

## **ESSO MAJOR FELLOWSHIP 2015-2016**

**INSTITUTION: City of Hope National Cancer Center, Duarte (CA), USA**

**PERIOD: May 02, 2016 – November 02, 2016**

### **REPORT:**

Last year, I realized that if I was really interested in surgical oncology, I needed to improve my knowledge by going outside my Institution and getting new experiences.

So I decided to apply for the ESSO fellowship program, which allows the recipient to visit a center outside his or her country, and after evaluation by the education and training committee I received the major fellowship.

I was able to start my training period at City of Hope in May, after completing the required paperwork and obtaining the J1-VISA.

First, I was impressed by the high level of education provided, and I tried to take part in all the meetings and activities organized for the ACGME fellows in training at City of Hope so that I could get the best possible experiences and lessons in surgical oncology. The preoperative conferences gave me a systematic approach to patient and tumor evaluation. I especially found useful the discussion on diagnostic images review and the literature-based decisional approach.

Each Tuesday without fail, I have attended the educational conference offering lectures involving different fields and discussions on surgical strategies and practice.

It's difficult to summarize the huge scope of the education I have received during my six months at City of Hope, from Grand Rounds to the SSO web meetings and the opportunity to meet international experts.

I'm thankful to Prof. Yanghee Woo and Prof. Yuman Fong for giving me the opportunity to follow their activity, particularly in the management of gastric and liver cancer patients. During my clinical training, I learned how to perform a comprehensive evaluation of the oncological patient, critical review of images, and most importantly, preoperative counseling and how to discuss expectations, pain management, nutrition, and follow-up with the patient and his family.

Surgical activity has been, of course, the most fascinating aspect of my fellowship. As previously described in my motivation letter, I decided to focus my attention on gastric cancer surgery and liver surgery as well as attend some complex surgical procedures. Particularly, the unique daily opportunity to participate in complex liver resection procedures allowed me to better understand surgical anatomy and strategies and also gave me the opportunity to learn about ablation techniques and liver pump placement.

I also took interest in deepening my understanding of the robotic approach and became familiar with the Xi System.

I attained robotic training when I had the opportunity to play with a skills simulator as well as follow the surgical procedures at the dual console. The latter, I think, is one of the most important parts of surgical education because it gives you the same view of the operative field as that of the operator.

One of the expectations of the grant was that I be involved in the research setting. I think City of Hope is one of the best places to research in the world. Consider that in the campus there are the Beckman Research Institute of Biological Sciences and the Lee Graff Medical and Scientific Library. Obviously, as my time has been limited and I had to set priorities, I directed my efforts toward clinical research. Dr. Woo allowed me to deepen my knowledge in this field and gain experience in how to carry out a scientific project from hypothesis to full development.

My first project was a meta-analysis to systematically evaluate the role of Hyperthermic intraperitoneal chemotherapy (HIPEC) in gastric cancer and clarify its effectiveness both for the prevention and treatment of gastric cancer peritoneal carcinomatosis.

I want to highlight the work I made on video editing because I think this is one of the most significant opportunities to review procedures and learn about anatomy, lymph node dissection, and techniques. We sent two abstracts for video presentations (SSO, SAGES) that were accepted.

With Prof. Woo, we decided to establish a high-quality gastric cancer database for City of Hope. So we started a chart review of all patients who had undergone gastrectomy since 2012. This has become an impressive database with 286 variables collected for each patient included. We entered data in 9 sections. This instrument should allow researchers to perform an infinite variety of analysis and research work.

From this database, we decided to perform a first study on the impact of the ERAS approach on surgical and clinical outcomes. Particularly, we carried out a propensity score matching analysis and we submitted an abstract for oral presentation to the upcoming IGCC 2017 congress.

My research experience in the US put me face-to-face with the US national databases. Despite the inevitable limitations of these instruments, they are a relevant source of information. I started working with the SEER database and defined an area of study and analysis for gastric cancer metastatic patients.

The ESSO fellowship program was also established to create connections and cooperation among Institutions. During these six months, I worked to establish a bridge between City of Hope and the Department of Digestive Surgery in Terni – Italy – and its chief, Dr. Amilcare Parisi.

Particularly, we were able to organize together an ERAS congress, in Italy, at the end of my fellowship period. During the meeting, I talked about the perioperative management of patients at City of Hope and Prof. Woo reported her experience in the treatment of gastric cancer. This event gave us the opportunity to discuss future projects and studies.

I found wonderful people and an extraordinary surgical group at City of Hope. The European Society of Surgical Oncology allowed me to improve my education and I'm glad for this unique experience.

**Jacopo Desiderio**

## **RESEARCH ACTIVITY AT CITY OF HOPE**

### **META-ANALYSIS:**

The Thirty-Year Experience - A Meta-analysis of Randomized and High Quality Non-Randomized Studies of Hyperthermic Intraperitoneal Chemotherapy (HIPEC) in the Treatment of Gastric Cancer

### **THE COH DATABASE FOR GASTRIC CANCER:**

286 variables created for each patient in an excel file, chart review of all medical records from January 2012 to October 2016. Sections included: Demographics, Surgery, Tumor, Post-operative, Pain assessment, LAB (Preoperative, 1,3,5,7 PODs), Complications: in-hospital, Complications: after discharge, Follow-up

### **PROPENSITY SCORE-MATCHED CASE-CONTROL STUDY:**

Improving outcomes after establishing a gastric cancer program with a dedicated enhanced recovery after surgery (ERAS) protocol

### **SEER DATABASE:**

Population-based SEER analysis of survival in 25384 patients with metastatic gastric cancer. Groups of comparison: Palliative surgery, Palliative Radiation, Palliative Chemotherapy, Combination Therapies, Supportive Care.

### **ABSTRACTS SUBMITTED FOR SCIENTIFIC CONGRESSES:**

- **SAGES 2017 Meeting** March 22-25, 2017 - Houston, TX

Robotic Liver Resection of the Posterosuperior Segments Using the daVinci Xi Surgical System

*Video Presentation*

- **SSO 2017 Annual Cancer Symposium** March 15-18 Seattle, WA

Robotic Distal Subtotal Gastrectomy with D2 Lymphadenectomy for Advanced Gastric Cancer

*Video Presentation*

- **IGCC 2017** April 20-23 Beijing, China

Improving surgical and clinical outcomes after establishing a gastric cancer program and a protocol for dedicated enhanced recovery after surgery (ERAS)

*Oral Presentation*

## **SURGEONS FOLLOWED AT CITY OF HOPE:**

### **Yanghee Woo**

Associate Professor

Director, Gastroenterology Minimally Invasive Therapy Program

Director, International Surgery

### **Yuman Fong**

Sangiaco Chair in Surgical Oncology

Chair and Professor, Department of Surgery

Professor of Experimental Therapeutics

Director, International Medicine

### **Gagandeep Singh**

Head, Hepatobiliary and Pancreatic Surgery

Vice Chair and Clinical Professor, Department of Surgery

### **Byrne Lee**

Chief, Mixed Tumor Surgery Service

Assistant Clinical Professor

### **Jae Y. Kim**

Chief, Division of Thoracic Surgery

Assistant Professor

### **Lily Lau Lai**

Associate Clinical Professor

Director, Surgical Oncology Training Program

### **Laleh Melstrom**

Assistant Professor

## **EDUCATION AT CITY OF HOPE:**

### **Preoperative conferences**

- Systematic, literature-based, approach to patient and tumor evaluation
- Images reviews
- Make a rationale and start a decisional process

### **Educational Conferences**

- Invaluable lectures, involving different fields of surgical oncology
- Diagnosis, surgical strategies and experts' suggestions for surgical practice

### **M&M meetings**

- Evaluation of surgical complications and their management, discussion for improvement

### **Grand Rounds**

- Lectures from relevant surgical experts
- Sharing of projects and experiences

### **Research meetings**

- Methodological scientific approach
- Sharing ideas
- Formulate hypotheses
- Develop a study project
- Cooperate in a research group

### **Literature review meeting**

- A Comprehensive analysis on specific topics and most recent breakthroughs

### **SSO web meetings**

- Discussion of cases via online web connection with other relevant surgical US centers

### **CRC / HPB Tumor board meetings**

- Multidisciplinary management of complex oncological cases
- Different experts views
- Evaluation until a definitive therapeutic decision

### **Meeting with international surgeons**

- City of Hope attracts international surgeons that come for projects exchange and cooperation