# CURRICULUM vitae Dr. CARLO ALBONI

Email carlo.alboni@gmail.com Italian Date of birth July 30, 1976

Fiscal Code LBNCRL76L30I496O

# WORKING EXPERIENCE

• 11/12/2006 to 05/04/2007

Obstetric-Gynecological Clinic and Gynecological Physiopathology of the Third Age Unit Via Massarenti 138, Bologna

- S. Orsola Malpighi University Hospital of Bologna
- PhD student authorized to provide clinical assistance

• Clinical, outpatient (ultrasound and endoscopic) research, surgical activity

- 30/4/2007 to to 8/1/2017
- Gynecology and Obstetrics Unit, Sassuolo Hospital.

Via Ruini 2, Sassuolo (MO)

Ward care activity (Contact person in charge of the Gynecology Department) Surgical Activity (Coordinator of surgical planning) Outpatient Activity:

Hysteroscopy surgery

Level II consulting clinic for gynecological pathology (Responsible)

Gynecological Ultrasound Clinic

Endometriosis Clinic (Head) involved in the multidisciplinary management of the pathology (U. General

Surgery, U. Urology).

9/1/2017 to date
Dept. Gynecology and Obstetrics, University Hospital of Modena Via del Pozzo 71, Modena (MO)
U.O. Gynecology and Obstetrics - University Hospital of Modena Via del Pozzo 71, Modena (MO) *Head of the Minimally Invasive and Robotic Gynecologic Surgery Unit* Head of the Endometriosis Center – Regional Referral Center of Emilia-Romagna for the diagnosis and treatment of Deep multivisceral endometriosis

May 2002 - "Certificate of Basic Competence in Clinical Research and Good Clinical Practice (GCP) "- University of Chieti

2003-2004 Residential internship at the Obstetric Clinic e Gynecological -U.O. Oncological Gynecology of the University Hospital of Ljubljana, Slovenia. During this period he participates mainly to the supervision and management of patients with gynecological oncological and urogynecological pathology. Participates in the execution of 133 surgical procedures of which 7 from first surgeon.

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2005-2006 Co-investigator in the research project: Anatomical bases of nerve sparing radical gynecological surgery. Anatomo-clinical study. Owner of the research project Dr. M Barbic. In collaboration with the Institute of Normal Anatomy and the Unit of Gynecology and Obstetrics at Klinični Center, University of Ljubljana, Slovenia.

since 2009 scientific director and lecturer of the course: "Minimally Invasive Vaginal Hysterectomy "in collaboration with ERBE - Italy

since 2009 Member of the Scientific Committee of the Project Association Endometriosis (APE) www.apeonlus.it

Since 2011 founding member and vice-president of MIPSA (Minimally Invasive Pelvic Surgery Association). www.mipsa.it

2014-2016 Co-experimenter of the "Study of the anatomy of the lumbosacral plexus by magnetic resonance tractography in patients with deep pelvic endometriosis and chronic pelvic pain " (investigator of reference: prof. Pietro Torricelli- Radiology 1 - Modena University Hospital)

2018 Study Coordinator: Myovant MVT-601-3102. SPIRIT 2: An International Phase 3 Randomized, DoubleBlind, PlaceboControlled Efficacy and Safety Study to Evaluate Relugolix Administered with and without Low-Dose Estradiol and Norethindrone Acetate in Women with Endometriosis-Associated Pain

Since 2018 Lecturer at the II level International Master in Mini-Invasive Gynecological Surgery. University of Bologna. Director of the Master prof Renato Seracchioli.

#### Scientific Publications

1.Ceccaroni M, Savelli L, Bovicelli A, Alboni C, Ceccarini M, Farina A, Bovicelli L. Prognostic value of pelvic lymphadenectomy in surgical treatment of apparent stage I endometrial cancer. Anticancer Res. 2004 May Jun;24(3b):2073-8.

2.Ceccaroni M, Chieco P, Alboni C, De Iaco P, Pagano K, Ceccarelli C, Santini D, Taroni B and Pelusi G. P53 expression, DNA ploidy and mitotic index as prognostic factors in patients with epithelial ovarian carcinoma. Tumori. 2004 Nov-Dec;90(6):600-6.

3.De Iaco P, Ceccaroni M, Alboni C, Roset B, Sansovini M, D'Alessandro L, Pignotti E, de Aloysio D. Transvaginal evisceration after hysterectomy: is vaginal cuff closure associated with a reduced risk? Eur J Obstet Gynecol Reprod Biol. 2006 Mar 1;125(1):134-8.

4.De Iaco P, Rosati F, Alboni C, Zazzeroni L, Orazi L, Zamagni C, Rosati M, Massari F and de Aloysio D. Diagnostic laparoscopy in the management of advanced ovarian cancer. 1 st AAGL International Congress on Minimally Invasive Gynecology, 4th SEGI Annual Meeting. Medimond International Proceedings June 2007; 159-62.

5.Alboni C, Rosati F, de Aloysio D and De Iaco P. Laparoscopic surgery of adnexal masses in pregnancy. 1st AAGL International Congress on Minimally Invasive Gynecology, 4th SEGI Annual Meeting. Medimond International Proceedings June 2007; 149-52.

6.Alboni C, Sansavini S, Rosati F, Fratto R, Bolletta M, Orsini LF. Early diagnosis and conservative management of cervical ectopic pregnancy. Ultrasound Obstet Gynecol 2007; 30 (4): 562

7. Alboni C, Rosati F, Sansavini S, Cappelli A, Bartalena T, Zucchini N, Galaverni MC, De Iaco P, de Aloysio D, Orsini LF. Three-dimensional power Doppler angiography in the diagnosis of pseudoaneurysm of the uterine artery. Ultrasound Obstet Gynecol 2007; 30 (4): 608. Pagina 11 - Curriculum vitae di Carlo Alboni

8. Sansavini S, Rosati F, Fratto R, Mahad S, Alboni C, De Iaco P, LF Orsini. Early 3D aspects of recurrence of borderline ovarian tumors. Ultrasound Obstet Gynecol 2007; 30(4):436-7.

9.Rosati F, Sansavini S, Fratto R, Alboni C, De Iaco P, Rosati M, Zamagni C, LF Orsini. Evaluation of response to neoadjuvant chemotherapy in advanced ovarian cancer by transvaginal sonography. Ultrasound Obstet Gynecol 2007; 30 (4): 510.

10. Di Stefano AB, Alboni C, Garozzo G, Barbic M, Rakar S, Kobal B, Cor A, Ravnik D. Nerve contents of the deep part of anterior parametrium: an anatomic study. 15th International Meeting of the European Society of Gynaecological Oncology (ESGO). Berlin 30 October-1 November 2007

11.Bartalena T, Pascali E, Rinaldi MF, Marasco R, Bassi F, Alboni C, Gavelli G. Transmigrated intrauterine device discovered 17 years after its insertion. Australas Radiol. 2007 Dec;51 Suppl:B284-6.

12.Bartalena T, Rinaldi MF, Alboni C, Giannelli G, Leoni C, Rinaldi G. Krukenberg Tumor from Gastric Adenocarcinoma: CT findings. The Internet Journal of Radiology. 2009;10(1).

13.Alboni C, Rosati F, Sansavini S, Bartalena T, Mancini F, De Iaco P, de Aloysio D,Three-dimensional power Doppler imaging of uterine artery pseudoaneurysm treated unsuccessfully with selective embolization. Orsini LF. Ultrasound Obstet Gynecol. 2009 May;33(5):614-6.

14.Alboni C, Di Stefano AB, De Iaco P, Alboni A, Ravnik D, Barbic M, Rakar S, Ghirardini G. Corona mortis: anatomic study on cadavers and in vivo implications for sugical technique. SEGI congress.. Bologna 10-13 June 2009

15.Zamagni C, Wirtz R, De Iaco P, Rosati M, Veltrup E, Rosati F, Capizzi E, Cacciari N, Alboni C, Bernardi A, Massari F, Quercia S, D'Errico Grigioni A, Dietel M, Sehouli J, Denkert C, Martoni A. Oestrogen receptor

1 mRNA is a prognostic factor in ovarian cancer patients treated with neoadjuvant chemotherapy: determination by array and kinetic PCR in fresh tissue biopsies. Endocr Relat Cancer. 2009 Sep 11. Pagina 12 - Curriculum vitae di Carlo Alboni

16.Alboni C, Mabrouk M, Pozzi S, Voci C, Ghirardini G. Is there an association between endometriosis and the risk of adverse pregnancy outcomes? A retrospective study. 11th World Congress on Endometriosis. Montpellier (France) 4-7 September 2011

17.Mabrouk M, Alboni C, Neri S, Tondi C, Gibertini G, Ghirardini G. Spontaneous postpartum hemoperitoneum in primipara with decidualized pelvic endometriosis: a case report. 11th World Congress on Endometriosis. Montpellier (France) 4-7 September 2011

18. Ceccaroni M, Clarizia R, Alboni C, Ruffo G, Bruni F, Roviglione G, Scioscia M, Peters I, De Placido G, Minelli L. Laparoscopic nerve-sparing transperitoneal approach for endometriosis infiltrating the pelvic wall and somatic nerves: anatomical considerations and surgical technique. Surg Radiol Anat. 2010 Jul;32(6):601-4.

19.Ghirardini G, Alboni C, Mabrouk M. Use of balloon tamponade in management of severe vaginal postpartum hemorrhage and vaginal hematoma: a case series. Gynecol Obstet Invest. 2012;74(4):320-3.

20.Ghirardini G, Mohamed M, Bartolamasi A, Malmusi S, Dalla Vecchia E, Algeri I, Zanni A, Renzi A, Cavicchioni O, Braconi A, Pazzoni F, Alboni C. Minimally invasive vaginal hysterectomy using bipolar vessel sealing: Preliminary experience with 500 cases. J Obstet Gynaecol. 2013 Jan;33(1):79-81.

21. Ghirardini G, Alboni C. Balloon tamponade for prevention and treatment of vaginal hemorrhages in gynecology. Clin Exp Obstet Gynecol. 2013;40(4):579-80.

22. Scalia AC, Farulla A, Fiocchi F, Alboni C, Torricelli P. Imaging features of uterine and ovarian fibromatosis in Nevoid Basal Cell Carcinoma Syndrome. J Radiol Case Rep. 2018 Sep 30;12(9):21-30

23.Italian Edition of the surgical technique of "Painless Vaginal Hysterectomy With Biclamp " -ERBE Educational. H Clavè, H Baar, JC Hammou, P Niccolai, C Alboni http://www.erbe-med.com/it/tecnologia medica/Arzt/Downloads/ Media#main

24. Robot-Assisted Nerve-sparing Resection of Bilateral Parametrial Deep Infiltrating Endometriosis. Alboni C, Farulla A, Facchinetti F, Ercoli A. J Minim Invasive Gynecol. 2020 May 19:S1553-4650(20)30240-5.

25. Primary fallopian tube carcinoma (PFTC) in a BRIP-1 mutation carrier: the first case report. Grandi G, Caroli M, Alboni C, Cortesi L, Toss A, Barbieri E, Botticelli L, Facchinetti F. Fam Cancer. 2020 Apr 24. doi: 10.1007/s10689-020-00179-0.

26. An unusual case of large endometrioma within the rectus abdominis muscle misdiagnosed as desmoid tumour. Manco G, Caramaschi S, Serra F, Tarantini A, Schiavo G, Alboni C, Gelmini R. Ann Ital Chir. 2020 Mar 24;9:S2239253X20031710.

27.Alboni C, Farulla A, Facchinetti F, Ercoli A. Robot-Assisted Nervesparing Resection of Bilateral Parametrial Deep Infiltrating Endometriosis. J Minim Invasive Gynecol. 2021 Jan;28(1):18-19. doi: 10.1016/ j.jmig.2020.05.009. Epub 2020 May 19. PMID: 32442484.

28.Piccoli M, Esposito S, Pecchini F, Francescato A, Colli F, Gozzo D, Trapani V, Alboni C, Rocco B. Full robotic multivisceral resections: the Modena experience and literature review. Updates Surg. 2021 Jun;73(3):1177-1187. doi: 10.1007/s13304-020-00939-8. Epub 2021 Feb 11. PMID: 33570711.

29.Alboni C, Mattos LC, Botticelli L, Malmusi S, Facchinetti F, Pecchi A. Surgical treatment of deep endometriosis with adenomyosis externa: a challenging case in an infertile woman. Fertil Steril. 2021 Apr;115(4):1084-1086. doi: 10.1016/j.fertnstert.2020.11.004. Epub 2021 Mar 6. PMID: 33750620.

30.Raimondo D, Alboni C, Orsini B, Aru AC, Farulla A, Maletta M, Arena A, Del Forno S, Sampogna V, Mastronardi M, Petrillo M, Seracchioli R. Comparison of perioperative outcomes between standard laparoscopic and robot-assisted approach in patients with rectosigmoid endometriosis. Acta Obstet Gynecol Scand. 2021 Sep;100(9):1740-1746. doi: 10.1111/aogs.14170. Epub 2021 Jun 10. PMID: 33999408; PMCID: PMC8453718.

31.LA Marca A, Imbrogno MG, Gaia G, Alboni C. T-shaped uterus: what has been done, what should be done. Minerva Obstet Gynecol. 2021 Aug;73(4):500-505. doi: 10.23736/S2724-606X.21.04825-9. PMID: 34319061.

32.LA Marca A, Gaia G, Mignini Renzini M, Alboni C, Mastellari E. Hysteroscopic findings in chronic endometritis. Minerva Obstet Gynecol. 2021 Dec;73(6):790-805. doi: 10.23736/S2724-606X.21.04970-8. PMID: 34905882.

33.Alboni C, Spanò Bascio L, Camacho Mattos L, Gallo G, Botticelli L, Cabry F, Facchinetti F, Gelmini R. Ileocecal deep infiltrating endometriosis with intestinal mucinous metaplasia and high-grade dysplasia. J Obstet Gynaecol. 2022 Jul;42(5):1593-1596. doi: 10.1080/01443615.2021.2006158. Epub 2022 Jan 6. PMID: 34989295.

34.Alboni C, Mattos LC, Malmusi S, Galassi MC, Facchinetti F, Mabrouk M. Ultrasound-guided Needle Biopsy for Preoperative Assessment of Uterine Fibroids: Our Experience and a Review of the Literature. Gynecol Minim Invasive Ther. 2022 Feb 14;11(1):47-50. doi: 10.4103/GMIT\_GMIT\_31\_20. PMID: 35310126; PMCID: PMC8926054.

35.Bertucci E, Sileo FG, Diamanti M, Alboni C, Facchinetti F, La Marca A. How adenomyosis changes throughout pregnancy: A retrospective cohort study. Int J Gynaecol Obstet. 2023 Mar;160(3):856-863. doi: 10.1002/ijgo.14383. Epub 2022 Aug 17. PMID: 35929196.

36. Gaia G, Sighinolfi MC, Rocco B, Cannoletta M, Sampogna V, Lamarca A, Alboni C. Learning curve of optical trocar access during laparoscopic

pelvic surgery: A prospective study. Actas Urol Esp (Engl Ed). 2023 Dec;47(10):675-680. English, Spanish. doi: 10.1016/j.acuroe.2023.07.002. Epub 2023 Jul 11. PMID: 37442225.

37. Alboni C, Melegari S, Camacho Mattos L, Farulla A. Effects of osteopathic manipulative therapy on recurrent pelvic pain and dyspareunia in women after surgery for endometriosis: a retrospective study. Minerva Obstet Gynecol. 2024 Jun;76(3):264-271. doi: 10.23736/ S2724-606X.23.05351-4. Epub 2023 Nov 23. PMID: 37997320.

38. Leone Roberti Maggiore U, Spanò Bascio L, Alboni C, Chiarello G, Savelli L, Bogani G, Martinelli F, Chiappa V, Ditto A, Raspagliesi F. Sentinel lymph node biopsy in endometrial cancer: When, how and in which patients. Eur J Surg Oncol. 2024 Mar;50(3):107956. doi: 10.1016/ j.ejso.2024.107956. Epub 2024 Jan 17. PMID: 38286085.

39. Spanò Bascio L, Gambigliani Zoccoli S, Pellegrini R, Farulla A, Cannoletta M, Paterlini L, La Marca A, Alboni C. The impact of COVID-19 pandemic on women with endometriosis: a retrospective cohort study on referral center population. Minerva Obstet Gynecol. 2024 Apr 10. doi: 10.23736/S2724-606X.24.05518-0. Epub ahead of print. PMID: 38602014.

40. Ianieri MM, Raimondo D, Pavone M, Alboni C, Alesi MV, Campolo F, Raffone A, Celerino P, Orsini B, Carcagnì A, Fanfani F, Seracchioli R, Scambia G. Clash of the Titans: the first multi-center retrospective comparative study between da Vinci and Hugo<sup>™</sup> RAS surgical systems for the treatment of deep endometriosis. Minim Invasive Ther Allied Technol. 2024 Dec;33(6):341-350. doi: 10.1080/13645706.2024.2417403. Epub 2024 Nov 1. PMID: 39485905. 41. Alboni C, Cannoletta M, Mosca S, Pasini S, Farulla A, Chiossi G. Endometriosis and risk factors in pregnancy, labor and delivery: a casecontrol study. Minerva Obstet Gynecol. 2024 Nov 8. doi: 10.23736/ S2724-606X.24.05527-1. Epub ahead of print. PMID: 39512100.

## ENDOMETRIOSIS

Since 2007, my professional activity has had a specific focus on endometriosis. Already at the hospital in Sassuolo, I set up a dedicated clinic and personally followed the formation of a multidisciplinary group for the treatment of the pathology. At the same time, I continued the training activity on the topic, later becoming a teacher in courses, conferences and Masters dedicated to minimally invasive surgery and endometriosis in particular.

Since 2008, I have been an elected member of the Scientific Board of the Progetto Endometriosi association, the most widespread and numerically important patient association in Italy. I have constantly collaborated with the association to carry out continuous training and information activities for the population, often in collaboration with institutions (municipality, province, region), through meetings, conferences, round tables and via the web (during the pandemic).

Since 2017, I have brought my experience to the Policlinico di Modena, increasing minimally invasive surgical activity, outpatient and research for endometriosis. I was first appointed Head of the Endometriosis and Chronic Pelvic Pain outpatient clinic and then Head of the Simple Structure to which the endometriosis treatment activity is headed. During these years, I have personally trained collaborators and doctors in specialist training in the activity of classification, instrumental and clinical diagnosis and therapy.

The clinical and organizational experience needed for the treatment of this pathology led me to be appointed as a member of the restricted working group that from 2017 to 2019 produced the regional PDTA for the patient affected by Endometriosis. The group carried out the regional assistance reorganization project by applying the Hub and Spoke model, and defining the geographical and clinical criteria for the assistance network of the Emilia Romagna Region. The Policlinico di Modena was appointed by regional resolution as a Hub center for the AVEN Emilia-Romagna area for the treatment of Multivisceral Endometriosis, having become (from 2017 to 2019) the second hospital structure in the Region in terms of number of interventions for endometriosis / year, number of interventions for deep endometriosis / year and number of patients who access the dedicated clinic per year. After the regional resolution, we declined the PDTA at company level by institutionalizing the existing path and defining the methods of interaction between the various UOs and services within the AOU of Modena and with the Spoke centers.

In 2022 I was appointed to the group of expert teachers at national level for the AGENAS (National Agency for Regional Health Services) project for the project "Training and information paths for the diagnosis and treatment of endometriosis". The aim of the ministerial project is to increase knowledge of the pathology and the correct diagnosis and treatment pathways among specialist gynecologist colleagues in the area, outpatients, hospitals but also and above all among psychiatrists, general practitioners, pediatricians and other figures who will be in contact, often first, with patients in whom the classification has probably not yet been correctly performed.

## FOCUS in OBSTETRICS

From 2008 to 2017 I was in charge of the outpatient obstetric activity and Delivery Room at the Civil Hospital of Sassuolo. There was only one doctor on duty in the delivery room (night and day) and he was in charge of emergencies and scheduled Obstetric activity. On average the Department managed 1200 -1300 births/year. In the same period I conceived and co-directed (together with Dr. Federico Vianello – MN) a course on the topic: Perineal Suture: Laboratory dedicated to Midwives and Delivery Room Doctors. The course has had numerous editions between Emilia Romagna and Lombardy and has attracted the transversal interest of all the personnel employed in the Delivery Room. Since 2017 I have been the Doctor responsible for the Obstetric Gynecological on-call shift and an On-call Expert (2nd on-call) for gynecological and obstetric surgical emergencies at the University Hospital – Policlinico of Modena. A particular area of interest for me is also Gynecological pathology, its management and minimally invasive surgical treatment in pregnant patients. This interest stems from a first publication proposed after the report at the SEGI national congress in 2007 in Palermo entitled: Laparoscopic surgery of adnexal masses in

pregnancy. 1st AAGL International Congress on Minimally Invasive Gynecology, 4th SEGI Annual Meeting. Medimond International Proceedings June 2007; 149-52. Alboni C, Rosati F, de Aloysio D and De Iaco P., to arrive at the organization of the conference "Diagnosis Counseling and Treatment of" Gynecological Pathology in Pregnancy " in collaboration with the Policlinico-Clinica Mangiagalli of Milan in March 2022.

Minimally invasive techniques are particularly indicated in the surgical pathology of the pregnant patient, having proven to be safe and effective in the treatment and in preserving the regular course of gestation. My PhD also sought a fusion between the Gynecological and Obstetric fields, having carried out one of the first studies on the relationship between endometriosis and the risk of obstetric pathology. The thesis entitled: Retrospective study for the evaluation of endometriosis as a risk factor for hypertensive pathology in pregnancy", discussed at the University of Parma, is still the subject of an on-going study. During my career I have performed numerous urgent operations for obstetric complications (complex vaginal lacerations, urgent hysterectomies for postpartum hemorrhage, uterine rupture during pregnancy, hemoperitoneum during pregnancy due to laceration of the uterine vessels)

## ONCOLOGICAL SURGERY

During my specialist training the main focus was on training in Gynecological Oncology Surgery. I spent the last years of training and the first years as a PhD student as part of the Working Group of the Gynecological Oncology Unit of Prof. De Iaco at the S.Orsola Polyclinic in Bologna. The daily outpatient, departmental, research and surgical activity was completed by the Fellowship period at the University Center for Oncological Surgery of the University of Ljubljana - Slovenia (Director Prof. Stelio Rakar). Here I then proposed and obtained approval for the research project, the subject of my specialty thesis, on the Anatomical study of the female pelvis on a cadaver for Radical Nerve-Sparing Surgery.

# GYNECOLOGICAL ROBOTIC SURGERY

Since 2017-18 I have activated the Robotic surgery program at the Policlinico of Modena. At the same time as the appointment in the Regional Working Group for the indications and multidisciplinary management of Robotic Surgery, I have started the application of the minimally invasive Robotic technique (Intuitive Da Vinci Xi system) mainly for the treatment of Gynecological Oncology and Deep Multivisceral Endometriosis. The program began with a period of field training at the U.O. of Gynecology and Obstetrics of the Ospedale Maggiore of Novara (University of Western Piedmont) under the guidance of Prof. Alfredo Ercoli.

Along with the clinical activity we have produced a research activity in collaboration with the other Operative units and in collaboration with other centers of Excellence for Gynecological Robotic Surgery such as the Policlinico S.Orsola in Bologna and the S.Paolo Hospital in Milan.

I have performed more than 4000 surgical interventions I routinely perform:

- Advanced Radical Laparoscopic and Robotic Abdominal Pelvic Surgery with electrosurgical instruments for Oncological pathology and Multivisceral Endometriotic pathology

- Laparotomic Radical Oncological Abdominal Pelvic Surgery

- Minimally Invasive Laparoscopic and Robotic Urogynecological Surgery and Vaginal Surgery

- Minimally Invasive Surgery in Obstetric Patients with Gynecological Pathology

- Minimally Invasive Laparoscopic, Vaginal and vNotes Surgery for Benign Gynecological Pathology

- Hysteroscopic Surgery

- Obstetric Surgery

- I have High Expertise in Surgical Anatomy and Laparotomic and Laparoscopic Anatomical Dissection of the Female Pelvis

Modena 19/10/2024

Dr. Carlo Alboni