



## Center Receives American College of Surgeons Accreditation

Volume 1, Issue 2  
Fall 2008

The Center of Excellence in Laparoscopic and Minimally Invasive Surgery (Center) received the designation of Accredited Education Institute from the American College of Surgeons (ACS) on June 24, 2008. The Center joins only 34 other facilities across the United States, Canada and England to receive accreditation.



AMERICAN COLLEGE OF SURGEONS - DIVISION OF EDUCATION  
**ACCREDITED EDUCATION INSTITUTES™**  
ENHANCING PATIENT SAFETY THROUGH SIMULATION



Jose M. Martinez, MD, Center Assistant Director, in recent endoscopy CME course.

“Our mission is to promote the highest level of education and training of medical professionals via the most technologically advanced methods,” said Dr. Atul K. Madan, Director of the Center of Excellence for Laparoscopic and Minimally Invasive Surgery. “The designation of Accredited Education Institute by the ACS is a demonstration of the hard work of all who support the Center.” The aim of the ACS Program for Accreditation of Education Institutes is to identify, develop, and promote standards for quality education. One of the program goals is to create a network of accredited education institutes across the country to assist surgeons, residents, medical students, and other members of the surgical team in achieving the requisite knowledge and skills in order to provide optimal care to surgery patients.

*continued on page 2*

## First ‘No-Scar’ Gallbladder Removal Performed at UMH/JMH

“One patient asked me if I had really taken out his gallbladder since he could not detect a scar,” Dr. Alberto Iglesias recalled a patient saying after performing a laparoscopic cholecystectomy with only a single incision. Dr. Iglesias, Assistant Professor of Clinical Surgery in the Division of Laparoendoscopic and Bariatric Surgery, DeWitt Daughtry Family Department of Surgery, has now performed 10 such surgeries. He is the first surgeon at the University of Miami Hospital (UMH) and Jackson Memorial Hospital (JMH) to do what is being referred to as ‘no-scar’ or single incision surgery.



Alberto Iglesias, MD  
Assistant Professor of Surgery  
Division of Laparoendoscopic and Bariatric Surgery

The 10 procedures, all laparoscopic cholecystectomies or minimally invasive removal of the gallbladder, were performed at UMH and JMH. Dr. Iglesias added, “The patients have been very happy with the results.” This method of removing the gallbladder is the latest technological advance in minimally invasive surgery.

He explained that the surgical technique for the laparoscopic cholecystectomy has not changed. The difference is instead of making three small abdominal incisions as in regular minimally invasive laparoscopic surgery, only one incision is made. This single incision is made through the middle of the patient’s belly button. Two ports are then inserted in the incision allowing for the entry of a camera and the laparoscopic instruments normally used. The single incision heals and is hard to detect within the belly button.

*continued on page 4*

### Upcoming Courses

- SAGES Flexible Endoscopic Surgery for Minimally Invasive Surgery Fellows  
September 25-26, 2008
- What to do when the lights go out...Laparoscopic Equipment for Nurses and OR Technicians  
October 4, 2008
- Gelport™ Minimally Invasive Nephrectomy Workshop  
October 18, 2008
- ATOM Course  
October 20, 2008

### Contents

<b>Center Receives Accreditation</b>	1
<b>No-Scar Surgery</b>	1
<b>Robotic Training</b>	2
<b>Technical Training for Surgical Residents</b>	3
<b>ATOM Course</b>	4
<b>Mission Statement</b>	4
<b>Center Contacts</b>	4

**MILLER**  
SCHOOL OF MEDICINE  
UNIVERSITY OF MIAMI

## Center Receives American College of Surgeons Accreditation

*continued from page 1*

To obtain accreditation, the Center submitted over 400 pages of documentation covering 20 specific criteria ranging from curriculum development to a listing of the training equipment available. The final step was a meeting in April at the Center with site surveyors from the ACS. Attending this pivotal meeting were the key contributors to the accreditation project: Dr. Atul K. Madan, Center Director, Dr. Jose M. Martinez, Center Assistant Director, Susan G. Mazzola, Center Administrator, and Ray I. Gonzalez, Surgical Educator. The Accreditation Review Committee's Decision Summary listed several strengths of our program: Self-sustainability, strong academic team, strong management team, curriculum development and curriculum dissemination.

### Program Strengths:

- Self-sustainability
- Strong academic team
- Strong management team
- Curriculum development
- Curriculum dissemination

The Center was established in 2001 by the DeWitt Daughtry Department of Surgery to provide education and technical training in laparoscopic and minimally invasive surgery. The curriculum for Jackson Memorial Hospital general surgery residents was expanded by Co-Program Director of the Surgical Residency Training Program and Professor of Surgery,

Dr. Duane G. Hutson, to include a one-month rotation for interns in addition to the technical training labs regularly held during each resident year. In May 2008, a da Vinci™ Surgical System (robot) was added to the training equipment available at the Center. Medical students, nurses, residents and doctors from all over the country have completed technical and skills training at the Center to learn or update skills. ■

## Robot Comes to the Center



*Raymond J. Leveillee, MD, FRCS-G (hon)  
Professor of Clinical Urology, Radiology  
and Biomedical Engineering  
Chief, Division of Endourology, Laparo-  
scopy and Minimally Invasive Surgery  
Department of Urology*

The da Vinci™ Surgical System, a.k.a. "the robot", arrived at the Center in late May. Thanks to the leadership and efforts of the medical center, the robot was added to the other technical training equipment at the Center of Excellence for Laparoscopic and Minimally Invasive Surgery (Center).

The University of Miami Hospital (UMH) administration transferred the Intuitive Surgical stalwart from the former Cedars Medical Center as they upgraded to a newer model. In keeping with the tradition of excellence, the University of Miami Miller School of Medicine not only offers the highest quality care for our patients but also the most advanced technology to train future generations of surgeons.

An ad hoc committee was created of members of the Center Medical Advisory Board. At the first meeting, we agreed that our target learning audience were the JMH residents though there are Fellows and UM Faculty members wanting and waiting to train on the robot. Everyone discussed their own learning on the robot as well as their current and potential use of the robot for surgical procedures.

Each specialty has slightly different needs when it comes to teaching the residents. We decided to create a series of non specialty specific inanimate tasks that a student would have to master. We also agreed that everyone requesting/receiving training on the robot would have to take the manufacturer's (Intuitive) online tutorial.

Each 'task' would have a specific teaching objective. With this established, we discussed a series of learning objectives. Ray Gonzalez, the Center's Surgical

Educator, was asked to develop tasks on the robot that will accomplish each learning objective and record them.

At the second committee meeting, our goals were to review the recorded tasks, put them in logical learning order, and determine a grading/scoring system. Ray Gonzalez did a phenomenal job creating these tasks and was resourceful in finding and using materials (such as 'Cheerios') to simulate the use of the robotic instruments

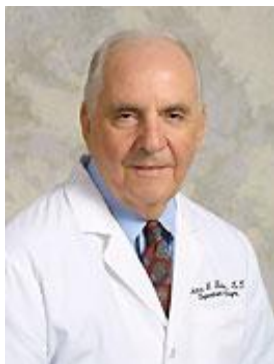
*continued on next page*



*Robotic operating room suite.*

*Photo courtesy of Intuitive*

## Technical Training for General Surgery Residents



*Duane G. Hutson, MD  
Co-Program Director  
Jackson Memorial Hospital Surgical  
Residency Training Program  
Professor of Surgery*

The DeWitt Daughtry Family Department of Surgery has developed a technical training program for the Jackson Memorial Hospital General Surgery residents at the University of Miami Miller School of Medicine which, we believe, is unique in many respects.

The program begins with a dedicated month at the Center of Excellence for Laparoscopic and Minimally Invasive Surgery at the 1<sup>st</sup> year level and continues with scheduled sessions at all year levels over the ensuing 4 years. A progressive, definitive curriculum is established which is directed primarily to the areas of laparoscopy, suturing

and stapling. Most sessions are one-on-one (instructor and student) and begin with the basic technical considerations followed by sessions on the utilization of these techniques on the various organ systems. In order to provide uniform instruction, the sessions begin with the esophagus and continue with the stomach, duodenum, small bowel and colon. This is enhanced by the development of technical manuals outlining the techniques and their utilization on the various organs. In order to ensure that the course is progressive, a detailed grading system is established which identifies the level of competence at a particular point, the need for remedial work and information needed to plan future sessions.

This comprehensive technical training program became possible following completion of the Center of Excellence for Minimally Invasive Surgery. Its location allows residents at all levels to attend multiple labs while rotating through the clinical service – a critical issue in the development of the program – and the participation of multiple Attendings.

The equipment is state-of-the-art and includes virtual reality simulators, box trainers, endoscopic trainers, access to two online video libraries with a full assortment of surgical procedures, a variety of technical books and confer-

ence rooms equipped for local and remote presentations. The recent addition of a da Vinci™ Surgical System (robot) to the facility will allow the development of educational programs in the use of this equipment.

Utilization of the facility for resident education requires exquisite organization (since there are multiple users) which is provided by the Susan Mazola, Administrator at the Center. All resident educational activities are organized and executed by Ray Gonzalez, Surgical Educator at the Center. He is assisted by Leonardo Real, Veterinary Technician.

This technical training program is under my direction with assistance from Dr. Harold Goldstein, Dr. Holly Neville, Dr. W. Raleigh Thompson, Dr. Vincent DeGennaro, Dr. Anthony Panos and Dr. A. J. Furst. With the organization of the program now completed, faculty participation will expand rapidly. Essential to the development of the program was the full support of the Departmental Chairman, Dr. Alan S. Livingstone and the Program Director, Dr. Danny Sleeman.

Full implementation of the program at this point is timely, in that, it is quite certain that the requirement for such training by the ACGME for approved surgical programs is imminent.■

## Robot Comes to the Center



*Chad Thorson, MD JMH General Surgery  
Intern at the control console for robot.*

*continued from previous page*

in a surgical environment. We referred to this process as establishing the 'fundamentals of robotic surgery' an affirmation of the successful program,

Fundamentals of Laparoscopic Surgery (FLS), established by the Society of American Gastrointestinal and Endoscopic Surgeons. Each task video was reviewed and discussed to determine how accurately it would meet the learning objective, task ease or difficulty, grading/scoring possibilities, etc.

Our next meeting will finalize these tasks and the implementation and integration of this first phase of inanimate robotic training into each residency programs' existing curriculum. Ultimately we will strive for labs that will allow for tailored learning that are geared toward specific tasks and eventual operation-specific learning modules. This is a tremendous step forward in the formal training of our "surgeons of tomorrow" as the role of



*Ray Gonzalez reviewing robotic instruments  
with Chad Thorson, MD, JMH General Surgery  
Intern.*

automation, robotics and image-guided surgery continues to increase.■

**MILLER**  
SCHOOL OF MEDICINE  
UNIVERSITY OF MIAMI

University of Miami Miller School of Medicine  
Center of Excellence for Laparoscopic and  
Minimally Invasive Surgery  
McKnight Research Building, 8th Floor  
1638 NW 10th Avenue • Miami, FL 33178  
305-326-6480 • Fax: 305-326-6328  
Email: [miscenter@med.miami.edu](mailto:miscenter@med.miami.edu)  
[www.mis.med.miami.edu](http://www.mis.med.miami.edu)

Atul K. Madan, MD - Director  
305-243-2424  
[amadan@med.miami.edu](mailto:amadan@med.miami.edu)

Jose M. Martinez, MD - Assistant Director  
305-243-2424  
[jmartinez4@med.miami.edu](mailto:jmartinez4@med.miami.edu)

Susan G. Mazzola - Administrator  
305-326-6480  
[smazzola@med.miami.edu](mailto:smazzola@med.miami.edu)

Ray I. Gonzalez - Surgical Educator  
305-547-3700  
[rgonzalez4@med.miami.edu](mailto:rgonzalez4@med.miami.edu)

Leonardo Real - Veterinary Technician  
305-482-4784  
[lreal@med.miami.edu](mailto:lreal@med.miami.edu)

**Mission Statement**  
Center of Excellence for Laparoscopic and  
Minimally Invasive Surgery

To promote the highest level of education and training of medical professionals via the most technologically advanced methods as well as to foster research and product development in laparoscopic and minimally invasive procedures.

**Vision**

To become the local, national, and international leader in the field of education, research, and product development in laparoscopic and minimally invasive procedures.

**Core Values**

Ingenuity  
Integrity  
Quality

**First 'No-Scar' Gallbladder Removal  
Performed at UMH/JMH**

*continued from page 1*

This single incision technique has been used for gallbladder removal. However, Dr. Iglesias plans to expand the technique to other routine laparoscopic procedures such as anti-reflux surgery, appendectomies, and inguinal hernias. He presently performs laparoscopic and minimally invasive surgery at UMH, JM and the Miami Veterans Hospital. For more information on this procedure, contact Dr. Iglesias at (305) 243-2424 or [aiglesias@med.miami.edu](mailto:aiglesias@med.miami.edu). ■

**Advanced Trauma Operative Management Course (ATOM)**



*Fahim Habib, MD  
Assistant Professor of Surgery  
Division of Trauma and Critical  
Care  
DeWitt Daughtry Family  
Department of Surgery*

Overall, the operative experience of residents and practicing surgeons in trauma surgery has declined. Key reasons for this include: the decreasing incidence of penetrating trauma and the increasing adoption of non-operative strategies for the management of blunt trauma. This declining exposure may erode surgeon confidence and has the potential to increase the mortality and morbidity following traumatic injury.

The Advanced Trauma Operative Management Course (ATOM) was developed at Hartford Hospital in 1998 to overcome this learning gap. It focuses on the operative management of penetrating injuries of the chest and abdomen. The course is approved to provide 8 AMA PRA Category 1 Credits™ for physicians. In this tightly structured education experience, participants start with preliminary preparation by reviewing a CD-ROM and course manual to familiarize

them with the course. An online pre-test is also taken. The core one-day course consists of six 30-minute lectures. By the use of uniform content, the reproducibility of the course is maintained. The ATOM course makes use of simulation to create life-like situations in order to train participants to perform operative procedures competently. During the simulation session, the Faculty to participant ratio is 1:1 during which time the participant must evaluate, identify and repair simulated injuries in a time-sensitive situation. The participants take a post-test to identify learning behaviors. Additional tests are taken at 6 and 12 months to determine retention of knowledge.

To date, 5 ATOM courses have been conducted at the Center of Excellence for Laparoscopic and Minimally Invasive Surgery. Of the total of 25 participants, 17 have been Jackson Memorial Hospital (JM) Trauma Fellows and 8 JM senior surgical residents. Ten of the 17 have gone on to achieve instructor status. One became an instructor while still a surgical resident; the only surgical resident instructor in the country. Two of the participants have gone on to establish training sites of their own. Three instructors are exploring the possibility of providing the course to the Army. As Course Director, I have been assisted by the following Attendings who participated as faculty members: Jeffrey S. Augenstein, MD, PhD; Patricia M. Byers, MD; MSPH; Joseph Corallo, MD; George Garcia, MD; Felicia Ivascu, MD; Booker King, MD; Antonio Pepe, MD; Major Donald Robinson, MD; Rafael Sanchez, MD; Carl I. Schulman, MD, and Kevin Schuster, MD.

Response to the course has been uniformly favorable and enthusiastic. The recognized education value has prompted the American College of Surgeons to take the course under its guidance, and in the near future, is expected to make it a required course similar to the Advanced Trauma Life Support (ATLS) course. ■