

**VIIIth AMHE Visit to Justinien University Hospital
Cap-Haitien, Haiti
February 24 – March 3, 2018**

After a three-year hiatus, the AMHE, with the strong support of Long Island Jewish Medical Center, New Hyde Park, NY conducted its eighth time medical visit to the main teaching hospital of the Northern provinces of Haiti, Justinien University Hospital. This government-run hospital officially features 250 acute care beds, although at the time of our visit, the number of active beds may have been lower. Indeed, two services were been rebuilt and both Surgery and Pediatrics were relocated to different parts of the hospital, during that period of reconstruction and expansion of their facilities. Justinien Hospital is also a major contributor to the formation of young physicians, since it offers residency training in Anesthesiology, Family Medicine, Internal Medicine, Obstetrics and Gynecology, Orthopedics, Pediatrics, Surgery and Urology. We have focused our efforts on this center both because it allows to provide some continuity of care between our visits and because we have the opportunity to enhance the training and formation of the young resident physicians.

Previous experience at that hospital has progressively shaped our expectations and the organization of our visits to that institution. Although all the fine details of health care statistics in Haiti are not clearly defined, we know that cervical cancer is a major cause of deaths among Haitian women and motor vehicle accidents, caused by the proliferation of motorcycles, represent a major drain on the healthcare resources in the country, causing bone fractures, multiple abdominal injuries with implications for both General Surgery , Orthopedics and Urology . We also know that breast cancer is most often seen at a later stage, since early detection by mammography is not practiced to any significant scale. Infant mortality remains elevated as well.

Previous attempts at large scale screening at that hospital had shown us that it was difficult to follow up on the women with significant cytologic findings at the time of the screening, particularly if it takes a few months to provide the results.

Repeated flooding having impeded our efforts during the previous missions to the region led us to avoid the rainy season at all cost. Thus we opted to schedule the trip in February, more specifically during the last week of February, in order to avoid the Mardi-Gras celebrations and the President's Week in the United States. The mission took place from February 24 to March 3, 2018.

Finally, we were also well aware of the limited resources at the hospital, going from basic necessities like gauze and lap pads to surgical drains, prosthetic meshes for hernia repairs, etc... With all this information, we started planning for this visit six months ahead of time. The staff at Long Island Jewish Operating Room salvaged all reusable material that could be useful during the trip. Carol Olsen, RN of the Department of Urology at Northwell Health also gathered for us all the supplies and equipment that she thought may be of use during the mission. These

supplies were screened for their relevance, safety and usefulness. The Administration at Long Island Jewish Medical Center, namely Ms. Megan Stiles, kindly provided us with some storage space to collect the donations. Three weeks prior to our departure, Mr. Gregory Eversley volunteered to help us assemble 1700 lbs worth of goods in three pallets ready for shipping. Pilot Freight Services transported the pallets to Miami, Florida and from there Haiti Shipping Lines took them to their final destination in Cap-Haitien, Haiti.

We assembled a multidisciplinary team, which included the following physicians, nurses and other health professionals.

Evan Auguste, PhD (candidate)	Psychology	Fordham University
Louis Auguste	Telepathology	Alexapath/NYU
Louis J Auguste, MD, MPH	Surgical Oncology	New Hyde Park, NY/AMHE
Maxime Coles, MD	Orthopedics/Trauma	Coffeyville, Kansas/AMHE
Marie-France Conde, MD	Pediatrics	Brooklyn, NY/AMHE
Chris Dixon, MD	Urology	Lenox Hill Hospital
Paul Dossous, MD, MPH	Radiology Resident	Northwell Health
Cecilia Gimenez, MD	Pathology	Northwell Health
Elizabeth Hricko, RN	Nursing	New Jersey
Edna Joseph, RN	Recovery Room/Nursing	Queens Hospital Center, NY
Anne Lihau-N’Kanza, MD	General Surgery/Trauma	Miami, FL
David Livingston, MD	Anesthesiology	NAPA/Bronx-Lebanon Hospital
Jean-Michel Loubeau, MD	General/Vascular Surgery	AMHE
Sandeep Mehta, MD	Urology Resident	Northwell Health
Tiffany Olier, MD	OB/GYN Resident	Northwell Health
Carline Pierre, RN	Nurse Practitioner	New Jersey
Danielle Pigneri, MD	Trauma/General Surgery	Miami, FL
Jn-Bernard Poulard, MD, MBA	Colo-Rectal Surgery	Queens Hospital Center/AMHE
Victoria Prevost, LPN	Nursing	Northwell Health
Antoinette Sakaris, MD	Gyn. Oncology	Northwell Health
Ruth Sarmiento, MD	Radiology Resident	Northwell Health
Sagine Berry-Tony, MD	Radiology Resident	Northwell Health
Vineya Vasudevan, MD	Urology Resident	Northwell Health
David Zeltsman, MD	Thoracic Surgery	Northwell Health
Michael Ziegelbaum, MD	Urology	Northwell Health

The availability of such a strong and diverse faculty allowed us to prepare a very ambitious schedule with 37 formal lectures geared toward the interns and residents, as well as the attending physicians at Justinien Hospital, in addition to the educational opportunities both at the different clinics and the bedside. The intense screening activities in Gynecology and the workload at the Urology clinics hampered somewhat the lecture schedule and only 20 lectures

were actually delivered. However, all the lectures were loaded on a USB drive that was shared with all the residents and interns. The lectures included the following topics:

- Pre, Intra and Post-operative care of the surgical Patient.
- Nutrition in Surgery
- Anesthesia, Nerve Blocks and Pain Management
- Management of Benign Ano-Rectal Disorders.
- Intestinal Stomas: What, How, Why and Why not?
- Benign Diseases of the Esophagus
- Surgery for Esophageal Cancer
- Surgical Management of Lung Cancer
- Video Demonstration of Minimally Invasive Surgery of the Chest
- Initial Evaluation of the trauma Patient
- Chest trauma
- Urologic Trauma
- Evaluation of a Child with Failure to Thrive
- Clinical Immunology in Pediatrics
- Early Detection of Autism
- Starting a practice in Pediatrics: All that you wanted to know but were afraid to ask!
- Research in Medicine: Understanding the Medical Literature and Making Original Contributions.
- Principles of Hospital and Healthcare Management
- Options in the Management of Cervical Cancer
- New Staging Systems for Cervical cancer and Pre-cancerous lesions
- Tele-Pathology
- HPV Vaccination and Cervical Cancer
- Cryptorchidism
- Neuro-Urology and Uro-Dynamics
- Value of PSA in the Early detection of Prostate Cancer
- Metabolic Evaluation of Urinary Stones
- Circumcision and HIV
- Vesico-Ureteral Reflux
- Urethral reconstruction
- Sonography in the Trauma Patient
- Musculo-Skeletal and Spinal trauma

The four lectures on lung and esophageal cancers were combined in the form of a Chest Surgery Symposium, that was presented on The Wednesday, by Dr. Zeltsman.

The academic program included also daily case-presentations conducted daily by Dr. Maxime Coles in the Orthopedic service. Extensive training in flexible cystoscopy was provided in the Urology clinics. The Surgical Team led daily teaching bedside rounds. In addition, the Radiology Team conducted hands-on training in Ultrasonography for the residents in Pediatrics, Urology and Surgery and Dr. Gimenez gave practical training to the residents in Ultrasound guided Fine Needle Aspiration for Head and Neck Neoplasms.

As far as direct patient care, the combined presence of Gynecology, Pathology, Radiology and Surgical specialists was a formidable opportunity to carry out screening for cervical cancer and breast cancer. By word of mouth, the news spread through the community that the screening program was taking place and every day of the week saw more and more women coming to be screened. The evaluation consisted of an extensive questionnaire regarding family history, health habits, past medical and gynecological history and symptoms. This was followed by a pelvic and a breast examination, as well as a Pap smear and a breast sonogram. If there were any sonographic findings a sonographically guided fine needle aspiration biopsy was done. The cytology for both the cervical smears and the breast biopsies were read immediately by our pathologist, Dr. Cecilia Gimenez, who carried out the incredible task of processing and interpreting personally 78 Pap smears, 4 breast specimens and 1 cervical mass biopsy. Four Pap smears were positive for malignancies: one case was advanced with the tumor extending to the pelvic wall and precluding any treatment at the local facility. One patient underwent a radical hysterectomy for her invasive cervical carcinoma. Two other patients were diagnosed too late in the week and could not be managed before our departure. Four patients had significant breast findings: one patient had a fibroadenoma, one patient had benign cysts, a third one was found to have a papilloma, which would have required an image-guided excision, but again, the timing of the discovery did not allow us to take care of her before our departure. A fourth patient had an infiltrating ductal carcinoma and she underwent a modified radical mastectomy. The neck mass presented on our very last day. The mass was consistent with a pleomorphic adenoma of the salivary, but the patient could not be scheduled in time.

Louis Auguste, jr reevaluated the program of tele-pathology that he initiated at the institution and that is being pursued by Dr. Vincent Gennaro. He provided technical support and rendered functional the equipment that had ceased to operate.

The Urology Service was also extremely busy. The presence of Dr. Dixon, specialist in Urethral reconstruction was anticipated and a large number of known cases of urethral strictures were recalled for evaluation during our stay. A total of six cases were taken to the operating room, three simple repairs and three complex repairs, providing a great relief to these patients who were strictly dependent on continuous catheterization. These procedures allowed also the local urology residents to acquire a skill, which was not available to them before our arrival. In addition, our Urology team performed a supra-pubic prostatectomy, a circumcision, a hydrocelectomy, a nephrectomy for a Wilms tumor and a case of cryptorchidism. The last three cases were done at the neighboring Sacred Heart Hospital in Milot, which has an affiliation for General Surgery with Holy Name Hospital in New Jersey.

The Orthopedic Service was probably the busiest of all in the operating room with 14 cases of fractures, some fresh, some delayed with malunion, in the most difficult conditions and without a working drill. In addition, Dr. Maxime Coles performed an emergency amputation for wet gangrene in an 8 year old with more than 50 % body surface third degree burn as well as the complex repair of a wrist laceration affecting both nerves and tendons. He also conducted bedside rounds and intense teaching through a series of case presentations.

To complete the list of surgical cases, we have to add a split thickness skin graft for a third degree burn of the buttocks, an examination under anesthesia and anal dilatation for an anal fissure and a hemorrhoidectomy, as well as an anterior colporrhaphy for a large cystocele.

At the end of the week, the team was tired but satisfied that they had given their all for a good cause. They had given their all to heal their fellow human beings and they had supported a healthcare system in dire need of everything, from medications and clean sheets to the simplest technology. They gained a lot as well, for having learned to do more with a lot less.

Having organized all seven previous missions to Justinien University Hospital, I can call this eight visit a success, judging by the knowledge and the skills that were passed along to the local physicians, by the number of women screened for cervical and breast cancer and by the number of surgical procedures (33) performed, some of them could never have been done if it were not for the expertise of the diverse team of physicians and nurses who volunteered their time and resources to accomplish this tremendous act of altruism and generosity. They all vowed to return in the future, as we strive to continue to improve and expand the program of assistance to Justinien University hospital.

On behalf of the population of the North of Haiti, on behalf of all the physicians in training or practicing in that community, on behalf of the Association of Haitian Physicians Abroad (AMHE), I wish to express my sincere gratitude to every single member of this extraordinary group of individuals. I wish to express my thanks to the leadership of the AMHE, particularly the Treasurer of the AMHE Foundation, Dr. Andre Jean Talleyrand, for his support.

At the conclusion of the mission, we had a final debriefing with the leadership at the Hospital which included Dr. Dube, CEO of the Hospital, Dr. Jean Coq, Medical Director, Mr. Zephyr, Administrator, Dr. Yverl Zephyr Director of Formation. They shared with us the hardship that they have to face every day to meet the healthcare needs of a population which lives in dangerous conditions due to inadequate roads and means of transportation, dangerous practices with open air fires and cooking, causing extensive third degree burns to children, a population without adequate preventive medicine programs to screen for Diabetes mellitus, Arterial hypertension or to provide adequate vaccination to its children.

Dr. Dube shared with us his frustration in his inability to retain the proper level of staffing in the emergency rooms and he hopes to start soon a training program in Emergency Medicine. He requested our support in conceiving the curriculum for such program and we will put him in contact with the Chairman of Emergency Medicine at Northwell Health/Lenox Hill, Dr. Duroseau and the Chair of Emergency Medicine at Nassau County Medical Center, Dr. Boutin.

In spite of all, we did notice snail-paced improvement in the infrastructure. A brand new building will soon house the previously small, cramped pediatric pavilion. The operating room in the Maternity Ward has been reactivated causing less disruption of services in the main operating room. A second story is being added to the Surgery pavilion, to expand its capacity.

Finally, the open ward in the Internal medicine Pavilion has been sub-divided to provide only single and double bed rooms.

Strong of our observations, we are committing to exploring possibilities to provide substantial support to that institution. Providing supplies collected in the Operating Room that could have been otherwise discarded is good. However, we have to do more by providing some necessary tools, such as an electric drill and a pneumatic tourniquet for the orthopedists, grounding plate for the electro-cautery devices in the operating rooms and yes, why not, funding for a sustained vaccination program for young women in order to make a dent in the high mortality associated with cervical cancer in this country.

The AMHE and Northwell Health can, must and will do more. Already we have started preparing for next year's Mission.

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