

# Mexico City Training Center - WGO Information Package

Name: Centro de Entrenamiento Avanzado (CEA)

Location: México City, México

Center Director: Dr. Miguel A. Ramírez and Dr. Enrique Coss



## Introduction:

Centro de Entrenamiento Avanzado Ciudad de México was inaugurated in México City on July 28, 2008. The Training Center is directed by Dr. Miguel A. Ramírez Luna and Co-Directed by Dr Enrique Coss-Adame.

## Aims/Objectives:

The objectives of the Mexico City Training Center are:

- to provide theoretical and practical training in advanced techniques of gastroenterology, hepatology, gastrointestinal motility, and endoscopy
- to improve the learning process through effective teaching activities: conferences, discussions, workshops with animal models and electronic simulators, live demonstrations with patients, tutorials and interactive video and computer programs
- to promote interaction between regional and international experts and gastroenterology and endoscopy associations
- to diffuse knowledge of advanced techniques in gastroenterology in the geographical region, with the multiplier effect achieved when the trained student returns to his or her place of origin.

## Facilities:

The Mexico City Training Center is located at the "Instituto Nacional de Ciencias Médicas y Nutrición". Fundamental to the Center are the medical and paramedical personnel and infrastructure of the departments of Gastroenterology, Gastrointestinal Endoscopy, Imageology and the Medical Skills Development Center ("Centro de Desarrollo de Destrezas Médicas", CEDDEM).

The Training Center is composed of the Departments of Gastroenterology and Endoscopy, the GI Motility and GI molecular labs, as well as the Medical and Surgical Skills Center.

- The motility lab is fully equipped with Medtronic working stations to perform High resolution esophageal (w/wo impedance) and pH studies. High resolution anorectal manometry (2D and 3D), biofeedback therapy for fecal incontinence and constipation. H<sub>2</sub> and CH<sub>4</sub> breath testing for sugar intolerances and SIBO.
- The Digestive Endoscopy Unit consists of 5 endoscopy rooms; 2 for gastroscopes, 1 for colonoscopy, 1 for enteroscopy and endoscopic ultrasound and 1 for ERCP. All rooms are equipped with state of the art Olympus and Fujinon

videoendoscopes, endoscopic ultrasound, electrosurgical generators, argonplasma coagulators, and accessories for therapeutic endoscopy. A room for disinfection and sterilization process is also available in this unit.

- A fully equipped angiography suite is used for hepatic hemodynamics and TIPS placement.
- GI lab is mainly dedicated to research activities. It is equipped with real time PCR, blood chemistry multiprocessor, cell culture chamber, electrophoresis, ELISA, and other lab techniques used in molecular biology.
- The Medical and Surgical Skills Center, the first of its kind in Mexico and Latin America, provides a laboratory setting where basic and complex medical and surgical procedures can be learned and practiced. The models used in the Center vary from very basic knot-tying boards used for basic skills, partial simulators, and animal models to virtual reality simulators.

To enhance the learning experience, the Center is equipped with telecommunications capability. Directly linked with operating and endoscopy rooms in the hospital, participants can view live endoscopy or surgery in the context of the course and are able to interact directly with the operating surgeon or endoscopist. Using this telecommunications system, the Center is also able to connect with any similarly equipped facility in the world and continues to expand their video conference capabilities.

In house videotaping of expert endoscopies and other procedures has also provided several key applications:

- The person who performed the endoscopy or procedure can reflect and evaluate their technique.
- Students can review and learn from the taped expert.

As research has confirmed that video learning is an effective way of training, particularly for early learners, the Center has placed a strong emphasis on this style of education.

State of the art virtual reality simulators (Simbionix®) are part of the equipment of the Center; there are 2 simulators for laparoscopic surgery, 1 for urology, 1 for gastrointestinal endoscopy, 1 for bronchoscopy, which also has the capability to have software for gastrointestinal endoscopy, 1 for vascular access, 1 for angiography, and 1 simulator for all areas of medicine. The gastrointestinal endoscopy simulator is composed of modules for upper GI (Gastroscopy), lower GI (colonoscopy), endoscopic retrograde cholangiopancreatography (ERCP), flexible sigmoidoscopy, and endoscopic ultrasound. In addition, there are also partial simulators for different areas such as anesthesia, nursing, and critical care, for instance difficult airway, vascular access, ultrasound, arrhythmias, cardiovascular resuscitation, etc.



Multimedia Library and Scientific Journals are also available for trainees.

### **Teaching Facilities:**

- Two are the maximum number of trainees accepted per course.
- Twelve courses (3-month duration) per year with proper funding can be held in our Training Center
- Courses start in January, April, July, and October
- Six trainees/faculty can be accommodated for periods of 12 weeks.

Housing facilities: Four double rooms in the medical residency, which can be used to accommodate 6 foreign trainees free-of-charge simultaneously for periods of 12 weeks (2 meals per day included). Low-cost rooms in a nearby hotel can also be arranged.

### **Faculty and Staff:**

- Director: Miguel A. Ramirez-Luna, MD
- Co-directors: Enrique Coss-Adame, MD.
  
- Training Course Coordinators:
  - GI Motility Tests: Enrique Coss-Adame
  - Endoscopic Ultrasound: Dr Miguel A. Ramirez MD
  - Enteroscopy: Dr Luis Eduardo Zamora Nava MD
  - ERCP and Bilio-Pancreatic Therapeutic Endoscopy: Dr Miguel Ángel Ramirez Luna MD
  
- Additional Local Faculty:
  - Dr. Rafael BarretoZuñiga (Endoscopy)
  - Dr. Guido Grajales Figueroa (Endoscopy)
  - Dr. Ignacio Garcia Juarez (liver)
  - Dr. Kazuo Yamamoto (Inflammatory bowel disease)

### **Areas of Training:**

- GI Motility Tests
- Endoscopic Ultrasound
- Enteroscopy
- ERCP and Bilio-Pancreatic Therapeutic Endoscopy

### **Training/Courses Offered:**

One trainee is accepted for each of the training courses listed above for a training duration of 3 months. The curriculum is flexible according to the experience and background education of trainees and special requirements of the home institutions. Please see attached core curriculum overview.



### **Regulatory Requirements:**

- Medical insurance for foreign trainees

### **Certifications:**

- 3-month courses:
- Trainees will receive a diploma sponsored by WGO and INCMNSZ for all trainees (ERCP, Enteroscopy, EUS, Motility) and additionally Mexican Neuro-gastroenterology and Motility Society endorsement for Motility training.
- Short duration courses (minimal 3 months maximum 4 months)  
Trainees will receive a certification of attendance for specific courses.

## **Trainee Application Process and Requirements:**

- Trainees must have completed a 3-year residency in gastroenterology or general surgery and a 1-year training period in basic gastrointestinal endoscopy at an institution accredited by the Mexican Board of Gastroenterology or a foreign equivalent.
- Medical insurance for foreign trainees
- Trainees are responsible for their own travel expenses to and from the course.

## **Further Academic Activities:**

- Trainees can participate in the annual postgraduate courses organized by the GI and Endoscopy Departments (1<sup>st</sup> week in July)
- Trainees can participate in the National Gastroenterology and Endoscopy Weeks sponsored by the Mexican Association of Gastroenterology and Endoscopy (2<sup>nd</sup> week of September and 3<sup>rd</sup> week of November)

## **Endorsements:**

The Mexico City Training Center has been endorsed by

- the World Gastroenterology Organisation (WGO)
- the Mexican Associations of Gastroenterology and Endoscopy

## **Funding / Sponsorship:**

Funding and/or sponsorship is currently received from the following sources:

- World Gastroenterology Organisation (WGO)
- Instituto Nacional de Ciencias Médicas y Nutrición
- The Mexican Association of Gastroenterology

## **Philanthropic Endeavors:**

- Patients are treated free of charge by trainees

## **Site-Seeing Experiences**

- Sala Nezahualcoyotl Music Hall
- Gardens of Xochimilco
- Town of Taxco (The town of silver)
- Historic Plazas: Coyoacan, San Angel, Tlalpan
- Mexico City Historic Center and Templo Mayor
- Teotihuacan Pyramids
- San Angel Bazaar
- Diego Rivera & Frida Kahlo Museum and Houses
- The Museum of Anthropology
- Dolores Olmedo Museum
- Campus of The National University of Mexico



### **Training Center Needs:**

Scholarships are mainly for non-Mexican trainees.

Mexico City Training Center Scholarship Amount:

USD 6600