


Acknowledgement

I take this opportunity to express my deepest gratitude to my supervisors, colleagues, friends and my family. This thesis would not have been accomplished without their help.

My PhD study in the VU Medical center was started through the contact with Prof. Dr. Hans Bröllmann, my main promoter. Without his continuous optimism concerning this work, enthusiasm, encouragement and support this study would hardly have been completed.

I also wish to express my gratitude to my co-promoter Dr Renato Seracchioli, the head of the Minimally Invasive Gynecological Surgery Unit of Bologna University, who has become a close friend among the years of my study. His support was particularly important for me, not only in learning several advanced surgical techniques but also, in greatly widening my perspectives concerning endometriosis and its management.

I am indebted to Dr. Velja Mijatovic (my previous co-promoter), who suggested this topic to me. His guidance and supervision have been essential during this work. Thanks also for his constructive review of the manuscript.

The input of my colleagues at the Minimally Invasive Gynecological Surgery Unit in Bologna, co-authors of all the studies in my thesis (Giulia Montanari, Clarissa Frascà, Emanuela Spagnolo, Elisa Geraci, Claudia Vicenzi, Serena Solfrini, Simona Del Forno, Linda Manuzzi, Letizia Zannoni, Giuseppe Mignemi, Nadine Di Donato, Antonio Farina, Luca Savelli, Manuela Guerrini, Gioia Villa, Giulia Ferrini, Chiara Facchini, Diego Raimondo and many others) has been very valuable. This thesis would not have been completed without their invaluable contribution. I also feel very grateful for the patients who participated in the studies.

A special word of thanks goes to Dr. Amira Elmakky, my wife, who spared a lot of time out of her busy duties to help me writing and finalizing the thesis. Thanks to my daughters, Leina and Noor, for their understanding, their love and support. I would like to show my deepest gratitude to my parents for all what they have done and what they are continuing to do for me. Many thanks go to my brothers, Wael and Islam who have dedicated their time and energy to support me all through these years.

I am truly grateful to Professor Hassan El Maghraby, Professor Marco Filicori (supervisors of my MD thesis), and to Professor Pedro Ramirez (Supervisor of my training in the MD Anderson Cancer Center in Texas, USA). They were the first who taught me what research means. They have
always been by my side and I owe my deepest gratitude to them and to all my School teachers, University professors and senior colleagues. Many thanks to my friends (Mohamed Nazih, Tamer Nafee, Marcello Ceccaroni, Mervat Fouad, Federico Vianello, Carlo Alboni, Paola Pollastri, Tamer Hanafy, Sherif Gaafar, Sally El Tawab, Mohamed El Mahdy, Amal Hassan, Mohamed Hussein, Aly Alaa and many others) for all the sincere care and support they offered me. I also would like to thank Christine Esveld, for her help in all the administrative steps. Finally, I wish to express my gratitude to everybody from whom I learned something.
Biography

Mohamed Mabrouk was born on the 8th of January 1976 in Taiz, the Republic of Yemen. He finished his pre university education in Alexandria, Egypt in 1993. He started his medicine studies and earned his M.B.B.Ch degree in 1999 at University of Alexandria, Egypt. He performed his internship and completed his residency, obtaining his Master’s degree in Obstetrics and Gynecology in 2004 at El Shatby Maternity University Hospital in Alexandria, Egypt.

Mabrouk completed his training in Bologna University, Italy, and earned the Italian Diploma of Specialization in Obstetrics and Gynecology (2005-2009). In Alexandria University, in 2009, Mabrouk discussed his MD thesis, performed in collaboration between Alexandria and Bologna Universities.

His interest in endometriosis was raised during working in the Minimally Invasive Surgery Unit, S.Orsola-Malpighi Hospital of Bologna University, under the supervision of Dr. Renato Seracchioli. He received the First place for the “Carlo Romanini Award” for the Best Endometriosis Research and “Violet Bowen-Hugh Award” for Women's Health Awareness at 37th Global Congress of Minimally Invasive Gynecology, Las Vegas, USA October 2008.

Mabrouk developed knowledge and skills in Gynecological Endoscopy by receiving training in Bologna University, Bologna Italy, in Kiel University, Schleswig-Holstein, Germany and in the M.D. Anderson Cancer Center, Houston, USA.

Mabrouk started his PhD, at the department of Obstetrics and Gynecology, VU Medical Center, Amsterdam, the Netherlands, under the supervision of Prof. Dr. Hans Bröllmann, performing his researches in collaboration with the Minimally Invasive Gynecological Surgery Unit and Endometriosis Center of Bologna University.

From June 2012, Mabrouk is working as a Senior Consultant in the Gynecologic Oncology and Minimally Invasive Pelvic Surgery Unit, Sacred Heart Hospital, Negrar, Verona, Italy. He also works as a lecturer of Obstetrics and Gynecology in Alexandria University, Egypt.

In his thesis he investigated the role of long-term COC therapy in the prevention of postoperative pain recurrence and anatomical relapse after ovarian endometriosis surgery and the effect of pre-operative COC use in patients with posterior DIE. Furthermore, he described the correlation
between histological pattern and clinical outcomes in patients undergoing segmental bowel resection for colorectal endometriosis, the impact on sexual function of laparoscopic treatment and subsequent COC therapy in women with deep infiltrating endometriosis and the effect of surgical treatment of DIE on Quality of life. He also investigated the performance of peripheral (serum and molecular) blood markers for diagnosis and follow up of endometriosis.