honourable LL Douglas OJ . We are privileged to welcome a very distinguished overseas Faculty that includes Professor Frank Keeley, BJUI representative, Professor Grannum Sant, SIU representative and Dr Mike Coburn, AUA representative. Professor Arthur Burnett of Johns Hopkins is hardly a visitor. Residents can also sit the AUA International Residents examination on Saturday morning starting at 6am and I trust that the Proctors will be gracious and consider the early morning start when they offer their final assessments.

CURA is indebted to the Jamaica Urological Society, the organisers of the Science of Global Prostate Cancer Disparities Conference and the administration of the Rose Hall Hilton Hotel, Montego Bay. A very warm welcome awaits you.

**Dr Deen Sharma**
President
CURA

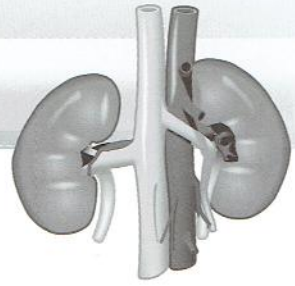
# Welcome to CURA 2014 in the City of Montego Bay

It is a great privilege to have the annual Caribbean Urological Association (CURA) meeting in Jamaica this year and in no other place but the world renowned tourist city of Montego Bay. On behalf of the University of the West Indies and the Jamaica Urological Society I welcome CURA's members and guests to the city of Montego Bay and trust that this year's meeting will exceed your expectations in its content, camaraderie and potential future collaborations.

This year we have once again been fortunate to nest our meeting within the Global Prostate Cancer Disparities Conference (GPCDC) and in so doing have managed to keep operating costs down while at the same time benefitting from the special conference rates negotiated with the hotel. CURA members and guests also have complete and unrestricted access to all the events on the GPCDC programme. For those interested in prostate cancer in men of African descent, it is a programme not to miss as it brings together the best and brightest minds from all over the world in this area of research. We thank the organisers of the GPCDC for accommodating us in this way.

CURA this year will honour one of its outstanding members, Professor the Honourable L. Lawson Douglas, who has made a seminal contribution to Jamaican, Caribbean and International Urology. Professor Douglas on his return to Jamaica from urological training in Canada set about transforming urological care in the Caribbean. Among his many accomplishments, Professor Douglas introduced renal transplantation to the Caribbean and started regional training programmes in urology (the Diploma and DM in Urology) at the University of the West Indies which has graduated 17 Caribbean urologists to date serving the Bahamas, Jamaica, Grenada and Barbados. He has made important contributions to the urological management of priapism, sickle cell haematuria, prostate cancer and haemodialysis access and he has been a champion in highlighting the plight faced by renal failure patients in Jamaica. CURA salutes Professor Douglas and wishes him long life, good health and prosperity.

This year we are honoured to have as our International guests and speakers, Professor Mike Coburn, the official AUA sponsored speaker, Professor Grannum Sant, the official SIU sponsored speaker, Mr. Frank Keely, the official BJUI speaker and Professor Arthur Burnett who gave the inaugural AUA sponsored lecture last year in Trinidad and Tobago. Professors Burnett and Sant have been working tirelessly in the background over the years to raise the bar of urological training in the Caribbean and we thank them for their efforts. The AUA's International exam our residents will be taking at this meeting is largely a result of their efforts.



CURA continues to encourage Caribbean urology residents to become actively involved in research and present at its annual meeting. We are therefore proud this year to have several presentations from residents currently in the training programme. CURA is deeply invested in ensuring that the next generation of Caribbean urologists will play their role in ensuring Caribbean urology continues on its upward trajectory.

In closing I want to thank Dr. Satyendra Persaud and Dr Lester Goetz for their efforts in ensuring a smooth 2014 CURA programme. I also wish to thank our sponsors for helping to make this meeting possible. Thanks also to the Jamaica Urological Society for helping with the logistics. Have a great meeting!

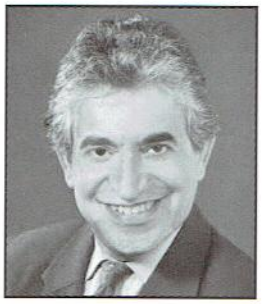
**William (Bill) Aiken**
*Local Conference Organiser*

# A Message from the Jamaican Urological Society

As president of the JUS, I would like to welcome CURA and its membership to Jamaica for the staging of its annual conference. This meeting represents an opportunity for the Caribbean community of urological surgeons to share knowledge and to pool our collective resources. The JUS is happy that this year's meeting is being staged locally and I am optimistic that we will indeed seize this opportunity to deepen and strengthen the ties between the two associations. On behalf of all of the members of our Society, I would like to pledge our support for this CURA event. We look forward to what is anticipated to be a very successful and informative meeting.

**Michael Brooks** MBBS DM
*President*

# Greetings from the AUA



On behalf of the American Urological Association (AUA), it is my pleasure to welcome attendees to the 2014 Caribbean Urological Association (CURA) Annual Meeting in Montego Bay, Jamaica.

It is through friendship and collaboration that great discoveries and advancements in the treatment of urologic disease can be achieved. In that spirit, I am pleased to report that CURA and AUA have been actively building an educational bridge between our two associations. As AUA's activities and programs continue to expand around the globe, the close proximity of the AUA to our colleagues in the Caribbean makes this educational outreach particularly important and effective. While AUA has a long history of collaboration with our colleagues in the Caribbean, formal collaborations and discussions began with CURA representatives in May 2013.

The educational bridge will include a variety of short and long-term educational initiatives designed to standardize urologic training throughout the Caribbean. This goal will be achieved through a multi-prong approach including, but not limited to, providing educational lectures and programs, administering the AUA International Examination in Jamaica and Trinidad and Tobago, overseeing the coordination and solicitation of urologic equipment donations for use in the region, assisting with "benchmarking" surgical experience and competencies, donating AUA educational resources and materials, and providing access to AUA's Basic Sciences Course.

Drs. Grannum Sant and Arthur Burnett have been stewarding the educational bridge activities with CURA for the AUA and have been volunteering their time and expertise in the region for many years. They are both participating in the 2014 CURA meeting in addition to Dr. Michael Coburn who will serve as the official AUA lecturer. Drs. William Aiken, Belinda Morrison, and Lester Goetz are guiding the activities on behalf of CURA. This November, one of the main components of our collaborations will begin when residents from Jamaica and Trinidad and Tobago sit for the AUA International Exam.

The AUA and CURA have a bright future ahead together and I would like to congratulate the CURA leadership for assembling an excellent scientific program. Someday I hope to attend a CURA meeting, home to the cricket legends of the West Indies, who I admire greatly.

**Gopal H. Badlani**, M.D.,
*AUA Secretary*

# SOCIETE INTERNATIONALE d'UROLOGIE (SIU)

## A GLOBAL TRAILBLAZER IN INTERNATIONAL UROLOGICAL EDUCATION

*Grannum R. Sant, MB, BCh, BAO (Hons.), MA, MD, FRCS, FACS*
*SIU Lecturer, 2014 CURA Meeting, Montego Bay, Jamaica and Department of Urology, Tufts University School of Medicine, Boston, MA, USA (grannum.sant@yahoo.com)*

The SIU was founded in Paris, France in 1907 by Dr. Jean-Casimir Félix-Guyon as an elite club of urologists. Up to 2000 the society held triennial Congresses since1908.1997 was a landmark year for the society with the establishment of the SIU Central Office in Montreal, Canada by Prof. Mostafa Elhilali, the abolishment of country quotas and the opening up of membership to all practicing urologists. Beginning in 2011, the SIU Congresses have been held annually and follow a continental rotation. The 2014 annual congress was recently held in Glasgow, Scotland in October 2014 with the next congress scheduled for Melbourne, Australia in October 2015.

The SIU promotes its mission of global urologic education thru a variety of activities, including training scholarships for young urologists at SIU-accredited Institutes, provision of educational materials including the monthly Urology Journal, access to the SIU e-learning portal, annual World Congress meetings and Regional Focus meetings (inaugural meeting being held in 2014 in Dubai). The goal of the regional Focus Meetings is to address topics of regional interest to urologists who are not able to attend the annual Congresses.

The SIU currently has over 4,000 individual members from 120 countries. There is a free Trainee Membership category open to trainees worldwide (see www.siu-urology.org). The official scientific journal of the SIU is UROLOGY and other society publications include the SIU Quarterly Newsletters and periodic Disease Monographs based on the SIU-ICUD International Consultations. The SIU Academy (www.siu-academy.org) affords urologists and urology trainees worldwide the opportunity for distance e-learning. The e-learning portal was launched in March 2013.

To date over 220 training scholarships have been awarded by the SIU since 2002. Two new fellowships in the USA include the Christie-SIU International Fellow in Urological Oncology at the University of California, San Francisco and the UMN-SIU Leo Fung Memorial International Pediatric Fellowship at the University of Minnesota.

35 SIU-accredited Training Centers throughout the world are equipped and maintained by the SIU including 1 in North America, 4 in South America, 1 in the Caribbean, 6 in Europe, 13 in Africa and 10 in Asia. The SIU also supports international consultations on a broad number of urologic diseases via the International Consultation on Urological Diseases (ICUD).

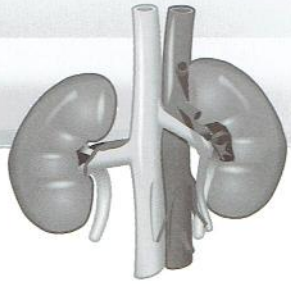
Humanitarian and philanthropic activities of the SIU are represented via collaboration with the International Volunteers in Urology organization (IVUmed) and the recently constituted urological multi-society Global Philanthropic Committee (GPC). This committee was formed in 2010 in response to the numerous worldwide requests for support of worthy projects that are difficult for any single urology organization to sponsor.

The GPC is made up of representatives of the American Urological Association (AUA), European Association of Urology (EAU) and SIU. Other major urology associations are considering joining the group. The objective of the GPC is to pool the resources of the various multi-national urology associations so as to be able to collaboratively fund larger-scale projects that support training and education of the global urologic community. The committee meets 3 times during the year at the time of the annual EAU, AUA and SIU meetings. Educational projects in developing countries are discussed, evaluated and selected for support by the GPC. Decisions regarding funding are taken by group consensus and the funds are managed by the SIU Foundation on behalf of the GPC. The first major project endorsed by the GPC the PAUSA Initiative for Urology Training in Africa (PIUTA) for the support of 2 urology training centers: one in Dakar, Senegal and the other in Ibadan, Nigeria.

In summary, the SIU is an integral part of the global urology community and it is a major contributor to international urological training and education especially for urologists and trainees from developing countries. It has a stellar track record of funding of trainee scholarships and has invested significantly in a large number of SIU-accredited Training Centers worldwide. As a founding member of the Global Philanthropic Committee, the SIU continues to extend it educational outreach as a responsible and committed member of the global urological educational "ecosystem".

## *Congratulations*

Since our last meeting Dr Reaud Gafoor has completed his Doctor of Medicine in Urology from the Mona Campus. Dr Gafoor has moved on to an endourology fellowship in Australia. All members of CURA wish to congratulate Reaud on his achievement.



# A Tribute to Mr. John Fitzpatrick

Since I was with you in Trinidad last year, we have all been saddened by the sudden and untimely loss of Professor John Fitzpatrick. How he loved CURA and how much he would have loved to have been with you this year!

John was a larger than life, "hail fellow - well met", charismatic, once in a life-time character. There will be no other. He was truly the "International" Urologist and he put the "International" on the world map for the BJU International. Everyone everywhere knew who he was. He had more frequent flyer miles than Kofi Anan. He was accused of always turning left when he boarded an aircraft, but he told me that what people did not realise was that it was always "far" left. He enjoyed life to the full, he was fascinated by different places, great company, good food and great wines. No wonder he loved the Caribbean so much.

He had a great mind and was a true academic. He spoke fluent French, read avidly and had a great interest in history. His knowledge of what was happening and changing in Urology had no equal. He personally knew and interacted with all the "movers and shakers" the world over. His career highs were many. He will be remembered particularly for his roles as Professor of Surgery at University College Dublin, President of the Irish Society of Urology, President of the British Association of Urological Surgeons and Editor of the BJU International.

More than all of this, however, he will be remembered as a loving husband and father and a great, great and loyal friend. He was tremendous fun and good company. His laugh was infectious. We can all still hear that laugh in our minds now, and we all expect to turn a corner and see John standing there. Sadly, that is to be no more. May he rest in peace.

**David Quinlan**
*Chairman, BJU International*
*President, Irish Society of Urology*

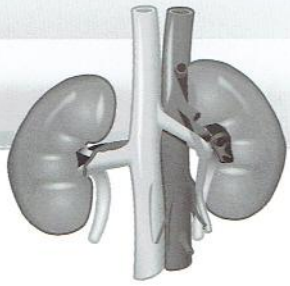
# International Collaborations In Urology

International collaborations in Urology have yielded great benefits in clinical care, research, and continuing medical education for practicing urologists. The opportunity for international collaborations around Graduate Medical Education (GME) is equally promising, but less well-developed. Training paradigms vary greatly around the world – based on traditional approaches, patient needs, administrative and governmental standards, and diverse educational philosophies. Organized efforts to compare methodologies and best practices in GME offer great potential for enhancing quality and innovation in resident training.

This past spring at the AUA Annual Meeting, a team of educational leaders from the US had the pleasure and privilege of meeting with the leadership of CURA to address a range of potential collaborations. Dr. Cully Carson of North Carolina (President of the Society of University Urologists), Dr. Bud Burnett (Professor of Urology at Johns Hopkins University School of Medicine), and I, had a very productive and inspiring discussion with representative of CURA. I have been involved in GME for most of my career – as a residency program director at Baylor College of Medicine, and more recently as Chair of the ACGME Residency Review Committee for Urology – so this meeting was of particular interest to me. One of our major areas of focus from our discussion was GME – exploring opportunities for collaboration and program development with CURA.

The GME landscape has evolved rapidly in the US in recent years. In response to input from governmental and other interests, standards have been refined for duty hour limitations and supervision, and new systems to specifically describe the elements of clinical competency in every specialty have been developed through the Milestone Project. Minimum required surgical case experience numbers in multiple categories of urologic surgery have been defined for urology residency training. The process of accrediting residency programs through the ACGME – the Accreditation Council for Graduate Medical Education, our accreditation agency – has changed substantially. At this past AUA Annual Meeting, I met with leaders in urologic education from Central America, the UK, and Korea – in addition to the CURA team, to discuss challenges and new approaches to training residents. There is a new level of interest in creating an international community of educators in urology, and the potential to increase exchange of ideas around GME is gaining momentum.

The opportunity to open a regular and meaningful dialog with our urology colleagues in the Caribbean represents a unique opportunity to share contrasting approaches and systems in GME.



We can explore the potential for developing a process for residents from neighboring countries to experience each others' systems through exchange elective opportunities. We can address the strengths and limitations of our training programs and benefit from an improved mutual understanding of how our training is structured and how we can optimize the learning environment.

At the upcoming CURA meeting, Dr. Burnett and I will be in attendance, with support from the AUA. We look forward to a robust discussion of the many issues facing medical education – including training approaches, program accreditation, funding challenges, and international outreach opportunities. The geographic proximity of our training settings, and our professional collaborations and friendships, provide an extraordinary range of possibilities which can benefit our trainees, our faculty, and most importantly, our patients. We look forward to working with you!

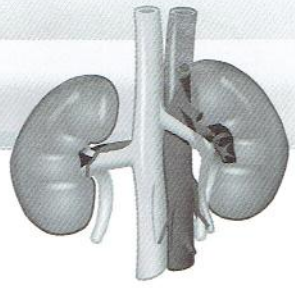
**Dr Michael Coburn**
*Residency Program Director*
*Baylor College of Medicine*
*Chairman of ACGME*

# Caribbean Urology Training In 2014 And Beyond

Education has seen tremendous changes over the past several decades with improvement in technology and increased access to information. This has extended to the medical community, where education of medical students and residents has seen similar growth. No longer do medical students and residents journey to the medical library to search for books or journal articles. Instead information is literally at their fingertips with the use of smart phones and tablets. This has been relevant especially since patients also have found increased access to medical information useful in preparing for physicians' visits and evaluating competence of physicians.

The challenges of medical education in 2014 extend far beyond the need to train research-driven and solution-oriented residents who must keep pace with rapid rise in medical publications and changes in evidence as well as new surgical techniques. For those involved in medical education in the Caribbean, we face the challenge of training residents in an economically- limited environment while trying to maintain and produce high standards in our trainees. The limitations are seen daily with reduced operating hours, challenging operating conditions and limited disposables, poorly functioning equipment or lack of the latest technology. Despite these challenges, we aim to train residents who will be not only relevant in providing care in the Caribbean but also in the global sphere.

Urology residency training began in 1995 at the University of the West Indies, Mona campus as the brainchild of Prof. L. Douglas. I laud him for his efforts in conceptualizing a training program that would produce regional urologists who would provide expert care across the Caribbean region. Dr. William Aiken successfully continued the work of Prof. Douglas. Since the inception of the program, there have been 12 graduates with all contributing significantly in providing urological care to persons in the Caribbean region. It is with great honor that I continued in the footsteps of Prof Douglas and Dr. Aiken as supervisor of the urology training



program at Mona on July 1, 2014. The program at Mona currently has 6 residents at various levels of training. The successful continuation of the program will require the energy and effort of not only the staff at the University of the West Indies, Mona campus but all practicing urologists in the Caribbean to assist with mentoring and training our residents. The education of our residents will also require novel and innovative ways of engaging and challenging them to continually strive for high standards.

I am very pleased to be involved in the preliminary discussions with the American Urological Association (AUA) and observe their assistance in growing Caribbean urology through donations to CURA and JUS. I am also grateful to Prof. Arthur Burnett who has been a mentor to many of us in the region and has worked tirelessly to improve urological care in Jamaica and Trinidad. I thank Prof. Arthur Burnett and Prof. Grannum Sant in spear-heading the charge of the AUA in assisting CURA and JUS. It is through collaborative efforts that the AUA International Residency examinations will be taken for the first time in the Caribbean region on November 8, 2014. The sitting of this examination is an important milestone in Caribbean urology training as it aims to standardize assessments for residents annually. I also thank Prof. Mike Coburn, chair of the Residency Review Committee for his efforts and contribution.

For the future, it is hoped that continued growth of the residency training programs in the Caribbean will occur with collaborations with the AUA and SIU. It is hoped that these collaborations will not only elevate the educational standards but also provide well needed supplies and equipment and also technical expertise from visiting surgeons. It is hoped that we not only train surgically competent urologists but also those with a desire to be academics and researchers and contribute significantly to the international literature in urology.

**Dr. Belinda F Morrison**
*Consultant Urologist and Lecturer*
*Supervisor, Urology Training Program*
*University of the West Indies, Mona Campus*

# Against All Odds:

## The History of Urology at the San Fernando General Hospital

*Kirby Sebro and Lester Goetz*
*Department of Urology, San Fernando General Hospital, Trinidad and Tobago*

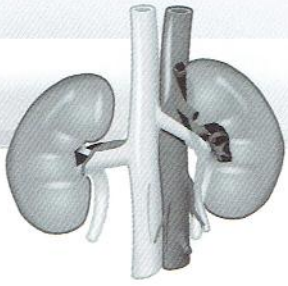
The birth of Urology at the San Fernando General hospital, and indeed the whole of Trinidad and Tobago, was against all odds. From the baby steps of Dr Andrew Yip Hoi in 1980 who, armed with fresh qualifications from the United kingdom, kicked, screamed, and raised more than a rattle thus establishing the first dedicated urological 8 bed ward in the Caribbean, to the mature 25 bed, world class, urological institute it is today.

Since its inception, due to the pioneering efforts of consultants Dr. Andrew Yip Hoi, Dr. Lester Goetz, Dr. Michael Rampaul, Dr. Gobinrajh Bajrangee and finally Dr. Krishan Ramsoobhag in 2013, the urology department has grown into an independent fully functioning entity. It is this level of excellence that has led the Urological Department at the San Fernando General Hospital to be recognized as a University of the West Indies DM post graduate training centre (2006), and designated an International Society of Urology (SIU) approved training centre in 2011.

In order to maintain academic standards of excellence, there are now uro-pathology lectures, uro-radiology lectures, Journal review meetings, morbidity and mortality meetings, multiple disciplinary team meetings and urology tutorials. This academic stimulation has encouraged Urology DM residents to present papers at regional and international conferences including the American Urological Association (AUA) meetings, and the Caribbean Urological Association (CURA). Indeed Dr. Lester Goetz in 1998 established the Trinidad and Tobago Urological Association (T&TURA), and was one of the founding fathers of the Caribbean Urological Association in 1999.

We have been singled out for many regional and national awards, including: Individual of the year-Ministry of Health (2006), Shortest waiting time – flexible cystoscopy (2008), Individual of the year (2008 and 2009) South West Regional Health Authority (SWRHA), and Excellence in Urology - Trinidad & Tobago Medical Association (2012 and 2013).

Along the way, pioneering workshops have been conducted at the San Fernando General Hospital. These have been internationally recognized, and are well patronized by not only local surgeons, but also those of the greater Caribbean. These have enabled us to upgrade our urological skills. These include among others, workshops for radical nerve sparing prostatectomy, brachytherapy, tension free vaginal tape, percutaneous nephrolithotomy (PCNL), urethroplasty, hypospadias, robotic arm surgery, mini loin nephrolithotomy, and laparoscopic nephrectomy.



From its humble beginnings the urological department has expanded considerably. Currently, each week, there are four general urology clinics, four ward review clinics, one benign prostatic hyperplasia (BPH) clinic, one uro-oncology clinic, one erectile dysfunction clinic, and one community clinic. There are also nurse led clinics, including two uroflowmetry clinics and one urodynamics clinic. Per week, there are now ten (10) operating lists in a dedicated twin urology theatre established in 2004. There are also four flexible cystoscopy lists, and four extracoporeal shock wave lithotripsy (ESWL) lists and a daily nephrostomy service.

San Fernando General Hospital now offers internationally recognized services in Kidney stone disease, such as Laser, ultrasound and Swiss lithoclast stone lithotripsy, ESWL, ureteroscopy, retrograde intrarenal surgery (RIRS), mini loin nephrolithotomy (pioneered by Dr. Lester Goetz), percutaneous nephrolithotomy (PCNL) (pioneered by Dr. Michael Rampaul), and nephrostomy tube insertion (pioneered by Dr. Krishan Ramsoobhag). Urethroplasty (pioneered by Dr. Gobinrajh Bajrangee), including buccal mucosal graft for urethral stricture disease is now a routinely performed surgery. Prostate services include ultrasound-guided prostate biopsies, periprostatic anaesthesia, subcapsular orcidectomies, brachytherapy, radical nerve sparing prostatectomies are now commonly performed. There is now a dedicated transurethral resection of the prostate (TURP) theatre list utilizing both monopolar and bipolar modalities of cautery. There are incontinence services that have recently been established, including bladder pressure testing (urodynamics), flow testing, TVT (trans vaginal tape), and TOT (trans obturator tape) slings, and video urodynamics. There is an erectile dysfunction clinic at which patients are assessed and administered PDE5 inhibitors (Viagra and Cialis), and Trimix injectable therapy – a first for the public sector in the Caribbean.

In conclusion, we have determined that it is attitude not aptitude that determines our altitude. Under the tutelage of our pioneering consultants, we have learnt grown and survived, and indeed thrived at the San Fernando General Hospital. It is undoubtedly true that we will endeavor to do this in the future.

# The 4Kscore Test -
## A New Blood Biomarker For Aggressive Prostate Cancer

*Grannum R Sant, MB, BCh, BAO, MD, FRCS, FACS;*
*Department of Urology, Tufts University School of Medicine, Boston, MA, USA*
*(grannum.sant@yahoo.com)*

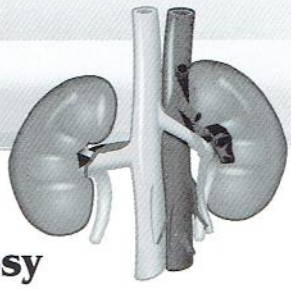
**Introduction:** Prostate cancer (PCa) screening utilizing PSA is controversial because PSA is a nonspecific biomarker that leads to over-diagnosis and overtreatment. Recently introduced prostate cancer biomarkers hold promise to change the way PCa is currently detected and managed. The 4Kscore blood test is a new commercially available test that combines four prostate-specific kallikrein biomarkers (total PSA, free PSA, intact PSA and human kallikrein 2), with clinical information (patient age, digital rectal examination findings and history of prior prostate biopsy) into an algorithm that calculates an individual patient's percent risk for having high-grade prostate cancer (Gleason Score≥7) - the lethal form of prostate cancer that should be treated. This information is available prior to prostate biopsy and is useful in the shared decision-making regarding need for prostate biopsy.

**Background:** The 4Kscore Test was developed by OPKO Lab and is performed at its CLIA-accredited laboratory facility. The 4Kscore test biomarkers were developed at Memorial Sloan-Kettering Cancer Center in the US and leading research centers in Europe in over 10,000 patients. The test accurately discriminates between pathologically indolent versus aggressive disease with an AUC (area under the curve) of 0.80 to 0.90.

**Study:** A recent US multicenter, blinded study prospectively validated the clinical utility of the 4Kscore test to predict the risk high-grade prostate cancer at prostate biopsy. 1,012 men scheduled for prostate biopsy, regardless of PSA level or clinical findings at 26 US centers between Oct. 2013 and April 2014 were enrolled. Pathologic findings as reported by the local pathologist were correlated with the pre-biopsy blood 4Kscore.

**Findings:** The 4Kscore showed high discrimination (AUC = 0.82), well correlated risk calibration, and higher net benefit by decision curve analysis DCA) compared to the Prostate Cancer Prevention Trial (PCPT) Risk Calculator 2.0 model. 42% of the prostate biopsies could have been avoided at a 9% 4Kscore risk threshold. The high concordance between predicted vs. actual findings of high grade PCa on biopsy was noteworthy.

**Conclusion:** The 4Kscore test has excellent diagnostic performance with high sensitivity to detect high-grade cancer and high negative predictive value to avoid prostate biopsies where there is no high-grade cancer present. It is a useful tool in identifying men likely to have high-grade, aggressive prostate cancer who can benefit from prostate biopsy and definitive treatment while avoiding prostate biopsies in men who are at low risk for high-grade disease.



# Complications Following Prostate Biopsy At A Tertiary Hospital In Trinidad:
## A Prospective Study

*K. Gooden, S. Persaud, L. Goetz*
*Department of Urology, San Fernando General Hospital*
*Division of Urology, Department of Clinical Surgical Sciences, UWI - St Augustine*

**Objective** - To prospectively evaluate the complications of prostate biopsy at the San Fernando General Hospital.

**Method** - All patients who underwent prostate biopsy between June 2013 and September 2014 at the San Fernando General Hospital were prospectively evaluated. A pre biopsy questionnaire was obtained to provide demographic information. Immediate complications were recorded at the time of the procedure. Patients were contacted by telephone every week for four weeks following biopsies and complications recorded. Clinical information included race, PSA, prostate volume, hypertension, diabetes, previous hospital admission and recent antibiotic usage.

**Results** - From June 2013 to September 2014, approximately 233 men underwent prostate biopsy at the San Fernando General Hospital. The mean age of the patient was 68.2 years. PSA elevation was the most common indication for prostate biopsy (66.6%). The most common co-morbidity was hypertension (46.8%). Most patients tolerated the procedure with minimal discomfort.

The most common complication was hematuria. 58.3% experienced macroscopic hematuria with a mean duration of 2.95 days. None required hospital admission and none were related to aspirin or NSAID use. 9.2% complained of hematospermia with a mean duration of 2.6 weeks and a mean number of ejaculates of 2.6. 19.2% experience hematochezia with a mean duration of 1.95 days. One patient who experienced hematochezia required hospital admission. 1.3% experienced AUR and 15% complained of voiding symptoms. 7.8% experienced infective complications of whom 3 required hospital admission, 4 visited their general practitioner and 9 resolved with antipyretic measures alone.

**Conclusion** - Transrectal ultrasound guided needle prostate biopsy is associated with frequent minor complications and few major complications. Infective complications still remain a concern and further study is still required to identify possible contributing risk factors.

## A Case Of A Penile Fracture:
### Delayed Repair As An Alternative Approach.

*D Wong*
*University Hospital of the West Indies, Jamaica*

Penile fracture is a relatively uncommon clinical condition. Most cases are due to traumatic rupture of the tunica albuginea of the erect penis during aggressive sexual intercourse, except in some countries like Iran, where taghaandan (self manipulation to achieve detumescence) is commonplace. The contemporary best practice is immediate exploration and repair by a subcoronal degloving approach. The urological team at the University Hospital of the West Indies made a clinical diagnosis of a penile fracture (without suspicion of urethral injury) in an uncircumcised 53year old man on day one of the insult. He was offered an elective delayed repair, as an alternative to an immediate exploration, and was managed as an outpatient with oral Diclofenac and subsequently had surgical repair on day eight post injury. The intentional delay resulted in a localized hematoma over the site of injury and a reduction in surrounding oedema, which thereby allowed for a localized incision and repair instead of the traditional subcoronal degloving incision. Surgical repair was considered quick and simple and no intraoperative complications occurred. So far, postoperative outcomes have been comparable and he has achieved good erections. We consider a delayed repair to be not only a safe and simple alternative, but potentially advantageous- due to- smaller localized incision, preservation of foreskin, no need for hospital admission, and less potential complications like skin necrosis.

## Stereotactic Body Radiation Therapy (SBRT):
### Precise, Targeted and Shorter Treatment Course for Prostate Cancer

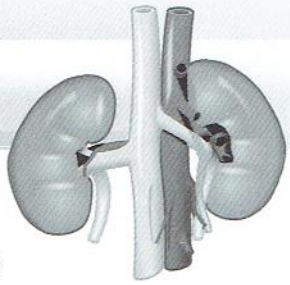
*Sophia Edwards-Bennett MD PhD DABR*
*21ST Century Oncology*

Treatment options for low and intermediate-risk prostate cancer include surgery, brachytherapy and external beam radiation therapy. For patients who are not suitable surgical candidates, or who prefer a less invasive approach, external beam radiation therapy is the treatment of choice.

Traditionally, external beam radiation therapy for prostate cancer is delivered in 38-45 fractions over the course of 7 to 9 weeks.

Stereotactic Body Radiation Therapy (SBRT) offers a significantly shorter course of radiation; and typically entails the delivery of five (5) total fractions, each administered every other day over the course of 1.5 weeks. Prostate SBRT allows for safe and highly conformal delivery of higher radiation doses, with concomitant sparing of adjacent organs such as the rectum and bladder.

Herein, we review the procedures and techniques employed to deliver prostate SBRT, treatment planning and dose constraints, as well as the criteria applied to determine patient eligibility for prostate SBRT.



# Erectile Dysfunction after Sickle Cell Disease - Associated Recurrent Ischemic Priapism: Profile and Risk Factors

*Uzoma Anele, Arthur L. Burnett**
*Brady Urological Institute, Johns Hopkins Hospital, USA*

**Introduction:** Priapism is a pathologic condition involving prolonged erection unassociated with sexual interest. It is estimated to affect approximately 40% of patients with sickle cell disease (SCD). Ischemic priapism (distinct from non-ischemic priapism) comprises the vast majority of priapism presentations (>90%). Major ischemic priapism episodes are characterized as lasting commonly approximately six hours or longer because of irreversible, time-dependent histological changes to erectile tissue ultrastructure after this duration of time. Beyond 24 hours, these episodes often render the devastating sequelae of erectile tissue necrosis and subsequent fibrosis, resulting predictably in erectile dysfunction (ED) with rates as high as 90%. However, reports of ED have also been related to minor ischemic priapism episodes, commonly referred to as "stuttering" or recurrent ischemic priapism (RIP), in which durations of priapism are observed to be a few hours or less. Accordingly, a prolonged duration of priapism of many hours does not solely account for the risk of ED, and alternative risk factors may account for the outcome of ED in patients with RIP.

**Aim:** Our aim in this investigation was to determine and compare ED risk factors associated with SCD and non-SCD related "minor" RIP, defined as having ≥ two episodes of ischemic priapism within the past six months with the majority > 75%) of episodes lasting < five hrs.

**Method:** We performed a retrospective study of RIP in SCD and non-SCD patients presenting to the urology and hematology clinics of the Johns Hopkins Medical Institutions from June 2004 to March 2014 using priapism-specific, International Index of Erectile Function (IIEF) and IIEF-5 questionnaires. The study comprised 59 patients: 40 SCD (mean age 28.2 ± 8.9 yrs) and 19 non-SCD (15 idiopathic and 4 drug-related etiologies) (mean age 32.6± 11.7 yrs). Nineteen of 40 (47.5%) SCD patients vs 4 of 19 (21.1%) non-SCD patients (39% overall) had ED (IIEF < 26 or IIEF-5 <22) (p=0.052). SCD patients had a longer mean RIP duration than non-SCD patients (p=0.004). Thirty of 40 (75%) SCD patients vs 10 of 19 (52.6%) non-SCD patients (p=0.14) had "very minor" RIP episodes regularly lasting ≤ 2 hrs). Twenty eight of 40 (70%) SCD patients vs 14 of 19 (73.7%) non-SCD patients had weekly or more frequent episodes (p=1). Of all patients with very minor RIP, ED was found among 14 of 30 (46.7%) SCD patients vs none of 10 (0%) non-SCD patients (p=0.008). Using logistic regression analysis, the odds ratio for developing ED was 4.7 for SCD patients, when controlling for RIP variables (95% CI: 1.1-21.0).

**Conclusion:** ED is associated with RIP, occurring in nearly 40% of affected individuals overall. SCD patients are more likely to experience ED in the setting of "very minor" RIP episodes and are 5 times more likely to develop ED in association with RIP compared to non-SCD patients.

# Atypical Small Acinar Proliferation On Prostate Biopsies At The University Of The West Indies

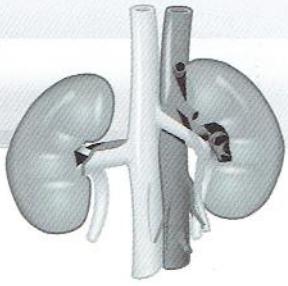
*Brown M, Morrison B, Coard K, Reid M.*
*University Hospital of The West Indies, Jamaica*

**Introduction:** Prostate adenocarcinoma is the leading male cancer in Jamaica and the Caribbean as well as the leading cause of cancer-related deaths. Atypical small acinar proliferation (ASAP), a histological diagnosis that does not demonstrate all the features of adenocarcinoma is considered pre-malignant and usually warrants a repeat prostate biopsy. ASAP is seen in 1.5-9% of prostate biopsies and results in an ultimate diagnosis of cancer in 40% of biopsies repeated. We sought to determine the prevalence of ASAP in prostate biopsies done at the University Hospital of the West Indies (UHWI) and determine the outcome of these patients.

**Methods:** A retrospective analysis of all prostate biopsies done at the UHWI from January 2000 to December 2007 was done. The histology reports were reviewed and all ASAP reports were extracted and dockets reviewed. Outcome of patients including prostate cancer diagnosed and survival were determined. The results were analyzed using STATA statistical tool.

**Results:** A total of 1670 prostate biopsies were done from January 2000 to December 2007 with 57 (3.4%) having a diagnosis of ASAP. Thirty two (32) patient records were analyzed, mean age of 69.2 years. Twenty five (25) patients had follow up for repeat biopsies with a cancer detection rate of 36%. Most cancers detected were well to moderately differentiated adenocarcinoma.

**Conclusion:** The prevalence of ASAP in Jamaica is similar to internationally quoted studies. Close follow up is required post diagnosis as it is a premalignant lesion to clinically significant prostate cancer.



# 100 Cases of PCNL in a Caribbean Island Setting

*M. Rampaul FRCS, U. Okoli MBBS, K Gooden MBBS, M. Persaud MBBS, R. Sukhraj MBBS*
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*Division of Urology, Department of Clinical Surgical Services, UWI, St Augustine*

**Introduction:** In Trinidad, the most southern of the Caribbean islands, stone disease accounts for approximately half of the operative workload of urologists. Efficient and safe methods of stone removal are needed to minimize distress and save kidneys. PCNL in particular has been recommended by the American Urological Association as the method of choice for removing stones> 20 mm diameter and as a good option for lower pole stones10- 20 mm.

**Methods:** Over a 29 month period, patients on the waiting list of one Urology unit at SFTH, for Open Nephrolithotomy (ON) were offered PCNL, with ON only if PCNL fails. Under fluoroscopy, a 30Fr. working tract was established. Stone fragmentation was done using the Swiss Lithoclast Master® device via a 24 Fr Wolf® nephroscope. Post operatively a 28 Fr nephrostomy tube was inserted into the tract and sutured to skin. On day 1 post op, the nephrostomy tube was removed and the patient was discharged if stable, on oral antibiotics and analgesics. Each patient was reviewed within 1 week with a KUB X-Ray, or CT to assess for residual stone fragments and complications.

**Results:** 100 operations were performed in the study period, of which 85 patient records were available. The mean age of patients was 47.72 yrs, with equal numbers of males and females. Most patients had solitary stones (82%). The majority of stones were located in the Lower pole (37%) and the renal pelvis (36%). 97% of stones were > 10mm.The mean operating time was 2hr 1 minute and the mean post op hospital stay was 4.3 days, reducing to 2 days for the last 50 cases. The transfusion rate was 4%. Stone clearance rate was 93.8% and 76.8 % for stones <10 mm and >20mm respectively. Overall stone free rate was 82%. Minor complications included failed access (11%), chest wall pain (4%), prolonged leakage from nephrostomy sites (4%), and fever (6.7%).There were no organ injuries. One patient required ICU care for respiratory support, and there were two sepsis related mortalities.

**Conclusion:** PCNL has become the procedure of choice for removing most renal stones and in particular for lower pole stones, where ESWL is less effective. As a minimally invasive operation, it continues to offer excellent stone clearance, great cosmetic results, high patient acceptability and relatively low morbidity. This procedure should be developed in all of our Caribbean islands, even if in designated centers only. Because of its potential for complications, adequate training and supervision are advised.

# Fecal carriage of ciprofloxacin resistant Escherichia coli in patients undergoing trans-rectal ultrasound guided prostate biopsy at the San Fernando General Hospital

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*#Department of Microbiology, San Fernando General Hospital, Trinidad*

**Objectives:**

- To establish the prevalence of Ciprofloxacin resistant Escherichia coli in the fecal carriage of patients undergoing trans-rectal ultrasound guided prostate biopsy and
- To identify risk factors for harboring Ciprofloxacin resistant Escherichia coli.

**Methodology**

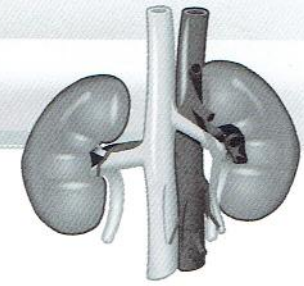
From August to October 2014, all patients undergoing trans-rectal ultrasound guided prostate biopsy had rectal swabbing done. Also, data regarding demographics, recent hospitalization and antibiotic use, prior biopsy, and indwelling urinary catheters were prospectively collected. All isolates of Escherichia coli were tested for sensitivity to Ciprofloxacin and other antibiotics commonly used in urological practice. Patients were followed for 4 weeks post biopsy for complications.

**Results**

52 patients had rectal swabs taken, and 40 cultures were positive for Escherichia coli with 24 (60%) being resistant to Ciprofloxacin and 67% (16/24) of these isolates being multi-drug resistant. Resistance to other antibiotics commonly used in urological practice were also identified: Gentamycin 35% (13/37), Amoxicillin/Clavulanate 48% (19/40), Piperacillin/Tazobactam 16% (7/40), Trimethoprim/Sulfamethoxazole 42% (13/31) and Ceftrioxane 42% (13/31). All patients with indwelling catheters and 66% of patients who had recently used antibiotics harboured resistant strains of E.coli. There did not appear to be any correlation between resistance and patients' age, PSA values, previous biopsy or recent hospitalization.

**Conclusion**

There is a high prevalence of Ciprofloxacin resistant Escherichia coli in the fecal carriage of patients undergoing TRUS guided prostate biopsy at the San Fernando General Hospital. This is an ongoing study and as the number of patients increase we will determine whether our current prophylaxis policy needs to be revisited and whether targeted antibiotic prophylaxis should be considered.



# Cigarette Smoking and Bladder Cancer:
## Are People Aware Of The Risk?

*William Aiken, Marie Brown*, Belinda Morrison, Richard Mayhew*
*Division of Urology, Department of Surgery, University of the West Indies, Mona, Kingston 7, Jamaica*
**Presenting author*

**Background:** Bladder cancer is a common cancer affecting the urinary tract. Cigarette smoking is the most important population risk factor for bladder cancer but the level of awareness of this risk relationship among Jamaican patients is unknown. Determining the level of awareness is important in informing health education programmes aimed at decreasing the incidence of tobacco-related cancers.

**Methods:** Patients attending the urology clinics at the University Hospital of the West Indies, Kingston, Jamaica, were surveyed utilizing a self-administered questionnaire which enquired about their sociodemographic characteristics and smoking history as well as their opinion regarding a number of risk factors (age, family history, low fibre diet, high fat diet, lack of physical activity, multiple sexual partners and cigarette smoking) in relation to common cancers including lung and bladder cancer. The primary outcome was to determine the relative proportions of patients who were aware of the risk relationship between cigarette smoking and bladder cancer with those aware of the risk relationship between cigarette smoking and lung cancer.

**Results:** One hundred and fifteen patients completed the questionnaire, 57% (65) men and 43% (50) women. The average age of participants was 54 ± 16 years but men (58 years) were on average 8 years older than the women (50 years). The majority of the participants was either married or single and had received primary or secondary education. Only 32.4% (36 of 111) (95% confidence interval (95%CI); 23.9% – 42%) of persons were aware that cigarette smoking was a risk factor for bladder cancer compared to 93% (106 of 114) (95%CI; 86.6% - 96.9%) that were aware that cigarette smoking is a risk factor for lung cancer. This difference in awareness was highly statistically significant ($p=0.0001$). Eighty percent (4 of 5) of current smokers compared to 28.4% (29 of 103) of non-smokers (Fisher's exact test, $p=0.031$) were aware of the association between cigarette smoking and bladder cancer.

**Conclusions:** Knowledge of the awareness of cigarette smoking as a cause of bladder cancer is very poor and this suggests that health education efforts should focus not only on cigarette smoke being a cause of lung cancer but should also aim to increase knowledge of the risks of tobacco smoke in causing other cancers including bladder cancer.

# Effect of Hydroxyurea on Priapism in Jamaican Men with Sickle Cell Disease

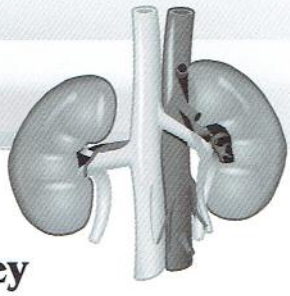
*B. Morrison, P. Hamilton*
*University Hospital of The West Indies*

**Introduction:** Sickle Cell Disease patients with priapism may have varying outcomes but to date, the optimal mode of pharmacological management is yet to be established.

**Methods:** Twelve (12) consenting Jamaican men with priapism who were treated with hydroxyurea (HU) were located by searching the SCU database at the UWI TMRI and were interviewed between July 1, and September 30, 2014 using a modification of the standard priapism questionnaire, version 5/9/08 from The Johns Hopkins University. Three (3) of the patients were younger than twelve (12) years old and consent was granted by their parents. Data were analyzed using Stata software.

**Results:** Of the sixteen (16) patients alive who had priapism and received HU, twelve (12) were interviewed. All patients had ischemic priapism, 58% began experiencing priapism before 12y.o. with 75% reporting episodes during sleep. 41.6% started HU before 12 y.o. with leading indications being recurrent painful crises and stroke (42% and 33% respectively). While before HU therapy 25% of patients had daily episodes 42% had no further episodes after starting HU. Before HU therapy 33% reported episodes lasting greater than five hours (5hrs) and 16.5% less than thirty minutes (30mins). There was a reversal of the stastistics after HU as 33% reported episodes less than 30 mins and 8.3% (n=1) reported priapic episode longer than five hours. One patient reported having short 2 priapic episodes after being noncompliant with HU for two weeks but had no further episodes upon resuming therapy. All patients had analgesia and Oxygen therapy but only 23% had penile aspirations and 8.3% proceeded to penile surgery. None of the patients had penile scarring but 50% reported adverse effects and 8.3% reported negative effect on their relationships. Whilst 85.3% reported a subjective overall improvement, 83.3% reports no change in confidence with HU therapy.

**Conclusion:** Priapism episodes improved in Sickle cell disease patients who are treated with HU but the majority admitted that this is not due to HU. Rather by the time of starting HU they were more educated and experienced in dealing with priapism. Larger randomized control studies are needed to assess the effect of HU on priapism episodes.



# Prostate Biopsy Practices Among Caribbean Urologists: An Online Survey

*S. Persaud[1], K. Gooden[1], B. Morrison[2]*
*1 - Department of Urology, San Fernando General Hospital, Trinidad and Tobago*
*2 - Department of Surgery, University Hospital of The West Indies, Jamaica*

**Aim:** Prostate biopsy is critical to the diagnosis of prostate cancer. Standards exist in order to optimize both diagnostic accuracy as well as patient well being. Anecdotally, urologists have been noted to vary both in patient preparation as well as biopsy technique. We therefore aimed to assess prostate biopsy practices among Caribbean urologists.

**Methods:** A questionnaire was designed to collect demographic data as well as data relating to practices surrounding prostate biopsy including patient preparation, biopsy technique as well as management of common histological findings. The questionnaire was distributed to urologists in the Caribbean using the online survey tool Survey Monkey ®. All urologists on the mailing list of the Caribbean Urological Association were contacted. Data were collected, compiled in Microsoft Excel® and statistical analyses were performed.

**Results:** Forty (40) questionnaires were distributed of which 31 (77.5%) were returned. Nine (9) Caribbean territories were represented but most respondents were from Jamaica (12, 38.7%) and Trinidad and Tobago (9, 29.0%). Twenty seven (87.1%) indicated that they performed some or all of their own biopsies with 4 (12.9%) outsourcing biopsies to another colleague. The average number of biopsies performed per urologist was 7.2 (range 1- 20). Most urologists (21, 77.8%) did not utilize pre-biopsy enemas but all used prophylactic antibiotics. Fluroquinolones (24, 88.9%) were most commonly used as prophylaxis and most (24, 88.9%) employed a multidose regimen, most commonly for 3 days (17, 65.4%). Analgesia was utilized by most urologists with 51.6% employing peri-prostatic nerve block, either alone or in combination. Most (16, 59.3%) urologists indicated their biopsies were solely ultrasound guided while 4 (14.8%) performed only digitally guided biopsies. In the majority of cases (19, 70.4%), twelve or more cores are routinely sampled. In their approach to unifocal high grade prostatic intraepithelial neoplasia (HGPIN), 54.8% were of the opinion that a single focus of HGPIN would not affect their decision to repeat biopsy. Their approach differed with multifocal PIN or atypical small ascinar proliferation (ASAP) with the majority in favour of early (<6 months) rebiopsy of both entities.

**Conclusion:** This study illustrates the wide variations in practice among urologists in the region. Standard of care is not uniformly practised.

# Retrograde Intrarenal Lithotripsy (RIRL):
## A case for simultaneous treatment of bilateral renal stones <2cm endoscopically

*Uchechukwu Okoli, MBBS , Michael Rampaul FRCS, Dip Urol*
*Division of Urology, Department of Clinical Surgical Sciences, University of the West Indies, St. Augustine*

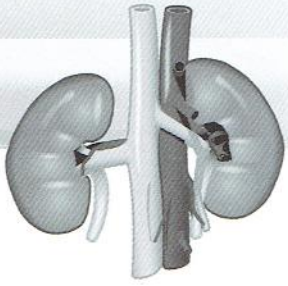
**Introduction:** Flexible ureterorenoscopy is an effective second line treatment for Shock wave (ESWL) refractory renal calculi, and a reliable first line treatment for lower pole, LP stones <1.0 cm (EUA Guidelines 2002). RIRL has also been accepted as an option when ESWL or percutaneous nephrolithotomy might be ill-advised or contraindicated eg in pregnancy, morbid obesity and anticoagulated patients. Stone free rates using RIRS have been reported as 50-80% for calculi <1.5 cm, and by Shah HN1 as 50-90% for LP stones<1cm diameter.

To our knowledge, very little has been published on the application of RIRL to the treatment of bilateral renal stones simultaneously.

We reviewed 13 patients with renal stones, 6mm-20mm, presenting over a 2-year period. They were offered RIRL as minimally invasive alternative to ESWL. Stones were fragmented with the holmium laser 200 micron fibre, via a 7.5 Fr ureterorenoscope and cleared with zero tipped nitinol baskets. In our small study of 13 patients with total of 32 renal stones, 2 (15.5%) had single stones, 3(23%) had multiple unilateral stones and 8(61.5%) patients had bilateral stones, (treated as 2 renal units each). Mean number of stones was 2.46 per patient (range 2-5). Mean stone size was 8.2mm (range 0.6-23mm), average number of procedures was 2.3 (range 1-3).

Our results showed that of 18 renal units treated, 14 units were stone free. Stone free rates were: 8 (44.4%), 11(61.1%) and 13 units (77.2%) after 1, 2 and 3 procedures respectively. Residual fragments/stones remained in three units with 8, 15, 15 mm stone respectively and in a pelvic kidney, a 20mm stone (22.2%).There were no major complications; minor intraoperative complications include mild bleeding causing poor visibility and abandonment (2). Minor post op complications include haematuria (3), pyrexia(4), and significant post op haematuria requiring blood transfusion in one patient, a hemophiliac.

We concluded that RIRL is a safe procedure which can be performed satisfactorily with adequate training and appropriate equipment, even in a third world country. We propose that it should become a preferred modality for treating multiple scattered stones and also for treating bilateral renal stones<2cm, simultaneously, in view of the minimal complications and high stone clearance rate.



# Best of ASTRO 2014:

## New Answers To Old Questions On Prostate Cancer Treatment

*Anesa Ahamad MD FRCR DABR; Eduardo Fernandez MD, PhD, FACRO; FASTRO; Sophia Edwards – Bennett MD, PhD; Elizabeth Paucar MBA*
*21st Century Oncology, Florida USA*

ASTRO (American Society for Radiation Oncology) is the largest radiation oncology group with more than 10,500 radiation oncology professionals. The ASTRO Annual Meeting is the premier radiation oncology scientific event in the world. This was held in San Francisco in September 2014. This presentation will disseminate key research results regarding the treatment of prostate cancer: Answers to the following questions:

New techniques in delivering radiotherapy over the past 2 decades allowed a higher dose to be given to prostate cancer. Has this resulted in improved survival? Analysis of 17,603 patients gave a clear and significant answer.

No randomized controlled trial has assessed the role of radiotherapy (RT) in node positive (N+) non-metastatic PCa. Does radiotherapy improve survival? The STAMPEDE trial of 5272 men presents an answer. In this UK analysis, what is the difference in failure-free survival (FFS) between the 71 N+ patients who got radiotherapy and the 84 patients who did not?

In the United States population an analysis of the men with lymph node-positive (N1M0) PCa treated with and without definitive external beam RT was also reported. Was there a survival impact of RT? Do patient with high PSA level or advanced age benefit or should they be excluded?

For patients with locally advanced prostate cancer (PCa), androgen deprivation (AD) combined with radiation therapy significantly decreases mortality. Does long-term AD (LTAD) improve outcome compared to short-term AD (STAD) in patients treated with high-dose radiation therapy (HDRT)?

Men with adverse pathologic factors at radical prostatectomy (RP) benefit of adjuvant radiation therapy (ART). Despite ART, a high-risk group of patients has been defined with 50% risk of progression at 3 years. Does the addition of androgen deprivation (ADT) and docetaxel to ART increase freedom from progression in this high-risk group?

Given the biologic heterogeneity seen in prostate cancer, is there a molecular biomarkers that may guide treatment decisions in addition to the prognostic variables currently used for risk stratification (Gleason score, PSA, tumor stage, lymph node invasion, and surgical margin status)?

Among men with PCa treated with brachytherapy with or neoadjuvant androgen deprivation therapy (ADT): is there an excess cardiovascular-specific mortality? In which subgroup can treating 20 men with ADT result in one cardiovascular death?
What about men treated with external beam radiotherapy and ADT: is there an increased risk of cardiovascular events? Is the effect present for both short course ADT in the upfront setting, as well as those receiving generally longer courses of ADT?

Patients report different Urinary and Sexual Function Outcomes following radical prostatectomy, brachytherapy and intensity modulated radiation therapy (IMRT). Using the American Urologic Association Symptom Score (AUA) and Sexual Health Inventory for Men (SHIM) in a cohort of 3,515 men, can we predict changes in urinary and sexual function over time based on treatment modality and use the data for counseling patients regarding treatment selection?

Following Prostatectomy for high risk patients what first post-op PSA level can be called biochemical relapse? This new evidence indicates that integrating Ultra-Sensitive PSA into the immediate and continued surveillance of high-risk RP patients correctly identifying true failures, promoting an early salvage strategy, and minimizing overtreatment.

Is a PSA Bounce a good thing? Among patients treated with Radiation Therapy for prostate cancer who have as a rise of 0.4 ng/mL above the interval PSA nadir followed by a PSA decrease (i.e. a PSA Bounce): can this predict for lower risk for distant metastases and improved cancer-specific survival?

**Bio: http://www.21stcenturyoncology.com/physicians/ahamad-anesa-w**
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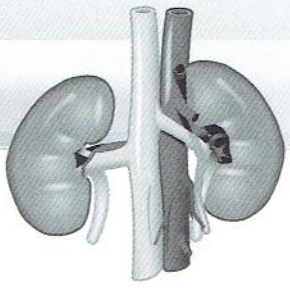
**Tel: 305 393 6183**



# Needlestick Injuries And Other High-risk Exposures Among Surgical Trainees At A Teaching Hospital In Trinidad And Tobago

*Authors: Sukhraj R, Persaud S, Goetz L*
*Department of Urology, San Fernando General Hospital*
*Division of Urology, Department of Clinical Surgical Sciences, UWI - St Augustine*

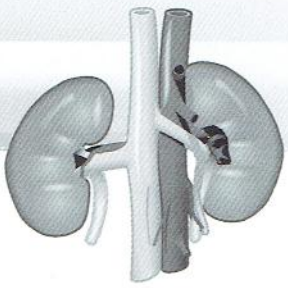
**Objectives:**

- To assess the prevalence of needle-stick injuries and other high risk exposures among Surgical Trainees at the San Fernando General Hospital.
- To establish the Surgical Trainees' familiarity with the Hospital's policies and procedures regarding high risk exposures.
- To determine the rate of Hepatitis B vaccination among Surgical Trainees.

**Method:** Using a cross-sectional study design and an anonymous self-administered questionnaire, data were collected from non-specialist staff in the surgical fields (General Surgery, Urology, Orthopedics, Plastic Surgery, Pediatrics and ENT). Respondents were asked about high-risk exposures during the previous 12 months and participation was voluntary.

**Results:** There were 40 respondents form the various specialties (General Surgery 47%, Urology 18%, Orthopedics, Pediatrics and ENT 10% each). The majority of the trainees were junior residents between the ages of 21 and 29 years. 75% of the respondents reported a high risk exposure in the past year (25% had a needlestick, 18% had bloody fluid splashed in the eyes, and 32% had both). The operating theatre was the location of 74% of the exposures. In the majority of cases, the supervisor was not informed, no source testing was done and no counseling nor post-exposure prophylaxis was administered. Only 2 of the needlestick injuries and none of the eye splashes were reported to OSHA. 57% of trainees were not aware of the Hospital's policy regarding high-risk exposures and only 27% had received any training in dealing with such situation. All of the trainees were immunized against Hepatitis B.

**Conclusion:** There was a high rate of needle-stick and other high risk exposure among surgical trainees, and incident reporting and post-exposure management was inadequate. Educational and other preventive measures are urgently needed.



## Major Priapism At The University Hospital Of The West Indies, Kingston, Jamaica

*A. Rhudd, University Hospital of the West Indies, Jamaica*

Priapism is a persistent penile erection that continues beyond or is unrelated to sexual stimulation[1]. It is an uncommon disorder usually found in high-risk groups, particular those with hyperviscosity hematological disorders such as Sickle cell disease. Eland et al describe an incidence of 1.5 per 100,000 person years[2]. Sickle cell disease (SCD) as the cause of priapism depends on the population studied but ranges from 11%-67%[3,4] The University Hospital of the West Indies, Kingston, Jamaica is one of the two major tertiary institutions serving the corporate area. Emergencies such as priapism are likely to present to this institution. With a high prevalence of patients with the sickle cell disease in Jamaica and by extension in this population a high prevalence of SCD related priapism is expected. During the 11-year study period 65 patients with 129 episodes were seen. Of the 65 patients 45 had a history of SCD. 81% (non SCD) and 77% (SCD related) of cases had to be managed with invasive management techniques for tumescence. Prophylactic medical therapies were used in only 12% of patients, all of which had SCD. The study determined that SCD is a significant contributing factor to the incidence of priapism in this subset of our population studied.

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## What's New in Stone Management - FX Keeley (Bristol UK)

This lecture aims to give an update on the developments in kidney stone management, from medical expulsive therapy for ureteral stones to advances in flexible ureteroscope design. Much of the management of kidney stones is based on techniques developed over 25 years ago: ESWL, PCNL, and ureteroscopy. Recent advances have allowed many more urologists access to techniques and technology that once were carried out only in highly specialized centers.

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## Talk On The Management Of Small Renal Masses - FX Keeley (Bristol UK)

The incidence of small renal mass diagnosis is rising in many countries due to increased use of imaging and possibly an increased incidence of kidney cancer. The traditional treatment of renal masses, radical nephrectomy, is considered inappropriate for many of these patients due to the effect on renal function in the long term. Many more management options are available, including surveillance, needle ablation, and partial nephrectomy. Given that the natural history of small renal masses appears to be less severe, treatment with less morbidity becomes more attractive, but extirpative surgery remains the standard of care. Keep an eye on this field, however, as techniques are evolving quickly and evidence is accumulating rapidly.

# A Pathological Profile Of Prostate Biopsies In A Tertiary Care Centre In Trinidad And Tobago

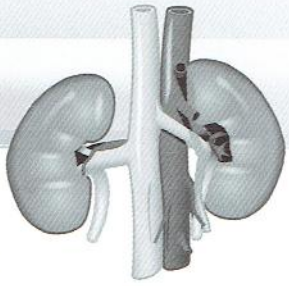
*I Hosein, S Persaud, R Sukhraj, L Goetz*
*Department of Urology, San Fernando General Hospital, Trinidad and Tobago*
*Division of Surgical Sciences, University of the West Indies, St Augustine*

**Aim:** To conduct a review of all prostate biopsies performed in our institution, a tertiary referral centre, over a period of two and a half years and to document the clinico-pathological profile of prostate cancers seen in our unit.

**Method:** A review of the biopsy records was conducted from January 2012 to July 2014 and an attempt was made to recover all biopsy reports for all patients who had undergone biopsy during this period. Clinical and pathologic data were compiled and subsequently analysed using STATA.

**Results:** From January 2012 to July 2014 617 trans-rectal ultrasound guided prostate biopsies were performed. Pathological data were found for 546 patients of whom 283 (51.8%) were confirmed carcinoma of the prostate. All patients had 12 cores taken and in the case of prostate cancer the average number of positive cores was 7.2. Of the 235 patients for whom PSA data were available, 60 (25.5%) presented with greatly elevated PSA levels (>100 ng/ml). Of significance we found that patients of African descent were more likely to have higher PSA values than their Indo-Trinidadian counterparts: among patients with PSAs >100 Afro-Trinidadians feature almost three times as much as Indo-Trinidadians ( 27.51% vs 10.61%, $p<0.001$). Afro-Trinidadians were also more likely to have a Gleason score of 9 ($p <0.001$). The portion of Africans having prostate cancer on biopsy was 54% (204/373) compared to 44% (71/162) in East Indians, a difference which was not found to be statistically significant (Fisher's exact $p= 0.121$). Clinical stage T1 was the most commonly encountered stage. A Gleason's score of 7 was most common, accounting for 45.6% of all cancers. Perineural invasion was found in 28 (9.9%) cancers and showed a trend towards an increase incidence in blacks although this did not reach statistical significance (Fisher's exact, $p=0.353$). Using D'Amico risk classification most cases were found to be high risk(155/283, 55.12%) followed by intermediate risk (73/283 25.8%) and low risk (18/283 6.36%). Due to incomplete data 36(12.72%) patients could not be assigned a risk status. High grade prostatic intraepithelial neoplasia (HGPIN) was noted in 14 patients (2.6%).

**Conclusion:** This study demonstrates that over half of our biopsies are eventually positive for cancer. Afro- Trinidadians made up a disproportionate number of those biopsied; they were slightly more likely to be diagnosed with prostate cancer when biopsied. It demonstrates that a third of our patients present with greatly elevated PSA levels. The presence of HGPIN was rare and there was no case of ASAP.



# The Year in Review: My Perspective

**Gareth Reid** MBBS

*Chief Resident, University Hospital, Mona*

The Urology DM program over the last few years has seen significant changes and growth. When I first entered the program there were a total of 4 residents for the entire urology DM program servicing the University Hospital of the West Indies as well as the Kingston Public Hospital. It was extremely challenging keeping up with academic requirements and the service work that lay at our feet. Currently there are seven residents, with residents in seniority from years one to five. Our ability to now balance the service work and academic schedule, has left us ample time and opportunity to get involved in well needed research studies to give us a better idea of our unique population and how best to apply our urological expertise to their care.

The year started off with a "bang" with our most recent graduate Reaud Gafoor being successful in his DM part II exams. While he has moved on to "loftier pastures" we wish him all the best and strive to continue in his successful footsteps.

Our next significant event was our annual Jamaica Urological Society and CURA meeting held in February 2014 at the Jamaica Conference Center. The conference was truly rewarding to all attendees with excellent presentations by all the presenters including our international guest speakers Prof. Claus Roehrborn and Dr. Alan Nieder.

In July 2014, Dr. Belinda Morrison assumed the role of program director taking over from Dr. William Aiken who provided excellent care, stewardship and guidance prior to this. Dr. Aiken along with his predecessor Prof. Lawson Douglas has made our program one to academically rival any international institution in the world. Though Dr. Morrison has "big shoes" to fill, she has been more than up to the challenge. Our resident staff has been "treated" to a rather robust weekly academic presentation schedule, as well as a monthly "case of the month" dissertation exploring commonly encountered clinical scenarios.

We have also attempted to include our "family" in Trinidad using videoconferencing during these sessions. Unfortunately our equipment leaves much to be desired, most of these sessions being broadcast via laptop or ipad over Skype.

It has not been all "fun and roses". We continue to face significant challenges as residents, due to the lack of essential equipment that has long been the standard in other urology training programs such as a laser energy source or a flexible ureteroscope. Our mandatory overseas elective period makes up for this deficiency. Securing an elective position is also however, a significant challenge and remains one of the deficiencies of our program.

As my chief year comes to an end, I look forward to life beyond residency. I have had excellent support from my fellow residents and challenge them to continue the "family like" fraternity that has long been the hallmark of our program.

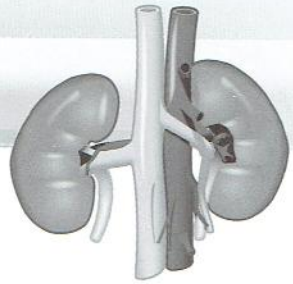
## Year in Pictures

*Reflecting on a successful 2013 meeting*
*(from L to R)- Professor Arthur Burnett, Professor Samuel Ramsawak*
*(Dean, Faculty of Medical Sciences - St Augustine Campus), Dr. Grannum Sant, Dr. Lester Goetz*

*Participants from one of CURA's 2013*
*Urethroplasty Workshops (SFGH, Trinidad and Tobago)*

*Seated (L to R) - Mr. Josh Wood (IVUMed),*
*Dr. Richard Santucci*

*Standing (L to R) - Dr. William Aiken, Dr. Lester Goetz,*
*Dr. Gobin Bajrangee, Dr. Krishan Ramsoobhag,*
*Dr. Leonard Stephens, Dr. Trevor Tulloch,*
*Dr. Michael Rampaul*



# Honoree For 2014

## Professor the Honorable Lawson Douglas OJ

The Caribbean Urological Association is pleased to be able to honor Professor the Honorable Lawson Douglas OJ at its 2014 meeting. Professor Douglas' contribution to urology in the region cannot be understated.

Professor Douglas returned to the Caribbean at a time when urology as a specialty did not exist. He went on a develop urology, even pioneering the first residency training program in urology which has benefitted the region tremendously.

Professor Douglas continues to teach the urology trainees and is always available to lend advice and wisdom.

On behalf of all urologists in the Caribbean we wish to salute Professor Douglas for his sterling service over the years.

# The Year in Review

## Department of Urology, San Fernando General Hospital

by Dr. Maliza Persaud, MBBS, *PGY-4 Resident*

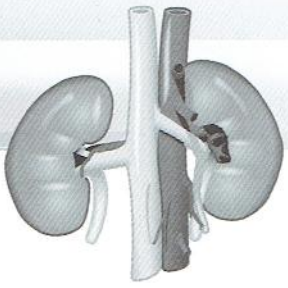
As yet another year comes to an end; we take a moment to reflect on our achievements in the Department of Urology. Our aim is to continue striving assiduously to maintain high standards in our execution of patient care and to provide a nurturing, teaching environment to ensure our junior staff is adequately and appropriately trained. We have accomplished much over the past year in fulfilling some of these goals by various workshops and our many academic activities.

We are proud to have hosted the last CURA meeting in 2013, a 3-day event lasting from October 25th-27th, at which we were privileged to have in attendance various internationally renowned and widely published urologists from around the world. All were impressed with the meeting particularly the high standard of residents presentations. A 2013 edition of the CURA magazine was also compiled and published to commemorate this meeting.

Several workshops have been organized for the acquisition and augmentation of basic and advanced skills for all categories of staff, in addition to providing didactic sessions for the interaction of our medical staff with the visiting urologists.

In October 2013, two urethroplasty workshops were conducted, led firstly by Dr. Richard Santucci (Director, Center of Urological Reconstruction, Detroit) and the second by Professor Arthur Burnett of the James Buchanan Brady Urological Institute, Johns Hopkins University. The well travelled Dr Santucci remarked that it was the best surgical workshop of his life. Following this, a supine PCNL workshop directed by Dr. Roy McGregor of Jamaica was hosted in March 2014.

Professor Burnett and the Urology Staff following another successfull workshop



The May 2014 Annual Meeting of the American Urological Association (AUA) held in Orlando, Florida was attended by several of our urology consultants and residents. Two of our senior residents, Dr. Kirk Gooden and Dr. Satyendra Persaud were granted coveted opportunities to give oral presentations at this meeting. The studies presented were both original work prepared by the residents and were titled "The status of Prostate Cancer Screening among Physicians in Trinidad" and "PSA based screening in the Afro-Caribbean male; a survey of urologists". Following this, Dr. Adrian Ramkissoon, won the Best Poster Prize at the Caribbean College of Surgeons (CCOS) meeting in Curacao in June 2014. His poster was titled "Prostate Cancer: distribution, mortality and ethnicity in Trinidad and Tobago".

Several strides have been made in the academic arena as well, chief of which is the Wednesday morning teleconferencing with our Jamaican counterparts. These sessions have afforded us in Trinidad an opportunity to learn and participate in the Jamaican DM Urology teaching sessions. We have also succeeded in collaborating with the Departments of Pathology and Radiology at San Fernando General Hospital to conduct teaching sessions in the areas of uro-pathology and uro-radiology respectively. Additionally, we have been diligent in hosting our monthly journal club at which residents present landmark and other relevant journal articles at dinner meetings with lively, interactive discussion in a relaxed informal atmosphere.

October 2014 marks an important milestone in the lifespan of the Urology Department of SFGH. It has been ten years since the establishment of a dedicated Urology Theatre and over this period, we have seen much advancement, met countless obstacles and served thousands of patients. Plans for a grand anniversary celebration are ongoing and include a Urologic exhibition, an academic symposium and patient education forums.

We can only hope as we approach the 2014 CURA meeting, that the year holds much potential for improvement and advancement. Even though we have put much effort into our small strides over the past year, we aspire to make giant leaps towards the academic horizon in an attempt to meet and quite possibly surpass our own expectations.

# *Caribbean Urological Association*
# *16th Annual Conference*

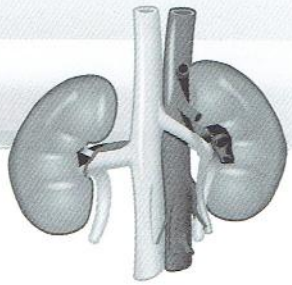
Hilton Rose Hall
Montego Bay
Jamaica

November 7th - 8th 2014

## Friday 7th November (PM)

*12:00 pm – 1:00 pm – Registration*

| | |
|---|---|
| Moderators: | Dr Grannum Sant / Dr Ian Hosein |
| 1:00 pm - 1:05 pm | Welcome Address – Dr William Aiken – On Behalf of Local Organizing Committee |
| 1:05 pm - 1:10 pm | Opening Remarks – Dr Deen Sharma, President of CURA |
| 1:10 pm - 1:30 pm | Erectile Dysfunction after Sickle Cell Disease-Associated Recurrent Ischemic Priapism: Profile and Risk Factors - Professor Arthur Burnett |
| 1:30 pm - 1:40 pm | Effect of Hydroxyurea on Priapism in Jamaican Men with Sickle Cell Disease - Dr Preci Hamilton (Jamaica) |
| 1:40 pm - 1:50 pm | ASAP and prostate cancer at UHWI – Dr Marie Brown (Jamaica) |
| 1:50 pm - 2:00 pm | Case presentation – Impalement injury of the bladder – Dr Satyendra Persaud (Trinidad and Tobago) |
| 2:00 pm - 2:30 pm | "2014 AUA Lecture" : New AUA Urotrauma Guidelines – Dr Mike Coburn (USA) |
| 2: 30 pm - 2:40 pm | Complications following prostate biopsy in a urology referral centre in Trinidad and Tobago: a prospective study – Dr Kirk Gooden (Trinidad and Tobago) |
| **2:40 pm - 3:00 pm** | **COFFEE BREAK** |
| Moderator: | Dr William Aiken/Dr Kirk Gooden |
| 3:00 pm - 3:10 pm | The Trinidad PCNL experience – a single surgeon review of the first 100 cases – Dr Mike Rampaul (Trinidad and Tobago) |
| 3:10 pm - 3:40 pm | Management of small renal masses – Dr Francis Keeley (UK) |
| 3:40 pm - 4:00 pm | Stereotactic body Radiation Therapy: Precise, targeted and shorter treatment course for prostate cancer – Dr Sophia Edwards-Bennett (USA) |
| 4:00 pm - 4:30 pm | Panel Discussion – Urological education in the Caribbean: the way forward – Moderator: Dr Robin Roberts. Panelists: Dr Belinda Morrison, Dr Lester Goetz, Dr Mike Coburn, Dr Grannum Sant, Dr Arthur Burnett, Dr Frank Keeley |
| **Vote of thanks** | **Dr Belinda Morrison** |



## Saturday 8th November

*9:00am - 9:30 am : Registration*

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|---|---|
| Moderator: | Dr Mike Rampaul / Dr Phillip Bhoorasingh |
| 9:30 am - 9:35 am | Welcome Address – Dr Lester Goetz, Secretary of CURA |
| 9:35 am - 10:00 am | "2014 SIU Lecture"<br>The 4Kscore test – a new blood biomarker for aggressive prostate cancer – Dr Grannum Sant |
| 10:00 am - 10:30 am | What is new in stone management – Dr Francis Keeley (UK) |
| 10:30 am - 10:40 am | The everyman urethroplasty – Dr Deen Sharma (Guyana) |
| 10:40 am - 10: 50 am | Major priapism at University Hospital of the West Indies – Dr Adrian Rhudd (Jamaica) |
| 10: 50 am - 11:00 am | A pathological profile of prostate biopsies in Trinidad and Tobago –<br>Dr Ian Hosein (Trinidad and Tobago) |
| 11:00 am - 11:10 am | Emphysematous pyelonephritis – two case reports – Dr Davon Mitchell (Jamaica) |
| 11:10 am - 11:20 am | Prostate biopsies in the Caribbean: a survey of urologists –<br>Dr Satyendra Persaud (Trinidad and Tobago) |
| **11:20 am - 11:40 am** | **COFFEE BREAK** |
| Moderator: | Dr Lester Goetz / Davon Mitchell |
| 11:40 am - 11:50 am | Fecal carriage of ciprofloxacin resistant Escherichia coli in patients undergoing trans-rectal ultrasound guided prostate biopsy at the San Fernando General Hospital –<br>Dr Rajendra Sukhraj (Trinidad and Tobago) |
| 11:50 am - 12:00 pm | Retrograde Intrarenal Lithotripsy (RIRL): A case for simultaneous treatment of bilateral renal stones <2cm endoscopically– Dr Mike Rampaul (Trinidad) |
| 12:00 pm - 12:10 pm | Cigarette Smoking and Bladder Cancer: are people aware of the risk? – Dr Marie Brown (Jamaica) |
| 12:10 pm - 12:20 pm | Surgical repair of the penile fracture- challenging the dogma – Dr Dean Wong (Jamaica) |
| 12:20 pm - 12:30 pm | Needlestick injuries among residents in a tertiary care facility in Trinidad and Tobago –<br>Dr Rajendra Sukhraj (Trinidad and Tobago). |
| 12:30 pm - 12:40 pm | Incorporating the business of medicine in urological training – Dr Belinda Morrison (Jamaica) |
| 12:40 pm - 1:00 pm | Best of ASTRO - New Answers to Old Questions - Dr Anesa Ahamad (USA) |
| 1:00 pm - 1:10 pm | Challenges in Endourology – Dr Roy McGregor (Jamaica) |
| **1:10 pm - 2:00 pm** | **LUNCH** |
| 2:00 pm - 2:15 pm | Reading of citation for this year's Honouree – citation read by Dr Deen Sharma. |
| 2:15 pm - 2:30 pm | Acceptance of 2014 Honouree Award – Prof LL Douglas |
| 2:30 pm - 4:00 pm | AUA/CURA Joint Symposium – "Active Surveillance and the Afro-Caribbean man".<br>Panelists: Dr Belinda Morrison, Dr Grannum Sant, Dr Arthur Burnett, Dr Mike Coburn, Dr Chad Ritch. |
| **Vote of Thanks** | **Dr William Aiken** |

## The Caribbean Urological Association Wishes To Thank Its Partners And Sponsors

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The British Journal of Urology International

The Societe Internatonale d' Urologie

The Jamaican Urological Society

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